

Health in the hills:

*An analysis of the health-seeking behaviours of people in rural
Makwanpur, Nepal*

Appendices

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Thesis submitted to the Examination Schools
For the degree of
DOCTOR OF PHILOSOPHY

TRINITY TERM 2013

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Appendix 1.1

How Different Disciplines Approach the Study of Health-Seeking Behaviours¹

	SOCIOLOGY	PSYCHOLOGY	ANTHROPOLOGY	EPIDEMIOLOGY (PUBLIC HEALTH)
Explanatory/ Independent Variables	Individual, household, community socio-demographic factors (age, gender, SES, occupation, education, family composition, parity etc.) Health system factors (access, cost, quality, availability etc.)	Self efficacy beliefs, gender, individual demographic characteristics, individual perceptions, attitudes and beliefs regarding self and health system, affect	Culture, cultural beliefs, culturally patterned illness definitions, cultural norms	Illness factors (severity, duration, loss of productivity, aetiology, type of condition) Individual and health system factors Illness-related knowledge
Outcome/ Dependent Variables	Choice of provider Where care is sought – outside home vs. self care, private vs. public, formal vs. informal Time elapsed before seeking care Utilisation rates	Whether or not care is sought, treatment is taken or preventative measures are taken Time elapsed before seeking care Stage of awareness/ readiness to accept change Behavioural change	Choices of health providers from pluralistic health landscape; reasons why people make certain health choices and how these choices are shaped by local conceptions of illness and disease and by social environment	Mortality Morbidity Cure Rate Satisfaction Expense Choice of Provider Whether or not care is sought Time elapsed before seeking care (delay) Utilisation rates
Conceptual Models/ Frameworks	Grossman: economic model Andersen: Socio-Behavioural model Kroeger: 'Utilisation of Care' model Good's model (pathway model)	Health Belief model Protection Motivation Theory Theory of Planned Behaviour/ Theory of Reasoned Action Self Regulatory Model of Health & Illness	Decision models	Pathway models Kroeger: 'Utilisation of Care' model Andersen: Socio-Behavioural model
Types of Questions Asked	What are the most important individual, household, community socio-demographic (predisposing) factors and health system (enabling) factors which govern whether or not people seek care, how long they wait if they do and the choice of providers they consult?	How do various cognitive and emotional processes (positive/negative affect, perceived barriers and benefits, attitudes regarding care, beliefs regarding treatment) affect whether or not people engage in health seeking/health protective behaviours?	How does culture shape how individuals define illness and hence how and why people make certain health care choices? What factors determine where people seek care in a pluralistic care setting?	How do people utilise their healthcare system? Which illness factors, health system factors or individual socio-demographic factors determine where people seek care? How do peoples' care-seeking practices / choice of providers affect health outcomes and consumer satisfaction? Does disease-specific knowledge affect where and when people seek care?

¹It must be acknowledged that there is a lot of overlap in each of the disciplinary approaches to health seeking

Appendix 2.1

Brief Overview of the Broader Study Context: Nepal

Nepal is a small country of approximately 27 million people, eighty-percent of whom reside in rural areas. Administratively, the entire country is divided into 75 districts, which are grouped into 14 Zones. The Zones are further grouped into five Development Regions: Eastern, Central, Western, Mid-western and Far-western. The entire country is comprised of three geographic belts: terai (plains), hills and mountains. Each district is divided into smaller municipalities and Village Development Committees (VDCs) with approximately 500-700 households in each (Rai et al., 2001; World Bank, 2002). Each VDC can be further broken down into nine wards, and these further broken down into toles.

Nepal remains one of the poorest countries in the world with a GDP per capita of only \$290 and a Human Development Index of 0.52. Twenty-five percent of the population live below the national poverty line, and only 59% of the population has access to safe drinking water (Pearson, 1999; Health questions about the 11 SEAR countries; Country Reported data on basic health indicators; Human Development Report, 2009; NLSS III). The vast majority of people rely on subsistence agriculture for survival (Rai et al., 2001; WHO, 2009).

Appendix 2.2

Nepal field visit report: site visit #1 [September 18th – October 12th 2010]

While I went to the field with the intention of conducting research exclusively on Female Community Health Volunteers (FCHV) and their relationship with the larger Nepalese healthcare system, my research questions changed somewhat drastically while I was in Nepal and had access to grey literature, a better understanding of the logistical feasibility of the data collection and had input from people working locally in the health sector. What started off as a potential study on CHWs has evolved into a study on healthcare seeking behaviours of households in rural Nepal, and the disconnect between Nepalese health policy and the users' utilisation of the system. It became quite apparent in my time there that very few health studies carried out in the country took into account the perspective of the system users, hence my decision to focus this study almost exclusively on those system users rather than on health worker surveys (as most previous studies have done). While a lot of health research has been carried out in Nepal, very little of it has been published internationally or has been done formally, which is why Nepal is an ideal place to do health systems research – one can contribute both to the international literature as well as provide valuable feedback on system functioning to the Ministry of Health and Population, which can then potentially guide in future policy formulation.

The major difficulties of conducting research in this context will be logistical – given the topography of the country and the distance between villages. I have formulated a tentative data collection plan and formed relationships with several

organizations working locally, to ensure the logistical feasibility of the actual data collection in the given time frame.

The following provides an overview of the insights I gained from this specific trip, the specific tasks accomplished while in the field and an overview of the research questions which evolved out of this field trip.

Overall Insights Gained from Visit:

- Understanding of the structure of the Nepalese healthcare system, the different cadres of health workers, the requirements of each level of the system and the health policy documents that lay the foundation for the community healthcare system – including an understanding of Nepal's free healthcare policy and their essential care packages (from MoHP documents, reports from health organizations, discussions with health officials and from Makwanpur site observations and discussions)
- Understanding of role and function of Female Community Health Volunteers, sub health post, health post and primary health care centres (from training materials gathered and analysed and from informal discussions with workers at each level of the system in Makwanpur)
- Understanding of peoples' healthcare seeking behaviours in rural Nepal (from select discussions with villagers in Makwanpur)
- Understanding of the FCHV programme stakeholders, FCHV programme interventions key areas of FCHV research, and potential areas for future research (from discussions with various health organizations working with FCHVs)
- Understanding of the deficiencies in the Nepalese health literature (from review of various health reports, theses, articles published locally and internationally; and from discussions with other academic researchers working in Nepal)
- Understanding the logistics of data collection in Makwanpur district (from visit to several VDCs within Makwanpur and discussions with several NGOs working in the district)

Specific Tasks Accomplished on Visit:

- Obtained background grey literature on the healthcare system of Nepal including health policy documents, background statistics, training materials for different cadres of health workers from libraries all over Kathmandu and from health organizations in
- USAID interview: discussed their involvement with FCHVs, other FCHV programme stakeholders, potential areas for FCHV research, including retention of FCHVs and FCHV involvement with IMCI
- UNICEF interview: discussed FCHV programme and UNICEF's relationship with FCHVs; discussed potential areas for FCHV research, including FCHVs and volunteerism, FCHVs and task shifting approaches, FCHVs involvement in nutritional sprinkle distribution, how to differentiated FCHVs from rest of the healthcare system, FCHVs in urban areas etc.
- Maternal and Infant Research Activities interviews: discussed MIRAs work with FCHVs and mother's groups in Nepal; they are running a randomized control trial to determine the effects of FCHV-facilitated mother's groups on maternal and child health outcomes. They work in conjunction with UCL and have published a few papers on their research in the Lancet.
- Nepal Technological Assistance Group interview: discussed NTAGs involvement with the FCHV programme – mostly involved with the Vitamin A supplementation programme
- Nepal Family Health Programme interviews: discussed NFHP's work with FCHVs and their specific FCHV programmes (trainings, nutritional counseling, neonatal illness packages etc.); obtained training packets and materials; discussed idea of conducting research on the relationship between VHVs/MCHWs and FCHVs
- WHO interview: this interview was useless, but the purpose of it was to get a better understanding of the functioning and set-up of the rural healthcare system and to get a better understanding of what health systems data is collected regularly by the government
- NSI interview: discussed different health providers in Nepal and their training curriculums; received copies of reports they had conducted assessing the health workforce in Nepal and clinical algorithms they had compiled for training of mid-level health workers
- CARE interview: discussed the CARE's work in Makwanpur and the logistics of getting from one VDC to the next with the district

- Makwanpur field visit (5 days): met with health workers at each level of the system, several FCHVs and several villagers to discuss the functioning of the system, the main health concerns of people in that area, people's utilization of the system, people's health seeking behaviours, roles of FCHVs in the referral process, referral more generally; gained a better understanding of how each level of the system is actually functioning and what data is actually collected at each of the levels

Research Objectives, Questions and Justification:

Female Community Health Volunteers are only one component of a much larger and more complex community healthcare system. While they are the sole level of the system that is given any attention, this is often to the detriment of the rest of the system. Most of the research and projects focus exclusively on this cadre of workers and not on the other components of the system, which are every bit as critical as FCHVs. Moreover, most of the FCHV research focuses exclusively on the role of FCHVs in targeted intervention programmes (mostly restricted to maternal and child health) and rarely looks at the perspective of the system users. That said, it appears as if much of the health policy and the design of the overall system was done without much concern for the system users. While the system has multiple tiers intended to serve different functions, it is most likely not being utilized that way, and there is limited to no data on how the system is actually being utilized by the villagers. In other words, there is a massive disconnect between health policy and health realities in Nepal. To that end, this study will be an attempt to better understand how people are actually utilizing their community healthcare system and being moved through that system in the hopes of providing recommendations that will then inform policy. It is a chance to incorporate the perspectives of the system users into the equation – this is often

left out in favor of health facility surveys. The few health seeking behaviour surveys which were conducted were done on a small scale, in urban areas or informally and were purely descriptive accounts of where people go when they are sick. This study will move beyond that in an attempt to not only describe how the system is utilized, but understand the reasons why it is utilized this way and people's perceptions of the system. In addition, there has only been one other study conducted in Nepal to describe the functioning of the health referral system. There is a desperate need for the government to understand how this referral system is actually functioning and how this functioning may differ from the actual system design.

As a result of all of this, I have considered the following specific research questions to focus on for my DPhil research:

- How do people in rural Nepal use the decentralised community healthcare system when they are ill and why do they use it in this way?
- What determines where people seek care in the system? When do people actually consult FCHVs? SHP? HP? PHCC? How does this differ from what the government intended?
- How satisfied are the users with the system and their treatment? What are the outcomes of the treatment people receive? How much does the system cost? How accessible are the facilities?
- Once people enter the system, how are they moved through the system? How is the referral system functioning: what cases are sent to the next level? How are people referred? How often do people follow through on these referrals? What are the reasons for referrals?

The overall objectives of this research would be to understand and describe the functioning of the community healthcare system in rural Nepal from the

perspective of the users and to understand the gaps between the system design and system functioning.

Not only will this type of study fill a huge need within the healthcare literature of Nepal, it will also contribute to the international literature by looking at CHWs as part of people's healthcare seeking pathways. It will also ideally contribute to a better understanding more generally of the way in which healthcare system design and conceptualization actually differs from healthcare system functioning. Healthcare systems should not be designed without factoring in the perspectives of the users, but in Nepal this is what has happened. I hope this study will ultimately illuminate some of the problems with not including some of the key stakeholders into the system design.

Appendix 2.3

Overview of the Healthcare System of Nepal

The healthcare system of Nepal is designed so that each level – from the Female Community Health Volunteer (FCHV) upwards -- feeds into the next tier through a network of referrals, the entire system is also designed so that the higher levels provide logistical, financial, supervisory and technical support to the lower levels through various feedback mechanisms (DoHS, 2009; Neupane & Khanal, 2010; Figure A).

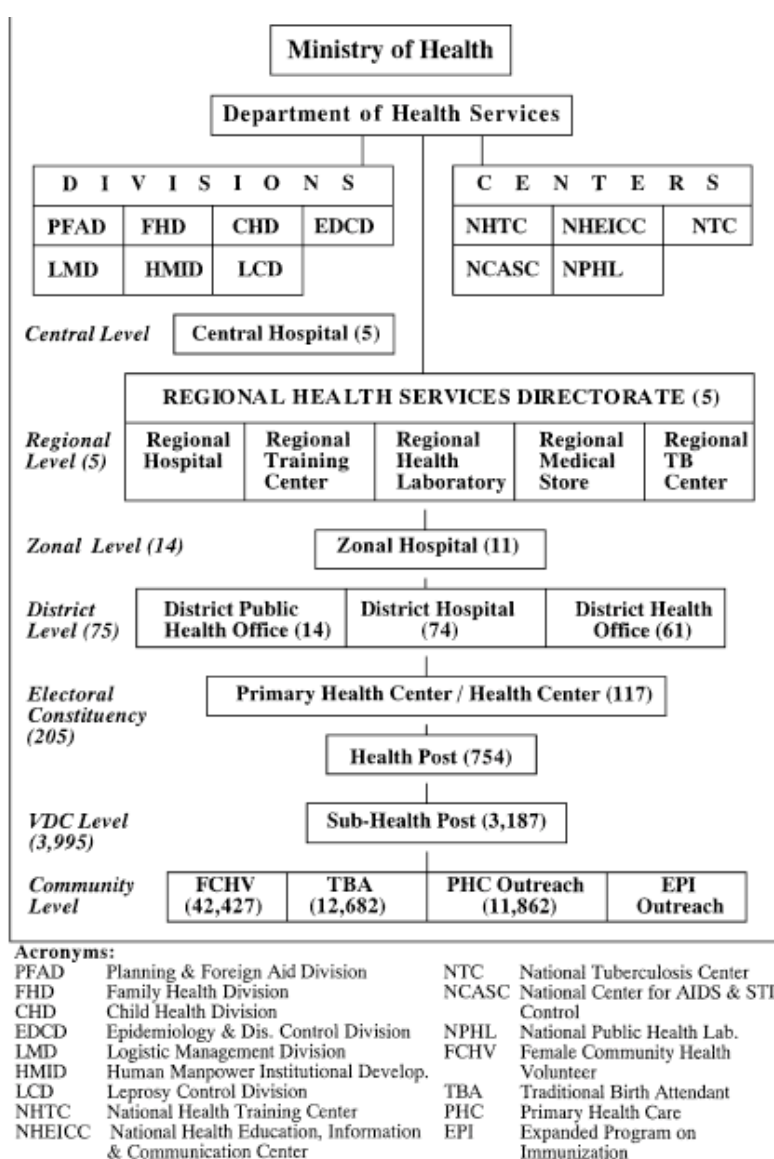


Figure A. Organisational structure of the Department of Health Services (from DoHS, 2009)

The first level is the Female Community Health Volunteer (FCHV), who is considered to be the backbone of the entire Nepalese healthcare system. Currently, there are a total of 48,549 FCHVs. They operate in each ward of each village (nine FCHVs per Village Development Committee) to promote community ownership and participation in health services, increase health awareness and gender sensitivity, motivate mothers and community members to utilise government health services, provide basic curative care and assist other health providers with distribution of medicines and with nutrition and immunisation programmes (USAID, 2010; WHO, 2008; NFHP, 2006). More specifically, FCHVs are involved in family planning services, safe motherhood initiatives, infectious disease programmes and neonatal health interventions. Through the Integrated Management of Childhood Illness (IMCI) programme, FCHVs are able to identify and treat acute respiratory infections (ARI) and diarrhoea cases. In short, FCHVs serve preventative, promotional and curative functions, operating as a bridge between government services and the communities themselves, and providing care as close to home as possible (NFHP, 2006).

FCHVs refer pregnant mothers and all patients they cannot treat to one of the other levels of the primary healthcare system. The Sub-Health Post (SHP), which is staffed by an Auxiliary Health Worker (AHW), a Maternal and Child Health Worker (MCHW) and a Village Health Worker (VHW) is designated as the first institutional contact point for basic health services (DoHS, 2008; Neupane & Khanal, 2010). It serves as the primary referral point for FCHVs and the venue for most community-based activities. The primary responsibilities of the SHP are to provide prevention and promotional services in the areas of family planning, safe motherhood, ante-natal and postnatal care, immunisation, diarrhoeal disease, leprosy, TB, HIV/AIDs, health education and nutrition; to provide

treatment services for minor diseases and injuries and to conduct health outreach clinics for three to five days each month in some of the less accessible wards (each village (VDC) is comprised of nine wards)(DoHS, 1994). Every Village Development Committee (VDC) should have a SHP unless there is another health facility present in that area (DoHS, 2009). In 2009, the Ministry of Health reported a network of 3,134 SHPs throughout the country (DoHS, 2009).

Above the SHP in the hierarchy is the Health Post (HP). According to government regulations, there should be one HP for every four to five VDCs (DoHS, 2008). In 2009, the government reported a total of 679 HP throughout the country (DoHS, 2009). Although the primary functions of the HP are similar to those of the SHP, they are required to have almost twice the manpower of the SHP and be staffed by a Health Assistant (HA) and an Auxiliary Nurse Midwife (ANM) in addition to the AHW, which makes them better equipped to deal with deliveries and other more complicated cases (DoHS, 1994).

For approximately every two HPs (one per every 8-11 VDCs) there is a Primary Healthcare Centre (PHCC), which is the first level of the healthcare system where a doctor can be consulted and inpatient and emergency care is available. Each PHCC is supposed to have between three and four inpatient beds and be staffed by eleven workers who are overseen by a medical officer (DoHS, 2008). PHCCs should also offer basic laboratory services, such as routine examination of blood, stool, urine or sputum (MoH, 2000). In 2009, the government reported a total of 214 PHCCs throughout the country.

Table A. Health workers and the length of their training requirements (adapted from UNICEF, 2006)

Health Worker Type:	Length of Training Required:
Female Community Health Volunteer (FCHV)	No schooling requirements and eighteen weeks of training
Maternal and Child Health Worker (MCHW)/ Village Health Worker (VHW)	Eight years of schooling and three months of training
Auxiliary Nurse Midwife (ANM)	10 years of school and 18 months of training
Auxiliary Health Worker (AHW)	10 years of school and 18 months of training
Health Assistant	SLC and two years of training
Medical Officer	Intermediate in Science (ISc) and five years of training

Table B. Staffing requirements for each primary health facility in the Nepalese public health system (adapted from MoH, 1994)

STAFFING REQUIREMENTS	SHP	HP	PHCC
Medical Officer	0	0	1
Health Assistant	0	1	1
Staff Nurse	0	0	1
Auxiliary Health Worker	1	1	2
Auxiliary Nurse Midwife	0	1	3
Maternal and Child Health Worker	1	0	0
Village Health Worker	1	1	0
Peon	1	2	3
Other (office assistant, lab tech., x-ray tech. etc.)	0	1	1
TOTALS	4	7-8	12

All PHCCs in a given district are linked to the District Hospital (DH), which has different grades depending on the type of facilities and staff it offers (DoHS, 2008). The district hospital, which offers the services of a paediatrician, OBG/YN and several medical doctors, is the first level of secondary care available in the Nepalese system. All district hospitals in

a region are linked to the regional hospital, which is also a secondary care facility. Finally, above the regional hospital are the Zonal and Central Hospitals which provide subspecialty, tertiary care (DoHS, 2008; DoHS, 2009).

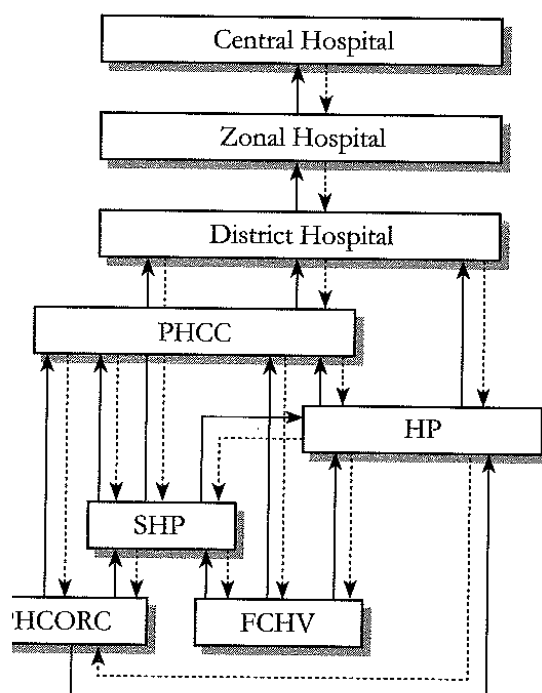


Table C. Distribution of healthcare facilities by population 2003/04 (from WHO, 2007)

No	Type of institution	Mountain		Hill		Tera i		National Total	
		No. of health institution	population/ institution	No. of health institution	Population/ institution	No. of health institution	population/ institution	No. of health institution	population/ institution
1	Government Hospital	16	112,893	43	257,153	25	488,804	84	317,519
	No. of beds	250		2,660		2,115		5,025	
	bed/1,000 pop	7.23		4.16		5.78		4.99	
2	PHCC/HC	18	100,349	91	121,512	78	156,668	187	134,139
3	Health Post	152	11,883	377	29,330	169	72,308	698	35,937
4	Sub-Health Post	384	4,704	1,600	6,911	1,145	10,673	3,129	8,017
	Total population		1,806,288		11,057,588		12,220,112		25,083,988

Source: DHS/MoHP

Table D. Health Personnel in Nepal (from: Rai et al., 2001)

<i>Under Ministry of Health</i>	
Doctors (including Dental Surgeons)	922
Nurses	1,160
Pharmacists	17
Health Assistants (HA)	1,084
Laboratory Technologists	41**
Laboratory Technicians (including Microscopist and Lab. Assistant)	Over 500***
Auxiliary Health Workers (AHW)	4,659
Assistant Nurse Midwives (ANM)	1,601
Maternal Child Health Workers (MCHW)	3,176
Female Community Health Volunteers (FCHV)	42,427
Traditional Birth Attendant (TBA) (<i>Sundeni</i>)	12,682
<i>Ayurvedic Manpower</i>	
<i>Adhikrit Kaviraj</i> (Officer level)	60
<i>Kaviraj/Sr. Vaidhya</i>	230
<i>Vaidya</i>	227
<i>Outside of Ministry of Health</i>	
A large number of health personnel are working in the Non-Government Sector (Table 2). Some are also working independently. The exact number is not available.	

Essential Healthcare Services (EHCS):

In order to make health services as affordable and accessible as possible, the government adopted a package of essential healthcare services to be provided by each level of the public health system. This essential service package is a set of low cost, high impact interventions which were introduced to increase the cost-effectiveness of the overall healthcare system and to ensure that the most important treatment programmes were standardised and available across the nation (MoH, 2000). The services selected were selected to address the most essential health needs of the population (box A). Each level of the health system was assigned specific tasks with regard to each of these interventions (Table E).

**Box A: Elements of Essential
Healthcare Services (MoH, 2000)**

1. Appropriate treatment of common diseases and injuries
2. Reproductive health services
3. Expanded programme on immunisation
4. Control of AIDs and STDs
5. Leprosy control
6. TB control
7. IMCI
8. Nutrition supplementation, enrichment, education and rehabilitation
9. Prevention and control of blindness
10. Environmental sanitation and hygiene
11. School health services
12. Vector born disease control
13. Oral health services
14. Prevention of deafness
15. Substance abuse including tobacco and alcohol
16. Mental health services
17. Accident prevention and rehabilitation
18. Community based rehabilitation
19. Occupational health
20. Emergency preparedness and management

Table E. Essential Healthcare Services provided by each level of the healthcare system for the '1. Appropriate treatment of common diseases and injuries' with modern allopathic medicine (adapted from MoH, 2000)

Level	Essential Services	By Whom
Household/Family	- First aid treatment of minor injuries and burns - Fever/headache - Refer to the nearest health institution	Female Community Health Volunteer (FCHV)
Community/Outreach	- First aid treatment of minor injuries and burns - Fever/headache	Village Health Worker (VHW), Maternal and Child Health Worker (MCHW)
Sub-Health Post	- Skin disease - Diarrhoea - Acute respiratory infection (ARI) - Intestinal worms - Pyrexia - Gastritis - Ear/eye infection - Chronic bronchitis - Abdominal pain - Anaemia - Abscesses	Auxiliary Health Worker (AHW) and MCHW/VHW

Health Post	- Skin disease - Diarrhoea - Acute respiratory infection (ARI) - Intestinal worms - Pyrexia - Gastritis - Ear/eye infection - Chronic bronchitis - Abdominal pain - Anaemia - Abscesses - Emergency services - Ear problems - TB follow-up - Leprosy follow-up	Health Assistant (HA)/Sr. AHW, AHW and Assistant Nurse Midwife (ANM)
Primary Health Care Centre (PHCC)	Outpatient Services: - Skin disease - Diarrhoea - Acute respiratory infection (ARI) - Intestinal worms - Pyrexia - Gastritis - Ear/eye infection - Chronic bronchitis - Abdominal pain - Anaemia - Abscesses - Emergency services - Ear problems - Minor surgeries - TB follow-up - Leprosy follow-up Inpatient Services: - Spontaneous normal delivery cases - Emergency cases - Lab services (routine examination of blood, stool, urine and sputum)	Medical Officer (MO), HA/Sr. AHW, Staff Nurse (SN), AHW, ANM, Lab Assistant
District Hospital	Outpatient Services: - Skin disease - Diarrhoea - Acute respiratory infection (ARI) - Intestinal worms - Pyrexia - Gastritis/acid peptic disorder - Ear/eye infection/Minor ENT - Chronic bronchitis/Chest infections - Abdominal pain/diseases - Anaemia - Other surgical operations - Laboratory and x-ray services Inpatient Services: - Spontaneous normal delivery cases - Gastroenteritis - Typhoid/para-typhoid cases - Pneumonia - Pyrexia of unknown origin - Injuries - ARI - Influenza - Abdominal/pelvic pain - Chronic obstructive pulmonary diseases - Treatment of TB/Leprosy - Surgery - Laboratory and X-ray services	Senior Medical Officer (SMO), MO, HA, Staff Nurse (SN), AHW, ANM, Lab tech, X-ray tech.

In order to increase utilisation of health facilities and reduce barriers to access, on 7 October 2007, the government declared that the delivery of all essential health services through the SHPs and HPs would be free of costs (RECPHEC, 2010). On 16 November 2008, the government decided to further expand all free health services to the PHCC level. In addition to the essential health service package, they introduced a list of 25-35 drugs (figure C) which were to be provided free of charge to all patients receiving care at the SHP, HP or PHCC (HSRSP & RTI, 2010).

उपस्वास्थ्य चौकीबाट निःशुल्क प्रदान गरिने औषधिहरू:		
1. Lignocaine Inj.	9. Ferrous Sulphate + Folic Acid Tab	17. Chloramphenical Eye Applicap
2. Paracetamol Tab/Syp.	10. Calamine Lotion	18. Clove Oil
3. Chlorpheniramine Tab	11. Gamma Benzene Hexachloride	19. Aminophylline Tab.
4. Pheniramine Inj.	12. Povidine Iodine	20. Vitamin B Complex Tab.
5. Albendazole Tab.	13. Aluminium Hydroxide + Magnesium Hydroxide Tab.	21. Metochlopromide Inj.
6. Metronidazole Tab./Susp.	14. Hyoscine Butylbromide Tab.	22. Ringer Lactate Inj.
7. Amoxyciline Cap/Tab	15. Oral Rehydration Salt (ORS) Powder	23. Oxytocin Inj.
8. Sulfamethoxazole+Trimethoprim Tab./Susp.	16. Ciprofloxacin Eye/Ear Drop	24. Magnesium Sulphate Inj.
25. Gentamycin Inj.		
प्रा.स्वा.के. स्वास्थ्य चौकीबाट निःशुल्क प्रदान गरिने औषधिहरू:		
1. Lignocaine Inj.	13. Aluminium Hydroxide + Magnesium Hydroxide	24. Charcol Activate Powder
2. Paracetamol Tab/Syp.	14. Hyoscine Butylbromide Tab.	25. Atropine Inj.
3. Chlorpheniramine Tab	15. Oral Rehydration Salt (ORS)	26. Ciprofloxacin Tab.
4. Pheniramine Inj.	16. Ciprofloxacin Eye/Ear Drop	27. Benzoic Acid + Salicylic Acid
5. Albendazole Tab.	17. Ciprofloxacin Eye Ointment	28. Atenolol Tab.
6. Metronidazole Tab./Susp.	18. Chloramphenical Eye Applicap	29. Frusemide Tab.
7. Amoxyciline Cap/Tab.	19. Clove Oil	30. Promethazine Tab.
8. Sulfamethoxazole + Trimethoprim	20. Vitamin B. Complex	31. Dexamethasone Inj.
9. Ferrous Sulphate + Folic Acid Tab	21. Metochlopromide Inj.	32. Salbutamol Tab.
10. Calamine Lotion	22. Ringer's Lactate Inj.	33. Oxytocin Inj.
11. Gamma Benzene Hexachloride	23. Sodium Chloride Inj.	34. Magnesium Sulphate Inj.
12. Povidine Iodine		35. Gentamycin Inj.

Figure C. List of essential medicines provided free of charge (from: MoHP, 2011)

The Health Management Information System:

The Health Management Information System (HMIS) was designed to enable better coordination, planning, monitoring and evaluation across the various levels of the healthcare system. The specific objectives of the HMIS are as follows:

- 1) Monitor the achievement, coverage, continuity and quality of health services
- 2) Help assess the progress towards goals and targets of district health programmers
- 3) Support the planning activities of all health programmes
- 4) Help senior managers to develop appropriate health policy guidelines
- 5) Provide access of data/information to all MoHP personnel
- 6) Support the planning, monitoring and evaluation management cycle of all health programmers

(Neupane & Khanal, 2010).

The system involves the regular collection of health data from across the country using 37 different forms (see following page), which are compiled at each level and analysed at the Ministry of Health and Population. The HMIS form we used for this study can be found in Appendix 3.3. The following diagram illustrates the flow of information in the system:

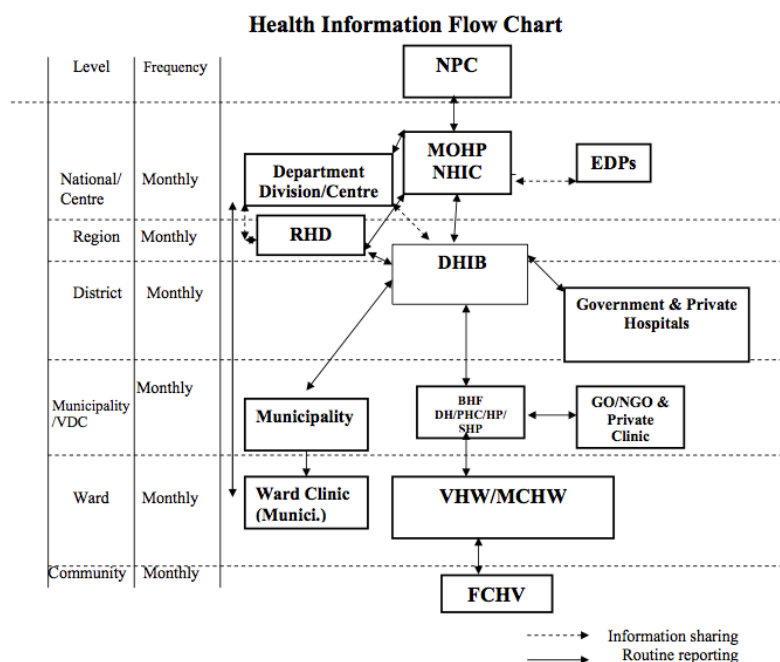


Figure D. Information flow in the HMIS

HMIS Tools

HMIS 1	Master Register
HMIS 2	Multipurpose Contact Card
HMIS 3	Child Health Card
HMIS 4	OPD Ticket
HMIS 5	Immunization Register
HMIS 6	TT Register
HMIS 7	<5 Nutrition Register
HMIS 8	Micronutrient Distribution Register
HMIS 9	Maternal Health Card
HMIS 10	Maternal Health Register
HMIS 11	Face Sheet (Hormonal)
HMIS 12	Face Sheet (Non- Hormonal)
HMIS 13	Family Planning Register
HMIS 14	Sterilization Register
HMIS 15	IUD / Norplant Removal Register
HMIS 16	Out Patient Register
HMIS 17	Outreach Clinic Register
HMIS 18	Specimen Collection Form
HMIS 19	Laboratory Examination Register
HMIS 20	Tuberculosis Treatment Card
HMIS 21	District Tuberculosis Register
HMIS 22	Leprosy Examination and Treatment Card
HMIS 23	Leprosy Clinical Register
HMIS 24	Malaria Classification and Treatment Register
HMIS 25	Referral Slip
HMIS 26	Defaulter Follow-up Slip
HMIS 27	FCHV register
HMIS 28	TBA Register
HMIS 29	VHW/MCHW Diary
HMIS 30	Universal Tally Sheet
HMIS 31	VHW/MCHW Reporting Form
HMIS 32	PHCC/HP/SHP Reporting Form
HMIS 33	District Reporting Form
HMIS 34	Hospital Reporting Form
HMIS 35	Admission Register
HMIS 36	Discharge Register
HMIS 37	Hospital Tally Sheet

Traditional Healers:

“If health care in Nepal is to be improved, one must start with the assumption that villagers’ faith in their own healing techniques – be they herbal or ritual – is not going to be shaken by the occasional visits of medical teams or even the building of hospitals”

- Blustain, 1976, pg 22

Despite a multi-tiered public health infrastructure which extends into the rural communities and provides a host of free services to the population, a good portion of rural Nepalese people still seek care outside of the governmental sector either through certified private or NGO-run hospitals or from unofficial faith healers (Dixit, 2005). In fact, there are more traditional healers in Nepal than there are certified health personnel. It was estimated that there were between 400,000 and 800,000 faith healers working in almost every ward of every village in rural Nepal (Shrestha & Lediard, 1980; Dixit, 2005).

More than just outnumbering medical professionals, traditional healers are not only more physically accessible, but they are more culturally acceptable to the vast majority of patients (Poudyal et al., 2003). At one point in time, the government even started several training programmes for traditional healers in hopes of utilising their acceptability to the communities as ways of increasing proper utilisation of government health services (Oswald, 1983). Part of the reason for their acceptability is that they are aligned with many patients’ belief systems, and allow patients to address the spiritual and not just the physical causes of ill health or to get at their deeper meanings (Dixit, 2005).

There is not just one type of traditional healer, but rather a host of different healers each serving different purposes, each consulted for different illnesses. *Jhankris* and *Dhamis* are

spirit mediums who can put patients into trances by chanting, while *Jyotishi* are tantrik healers who use sacrifices and spells to break curses. *Deuta* are priestly healers who are said to be possessed by goddesses and are able to commune with the spirits. On the other hand, *Jadi* and *Buti Walas* are considered medical providers and use herbal elixirs and preparations for treatment of ailments (Shankar et al., 2003; Neupane & Khanal, 2010).

Traditional healing and allopathic medicine, however, are not mutually exclusive healing systems. It is often the case that people will consult traditional healers to address the spiritual aspects of their illness and then consult allopathic care providers to address the physical aspects of their illness (Jimba et al., 2003). Despite their prominent role in the informal healthcare infrastructure of rural Nepal, traditional healers have yet to be incorporated into government health policies, and are often neglected by the government as part of people's health seeking pathways.

Timeline of Important Health Policies:

The Health sector's vision is:

“A health system in which there is equitable access to coordinated quality health care services in rural and urban areas, characterised by: self-reliance, full community participation, decentralisation, gender sensitivity, effective and efficient management, and private and NGO sector participation in the provision and financing of health services resulting in improved health status of the population”

- Second Long Term Health Plan, 1997 (from MoH, 2004)

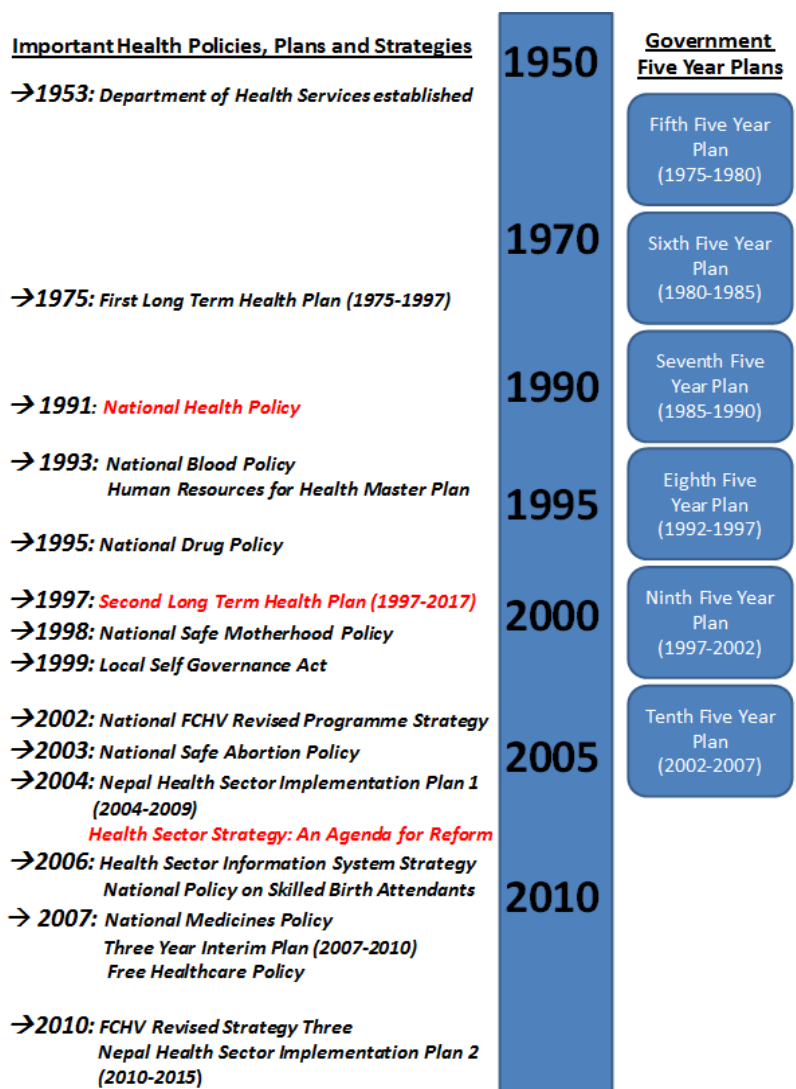


Figure E. Timeline of important health policies, strategies and plans and how the dates correspond to each of the government's five-year development plans. Those plans, policies or strategies highlighted in red are further detailed below.

[From:GON, Ministry of Health and Population]

[http://mohp.gov.np/english/publication/national_health_policy_1991.php]

National Health Policy, 1991

The National Health Policy was adopted in 1991 (FY 2048 BS) to bring about improvement in the health conditions of the people of Nepal. The primary objective of the National Health Policy is to extend the primary health care system to the rural population so that they benefit from modern medical facilities and trained health care providers. The National Health Policy addresses the following areas:

- ❖ **Preventive Health Services**
Priority is given to programmes that directly help reduce infant and child mortality rates. Services are to be provided in an integrated manner throughout the health system to sub health posts at the local level.
- ❖ **Promotive Health Services**
The programmes that enable people to live healthy lives will be given priority.
- ❖ **Curative Health Services**
Curative health services will be made available at all health institutions-central, regional, zonal and district hospitals; primary health care centres (PHCC), health posts (HP), and sub health posts (SHP); and, at health institutions at all levels of the healthcare system. Hospital expansion will be based on population density and patient loads. Mobile teams will be organised to provide specialist services to remote areas. A referral system will be developed to direct the rural population to well-equipped institutions.
- ❖ **Basic Primary Health Services**
Sub Health Posts will be established in phased manner in all Village Development Committees (VDC). One Health Post in 205 electoral constituencies will be upgraded in a gradual manner and converted to a Primary Health Care Centre.
- ❖ **Ayurvedic and other Traditional Health Services**
The ayurvedic system will be developed and other traditional health systems (such as Unani, homeopathy, and naturopathy) will be encouraged.
- ❖ **Organisation and Management**
Improvements will be made in the organisation and management of health facilities at the central, regional and district levels. This will include the integration of the district hospitals and the public health offices into District Health Offices.
- ❖ **Community Participation in Health Services**
Community participation will be sought at all levels of healthcare through the participation of female community health volunteers (FCHV), traditional birth attendants (TBA) and leaders of various local social organisations. VDCs will provide sites for the location of SHPs.
- ❖ **Human Resources for Health Development (HRH)**
Technically competent human resources will be developed for all health facilities. Training centres and academic institutions will be strengthened.
- ❖ **Resource Mobilisation in Health Services**
National and international resources will be mobilised and alternative concepts (such as health insurance, user charges, and revolving drug schemes) will be explored.
- ❖ **Private, Non-Governmental Health Services and Inter-sectoral Co-ordination**
The Ministry of Health will co-ordinate activities with the private sector, non-governmental organisations (NGOs), and non-health sectors of HMG. The private sector and NGOs will be encouraged to provide health services.
- ❖ **Decentralisation and Regionalisation**
Decentralisation and regionalisation will be strengthened; peripheral units will be made more autonomous. District Health Offices (DHO) will have a prominent role in the planning and management of curative and promotive health services from district to village levels.
- ❖ **Blood Transfusion Services**
The Nepal Red Cross Society will be authorised to conduct all programmes related to blood transfusion. The practice of buying, selling, and depositing blood will be prohibited.

- ❖ **Drug Supply**
Improvements will be made in the supplies of drugs by increasing domestic production and upgrading the quality of essential drugs through effective implementation of the National Drug Policy.
- ❖ **Health Research**
Health research will be encouraged for better management of health services.

[From:GON, Ministry of Health and Population]

[http://mohp.gov.np/english/publication/second_long_term_health_plan_1997_2017.php]

Second Long Term Health Plan, 1997 - 2017

The Ministry of Health of His Majesty's Government of Nepal developed a 20-year Second Long-Term Health Plan (SLTHP) for FY 2054-74 (1997-2017). The aim of the SLTHP is to guide health sector development in the improvement of the health of the population, particularly those whose health needs are not often met.

The SLTHP addresses disparities in healthcare, assuring gender sensitivity and equitable community access to quality healthcare services. The aims of the SLTHP are to provide a guiding framework to build successive periodic and annual health plans that improve the health status of the population; to develop appropriate strategies, programmes, and action plans that reflect national health priorities that are affordable and consistent with available resources; and to establish co-ordination among public, private and NGO sectors and development partners.

The SLTHP vision is a healthcare system with equitable access and quality services in both rural and urban areas. The system would encompass the concepts of sustainability, full community participation, decentralisation, gender sensitivity, effective and efficient management, and private and NGO participation.

2.1 Objectives

- ❖ To improve the health status of the population of the most vulnerable groups, particularly those whose health needs often are not met—women and children, the rural population, the poor, the underprivileged, and the marginalized population.
- ❖ To extend to all districts cost-effective public health measures and essential curative services for the appropriate treatment of common diseases and injuries.
- ❖ To provide the appropriate numbers, distribution and types of technically competent and socially responsible health personnel for quality healthcare throughout the country, particularly in under-served areas.
- ❖ To improve the management and organisation of the public health sector and to increase the efficiency and effectiveness of the healthcare system.
- ❖ To develop appropriate roles for NGOs, and the public and private sectors in providing and financing health services.
- ❖ To improve inter-and intra-sectoral co-ordination and to provide the necessary conditions and support for effective decentralisation with full community participation.

2.2 Targets

The targets of the SLTHP are as follows:

- ❖ To reduce the infant mortality rate to 34.4 per thousand live births;
- ❖ To reduce the under-five mortality rate to 62.5 per thousand;
- ❖ To reduce the total fertility rate to 3.05;
- ❖ To increase life expectancy to 68.7 years;
- ❖ To reduce the crude birth rate to 26.6 per thousand;
- ❖ To reduce the crude death rate to 6 per thousand;
- ❖ To reduce the maternal mortality rate to 250 per hundred thousand births;
- ❖ To increase the contraceptive prevalence rate to 58.2 percent;
- ❖ To increase the percentage of deliveries attended by trained personnel to 95%;

- ❖ To increase the percentage of pregnant women attending a minimum of four antenatal visits to 80%;
- ❖ To reduce the percentage of iron-deficiency anaemia among pregnant women to 15%;
- ❖ To increase the percentage of women of child-bearing age (15-44) who receive tetanus toxoid (TT2) to 90%;
- ❖ To decrease the percentage of newborns weighing less than 2500 grams to 12%;
- ❖ To have essential healthcare services (EHCS) in the districts available to 90% of the population living within 30 minutes' travel time of facilities;
- ❖ To have essential drugs available at 100% of facilities;
- ❖ To equip 100% of facilities with full staff to deliver essential health care services; and
- ❖ To increase total health expenditures to 10% of total government expenditures.

“Health Sector Strategy: An Agenda for Reform” (from: HMG MOH, 2004)”

Outputs:

Output One: Prioritise Essential Healthcare Services

- Costing of and resource allocation for EHCS
- Redefine institutional arrangements for delivering EHCS
- Develop systems for priority access for poor and vulnerable groups
- Strengthen outpatient services
- Additional behaviour change and communication (BCC) activities

Output Two: Decentralise health management

- Introduce local management of Sub-Health Posts
- Create hospital autonomy and initiate resource mobilisation

Output Three: Private and NGO sector development

- Formally establish committees or workgroups for specific program areas to co-ordinate the work of government, EDPs and I/NGO groups
- Establish district level health co-ordinating committees
- Up-date inventory of existing private/NGO/public involved in health sector, by district
- Define an appropriate public/private/NGO mix for each district
- Set quality standards and regulatory mechanisms for private and NGO delivery

Output Four: Sector management

- Strengthen joint MOH/EDPs annual planning programming, budgeting and monitoring cycle
- Strengthen ongoing MOH/EDPs programmatic collaboration
- Strengthen sector management at central level
- Strengthen regional and district management
- Capacity building at central and district levels
- Systematic assessment of institutional and organisational arrangements
- Re-definition of role throughout the health system

Output Five: Financing and resource allocation

- Identification of health sector priorities and re-allocation of resources to priority services
- Alternative financing arrangements, such as community health insurance, explored
- MOH to develop national guidelines for user fee practices and other payments in public facilities
- Drug financing mechanisms strengthened to support increased and equitable availability of essential drugs

Output Six: Management of physical assets

- Products selection and quality improvement
- Commodity distribution improved
- Drug financing mechanisms strengthened
- National drug policy better implemented
- Logistics management information system (LMIS) strengthened
- Disaster relief commodities management strengthened
- Quality and safety policies and systems to be established

Output Seven: Human resource development

- The MoH will reform its HRD unit and locate it in an appropriate place
- The MoH will improve its personnel management
- In-service training co-ordination and quality will be improved
- New training for identified needs
- Better co-ordination between the Ministry of Education (MoE), MoH and CTEVT for pre-service education

Output Eight: Integrated MIS and QA policy

- Develop and establish integrated management information system
- Establish and implement quality assurance policy

Appendix 2.4

The Literature on Health-Seeking Behaviours in Nepal

Before one can start devising an entirely new study on health-seeking behaviours in the Nepalese context, it helps to understand the findings from previous ones.

As noted, the vast majority of studies deal with care seeking related to maternal health, focusing predominantly on the factors which deter women from seeking antenatal or postnatal care. Several studies found that less than a third of women tend to use antenatal care or postnatal care services (Jahn et al., 2000; Acharya & Cleland, 2000; Furber, 2002; Dhakal et al., 2007; Syed et al., 2008). One study found that lack of awareness regarding services was the main reason for their non-use, but increased utilisation of postnatal services was also correlated with a series of individual and household socio-demographic variables: women's occupation, ethnicity, the number of pregnancies and children, and husband's socioeconomic status (Dhakal et al., 2007). Another study actually found that while women's education, family size and household socioeconomic status were positively correlated to usage of maternal health services, women's occupation was actually negatively correlated, the opposite of the findings of Dhakal and colleagues (2007) (Matsumura & Gubhaju; 2001). Yet another study, using data from a nationally representative survey, showed that health worker visits and educational promotion programmes could increase maternal utilisation of health services, but socioeconomic and demographic variables such as household economic status, number of children and place of residence were more strongly

associated with service utilisation than any intervention programme (Sharma, Sawangdee & Srirassamee, 2007).

Reluctance to utilise antenatal care services can also possibly be explained by various institutional factors such as the number of professional staff or drugs available at the facilities at which care was being sought. In one study of antenatal care seeking, physical infrastructure of the facilities was found to be significantly related to services usage, and quality mattered more than physical accessibility in determining whether or not pregnant women sought care (Acharya & Cleland, 2000). The modest effect of physical accessibility on usage of maternal services was confirmed again by Hotchkiss (2001) in his analysis of the Nepal Living Standards Survey Data. In other words, factors other than physical access may play a more important role in maternal health seeking.

Still, even when it comes to severe complications during pregnancy, women are often reluctant to seek care outside of the community. In one study, of the 40% of women who had experienced danger signs during their pregnancies, 31% used self-treatment with allopathic medicines, while only 12% sought care from a primary health care facility and 10% from the hospital (only in dire cases). Of those who did seek government care, half took longer than forty-eight hours to go, three quarters delayed by first consulting a traditional healer or waiting to get better. In this study, lack of awareness, cultural attitudes towards pregnancy, geographical inaccessibility and difficulty with transport were cited as the reasons for often delaying care or not utilising services (Mesko et al., 2003). With

regard to maternal health, Andersen's model along with various cultural beliefs and attitudes about the pregnancy and perinatal period seem to predict utilisation behaviour in most of the cases studied (Syed et al., 2008).

What holds true for maternal health regarding low service utilisation also seems to pertain to women more generally. For example, one study on women's health seeking for sexually transmitted infections found that low utilisation of services was due to inadequate knowledge, strong cultural beliefs about illness aetiology, fear of stigmatisation and social taboos, which prevented women from seeking facility-based care and instead led them to seek care from home remedies or traditional healers (Poudel-Tandukar, Poudel & MacDougall, 2003). Women who do seek care, tend to delay longer than men in doing so (Subedi, 1989). This might be partially explained by the fact that women often consult traditional healers or wait for health workers to visit them within their communities before seeking care outside, while men tend to go directly to government health centres, as was found to be the case with malaria and tuberculosis patients (Raj Sharma, 2008; Yamasaki-Nakagawa et al., 2001).

This delay in care seeking also pertains to women's care-seeking habits for childhood illnesses, although perhaps to a less extreme degree. One study showed that only 11% of mothers sought 'prompt' and 'appropriate' care for their ill children and that this was correlated with family income, mother's education and perceived severity of illness (Sreeramareddy et al., 2006). Another study showed that poor knowledge of danger signs, high costs, physical inaccessibility of

facilities and traditional beliefs prevented women from seeking care outside of the home for their newborns (Syed et al., 2008). While it was found that physical distance to facilities and socioeconomic status play an important part in care-seeking for childhood illness, perhaps the factor which is most predictive of whether or not care is sought outside the household is perception regarding the severity of illness. Although a subjective process, women who perceived their children to be severely ill were more likely to seek prompt care at a government facility than those who perceived their child's illness to be of lesser severity. Unfortunately, there was also found to be a gender bias in illness perceptions, with more male babies being considered ill enough to warrant medical attention than female babies, despite actual clinical similarities between the two (Pokhrel & Sauerborn, 2004).

The vast majority of delays in modern care seeking or failures to seek modern care in most studies of health seeking behaviour in Nepal have been attributed in large part to the availability of cheaper and more culturally and physically accessible options within respondent's own communities (Subedi & Subedi, 2000). One study, which used a modified version of Andersen's Health Belief Model showed that medical pluralism factors, such as the availability of traditional care services or home remedies, had a significant effect on delay of care (Subedi, 1989). Seeking services of traditional healers prior to allopathic care is common in Nepal (Shimobiraki & Jimba, 2000). In a household survey of 405 households, it was found that 81% of severely ill individuals sought care first from a traditional healer, 55% of those people went on to visit a government facility

when the illness did not resolve (Jimba, Poudyal & Wakai, 2003). Usage of complementary and alternative medicines may also be one of the reasons for underutilisation of modern facilities in this context. One study showed that 62% of respondents used complementary remedies, citing difficulty in accessing health post and doctors as reasons for not seeking modern allopathic care (Shankar, Partha & Shenoy, 2003). Further, home remedies or self-care tend to dominate people's health-seeking decisions (Parker et al., 1979). Either people use home remedies or they seek medicines and care from a pharmacist first, even for conditions as severe as tuberculosis (ten Asbroek et al., 2008). In one study of medication usage, it was found that 59% of respondents had taken some form of self-medication, mostly paracetamol and analgesics, without consulting a trained health provider (Shankar, Partha & Shenoy, 2002). One potential explanation cited for this over-reliance on traditional healers, home remedies and pharmacists has been the cost of modern medical care, the vast majority of which is out-of-pocket expenses, which most people have difficulty affording (Hotchkiss et al., 1998). In a study using Andersen's Health Belief model to determine the factors associated with modern care usage, it was found that various predisposing and enabling socio-demographic factors were strongly associated with modern care usage, but that those who didn't seek modern care cited distance, poor treatment, poor health staff attitudes and high costs as their reasons for not doing so (Niraula, 1994). Cost of services as an explanation on its own, however, does not explain why people often choose more expensive private clinics for care rather than use the health posts (Raj Subba, 2001). It is obviously a combination of interacting variables - socio-demographic factors, illness factors and health

service factors, mediated by cultural beliefs, emotional processes, attitudes, perceptions, knowledge and motivations – which determine where and why people seek care within the Nepalese context. No single existing conceptual model of healthcare seeking can adequately capture the Nepalese health-seeking behaviours, which is why a more comprehensive model is needed to untangle this plethora of different factors affecting care choices. Further, no single study of health-seeking behaviours in Nepal as of yet seems to get at this complexity. It is only when the literature is taken as a whole that the complexity of care choices is revealed.

Table A. HSB Studies from Nepal

Author, Date	Sample Size	Data Collection Methods/ Instrument/s	Major Findings
Sreeramareddy et al., 2006 [1]	292 mothers	Cross-sectional survey in immunization clinics	8.9% of children received traditional home remedies 2.7% of children received no care 46.2% of children received care from pharmacies 26.4% of children received care from allopathic medical practitioner 26.4% of mothers sought 'appropriate' care 56.8% of mothers sought 'prompt' care 11.3% of mothers sought 'appropriate & prompt care' total family income, number of symptoms, mothers' education and perceived severity of illness were the predictors of care seeking behaviour
Syed et al., 2008 [2]	57 participants	Intervention study; Focus Group Discussions	Prevailing attitude was that pregnancy was a normal process for which no additional medical care was required, so women do not seek care during pregnancy unless a problem is perceived Although knowledge of maternal danger signs is high, people usually use home remedies and traditional healers before seeking allopathic care because of distance and costs Postnatal care seeking is largely non-existent due to lack of motivation of health workers to promote care Poor knowledge of newborn danger signs, family traditions, costs and lack of transport to inaccessible facilities prevent women from seeking care for newborns
Pokhrel & Sauerborn, 2004 [3]	8,112 observations from 2,847 households in 274 communities	Descriptive analysis of Nepal Living Standards Survey data to substantiate construct which maps out a hierarchical scale of household decision making regarding child health care	10% of total population reported illness and 69% of whom sought care Depending on provider, people spent between 2.5 and 4.3% of per capita household annual expenditure on health care Analyses detected an age and gender bias in perception of illness Mother's socioeconomic status, income and the travel time to the nearest facility were important for care seeking outside the home Perception of illness was probably single most important factor in determining subsequent care seeking
Jahn et al., 2000 [4]	Health service documents from 14 first level health units and two hospitals covering 1,378 pregnancies and 1,323 deliveries; antenatal exit interviews (n=136); maternity user interviews (n=146)	Health document reviews, semi-structured interviews	Only 32% of women utilised antenatal care even within a 5-km range from health facilities – this indicates that there may be cultural barriers or social barriers which prevent people from seeking care apart from geographic barriers

Subedi, 1989	706 outpatients and inpatients at two hospitals	Structured survey questionnaire using modified version of Andersen's Health Belief Model	Logistical regressions revealed that older people and women delay longer in seeking care Higher education or income is correlated with delaying less Medical pluralism factors, such as reliance on family and or friends for advice before making care choices, had a statistically significant effect on delay of care Home remedies also contributed to people delaying care The Health Belief Model is not sufficient in-and-of – itself to explain delay of care
[5]			
Mesko et al., 2003	Pregnancy surveys (n=8,798); Pregnancy case studies (n=30); Women's Focus Group Discussions (n=43)	Quantitative surveys and qualitative interviews and focus group discussions	94% of women gave birth at home (12% alone) 40% of women had experience danger signs of high risk pregnancies and ¾ of them had consulted a traditional healer, who was first point of contact in all 30 case studies 31% of women purchased allopathic medicines, but waited more than six hours to do so 12% sought care from primary health centre, citing poor quality care, lack of medicines and long wait times as reasons for not seeking care there 10% sought care at district hospital, depending on their proximity –this was never their first choice Of those who sought government care, half took more than 48 hours to go; this was in part due to period of seclusion post pregnancy Reasons for delay of care were: lack of awareness regarding danger signs and attitudes towards pregnancy, geographic inaccessibility and lack of transport, institutional factors related to health facilities, culture of watching and waiting, shame Major obstacles to seeking care were limited capacity to recognise danger signs, need to watch and wait and overwhelming preferences for treatment within the community Peer pressure, perceived costs, distance from health facility and reluctance to move pregnant women were the factors which influence the preference for local care
Raj Subba, 2001	175 households in two VDCs	Household surveys	72% of people use private clinics while only 15.4% used health posts Poor people and uneducated people were more likely to self medicate Average treatment was 1031Rs and 73% of people reported being unable to afford expenses Knowledge of community health options is quite low
[7]			
Shankar, Partha & Shenoy, 2002	142 respondents	Semi-structured questionnaire	Urban respondents were more frequent users of self-medication than rural respondents 59% of people had taken some form of self medication Most commonly used medications were paracetamol and analgesics for fever and headaches Many people also used herbal remedies
[8]			

Niraula, 1994	625 households	Survey data (used Benighat Survey Data from 1988) In-depth case studies Observations Group Discussions Key Informant Interviews using Andersen's Health Belief Model as a conceptual guide	Treatment seeking is largely determined by the types of illnesses and popular beliefs regarding them – illness is though to be both physical and spiritual Home remedies are often most peoples' first choices Use of modern health care was directly related to Socioeconomic status and distance to health facility as well as related to age Of those who didn't use modern health services, distance, bad treatment and high costs of treatment were cited as reasons for not using health post services Predisposing: Age and size of family were negatively related to probability of using modern services, while number of children living increases the probability of using such services; maternal education was found to be positively correlated with seeking care Enabling: settlement cluster, knowledge of health worker and value of land were all positive correlated with modern health facility usage and found to be stronger than predisposing factors Status difference between providers and care-seekers can create communication gaps, which lessen people's willingness to seek care Promptness of care depends on age and sex of sick person
[9]			
Acharya & Cleland, 2000	592 children from 56 clusters	Survey data using Nepal Fertility Family Planning and Health Survey from 1991	Travelling time effected peoples' willingness to use ANC or get BCG vaccinations Frequency of visits by VHW had positive effect on utilisation of ANC, but only when visits were regular ANC was higher in villages with medium, but not active FCHVs ANC was significantly related to number of professional staff and drug availability at nearest facility Physical infrastructure of health posts was significantly related to service utilisation Quality of facilities matters more than accessibility
[10]			
Shankar et al., 2003	112 households	Semi-structured questionnaire	71% of individuals had used prescribed allopathic medicines Most commonly used were antibiotics and paracetamol Self remedies accounted for 18% of drugs used Self medication was more common among rural households
[11]			
Jimba, Poudyal & Wakai, 2003	405 households from 28 communities (30%)	Household Surveys	53% of respondents had illness in household in previous year (34% mild, 42% moderate, 24% severe) 69% of households sought care for illness, while 31% did not 81% of those who sought care first visited a traditional healer (26% of those visited traditional healers exclusively, while 55% first went to a traditional healer and then visited the health post or sub-health post) 19% visited either SH/HP or female community health volunteer first
[12]			
Raj Sharma, 2008	469 malaria cases	Semi-structured interviews with cases	Care-seeking rate or probability of seeking care for malaria was low on the first day of the symptoms and increased sharply over the first five days before declining Women generally tended to wait longer for malaria workers in order to receive home treatment Patient's age, household size, education and type of malaria species infecting patient had significant effect on care-seeking rate
[13]			

Furber, 2002 [14]	1,230 referred cases	Referral data collection forms	Low number of patients attend hospital after referral This could be due in part to geographical constraints, transportation issues, economic concerns, perceptions regarding quality of government services, preference for private care Only 26% of the women who were expected to be pregnant attended for antenatal care Access to hospital services may be more strongly influence by economic, social, geographical factors
Parker et al., 1979 [15]	14,000 interviews in 7,400 households comprising 48,000 people	Semi-structured interviews (four separate studies)	Those closer to services were more likely to use them 20-29% of individuals used professional services when they were ill; the vast majority used self care, the majority of which was provided by relatives Self care was in part dependent on type of illness
Shankar, Partha & Shenoy, 2002 [16]	242 respondents	Semi-structured questionnaire	62% of respondents used complementary remedies, of which Ayurveda was the most popular, followed by faith healing Abdominal pain, followed by fever and headache were the most common complaints for preferring complementary medicine Difficulty in accessing health post and doctors were the most commonly cited reasons for turning to complementary therapies
Yamasaki-Nakagawa et al., 2001 [17]	265 men and 125 women	Cross-sectional study using patient interviews with TB cases	Women delayed longer in seeking care than men – most visited traditional healers first Women were more likely than men to receive more complicated charms from traditional healers Men tended to visit the government medical establishment first if they knew free TB treatment was available, while women did not
Poudel-Tandukar, Poudel & MacDougall, 2003 [18]	54 focus group participants 120 interviews	Structured questionnaire delivered through focus group discussions and face-to-face interviews	Predictors of low utilisation of health services for sexually transmitted infections were self-medication, consultations with faith healers, inadequate knowledge regarding STIs, beliefs about causes, fear, social taboos and stigmatisation, confounded by women's secondary status and presence of male health professionals Results indicate importance of beliefs in shaping health decisions
Shimobiraki & Jimba, 2000 [19]	200 villagers in two villages	Semi-structured interviews, focus group and key informant interviews	40% of villagers had suffered from illnesses for which they sought care 70% of sufferers consulted traditional healers first as they were convenient and did not require cash and could properly identify the spiritual or non-spiritual causes of illness Of those, more than 90% said they would continue to consult traditional healers first and would only consult modern medicine when traditional failed In one of the villages, the effectiveness of the nearby primary health centre was cited as a reason for choosing it over traditional healing In other village people only visited modern health facilities after traditional healers or other community-based health workers referred them there
Hotchkiss, 2001 [20]	3,338 households (18,855 individuals in 275 communities)	Secondary analysis of Nepal Living Standards Survey Data	Physical access to health care facility has a statistically significant, but modest impact on the use of maternal services The difference between service utilisation for those less than an hour and more than an hour away from a facility was significantly different, although closer proximity than one hour is not significant

Dhakal et al., 2007 [21]	150 women	Cross-sectional study using semi-structured questionnaires with women who had delivered	Only 34% received postnatal care and only 19% received it within 48 hours of giving birth Lack of awareness was the main barrier to utilisation Women's occupation, ethnicity, number of pregnancies and children and the husband's socioeconomic status, occupation and education were significantly associated with utilisation of postnatal care Wealth and having attended antenatal care are important factors in uptake of postnatal care Women experiencing health problems are strongly motivated to seek postnatal care
Sharma, Sawangdee & Sirirassamee, 2007 [22]	3,845 women (NFHS); 4,731 (NDHS)	Analysis of data pooled from Nepal Family Health Survey (1996) and Demographic and Health Survey (2001)	Health worker visits and educational promotion led to increased utilisation of maternal health services Socioeconomic and demographic variables such as household economic status, number of living children and place of residence showed strong associations with use of maternal health services – stronger than any intervention programmes
Matsumura & Gubhaju, 2001 [23]	1,388 women	Analysis of data from Nepal Family Health Survey (1996)	Education of women had a positive relationship with maternal healthcare utilisation Employment of women was negatively associated with use of maternal health services Household economic status was significantly positively associated with utilisation behaviour Women from extended households were more likely to use maternal health care
ten Asbroek et al., 2008 [24]	26 TB patients	Semi-structured interviews	Patients routes to care often started at medical shop and led via intricate pathway with multiple providers and facilities to higher care (private and public) Known patient factors such as severity of complaints, ability to pay for services, availability of services and peer support influenced peoples' routes Specific health factors also impacted trajectories such as perceived quality, costs and service level of a provider and lack of provider-initiated referral Self referral because of waned trust in provider was common
Shankar et al., 2003 [25]	Four health centres (775 patients at PHC, 485 patients at HP, 501 patients at SHP)	Prospective data collection using prescription form at facilities	Most common reasons people visited PHC, HP and SHP was for ARI, followed by skin diseases for PHC and wounds for HP and SHP Most commonly prescribed drug at the PHC was vitamins, while at SHP and HP it was Paracetamol; Cotrim was also commonly prescribed at SHP and HP There were significant differences in the average number of drugs per prescription across the different levels and the morbidity profiles differed Costs were higher at PHC
Pokhrel et al., 2005 [26]	8,112 observations from 2,847 households	Analysis of data from Nepal Living Standards Survey (1996)	A 100% subsidy of user fees would increase current utilisation rates by 56%, while a 100% increase in fees would lead to a drop in utilisation of 12%

Appendix 2.5

Health-Seeking Behaviour Literature which Substantiates Kroeger's Model

Table A2.1. Health seeking behaviour studies dealing primarily with socio-demographic factors (patient factors) as determinants of behaviour

Study (author/s, date)	Primary Independent Variable/s	Notes on Findings
Yanagisawa, Mey & Wakai, 2004	Socioeconomic status of household using assets	Poor families tend to use health centres more often than more well-off families as a first step in their care seeking pathways This could be due to the fact that services at government facilities are cheaper and more accessible than private care Difference disappeared for villages where health centres were more than two km away
Kofoed et al., 2004	Socioeconomic status of household using bed crowding and electricity availability	Bed crowding and lack of electricity were strongly associated with seeking care outside of the home for malaria rather than home treatment This could have been due to lower costs of government services or knowledge regarding signs and symptoms of malaria
Kristiansson et al., 2009	Socioeconomic status of household using income	Poorest households seek care less from health professionals for both non-severe and severe childhood illness. This may be due to the costs of medicines the families would be required to purchase if children were diagnosed or could be due to lack of knowledge regarding health care options or inability to take time off work to seek care
Van der Stuyft et al., 1996; Alberts et al., 1997	Socioeconomic development of the community	Poorer communities use health services less often than more wealthy communities
Develay, Sauerborn & Diesfeld, 1996	Residential zone and socioeconomic status of household	Residential zone was found to have a significant association with utilisation of modern care services, while household socioeconomic status did
Celik & Hotchkiss, 2000	Educational level	Educational attainment of women predicts appropriate use of essential care during the perinatal period
Alberts et al., 1997	Educational level	People with higher educational levels are more likely to consult specialists, dentists of physiotherapists for care and are more likely to be hospitalised
Ahmed et al., 2005; Howlader & Bhuiyan, 1999	Educational level	Level of education determines whether or not people avoid self-care or unqualified drugstore salespeople and instead choose formal, qualified allopathic practitioners for care
Olaogun et al., 2006	Occupation	Religion, family income and family structure are insignificant in determining whether women seek appropriate care, while occupation is the only factor positively correlated with appropriate health service usage

Boman & Wallter, 2010	Gender	Higher conformity to masculine norms is a strong predictor of more perceived barriers to health care seeking, while higher general self efficacy is correlated with fewer perceived barriers
Masfield, Addis & Courtenay, 2005	Gender	Strong masculine norms make men afraid to overreact to health problems or behave in ways which make them appear weak and dependent on other, or lacking in control. As a result, men seek care less often when they need it and delay longer than women in their care seeking
Woldemicael & Tenkorang, 2009	Gender	Women with higher autonomy are more likely to seek care than those with lower levels of autonomy
Weeks et al., 2005	Gender	Women are often thwarted in their attempts to get practical and financial help from those around them. As a result of disempowerment, they fail to gain access to necessary care
Ngome et al., 2003	Gender	Husbands operate as gate-keeping to care seeking, impeding ability of women to seek prompt care for their children at modern health facilities
Chen et al., 1981; Paul, 1992	Gender	Male children are more likely to survive past childhood as a result of being brought to health facilities for treatment more often than female children
Johansson et al., 2000	Gender	Men are more concerned with treatment costs and thus often wait until much later to seek care, and when they do, they go directly to cheaper government facilities Women place more value on service conditions and staff attitudes and thus often seek private care and practice self-treatment before going to government health facilities
Charles et al., 2008	Household dynamics	Interlocking family objectives and values can have a strong influence on the decision making of individuals regarding care seeking for childhood illness
Franckel & Lalou, 2009	Household dynamics	Decision making for care is often a collective process involving the entire family unit
Ngo et al., 2007	Social support (community-level dynamics)	Care-seeking choices can be influenced by the advice of communities and the support provided to individuals by the communities Those who do not feel supported are less likely to seek care for STDs or get tested for HIV
Plowden & Young, 2003	Social support	‘Significant others’ are often cited as being important in reducing barriers to care seeking
Asbury et al., 1994	Social support (community-level dynamics)	Social support structures within the community can give people the strength they need to take the first steps towards recovery, which increases likelihood of seeking care at the outset
Nicholls, Wens & Smith, 2003	Social support (community-level dynamics)	Communities can prevent people from seeking care because of the fears they can induce about social ostracism or stigmatization
Otusanya et al., 2007	Ethnicity	Different structural access factors between Yoruba and Fulani groups determine how often they seek care from private or government facilities; these differences are not explained by differing cultural beliefs

Basu, 1990	Ethnicity	Utilisation of maternal health services differs between regional groups. These differences are dictated more by lifestyle differences and employment rate differences than by intrinsic cultural differences
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Table B.2. Health seeking behaviour studies dealing primarily with health service factors (institutional factors) as determinants of behaviour

Study (author/s, date)	Primary Independent Variable/s	Notes on Findings
Cook et al., 1999; Ndyomugenyi, Neema & Magnussen, 1998; D'Ambruso, Abbey & Hussein, 2005; Airey, 1989	Affordability of services	Costs of services is often mentioned as one of the primary determinants for whether or not people seek care or fail to seek care
Huy et al., 2009	Affordability of services	Cost of health services poses a major financial burden for many households and can prevent poorer households from seeking hospital-based care for children with dengue or other major febrile illnesses
Hang & Byass, 2009	Affordability of services	Cost of care can prevent people from seeking care for injury
Van Damme et al., 2004	Affordability of services	Even modest out-of-pocket medical expenses can cause indebtedness and further perpetuate the poverty cycle
Ladha et al., 2009	Affordability of services	62% of respondents cited financial constraints and high costs of services as deterrents for seeking care during illness episodes
Ndegwa et al., 2005	Affordability of services	Costs are major deterrent for seeking eye care services
Crabbe et al., 1996	Affordability of services	Costs are a major deterrent for seeking care for STDs; greater than stigma
Baltussen et al., 2002	Affordability of services	Surveyed individuals indicate that financial accessibility of services should be a major health policy priority
Ahmed et al., 2006	Affordability of services (insurance scheme)	Providing people with health grants can result in increase in service utilisation of allopathic care options
Criel, Van der Stuyft & Van Lerberghe, 1999	Affordability of services (insurance scheme)	Introduction of insurance plans can lead to increase in service utilisation
Cheng & Chiang, 1998	Affordability of services (insurance schemes)	People with insurance, no matter what the plan, have a much higher probability of seeking care from a doctor than those without insurance
Asenso-Okyere, 1998	Affordability of services	If service costs increase without a subsequent increase in service quality, service utilisation decreases and self-medication increases
Chawla & Ellis, 2000	Quality of services	Overall increase in fees does not always result in serious reductions in usage or access because increased utilisation due to improved services quality care outweigh decreased utilisation due to increased costs

Habbani, Groot & Jelovac, 2006	Quality of services	People are willing to pay for more expensive services if they feel that the services are worth the amount they pay
Aday & Andersen, 1974	Accessibility of services	Accessibility plays as large a role as affordability in determining whether or not people seek care
Hang & Byass, 2009	Physical accessibility of services	Geographically inaccessible populations are much less likely to receive the acute care they require because in order to get to health facilities they often have to travel long distances over difficult terrain
Amuge et al., 2004	Physical accessibility of services	Long distances to services are one of the major factors which deter people from seeking care altogether
Paul, 1992	Physical accessibility of services	People are more likely to seek care of lesser quality if it is closer to their homes
Kumar, Singh & Kaur, 1997	Physical accessibility of services	High quality care within the community can result in better mortality statistics
Kunda et al., 2007	Physical accessibility of services	Long travel distances can result in critical treatment delays for brucellosis
Auer et al., 2000	Physical accessibility of services	Long travel distances can result in critical treatment delays for tuberculosis
Weeks et al., 2005	Physical accessibility of services (transport)	Transport to facilities may not always be available, resulting in delayed or no treatment
Hausmann-Muela, Riber & Nyamongo, 2003	Acceptability of services	Perceptions of service acceptability is predicated on characteristics of health providers, attitudes of health staff, availability of various services and medicines and the overall health facility atmosphere, although each of these is valued differently by different people
D'Ambruso, Abbey & Hussein, 2005	Acceptability of services	Staff attitudes are considered to be one of the most important factors in influencing acceptability of care and hence service utilisation, which in turn results in more successful deliveries
Cook et al., 1999	Acceptability of services	People cite the ways in which they are received by staff members as a critical factors in determining where care is sought
Uzochukwu & Onwujekwe, 2004; Ikoh et al., 2009; Luque, Whiteford & Tobin, 2007	Acceptability of services	Availability of staff, services and medicines are critical in shaping people's perceptions of service quality and acceptability
Ndomugenyi, Neema & Magnussen, 1998	Acceptability of services	Women's care seeking for malaria and antenatal check-ups is strongly influenced by understaffing and irregular drug supply, which result in perceptions of low quality government services
Lonnroth et al., 2001	Acceptability of services	TB patients prefer to seek care from private clinics because they have more flexibility of treatment options and diagnostic procedures – in short, better care options
Deressa, Ali & Hailemariam, 2008	Acceptability of services	People often prefer private care for treatment for malaria despite higher costs because care is perceived to be of better quality

Ager & Pepper, 2005	Acceptability of services	People tend to bypass primary levels of healthcare despite their closer physical proximity because they perceive secondary care to be of higher quality; perceptions of quality are often independent of actual quality
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Table B.3. Health seeking behaviour studies which deal primarily with illness factors as determinants of behaviour

Study (author/s, date)	Primary Independent Variable/s	Notes on Findings
Abdulraheem, 2007	Nature of illness	Nature of illness can sometimes be the most critical factor in determining whether or not people seek care
Nicholls et al., 2005; Nicholls, Wiens & Smith, 2003; Mulder et al., 2007; Mfinanga et al., 2008	Impact of illness on productivity	If disease does not initially have a large impact on people's productivity, it is likely people will ignore the first symptoms, which can result in critical treatment delays
Taffa & Chepngeno, 2005; Weller, Ruebush & Klein, 1997; Kamat, 2006	Perceived severity of illness	If people do not perceive the illness to be serious, they fail to seek care outside of the home or seek care from folk healers or low level facilities; perceptions are often independent of actual illness severity
Sutrisna et al., 1993; Malik et al., 2006; Yimer et al., 2009; Zhang et al., 2007	Duration of symptoms	People are more likely to seek care outside of the household or switch to facility-based care if the symptoms persist for a long period of time or are unresponsive to treatment
Tan et al., 2006	Knowledge regarding symptoms	If people are more knowledgeable about symptoms, they tend to seek care more promptly and appropriately
Mfinanga et al., 2008; Zhang et al., 2008	Knowledge regarding symptoms	If people are unaware of symptoms associated with certain diseases, they delay in seeking care or seek inappropriate treatment
Fantahun & Degu, 2003	Perceived severity of illness	People may recognise symptoms, but still fail to seek care for them because they do not perceive them as severe enough to require facility-based care

Appendix 2.6

The Creation of a Comprehensive Analytical Model to Explain Health-Seeking Behaviours

In order to create such an analytical model, it helps to begin with previous models and previous findings and build from there. Rather than looking at health seeking as a single step process, one should deconstruct the entire process into multiple steps, each of which is acted upon by individual, institutional, environmental, cultural, psychological factors. One of the first attempts at such a model was Suchman's (1965) 'Stages of Illness and Medical Care' model in which he broke health seeking behaviours down into five distinct phases which could each be analysed independently: symptom experience stage, assumption of sick role stage, medical care contact stage, dependent patient role stage, recovery or rehabilitation stage (Box A).

Box A: Stages of Illness and Medical Care (Suchman, 1965)

- 1) Symptom Experience Stage:
 - a. Physical Experience
 - b. Cognitive Aspects – interpretation and derived meanings of individual experiences
 - c. Emotional response – perceptions and interpretations of symptoms not in terms of medically diagnostic categories, but in terms of interference with social functioning
- 2) Assumption of Sick Role Stage:
 - a. Discussion of symptoms with other, involvement of family and friends in illness, relinquishing normal duties and embracing illness
- 3) Medical Care Contact Stage:
 - a. Selection of source of care – reflects knowledge, availability and convenience of such services and the impact of one's social group on decision
- 4) Dependent Patient Role Stage:
 - a. Officially become patient and turn responsibility over to the doctors
 - b. Start treatment
- 5) Recovery or Rehab Stage:
 - a. Start to return to normal self

Fabrega (1973) took Suchman's model and reshaped it into his 'Model of Illness Behaviour.' Fabrega felt that "recognition, definition and responses associated with illness are variable, highly complex and interconnected" and this was his attempt to make some almost mathematical sense out of the complexity by breaking illness behaviour down into nine stages with a set of variables assigned to each (Box B).

Box B: Illness Behaviour Model (Fabrega, 1973)

- 1) Illness recognition and labelling
- 2) Illness disvalue: an evaluative/inquiry process to establish meaning and/or significance of given illness; often predicated on current and past system values
- 3) Treatment plans: product of learning and earlier experience with illness; every illness evaluation leads to a vector of mutually exclusive treatment plans
- 4) Assessment of treatment plans: establish potential benefits of various plans
- 5) Treatment benefits: computation of potential benefits that can accrue from various treatment plans
- 6) Disvalues of illness: computation of costs associated with treatment plans (time, resources, personal control)
- 7) Net benefits/utility: cost of treatment plan subtracted from treatment benefits which yields a vector of residual benefits or costs
- 8) Selection of treatment plan: creating of a decision plan to implement particular treatment plans following a particular decision rule
- 9) Set up for recovery

Both of these models helped to deconstruct, albeit in different ways, the sets of decisions and choices people must make in the care seeking process. They both still fail, however, to explain how various individual, social, environmental and

institutional determinants impact each of these decisions. As such, they continue to look quite narrowly at how individuals process information and in turn make decisions about care.

Chrisman (1977) took a step back from the individual when he constructed his empirical 'Health Seeking Process' model, which was designed to help investigators precisely define the temporal relationships amongs different aspects of the health seeking process and illuminate its dynamic nature. In helping to relate conceptual elements with chronology of processes, the model was supposed to allow investigators to explicitly link sociocultural factors such as health beliefs or sick roles to behaviours during illness (Chrisman, 1977; Figure A).

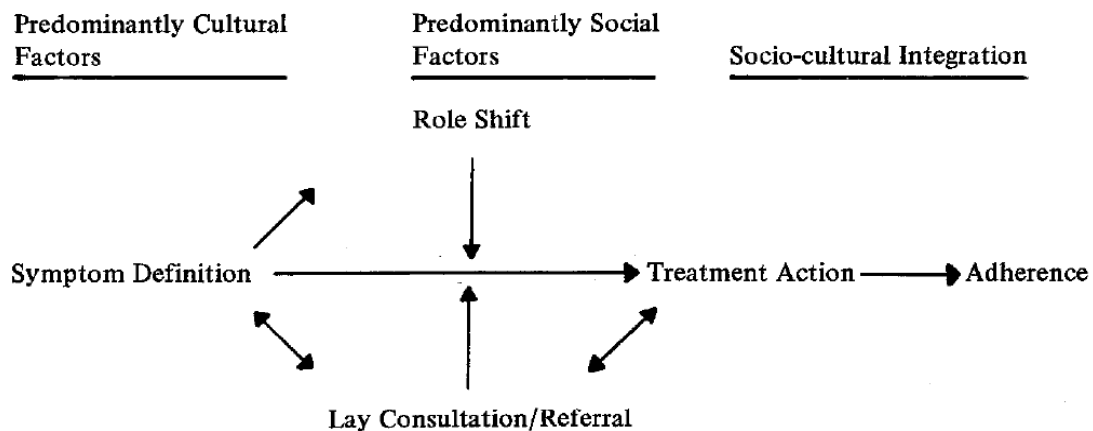


Figure A.Chrisman's 'Health Seeking Process' Model. *"This is a schematic depiction of the halth seeking elements and the major directions of influence. When placed in chronological context, the evaluation process would effect the temporal sequences and repition of elements. Health seeking must also be seen in a socio-economic context in which societal constraints operate to influence exposure to biomedical system and the insularity of the group."* [from Chrisman, 1977]

Although Chrisman's model acknowledges the role of the sociocultural context in shaping health behaviours, it still leaves out many of the determinant factors and processes which can influence health seeking, and neglects several important steps involved in treatment decision-making, such as choice of provider.

Andersen (1995), in an attempt to move beyond Chrisman's model and address all of the various determinant factors which influence health seeking choices, revised his behavioural model to illustrate the dynamic and recursive nature of health services' use and to incorporate the resulting outcomes of health seeking. The model portrays all of the different external and internal influences on health service usage and uses feedback loops to demonstrate how outcomes can in turn effect future health attitudes, perceptions beliefs and behaviours (Figure B).

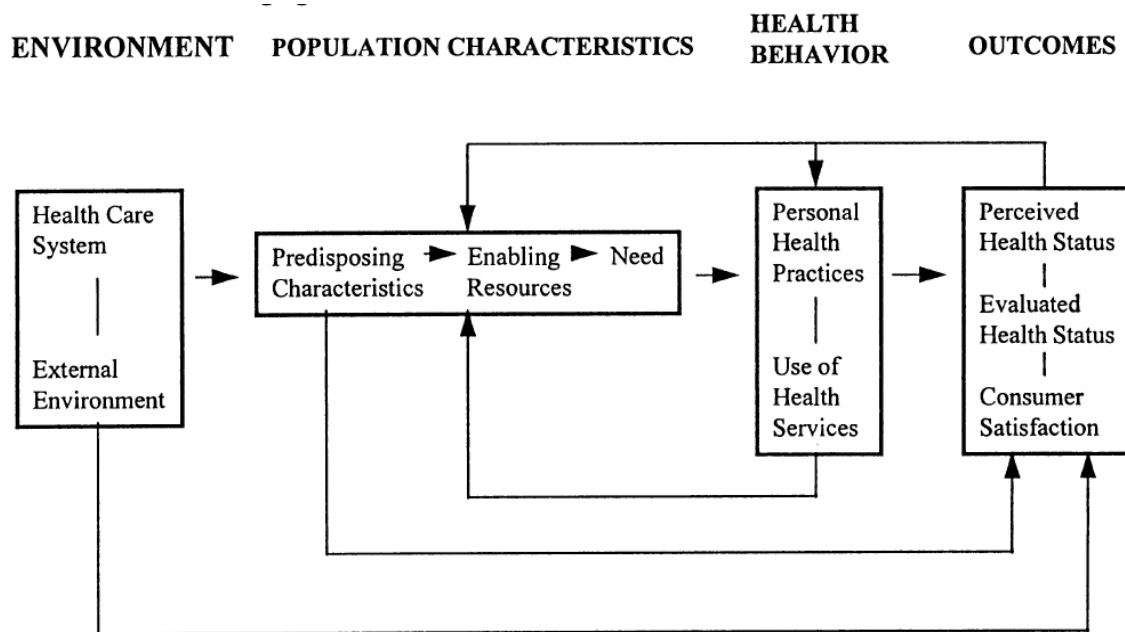


Figure B. Andersen's revised 'Health Behaviour Model.' Health care system can be further broken down into policy, resources and organisations. Use of health services can be further broken down into type, size, purpose and time interval. Consumer satisfaction can be further broken down into convenience, availability, financing, provider characteristics and quality. [from Andersen, 1995]

Still, while Andersen's revised model is perhaps the most comprehensive in terms of the attention it pays to each of the factors which influence care decisions, and while it is one of the only models to acknowledge the ways in which previous health experiences can impact future health seeking practices, unlike Suchman's and Fabrega's models it still considers the health behaviour and health decision process as a single step rather than multiple different steps each one of which is influenced by a hierarchy of different factors.

Pokhrel and Sauerborn's (2003) 'Household Decision-Making' model is perhaps the only model that looks simultaneously at the health seeking decision process (broken down into four distinct steps) and the possible determinant factors which influence this entire process (broken down into three levels: individual characteristics, household characteristics and health system characteristics; figure C). It is one of the only models to acknowledge that determinant factors effect the entire health-seeking process not just those steps involving choice of providers or symptom definition. It is also one of the few models which can bridge the divide between the quantitative and qualitative literatures. In that sense, it is by far the most holistic of the health care utilisation and health seeking behaviour models, but it does leave out the cognitive and emotional processes which impact care seeking, and it does leave out the disease and sociocultural factors which influence health decisions.

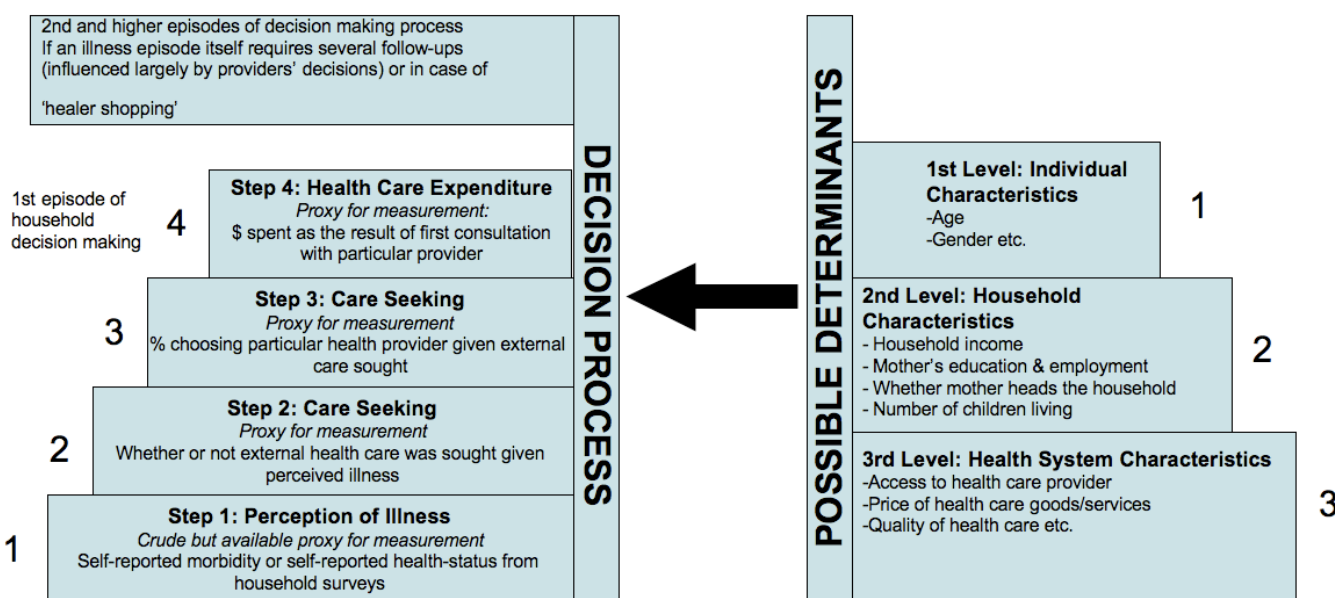


Figure C. Household decision-making on child health care as a process involving four hierarchical steps and determined by factors at three levels [adapted from Pokhrel & Sauerborn, 2003]

Despite its shortcomings, Pokhrel and Sauerborn's model provides a very good jumping off point for the construction of an even more comprehensive health seeking model which combines all of these previous models in some capacity (figure D).

As Andersen and Kroeger proposed, the health seeking process begins with a set of objective variables which are inherent to the individual who is seeking help, the health system from which s/he is seeking help from and the illness from which the individual is suffering. These variables are often the independent variables in most studies of health seeking behaviour and are used as the explanatory variables in most health seeking behaviour logistical regressions. They includes individual, household and community level sociodemographic

factors, health system factors such as accessibility, affordability, availability and acceptability, as well as various illness factors such as aetiology, illness time, illness severity illness duration etc. These variables in-and-of -themselves, however, do not allow researchers to understand why people make certain health decisions, which is perhaps more important for those wishing to devise health policies or evaluate health interventions.

Indeed, the 'why' of health-seeking behaviours are often left out of most explanatory models because they do not easily loan themselves to quantitative analyses. The 'why' of health seeking can be seen as a set of intervening mechanisms or mediating processes which connect the objective explanatory variables to the health seeking decisions. Each of the explanatory variables is shaped by these processes, and this in turn results in a set of health decisions. These processes are things like individual cognitive and emotional considerations which shape peoples' perceptions about illness threats and coping mechanisms (this is where psychological models like the Health Belief Model, self efficacy beliefs and Protection Motivation Theory come into play), cultural conditioning, which shape peoples' beliefs about illness and treatment, and interpersonal communications, which contribute to constructing people's attitudes about health services and willingness to seek treatment. In short, all of the demographic explanatory variables must first be filtered through people's attitudes, beliefs, perceptions, and emotions before a health-seeking decision can be formulated.

As Suchman, Fabrega, Pokhrel and Sauerborn acknowledged in their models, health seeking is not just a single decision, but an entire process, which is why a comprehensive model must also break down health decisions into a series of steps, each a decision of its own to be analysed. In amalgamating these models and simplifying them, health seeking becomes a series of five steps leading to a set of outcomes:

- 1) **Perception of Illness:** recognise symptoms, classify them and define them subjectively and objectively in terms of biomedical, cultural or combined constructs; determine illness severity (a process guided by cultural beliefs, previous experiences and biomedical knowledge)
- 2) **Situational Appraisal:** weigh various illness factors against the perceived barriers and costs of seeking care and the perceived benefits of treatment (a process guided by cognitive and emotional processes and governed by individual's attitudes regarding illness and health services)
- 3) **Care Seeking Decision:** decide whether or not to seek care (a process guided by health system characteristics, cultural beliefs, self efficacy beliefs and other interpersonal processes)
- 4) **Choice of Provider:** determine whether informal or formal, private or public, traditional or allopathic care will be sought, or how care options will be combined (a process guided by institutional factors of accessibility, availability, quality and affordability, attitudes regarding various sources of medical care, cultural beliefs and previous health experiences of the individual and the community)
- 5) **Treatment:** determine which of the various treatment offers provided by the provider to take; determine whether or not to comply with treatment or whether or not an additional opinion will be sought (a process guided by interpersonal aspects of the provider-patient relationship, biomedical knowledge, perceptions regarding quality of services, cultural beliefs regarding the efficacy of various treatments and attitudes regarding the specific health provider/facility)

Depending on the study objectives, these decisions can be the dependent variables of interest. Each of these steps can be analysed independently to determine which factors contribute to which decisions. In this way a decision tree

can be constructed of people's health choices and the explanatory variables and intervening mechanisms which shape them. Inevitably the outcomes of the treatment will also help to determine people's future health seeking habits by effecting peoples' beliefs, perceptions, attitudes, knowledge and emotions.

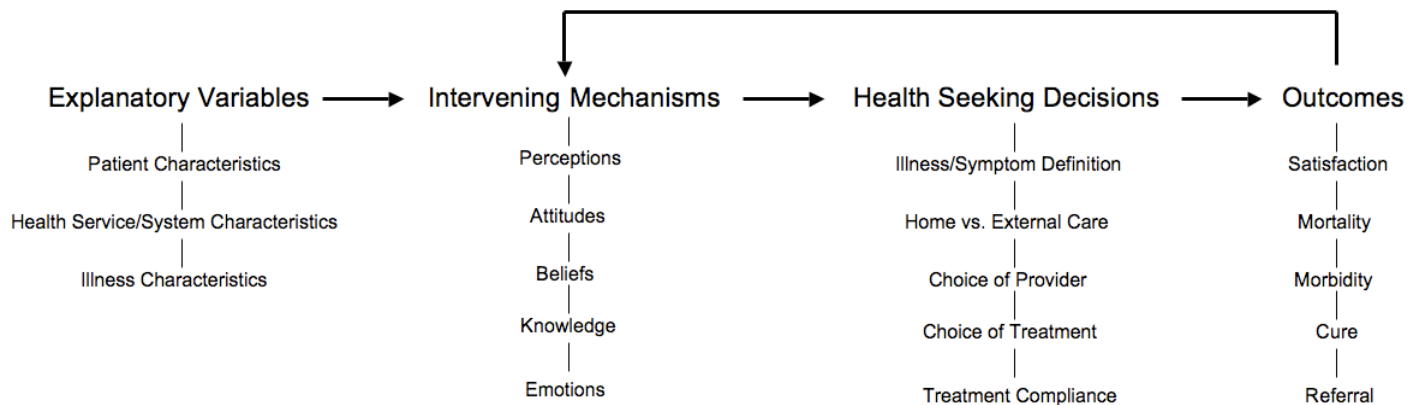


Figure D. A simplified versions of a comprehensive model of health seeking behaviours. The model attempts to amalgamate all of the previous models in order to look hollistically at health seeking behaviours and the objective explanatory variables and the subjective intervening processes which shape them and ultimately determine health outcomes.

Taking such a model as a whole it is possible to see where each of the various disciplines and their literatures can fit into the picture. Moreover, it is possible to see how each of the various steps of the process can be deconstructed and analysed. It is possible to analyse individual components of the whole process (ie. looking only at where people go or what providers they use) or look at the relationship between various aspects of the process (ie. the relationship between health system factors and choice of providers). It is possible to see how logistical regressions can be used to connect the explanatory variables to health decisions and to health outcomes and how health decisions can be correlated to health outcomes. It is possible to see how qualitative interviews and thematic anaylses

can be used to connect the explanatory variables to the intervening processes and the intervening processes to health decisions. This model can be used both to analyse individual health-seeking decisions and to get a sense of health-seeking at the aggregate level. Rather than being prescriptive in the way it dissects the behaviour, this model provides a synthesis of the literature and offers a framework into which each of the previous health seeking behaviour studies can be fit. Finally, it can be seen as a conceptual model around which future health-seeking behaviour studies can be built.

Unlike previous models, there is room for each of the disciplinary approaches to health seeking behaviours and room for the multitude of different independent and dependent variables which research on this topic has attempted to cover (figure E). If we take a step back from this model we can even start to use it to analyse the overall functioning of the health system by looking at the difference between actual use and intended use of the system and the reasons for these discrepancies.

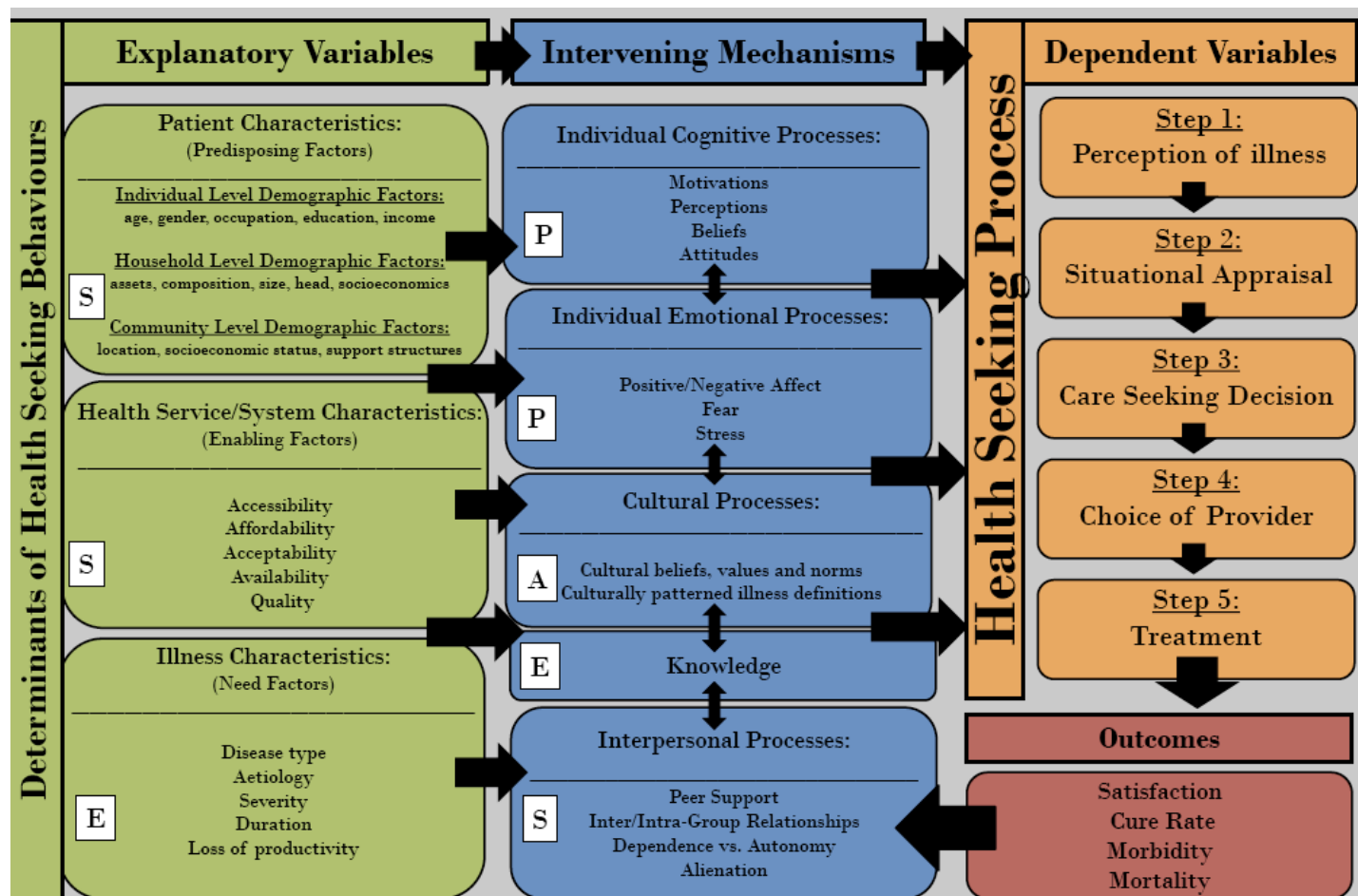


Figure E. A detailed conceptual model of health seeking behaviours. This model is a more detailed version of figure 12. It incorporates each of the subfactors in the health seeking pathway

Unfortunately, although this model is an ideal framework for studying HSBs, and although it is more comprehensive than all of the past models, it poses a problem for actually studying HSBs because it necessitates a level of awareness about the decision-making process that most households or individuals do not possess (especially when studying HSBs retrospectively). To substantiate this model with research would require countless sub-studies to address each of the explanatory variables and intervening mechanisms in turn and their relationships to each of the various steps in the health-seeking process. Moreover, it would require research to understand of how each of the various intervening mechanisms relate to one another and in turn influence the decision-making process. It is also a model that assumes that households' explicit reasons for care choices align with the implicit reasons and that the quantitative relationships between the explanatory variables and the health-seeking decisions comport with the more qualitative findings. This, however, is often not the case, and often the results from quantitative studies of HSBs do not align with the findings from qualitative studies of HSBs.

So, in order to use this model as a guiding framework for this research, and in order to limit the scope of the study, the model had to be simplified. Instead the following model was used as a guiding framework for this research:

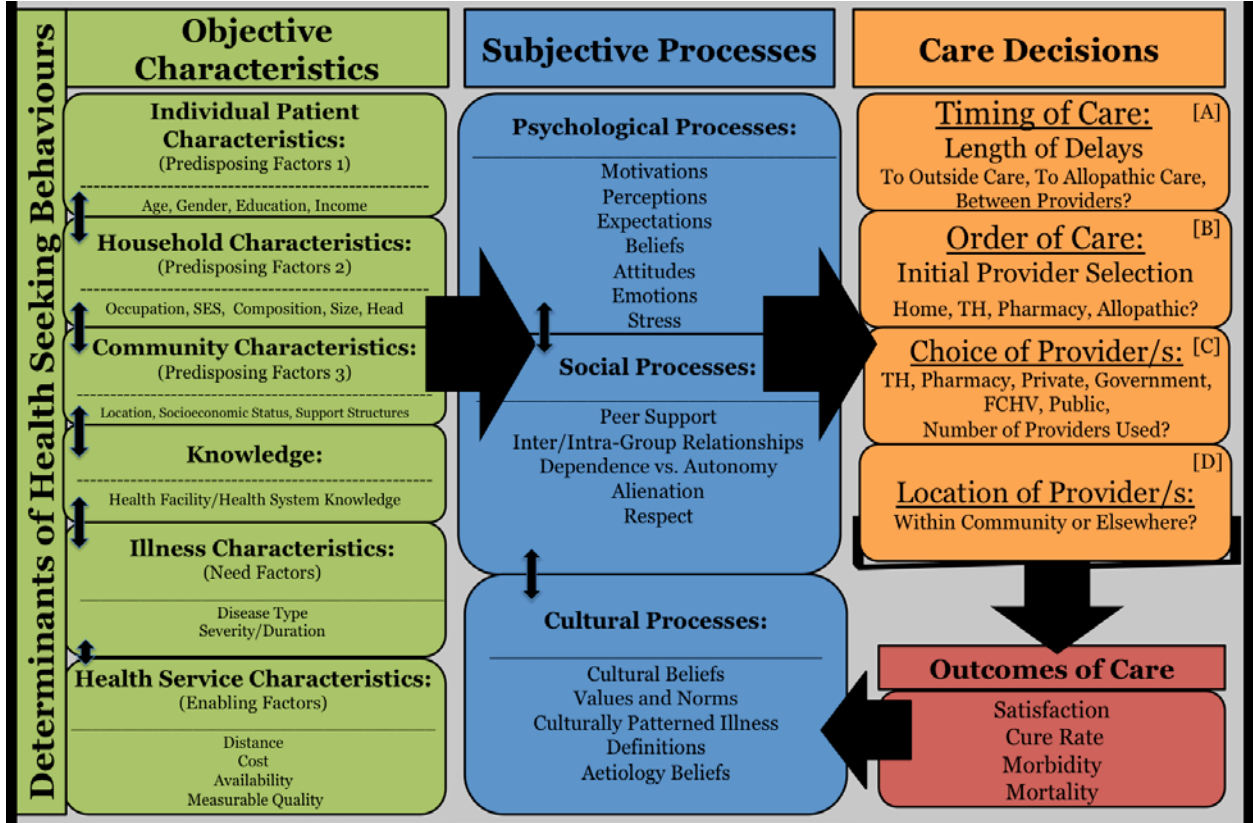


Figure F. The final conceptual model used to guide this research. Although it is not as comprehensive as the model presented in figure E, it is more realistic for the purpose of this research.

Rather than deconstructing the entire HSB process into its five distinct steps, which would have required a separate quantitative and qualitative analysis for each, three specific major care decisions were selected as the outcomes of primary interest: timing of care, order of care, choice of provider, and location of care. Each of these is an important and distinct aspect of the overall health-seeking process, and thus is worth examining. All of the factors in green are the objective variables which can be related to the care decisions via a series of quantitative regression analyses. These are broken down by patient-level demographics, household demographics, community demographics, knowledge

variables, health system factors and illness factors. All of the factors in blue are the more subjective processes which may impact decisions. In order to simplify the model somewhat, these were broken down into three distinct categories of interest: psychological processes (which include both cognitive and emotional processes), social/interpersonal processes and cultural processes. Self-efficacy beliefs were not included in this particular model because they lie predominantly in the realm of psychology and were not the focus of this particular study. The role between those processes in blue, those factors in green and the choices of different providers were explored through qualitative interviews in addition to the quantitative analyses. It should be noted that each of the variables and processes also influence one another in turn (although these dialectical relationships are more difficult to explore with research). For example, a more educated household will obviously be impacted differently by cultural norms and social processes than a less well educated household would be, and those differences in turn will play out differently in the health-seeking choices those households ultimately make. Unfortunately, it is very difficult to explore these types of relationships explicitly because most of them take place on a subconscious level and thus are not something a household mentions when they are asked about the factors which govern different health decisions.

Below is a simplified version of the comprehensive model presented above:

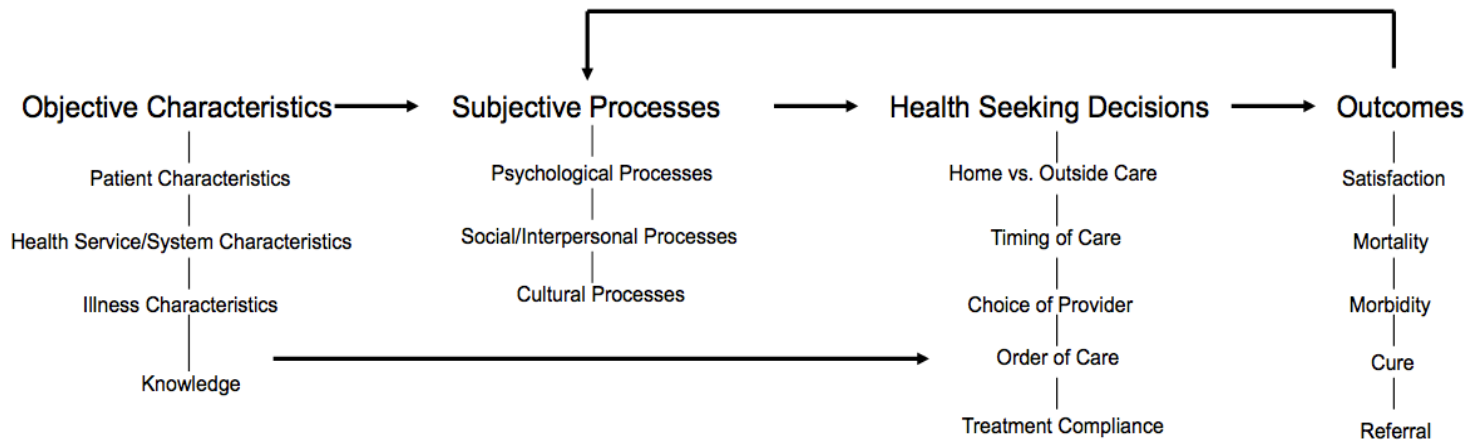


Figure G. A simplified version of the theoretical framework/comprehensive model which guided this research.

Appendix 3.1

Sample Size Formula Used for the Sample Size Calculation

The following formula was the one that was used for the sample size calculation for this study:

$$SS = \frac{Z^2 * (p) * (1-p)}{c^2}$$

Z = Z value (1.96 for 95% CI)

p= percentage picking a particular choice (used: 0.5)

c = confidence interval or margin of error (used: 0.02=±2)

The sample size calculation was done using a standard algorithm (<http://www.surveysystem.com/sscalc.htm>), with a confidence level of 95% and a confidence interval of +/- 2. A linear population projection (with an annual population growth of 2.1%) was used to calculate the population of Makwanpur in 2011 from the 2006 government data. The number of households was then calculated using available data on average household size in the district. 88,377 households (from a population of 486,075) was the number used for the sample size calculation to yield 2,338 households.

Appendix 3.2

Justification of Proposed Mixed-Methods Choice

There are several reasons researchers use to justify the choice of mixed methods (Axinn & Pearce, 2006; Bryman, 2006; Creswell et al., 2007; Greene, Caracelli & Graham, 1989). According to Rossman and Wilson (1985), mixed methods can be used to corroborate findings, establishing convergence, elaborate on findings, providing a richness of detail, and initiate new avenues of inquiry, prompting new interpretations of results or further study designs. In the case of HSBs, there is a major benefit to collecting both quantitative and qualitative data, because the qualitative data informs the quantitative data and provides a clearer picture of the objective and subjective or the exogenous and endogenous factors at play in the decision process (Ward, Mertens & Thomas, 1997; Weiss, 1988; Mackian, Bedri&Lovel, 2004). As Pokhrel and Sauerborn (2003) noted, simple quantitative studies of health seeking behaviours tend to overlook the importance of capturing health pathways, focusing on simple correlations which do not shed light on the behavioural complexities involved. Ward and colleagues (1997) also mentioned the importance of both quantitative and qualitative data in health seeking behaviour studies because one informs the other. According to van Enk (2002) mixed methods HSB studies can allow for two distinct levels of analysis – analysis of the determinants of use on a population level using large survey studies and analysis of individual-illness behaviours using detailed interviews – and connecting these levels is critical to being able to link HSBs and health policy (Jimba, Poudyal & Wakai, 2003). Justice (1981) and Stone (1986) agree that

qualitative health seeking data should go hand in hand with the quantitative. According to Justice, anthropologists and epidemiologists need to work together so that the cultural can inform health planning and design. More over, qualitative research when coupled with quantitative data can contribute to a better understanding of how to go about formulating necessary policies and plans (Ensor, Clapham & Prasad Prasai, 2009).

It is possible to create a unified methodological framework for combining both quantitative and qualitative data, and the goal of this research involved applying such a framework (Bryman, 1984; Castro et al., 2010; Hal & Howard, 2008; Greene, Caracelli & Graham, 1989; Marsland et al.; Mukherjee, 1995; Smith, 1983; Yin, 2006).

That said, the vast majority of previous studies on health seeking behaviours still use household or health facility surveys to determine people's care seeking choices and decisions. These health interview surveys have been shown to be useful in a variety of different developing country contexts (Kroeger, 1983). The selection of household surveys for the purpose of this study is intentional because the aim is to provide a snap-shot of the health seeking behaviours of the population of the entire district and not just those who seek care from formal institutions. In doing household surveys the data can incorporate both those who seek care outside their homes or formally and those who use home remedies, traditional healers or informal treatment. Further, the decision for a random

sampling method is to ensure that the data is representative and generalisable to the district at large.

The qualitative semi-structured interviews are part of an enhancement model and follow a sequential explanatory design (as mentioned earlier). The interviews are included as a way to explain and complement some of the data obtained from the surveys and to elaborate on many of the subjective details of health seeking behaviours – such as attitudes, perceptions, interpersonal processes and beliefs - which are not captured purely through survey data collection. The qualitative interviews complement the etic approach of the surveys and allow for the exploration of people's different explanatory models, through an emic approach, which will attempt to ascertain the role of culture and beliefs in guiding health-seeking choices¹. In waiting until after the survey data is collected, the interview schedule was able to pick up on and elaborate some of the emerging themes from the surveys, as well as allow for the creation of a set of new themes. The responses from the surveys were used to help create the interview schedules.

It is also worth mentioning, that a decision was made not to use Focus Group Discussions (FDGs) for the qualitative component, because the intentions of these interviews were to explore individuals views and processes in more depth and to allow for the revelation of more private stories and personal constructs rather than to explore how group dynamics and ideas shape behaviour and play

¹Etic approaches are based on the ideologies of professionals outside the local communities, while emic approaches are rooted in the ideologies of local communities (Weiss, 1997).

off one another (Creswell, 2003; Keenan, van Teijlingen & Pitchforth, 2005; Rossman & Wilson, 1985; Tashakkori & Teddlie, 1998; van Teijlingen et al., 2011). FDGs were piloted as part of the qualitative methods and a decision was made that they were not the best method to employ to build upon the quantitative results.

The interviews with health workers and other service personnel were simply to contextualise the findings of the research and to allow for the devising of some of the objective scales incorporating health system variables – such as the quality of health facilities scale, which was part of the data analysis process (Acharya & Cleland, 2000).

Figure A3.1An overview of the Explanatory Sequential Design, which was employed for this study [from: Creswell & Clark, 2010, pg 69]

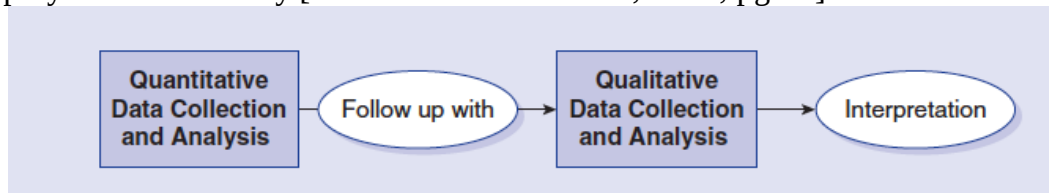
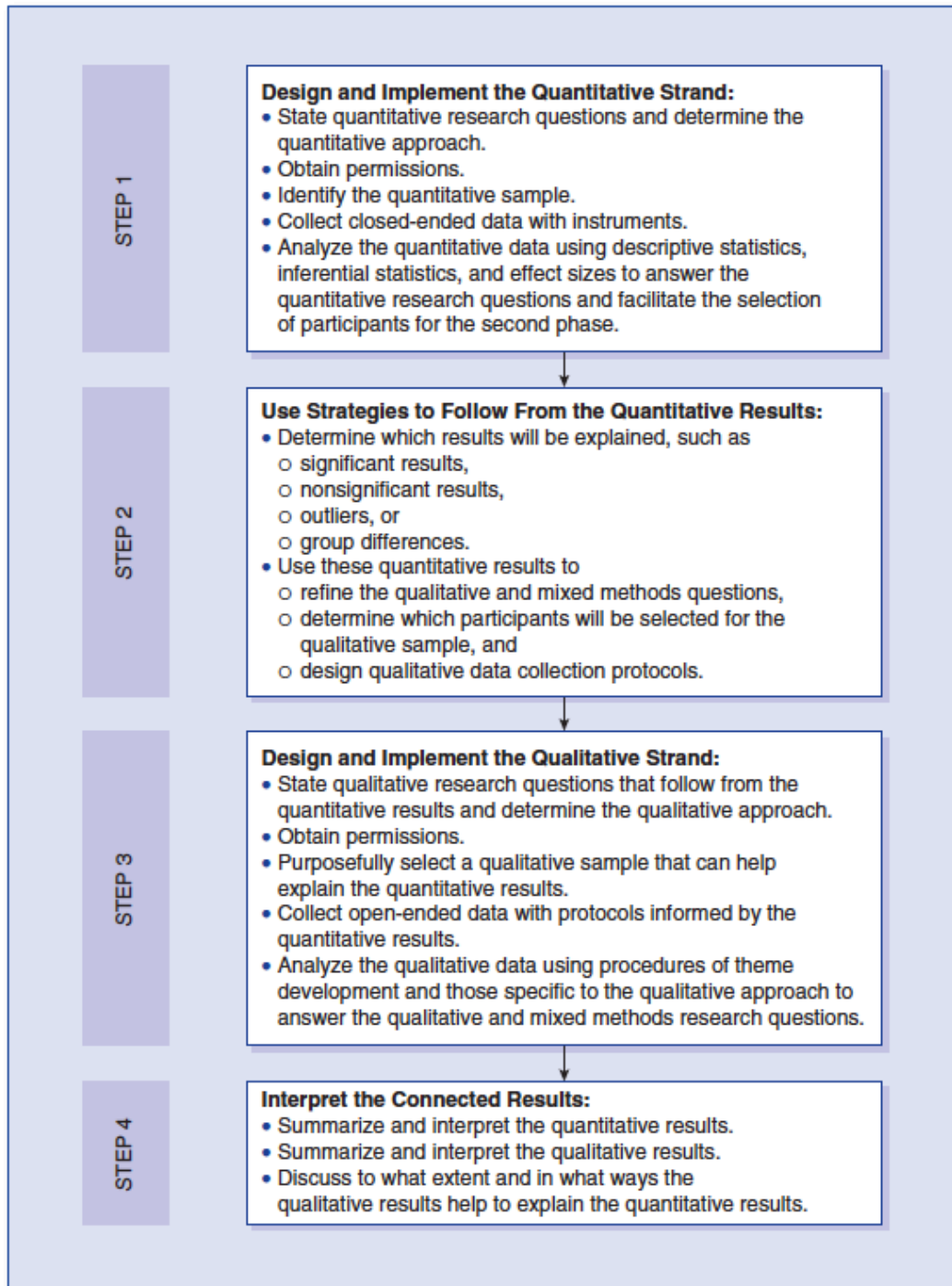


Figure A3.2 Flowchart with the detailed steps required to implement an Explanatory Sequential design mixed-methods study. These steps were roughly followed throughout the data collection and analysis process [from: Creswell & Clark, 2010, pg. 84]



Appendix 3.3

HMIS Report Illness Data

Data on illnesses in the Health Management Information System is collected by every government health facility on a form that looks like this:

स्वास्थ्य संस्थामा जचाउन आएका नयाँ बिरामीको संख्या

New OPD Morbidity

सि.नं.	ICD कोड	रोगको नाम	महिला	पुरुष
Communicable, Immunizable				
1	B05	Measles		
2	A36	Diphtheria		
3	A37	Whooping Cough		
4	A33	Neonatal Tetanus		
5	A35	Tetanus		
6	A16	Tuberculosis		
7	G 83	Acute Flacid Paralysis (AFP)		
8	B06	Rubella		
9	B26	Mumps		
10	B01	Chicken pox		
11	B 16	Hepatitis B		
12	A 83	Japanese Encephalitis (JE)		
Communicable, Vector Borne				
13	A 86	Acute Encephalitis like syndrome (AES)		
14	B74	Filariasis		
15	B54	Clinical Malaria		
16	B 50	Malaria (PF)		
17	B 51	Malaria (PV)		
18	A90	Dangue Fever		
19	B55	Kala-azar		
Communicable, Water/food Borne				
20	A01	Typhoid (Enteric Fever)		
21	A 09	Acute gastro enteritis		
22	A 06	Ameobic Dysentery		
23	A 03	Baccillary Dysentery		
24	K 52	Presumed non infectious diarrhoea		
25	A00	Cholera		
26	B82	Intestinal Worms		
27	R17	Jaundice and Infective Hepatitis		
Other Communicable Diseases				
28	A 64	STD/STI		
29	B24	HIV/AIDS		
30	A30	Leprosy		
31	G03	Confirmed Meningitis		
Other Infected Disease				
32	J 22	ARI/Lower respiratory tract infection		
33	J 39	Upper respiratory tract infection		

सि.नं.	ICD कोड	रोगको नाम	महिला	पुरुष
34	J18	Pneumonia		
35	J15	Severe pneumonia		
36	J40	Bronchitis		
37	J45	Asthma		
38	N 39	Urinary Tract Infection (UTI)		
39	J 11	Viral Influenza		
40	N 51	Reproductive (RTI) male		
41	N 99	Reproductive (RTI) female		
Nutritional and Metabolic Disorder				
42	E 46	Malnutrition (Marasmus/Kwashiorker)		
43	E 50	Avitaminoses and other nutri deficiency		
44	G 62	Polynuritis		
45	D 64	Anaemia		
46	E 04	Goitre, Cretinism		
47	E14	Diabetic mellitis		
48	E 66	Obesity		
49	H53	Night blindness		
Skin Diseases				
50	L01	Impetigo/boils/furunculosis		
51	L02	Abscess		
52	L 30	Eczema/Dermatitis		
53	B 36	Fungal infection		
54	B 86	Scabies		
55	L 81	Leukoderma		
56	L 40	Psoriasis		
57	L 04	Lymphadenitis		
Ear, Nose and Throat Infection				
58	H 66	Acute/Chronic Suppurative Otitis		
59	J32	Sinusitis		
60	J 03	Tonsilitis		
61	J 02	Pharyngitis/Sore throat		
62	T 15	Foreign body		
Oral Health related problems				
63	K02	Dental carries/toothache		
64	K 05	Periodontal diseases (gum disease)		
65	K 08	Oral pre-cancer and cancerous lesion		
66	K 13	Oral ulcer and other related disease		

For every health facility in our quantitative sample, this form was collected for the month prior to the interview period, and the data was analysed.

Overall, according to the HMIS reports, one-thousand six-hundred and fifty nine households experienced illnesses and sought care at government facilities in the one month prior to the survey. In comparison to the survey data, this data indicates a greater burden of disease than was captured with the household surveys. A breakdown of the specific illness types extracted from the HMIS report can be found in figure A below (categorised by ICD code).¹

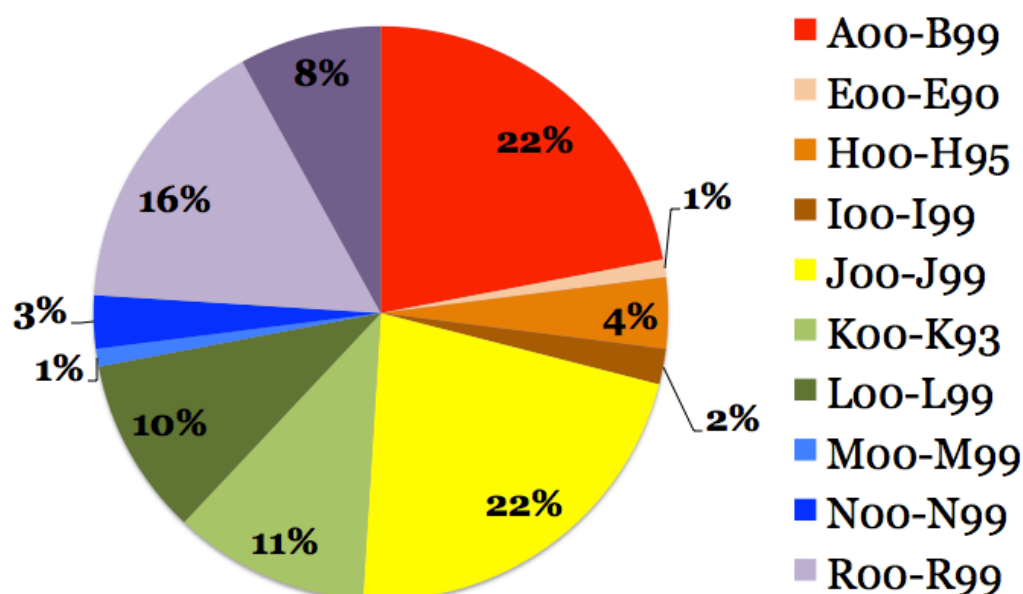


Figure A. Breakdown of the different diseases from the HMIS health facility data (n=1659).

Overall, the majority of diseases were still infectious/parasitic diseases (A00-B99) or respiratory diseases (J00-J99), but the breakdown was significantly different from the illnesses from our survey sample (chi-squared=308.1; $p<0.000$). Overall, our sample seemed to indicate less of a burden of injuries,

¹A00-B99: Certain infectious & parasitic diseases; F00-F99: Mental & behavioural disorders; G00-G99: Diseases of the nervous system; H00-H59: Diseases of the eye and adnexa; H60-H95: Diseases of the ear and mastoid process; J00-J99: Diseases of the respiratory system; K00-K99: Diseases of the digestive system; L00-L99: Diseases of the skin; M00-M99: Diseases of the musculoskeletal system; N00-N99: Diseases of the genitourinary system; P00-P96: Conditions originating in the perinatal period; R00-R99: Symptoms, signs & abnormal clinical findings not elsewhere classified; S00-T98: Injury, poisoning & certain other consequences of external cause

eye problems, diseases of the skin and diseases of the digestive system, while the HMIS data indicated significantly fewer infectious parasitic diseases (43% vs. 22%) and fewer respiratory illnesses (32% vs. 22%), fewer mental health problems and fewer diseases of the nervous system (see figure B for a comparison of the HMIS to our survey data).

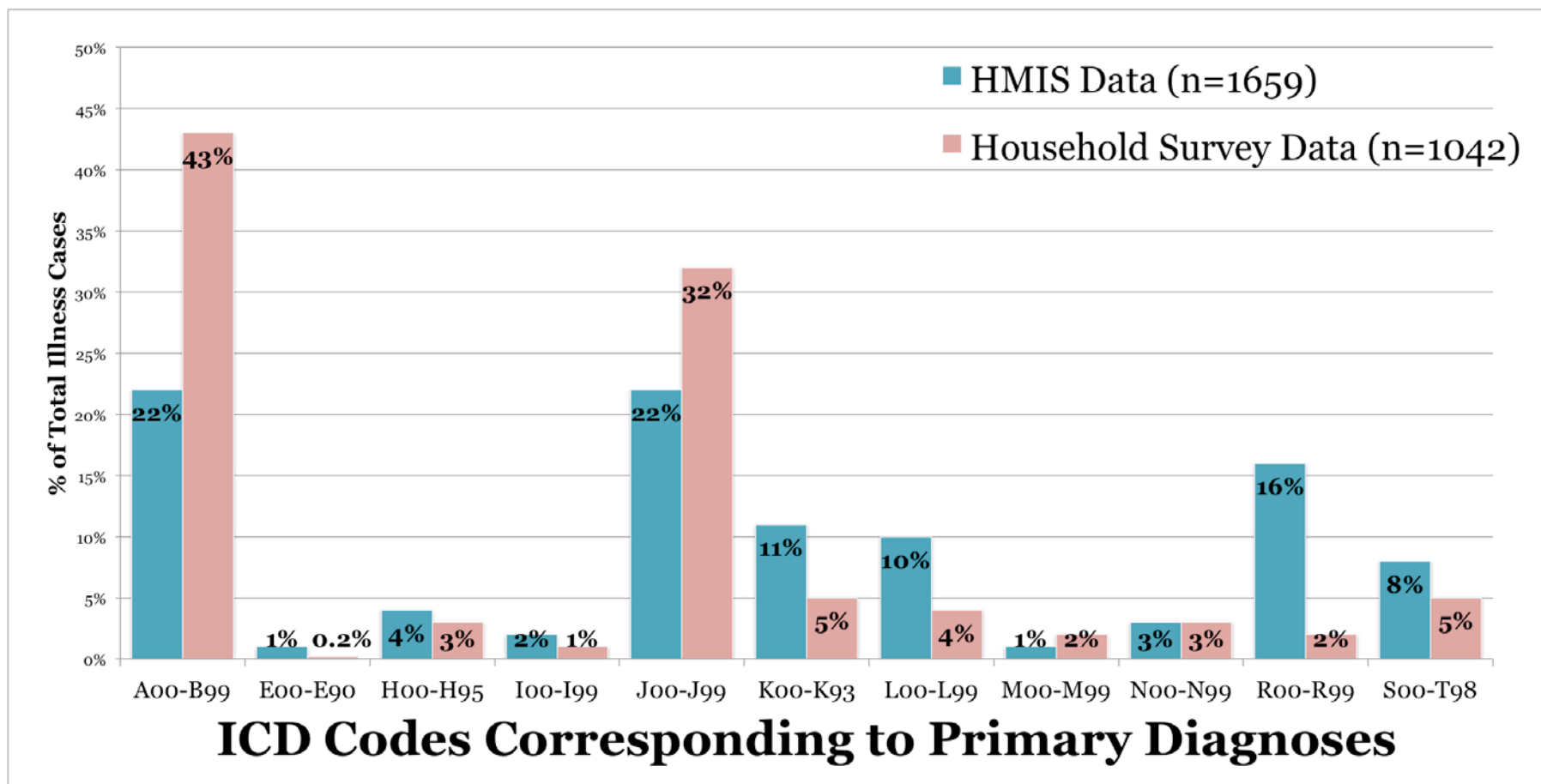
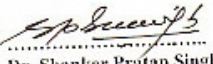


Figure B. Comparison of HMIS illness data to illness data from our sample

Appendix 3.4a & 3.4b

Ethical Approval Forms

3.4a: NHRC Ethical Approval Letter

 Nepal Health Research Council Estd. 1991	
NHRC	
Ref. No. 982	April 4, 2011
Executive Committee	Ms. Laurel Sydney Gabler Principal Investigator University of Oxford, Department of Public Health, UK
Executive Chairman Dr. Chop Lal Bhusal	Ref: Approval of Research Proposal entitled Health in the Hills: An Analysis of the Health-Seeking Behaviors of People in Rural Makwanpur
Vice - Chairman Dr. Rishi Ram Koirala	Dear Ms. Gabler, It is my pleasure to inform you that the above-mentioned proposal submitted on 1 March 2011 has been approved by NHRC Ethical Review Board on 1 April, 2011 (2067-12-18).
Member-Secretary Dr. Shanker Pratap Singh	As per the NHRC rules and regulations, the investigator has to strictly follow the protocol stipulated in the proposal. Any change in the objective(s), problem statement, research questions or hypothesis, methodology, implementation procedure, data management and budget that may be necessary in course of the implementation of the research proposal can only be made so and implemented after prior approval from this council. Thus, it is compulsory to submit the detail of such changes intended or desired with justification prior to actual change in the protocol.
Members Dr. Narendra Kumar Singh Dr. Meeta Singh Dr. Suman Rijal Dr. Samjhana Dhakal Dr. Devi Gurung	If the researcher requires transfer of the bio samples to other countries, the investigator should apply to the NHRC for the permission.
Representative Ministry of Finance National Planning Commission Ministry of Health & Population Chief, Research Committee, IOM Chairman, Nepal Medical Council	Further, the researchers are directed to strictly abide by the National Ethical Guidelines published by NHRC during the implementation of your research proposal and submit progress report and full or summary report upon completion.
	As per your research proposal, the total research amount is US\$ 9,864.00 and NHRC processing fee is US\$ 100.00.
	If you have any questions, please contact our research section.
	Thanking you.
	Sincerely Yours,
	 Dr. Shanker Pratap Singh Member Secretary
Tel: +977-1-4254220, 4227460, Fax: +977-1-4262469, Ram Shah Path, P.O. Box 7626, Kathmandu, Nepal. Website: http://www.nhrc.org.np , Email : nhrc@healthnet.org.np nhrc@nhrc.org.np	

3.4b: OXTREC Ethical Approval Letter

Oxford Tropical Research Ethics Committee

University of Oxford
Room 8, Manor House
The John Radcliffe, Headington, Oxford OX3 9DZ
tel. +44 (0) 1865 743005, fax +44 (0) 1865 743 002
e-mail: Fiona.Goulthorp@admin.ox.ac.uk



L S Gabler
Department of Public Health
c/o Green Templeton College
43 Woodstock Road
Oxford
OX2 6HG

8th February 2011

Dear Ms Gabler

Full Title of Study: Health in the hills: The health-seeking behaviours of people in rural Makwanpur, Nepal

OXTREC Reference: 09-11

In addition to your application, the documents reviewed were:

Documentation:	Version:	Date:
Participant information sheet	V1.1	25.01.2011
ICF	V1.1	25.01.2011
Covering letter from Dr Foster		
Map of selected VDCs from Makwanpur District		

The OXTREC executive team reviewed the above application and gave approval. We appreciated the covering letter of support from Dr Foster.

Thank you for your additional comment regarding the lack of clarity in the application guidance on the requirement to submit the study protocol; this has been noted.

This approval will be fully implemented upon final approval by the full committee at its meeting on Thursday 24th March 2011.

Yours sincerely,

A handwritten signature in cursive script that reads "Richard Mayon-White".

Dr Richard Mayon-White
OXTREC Chair

Appendix 3.5

Detailed Overview of the VDCs Included in the Quantitative Survey

The ten VDCs randomly selected for the quantitative component represent the urban and peri-urban areas of the district well.

Table A. Estimated population of selected survey VDCs based on 2006 data (from Makwanpur District Health Profile, 2006).

VDC Name	Total Estimated Population	Population <1 Year Old	Population <5 Years Old
Bajrabarahi	8,652	268	1,279
Beteni	3,746	116	554
Bhainse	8,870	275	1,311
Churiyamai	15,033	467	2,222
Kalikatar	5,114	159	756
Khairang	3,537	110	523
Kulekhani	3,721	115	550
Manthali	3,102	96	459
Palung	7,023	218	1,038
Sukaura	4,260	132	630

Kalikatar and Beteni both contained HPs (although the Beteni HP was technically located in the neighbouring VDC, Phadampokari, because of political pressures), while the remainder of the VDCs housed SHPs. Palung, which according to the map from the District Profile (2006), was supposed to have a PHCC, actually contained a SHP while the PHCC was actually located in the neighbouring VDC, Daman. While some of the wards in Palung had ready access to the PHCC, the remainder of the wards were closer to the VDC SHP. In terms of overall accessibility, five of the VDCs were not road accessible and required at least a day to reach via a combination of public transport and walking (table B), the

remaining five could be accessed via paved roads and public transport, but not all wards within the VDCs were connected to paved roads, and more than half of them had to be reached via foot, sometimes taking up to five or six hours. To reach Kalikatar specifically, a river had to be crossed 50 times, which is feasible during the low-season, but not after the monsoons. This was also similarly the case for Khairang. In Beteni/Phadampokari, the HP was on the other side of a river that had to be crossed in order to reach it (no bridge was available). In many of the VDCs landslides posed a huge problem to accessibility, especially during the monsoon season (see pictures).

Table B. Estimated accessibility and size of the ten VDCs in the quantitative sample (from Makwanpur District Profile, 2006)

VDC Name	Area (sq. km)	Distance to Hetauda (miles)	Time Required to Reach Hetauda (hrs)
Bajrabarahi	27.36	16	48
Beteni	27.36	16	48
Bhainse	59.87	3.5	0.5
Churiyamai	35.12	1	0.25
Kalikatar	34.32	12.5	8
Khairang	47.84	19.5	48
Kulekhani	21.60	10.5	4
Manthali	18.68	15	24
Palung	17.33	25.5	24
Sukaura	25.13	7	24

In terms of infrastructure, most VDCs got their water from public standpipes, although some VDCs also used river water or had private pipes. A little less than half of the households in these VDCs had toilet access, while ~75% had access to safe drinking water. About half of the households in the selected VDCs had

electricity, and almost every ward within each of the VDCs had a primary school.

All VDCs also had lower secondary or secondary schools as well (table 3.3).

Table C. Availability of electricity and schools in the ten VDCs in the quantitative sample (from key informant interviews and VDC profiles, 2011)

VDC Name	% of HHs with Electricity (including solar)	Number of Primary Schools	Number of Lower Secondary Schools	Number of Secondary Schools (including upper)
Bajrabarahi	93%	4	1	2
Beteni	49%	8	0	1
Bhainse	90%	9	1	2
Churiyamai	60%	12	4	5
Kalikatar	13%	9	0	1
Khairang	15%	6	1	1
Kulekhani	71%	9	0	1
Manthali	10%	8	0	1
Palung	96%	6	3	2
Sukaura	60%	8	1	1

In terms of ethnic composition, all of the VDCs except for Bajrabarahi, Palung and Churiyamai were predominantly Tamang¹. Khairang and Kalikatar also had a high percentage of Chepang² people, while Beteni and Bhainse also had a high

¹One of the major Tibeto-Burman communities in Nepal comprising roughly 6% of Nepal's population. Tamangs are usually of higher SES than Chepang people. More information on the Tamang people can be found here: http://en.wikipedia.org/wiki/Tamang_people

²An indigenous Tibeto-Burman people numbering 52,000 found predominantly in the hilly region of Nepal (Originally they were a nomadic population). Considered to be part of the Dalit caste and are among the poorest of Nepal's poor. More information on the Chepang people can be found here: http://en.wikipedia.org/wiki/Chepang_people

percentage of Magars.³ Bajrabarahi was predominantly Newar,⁴ while Palung and Churiyamai were predominantly Chhetri.⁵

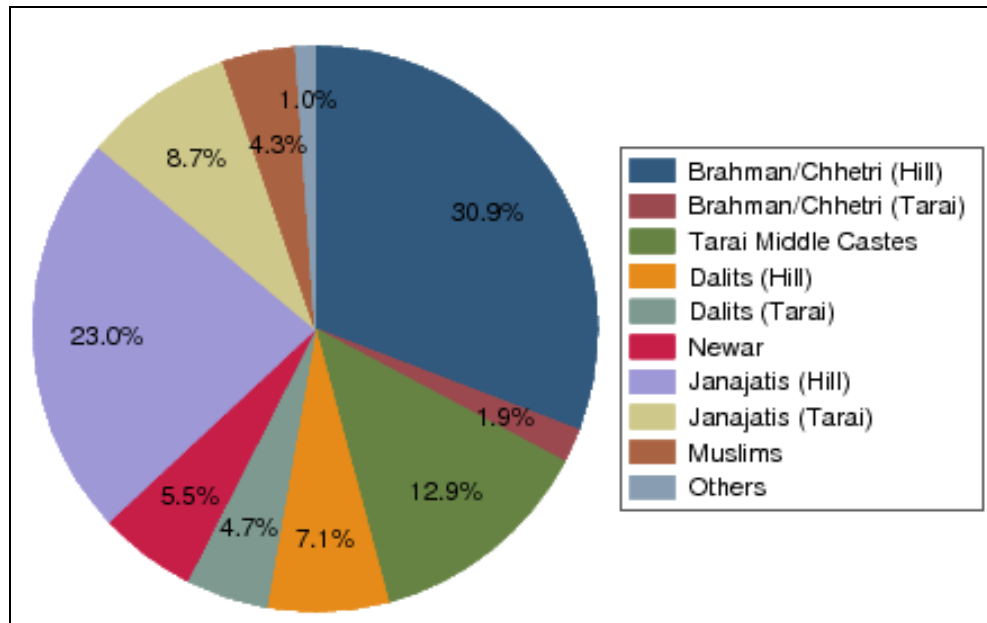


Figure A. Breakdown of different castes within the different regions in Nepal (from Huebler, 2007, heubler.blogspot.com)

³An indigenous ethnic group of Nepal comprising approximately 7% of the population. Most are Hindu while 25% are Buddhists. More information on the Magar people can be found here: <http://en.wikipedia.org/wiki/Magars>

⁴The Newar people are one of the original inhabitants of Kathmandu valley. More information on the Newar people can be found here: http://en.wikipedia.org/wiki/Newa_people

⁵Originally from India, Chhetris form the largest percentage of Nepals population (15%). They are considered to usually be of higher SES than either Tamang or Chepang people. More information on Chhetri people can be found here: <http://en.wikipedia.org/wiki/Chhetri>

	Main Caste/Ethnic Groups (7)	Caste/Ethnic Groups with Regional Divisions (11) and Social Groups (103)
Caste	1. Brahman/Chhetri	1.1 Hill Brahman Hill Brahman 1.2 Hill Chhetri Chhetri, Thakuri, Sanyasi 1.3 Tarai/Madhesi Brahman/Chhetri Madhesi Brahman, Nurang, Rajput, Kayastha
	2. Tarai/Madhesi Other Castes	2.1 Tarai/Madhesi Other Castes Kewat, Mallah, Lohar, Nuniya, Kahar, Lodha, Rajbhar, Bing, Mali, Kamar, Dhuniya, Yadav, Teli, Koiri, Kurmi, Sonar, Baniya, Kalwar, Thakur/Hazam, Kanu, Sudhi, Kumhar, Haluwai, Badhai, Barai, Bhediyar/ Gaderi
	3. Dalits	3.1 Hill Dalit Kami, Damai/Dholi, Sarki, Badi, Gaine, Unidentified Dalits 3.2 Tarai/Madhesi Dalit Chamar/Harijan, Musahar, Dushad/Paswan, Tatma, Khatwe, Dhobi, Baantar, Chidimar, Dom, Halkhor
Adivasi / Janajatis	4. Newar	4 Newar Newar
	5. Janajati	5.1 Hill/Mountain Janajati Tamang, Kumal, Sunuwar, Majhi, Danuwar, Thami/Thangmi, Darai, Bhote, Baramu/Bramhu, Pahari, Kusunda, Raji, Raute, Chepang/Praja, Hayu, Magar, Chyantal, Rai, Sherpa, Bhujel/Gharti, Yakha, Thakali, Limbu, Lepcha, Bhote, Byansi, Jirel, Hyalmo, Walung, Gurung, Dura 5.2. Tarai Janajati Tharu, Jhangad, Dhanuk, Rajbanshi, Gangai, Santhal/Satar, Dhimal, Tajpuriya, Meche, Koche, Kisan, Munda, Kusbadiya/Patharkata, Unidentified Adivasi / Janajati
Others	6. Muslim	6 Muslim Madhesi Muslim, Churoute (Hill Muslim)
	7. Other	7 Other Marwari, Bangali, Jain, Punjabi/Sikh, Unidentified Others

Figure B. An overview of the different castes in Nepal.

Appendix 3.6

Sampling Details Broken Down by VDC & Ward

VDC Name (No. of Households Sampled/Total No. of Households)	Ward No	% of Households Sampled (Total No. of Households in Ward) ACCORDING TO VDC PROFILE DATA*	% of Households Sampled (Total No. of Households in Ward) ACCORDING TO NHSB-MK STUDY DATA**	Avg HH Size inWard	No. of Toles in Ward
Kalikatar	1	15% (175 HH)	20% (130 HH)	6.7	7
	2	26% (102 HH)	31% (88 HH)	7.1	5
	3	23% (113 HH)	28% (94 HH)	7.7	6
	4	68% (34 HH)	68% (34 HH)	5.9	2
	5	74% (35 HH)	84% (31 HH)	5.5	2
	6	52% (52 HH)	56% (48 HH)	5.5	3
	7	54% (48 HH)	63% (41 HH)	6.5	3
	8	53% (57 HH)	52% (58 HH)	6.6	4
	9	17% (154 HH)	18% (141 HH)	7.3	7†
TOTALS		31% (770 HH)	36% (665 HH)	6.53±0.78	39
Khairang	1	22% (120 HH)	30% (87 HH)	6.2	10
	2	25% (102 HH)	28% (94 HH)	5.7	7
	3	70% (37 HH)	84% (31 HH)	5.3	2
	4	50% (52 HH)	70% (37 HH)	5.8	2
	5	41% (63 HH)	58% (45 HH)	6.9	3
	6	41% (64 HH)	55% (47 HH)	6.2	4
	7	54% (48 HH)	87% (30 HH)	6.8	3
	8	23% (113 HH)	38% (68 HH)	6.8	5 †
	9	25% (102 HH)	29% (90 HH)	7.3	8
TOTALS		33% (701 HH)	44% (529 HH)	6.33±0.66	41
Beteni	1	44% (59 HH)	55% (47 HH)	6.1	6 †
	2	39% (67 HH)	46% (57 HH)	6.6	4
	3	36% (73 HH)	43% (60 HH)	6.1	4
	4	59% (44 HH)	58% (45 HH)	5.8	7 †
	5	22% (118 HH)	23% (114 HH)	5.4	8
	6	35% (74 HH)	52% (50 HH)	6.3	3
	7	46% (56 HH)	48% (54 HH)	4.9	3
	8	43% (61 HH)	58% (45 HH)	6.2	6 †
	9	55% (47 HH)	57% (46 HH)	6.1	3
TOTALS		39% (599 HH)	45% (518 HH)	5.94±0.51	44
Manthali	1	49% (53 HH)	54% (48 HH)	6	1
	2	52% (50 HH)	50% (52 HH)	6	1
	3	51% (51 HH)	48% (54 HH)	6.2	4
	4	55% (47 HH)	57% (46 HH)	5.9	1
	5	67% (39 HH)	68% (38 HH)	6.5	1
	6	47% (55 HH)	46% (57 HH)	4.6	3
	7	33% (78 HH)	43% (61 HH)	6.5	5
	8	54% (48 HH)	57% (46 HH)	7.2	3
	9	77% (31 HH)	100% (24 HH)	6.5	3
TOTALS		51% (452 HH)	54% (426 HH)	6.20±0.71	22

VDC Name (No. of Households Sampled/Total No. of Households)	Ward No	% of Households Sampled (Total No. of Households in Ward) ACCORDING TO VDC PROFILE DATA*	% of Households Sampled (Total No. of Households in Ward) ACCORDING TO NHSB-MK STUDY DATA**	Avg HH Size inWard	No. of Toles in Ward
Sukaura	1	49% (53 HH)	52% (50 HH)	5.9	3
	2	25% (105 HH)	29% (90 HH)	6	5
	3	49% (55 HH)	54% (50 HH)	6.6	5
	4	65% (40 HH)	70% (30 HH)	6.8	3
	5	24% (110 HH)	33% (80 HH)	7	5
	6	71% (17 HH)	71% (17 HH)	6.4	2
	7	22% (120 HH)	31% (85 HH)	6.9	5 t
	8	29% (90 HH)	42% (62 HH)	6	4
	9	98% (40 HH)	30% (130 HH)	5.6	5
TOTALS		37% (630 HH)	40% (594 HH)	6.4±0.50	37
Kulekhani	1	31% (83 HH)	67% (39 HH)	5.6	1
	2	27% (92 HH)	26% (96 HH)	5.1	3
	3	28% (89 HH)	56% (45 HH)	5.1	2
	4	30% (47 HH)	70% (20 HH)	4.6	1
	5	23% (114 HH)	22% (116 HH)	5.6	4
	6	29% (93 HH)	30% (91 HH)	4.7	4
	7	55% (47 HH)	67% (39 HH)	6	1
	8	42% (62 HH)	50% (52 HH)	6.3	2
	9	67% (39 HH)	62% (42 HH)	6.3	2
TOTALS		33% (666 HH)	41% (540 HH)	5.5±0.64	20
Bajrabarahi	1	18% (145 HH)	33% (80 HH)	6.5	2
	2	10% (270 HH)	23% (120 HH)	5.4	4
	3	20% (131 HH)	27% (95 HH)	5.2	4
	4	16% (164 HH)	19% (139 HH)	6	4
	5	19% (139 HH)	20% (129 HH)	4.7	4
	6	12% (221 HH)	22% (120 HH)	5.7	2
	7	22% (119 HH)	19% (140 HH)	5.9	2
	8	14% (185 HH)	22% (117 HH)	6.6	3
	9	20% (129 HH)	26% (101 HH)	5.3	3
TOTALS		16% (1503 HH)	22% (1041 HH)	5.7±0.62	28
Palung	1	18% (144 HH)	31% (84 HH)	6.3	2
	2	17% (149 HH)	26% (100 HH)	5.3	3
	3	43% (61 HH)	48% (54 HH)	4.6	1
	4	22% (117 HH)	26% (99 HH)	6.1	3
	5	35% (75 HH)	33% (80 HH)	5.3	3
	6	28% (93 HH)	35% (74 HH)	5.3	2
	7	20% (129 HH)	20% (127 HH)	5.2	1
	8	29% (90 HH)	40% (65 HH)	5.1	3
	9	9% (304 HH)	10% (260 HH)	5.2	4
TOTALS		20% (1162 HH)	28% (844 HH)	5.4±0.52	22

VDC Name (No. of Households Sampled/Total No. of Households)	Ward No	% of Households Sampled (Total No. of Households in Ward) ACCORDING TO VDC PROFILE DATA*	% of Households Sampled (Total No. of Households in Ward) ACCORDING TO NHSB-MK STUDY DATA**	Avg HH Size inWard	No. of Toles in Ward
Bhainse	1	26% (109 HH)	27% (103 HH)	5.3	4
	2	36% (78 HH)	47% (60 HH)	4.8	5
	3	30% (93 HH)	39% (72 HH)	4.6	2
	4	22% (119 HH)	36% (73 HH)	5.2	4 t
	5	46% (56 HH)	67% (39 HH)	6.5	3
	6	11% (243 HH)	12% (210 HH)	5.1	4
	7	10% (268 HH)	12% (224 HH)	5.4	4 t
	8	20% (130 HH)	31% (120 HH)	6.3	3
	9	27% (96 HH)	31% (85 HH)	4.4	4
TOTALS		20% (1192 HH)	24% (986 HH)	5.3±0.71	33
Churiyamai	1	5% (515 HH)	5% (515 HH)	5.3	2
	2	4% (609 HH)	5% (550 HH)	5.5	2
	3	7% (357 HH)	11% (247 HH)	5	1
	4	26% (100 HH)	26% (100 HH)	6.3	2
	5	9% (293 HH)	9% (293 HH)	4.6	2
	6	13% (199 HH)	13% (199 HH)	4.8	2
	7	17% (156 HH)	17% (156 HH)	5	1
	8	12% (209 HH)	12% (209 HH)	5.3	1
	9	10% (272 HH)	12% (219 HH)	4.8	3
TOTALS		9% (2710 HH)	9% (2488 HH)	5.2±0.51	16
OVERALL TOTALS		22% (10,385 HH)	27% (8,631 HH)	5.84±2.4	302

Appendix 3.7

Methods Employed by 'Key' HSB Studies [from Published Literature]

This table presents an overview of some of the main methods and instruments used in some of the other key HSB studies that served as a guide for the creation of my own instrument.

Author/s name/s, Date	Methods Used	Content of Questionnaire/ Survey/ Interview (main variables of interest, types of questions asked, categories of questions etc.)	Obtained Copy of Instrument Used?	Comments on Instrument/s Used & Study Design (How did I adapt the methods & study design for purpose of my research; How I used the existing surveys to design my own instruments)
Develay, Sauerborn & Diesfeld, 1996	Household survey of 547 households	Used Kroeger's model Questionnaire covered (1) demographic characteristics of the household (2)socioeconomic characteristics of household: education, occupation of head, type of abode, presence of utilities, household assets and transport → overall composite score (1-5 socioeconomic groups) (3) Perceived illness factors: severity, length, symptoms (using pre-est. list of signs and symptoms), type of care sought (no care, self care, TH, dispensary, private Dr., hospital), cost of care, transport used	Yes	Used some of the same categories of variables in my instrument including demographic, socioeconomic and illness factors, but expanded on the content of the survey and include perceptions/ratings of health services and the health-seeking experience as well as more options of care (including the different levels); used similar composite measure of SES
Sauerborn, Nougara & Diesfeld, 1989	Household surveys of a 7% stratified cluster-sample of n=715 households	Used Kroeger's model to examine specifically utilization of CHWs Three sets of questions were covered: (1) demographic socio-economic variable of household (size, marital status, income, food production, transport and attitudes towards traditional medicine) and demographic data of individuals within household (age, sex, ethnic group, literacy) (2) Info on previous disease: serious (forced to stay home in bed) – 6 month recall period; mild - 2 week recall period; fatal – 1 year recall; excluded diseases lasting longer than 3 months (3) Health-seeking behaviours – family/self, TH, CHW, Professional Care (nurse, midwife), no care; was additional treatment sought	Yes	Used same recall periods for disease and all three sets of questions (plus others). In terms of health-seeking behavior questions, my own survey will expand on the types of care utilized and some of the self-reported reasons for choice of care. This survey provided a strong basis for my own
Gish, Malik & Sudharto, 1988	Health centre surveys/data collection in one district	Collected data from records of health facilities including financial inputs and expenditures, the number, demographic characteristics and geographic origins of pt., type of service utilized, bed occupancy rates, length of hospital stay etc.	No	Used some of the same variables for the health centre data collection forms

Ager & Pepper, 2005	219 field interviews with local populations in four districts (diversity sampling strategy)	Used semi-structured interview schedules which considered general perceptions of health needs in the local community, perceptions of the role of ANM and details of a specific illness episode effecting a household member in the last six months (which health providers they used, what treatment they received and an appraisal of its effectiveness)	Yes	Used some of the same variables in my analysis including an appraisal of the effectiveness of the care received and people's perceptions regarding the services in their areas
Mbagaya, Odhiambo & Oniang'o, 2005	Cross-sectional household survey of 172 households with pre-school children + semi-structured key informant interviews with nurses/midwives, clinical officers, and CHWs	Surveys collected information on demographic, socioeconomic and child characteristics (children's health status, severity of illness and mother's health seeking behaviours in week prior to survey). Data was collected on types of drugs purchased, symptoms experienced, actions taken (taken to hospital, purchased drugs, used traditional med, consulted traditional healer, did nothing) and the factors which determined actions of mothers (finances, education, distance, friends, media) – these were collected both through self-report measures and through logistical regression analyses of the socioeconomic and demographic variables and choice of care	Yes	Most of the questions were specifically regarding health seeking for child illness. I adapted some of the questions on disease symptoms, and actions taken to combat disease and questions on the types of drugs purchased.
Luque, Whiteford & Tobin	A semi-structured questionnaire administered to purposively-selected sample of 91 caregivers (on ARI) + Focus group discussions with mothers and in-depth interviews with healthcare providers (qualitative data)	Questionnaires required a detailed health record of resp illness for youngest child in household, an est. freq. of use of different healthcare facilities, a detailed 24 hr dietary recall and an inventory of meds taken. Socioeconomic, employment, edu, home remedies and symptomrecog. forresp illness were also recorded; produced 81 categorical and continuous variables in response to 11 open-ended questions; respondents were given list of hypothetical symptoms and asked where they would seek care/what they would do for each	Yes	Instruments were specifically regarding health seeking for ARI and knowledge regarding ARI symptoms, so none of the specific items were useful; Used the hypothetical vignettes in the qualitative research to determine where people seek care in theory;
Malik et al., 2006	Interviews with 96 mothers who brought febrile children to health facilities, 10 FGDs with mothers at village level	Collected data on how mothers responded to fever before taking children to health centre, duration of time waited before seeking care at facility, who made decision to come to health facility; info obtained on actual tx versus preferred tx related to febrile children and on some of the factors involved with the selection between different tx options: type of fever, costs, traditional med use	Yes	Used some of the questions as a basis for my own questions, but most of them dealt too narrowly with febrile illness and had too broad of response categories. There is a lot of overlap between the questions asked and other disease-specific health seeking behavior studies

Srivastav, Awasthi & Agarwal, 2009	Prospective survey/questionnaire study of all neonates screened within 48 hours of delivery at health centre	Mothers were asked to keep prescriptions, receipts, wrappers, investigation reports, bottles of medication etc. to assist in accurate diagnosis of neonatal illness for purpose of survey follow-ups; Mothers were asked if baby faced any health problems, -symptoms of morbidity were recorded; structured questionnaire elaborated on the details of illness; illness defined according to IMNCI: diarrhea with dehydrations, persistent diarrhea, pneumonia, meningitis, ear discharge, fever >10 pustules, jaundice and sepsis, Non-IMNCI diseases: URI, diarrhea, conjunctivitis, dermatitis, physiological jaundice etc. (used comprehensive list of illness and symptoms prepared in local terminology Asked about healthcare providers consulted (Government physicians, Non-gov. consultants, non-gov. dispensers), expenditures incurred; pills, prescriptions, bottles were also taken into account; Constructed five income strata: <1700 INR, 1701-2000, 2001-2500, 2501-4000, >4000 (used quintile values to decide cut-off points)	Yes	Used a prepared list of symptoms and tracer conditions created in consultation with local health professionals in advance of starting the survey (and use ICD for coding) In order to get accurate assessment of illness I asked all survey respondents to produce and pill bottles, receipts, or prescriptions they may have had in relation to this episode of illness Used similar methods for obtaining household SES
Amin et al., 1980	Secondary analysis of survey data from two household surveys (during and after pilot project; n=998, n=2020, random sample)	Surveys were based on verbal reporting and retrospective data. Information recorded on the types of physicians utilized by patients, types of physicians preferred by patients,	No	Given that these surveys are extremely old and outdated, they were not particularly useful for my survey
Materia et al., 1993	Household health interview survey on MCH service utilization in 21 villages (10% of households per village; 23% of villages in area)	Used census data to select households ('group of related people sharing the meals cooking in the same pot'); Interviews on utilization of MCH services (ANC, delivery care, Under 5 clinic usage, immunization during pregnancy and breast-feeding, family planning and immunisations) and ORS (KAP study); immunisation status children in household was determined from records	No	Adapted knowledge questions for my survey

Hayes et al., 1990	Surveys comparing reported utilization of health services with actual records for childhood illness (n=195)	Single-page response form for easy and quick recording of data; interviews conducted with a household member familiar with the health experience of the child(ren); interview conducted with any available household member (although pref. given to primary caregiver); advance census data collected of sample area; Questionnaire included items on the risk factor found to predict diarrhea (cleanliness of house, breast feeding and water usage), morbidity questions regarding occurrence of diarrhea in past two weeks and past three months (using holiday as a marker given long recall period), general morbidity question over same time periods, whether or not a health provider was consulted for diarrhea or morbidity and the name/location of provider; obtained all healthcare utilization records from every service provider in district – used these to construct service utilization histories of each person in study communities (allowed for comparison between actual and reported utilization)	No: no need to obtain instrument given that the questionnaire content was laid out in detail in the published paper	I attempted to validate all reported utilization against the existing records kept by each level of the healthcare system (similar to what was done with this study)
Rutherford et al., 2009	Case-control study of n=140 cases (children who had died), matched to five controls (n=700); information gathered through interviews	Questionnaires had seven sections: 1) demographic characteristics 2) child characteristics (ethnicity) 3) child health 4) Household features including amenities and wealth 5) Social support 6) health seeking behavior 7) traditional measure of access to health care Used household crowding index adapted from Hill et al., 2005 Social and financial questions were identified and refined from literature review of 11 social support questions from a medical outcomes study (Sherbourne CD & Stewart AL, 'MOS Social Support survey', 1991) and other studies containing social and economic questions – refined using FGDs, two rounds of piloting and expert review; used reference date; to ascertain data on health centre appropriateness used data on capacity to treat seriously ill children, vaccinations and essential med availability; Used GPS to calculate distances from centre of village; travel time calculated by replicating mode of travel used; costs were obtained from taxi attendants and respondents; possible confounding factors identified in literature were incorporated into questionnaire	Yes	Adapted some of the items from sections 1, 4, 5, 6 and 7 of questionnaire to my survey; also used several of the studies identified by the authors in the construction of my own instrument

Fantahun & Degu, 2003	Cross sectional surveys of 21 villages/kebeles (n=17,780 people)	Questionnaires included sociodemographic data: educational status, occupation, religion and ethnicity, number of fatalities in household were recorded and reasons for not taking people to health institutions for diseases that killed them were noted (disease fast course, assumed no benefit, lack of money, distance, refusal of pt, accident, no one to assist, suicide) along with reasons for not visiting modern health institutions by people who perceived themselves to be sick (believed disease did not need tx at health institution, bought drugs from vendor, visited traditional healer, used holy water, visited local injectors); relationship between socioeconomic variables and utilization of health services was determined	No	Many of the questions were useful for my survey
Fassin et al., 1988	Household survey of 500 mothers with at least one child under five	Curative access to health services studied using two sets of questions concerning last illness episode for mother and child (date, symptoms, place of first consultation, prescription of meds and cost, prescription of exams, place of second consultation); health services classified as public dispensaries, congregational health centres, general hospitals and private clinics; Mother's age, marital status, educational level, social insurance, ethnic group and disease category (gynaecological, general fatigue and pain and other; measles, diarrhoea and other); Sociocultural synthetic indicators were created for socioeconomic level, urban experience, town integration, and village attachment; correlations between variables significantly associate with utilization of services were tested: IV: age, marital status, educational level, socioeconomic level, urban experience, town integration, village attachment, social insurance, ethnic group, disease categories, DV: No vs. Any consultation, Public vs. Private consultation	No	Most of the categories are too broad or not applicable to my sample population, so I did not use any of the survey items directly in the designing of my own instruments or study. I did, however, like the usage of interpersonal variables such as 'town integration' and 'village attachment' to assess the degree to which a household/individual feels s/he has the support of the community. Unfortunately, I was not able to do this in my survey

Patel, Simunyu & Gwanzura, 1997	Cross-sectional survey of patients in primary care (n=109)	Used Pathways to Care Schedule developed from questionnaires used in previous studies: pt were asked to describe the first care provider consulted, followed by enumeration of all other types of providers consulted. First three encounters were inquired about with qualitative open-ended questions to get at the reasons for consultation with that particular type of care provider, the explanation given by that provider, the tx given and the level of satisfaction with the care (a closed item) and the reasons for the level of satisfaction. Patients were also interviewed with the Explanatory Model Interview (explanatory models: pts' reasons for consultation and the label given to illness experience), and the Revised Clinical Interview Schedule [Goldberg & Huxley, Pathways to Care, 1980]	Yes	Although this survey was regarding care-seeking for mental illness and although patients were selected from primary care facilities and not from households, the interview schedule and PACS were useful for my purposes. I used some of the same items to assess people's care trajectories beyond their first choices – up to three ; also adapted some of the questions from the Explanatory Model interview for the purpose of my qualitative interviews to get at how pt explanatory models help define their choices of care. Also asked about pt satisfaction with care and the reasons for the level of satisfaction, adapted the questions they have used for these purposes; This study was most useful for the qualitative interviews given that most of the questions used in this study were open-ended
Kloos, 1990	Survey using statistics from outpatient and inpatient registers (n=281,178); Structured interviews with 4479 polyclinic outpatients in 18 facilities	Questionnaire used to obtain info on pt. socioeconomic status, their illness as known to or perceived by patient, prior tx for same illness, tx preferences, place of residence, type and cost of transportation and referral status; every 5th pt interviewed, illness classification used was developed by WHO (Lay reporting of health information, 1978); Factors in utilization were classified as follows: size and location of facilities; type, cost and duration of transport; pt. socioeconomic status; type and duration of illness; prior treatment; patient referral pt were asked about the reason for using the facilities where they were interviewed. Responses were summarized in three categories: nearness, good services and free treatment	No	Although this was a facility-based survey, some of the questionnaire items were useful in the designing of my own instruments. I used a similar method of illness classification for lay people (as well as the ICD system) and asked people about their perceived illness. I also asked about referrals beyond the first level of care about pt preferences regarding facility choice

Weller, Ruebush & Klein, 1997	Illness case histories from cross-sectional surveys with 270 households; Descriptive interviews with cohort of 20 families Sociobehavioural model used to predict tx using discriminant analysis to identify factors associated with tx options; 2nd study used interviews and responses to hypothetical illnesses cases to develop a decision model of tx action	Anyone reporting an illness during recall period (previous three months days with a point of reference to jog memory) was asked a detailed series of questions about the illness episode; descriptions of symptoms experienced, diagnosis, treatment and the impact on family; up to four sequential steps in treatment and changes in diagnosis were recorded; tx recorded with option of two treatment sources and two remedies per source for each step; self report of proxy interviews used; used sociobehavioural (Andersen) model to determine the factors most associated with/predictive of treatment action. Predisposing: age, gender, global health assessment (four point rating scale) of overall health, prior illness experience in family member or friend, household education level Enabling: Presence or absence of health care sources within village, financial resources of family (financial resource scale was developed using rankings from ten households to determine items – summation of eight items: number of chickens, wall construction, floor composition, land ownership, number of rooms in house, presence of appliances, ownership of bicycle and monthly income – footnote 2 and 3 describe the scale in detail) Need: six measures of illness severity considered – total number of sick days, total number of days in bed, days missed from work or school, whether or not someone from outside the house helped care for the pt and whether they considered the illness episode to be mild or severe); obtained independent ranking from informants about relative severity of the most common illnesses (footnote 4) Treatment actions: 5 categories – self care, pharmacy, health post, physician, folk Analysis involved jackknife discriminant analysis using 12 predisposing, enabling and need variables and a variable indicating the cross-sectional and cohort samples; DV: treatment options Model created and tested	Yes	This study is extremely useful in assisting with the design of my own instruments. I plan to use a much larger sample, size, however. I plan to use the same categories of treatment options, the same scale for financial resources (adapted to Nepalese context), the same illness questions related to severity. Also plan to try and create a model to predict future health actions using the results of my study. I plan to use a shorter recall period of 2 weeks for mild illnesses or 3-6 months for more severe illnesses. Used hypothetical health scenarios in my qualitative interviews similar to those used in the second study described, although I did not use the same design for the hypothetical illness scenarios as was employed here – presence or absence of financial resources, prior or no prior experience with illness and serious versus non-serious illness.
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Mulder et al., 2008	In-depth interviews with patients treated in hospital (n=107) patients treated traditionally (n=46) for Buruli ulcer and healthy community control subjects (n=107); active case finding and hospital records were used to find patients	Questionnaire delivered via semi-structured interview; Questions on healthcare seeking behaviour: pt were asked about their thoughts on the causes of their disease, their healthcare seeking behaviour during their illness and expectations of this healthcare seeking in general and their feelings of trust toward hospital treatment in general; their motivation for seeking help in the hospital or for choosing traditional healing; pt. delay; healthy community members were shown pictures of different stages of disease and asked about personal preference for care seeking at each stage of the disease Used stigma questionnaire (stienstra et al., 2002) adapted from onchocerciasis related stigma in rural Africa (vlassoff et al., 2000); Divided treatment seeking into three stages based on care pathways and determined the external (advice of others, cost of treatment, duration of admission, distance, community habits) and internal (confidence in hospital, ideas on the cause of diseases, perceived severity of disease, fear of treatment) influences on healthcare seeking behaviour as well as the healthcare seeking of the healthy community members by comparison	Yes (YmkjeStienstra : y.stienstra@int.umcg.nl)	This survey is particularly useful in coming up with a way to divide the influences on care seeking based on internal/external dichotomy. The questionnaire items are also useful and I adapted many of them to my own instruments – including items related to stigma, trust toward hospital treatment in general, expectations of health seeking and motivations for seeking care at particular facilities The stages of care diagrams are particularly helpful in capturing people's health pathways when multiple care options are involved (figure 1) Used the same method they used with healthy community members in my qualitative interviews to ask about preferences of care seeking for various diseases by presenting people with pictures depicting various illnesses and asking them where they would seek care for each.
Winston & Patel, 1995	Cross-sectional community household survey in two villages (n=104 and n=130) – 1% residential sample	First section: sociodemographic information about the household (age, sex, education, language, ethnic origin and total income) 2 nd section: all consultations with specific care providers (TH, faith healers, private dr, health clinics) in the previous year; open-ended questions south information on the complain an reasons for choosing particular provider, cost of tx, explanations given and outcome 3 rd section: asked about any health difficulties suffered by family members which didn't result in formal consultation, reasons for not consulting, actions taken and outcomes Data analysis: data were pre-coded and qualitative data were reviewed to determine broad categories	Yes	Used some of the questionnaire items from section 2 in qualitative data collection process Similar to this survey, my surveys focused on usage of traditional healers and informal care as much as formal care and tried to ascertain the reasons for this choice over other choices (including specific healer choices); <u>Data analysis:</u> relationships btw sociodemographic, episode-related or outcome variables and three dependent categorical variables reflecting three stages in the health seeking process (presence/absence of illness episode, decision to consult/not consult, specific choice of care provider) ANOVA and Kruskal-Wallis tests will be run on cont. data

Feyisetan, Asa & Ebigbola, 1997	Survey on impact of cultural beliefs and practices on child health; info collected through formal interview, in-depth interviews coupled with ethnographic observation and FGDs; household and individual interview schedules used	Household schedule contained questions on every member of the household and was used to determine individual eligibility; Individual schedule contained questions on maternal and household characteristics, biological attributes of <5 children at birth and at survey time, maternal and child nutrition, measures of malnutrition among under 5, sanitation and environmental conditions, incidence and prevalence of diseases, perceptions of disease aetiology, diagnosis of diseases, preventative and curative measure, ANC PNC; women were asked to mention the common childhood diseases in their communities and asked to state what they perceived as the causes and the preventive and curative measures that should be adopted	No	Incorporated survey items on the aetiology of various illnesses similar to the ways in which questions were asked for the purpose of this survey.
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Appendix 3.8

Diagnosing Illnesses for the Survey: Clinical Algorithms & Verbal Autopsies

As mentioned in the methods section, part of this study entailed diagnosing illnesses from the household surveys using only those symptoms which were reported. This procedure involved a three-phase (step) process including using clinical algorithms to guide questioning and using verbal autopsies to determine a diagnosis.

Phase #1: Collecting a list of symptoms using clinical algorithms

Clinical algorithms for diagnosing illnesses have been used with success in a number of other contexts worldwide¹²³⁴⁵. In the field, if an episode of illness was identified within a household (a list of tracer conditions was used to prompt responses and ensure no illnesses were left out)⁶, the interviewers were taught to start the diagnosis process by eliciting the chief complaint and using that to determine which clinical algorithm to use. The clinical algorithms used were developed and validated for use in rural Nepal by the Nick Simons Institute⁷⁸. For example, two of the most commonly used clinical algorithms – diarrhoea and fever <3 weeks -- can be found translated on the pages following this appendix,

¹ Lowery, JC et al., 1998, 'Comparison of professional judgment versus an algorithm for nutrition status classification. *Med Care*, vol. 36, no. 11, pp 1578-1588.

² Cao, XT et al., 2004, 'Evaluation of an algorithm for integrated management of childhood illness in an area of Vietnam with dengue transmission', *Trop Med Int Health*, vol. 9, no. 5, pp. 573-581.

³ Margolis, CZ et al., 1989, 'Clinical algorithms teach pediatric decision-making more effectively than prose', *Med Care*, vol. 27, no. 6, pp. 576-592.

⁴ Lietzau, J 1996, 'Teaching symptom management of HIV/AIDs using algorithms', *Cancer Nurs*, vol. 19, no. 4., pp. 263-268.

⁵ Gao, M, Sun, Z & Yeh, P-P 2008, 'The effectiveness of diagnostic algorithms in education and practice' unpublished literature review, *Nick Simons International*, Kathmandu.

⁶ For the tracer conditions list used, see the end of this appendix

⁷ NSI 2010, 'Clinical Algorithms for Mid-Level Healthworkers in Nepal' *Nick Simons Institute*, Kathmandu.

⁸ Knoble, S, 'Measuring the quality of rural based government mid-level health care workers: a clinical skills assessment' *Nick Simons Institute*

while pages from the Nepali version can be found below (figures A-C; please note: the algorithms were used in Nepali in the field):

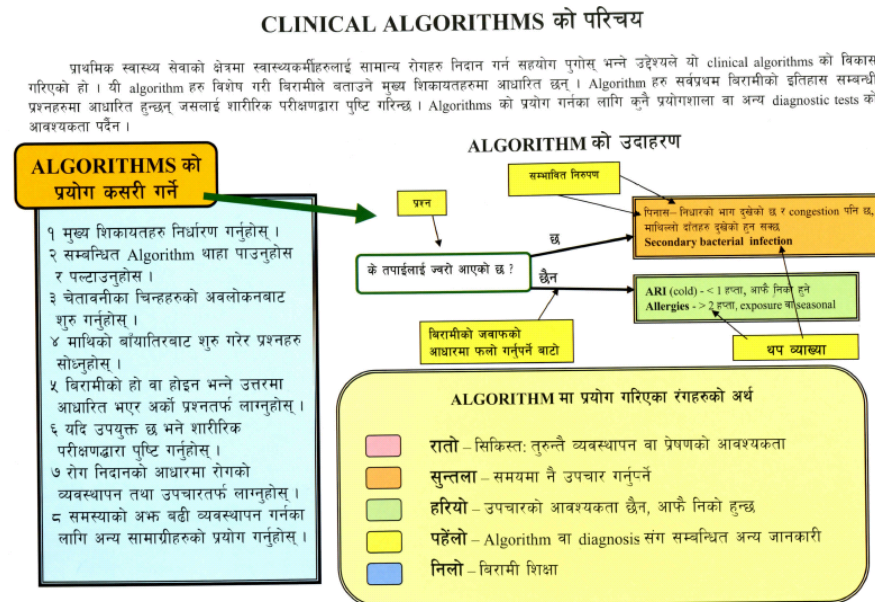


Figure A. An example of the instructional page from the clinical algorithms book used

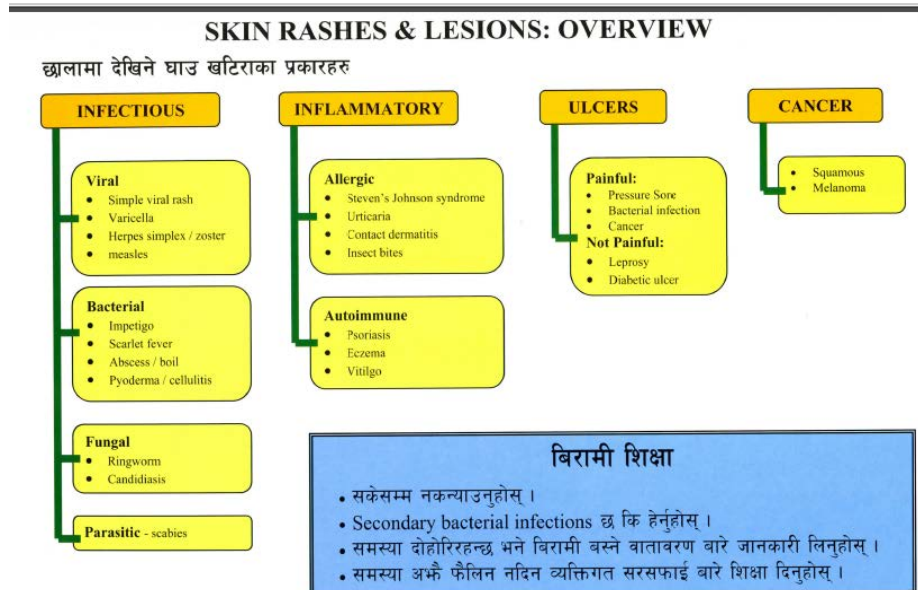


Figure B. An example of the overview page from the clinical algorithms book. Each section is preceded by a similar overview outlining the different potential diagnoses pertaining to that particular set of algorithms. For example, this is for skin rashes and lesions.

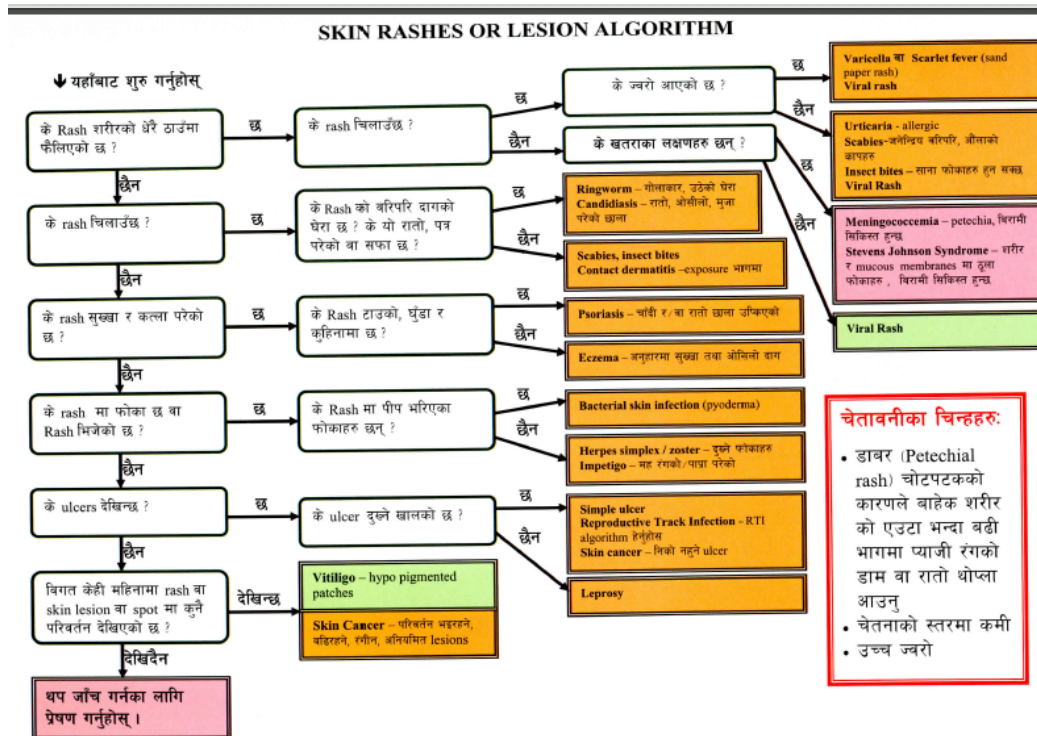


Figure C. An example of one of the clinical algorithms used for skin rashes or lesions. This page would follow the page found in figure B and help guide the diagnostic process.

Extensive training (including two days of practicals led by a medical doctor) was done on how to use these algorithms and how to elicit and record symptoms in the interviewing process. Interviewers were trained in much the same way medical doctors were trained to give an initial patient intake interview. Interviewers were asked to document each and every symptom as they were mentioned and the order in which they were mentioned. They were taught to probe for more details about each symptom. For example, if the symptom was pain, they were taught to ask if it was sharp or dull, radiating or localised, the location of its onset, the duration of it, any other associated symptoms etc. The interviewer documented the clinical algorithm used to guide the medical interview and wrote down a tentative diagnosis based on the algorithm.

Phase #2: Reviewing symptoms & diagnoses using training manuals

At the end of each day, the list of symptoms and potential diagnoses were reviewed by myself using the “Diagnostic and Treatment Manual for Primary Healthcare in the District”⁹ and the “Standard treatment schedules for SHP and HP”¹⁰ to narrow down the diagnosis and to determine if any symptoms were missing from the list recorded by the interviewers. If something seemed to have been omitted, I asked the interviewer in case s/he had simply forgotten to write it down.

Phase #3: Verbal autopsies

Finally, the last phase took place at the completion of the data collection period upon return to Kathmandu. A database was created with all of the symptoms, differential diagnoses, patient demographic information and medicines prescribed. These were then given to two medical doctors at Patan Academy of Health Sciences for a more detailed review. Modified verbal autopsies, which have been used in other contexts to successfully diagnose the causes of mortality^{11,12,13}, were done by both doctors on each cases in the database and a differential diagnosis was given. They were given the clinical algorithms and books to aid their diagnostic process. The doctors were also asked to rate how

⁹ Tribhuvan Institute of Health & WHO 2008, ‘Diagnostic and treatment manual for primary healthcare in the district’ *Health Learning Materials Center*, Kathmandu.

¹⁰ MoH 2004, ‘Standard treatment schedules for Subhealth post and Healthpost’ *Government of Nepal, Ministry of Health*, Kathmandu.

¹¹ Snow, RW et al., 1992, ‘Childhood deaths in Africa: uses and limitations of verbal autopsies’ *The Lancet*, vol. 240, no. 8815, pp. 351-355.

¹² Bang, AT, Bang, RA & SEARCH team 1992, ‘Diagnosis of causes of childhood deaths in developing countries by verbal autopsy: suggested criteria’, *Bulletin of the World Health Organization*, vol. 70, no. 4, pp. 499-507.

¹³ Kahn, K, Tollman, SM, Garenne, M & Gear, JSS 2000 ‘Validation and application of verbal autopsies in a rural area of South Africa’, *Tropical Medicine and International Health*, vol. 5, no. 11, pp. 824-831.

severe they felt the illness to be (using the same scale as was used by the patients in the household surveys and also using the Duke University Severity of Illness rating system – see figure D¹⁴), how certain they were with the diagnosis (0=not at all certain, 1 = somewhat certain (~50%), 2= very certain (~70-99%), 3 = 100% certain) and what course of treatment they would prescribe. The diagnoses from each of the doctors were compared to one another to determine the inter-rater agreement for the primary diagnoses, which was 0.72, considered to be a good degree of agreement.¹⁵ For any cases in which there was disagreement, the diagnosis with the higher certainty score was taken. If both had the same level of certainty about the diagnosis, which only happened in twenty cases, the doctors sat down together to discuss the case and come to some sort of agreement. From this list of differential diagnoses, ICD-10 codes were assigned and the illnesses were categorised accordingly. This is how the data in was generated.

¹⁴ Parkerton, GR, Broadhead, WE, Tse, CK J 1993, 'The Duke Severity of Illness Checklist (DUSOI) for measurement of severity and comorbidity' *J Clin Epidemiology*, vol. 46, no. 4, pp. 379-393.

¹⁵ <http://www.medcalc.org/manual/kappa.php>

*Duke Severity of Illness (DUSOI) Checklist**

ID Number: _____

Provider: _____	Date of Encounter: _____
If Audit, Date: _____ Auditor: _____	Patient's Name: _____

Diagnosis or Health Problem: _____					
	None	Questionable	Mild	Moderate	Major
1. Symptoms (past week):	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4
2. Complications (past week):	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4
Disability					
3. Prognosis (next 6 months, without treatment):	None ☐ 0	Mild ☐ 1	Moderate ☐ 2	Major ☐ 3	Threat to Life ☐ 4
Need for Treatment			Expected Response to Treatment		
			Good	Questionable	Poor
4. Treatability:	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4

Diagnosis or Health Problem: _____					
	None	Questionable	Mild	Moderate	Major
1. Symptoms (past week):	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4
2. Complications (past week):	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4
Disability					
3. Prognosis (next 6 months, without treatment):	None ☐ 0	Mild ☐ 1	Moderate ☐ 2	Major ☐ 3	Threat to Life ☐ 4
Need for Treatment			Expected Response to Treatment		
			Good	Questionable	Poor
4. Treatability:	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4

Diagnosis or Health Problem: _____					
	None	Questionable	Mild	Moderate	Major
1. Symptoms (past week):	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4
2. Complications (past week):	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4
Disability					
3. Prognosis (next 6 months, without treatment):	None ☐ 0	Mild ☐ 1	Moderate ☐ 2	Major ☐ 3	Threat to Life ☐ 4
Need for Treatment			Expected Response to Treatment		
			Good	Questionable	Poor
4. Treatability:	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4

USE ADDITIONAL SHEETS FOR OTHER DIAGNOSES

*Copyright 1990 Department of Community and Family Medicine, Duke University Medical Center, Durham, NC, U.S.A.

Figure D. The Duke University Severity of Illness Checklist Used by the Doctors [from: Parkerton, Broadhead & Tse, 1993]

DUSOI Ratings

When rating the illness episodes in the survey sample using the DUSOI scale, the majority of illness cases (41%) were assigned values between 10+ and 20 percent or between 40+ and 50% (28% of cases; figure 4.20). The mean DUSOI diagnosis severity score for all episodes was 29 ± 18 , and the median was 25. The most severe cases according to the doctor's ratings were diagnosed as cases of snake bite, pelvic peritonitis, sub-acute intestinal obstruction, epilepsy, cholera, stroke, acute gastroenteritis and dysentery. A comparison can be found in Figure F.

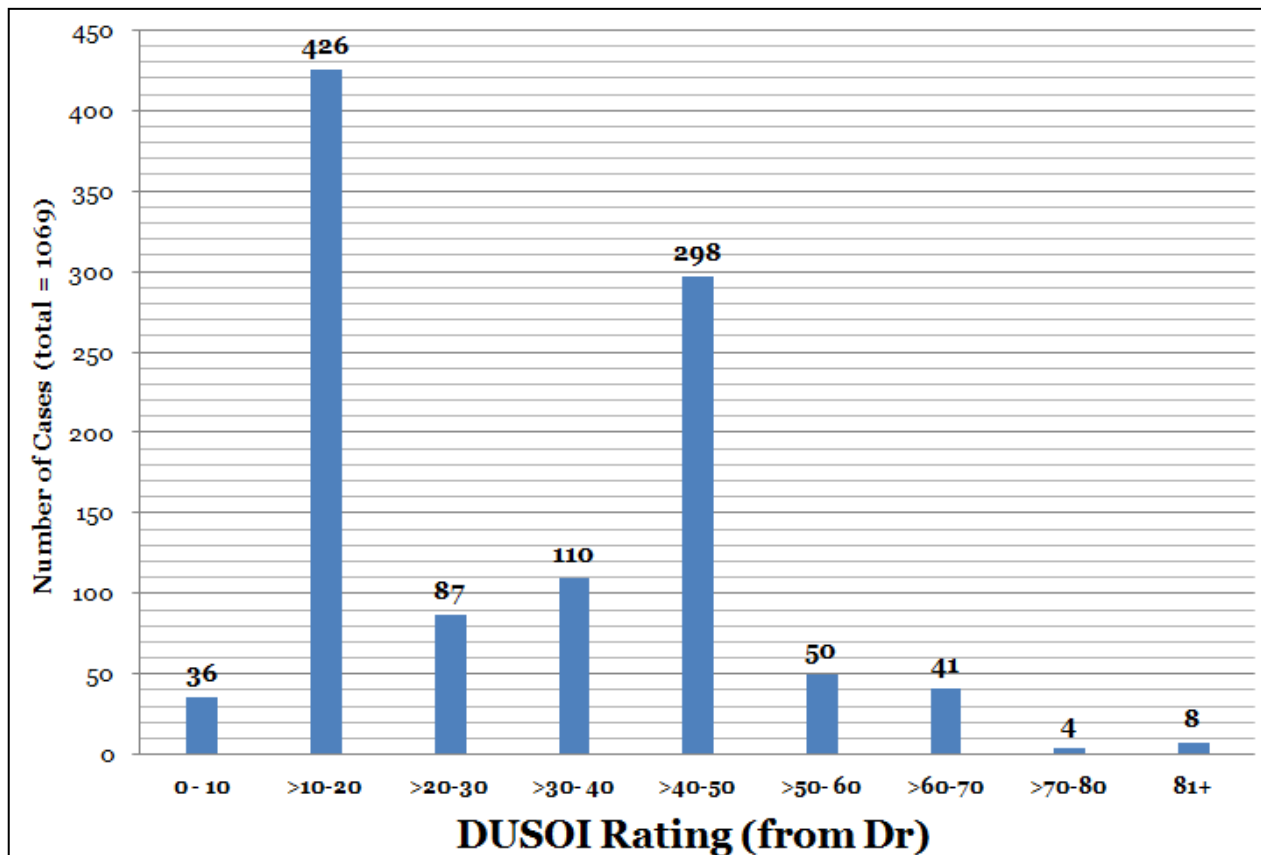


Figure E. Doctor's ratings of illness episodes using the DUSOI scale. The number of cases are grouped into categories according to percent ranges, with the majority of cases falling between >10-20% and >40 – 50%.

Table 2. DUSOI diagnosis severity scores for the 21 most prevalent health problems (*N* = 414 patients with 803 problems)

Health problems	<i>N</i>	Mean*	SD†	Minimum	Maximum	Range
Sprains and strains	8	43.0	11.8	18.8	56.3	37.5
Other neurological diseases	9	41.0	13.3	18.8	56.3	37.5
Headache	9	40.3	15.0	18.8	62.5	43.7
Bronchitis, acute	32	40.2	9.6	25.0	75.0	50.0
Obesity	29	40.1	12.7	12.5	68.8	56.3
Low back pain	13	38.0	14.1	18.8	62.5	43.7
Sinusitis, acute or chronic	16	37.5	6.5	25.0	50.0	25.0
Chronic ischemic heart disease	14	37.1	20.0	0	68.8	68.8
Anxiety	22	36.9	19.3	0	75.0	75.0
Other stomach diseases	16	35.5	13.8	6.3	62.5	56.2
Diabetes mellitus	38	35.4	21.1	6.3	87.5	81.2
Alcohol abuse	10	33.8	36.8	0	93.8	93.8
Bruises and contusions	8	32.8	13.3	18.8	56.3	37.5
Depression	9	32.6	10.7	12.5	43.8	31.3
Osteoarthritis	15	31.3	15.1	6.3	62.5	56.2
Upper respiratory infection, acute	21	31.0	13.9	18.8	81.3	62.5
Tobacco abuse	38	30.8	12.6	18.8	75.0	56.2
Hypertension	116	26.8	16.8	0	75.0	75.0
Vaginitis	10	24.4	7.5	12.5	25.0	12.5
Lipid disorder	32	14.1	8.2	6.3	37.5	31.2
Menopausal syndrome	9	13.9	10.7	6.3	37.5	31.2
All health problems	803	31.3	17.2	0	93.8	93.8

*Duke Severity of Illness (DUSOI) scores for individual health problems, not including comorbid health problems. Scale: 0 = lowest severity, 100 = highest severity.

†SD = Standard deviation.

Figure F. DUOSI ratings for the twenty-one most prevalent health problems. Allows for a basis of comparison to the ratings from our study (figure E) [from: Parkerton, Broadhead & Tse, 1993]

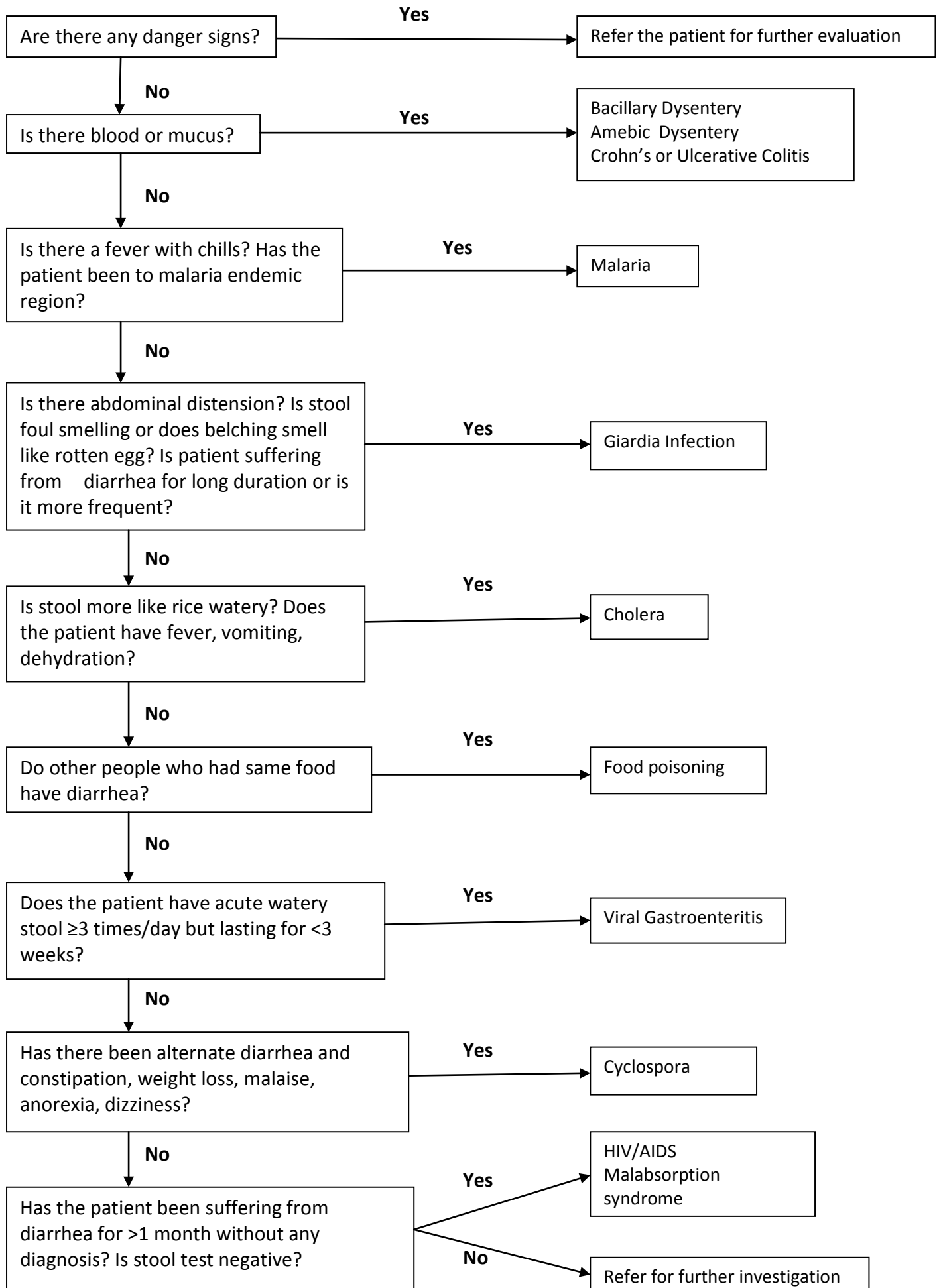
List of Tracer Conditions/Symptoms

Use to probe patients with

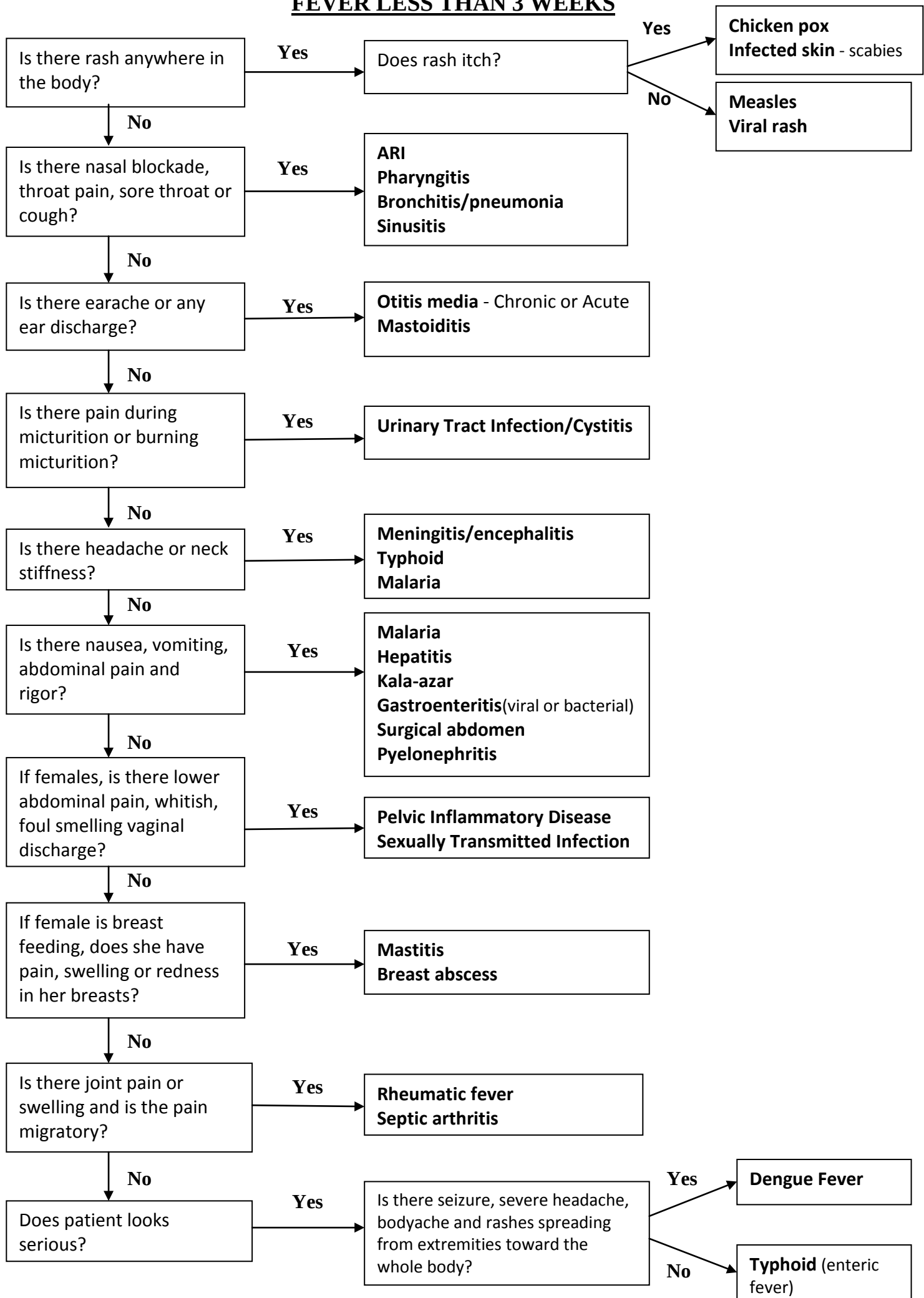
Respiratory Conditions	Pneumonia ARI Lower Respiratory infection Cough TB Asthma Shortness of breath COPD
Skin Condition	Rashes Eczema Scabies Discoloration Itching
Eye or Ear Conditions	Otitis media Ringing Conjunctivitis Red eyes
Head/Neurological Conditions	Headache Fever Dizziness Vertigo Meningitis Stroke Difficulty moving Encephalitis - Fever, headache, vomiting (projectile), altered mental state, neck stiffness
Stomach/Intestinal Conditions	Stomach pain Gastric problems/gastritis Vomiting Diarrhoea Constipation Abdominal pain, parasites, worms
General Complaints	Weakness Sore Throat, Tonsillitis Fatigue Weight loss Cold
Joint problems	Arthritis Joint pain, Stiffness Back pain Extremities/limb pain
Injuries	

Typhoid	Symptoms: Fever, headache, abdominal pain, nausea, vomiting, dry cough, constipation/diarrhoea, malaise, anorexia
Sexual/Urinary problems	Vaginal discharge, Menstrual problems Uterine/ lower abdominal Pain Prolapsed uterus UTI
Liver problems	Jaundice (yellow tinge to skin and eyes)
Chronic conditions	Diabetes High blood pressure

DIARRHEA ALGORITHM



FEVER LESS THAN 3 WEEKS



Appendix 3.9

Household Surveys & Consent: English & Nepali Versions

The following sub-appendices are contained within this appendix

Appendix 3.9a Study information sheet & household consent in English

Appendix 3.9b Household survey in English

Appendix 3.9c Household consent in Nepali

Appendix 3.9d Household survey in Nepali

Appendix 3.9a: Study Information Sheet



Study Title: 'Understanding the health-seeking behaviours of people in rural Makwanpur district, Nepal'

Principal Investigator: Laurel S. Gabler, DPhil Candidate, University of Oxford

NHSB-MK Study Information Sheet

I would like to invite you to take part in a research study to investigate the health-seeking behaviours of people in Makwanpur district. This study is part of a PhD research project being conducted under the supervision of the University of Oxford in the UK and Patan Academy of Health Sciences in Kathmandu.

Why is it important to study health-seeking behaviours?

Health-seeking behaviour studies involve asking people about where they go for care when they are sick and the reasons why they choose specific care options over others. These studies provide important information on healthcare system functioning from the perspective of health system users. The results of these studies can then be used by health organisations and the government in designing future health programmes and health policies.

What is this study about?

This specific study involves a survey and interviews about the health-seeking behaviours of people in Makwanpur district. I am attempting to find out how people utilise both formal and informal healthcare options within the district and to understand the factors that determine where people seek care, why they make the choices they do and their attitudes, beliefs and perceptions regarding health, illness and care options. I am also attempting to find out how much people pay for their health services, how they get to their health centres and how satisfied they are with their outcomes and the affordability, accessibility, quality and availability of health services in their communities. I hope that the results from this study will help people in the health sector of Nepal better understand how the healthcare system in this area is being utilised and how it can be improved upon.

What are the reasons why you might not be able to participate?

You cannot participate in this study if your household has not experienced an episode of illness in the two weeks prior to the date of the survey.

Appendix 3.9a: Study Information Sheet

What you will be asked during this study?

Should you agree to participate, during the survey an investigator will ask you about an episode of illness experienced by yourself or someone else in your household in the two weeks prior. You will be asked a series of specific questions about this episode of illness and the type of care or treatment you received for it. You will also be asked to rate the health services you utilised in terms of quality, accessibility, affordability, availability and acceptability.

A handful of additional study participants will also be visited and will be asked a series of more detailed, open-ended questions regarding your culture and your beliefs, perceptions and attitudes towards health care options and illness/health more generally.

Participation is completely voluntary and you are allowed to discontinue the interview or withdraw from participation at any point should you choose to do so once the interview has started. You are also allowed to skip over any items on the survey you do not feel comfortable answering.

How many people will participate?

Approximately 2,400 households from across eleven different VDCs in Makwanpur district will be needed to have reliable results for the study. 90 more households will be interviewed in more depth

What are the risks of participating?

The risks of participation are minimal to you. You may experience minor psychological distress in being asked about your illness episode and the treatment you received, but an attempt will be made to minimize all distress you experience during the data collection process.

Subject Protection:

The Nepal Research Council, the ethics committee of the Patan Academy of Health Sciences and the ethics committee in Oxford have approved this study. The study research team are committed to respecting your privacy throughout your study participation and when the study results are published, your name will not be mentioned. You will be identified throughout the survey process as number only, so nobody will be able to trace the results back to your household. Taking part in this research is voluntary. You are free to change your mind at any point in time.

Research Results:

Once the study has been completed and the results are available, the researchers will report the information to the health authorities of Nepal and the villages where the surveys were undertaken. Individual results will not be analysed or communicated.

Contact Information for the Principal Investigator:

Laurel S. Gabler, DPhil Candidate, Department of Public Health, Richards Building, Old Road Campus, Headington, Oxford OX3 7LF, UK

Mailing address: c/o Green Templeton College, University of Oxford, 43 Woodstock Road, Oxford, OX2 6HG Tel in UK: +44 (0) 7887 680625 Tel in Nepal: +977 (0) 9849 624566

E-mail: lsgabler@gmail.com or laurel.gabler@gtc.ox.ac.uk

Appendix 3.9a: Household consent form in English



Study Title: 'Understanding the health-seeking behaviours of people in rural Makwanpur district, Nepal'

Principal Investigator: Laurel S. Gabler, DPhil Candidate, University of Oxford



NHSB-MK Informed Consent Form for Households

I, Mr./Mrs. _____, agree to allow my household to participate in this survey/interview on health-seeking behaviours in Makwanpur. The study context and the objectives of this research have been explained to me by the investigator in a language that I understand. I have been provided with a copy of the information sheet with the details of the study and the investigator's contact information.

I understand that study participation is completely voluntary and that I am free to withdraw participation at any time. In signing this document, I agree for my household to be surveyed/interviewed regarding a specific episode of illness and our health-seeking behaviours more generally. I understand that to back up the data, survey information may have to be shipped to Kathmandu on a monthly basis, but that all personal identifying information will be left out of the survey data. I have had the opportunity to ask questions about the study and I am satisfied with the answers and explanations that have been provided. If I have other questions during the course of this study, I can telephone the researcher.

I agree to participate in this study

☐

I agree

☐

I do not agree

Contact information for Principal Investigator:

Laurel S. Gabler, DPhil Candidate, Department of Public Health

c/o Green Templeton College, University of Oxford, 43 Woodstock Road, Oxford, OX2 6HG

Tel in UK: +44 (0) 7887 680625 Tel in Nepal: +977 (0) 9849 624566 E-mail: lsgabler@gmail.com

Household Identification Number: _____

Name of Participant: _____

Signature/right thumb print of Participant:

[If participant is <18 years, name and signature of guardian]

Date: ____/____/____

Signature/right thumb print of Head of Household:

Name of person taking consent: _____

Signature of person taking consent: _____ Date: ____/____/____

Appendix 3.9b:

Household Survey in English

NHSB-MK Household Survey Form

FORM [A.1]

I. Interview Overview	
Interviewer Initials: _____	Code Given _____
VDC Name: _____ Ward #: _____ Household #: _____	-HSB- _____
Date of Interview: ____/____/____ Start Time: _____ End Time: _____	

II. Primary Respondent Details:	
Relationship to head of household: _____	Gender: <i>M/F</i> Age at last BD: _____
Level of Education: <i>Class 1-5/Class 6-8/Class 9-10/+2/University</i> ☐	Literacy: <i>Lit/Illiterate</i> ☐

III. Survey Questions

Section A.1: Household Demographic Information:

Question	Response																																													
(A.1) How many people live in this household? <i>Write relationship in column '1' and use coding scheme later.</i> 1.....partner (wife/husband) 2.....younger brother/sister 3.....older brother/sister 4.....child 5.....brother/sister in law 6.....aunt/uncle 7.....parent (mother/father) 8.....mother/father in law 9.....nephew/niece 10.....cousin 11.....grandchild 12.....daughter/son in law 13.....other blood relative 14.....other non-blood relative	A.1.1 Record Number: (including respondent) A. 1.2 Record relationship to respondent and age of every member: <table border="1"> <thead> <tr> <th>1)Relationship</th> <th>2)Gender</th> <th>3) Age</th> </tr> </thead> <tbody> <tr><td>a.</td><td></td><td></td></tr> <tr><td>b.</td><td></td><td></td></tr> <tr><td>c.</td><td></td><td></td></tr> <tr><td>d.</td><td></td><td></td></tr> <tr><td>e.</td><td></td><td></td></tr> <tr><td>f.</td><td></td><td></td></tr> <tr><td>g.</td><td></td><td></td></tr> <tr><td>h.</td><td></td><td></td></tr> <tr><td>i.</td><td></td><td></td></tr> <tr><td>j.</td><td></td><td></td></tr> <tr><td>k.</td><td></td><td></td></tr> <tr><td>l.</td><td></td><td></td></tr> <tr><td>m.</td><td></td><td></td></tr> <tr><td>n.</td><td></td><td></td></tr> </tbody> </table>	1)Relationship	2)Gender	3) Age	a.			b.			c.			d.			e.			f.			g.			h.			i.			j.			k.			l.			m.			n.		
1)Relationship	2)Gender	3) Age																																												
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m.																																														
n.																																														
(A.2) Caste/Ethic group	1.....Brahmin 9..... Magar 2.....Chhetri 10..... Other 3.....Muslim SPECIFY: _____ 4.....Newar 5.....Madhesi 6.....Tamang 7.....Gurung 8.....Chepang																																													

Appendix 3.9b:

Household Survey in English

(A.3) Person responsible for paying household expenses. <i>Sometimes the head of the house is not the person responsible for paying for the household expenses. Fill in 1-6 in box 1 and letter of row person is in in question A.1</i>	1.....Primary respondent (pr) 2.....Partner of primary respondent 3.....Child of primary respondent 4.....Grandchild of pr 5.....Half pr/half other 6.....Other
(A.4) Occupation of person responsible for paying household expenses (not including housework): <i>Ask: Other than household work, what kind of work do you do? How do you earn your living? What is your primary occupation?</i> <i>If person has more than one occupation record primary and secondary sources of income (if approximately 50/50)</i> <i>If two people pay expenses, record occupation of both</i>	1.....Agricultural worker (farmer) 2.....Migrant worker 3.....Business Person 4.....Teacher/Educator 5.....Other Government Employee 6.....Transport worker 7.....Construction worker 8.....Small shop owner 9.....Tailor 10.....Retired 11.....Unemployed (never worked) 12.....Porter (transport stuff) 13.....Other: ----- Tick Box: Daily Wages Regular Salary
(A.5) Education of household head (if not respondent)	0.....None 1.....Class 1-5 2.....Class 6-8 3.....Class 9-10 4.....+2 5.....University
(A.6) Household assets (record number of each and add up for total score) Temporary roof: straw, tile, stone, tin, wood, thatch Permanent roof: concrete, cement Total = Number of assets + No. of animals	+1 Temporary Roof +1.....Motorcycle +2 Permanent Roof +1.....Oxcart +1.....Bicycle +1.....Radio +1.....TV +1.....Fridge No. of Cows (+3): No. of Chickens/birds (+1) No. of Buff. (+4): No. of Goats (+2): TOTAL:
(A.7) Total household income (combined for entire household). <i>This is a sensitive question, so try to be careful when asking this. Ask about yearly income and divide by 12.</i> <i>Can ask this question again at the end of the interview if respondent doesn't answer initially</i> <i>If respondent says 'don't know' try to ask them how much they spend each month or how much money is sent to them from their children</i>	Record monthly income: <i>If unable to respond, put '99' and try to ask this question once more at the end of the interview when less people are watching</i> [A.7.2] Income bracket: 0.....<=3,000 1.....3,001 – 4,000 7.....30,001 – 40,000 2.....4,001 – 7,000 8.....40,001 – 50,000 3.....7,001 – 10,000 9.....> 50,000 4.....10,001 – 15,000 5.....15,001 – 20,000 6.....20,001 – 30,000

Appendix 3.9b:

Household Survey in English

(A.8) House type: Composite = Walls + Floor + Bathroom + Water + Rooms (high number is equivalent to better quality houses)	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%; vertical-align: top;"> 1.WALLS: 1.....Tin 2.....Mud 3.....Wood walls 4.....Brick/Stone/Cement 2.FLOOR: 1.....Dirt/Mud 2.....Wood 3.....Cement 3.TOILET: 0.....no toilet 1.....outdoors 2.....inside 4. Distance to water: 0.....More 30 min 1.....16-30min 2.....5-15min 3.....less than 5 min 4.....water in home 5. Type of water supply: 0.....well/spring 1.....tap </td> <td style="width: 40%; vertical-align: top;"> 6.Number of rooms: COMPOSITE: </td> </tr> </table>	1.WALLS: 1.....Tin 2.....Mud 3.....Wood walls 4.....Brick/Stone/Cement 2.FLOOR: 1.....Dirt/Mud 2.....Wood 3.....Cement 3.TOILET: 0.....no toilet 1.....outdoors 2.....inside 4. Distance to water: 0.....More 30 min 1.....16-30min 2.....5-15min 3.....less than 5 min 4.....water in home 5. Type of water supply: 0.....well/spring 1.....tap	6.Number of rooms: COMPOSITE:
1.WALLS: 1.....Tin 2.....Mud 3.....Wood walls 4.....Brick/Stone/Cement 2.FLOOR: 1.....Dirt/Mud 2.....Wood 3.....Cement 3.TOILET: 0.....no toilet 1.....outdoors 2.....inside 4. Distance to water: 0.....More 30 min 1.....16-30min 2.....5-15min 3.....less than 5 min 4.....water in home 5. Type of water supply: 0.....well/spring 1.....tap	6.Number of rooms: COMPOSITE:		
(A.9) Land ownership. <i>Record response in whatever terms they use and convert later</i> (Ropani, Bigha, Hectare, Katha etc.)	Record Response:		

-Continue onto next page for all households-

Appendix 3.9b:

Household Survey in English

Section A.2: Knowledge Regarding Health Services/System:

Question	Response
(A.10) Knowledge of health system: [A.10.1] What type of health facility is the nearest facility to your house? <i>Try to gauge whether or not they know if it is a SHP, HP, PHCC.</i> [A.10.2] Can you tell me what the lowest level of facility-based government care is called? <i>Show them pictures and ask them to point. Ask them if they know what it is called.</i> [A.10.3] If someone gets sick and goes to the HP for care, where is the health worker at the HP supposed to send the sick person if he cannot treat that person? <i>Show pictures of all of the government facilities. Correct answer is PHCC</i> [A.10.4] Can you tell me which government facility offers free care and medicines? <i>Ask them to point to all of the facilities which they think offer free care. Make sure to inform them of the correct answer afterwards</i>	[A.10.1] 1.....correct, know ☐ 2.....incorrect, don't know [A.10.2] 1.....able to point/identify ☐ 2.....able to name 3.....pointed wrong 4.....unable to respond at all [A.10.3] 1..... able to point/identify ☐ 2..... able to name 3.....identified incorrectly 4.....unable to respond at all [A.10.4] Circle facility they point to: SHP HP PHCC 0.....if no facilities ☐ 1.....if one facility 2.....if two facilities 3.....if all three facilities
(A.11) Knowledge of health workers: [A.11.1] Can you tell me which government health facility should have a medical doctor available at it? <i>Can ask them to point to the picture</i> <i>Correct Answer: PHCC</i> [A.11.2] Can you tell me what the FCHV does? What is her job/role? DO NOT PROBE - Involved in maternal and child health - Treats minor illness/injury - Involved in immunisation, Family planning, ANC/PNC Counselling - Condom distribution - Nutrition advice - Treatment/referral of diarrhoea/ pneumonia/ high risk pregnancies	[A.11.1] 1..... able to point/identify ☐ 2..... able to name 3.....identified incorrectly 4.....unable to respond at all [A.11.2] 1.....Has no knowledge about FCHV role 2.....Has minimal knowledge about FCHV role 3.....Has some knowledge about FCHV role 4.....Has good knowledge about FCHV role <i>If respondent knows who the FCHV is but NOT WHAT she does, code as '2'</i> ☐

Appendix 3.9b:

Household Survey in English

Section B.1: Episode of Illness:

Question	Response												
(B.1) Illness episode [B.1.1] Has anyone in this household experienced any illness/health problems in the past 2 weeks? <i>Make sure to ask about ALL episodes during this period</i> IF NO, ASK: [B.1.2] Has anyone in this household experienced any illness/health problems in past 1 month (4 weeks from today?) IF STILL NO ASK Has anyone in this household visited a health provider, pharmacists, traditional healer, clinic in the last 2 weeks or one month? If so, what was the reason? IF STILL NO, USE <i>Probe with list of tracer conditions (see list)</i> <i>Probe by asking about each family member</i> <i>Record all episodes and the day of symptoms onset as accurately as possible (try to use salient events to obtain as accurate a date as possible)</i> Only include episodes of illness where the first symptoms starting during these periods, i.e. do not include episodes that started before 2 weeks and continued into the two week period (do not include chronic conditions) <i>Please provide as many details as you can so a verbal autopsy can be performed later</i> NOTE: For question B.1.1-B.1.2 ask about all medical problems/conditions in the last one month/two weeks (including chronic conditions which may have gotten worse in this period) RECORD all responses in column 3, along with anything anyone mentions regarding chronic pre-existing conditions. For question B.3 ONLY focus on acute illness episodes. IF not acute illness episodes were experienced, record chronic information and skip to section C.	B.1.1 Y/N B.1.2 Y/N <i>If No episodes, ask about the last time someone was sick and skip to Section C</i> [B.1.1] [B.1.2] <i>If Yes, record responses for each episode:</i> <table border="1"> <thead> <tr> <th>Who? (Use letter from Q A.1)</th><th>When did you first notice sx's?</th><th>What? List Sxs Experienced</th></tr> </thead> <tbody> <tr> <td>(a.1)</td><td>(a.2)</td><td>(a.3)</td></tr> <tr> <td>(b.1)</td><td>(b.2)</td><td>(b.3)</td></tr> <tr> <td>(c.1)</td><td>(c.2)</td><td>(c.3)</td></tr> </tbody> </table>	Who? (Use letter from Q A.1)	When did you first notice sx's?	What? List Sxs Experienced	(a.1)	(a.2)	(a.3)	(b.1)	(b.2)	(b.3)	(c.1)	(c.2)	(c.3)
Who? (Use letter from Q A.1)	When did you first notice sx's?	What? List Sxs Experienced											
(a.1)	(a.2)	(a.3)											
(b.1)	(b.2)	(b.3)											
(c.1)	(c.2)	(c.3)											

Appendix 3.9b:

Household Survey in English

[B.1.3] Pre-existing chronic conditions <i>List all non-acute episodes of illness and their details here</i>	[B.1.3] Chronic Disease <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Who? (From A.1)</th> <th style="width: 80%;">Details of chronic condition/s</th> </tr> </thead> <tbody> <tr> <td style="height: 40px;"></td> <td></td> </tr> <tr> <td style="height: 40px;"></td> <td></td> </tr> </tbody> </table>	Who? (From A.1)	Details of chronic condition/s				
Who? (From A.1)	Details of chronic condition/s						
(B.2) Suspected diagnosis for each item mentioned in B.1 <i>If they present you with symptoms rather than a diagnosis, use NSI Clinical algorithms to get at as accurate a diagnosis as possible. If they present you with a diagnosis rather than symptoms make sure to record all the associated symptoms in the section above to double check accuracy later.</i> <u>RECORD LETTER OF ALGORITHM USED</u> <i>If they list a diagnosis rather than symptoms ask the following question about each of the episodes from above question:</i> <i>Skip these questions and write in '999' if they do not mention a diagnosis in question B.1</i> [B.2.2] How did you come up with this diagnosis? Who was responsible for diagnosing you? <i>Record whomever was responsible for providing them with the diagnosis for each of the episodes from B.1</i> <i>ENTER '999' if person did not mention diagnosis and only mentioned symptoms</i>	B.2.A B.2.B B.2.C [B.2.2] Diagnosis from column 3, question B.1.2 was given by: For Illness A/B/C 0.....self (diagnosed self) 1.....other non-medical person 2.....FCVH 3.....Pharmacist 4.....Traditional Healer 5.....Health worker at SHP/HP/PHCC 6.....Medical Dr. For Illness A/B/C 0.....self (diagnosed self) 1.....other non-medical person 2.....FCVH 3.....Pharmacist 4.....Traditional Healer 5.....Health worker at SHP/HP/PHCC 6.....Medical Dr.						

Appendix 3.9b:

Household Survey in English

(B.3) Illness for focus of interview: Which episode of illness will be the focus of the interview? <i>Choose one from the three to focus on Important to avoid proxy reporting whenever possible. If all choices are equal, choose more severe illness. If mother is present, can ask to report on child illness. Try to get person who was sick to report on own illness (unless person cannot be reached)</i>	CHOOSE ONLY ACUTE EPISODE [B.3.1] A/B/C							
[B.3.2] Treatment for other episodes listed: For the two episodes NOT selected as the focus of this interview, was any treatment sought for these? What type?	<table border="1"> <thead> <tr> <th>Episode Label [A/B/C]</th> <th>Treatment Sought</th> </tr> </thead> <tbody> <tr> <td>(a.1)</td> <td>(b.1)</td> </tr> <tr> <td>(a.2)</td> <td>(b.2)</td> </tr> </tbody> </table>	Episode Label [A/B/C]	Treatment Sought	(a.1)	(b.1)	(a.2)	(b.2)	
Episode Label [A/B/C]	Treatment Sought							
(a.1)	(b.1)							
(a.2)	(b.2)							
Is person who experienced episode of illness selected in B.3 for the focus of this interview the same as the primary respondent from section II. or a different person? [B.3.3] ☐ Same ☐ New Respondent ☐ → Fill out respondent info:								
Secondary Respondent Details: ↓ 4. Which person from Q A.1 (write letter): _____ 5. Gender: M/F 6. Age at last BD: _____ 7. Level of Education: Class 1-5/Class 6-8/Class 9-10/+2/University 8. Literacy: Lit/Illiterate ☐								
Is this person a proxy respondent for another person's illness? Y/N ☐								
(B.4) Illness aetiology (Explanatory Models): What do you think was responsible for this sickness/problem? <i>Ask as open-ended first. Only probe with responses if they say 'Don't Know'</i> 1.....food/diet/bad water 2.....humoral imbalance (hot and cold) 3.....magico-religious/supernatural forces 4.....physical factors (ie. fall, allergy, strenuous work) 5.....exposure to impure person/thing 6.....infection, micro-organism 7.....moral misbehaviour of self/family 8.....weather/climate 9.....other natural factors (ie. stars/planets) 10.....stress/other emotions a. b. 11.....Other: _____ ☐ ☐ 12.....Unkown ☐ ☐	[B.4.1] Record Perceived cause/s (Circle primary and secondary causes) Natural (including weather, humoral imbalance, diet/food, water, insects, physical factors etc.) Super natural (including spells, curses, sorcery, evil spirits etc.) Biological (including genetics, micro-organisms, infection etc.)							

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Appendix 3.9b:

Household Survey in English

(B.7) Efficacy of home remedies [B.7.1] Did these home remedies/meds help the problem at all? <i>If answer is 2-3, ask the following question:</i> [B.7.2] How long did it take for you to feel better from these home meds/remedies? (<i>make sure to ask this question ONLY if they did not seek outside care for this episode</i>)	[B.7.1] Efficacy of home remedies 0.....no, did not help at all 1.....yes, helped a little 2.....yes, helped a lot 3.....yes, helped completely 999.....not applicable [B.7.2] Time before improvement 1.....several hours 2.....1 full day 3.....2-3 days 4.....4-7 days 5.....more than one week
(B.8) Care-seeking outside home Did you seek care outside of your house for this illness? <i>If person did not seek care outside of the home, circle N and skip to next section (B.2)</i> [B.8.1] <i>If Yes</i>, did you seek care from a traditional healer for this episode of illness? [B.8.2] Did you seek care from an allopathic provider for this episode of illness? If yes, where/from whom? DISTINGUISH btw Private and Government facilities [B.8.2.b] What did they call this facility (in own words): [B.8.3] Did you seek care from an Ayurvedic or other certified traditional homeopathic provider/facility for this episode? [B.8.4] Did you seek care/obtain medicines from a pharmacy or pharmacist or other store at all for this episode?	(B.8) Y/N → Still ask B.8.1 thru B.8.6 [B.8.1] TRADITIONAL: Y/N [B.8.1.a] SPECIFY TYPE: 1.....Jhankri 7.....Lama 2.....Dhami 8.....Gubhaju 3.....Jyotishi 9.....Fedangwa 4.....Deuta 10.....Bijuwa 5.....Jadi wala 11.....Other: _____ 6.....Buti wala [B.8.2] ALLOPATHIC: Y/N 0.....No, did not seek care 1.....FCHV 2.....Private Clinic 3.....SHP 4.....HP 5.....PHCC 6.....DH 7.....Other (specify: _____) [B.8.3] AYURVEDIC: Y/N a. SPECIFY TYPE: [B.8.4] PHARMACY [w/out clinic]: 0.....no, did not seek care 1.....sought treatment advice 2.....got meds without advice 3.....both sought advice and got meds 4.....bought meds from a normal shop ↓ <i>If '0' to B.8.1-B.8.4 skip to section B.2</i>

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Appendix 3.9b:

Household Survey in English

[B.8.8] Person making decision: Who in the household was responsible for making each of these decisions about where to seek care? <i>Write down number of person from Q A.1 or specify if person does not live in the household</i>	[A] [B] [C] [D]												
(B.9) How long did you wait between the time you first noticed your symptoms and the time you actually sought care outside of the home from each of the following: <i>Start by asking about the first place where they sought care outside of the household and relating all other places where care was sought to that first option.</i> <i>i.e. if care was sought from a Traditional healer first, and then a pharmacy ask how long they waited before seeking care from the traditional healer and then ask how long after they sought care from the traditional healer did they seek care from the pharmacy. Be CAREFUL OF HOW YOU CODE THIS</i> [B.9.1] 1) allopathic provider 2) Pharmacy 3) Traditional healer 4) Ayurvedic provider <i>Fill in number of hours/days waited</i> [B.9.2] Reason for Delay: <i>Why did you wait? Fill out for each location</i> <i>Use coding scheme and record pt. response</i> 1.....waited to see if would improve w/out treatment 2.....no funds 3.....no time/too busy 4.....nobody to look after house 5.....unable to go without husband permission 6.....afraid to go 7.....no available transport 8.....Other (specify in box)	[B.9.1] Length of delay: <i>Record exact number of hours or days waited</i> <i>Start with first place where care was sought</i> <table style="width: 100%; text-align: center;"> <thead> <tr> <th>Allopathic [A]</th> <th>Pharmacy [B]</th> <th>TH [C]</th> <th>Ayurvedic [D]</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Hrs/Days</td> <td>Hrs/Days</td> <td>Hrs/Days</td> <td>Hrs/Days</td> </tr> </tbody> </table> [B.9.2] Record Reason/s for each: A B C	Allopathic [A]	Pharmacy [B]	TH [C]	Ayurvedic [D]					Hrs/Days	Hrs/Days	Hrs/Days	Hrs/Days
Allopathic [A]	Pharmacy [B]	TH [C]	Ayurvedic [D]										
Hrs/Days	Hrs/Days	Hrs/Days	Hrs/Days										

Appendix 3.9b:

Household Survey in English

*The majority of the rest of the questions in this section will refer to the allopathic provider/facility from B.8.5 where care was sought. There are a few questions which also ask about traditional healers. If care was sought from a pharmacist or TH ONLY and **not from** a allopathic facility, you can ask these questions about the pharmacy/TH instead. Write type of facility in this box:*

B.10

*TH = traditional healer; P = pharmacy; A=Ayurvedic
Pvt. = private facility; Gov. = government; O=other*

**If care was sought from more than one allopathic facility, ask these questions about first facility where care was sought*

(B.11) Transport/Distance:

[B.11.1] How did you get to the health facility/provider?

[B.11.2] How long did it take you to get to the health centre from your home?

[B.11.3] Distance in km (estimate)

[B.11.1] *Primary mode used:*

1.....walked
2.....biked
3.....motorbike
4.....Ox cart
5.....bus
6.....car (personal)
7.....taxi
8.....ambulance
9.....other public transport
10.....other:_____

[B.11.2]

Time in minutes:

[B.11.3]

Distance in KM:

(B.12) Wait time:

[B.12.1] Once you were at the facility, how long did you wait before being seen by someone?

[B.12.2] How long did you wait for any tests?

[B.12.3] How long did doctor/nurse spend examining you?

[B.12.4] How long did you wait for any meds?

[B.12.5] Total time at facility

Wait time in minutes:

[B.12.1]

[B.12.2]

[B.12.3]

[B.12.4]

[B.12.5]

(B.13) Health Provider Seen:

Who did you see at the facility? Which health worker treated you? *If saw more than one person at the facility, which one examined you or prescribed meds?*

[B.13.2] Was this person a medical dr. or paramedical?

1.....Peon 7.....MCHW
2.....ANM 8.....VHW
3.....AHW 9.....Nurse
4.....HA 10.....Unsure/DK
5.....Medical Dr. 11.....Other
6.....Specialist (Specify:_____)

1.....medical 2.....paramedical 3.....DK

Appendix 3.9b:

Household Survey in English

(B.14) Care Provided:

What did the dr./healthworker/healer do to examine you/treat you at the health centre?

Check all the apply

[B.14.2] If physical exam was done, ask for them to expand on exactly what types of things the doctor examined/did

If went to both a traditional healer and allopathic provider record responses for each

[B.14.3] What did the traditional healer do? What rituals did he/she perform?

[B.14.3.a] If animals were sacrificed, which ones?

[B.14.4] Record other details of interaction with traditional healer

[B.14.5] Did the TH provide you with any instructions or tell you to do anything in the future?

[B.14.1] If allopathic healer

Physical Exam		Blood Test		Urine Test	
Sputum Test		X-Ray		Stool Test	
Ultra-Sound		Prescribed meds			

[B.14.2] Record details (including details of physical exam)

[B.14.3] If Traditional healer:

Tick all that apply

Spell/Chant		Exorcism		Sacrifice	
Examination of Pulse		Casting of horoscope		Questions about Sxs/diet	
Throwing shells		Trance		Rice grain	
Herbal meds		Other meds		Drumming	

If animal was sacrificed record type:

[B.14.4] Other (record details here of questions asked, rituals performed, mantra recited etc.):

[B.14.5] Instructions from TH:

Appendix 3.9b: Household Survey in English

(B.15) Diagnosis, Meds & Compliance: <i>Ask these questions no matter where health was sought</i> [B.15.1] Did the health provider tell you your diagnosis? If so, do you remember? If so, what did he/she say [B.15.2] Did the health provider prescribe you any meds? If so, how many, what types? Do you still have them? [B.15.3] Name and dosage of meds <i>If unable to name from memory ask for packet, prescription or bottle.</i> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 35%;">Name</th> <th style="width: 15%;">Number</th> <th style="width: 15%;">Times/day [# of days]</th> </tr> </thead> <tbody> <tr><td>A.</td><td></td><td></td></tr> <tr><td>B.</td><td></td><td></td></tr> <tr><td>C.</td><td></td><td></td></tr> <tr><td>D.</td><td></td><td></td></tr> <tr><td>E.</td><td></td><td></td></tr> <tr><td>F.</td><td></td><td></td></tr> <tr><td>G.</td><td></td><td></td></tr> <tr><td>H.</td><td></td><td></td></tr> </tbody> </table>			Name	Number	Times/day [# of days]	A.			B.			C.			D.			E.			F.			G.			H.			<table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <tr> <td style="width: 60%;">[B.15.1] Diagnosis: Y/N/Unk</td> <td style="width: 40%;"></td> </tr> <tr> <td>[B.15.2] Number of meds given/Other thing given (if TH)</td> <td></td> </tr> </table> Prescriptions Available? YES ☐ NO ☐ NOT ALL ☐ <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Type [B.15.4]</th> <th style="width: 20%;">x. Number</th> <th style="width: 50%;">xx. Colour/s</th> </tr> </thead> <tbody> <tr><td>a. Capsule</td><td></td><td></td></tr> <tr><td>b. Tablet</td><td></td><td></td></tr> <tr><td>c. Injection</td><td></td><td></td></tr> <tr><td>d. Syrup</td><td></td><td></td></tr> <tr><td>e. Powder</td><td></td><td></td></tr> <tr> <td>f. Other:</td> <td></td> <td></td> </tr> <tr> <td> </td> <td></td> <td></td> </tr> </tbody> </table>		[B.15.1] Diagnosis: Y/N/Unk		[B.15.2] Number of meds given/Other thing given (if TH)		Type [B.15.4]	x. Number	xx. Colour/s	a. Capsule			b. Tablet			c. Injection			d. Syrup			e. Powder			f. Other:					
Name	Number	Times/day [# of days]																																																									
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d. Syrup																																																											
e. Powder																																																											
f. Other:																																																											
[B.15.4] <i>If packets/ prescriptions are not available and pt. Cannot remember, ask type and colour</i> [B.15.5] Did health provider give you any instructions on how and when to take these meds? Did doctor give you any other instructions? [B.15.6] Did you follow these instructions and do as you were told?			[B.15.5] Health providers instructions: <i>Record patient response</i> [B.15.6] 0.....no, I did not follow any instructions 1.....I followed some of the instructions 2.....I followed all the instructions																																																								

Appendix 3.9b:

Household Survey in English

[B.15.7] If '0' or '1' to Q B.15.6 ask: Why did you choose not to follow the instructions given to you?	[B.15.7] Record Reason/s given																
(B.16) Costs: [B.16.1] Record all associated costs in NRs	[B.16.1] <table border="1"> <tr><td>Transport (a)</td><td></td></tr> <tr><td>Medicines (b)</td><td></td></tr> <tr><td>Consultation/Reg. Fee (c)</td><td></td></tr> <tr><td>Test/Lab Fees/X-ray (d)</td><td></td></tr> <tr><td>Equipment/Materials (e)</td><td></td></tr> <tr><td>Food/Lodging (f)</td><td></td></tr> <tr><td>Other: _____(g)</td><td></td></tr> <tr><td>TOTAL: (h)</td><td></td></tr> </table>	Transport (a)		Medicines (b)		Consultation/Reg. Fee (c)		Test/Lab Fees/X-ray (d)		Equipment/Materials (e)		Food/Lodging (f)		Other: _____(g)		TOTAL: (h)	
Transport (a)																	
Medicines (b)																	
Consultation/Reg. Fee (c)																	
Test/Lab Fees/X-ray (d)																	
Equipment/Materials (e)																	
Food/Lodging (f)																	
Other: _____(g)																	
TOTAL: (h)																	
[B.16.2] Amount falls into which of the following categories	[B.16.2] 1....up to 250 Rs 3...601 to 1,900 Rs 2...251 to 600 Rs 4.... More than 1,900 Rs																
[B.16.3] How did you get the funds for this?	[B.16.3] 1.....had it already 2.....sold something to obtain it 3.....borrowed it from family 4.....borrowed it from friend/neigh. 5.....borrowed it from loan shark 6.....I.O.U to hospital/provider 7.....Other: _____ 																
[B.16.4] How much of a burden/problem was it to gather this money?	[B.16.4] 0.....No burden at all 1.....A little burden/somewhat 2.....A big burden 3.....An extreme burden 																
(B.17) Referral: [B.17.1]Did you get referred/told to go anywhere else for treatment? If so, where?	[B.17.1] 0.....No, not referred 1.....HP/SHP 2.....PHCC 3.....DH 4.....RH/ZH 5.....Private facility 																

Appendix 3.9b:

Household Survey in English

[B.17.2] Was this the last facility in which you were treated? If not, what was?	[B.17.2] 0.....Yes, 17.1 was last facility 1.....HP/SHP 2.....PHCC 3.....DH 4.....RH/ZH 5.....Private facility
(B.18) Self Reported Outcomes: [B.18.1] How are you currently feeling? [B.18.2] If 2 or 3 for B.18.1, how long did it take from the time you saw the doctor/went to the health facility until now for you to feel this way? [B.18.3] If 2 or 3 for question B.18.1 To what do you attribute your improvement?	[B.18.1] 0.....not at all better 1.....somewhat better 2.....a lot better 3.....completely better/cured [B.18.2] 1.....several hours 2.....1 day 3.....2-3 days 4.....4 days to one week 5.....8 days to two weeks 6.....still experiencing problems [B.18.3] (circle all that apply) 1.....Medicines given by doctor 2.....Traditional healers work 3.....Passage of time 4.....Home cures 5.....Other: _____
(B.19) Satisfaction: [B.19.1] How satisfied were you with the treatment you received at the facility (refer to B.8)? [B.19.2] How would you rate the care/treatment you received?	[B.19.1] 0.....not at all satisfied 1.....somewhat satisfied 2.....very satisfied 3.....extremely satisfied [B.19.2] 0.....Poor 1.....Fair 2.....Good 3.....Very Good 4.....Excellent

Appendix 3.9b:

Household Survey in English

(B.20) Future Illness: In the future, if you have a similar health problem, what is the first thing you will do for treatment? <i>Make sure to include self care and pharmacy in the response options</i>	1.....Pharmacy 2.....Traditional Healer (type:.....) 3.....FCHV 4.....Private Clinic 5.....SHP 6.....HP 7.....PHCC 8.....DH 9.....Self care (specify:.....) 10.....Ayurvedic/homeopathic facility 11.....Other (specify:.....) a. b. 																																				
(B.21) Problems/Difficulties Faced: Did you feel like you face any problems or difficulties while using this service (from B.8)? <i>Read list and tick all that apply</i> <i>If patient only saw TH or Pharmacist, ask this as an open-ended question ONLY</i>	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 33%;">a.High Fees</td> <td style="width: 10%;"></td> <td style="width: 33%;">b.Distance</td> <td style="width: 10%;"></td> <td style="width: 33%;">c. Unavailable drugs</td> <td style="width: 10%;"></td> </tr> <tr> <td>d.Long Wait time</td> <td></td> <td>e.High transport costs</td> <td></td> <td>f.Poor Service/facility</td> <td></td> </tr> <tr> <td>g.Absent provider</td> <td></td> <td>h.Facility closed</td> <td></td> <td>i.Physician didn't spend enough time</td> <td></td> </tr> <tr> <td>j.Unfriendly staff</td> <td></td> <td>k.Unhygienic facility</td> <td></td> <td>l.Lack of privacy</td> <td></td> </tr> <tr> <td>m.No Female Providers</td> <td></td> <td>n. Not allowed to go</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	a.High Fees		b.Distance		c. Unavailable drugs		d.Long Wait time		e.High transport costs		f.Poor Service/facility		g.Absent provider		h.Facility closed		i.Physician didn't spend enough time		j.Unfriendly staff		k.Unhygienic facility		l.Lack of privacy		m.No Female Providers		n. Not allowed to go									
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m.No Female Providers		n. Not allowed to go																																			

Notes:

Appendix 3.9b:

Household Survey in English

Section B.2 If person did not seek care outside of his/her home (question B.8):

(B.22) Reason for not seeking care outside of home: Why did you choose not to seek care outside of your house for this episode of illness?	[B.22.1] 1.....No need, self-care worked 2.....Expenses/Costs 3.....Permission/ Family members wouldn't allow 4.....Distance 5.....Lack of transport 6.....Condition not serious enough 7.....Don't trust services 8.....Don't like staff/health workers 9.....Drugs not available 10.....Care provider unavailable 11.....No person to look after household/too busy 12.....No female providers 13.....Other: _____ Explanation [B.22.2]:			
(B.23) Person making decision: Who was responsible for ultimately making this decision not to seek care outside of home?	0.....self 1.....other from household (letter from Q.A.1: _____) 2.....other not from household: _____			
(B.24) How often do you seek care from each of the following facilities/healers? Use scale: 0 = none of the time 1 = some of the time 2 = most of the time 3 = all of the time 5 = don't know	[a] FCHV [b] SHP [c] DH [d] Private Clinic		[e] PHCC [f] HP [g] Traditional Healer [h] Pharmacy	
(B.25) Frequency of care-seeking: How many times in the last year did you seek care from each of the following providers?	[a] FCHV [b] SHP [c] DH [d] Private Clinic		[e] PHCC [f] HP [g] Traditional Healer [h] Pharmacy	
(B.26) Future illness: [B.26.1] In the future if you had the same illness, where would you go for care? [B.26.2] In the future if your child had the same illness, where would you take him/her for care?	1.....Pharmacy 2.....Traditional Healer (type: _____) 3.....FCHV 4.....Private Clinic 5.....SHP 6.....HP 7.....PHCC 8.....DH 9.....Self care (specify: _____) 10.....Ayurvedic/homeopathic facility 11.....Other (specify: _____) [B.26.1] [B.26.2]			

Appendix 3.9b:

Household Survey in English

FILL THIS SECTION OUT FOR HOUSEHOLDS WITH AND W/OUT ILLNESS
Section C: Ratings of Gov. Health Services More Generally

Who is responsible for these ratings (check one):

☐

Primary respondent

☐

Secondary respondent

[C.1] Government facility closest to household: _____

[C.2] Last time visited this facility (# months ago): _____

[C.3] On last visit were you seeking treatment or were you accompanying someone else? _____

[C.3a] Reason for visit: _____

These ratings should refer to the government facility closest to the household even if this was not most recent facility visited

[C.4] Health Personnel Practices and Conduct

	Poor	Fair	Good	Very Good	Excellent	DK
Staff Attitudes						
Clarity of health provider explanations						
Health provider respect for patients						

Appendix 3.9b:

Household Survey in English

[C.5] Adequacy of Resources & Services:

	Poor	Fair	Good	Very Good	Excellent	DK
Availability of Meds						
Availability of staff						
Availability of female providers						
Availability of water						
Quality of bathrooms						
Availability of equipment						
Quality of facilities						
Cleanliness of facilities						
Privacy of exam rooms						

[C.6] Health Care Delivery:

	Poor	Fair	Good	Very Good	Excellent	DK
Quality of care/exam						
Wait time						
Quality of medicines						

Appendix 3.9b:

Household Survey in English

[C.7] Financial and Physical Accessibility/Affordability:

	Poor	Fair	Good	Very Good	Excellent	DK
Physical accessibility/ Distance + terrain						
Affordability/costs of services & meds						
Ease of obtaining meds						

[C.8] How often are you satisfied with the care and treatment you receive at this health facility?

- 1.....none of the time
- 2.....some of the time
- 3.....most of the time
- 4.....all of the time
- 5.....UNK

Notes:

Appendix 3.9b:

Household Survey in English

Section D: General Health-Seeking Behaviour

Fill out **only** for those households who have not experienced an episode of illness in previous 1 month (see question B.1)

(D.1) When was the last time you visited any of the following health provider/s? <i>How many weeks ago</i> IF any of these answers is <4 weeks you need to go back to question B.1 and see why they visited a health provider within the month	<table border="1"> <tr> <td>[a] FCHV</td> <td></td> <td>[e] PHCC</td> <td></td> </tr> <tr> <td>[b] SHP</td> <td></td> <td>[f] HP</td> <td></td> </tr> <tr> <td>[c] DH</td> <td></td> <td>[g] Traditional Healer</td> <td></td> </tr> <tr> <td>[d] Private Clinic</td> <td></td> <td>[h] Pharmacy</td> <td></td> </tr> </table>	[a] FCHV		[e] PHCC		[b] SHP		[f] HP		[c] DH		[g] Traditional Healer		[d] Private Clinic		[h] Pharmacy	
[a] FCHV		[e] PHCC															
[b] SHP		[f] HP															
[c] DH		[g] Traditional Healer															
[d] Private Clinic		[h] Pharmacy															
(D.2) How often do you seek care from each of the following facilities/healers? 0 = none of the time 1 = some of the time 2 = most of the time 3 = all of the time	<table border="1"> <tr> <td>[a] FCHV</td> <td></td> <td>[e] PHCC</td> <td></td> </tr> <tr> <td>[b] SHP</td> <td></td> <td>[f] HP</td> <td></td> </tr> <tr> <td>[c] DH</td> <td></td> <td>[g] Traditional Healer</td> <td></td> </tr> <tr> <td>[d] Private Clinic</td> <td></td> <td>[h] Pharmacy</td> <td></td> </tr> </table>	[a] FCHV		[e] PHCC		[b] SHP		[f] HP		[c] DH		[g] Traditional Healer		[d] Private Clinic		[h] Pharmacy	
[a] FCHV		[e] PHCC															
[b] SHP		[f] HP															
[c] DH		[g] Traditional Healer															
[d] Private Clinic		[h] Pharmacy															
(D.3) Hypothetical illness of self: [D.3.1] If you had a minor illness (ie. fever, cough, soar throat, gastritis) what would you do first to attempt to treat/cure it? <i>Home care or care outside of the home</i> [D.3.2] If you had a major illness (ie. Pneumonia, TB, typhoid) what would you do first to attempt to treat/cure it?	1.....Pharmacy 2.....Traditional Healer (type:.....) 3.....FCHV [D.3.1] 4.....Private Clinic 5.....SHP 6.....HP 7.....PHCC [D.3.2] 8.....DH 9.....Self care (specify:.....) 10.....Ayurvedic/homeopathic facility 11.....Other (specify:.....)																
(D.4) Hypothetical illness of child: If your child had an illness such as pneumonia or diarrhea what would you do first to attempt to treat/cure it? <i>Home care or care outside of the home</i> If the family does not have a child, enter 999 and SKIP	1.....Pharmacy 2.....Traditional Healer (type:.....) 3.....FCHV 4.....Private Clinic 5.....SHP 6.....HP 7.....PHCC 8.....DH 9.....Self care (specify:.....) 10.....Ayurvedic/homeopathic facility 11.....Other (specify:.....)																
(D.5) Hypothetical illness of partner: IF RESPONDENT IS MARRIED ASK: [D.5.1] If your husband/wife were ill with a severe illness, what would you do first to attempt to treat/cure it? [D.5.2] If your partner were ill with a minor illness, what would you first do to attempt to treat/cure it?	1.....Pharmacy 2.....Traditional Healer (type:.....) 3.....FCHV [D.5.1] 4.....Private Clinic 5.....SHP 6.....HP 7.....PHCC 8.....DH [D.5.2] 9.....Self care (specify:.....) 10.....Ayurvedic/homeopathic facility 11.....Other (specify:.....)																

Appendix 3.9b:

Household Survey in English

(D.6) Explanatory model of illness: What do you think are the primary reasons people get sick? <i>Ask as open-ended first. Only probe with responses if they say 'Don't Know'</i> 1.....food/diet/bad water 2.....humoral imbalance (hot and cold) 3.....magico-religious/supernatural forces 4.....physical factors (ie. fall, allergy, strenuous work) 5.....exposure to impure person/thing 6.....infection, micro-organism 7.....moral misbehaviour of self/family 8.....weather/climate 9.....other natural factors (ie. stars/planets) 10.....stress/other emotions a. b. 11.....Other: _____ ☐ ☐ 12.....Unkown ☐ ☐	[D.6] Record Perceived cause/s (Circle primary and secondary causes) Natural (including weather, humoral imbalance, diet/food, water, insects, physical factors etc.) Super natural (including spells, curses, sorcery, evil spirits etc.) Biological (including genetics, micro-organisms, infection etc.)																																				
(D.7) Reasons for underutilization/ barriers faced: What are some of the major barriers you face in seeking care from government health facilities? What are some of your major reasons which prevent you from seeking such care? <i>Tick all that apply</i> Response:	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 25%;">a.High Fees</td> <td style="width: 10%;"></td> <td style="width: 25%;">b.Distance</td> <td style="width: 10%;"></td> <td style="width: 25%;">c. Unavailable drugs</td> <td style="width: 10%;"></td> </tr> <tr> <td>d.Long Wait time</td> <td></td> <td>e.High transport costs</td> <td></td> <td>f.Poor Service/facility</td> <td></td> </tr> <tr> <td>g.Absent provider</td> <td></td> <td>h.Facility closed</td> <td></td> <td>i.Physician didn't spend enough time</td> <td></td> </tr> <tr> <td>j.Unfriendly staff</td> <td></td> <td>k.Unhygienic facility</td> <td></td> <td>l.Lack of privacy</td> <td></td> </tr> <tr> <td>m.No Female Providers</td> <td></td> <td>n. Not allowed to go</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	a.High Fees		b.Distance		c. Unavailable drugs		d.Long Wait time		e.High transport costs		f.Poor Service/facility		g.Absent provider		h.Facility closed		i.Physician didn't spend enough time		j.Unfriendly staff		k.Unhygienic facility		l.Lack of privacy		m.No Female Providers		n. Not allowed to go									
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j.Unfriendly staff		k.Unhygienic facility		l.Lack of privacy																																	
m.No Female Providers		n. Not allowed to go																																			
(D.8) Changed to health services: If you could change anything about your health services, what would you change? Reason for change	Response:																																				
(D.9) Quality of services: How do you feel about the quality of each of the following services/providers: 0 = poor 4= excellent 1 = fair 5 = Don't know 2 = good 3 = very good	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 25%;">[a] FCHV</td> <td style="width: 25%;"></td> <td style="width: 25%;">[e] PHCC</td> <td style="width: 25%;"></td> </tr> <tr> <td>[b] SHP</td> <td></td> <td>[f] HP</td> <td></td> </tr> <tr> <td>[c] DH</td> <td></td> <td>[g]Traditional Healer</td> <td></td> </tr> <tr> <td>[d] Private Clinic</td> <td></td> <td>[h] Pharmacy</td> <td></td> </tr> </table>	[a] FCHV		[e] PHCC		[b] SHP		[f] HP		[c] DH		[g]Traditional Healer		[d] Private Clinic		[h] Pharmacy																					
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-----STOP! END OF INTERVIEW-----

Appendix 3.9c Nepali Version of the Household Consent Form

Namaskar.

We have come from a research institution in Kathmandu. We are doing this study in order to understand how the people of Makawanpur District utilise health services and how they decide about what to do or where to go when they fall ill.

We will ask you or some member of your family questions about a recent health problem. It will take about 40 minutes to ask all the questions. We need your permission for this.

The questions that we ask do not have a right and wrong answer. You can say what you feel without fear. It is your wish to answer or not answer a particular question. Since we are not affiliated to any health organisation or Nepal's government we hope that you will not hesitate to tell the truth. Even if you feel bad about something in the health services if you openly say it then it will help our study a lot.

We will not give you any medications or treatment so you will not benefit directly by answering our questions. But the information that you give will greatly help to improve the services and in the coming years this will eventually be of benefit to you and your village.

We will keep everything you say in a secret manner and will not disclose your name anywhere.

If you agree with the above you can write your name and sign below.

Participant Identification Number: _____	
Name of Participant: _____	
Signature/right thumb print of Participant: _____	
[If participant is <18 years, name and signature of guardian]	
Date: ____/____/____	
Signature/right thumb print of Head of Household: _____	
Name of person taking consent: _____	
Signature of person taking consent: _____ Date: ____/____/____	

नमस्कार।

हामी काठमाडौंमा रहेको एक अध्ययन संस्थाबाट आएका हौं । मकवानपुर जिल्लाका मानिसहरूले स्वास्थ्य सेवा कसरी उपयोग गरिरहेका छन् र विरामी पर्दा कहाँ जाने र के गर्ने भन्ने बारेमा कसरी निर्णय गर्छन् भनेर बुझ्न यो अध्ययन गरिँदै छ।

हामी तपाईं वा तपाईंको परिवारको कोही सदस्यसँग हालै भएका स्वास्थ्य समस्याका बारेमा प्रश्नहरू सोध्नेछौं। सबै प्रश्न सोध्न ४० मिनेट जति लाग्नेछ। यसका निम्ति हामी तपाईंको अनुमति चाहन्छौं ।

हामीले सोध्ने प्रश्नहरूको सही वा गलत जवाफ छैनन्। तपाईंलाई मनमा जे लाग्छ त्यो नडराइकन भन्न सक्नुहुन्छ। कुनै प्रश्नको उत्तर दिनु-नदिनु तपाईंको आफ्नै इच्छाको कुरा हो। हामी कुनै स्वास्थ्य संस्था वा नेपालको सरकारसँग सम्बन्धित नभएको हुनाले तपाईंले साँचो कुरा भन्न संकोच मान्नुहुन्न भन्ने आशा गर्दछौं। तपाईंलाई स्वास्थ्य सेवाको कुनै कुरा नराम्रो लागेको छ भनेपनि त्यो कुरा खुलेर भन्नुभयो भने हाम्रो अध्ययनलाई धेरै सहयोग पुग्नेछ।

हामीले तपाईंलाई कुनै औषधी वा उपचार दिँदैनौं, त्यसैले तपाईंलाई प्रश्नको उत्तर दिएबापत सीधा फाइदा हुनेछैन। तर स्वास्थ्य सेवाको बारेमा तपाईंले दिनुहुने जानकारीबाट सेवालाई राम्रो बनाउन धेरै मद्दत पुग्नेछ र आउने वर्षहरूमा यसले तपाईंलाई र तपाईंको गाउँलाई अवश्य फाइदा हुनेछ।

तपाईंले हामीलाई भन्नुहुने कुराहरू सबै हामी गोप्य तरिकाले राख्नेछौं र तपाईंको नाम कहीपनि खुलाउने छैनौं।

यदि तपाईं माथि लेखिएका कुराहरूमा सहमत हुनुहुन्छ भने तल नाम र सहीछाप गर्न सक्नुहुनेछ।

घरको पहिचान नम्बर (Household Identification Number): _____

मुख्य व्यक्तिको नाम(Primary Respondent)_____

अभिभावकको नाम: _____

(यदि Primary Respondent १८ वर्ष नपुगेको भए)

मुख्य व्यक्तिको / अभिभावकको सहीछाप _____

मिति _____

दोस्रो व्यक्तिको सहीछाप _____

मन्जुरी लिने व्यक्तिको नाम _____

व्यक्तिको सहीछाप _____



Appendix 3.9d Nepali Version of the Household Survey

NHSB-MK Household Survey Form

I. अन्तर्वार्ताको विवरण

अन्तर्वार्ता लिनेको नाम : कोड :

गा.वि.स. को नाम : वार्ड नं. घर नं.

अन्तर्वार्ताको मिति :/...../..... सुरु समय अन्त समय.....

II. प्रमुख अन्तर्वार्ता दिने व्यक्तिको विवरण

घरमूली सँगको नाता : लिङ्ग : पुरुष/महिला उमेर :

शैक्षिक योग्यता : कक्षा १-५/कक्षा ६-८/कक्षा ९-१०/१०+२/विश्वविद्यालय ☐

साक्षरता : शिक्षित/अशिक्षित ☐

III. सर्वेक्षण संबन्धी प्रश्नहरु

Section A.1: घरपरिवारको जनसांख्यिक संबन्धी जानकारी

प्रश्न	प्रतिक्रिया
A.1 यो घरमा कति जना मान्छे बस्नुहुन्छ ? (नाताको विवरण १ नं को कोलममा लेख्ने र कोडिङ्ग पछि गर्ने)	A.1.1 संख्या लेख्ने (अन्तर्वार्ता दिने सहित) A.1.2 हरेक व्यक्तिको उमेर र अन्तर्वार्ता दिने व्यक्ति सँगको नाता लेख्ने
1. श्रीमान/श्रीमती	
2. भाइ/बहिनी	
3. दाइ/दिदी	
4. बच्चा	
5. भिनाजु/भाउजु	
6. आन्टी/अंकल	
7. आमा/बुवा	
8. सासु/ससुरा	
9. भदा/भदैनी/भान्जा/भान्जी	
10.....अंकल/आन्टीको छोरा वा छोरी	
11.....नाति/नातिनी	
12.....बुहारी/ज्वाई	
13.....अरु रगतको नाता पर्ने	
14.....अरु रगतको नाता नपर्ने	

NHSB-MK Household Survey Form

A.2 जात	1. ब्राह्मण 2. क्षेत्री 3. मुस्लिम 4. नेवार 5. मधेसी 6. तामाङ्ग 7. गुरुङ्ग 8. चेपाङ्ग 9. मगर 10.....अन्य (खुलाउनुहोस्) _____
A.3 घर खर्च बेहोर्ने व्यक्ति (कहिले काही घरमूली मात्र घर खर्च बेहोर्ने व्यक्ति नहुन सक्छ । बक्स 1 मा 1- 6 नं. लेख्ने र प्रश्न A.1 मा सम्बन्धित व्यक्तिको उल्लेख गरिएको अक्षर लेख्ने)	1. अन्तर्वाता दिने व्यक्ति 2. अन्तर्वाता दिने व्यक्तिको लोग्ने/स्वास्नी 3. अन्तर्वाता दिने व्यक्तिको छोरा/छोरी 4. अन्तर्वाता दिने व्यक्तिको नाति/नातिनी 5. आधा अन्तर्वाता दिने व्यक्तिले/आधा अरुले 6.....अन्य
A.4 घर खर्च बेहोर्ने व्यक्तिको पेशा(घरायसी काम बाहेक) <i>सोध्ने : घरायसी काम बाहेक तपाईं अरु के काम गर्नुहुन्छ ? तपाईंको आमदानीको स्रोत के हो ? तपाईंको प्रमुख पेशा के हो?</i> <i>यदि कसैको एक भन्दा बढी पेशा छ भने पहिलो र दोस्रो आय स्रोत लेख्ने ।</i> <i>यदि दुई व्यक्तिले घर खर्च धान्छ भने दुवैको पेशा उल्लेख गर्ने ।</i>	1. कृषक 2. विदेशी कामदार 3. व्यवसायी 4. शिक्षक 5. अन्य सरकारी कर्मचारी 6. यातायातमा काम गर्ने 7. सिकर्मी/डकर्मी 8. सानो पसलवाला 9. लुगा सिलाउने दर्जी 10.....अवकाश प्राप्त 11.....बेरोजगार 12.....भारी बोक्ने 13.....अन्य _____ चिन्ह लगाउने : दैनिक ज्यालादारी नियमित तलब पाउने

NHSB-MK Household Survey Form

A.5 घरमूलीको शैक्षिक योग्यता (अन्तर्वार्ता दिने व्यक्ति भन्दा अर्को भए)	1. छैन 2. कक्षा १ - ५ 3. कक्षा ६ - ८ 4. कक्षा ९ - १० 5. १० + २ 6. विश्वविद्यालय
A.6. घरायसी सम्पत्ति (हरेकको संख्या उल्लेख गर्ने अनि सबै जोडेर जम्मा निकाल्ने) अस्थायी छाना : परालको, टाइलको, ढुङ्गाको, जस्ताको, काठको, खरको स्थायी छाना : सिमेन्टको जम्मा = सम्पत्ति संख्या+जनावरको संख्या	+1 अस्थायी छाना +1 मोटरसाइकल +2 स्थायी छाना +1 बयल गाढा +1 साइकल +1 रेडियो +1 टि.भी. +1 फ्रिज गाईको संख्या (+3): कुखुरा/चराको संख्या(+1) : भैसीको संख्या (+4): बाख्राको संख्या(+2): जम्मा:
A.7 घरको पूरा आम्दानी (घरको सबै सदस्यको आम्दानी मिलाएर) यो सवेदनशील प्रश्न हो । त्यसैले यो प्रश्न सोध्दा अलि होस पुर्याउने । वार्षिक आम्दानी सोध्ने र त्यसलाई १२ ले भाग गर्ने । यो प्रश्न अन्तर्वार्ताको अन्तमा पनि सोध्न सकिन्छ, यदि अन्तर्वार्ता दिने व्यक्तिले शुरुमा जवाफ नदिएमा । यदि उसले 'थाहा छैन' भनेमा हरेक महिना कति खर्च हुन्छ भनेर सोध्न सकिन्छ, साथै हरेक महिना छोरा छोरीले कति पैसा दिन्छन् वा पठाउँछन् भनेर पनि सोध्न सकिन्छ ।	A.7.1 मासिक आम्दानी : भन्न नसकेको खण्डमा '99' लेख्ने र अन्तर्वार्ताको अन्तमा फेरि एक पल्ट सोध्न कोशिस गर्ने । A.7.2. आम्दानी : 0. ≤ 3000 1. 3001 – 4000 2. 4001-7000 3. 7001 – 10,000 4. 10,001-15,000 5. 15,001 – 20,000 6. 20,001 – 30,000 7. 30,001 – 40,000 8. 40,001 – 50,000 9. ≥ 50,000

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A.8 घरको प्रकार जम्मा: भित्ता+भुईँ+ट्वाइलेट+पानी+कोठाहरु (धेरै संख्याले राम्रो गुणस्तरको घर जनाउँछ ।)	1. भित्ता 1. जस्ताको 2. माटोको 3. काठको 4. ईटा/ढुगा/सिमेन्ट 2. भुईँ 1.....धूलो/ माटो 2.....काठको 3. सिमेन्टको 3. ट्वाइलेट/चर्पी 1.....छैन 2.....घर बाहिर 3.....घर भित्र 4. पानीको स्रोत सम्मको दूरी 1. आधा घण्टा भन्दा टाढा 2. १६-३० मिनेटको दूरी 3. ५-१५ मिनेटको दूरी 4. ५ मिनेट भन्दा कम दूरी 5. घरमै पानी छ 5. पानीको स्रोत 1..... इनार/भरना 2..... धारा 6. कोठाको संख्या : जम्मा :
A.9 जग्गाको विवरण (व्यक्तिले भनेकै संख्या उल्लेख गर्ने) (रोपनी, विघा, हेक्टर, कठ्ठा आदी)	

[सबै घरको लागि अर्को पेजमा जाने]

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Section A.2: स्वास्थ्य सेवा/ प्रणाली संबन्धी ज्ञान:

प्रश्न	प्रतिक्रिया
(A.10) स्वास्थ्य प्रणालीको ज्ञान : (A.10.1) तपाईंको घरबाट सबैभन्दा नजिकको स्वास्थ्य संस्था कुन हो ?(उनीहरूलाई उपस्वास्थ्य चौकी, स्वास्थ्य चौकी, प्राथमिक स्वास्थ्य सेवा केन्द्र के हो भन्ने थाहा छ या छैन भन्ने कुरा थाहा पाउने प्रयास गर्ने) (A.10.2) के तपाईं भन्न सक्नुहुन्छ, सरकारको सबैभन्दा पहिलो स्तरमा स्वास्थ्य सेवा प्रदान गर्ने संस्था कुन हो भनेर ? (उहाँहरूलाई चित्र देखाउने र त्यसलाई के भनिन्छ भनेर सोध्नुहोस्) (A.10.3) यदि कोही बिरामी परेर उपचारको लागि स्वास्थ्य चौकी जान्छ र स्वास्थ्य चौकीबाट उपचार भएन भने त्यो बिरामीलाई त्यहाँबाट स्वास्थ्यकर्मीले कहाँ पठाउनुपर्ने हो ? (सबै सरकारी स्वास्थ्य संस्थाको चित्र देखाउने । सही उत्तर प्राथमिक स्वास्थ्य सेवा केन्द्र हो) (A.10.4) के तपाईं भन्न सक्नुहुन्छ, कुन सरकारी स्वास्थ्य संस्थाबाट नि:शुल्क स्वास्थ्य सेवा र औषधीहरू पाईन्छ ? (उनीहरूको विचारमा नि:शुल्क सेवा प्रदान गर्ने स्वास्थ्य संस्थाहरू पहिचान गर्न लगाउनुहोस् । अन्त्यमा सही उत्तर बताउन नबिर्सनु)	(A.10.1) 1. सही, थाहा रहेछ 2. वेठीक थाहा रहेनछ (A.10.2) 1.....पहिचान गर्न सक्ने 2. नाम भन्न सक्ने 3. गलत पहिचान गरेमा 4. कुनै उत्तर नदिएमा (A.10.3) 1. पहिचान गर्न सक्ने 2. नाम भन्न सक्ने 3. गलत पहिचान गरेमा 4. कुनै उत्तर नदिएमा (A.10.4) उनीहरूले छानेकोमा गोलो चिन्ह लगाउने उप स्वास्थ्य चौकी / स्वास्थ्य चौकी / प्राथमिक स्वास्थ्य सेवा केन्द्र 0. यदि कुनै पनि स्वास्थ्य संस्था नभनेमा 1. यदि एउटा मात्र संस्था भनेमा 2. यदि दुईवटा संस्था भनेमा 3. यदि तिनवटै संस्था भनेमा

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A.11 स्वास्थ्यकर्मीहरू बारे जानकारी: (A.11.1) के तपाईं मलाई भन्न सक्नुहुन्छ कि कुन सरकारी स्वास्थ्य संस्थामा डाक्टर हुनुपर्दछ ? <i>(उहाँहरूलाई चित्र पहिचान गर्न लगाउन सक्नुहुनेछ)</i> सहि जवाफ : प्राथमिक स्वास्थ्य सेवा केन्द्र (A.11.2) के तपाईं मलाई भन्न सक्नुहुन्छ कि महिला स्वास्थ्य स्वयंसेविकाले के गर्छन् ? उनीहरूको काम, भूमिका के हो ? (प्रोब नगर्नुहोस्) - मातृ तथा शिशु स्वास्थ्यमा संलग्न - सामान्य रोग, चोटपटकको उपचार गर्ने - खोप कार्यक्रम, परिवार नियोजन, गर्भावस्था, सुत्केरी पश्चातको जाँच बारे परामर्श - कण्डम बाँड्ने - पोषण सम्बन्धी सल्लाह - भ्वाडापखाला, निमोनिया, जोखिमपूर्ण गर्भावस्थाको उपचार वा प्रेषण(रेफर)	(A.11.1) 1. पहिचान गर्न सक्ने 2. नाम भन्न सक्ने 3. गलत पहिचान गरेमा 4. कुनै उत्तर नदिएमा (A.11.2) 1. म.स्वा.स्व.से.को भूमिका बारे कुनै पनि जानकारी नभएको 2. म.स्वा.स्व.से.को भूमिका बारे न्यूनतम जानकारी भएको 3. म.स्वा.स्व.से.को भूमिका बारे केही मात्रामा जानकारी भएको 4. म.स्वा.स्व.से.को भूमिका बारे राम्रो जानकारी भएको (यदी सहभागीलाई म.स्वा.स्व.से. को हो भन्ने थाहा छ तर उसको भूमिका थाहा छैन भने, '२' भनेर कोड गर्ने ।)
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Section B.1: रोगको प्रसङ्ग

प्रश्न	प्रतिक्रिया																					
(B.1) रोगको प्रसङ्ग: (B.1.1) के यो घरमा गएको २ हप्तामा कोही बिरामी भएको थियो ? (यो समयावधीमा भएको सबै घटनाहरु सोधिएको छ भने कुरा निश्चित गर्नुहोस् ।) यदि छैन भने सोध्नुहोस् : (B.1.2) के यो घरमा गएको १ महिनामा कोही बिरामी भएको थियो ? यदि छैन भने सोध्नुहोस् : के यस घरको कुनै सदस्यले गएको २ हप्ता वा १ महिनामा कुनै स्वास्थ्यकर्मी, औषधी पसले, धामी भाँकी, क्लिनिकमा देखाउन गएको छ ? यदि छ भने जानुको कारण? यदि छैन भने सोध्नुहोस् : सूचीमा दिइएका अवस्थाहरुको बारेमा सोध्नुहोस् । परिवारका हरेक सदस्यहरुको बारेमा सोध्नुहोस् । सबै घटनाक्रमहरु र लक्षणहरु सुरु भएको दिन सकेसम्म सही उल्लेख गर्नुहोस् (सकेसम्म सहि मिति पाउनको निम्ति कुनै मुख्य घटनाक्रमको प्रयोग गर्न कोशिश गर्ने) यहाँ ती बिरामीहरु मात्र उल्लेख गर्नुहोस् जसको लक्षणहरु २ हप्ताभित्र सुरु भएको थियो । यदि कुनै रोगको लक्षणहरु २ हप्ता अगाडि सुरु भएको थियो र दुई हप्ताभित्र पनि ती लक्षणहरु रहिरह्यो भने त्यस्ता बिरामी यहाँ उल्लेख नगर्ने । (दीर्घकालिन रोगहरु पनि उल्लेख नगर्ने) सकेसम्म सबैभन्दा बढि विवरणहरु समेट्ने कोशिश गर्नुहोस् ।	B.1.1 छ/छैन यदि कुनै घटना भएको छैन भने, अन्तिम पल्ट को कहिले बिरामी परेको थियो भनेर सोध्नुहोस् र Section C मा जानुहोस् । (B.1.1) (B.1.1) यदि बिरामी परेको छ भने हरेक घटनाको विवरण लेख्नुहोस् । <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 33%;">को ? (प्रश्न A.1. वाट अक्षर लेख्नुहोस्)</th><th style="width: 33%;">तपाईंले सर्वप्रथम लक्षणहरु कहिले याद गर्नुभएको थियो</th><th style="width: 33%;">के के लक्षणहरु देखा परेका थिए ?</th></tr> </thead> <tbody> <tr> <td style="text-align: center;">(a.1)</td><td style="text-align: center;">(a.2)</td><td style="text-align: center;">(a.3)</td></tr> <tr> <td style="height: 100px;"></td><td></td><td></td></tr> <tr> <td style="text-align: center;">(b.1)</td><td style="text-align: center;">(b.2)</td><td style="text-align: center;">(b.3)</td></tr> <tr> <td style="height: 100px;"></td><td></td><td></td></tr> <tr> <td style="text-align: center;">(c.1)</td><td style="text-align: center;">(c.2)</td><td style="text-align: center;">(c.3)</td></tr> <tr> <td style="height: 100px;"></td><td></td><td></td></tr> </tbody> </table> B.1.2 छ/छैन	को ? (प्रश्न A.1. वाट अक्षर लेख्नुहोस्)	तपाईंले सर्वप्रथम लक्षणहरु कहिले याद गर्नुभएको थियो	के के लक्षणहरु देखा परेका थिए ?	(a.1)	(a.2)	(a.3)				(b.1)	(b.2)	(b.3)				(c.1)	(c.2)	(c.3)			
को ? (प्रश्न A.1. वाट अक्षर लेख्नुहोस्)	तपाईंले सर्वप्रथम लक्षणहरु कहिले याद गर्नुभएको थियो	के के लक्षणहरु देखा परेका थिए ?																				
(a.1)	(a.2)	(a.3)																				
(b.1)	(b.2)	(b.3)																				
(c.1)	(c.2)	(c.3)																				

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नोट: B.1.1-B.1.2 प्रश्नहरूको लागि गएको २ हप्ता र १ महिनामा भएको स्वास्थ्य समस्याहरूको बारेमा सोधनुहोस् । (दीर्घकालिन रोग सहित जसको अवस्था यो समयावधीमा गम्भीर हुनसक्छ) । सम्पूर्ण प्रतिक्रियाहरू, दीर्घकालिन रोग सहित पक्ति ३ मा उल्लेख गर्नुहोस् । प्रश्न नं B.3 मा खाली २ हप्ता भित्र देखिएको स्वास्थ्य समस्यामा मात्र केन्द्रित गर्नुहोस् । यदि छैन भने दीर्घकालिन समस्याको जानकारी लेखेर Section C मा जाने । (B.1.3) दीर्घकालिन रोगहरू सबै दीर्घकालिन रोगहरू र त्यसको विस्तृत विवरणहरू यहाँ उल्लेख गर्नुहोस् ।	(B.1.3) दीर्घकालिन रोग <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%;">कसलाई ? (प्रश्न A.1 बाट)</th> <th style="width: 50%;">दीर्घकालिन रोगको विस्तृत विवरण</th> </tr> <tr> <td style="height: 30px;"></td> <td></td> </tr> <tr> <td style="height: 30px;"></td> <td></td> </tr> </table>	कसलाई ? (प्रश्न A.1 बाट)	दीर्घकालिन रोगको विस्तृत विवरण				
कसलाई ? (प्रश्न A.1 बाट)	दीर्घकालिन रोगको विस्तृत विवरण						
(B.2) B.1 मा उल्लेख गरिएका रोगहरूको सम्भावित पहिचान । यदि बिरामीले रोग नभने रोगका लक्षण मात्र भनेमा NSI Clinical Algorithm को प्रयोग गरी सकेसम्म सही रोगको पहिचान गर्ने काशिश गर्नुहोस् । यदि बिरामीले रोग मात्र भनि रोगको लक्षणहरू नभनेमा त्यो रोगसँग सम्बन्धित लक्षणहरू टिपोट गर्नुहोस् ताकि पछि त्यसको पुष्टि गर्न सकियोस् । (कुन Algorithm प्रयोग गरेको त्यसको अक्षर लेख्नुहोस्) (यदि बिरामीले रोगको लक्षणहरूको सट्टा रोगको नाम नै भनेमा माथी उल्लेखित हरेक रोगको लागि निम्न प्रश्नहरू सोध्नुहोस् । यदि बिरामीले प्रश्न B.1. मा रोगको नाम भनेको छैन भने यी प्रश्नहरूमा '999' लेखेर यी प्रश्नहरू छोडिदिनुहोला । (B. 2.2.) तपाईंले यो रोग भनेर कसरी पत्ता पाउनु भयो ? तपाईंको यो रोग कसले पत्ता लगायो ?(प्रश्न B.1 मा उल्लेखित रोगहरू पत्ता लगाउने मान्छे उल्लेख गर्नुहोस्)	<table style="width: 100%;"> <tr> <td style="width: 10%; border: 1px solid black; padding: 2px;">B.2.A</td> <td style="border: 1px solid black; height: 25px;"></td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">B.2.B</td> <td style="border: 1px solid black; height: 25px;"></td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">B.2.C</td> <td style="border: 1px solid black; height: 25px;"></td> </tr> </table> (B.2.2) प्रश्न B.1.2 को पक्ति 3 बाट रोग पत्ता लगाईदिने व्यक्ति : A/B/C रोगको लागि 0.....आफै 1 अरु साधारण मान्छे 2.....महिला स्वयंसेविका 3.....औषधी पसले 4.....धामी भाँकी 5 उपस्वास्थ्य चौकी/ स्वास्थ्य चौकी/प्राथमिक स्वास्थ्य सेवा केन्द्रमा कार्यरत स्वास्थ्यकर्मी 6.....मेडिकल डाक्टर	B.2.A		B.2.B		B.2.C	
B.2.A							
B.2.B							
B.2.C							

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यदि सहभागीले रोगको नाम नभनेर लक्षणहरु मात्र भनेको छ भने '999' उल्लेख गर्नुहोला ।	A/B/C रोगको लागि 0.....आफै 1 अरु साधारण मान्छे 2.....महिला स्वयंसेविका 3.....औषधी पसले 4.....धामी भाँकी 5.....उपस्वास्थ्य चौकी/ स्वास्थ्य चौकी/ प्राथमिक स्वास्थ्य सेवा केन्द्रमा कार्यरत स्वास्थ्यकर्मी 6.....मेडिकल डाक्टर						
(B.3) अन्तर्वार्ताको लागि केन्द्रित गरिएको बिरामी: कुन बिरामीमा अन्तर्वार्ता केन्द्रित गरिने छ ? (दिइएका ३ वटा मध्येबाट एउटा छान्नुहोस् । अरुले प्रतिनीधित्व गर्ने रोगहरु सकेसम्म नछान्नुहोला । यदि सबै रोगहरु बराबर छन् भने सबैभन्दा जटिल रोग छान्नुहोला । यदि आमा उपस्थित छन् भने उहाँसँग बच्चाको रोगको बारेमा सोध्न सकिन्छ । सकेसम्म रोग लागेकै मान्छेसँग रोगको बारेमा सोध्नुहोला ।	(B.3.1.) A/B/C						
(B.3.2) उल्लेखित अरु रोगहरुको उपचारका बारेमा : अन्तर्वार्तामा केन्द्रित नगरिएका अन्य दुईवटा रोगहरुको उपचारको लागि कतै देखाउन गएको थियो ? यदि थियो भने, कस्तो प्रकारको उपचार गरिएको थियो ?	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 50%;">A/B/C</th> <th style="width: 50%;">उपचार गरिएको</th> </tr> </thead> <tbody> <tr> <td>(a.1)</td> <td>(b.1)</td> </tr> <tr> <td>(a.2)</td> <td>(b.2)</td> </tr> </tbody> </table>	A/B/C	उपचार गरिएको	(a.1)	(b.1)	(a.2)	(b.2)
A/B/C	उपचार गरिएको						
(a.1)	(b.1)						
(a.2)	(b.2)						

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(B.3.3) के यस अन्तर्वातको लागि B.3 मा छानिएको बिरामी Section II मा उल्लेख गरिएको सहभागी हो या छुट्टै व्यक्ति हो ? उही सहभागी नयाँ सहभागी सहभागीको विवरण भर्नुहोस्: दोस्रो सहभागीको विवरण 4. प्रश्न A.1 बाट कुन व्यक्ति (अक्षरमा लेख्नुहोस्): 5. लिंग: महिला / पुरुष 6. उमेर(पूरा): 7. शैक्षिक योग्यता: कक्षा १-५/ कक्षा ६-८/ कक्षा ९-१०/ १०+२/ विश्वविद्यालय 8. साक्षरता: शिक्षित/अशिक्षित के यो सहभागीले अर्को व्यक्तिको बिरामीको बारेमा जानकारी दिदैंछ ? छ/छैन	
(B.4) बिरामी हुनुको कारण: तपाईंको विचारमा यो समस्या हुनु / बिरामी पर्नुको कारण के होला ? पहिले उहाँहरूलाई आफ्नै शब्दमा भन्न लगाउने । यदि उहाँहरूले “थाहा भएन” भन्नुभयो भने मात्र तल दिइएका प्रतिक्रियाहरू एक एक गरी सोध्ने 1.....खाना/फोहर पानी 2.....तातो/चीसोको कारणले 3.....लागु /दैविक शक्ति 4.....भौतिक कारण(जस्तै खसेर, एलर्जी, धेरै काम गरेर) 5.....नराम्रो मानिस/चिजको संगत 6....संक्रमण, किटाणु 7.....आफै/परिवारद्वारा नराम्रो व्यवहार 8.....मौसम 9.....अरु कुनै प्राकृतिक कारणहरू(तारा/ग्रह) 10....चिन्ता 11....अन्य: _____ a. b. 12....थाहा भएन	(B.4.1) कारणहरू उल्लेख गर्नुहोस् (पहिलो र दोस्रो कारणहरूमा गोलो लगाउनुहोस्) प्राकृतिक (मौसम, तातो चिसोको असन्तुलन, खाना, पानी, किरा फट्याण्डा भौतिक कारणहरू आदि) दैविक कारणहरू (मन्त्र, श्राप, दुष्ट आत्मा, बोक्सी आदि) जैविक कारणहरू (वंशाणुगत, जीवाणु, संक्रमण आदि)

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(B.5) रोगको गम्भीरता: <u>वस्तुगत मापन:</u> (B.5.1) ओछ्यानमा कति दिन बिताउनुभयो ? (B.5.2) कति दिन काम गर्न / दैनिक घरायसी काम गर्न/ विद्यालय जान सक्नु भएन (ओछ्यानमै बिताउनु भएका दिन बाहेक) <u>विषयगत मापन :</u> (B.5.3) यो समस्याले तपाईंलाई कतिको चिन्तित पार्यो ? (B.5.4) तपाईं आफ्नो दुखाईलाई कसरी मुल्यांकन गर्नुहुन्छ ? (B.5.5) यो समस्याको गम्भीरतालाई तपाईं कसरी मुल्यांकन गर्नुहुन्छ ?  123456	(B.5.1) (B.5.2) यदि सानो बच्चा भए '999' कोड लेख्नुहोस् । (B.5.3) 0 पादैँ पारेन 1.... अलि अलि पार्यो 2.... धेरै पार्यो 3.... एकदमै धेरै पार्यो (B.5.4) V.A.S. प्रयोग गर्नुहोस् । (B.5.5) 0....सामान्य 1.... केही हदसम्म गम्भीर 2.... धेरै गम्भीर 3.... साबै गम्भीर
(B.6) रोग बारे पहिलो प्रतिक्रिया: सल्लाह र घरायसी उपचार (B.6.1.a) तपाईंले सबैभन्दा पहिले लक्षणहरु थाहा पाएपछि परिवार वा समुदायको कुनै सदस्यबाट सल्लाह लिनुभयो ? (B.6.1b) को सँग? उनीहरूले तपाईंलाई के भने ? (B.6.2) यो रोगको लागि बाहिर गएर उपचार गराउन अगाडी तपाईंले घरमै कुनै उपचार गर्नुभयो कि वा घरमै उपलब्ध कुनै औषधी/जडिबुटी प्रयोग गर्नुभयो ? (B.6.2b) प्रष्ट पार्नुहोस् : तपाईंले के गर्नुभयो वा के लिनुभयो (सकेसम्म जडिबुटी वा औषधीको नाम उल्लेख गर्नुहोस्) र यो छान्नुको कारण? <i>यदि एक भन्दा बढी चीजको सेवन गरेको छ भने, क्रम मिलाएर लेख्ने</i> <i>उनीहरूले घरमा अपनाएका सम्पूर्ण उपचार पद्धतीको बारेमा सोधिसकेपछि मात्रै अर्को प्रश्नमा जानुहोला ।</i> <i>यदि सहभागीले माथिको प्रश्नको जवाफ 1,2 वा 3 दियो भने B.7 को प्रश्न सोध्ने ।</i> <i>यदि सहभागीले जवाफ 4 वा 5 दियो भने सिधै B.8 मा जानुहोला ।</i>	(B.6.1a) सल्लाहको हकमा 0.... छैन, कसैलाई भनिन 1....लिएँ, परिवारको सदस्यबाट 2....लिएँ, साथी / छिमेकीबाट (B.6.1b) प्रतिक्रिया लेख्नुहोस् (B.6.2) घरायसी उपचारको हकमा 1.... घरायसी उपचार गरे 2.... घरमै भएको औषधी खाएँ 3.... घरमै भएको जडिबुटी खाएँ 4.... केही गरिन, केही खाइन 5.... शुरुमै स्वास्थ्यकर्मीकोमा गएँ । (यदि उत्तर 4 वा 5 भएमा सिधै प्रश्न B.8 मा जानुहोला) (B.6.2b) के प्रयोग गरेको थियो, प्रयोग गर्नुको कारण र कुन क्रममा प्रष्ट लेख्ने

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(B.7) घरायसी उपचारको प्रभावकारिता: (B.7.1) के घरायसी उपचार/औषधीले रोग निको पार्न मद्दत गर्‍यो त? यदि जवाफ 2 वा 3 भएमा निम्न प्रश्नहरू सोध्नुहोस् (B.7.2) घरायसी उपचार गरेपछि तपाईंलाई सञ्चो हुन कति समय लाग्यो? (यदि त्यो व्यक्तिले घरबाहिर उपचार गराएको छैन भने मात्र यो प्रश्न सोध्नुहोस् ।)	(B.7.1) घरायसी उपचारको प्रभावकारिता: 0. अहँ, अलिकति पनि गरेन 1..... हो, अलिअलि गर्‍यो 2.....हो, धेरै गर्‍यो 3.....हो, पूरै गर्‍यो 999.....असान्दर्भिक (B.7.2) सञ्चो हुनु अगाडीको समय 1.....धेरैघण्टा 2.....एक दिन 3.....२-३ दिन 4.....४-७ दिन 5.....एक हप्ता भन्दा बढी													
(B.8) घर भन्दा बाहिर उपचार गरेमा : के तपाईंले यो रोगको लागि घरभन्दा बाहिर गएर उपचार गराउनु भएको थियो? (B.8.1) यदि छ भने, के तपाईं धामी भाँकीकोमा उपचार गराउन जानुभएको थियो ? (B.8.2) के तपाईं यो रोगको लागि कुनै स्वास्थ्यकर्मीकोमा देखाउन जानुभयो?यदि जानु भएको थियो भने कहाँ र कसकोमा? नीजि वा सरकारी संस्था छुट्याउनुहोस् । (B.8.2b) उहाँहरूले यो संस्थालाई के भने उहाँहरूकै शब्दमा लेख्नुहोस् (B.8.3) के तपाईंले यो रोगको लागि आयुर्वेदिक वा अन्य प्रमाणित होमियोप्याथीक स्वास्थ्यकर्मी वा संस्थाबाट सेवा लिनुभएको थियो ?	(B.8) छ/छैन → 'छैन' भनेपनि B.8.1 देखि B.8.6 को प्रश्नहरू सोध्नुहोस् (B.8.1) धामी भाँकी : छ/छैन (B.8.1.a) प्रकार खुलाउनुहोस् <table style="width: 100%;"> <tr> <td>1.....भाँकी</td> <td>7.....लामा</td> <td rowspan="6" style="width: 50px; vertical-align: middle;"> </td> </tr> <tr> <td>2.....धामी</td> <td>8.....गुभाजु</td> </tr> <tr> <td>3.....ज्योतिषी</td> <td>9.....फेडावा</td> </tr> <tr> <td>4.....देउता</td> <td>10.....विजुवा</td> </tr> <tr> <td>5.....जडीवाला</td> <td>11.....अन्य _____</td> </tr> <tr> <td>6.....बुटीवाला</td> <td></td> </tr> </table> (B.8.2) स्वास्थ्यकर्मी : गएँ/गइन 0. अहँ, यदि गइन 1.....महिला स्वास्थ्य स्वयंसेविका 2.....प्राइभेट क्लिनिक 3.....उपस्वास्थ्य चौकी 4.....स्वास्थ्य चौकी 5.....प्राथमिक स्वास्थ्य सेवा केन्द्र 6.....जिल्ला अदालत 7.....अन्य _____ a b (B.8.3) आयुर्वेदिक : लिएँ/लिइन a) प्रकार खुलाउनुहोस्	1.....भाँकी	7.....लामा		2.....धामी	8.....गुभाजु	3.....ज्योतिषी	9.....फेडावा	4.....देउता	10.....विजुवा	5.....जडीवाला	11.....अन्य _____	6.....बुटीवाला	
1.....भाँकी	7.....लामा													
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5.....जडीवाला	11.....अन्य _____													
6.....बुटीवाला														

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(B.8.4) के तपाईले यो रोगको लागि औषधी पसल वा अन्य कुनै पसलबाट सेवा वा औषधी लिनुभएको थियो? (B.8.5) उपचारको क्रम: तपाईंले यो रोगको लागि अपनाउनु भएको उपचारहरु कृपया क्रमबद्ध रुपमा भर्नादिनुहोला । जस्तै सबै भन्दा पहिले कहाँ जानुभयो, त्यसपछि दोस्रो कहाँ जानुभयो, तेस्रो कहाँ जानुभयो आदि । 1.....धामी भाँक्री 2..... स्वास्थ्यकर्मी 3.....औषधी पसल 4.....आफै घरायसी उपचार 5.....अन्य (B.8.6) माथि उल्लेखित कसैबाट सेवा लिइसकेपछि के तपाईंले अरु कुनै घरायसी/आफै उपचार गर्नु भयो? यदि गर्नुभएको थियो भने के उपचार गर्नुभएको थियो? (B.8.7) कुनै पनि सेवा छान्नुको कारण: तपाईंले धामी भाँक्रीकोमा जाने निर्णय किन गर्नुभयो? स्वास्थ्यकर्मीकोमै जाने निर्णय किन गर्नुभयो? औषधी पसलै जाने निर्णय किन गर्नुभयो? आयुर्वेदको मै जाने निर्णय किन गर्नुभयो? अरु सेवा प्रदायक कहाँ नगई किन यहि सेवा प्रदायककोमा? “किनकि मेरो रोग उसले निको पार्छ भन्ने सोचेर” भन्ने जवाफ ठीक होइन । उनीहरुले त्यो सेवा अरु सेवाहरु भन्दा राम्रो सोच्नुको कारण पत्ता लगाउने कोशिश गर्नुहोस् ।	(B.8.4) औषधी पसल (क्लिनिक सहित/क्लिनिक बिना) 0. अहँ लिइन 1.....उपचारको लागि सल्लाह लिएँ 2.....औषधी मात्रै लिएँ, सल्लाह लिइन 3.....सल्लाह र औषधी दुवै लिएँ 4.....किराता पसलबाट औषधी लिएँ यदि प्रश्न B.8.1-B.8.4 सबैको जवाफ '0' भएमा सिधै B.2 section मा जानुहोस् । (B.8.5) क्रम: 1st (a) 2nd (b) 3rd (c) (B.8.6) थप घरायसी उपचार : गरेको/नगरेको a) उल्लेख गर्ने: (B.8.7) सेवा छान्नुको कारण: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">A) धामी भाँक्री</td> <td style="width: 70%;"></td> </tr> <tr> <td>B) स्वास्थ्यकर्मी</td> <td></td> </tr> <tr> <td>C) औषधी पसल</td> <td></td> </tr> <tr> <td>D) आयुर्वेदिक</td> <td></td> </tr> </table>	A) धामी भाँक्री		B) स्वास्थ्यकर्मी		C) औषधी पसल		D) आयुर्वेदिक	
A) धामी भाँक्री									
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C) औषधी पसल									
D) आयुर्वेदिक									

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(B.8.8) निर्णय गर्ने व्यक्ति: तपाईंको घरपरिवारमा रोग लाग्दा कुन ठाउँमा सेवा लिन जाने भन्ने निर्णय कसले गर्छ? (प्रश्न नं A.1 बाट त्यो व्यक्तिको सदस्य संख्या लेख्ने अथवा यदि त्यो व्यक्ति त्यो घरमा बस्दैन भने त्यसको बारेमा खुलाउनुहोला)	(A) (B) (C) (D)																
(B.9) तपाईंले लक्षण देखेको दिनदेखि उपचारको लागि घर बाहिर जानुको विचमा कति समय कुर्नुभयो? (घरभन्दा बाहिर सबै भन्दा पहिले कुन ठाउँमा देखाउन गएको सोध्नुहोस् र त्यसपछि गएको ठाउँहरू पहिले गएको आधार मानेर सोध्नुहोस्) जस्तै :- यदि पहिलो उपचारको लागि धामी भाँकीकोमा गएको र त्यसपछि औषधी पसलमा गएको भए, धामी भाँकीकोमा लक्षण देखापरेको कति समयपछि गएको र धामी भाँकीमा गएको कति समयपछि औषधीपसलमा गएको भनेर सोध्नुहोस्) [यो कोड गर्दा होश पुर्याउनु होस्] (B.9.1) 1. स्वास्थ्यकर्मी 2. औषधी पसल 3. धामी भाँकी 4. आयुर्वेदिक (कुरेको घण्टा / दिन भर्नुहोस्)	(B.9.1) ढिला भएको समय: (कुर्नु परेको घण्टा वा दिन ट्याक्कै लेख्नुहोस् ।) सबै भन्दा पहिले देखाउन गएको ठाउँबाट शुरु गर्नुहोस् । <table style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: center; width: 25%;">स्वास्थ्यकर्मी</th> <th style="text-align: center; width: 25%;">औषधी पसल</th> <th style="text-align: center; width: 25%;">धामी भाँकी</th> <th style="text-align: center; width: 25%;">आयुर्वेदिक</th> </tr> <tr> <th style="text-align: center;">(A)</th> <th style="text-align: center;">(B)</th> <th style="text-align: center;">(C)</th> <th style="text-align: center;">(D)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> </tr> <tr> <td style="text-align: center; font-size: small;">(घण्टा/दिन)</td> <td style="text-align: center; font-size: small;">(घण्टा/दिन)</td> <td style="text-align: center; font-size: small;">(घण्टा/दिन)</td> <td style="text-align: center; font-size: small;">(घण्टा/दिन)</td> </tr> </tbody> </table>	स्वास्थ्यकर्मी	औषधी पसल	धामी भाँकी	आयुर्वेदिक	(A)	(B)	(C)	(D)					(घण्टा/दिन)	(घण्टा/दिन)	(घण्टा/दिन)	(घण्टा/दिन)
स्वास्थ्यकर्मी	औषधी पसल	धामी भाँकी	आयुर्वेदिक														
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(B.9.2) ढिलाई गर्नुको कारण किन कुर्नु भयो? प्रत्येक ठाउँका लागी भर्नुहोस् दिइएका कोड प्रयोग गर्नुहोस् र बिरामीको प्रतिक्रिया लेख्नुहोस् 1.....उपचार विनै निको हुन्छ कि भनेर 2.....पैसाको अभावले 3.....समय नभएर/व्यस्त भएर 4.....घर कुरीदिने मान्छे नभएर 5.....श्रीमानको स्वकृती विना जान नसकेर 6.....जान डर लागेर 7.....सवारी साधन नपाएर 8.....अन्य (कोठामा उल्लेख गर्नुहोस्)	(B.9.2) हरेकको कारण उल्लेख गर्नुहोस् A B C						
यस खण्डको बाँकी प्रश्नहरू B.8.5 मा उल्लेखित स्वास्थ्यकर्मी/ स्वास्थ्य संस्था जहाँ उपचारको लागि विरामी गएको थियो, मा आधारित हुनेछ। केही प्रश्नहरू धामी भाँकीहरूको बारेमा पनि छन्। यदि उपचार सेवा स्वास्थ्य संस्थाहरूबाट नलिई औषधी वा धामी भाँकीबाट मात्रै लिएको छ भने पनि यी प्रश्नहरू सोध्न सकिन्छ। दिइएको कोठामा संस्थाको प्रकार लेख्नुहोस्। B.10. Th = धामी भाँकी P = औषधी पसल A = आयुर्वेदिक Pvt = प्राइभेट क्लिनिक Gov. = सरकारी O = अन्य यदि सेवा एक भन्दा बढी स्वास्थ्य संस्थाबाट लिइएको थियो भने सबैभन्दा पहिले गएको स्वास्थ्य संस्थाको बारेमा प्रश्नहरू सोध्नुहोस्							
(B.11) सवारी/ दूरी: (B.11.1) तापई स्वास्थ्य संस्थासम्म कसरी जानु भयो ? (B.11.2) तपाईंलाई घरबाट स्वास्थ्य संस्थासम्म पुग्न कति समय लाग्यो ? (B.11.3) दूरी (कि.मी.मा)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top; padding: 5px;"> (B.11.1) प्रमुख साधन </td> <td style="width: 50%; vertical-align: top; padding: 5px;"> 1.....हिडेर 2.....साइकलमा 3..... मोटरसाइकलमा 4..... गोरुगाडामा 5..... बसमा 6..... नीजि कारमा 7.....ट्याक्सीमा 8.....एम्बुलेन्समा 9.....अन्य सार्वजनिक यातायातमा 10.....अन्य </td> </tr> <tr> <td style="vertical-align: top; padding: 5px;"> (B.11.2) </td> <td style="vertical-align: top; padding: 5px;"> समय (मिनेटमा): </td> </tr> <tr> <td style="vertical-align: top; padding: 5px;"> (B.11.3) </td> <td style="vertical-align: top; padding: 5px;"> दूरी (कि.मी.मा) </td> </tr> </table>	(B.11.1) प्रमुख साधन	1.....हिडेर 2.....साइकलमा 3..... मोटरसाइकलमा 4..... गोरुगाडामा 5..... बसमा 6..... नीजि कारमा 7.....ट्याक्सीमा 8.....एम्बुलेन्समा 9.....अन्य सार्वजनिक यातायातमा 10.....अन्य	(B.11.2)	समय (मिनेटमा):	(B.11.3)	दूरी (कि.मी.मा)
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(B.11.2)	समय (मिनेटमा):						
(B.11.3)	दूरी (कि.मी.मा)						

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(B.12) कुरेको समय: (B.12.1) स्वास्थ्य संस्थामा पुगिसकेपछि तपाईंलाई त्यहाँ कसैले जाँच्नु अघि कति समय कुर्नुपर्यो ? (B.12.2) कुनै पनि परीक्षण गर्नको लागि कति समय कुर्नुभयो? (B.12.3) डाक्टर वा नर्सले तपाईंलाई जाँच्न कति समय लगाउनु भयो ? (B.12.4) औषधी लिनको लागि कति समय कुर्नुपर्यो? (B.12.5) स्वास्थ्य संस्थामा बिताएको पूरा समय	समय मिनेटमा: (B.12.1) (B.12.2) (B.12.3) (B.12.4) (B.12.5)																
(B.13) स्वास्थ्यकर्मी: (B.13.1) तपाईंले स्वास्थ्य संस्थामा कसलाई देखाउनु भयो? कुन स्वास्थ्यकर्मीले तपाईंको उपचार गर्‍यो? यदि एक भन्दा बढी स्वास्थ्यकर्मीले हेरेको भए, तपाईंलाई कसले जाँच्यो वा औषधी दियो ? (B.13.2) तपाईंलाई जाँच्ने व्यक्ति मेडिकल डाक्टर थिए कि अरु स्वास्थ्यकर्मी?	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">1. पियन</td><td style="width: 50%;">7. मा.शि.का.</td></tr> <tr> <td>2. अ.न.मि.</td><td>8. ग्रा.स्वा.का. </td></tr> <tr> <td>3. अ.हे.व.</td><td>9. नर्स</td></tr> <tr> <td>4. हेल्थ असिस्टेन्ट</td><td>10. थाहा भएन</td></tr> <tr> <td>5. मेडिकल डाक्टर</td><td>11. अन्य (खुलाउनुहोस्) :</td></tr> <tr> <td colspan="2">6. विशेषज्ञ</td></tr> </table> 1...मेडिकल डाक्टर 2...अरु स्वास्थ्यकर्मी 3.....थाहा भएन	1. पियन	7. मा.शि.का.	2. अ.न.मि.	8. ग्रा.स्वा.का.	3. अ.हे.व.	9. नर्स	4. हेल्थ असिस्टेन्ट	10. थाहा भएन	5. मेडिकल डाक्टर	11. अन्य (खुलाउनुहोस्) :	6. विशेषज्ञ					
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(B.14) सेवा दिएको: (B.14.1) तपाईंलाई स्वास्थ्य संस्थामा डाक्टर/स्वास्थ्यकर्मीले जाँच्न/उपचार गर्न के के गर्नुभयो? (उपयुक्त सबैमा चिन्ह लगाउनुहोस्) (B.14.2) यदि शारीरिक जाँच गरेको भए, डाक्टरले के के जाँचे भन्ने बारेमा विस्तृत जानकारी सोध्नुहोस् । यदि धामी भाँक्री र स्वास्थ्यकर्मी दुवैकोमा गएको भए दुवै जनाको प्रतिक्रियाहरु लेख्नुहोस् ।	(B.14.1) यदि स्वास्थ्यकर्मी भए: <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 25%;">शारीरिक जाँच</td><td style="width: 25%;"></td><td style="width: 25%;">एक्सरे</td><td style="width: 25%;"></td></tr> <tr> <td>खकार जाँच</td><td></td><td>औषधी</td><td></td></tr> <tr> <td>भिडियो एक्सरे</td><td></td><td>पिसाब जाँच</td><td></td></tr> <tr> <td>रगत जाँच</td><td></td><td>दिसा जाँच</td><td></td></tr> </table> (B.14.2) पूर्ण विवरण उल्लेख गर्नुहोस्	शारीरिक जाँच		एक्सरे		खकार जाँच		औषधी		भिडियो एक्सरे		पिसाब जाँच		रगत जाँच		दिसा जाँच	
शारीरिक जाँच		एक्सरे															
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(B.14.3) धामी भाँकीले के गर्नु भयो ? उहाँले कस्तो विधि अगाउनुभयो?	(B.14.3) यदि धामी भाँकी भए उपयुक्त सबैमा चिन्ह लगाउनुहोस् ? <table border="1"> <tr> <td>मन्त्र फुक्ने</td><td></td><td>देउता बसेको</td><td></td></tr> <tr> <td>नाडी छाम्ने</td><td></td><td>अरु औषधी</td><td></td></tr> <tr> <td>कौडा छर्ने</td><td></td><td>बली दिएको</td><td></td></tr> <tr> <td>आयुर्वेदिक औषधी</td><td></td><td>लक्षण/खानपिन बारे प्रश्न</td><td></td></tr> <tr> <td>भाड फुंक</td><td></td><td>चामल छोरेको</td><td></td></tr> <tr> <td>चिन्हा हेर्ने</td><td></td><td>ढ्यागो ठोक्नु</td><td></td></tr> </table>	मन्त्र फुक्ने		देउता बसेको		नाडी छाम्ने		अरु औषधी		कौडा छर्ने		बली दिएको		आयुर्वेदिक औषधी		लक्षण/खानपिन बारे प्रश्न		भाड फुंक		चामल छोरेको		चिन्हा हेर्ने		ढ्यागो ठोक्नु	
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(B.14.3.a) यदि जनावरको बली दिएको थियो भने कुन जनावर ?	कुन जनावरको बली दिएको थियो, उल्लेख गर्नुहोस्																								
(B.14.4) धामी भाँकीसँग भएको अरु अन्तरक्रियाको विस्तृत विवरण लेख्नुहोस्	(B.14.4) प्रश्नहरु सोधेको, रीति रिवाज गरेको, मन्त्र पढेको आदिको विवरण उल्लेख गर्नुहोस्																								
(B.14.5) के धामी भाँकीले तपाईंलाई कुनै निर्देशन दिनुभयो वा भविष्यमा केही गर्न भन्नुभयो ?	(B.14.5) धामी भाँकीले दिएको निर्देशनहरु																								
(B.15) रोगको निदान, औषधी र पालना जुनसुकै ठाउँबाट सेवा लिएको भएपनि यी प्रश्नहरु सोध्नुहोस् । (B.15.1) के स्वास्थ्यकर्मीले तपाईंलाई के रोग लागेको छ भन्नुभयो? यदि भन्नुभएको छ भने के तपाईंलाई सम्झना छ? यदि छ भने उहाँले के भन्नुभएको थियो?	(B.15.1) रोगको निदान भन्नुभएको छ/ भन्नुभएको छैन/थाहा छैन																								
(B.15.2) के स्वास्थ्यकर्मीले तपाईंलाई कुनै औषधी लेखेर दिनुभयो? यदि दिनुभएको थियो भने कतिवटा, कस्तो प्रकारको? के तपाईंसँग ती औषधीहरु अबै छन् ?	(B.15.2) कुल औषधी संख्या । यदि धामी भाँकी भए अन्य कुरा दिएको																								

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(B.15.3) औषधीको नाम र मात्रा? (नाम सम्झन नसकेको खण्डमा औषधीको खोल, डाक्टरले लेखेको पूर्जी वा बोतल माग्नुहोस्) <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 30%;">नाम</th> <th style="width: 10%;">संख्या</th> <th style="width: 60%;">दिनको कति पटक(दिनको संख्या)</th> </tr> </thead> <tbody> <tr><td>A.</td><td></td><td></td></tr> <tr><td>B.</td><td></td><td></td></tr> <tr><td>C.</td><td></td><td></td></tr> <tr><td>D.</td><td></td><td></td></tr> <tr><td>E.</td><td></td><td></td></tr> <tr><td>F.</td><td></td><td></td></tr> <tr><td>G.</td><td></td><td></td></tr> <tr><td>H.</td><td></td><td></td></tr> </tbody> </table> (B.15.4) यदि औषधीको खोल/पूर्जी उपलब्ध छैन र विरामीले सम्झन सकेन भने औषधीको प्रकार र रंगको बारेमा सोध्नुहोस् (B.15.5) के तपाईंलाई स्वास्थ्यकर्मीले यी औषधीहरु कसरी र कति बेला खाने भन्ने बारेमा केही निर्देशन दिनुभएको छ ? के डाक्टरले तपाईंलाई अरु कुनै निर्देशनहरु दिनुभएको छ ? (B.15.6) के तपाईंले यी सबै निर्देशनहरु पालना गर्नु भएको छ? (B.15.7) यदि B.15.6 प्रश्नको जवाफ '0' वा '1' भएमा सोध्नुहोस् किन तपाईंले दिएको निर्देशनहरु पालना नगर्ने भन्ने छान्नुभयो?	नाम	संख्या	दिनको कति पटक(दिनको संख्या)	A.			B.			C.			D.			E.			F.			G.			H.			(B.15.3) डाक्टरको पूर्जी उपलब्ध छ ? छ ☐ छैन ☐ सबै छैन ☐ <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 40%;">(B.15.4) प्रकार</th> <th style="width: 20%;">संख्या</th> <th style="width: 40%;">रंग</th> </tr> </thead> <tbody> <tr><td>a. क्याप्सुल</td><td></td><td></td></tr> <tr><td>b. ट्याब्लेट</td><td></td><td></td></tr> <tr><td>c. सुई</td><td></td><td></td></tr> <tr><td>d. भोल</td><td></td><td></td></tr> <tr><td>e. पाउडर</td><td></td><td></td></tr> <tr> <td>f. अन्य </td><td></td><td></td></tr> </tbody> </table> (B.15.5) स्वास्थ्यकर्मीको निर्देशन विरामीको प्रतिक्रिया लेख्नुहोस् । (B.15.6) 0.... छैन, मैले कुनै पनि निर्देशनहरु पालना गरेको छैन । 1.....मैले केही निर्देशनहरु पालना गरेको छु 2....मैले सबै निर्देशनहरु पालना गरेको छ (B.15.7) कारण लेख्नुहोस्	(B.15.4) प्रकार	संख्या	रंग	a. क्याप्सुल			b. ट्याब्लेट			c. सुई			d. भोल			e. पाउडर			f. अन्य 		
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(B.16) खर्च: (B.16.1) सम्बन्धित खर्चहरू रुपैयाँमा उल्लेख गर्नुहोस् (B.16.2) माथि उल्लेखित खर्च कुन वर्गमा पर्छ ? (B.16.3) उपचारको लागि खर्च कसरी जुटाउनु भयो? (B.16.4) यो खर्च जुटाउन तपाईंलाई कतिको भार/समस्या पर्यो?	(B.16.1) <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">यातायात (a)</td> <td></td> </tr> <tr> <td>औषधी (b)</td> <td></td> </tr> <tr> <td>विशेषज्ञ शुल्क/दर्ता शुल्क (c)</td> <td></td> </tr> <tr> <td>ल्याब टेष्ट/एक्सरे (d)</td> <td></td> </tr> <tr> <td>सामाग्री/उपकरण (e)</td> <td></td> </tr> <tr> <td>खान बस्न (f)</td> <td></td> </tr> <tr> <td>अन्य _____ (g)</td> <td></td> </tr> <tr> <td>जम्मा (h)</td> <td></td> </tr> </table> (B.16.2) 1.... रु २५० सम्म 3.... रु ६०१ देखि रु १९०० 2.... रु २५१ देखि रु ६०० 4.... रु १९०० भन्दा बढी (B.16.3) 1..... आफैसँग थियो 2..... केही सामान बेचेर 3..... परिवारसँग मागेर 4..... साथी/ छिमेकी सँग मागेर 5..... कृण लिएर 6..... स्वास्थ्यकेन्द्रमा उधारो राखेर 7..... अन्य _____ (B.16.4) 0..... केही समस्या भएन 1..... अलि अलि गाह्रो भयो 2..... धेरै गाह्रो भयो 3..... साढे नै गाह्रो भयो	यातायात (a)		औषधी (b)		विशेषज्ञ शुल्क/दर्ता शुल्क (c)		ल्याब टेष्ट/एक्सरे (d)		सामाग्री/उपकरण (e)		खान बस्न (f)		अन्य _____ (g)		जम्मा (h)	
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(B.17) प्रेषण: (B.17.1) उपचारको लागि तपाईंलाई अरु कतै प्रेषण गरिएको थियो, अरु कतै जानु भनिएको थियो? यदि थियो भने कहाँ ? (B.17.2) के यो संस्था तपाईंको उपचार गर्ने अन्तिम स्वास्थ्य संस्था थियो ? यदि थिएन भने, कुन थियो त ?	(B.17.1) 0..... अहँ कतै पठाइएन 1..... स्वास्थ्य चौकी/उपस्वास्थ्य चौकी 2..... प्राथमिक स्वास्थ्य सेवा संस्था 3..... जिल्ला अस्पताल 4..... क्षेत्रिय/अञ्चल अस्पताल 5..... नीजि संस्था (B.17.2) 0..... हो, 17.1 अन्तिम स्वास्थ्य संस्था थियो 1..... स्वास्थ्य चौकी/उपस्वास्थ्य चौकी 2..... प्राथमिक स्वास्थ्य सेवा संस्था 3..... जिल्ला अस्पताल 4..... क्षेत्रिय/अञ्चल अस्पताल 5..... नीजि संस्था
(B.18) स्वयं सूचित नतिजा: (B.18.1) तपाईं अहिले कस्तो महशुस गर्दै हुनुहुन्छ ? (B.18.2) यदि B.18.1 को उत्तर 2 वा 3 भए तपाईंलाई अहिलेको जस्तो महशुस गर्न डाक्टरलाई भेटेपछि वा स्वास्थ्य संस्थामा गएपछि कति समय लाग्यो ? (B.18.3) यदि B.18.1 को उत्तर २ वा ३ भएमा तपाईंको समस्याको सुधार तपाईंलाई के ले गर्दा भएको हो जस्तो लाग्छ ?	(B.18.1) 0 कति पनि ठीक छैन 1.....अलि अलि राम्रो 2.....धेरै राम्रो 3.....पूरै ठीक (B.18.2) 1.....केही घण्टा 2.....१ दिन 3.....२-३ दिन 4.....४ दिन देखि १ हप्ता 5.....८ दिनदेखि २ हप्ता 6.....अझै समस्या महशुस गरिरहेछु (B.18.3) (उपयुक्त सबैमा गोलो चिन्ह लगाउनुहोस्) 1.....डाक्टरले दिएको औषधी 2..... धामी भाँकीको कामले 3..... समय बितेको कारणले 4..... घरैलु उपचारले 5..... अन्य _____

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(B.19) सन्तुष्टीपना: (B.19.1) तपाईंले स्वास्थ्य संस्थाबाट पाउनु भएको उपचारबाट कतिको सन्तुष्ट हुनुहुन्छ ? (B.8 रेफर गर्नुहोस्) (B.19.2) तपाईंले प्राप्त गर्नुभएको सेवा/उपचारलाई कसरी मूल्यांकन गर्नुहुन्छ ?	(B.19.1) 0.....अलि कति पनि सन्तुष्ट छैन 1.....अलिअलि सन्तुष्ट छु 2..... धेरै सन्तुष्ट छु 3.....अति नै सन्तुष्ट छु (B.19.2) 0.....नराम्रो 1.....ठीकै 2.....राम्रो 3.....धेरै राम्रो 4.....उत्कृष्ट																												
(B.20) भविष्यमा रोगी भएमा: भविष्यमा यदि तपाईंलाई यस्तै स्वास्थ्य समस्या परेमा उपचारको लागि तपाईं सबै भन्दा पहिले के गर्नुहुन्छ ? (आफै उपचार गर्ने र औषधी पसललाई समेट्ने प्रयास गर्नुहोस्)	1.....औषधी पसल 2..... धामी भाँकी (प्रकार: _____) 3.....महिला स्वास्थ्य स्वयंसेविका 4.....प्राइभेट क्लिनिक a. 5.....उपस्वास्थ्य चौकी 6.....स्वास्थ्य चौकी 7.....प्राथमिक स्वास्थ्य सेवा केन्द्र 8.....जिल्ला अस्पताल 9.....आफै उपचार (खुलाउनुहोस्: _____) b. 10....आयुर्वेदिक/ होमियोप्याथिक संस्था 11....अन्य (खुलाउनुहोस्: _____)																												
(B. 21) समस्या वा अष्टयारोको सामना: तपाईंलाई B.8 मा उल्लेखित स्वास्थ्य सेवा प्रयोग गर्दा कुनै समस्या वा अष्टयारोको सामना गर्नुपरेको जस्तो भयो? (सूची पढ्नुहोस् र उपयुक्त सबैमा चिन्ह लगाउनुहोस्) यदि बिरामीले धामी भाँकी वा औषधी पसललाई मात्र देखाइएको छ भने यो खुला प्रश्नको रूपमा मात्र सोध्नुहोस् ।	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">महँगो शुल्क</td> <td style="width: 33%;"></td> <td style="width: 33%;">दूरी</td> <td style="width: 33%;"></td> </tr> <tr> <td>औषधी नपाइनु</td> <td></td> <td>धेरै समय कुर्नुपर्ने</td> <td></td> </tr> <tr> <td>महँगो यातायात</td> <td></td> <td>कम गुणस्तरको सेवा/संस्था</td> <td></td> </tr> <tr> <td>स्वास्थ्यकर्मी अनुपस्थित हुनु</td> <td></td> <td>स्वास्थ्य संस्था बन्द हुनु</td> <td></td> </tr> <tr> <td>डाक्टरले धेरै समय नदिनु</td> <td></td> <td>कर्मचारीद्वारा नराम्रो व्यवहार</td> <td></td> </tr> <tr> <td>स्वास्थ्य संस्था फोहर हुनु</td> <td></td> <td>गोपनीयता नहुनु</td> <td></td> </tr> <tr> <td>महिला स्वास्थ्यकर्मी नहुनु</td> <td></td> <td>जान नदिनु</td> <td></td> </tr> </table>	महँगो शुल्क		दूरी		औषधी नपाइनु		धेरै समय कुर्नुपर्ने		महँगो यातायात		कम गुणस्तरको सेवा/संस्था		स्वास्थ्यकर्मी अनुपस्थित हुनु		स्वास्थ्य संस्था बन्द हुनु		डाक्टरले धेरै समय नदिनु		कर्मचारीद्वारा नराम्रो व्यवहार		स्वास्थ्य संस्था फोहर हुनु		गोपनीयता नहुनु		महिला स्वास्थ्यकर्मी नहुनु		जान नदिनु	
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टिप्पणी:

Section B.2. विरामीले घरभन्दा बाहिर सेवा नलिएको खण्डमा (प्रश्न B.8)

(B.22) घरभन्दा बाहिर सेवा नलिनुको कारण: तपाईंले यो रोगको लागि घरभन्दा बाहिर उपचारको सेवा प्रयोग नगर्नुको कारणहरु के हुन् ?	(B.22) 1....आवश्यक भएन, आफ्नै उपचारले काम गर्‍यो 2....खर्चको कारणले 3....परिवारको सदस्यले जान नदिएको 4....दूरी 5....यातायातको साधन नहुनाले 6....अवस्था जटिल नभएकोले 7....स्वास्थ्य सेवा प्रतिको अविश्वास 8....स्वास्थ्यकर्मी/ कर्मचारीहरु मन नपनाले 9....औषधी नपाइनाले 10...स्वास्थ्यकर्मीको अनुपस्थिति 11..घर कुनै मान्छे नभएर/ धेरै व्यस्त भएर 12..महिला स्वास्थ्यकर्मी नभएर 13...अन्य:_____ a b विवरण (B.22.2)
(B.23) निर्णय गर्ने व्यक्ति: घरभन्दा बाहिरको स्वास्थ्य सेवा प्रयोग नगर्ने निर्णय कसले गर्‍यो	0 आफै 1.....घरका अन्य सदस्य (Q.A.1 बाट अक्षर:_____) 2.....घरभन्दा बाहिरको व्यक्ति:_____

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(B.24) तपाईंले तल उल्लेखित स्वास्थ्य संस्था/स्वास्थ्यकर्मीहरुबाट सेवा कतिको लिने गर्नुभएको छ ? 0= कहिले पनि लिएको छैन 1= कहिले काहिं लिने गरेको छ 2= धेरै जसो लिने गरेको छ 3= सधैं लिने गरेको छ 4= थाहा छैन	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">महिला स्वास्थ्य स्वयंसेविका</td> <td style="width: 33%;"></td> <td style="width: 33%;">प्राथमिक स्वास्थ्य सेवा केन्द्र</td> <td style="width: 33%;"></td> </tr> <tr> <td>उप स्वास्थ्य चौकी</td> <td></td> <td>स्वास्थ्य चौकी</td> <td></td> </tr> <tr> <td>जिल्ला अस्पताल</td> <td></td> <td>धामी भौँकी</td> <td></td> </tr> <tr> <td>प्राइभेट क्लिनिक</td> <td></td> <td>औषधी पसल</td> <td></td> </tr> </table>	महिला स्वास्थ्य स्वयंसेविका		प्राथमिक स्वास्थ्य सेवा केन्द्र		उप स्वास्थ्य चौकी		स्वास्थ्य चौकी		जिल्ला अस्पताल		धामी भौँकी		प्राइभेट क्लिनिक		औषधी पसल	
महिला स्वास्थ्य स्वयंसेविका		प्राथमिक स्वास्थ्य सेवा केन्द्र															
उप स्वास्थ्य चौकी		स्वास्थ्य चौकी															
जिल्ला अस्पताल		धामी भौँकी															
प्राइभेट क्लिनिक		औषधी पसल															
(B.25) गएको १ वर्षमा तपाईंले कति पल्ट तल उल्लेखित स्वास्थ्य संस्था र स्वास्थ्यकर्मीहरु बाट सेवा लिनु भएको थियो ?	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">महिला स्वास्थ्य स्वयंसेविका</td> <td style="width: 33%;"></td> <td style="width: 33%;">प्राथमिक स्वास्थ्य सेवा केन्द्र</td> <td style="width: 33%;"></td> </tr> <tr> <td>उप स्वास्थ्य चौकी</td> <td></td> <td>स्वास्थ्य चौकी</td> <td></td> </tr> <tr> <td>जिल्ला अस्पताल</td> <td></td> <td>धामी भौँकी</td> <td></td> </tr> <tr> <td>प्राइभेट क्लिनिक</td> <td></td> <td>औषधी पसल</td> <td></td> </tr> </table>	महिला स्वास्थ्य स्वयंसेविका		प्राथमिक स्वास्थ्य सेवा केन्द्र		उप स्वास्थ्य चौकी		स्वास्थ्य चौकी		जिल्ला अस्पताल		धामी भौँकी		प्राइभेट क्लिनिक		औषधी पसल	
महिला स्वास्थ्य स्वयंसेविका		प्राथमिक स्वास्थ्य सेवा केन्द्र															
उप स्वास्थ्य चौकी		स्वास्थ्य चौकी															
जिल्ला अस्पताल		धामी भौँकी															
प्राइभेट क्लिनिक		औषधी पसल															
(B.26) भविष्यमा रोगी भएमा: (B.26.1) भविष्यमा यदि तपाईंलाई यस्तै रोग लाग्यो भने तपाईं उपचारको लागि कहाँ जानुहुन्छ ? (B.26.2) भविष्यमा यदि तपाईंको बच्चालाई यस्तै रोग लाग्यो भने तपाईं उसलाई उपचारको लागि कहाँ लैजानुहुन्छ ?	1.....औषधी पसल 2.....धामी भौँकी (प्रकार:_____) 3.....महिला स्वास्थ्य स्वयंसेविका 4.....प्राइभेट क्लिनिक 5.....उपस्वास्थ्य चौकी 6.....स्वास्थ्य चौकी 7.....प्राथमिक स्वास्थ्य सेवा केन्द्र 8.....जिल्ला अस्पताल 9.....आफै उपचार (खुलाउनुहोस्:_____) 10.....आयुर्वेदिक होमियोप्याथिक संस्था 11.....अन्य (खुलाउनुहोस्:_____) (B.26.1) (B.26.2)																

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यो खण्ड बिरामी भएका/नभएका सबै घरमा भर्नुहोला ।

SECTION C: सरकारी स्वास्थ्य संस्थाको मूल्यांकन

यो मूल्यांकन गर्ने व्यक्ति को हो ?

पहिलो सहभागी

स्रो सहभागी

(C.1) तपाईंको घरबाट सबैभन्दा नजिक रहेको सरकारी स्वास्थ्य संस्था:_____

(C.2) पछिल्लो पटक त्यस स्वास्थ्य संस्थामा कहिले जानु भएको थियो ?(कति महिना अगाडि)_____

(C.3) पछिल्लो पटक तपाईं यस स्वास्थ्य संस्थामा आफैलाई जचाउन जानु भएको थियो वा अरु कससँग साथी जानु भएको थियो?_____

(C.3a) स्वास्थ्य संस्था जानुको कारण:_____

यो मूल्यांकन घर नजिकै को सरकारी स्वास्थ्य संस्थासँग सम्बन्धित हो, चाहे यो संस्थामा हालसालै नगएको भएतापनि

(C.4) स्वास्थ्यकर्मीको कार्यशैली र व्यवहार

	नराम्रो	ठीकै	राम्रो	धेरै राम्रो	अति राम्रो	थाहा छैन
कर्मचारीको व्यवहार						
स्वास्थ्यकर्मीले रोगको बारेमा बुझाउने तरिका						
बिरामीप्रति स्वास्थ्यकर्मीको सम्मान						

(C.5) श्रोतको पर्याप्तता र सेवाहरु:

	नराम्रो	ठीकै	राम्रो	धेरै राम्रो	अति राम्रो	थाहा छैन
औषधीको उपलब्धता						
कर्मचारीको उपलब्धता						
महिला कर्मचारीको उपलब्धता						
पानीको उपलब्धता						
शौचालयको अवस्था						
उपकरणको उपलब्धता						
सेवाको स्तर						
संस्थाको सरसफाइ						
छुट्टै जाँच्ने कोठा						

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(C.6) स्वास्थ्य सेवा विवरण

	नराम्रो	ठीकै	राम्रो	धेरै राम्रो	अति राम्रो	थाहा छैन
सेवा/जाँचको गुणस्तर						
कुनैपनि समय						
औषधीको गुणस्तर						

(C.7) आर्थिक र भौगोलिक पहुँच

	नराम्रो	ठीकै	राम्रो	धेरै राम्रो	अति राम्रो	थाहा छैन
भौगोलिक पहुँच (दूरी+भूभाग)						
सेवा र औषधीको मूल्य						
औषधीको सजिलै उपलब्धता						

(C.8) तपाईं यस स्वास्थ्य संस्थाबाट पाइने सेवा र उपचारबाट कतिको सन्तुष्ट हुनुहुन्छ ?

1. कहिले पनि हुन्न
2. कहिलेकाहिं
3. प्रायजसो
4. सधैं सन्तुष्ट
5. थाहा छैन

टिप्पणी:

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SECTION D: स्वास्थ्य सेवाको प्रयोग गर्ने बानी बारे जानकारी

यो खण्ड भएको एक महिना भित्र विरामी नभएको घरको लागि मात्र प्रयोग गर्ने

(D.1) तल उल्लेखित स्वास्थ्य संस्थाहरु मध्ये तपाईं पछिल्लो पल्ट कुन स्वास्थ्य संस्थामा जानु भएको थियो? कति हप्ता अगाडि? (यदि कुनै पनि उत्तर ४ हप्ता भन्दा कम आयो भने प्रश्न B.1 मा जाने र ऊ एक महिना भित्र स्वास्थ्य संस्था किन गएको थियो भन्ने कुरा पत्ता लगाउने)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">महिला स्वास्थ्य स्वयंसेविका</td> <td style="width: 10%;"></td> <td style="width: 30%;">प्राथमिक स्वास्थ्य सेवा केन्द्र</td> <td style="width: 10%;"></td> </tr> <tr> <td>उप स्वास्थ्य चौकी</td> <td></td> <td>स्वास्थ्य चौकी</td> <td></td> </tr> <tr> <td>जिल्ला अस्पताल</td> <td></td> <td>धामी भौकी</td> <td></td> </tr> <tr> <td>प्राइभेट क्लिनिक</td> <td></td> <td>औषधी पसल</td> <td></td> </tr> </table>	महिला स्वास्थ्य स्वयंसेविका		प्राथमिक स्वास्थ्य सेवा केन्द्र		उप स्वास्थ्य चौकी		स्वास्थ्य चौकी		जिल्ला अस्पताल		धामी भौकी		प्राइभेट क्लिनिक		औषधी पसल	
महिला स्वास्थ्य स्वयंसेविका		प्राथमिक स्वास्थ्य सेवा केन्द्र															
उप स्वास्थ्य चौकी		स्वास्थ्य चौकी															
जिल्ला अस्पताल		धामी भौकी															
प्राइभेट क्लिनिक		औषधी पसल															
(D.2) तपाईं तल उल्लेखित स्वास्थ्य संस्था/स्वास्थ्यकर्मीहरुबाट कतिको सेवा लिनुहुन्छ ? 0 = कहिले पनि लिन 1= कहिलेकाहिँ लिन 2= प्राय जसो लिन 3= सधैं लिन	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">महिला स्वास्थ्य स्वयंसेविका</td> <td style="width: 10%;"></td> <td style="width: 30%;">प्राथमिक स्वास्थ्य सेवा केन्द्र</td> <td style="width: 10%;"></td> </tr> <tr> <td>उप स्वास्थ्य चौकी</td> <td></td> <td>स्वास्थ्य चौकी</td> <td></td> </tr> <tr> <td>जिल्ला अस्पताल</td> <td></td> <td>धामी भौकी</td> <td></td> </tr> <tr> <td>प्राइभेट क्लिनिक</td> <td></td> <td>औषधी पसल</td> <td></td> </tr> </table>	महिला स्वास्थ्य स्वयंसेविका		प्राथमिक स्वास्थ्य सेवा केन्द्र		उप स्वास्थ्य चौकी		स्वास्थ्य चौकी		जिल्ला अस्पताल		धामी भौकी		प्राइभेट क्लिनिक		औषधी पसल	
महिला स्वास्थ्य स्वयंसेविका		प्राथमिक स्वास्थ्य सेवा केन्द्र															
उप स्वास्थ्य चौकी		स्वास्थ्य चौकी															
जिल्ला अस्पताल		धामी भौकी															
प्राइभेट क्लिनिक		औषधी पसल															
(D.3) कपोकस्मित रोग (आफुलाई) (D.3.1) यदि तपाईंलाई सामान्य विमारी (जस्तै ज्वरो, खोकी, घाँटी दुख्ने, ग्याष्ट्रिक) भयो भने त्यसलाई निको पार्न सबैभन्दा पहिले के गर्नुहुन्छ ? (घरायसी उपचार कि घरभन्दा बाहिरको उपचार) (D.3.2) यदि तपाईंलाई जटिल समस्या (जस्तै निमोनिया, टि.बी., टाइफाइड) भयो भने त्यसलाई निको पार्न पहिले के गर्नुहुन्छ ?	1.....औषधी पसल 2.....धामी भौकी (प्रकार_____) 3.....महिला स्वास्थ्य स्वयंसेविका 4.....प्राइभेट क्लिनिक 5.....उपस्वास्थ्य चौकी 6.....स्वास्थ्य चौकी 7.....प्राथमिक स्वास्थ्य सेवा केन्द्र 8.....जिल्ला अस्पताल 9.....आफै उपचार (खुलाउनुहोस्_____) 10.....आयुर्वेदिक/होमियोप्याथिक संस्था 11.....अन्य (खुलाउनुहोस्_____)																
(D.4) कपोकस्मित रोग (बच्चा/बाला) तपाईंको बच्चा/बाला यदि निमोनिया वा फाडापखाला जस्ता स्वास्थ्य समस्या देखियो भने त्यसलाई निको पार्न तपाईं सबैभन्दा पहिले के गर्नुहुन्छ ? (घरमै औषधी गर्ने वा घर बाहिर) यदि घरमा बच्चा छैन भने 999 लेखेर अर्को प्रश्नमा जानुहोस्)	1.....औषधी पसल 2.....धामी भौकी (प्रकार_____) 3.....महिला स्वास्थ्य स्वयंसेविका 4.....प्राइभेट क्लिनिक 5.....उपस्वास्थ्य चौकी 6.....स्वास्थ्य चौकी 7.....प्राथमिक स्वास्थ्य सेवा केन्द्र 8.....जिल्ला अस्पताल 9.....आफै उपचार (खुलाउनुहोस्_____) 10.....आयुर्वेदिक/होमियोप्याथिक संस्था 11.....अन्य (खुलाउनुहोस्_____)																

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(D.5) कपोकल्पित रोग (जहानलाई) यदि सहभागी विवाहित हो भने तलका प्रश्नहरू सोध्नुहोस् । (D.5.1) यदि तपाईंको श्रीमान/श्रीमतीलाई जटिल बिमारी भयो भने त्यसलाई उपचार गर्न सबै भन्दा पहिले के गर्नुहुन्छ ? (D.5.2) यदि तपाईंको श्रीमान/श्रीमतीलाई सामान्य बिमारी भयो भने त्यसलाई उपचार गर्न सबै भन्दा पहिले के गर्नुहुन्छ ?	1.....औषधी पसल 2.....धामी भाँकी (प्रकार_____) 3.....महिला स्वास्थ्य स्वयंसेविका 4.....प्राइभेट क्लिनिक 5.....उपस्वास्थ्य चौकी 6.....स्वास्थ्य चौकी 7.....प्राथमिक स्वास्थ्य सेवा केन्द्र 8.....जिल्ला अस्पताल 9.....आफै उपचार (खुलाउनुहोस्_____) 10.....आयुर्वेदिक/होमियोप्याथिक संस्था 11.....अन्य (खुलाउनुहोस्_____) (D.5.1) (D.5.2)																																			
(D.6) तपाईंको विचारमा मानिसहरू विरामी हुनुको प्रमुख कारणहरू के के हुन् ? (पहिले खुला प्रश्नको रूपमा सोध्नुहोस् । यदि सहभागीले “थाहा छैन” भन्ने उत्तर दिएपछि मात्र तल उल्लेखित प्रतिक्रियाहरूको बारेमा सोध्नुहोस् । 1.....खाना/ फोहर पानी 2.....तातो चिसोको असन्तुलन 3.....लागु /दैविक शक्ति 4...भौतिक कारण(खसेर, एलर्जी, कडा परिश्रम आदि) 5..... खराब मानिस/चिजको संगत 6..... संक्रमण, किटाणु 7.....आफै/ परिवारद्वारा नराम्रो व्यवहार 8.....मौसम 9.....अरु कुनै प्राकृतिक कारणहरू (तारा, ग्रह) 10... चिन्ता a b 11...अन्य: _____ 12... थाहा भएन 	(D.6) कारणहरू उल्लेख गर्नुहोस् (पहिलो र दोस्रो कारणहरूमा गोली लगाउनुहोस्) प्राकृतिक (मौसम, तातो चिसोको असन्तुलन, खाना, पानी, किरा फट्याण्डा भौतिक कारणहरू आदि) दैविक कारणहरू (मन्त्र, श्राप, दुष्ट आत्मा, वोक्सी आदि) जैविक कारणहरू (वंशाणुगत, जीवाणु, संक्रमण आदि)																																			
(D.7) कम प्रयोग गर्नु/ बाधाहरू सामना गर्नु पर्ने कारणहरू सरकारी संस्थाहरूबाट सेवा लिनको लागि तपाईंले सामना गर्नु पर्ने प्रमुख बाधाहरू के के हुन् ? तपाईंलाई उक्त सेवा लिनबाट वञ्चित गर्ने प्रमुख कारणहरू के के हुन् ? (उपयुक्त सबैमा चिन्ह लगाउनुहोस् ।) प्रतिक्रिया:	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">महँगो शुल्क</td> <td style="width: 10%;"></td> <td style="width: 30%;">दूरी</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>औषधी नपाइनु</td> <td></td> <td>धेरै समय कुर्नुपर्ने</td> <td></td> <td></td> </tr> <tr> <td>महँगो यातायात</td> <td></td> <td>कम गुणस्तरको सेवा/संस्था</td> <td></td> <td></td> </tr> <tr> <td>स्वास्थ्यकर्मी अनुपस्थित हुनु</td> <td></td> <td>स्वास्थ्य संस्था बन्द हुनु</td> <td></td> <td></td> </tr> <tr> <td>डाक्टरले धेरै समय नदिनु</td> <td></td> <td>कर्मचारीद्वारा नराम्रो व्यवहार</td> <td></td> <td></td> </tr> <tr> <td>स्वास्थ्य संस्था फोहर हुनु</td> <td></td> <td>गोपनीयता नहुनु</td> <td></td> <td></td> </tr> <tr> <td>महिला स्वास्थ्यकर्मी नहुनु</td> <td></td> <td>जान नदिनु</td> <td></td> <td></td> </tr> </table>	महँगो शुल्क		दूरी			औषधी नपाइनु		धेरै समय कुर्नुपर्ने			महँगो यातायात		कम गुणस्तरको सेवा/संस्था			स्वास्थ्यकर्मी अनुपस्थित हुनु		स्वास्थ्य संस्था बन्द हुनु			डाक्टरले धेरै समय नदिनु		कर्मचारीद्वारा नराम्रो व्यवहार			स्वास्थ्य संस्था फोहर हुनु		गोपनीयता नहुनु			महिला स्वास्थ्यकर्मी नहुनु		जान नदिनु		
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NHSB-MK Household Survey Form

(D.8) स्वास्थ्य सेवामा परिवर्तन यदि तपाईंले आफ्नो स्वास्थ्य सेवामा केहि परिवर्तन ल्याउनु पर्यो भने के परिवर्तन ल्याउनु हुन्छ ? परिवर्तन ल्याउनुको कारण	प्रतिक्रिया:																				
(D.9) स्वास्थ्य सेवाको गुणस्तर तपाईंलाई तल उल्लेखित स्वास्थ्य संस्था वा स्वास्थ्यकर्मीहरूले दिने सेवाको गुणस्तर कस्तो लाग्छ ? 0.= खराब 1..= ठीकै 2.= राम्रो 3.= धेरै राम्रो 4.= अति राम्रो 5.= थाहा छैन	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">महिला स्वास्थ्य स्वयंसेविका</td> <td style="width: 10%;"></td> <td style="width: 30%;">प्राथमिक स्वास्थ्य सेवा केन्द्र</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>उप स्वास्थ्य चौकी</td> <td></td> <td>स्वास्थ्य चौकी</td> <td></td> <td></td> </tr> <tr> <td>जिल्ला अस्पताल</td> <td></td> <td>धामी भौकी</td> <td></td> <td></td> </tr> <tr> <td>प्राइभेट क्लिनिक</td> <td></td> <td>औषधी पसल</td> <td></td> <td></td> </tr> </table>	महिला स्वास्थ्य स्वयंसेविका		प्राथमिक स्वास्थ्य सेवा केन्द्र			उप स्वास्थ्य चौकी		स्वास्थ्य चौकी			जिल्ला अस्पताल		धामी भौकी			प्राइभेट क्लिनिक		औषधी पसल		
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प्राइभेट क्लिनिक		औषधी पसल																			

Appendix 3.10

Creation of Other Data Collection Instrument

In addition to the survey instrument, a structured health facility interview was created for health facility data collection purposes. The data from this interview was later used to create the health facility quality composite index (discussed later). The interview was an amalgam of items for the Nepal Living Standards Survey ‘Rural Community Questionnaire’, the MEASURE/DHS ‘Service Provision Assessment’ for health facilities and lab and pharmacy services, the ‘Facility Audit of Service Quality’ (FASQ) and the ‘Rapid Health Facility Assessment’ (RHFA) (CBS, 2003, 2011; CSTS+, 2007; IHFAN, 2008; MEASURE Evaluation, 2005; MEASURE/DHS, 2007). In addition, checklists for equipment, instrument and drug availability were taken from the Ministry of Health’s ‘Standard Guidelines for Operating SHPs, HPs and PHCCs’ and the “Essential Drugs List” for Nepal (MoHP, DATES; RTI, 2008). Finally, patient vignettes were added to enable an assessment of provider quality in comparison to standardized protocols (Peabody et al., 2000).

Informal TH interviews, VDC Office interviews and FCHV interviews were also created for the purpose of this study, but since this data was only for background purposes, these instruments will not be discussed here.

Appendix 3.10a

Health Facility Survey

NHSB-MK Health Facility/Health Worker Interview Form

I. Interview Overview

Interviewer Initials: _____

Code Given

VDC Name: _____ Ward #

Date of Interview: ____/____/____ Start Time: _____ End Time: _____

Person/s Interviewed?

II. Interview Section A: Facility Overview

Facility Type?

Question	Response																														
(A.1) Health personnel How many of each of the following providers work in this facility? [A.1.2] Number of female providers:	A.1.1 Record Total Number: A. 1.2 Record number of each provider <table border="1"> <thead> <tr> <th>Provider</th><th>Number</th></tr> </thead> <tbody> <tr><td>Specialists</td><td></td></tr> <tr><td>Medical Doctor (GP)</td><td></td></tr> <tr><td>HA</td><td></td></tr> <tr><td>Staff Nurse/PHN</td><td></td></tr> <tr><td>AHWs</td><td></td></tr> <tr><td>ANMs</td><td></td></tr> <tr><td>Lab Assistant/Tech.</td><td></td></tr> <tr><td>Radiology Assistant</td><td></td></tr> <tr><td>VHW</td><td></td></tr> <tr><td>MCHW</td><td></td></tr> <tr><td>Other Technical Staff</td><td></td></tr> <tr><td>Pharmacist</td><td></td></tr> <tr><td>Peon/Cleaners/Office Assistants</td><td></td></tr> <tr><td>FCHV</td><td></td></tr> </tbody> </table>	Provider	Number	Specialists		Medical Doctor (GP)		HA		Staff Nurse/PHN		AHWs		ANMs		Lab Assistant/Tech.		Radiology Assistant		VHW		MCHW		Other Technical Staff		Pharmacist		Peon/Cleaners/Office Assistants		FCHV	
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Peon/Cleaners/Office Assistants																															
FCHV																															
(A.2) Health facilities hours ER Hours: From: To:	OPD Hours: From To Total Hours opened: Days on which centre is closed: Mon/Tue/Wed/Thurs/Fri/Sat/Sun What can patients do if they get sick outside of the OPD hours?																														

Appendix 3.10a

Health Facility Survey

(A.3) Costs Ambulance service costs: <table border="1"> <tr> <td>To PHCC</td> <td></td> </tr> <tr> <td>To DH</td> <td></td> </tr> <tr> <td>From Local area to facility</td> <td></td> </tr> <tr> <td>Other:</td> <td></td> </tr> <tr> <td>Other:</td> <td></td> </tr> </table>		To PHCC		To DH		From Local area to facility		Other:		Other:		Registrations Fees	
		To PHCC											
		To DH											
		From Local area to facility											
		Other:											
		Other:											
		Counselling Services											
		X-Ray Cost											
		Blood Test											
		Urin Analysis											
Stool Analysis													
Ambulance Services													
Bed Charge													
Materials													
Other Costs													

(A.8)How often do you run outreach services? ORCs? Who runs these clinics? <i>Record days when clinics are held in each ward</i> <table border="1"> <tr> <td>Ward 1</td> <td></td> <td>Ward 2</td> <td></td> </tr> <tr> <td>Ward 3</td> <td></td> <td>Ward 4</td> <td></td> </tr> <tr> <td>Ward 5</td> <td></td> <td>Ward 6</td> <td></td> </tr> <tr> <td>Ward 7</td> <td></td> <td>Ward 8</td> <td></td> </tr> <tr> <td>Ward 9</td> <td></td> <td></td> <td></td> </tr> </table>				Ward 1		Ward 2		Ward 3		Ward 4		Ward 5		Ward 6		Ward 7		Ward 8		Ward 9					
Ward 1		Ward 2																							
Ward 3		Ward 4																							
Ward 5		Ward 6																							
Ward 7		Ward 8																							
Ward 9																									

Section B: Overview of Medical Cases

Use OPD registers, tickets and HMIS report for this section

(B.1) Number of OPD/IPD cases, number of referrals and number of deliveries in the last month (1 month prior to date of survey) <i>get this information from OPD register take a photograph of the OPD register and log book for previous month</i> Write average estimate here (range):		Number of OPD Cases	
		Number of IPD Cases	
		Number of Deliveries	
		Number of Referrals	

(B.2) Most Common Reasons for referrals of cases			
---	--	--	--

(B.3a) How far to most patients travel to get to this facility? What are the furthest VDCs/Wards which use this facility? <i>Photograph intake log book for last 1 month (if possible and make a note of where people are coming from: VDC and ward)</i>			
---	--	--	--

Appendix 3.10a

Health Facility Survey

(B.4) Referrals

Ask these questions

[B.4.1] To which facility do you refer most cases beyond your capacity?

[B.4.2] How often do you use the referral slips?

[B.4.3] Reasons for not using them?

[B.4.4] How often do you get referrals here from the FCHV?

[B.4.5] How often do you get referrals here from other facilities?

[B.4.6] Which facility/provider is most likely to refer patients here?

B.4.1

- 1.....Pharmacy
- 2.....Private facility
- 3.....SHP
- 4.....HP
- 5.....PHCC
- 6.....DH
- 7.....Regional Hospital
- 8.....Zonal Hospital
- 9.....Ayurvedic facility
- 10.....Other (specify:_____)

B.4.2

- 0.....none of the time
- 1.....some of the time
- 2.....most of the time
- 3.....all of the time

B.4.3

B.4.4

- 0.....not at all
- 1.....somewhat frequently
- 2.....frequently
- 3.....very frequently
- 4.....all of the time

B.4.5

- 0.....none of the time
- 1.....some of the time
- 2.....most of the time
- 3.....all of the time

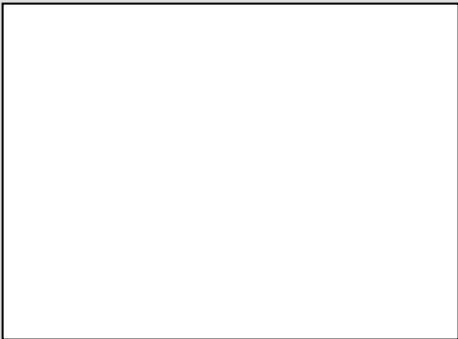
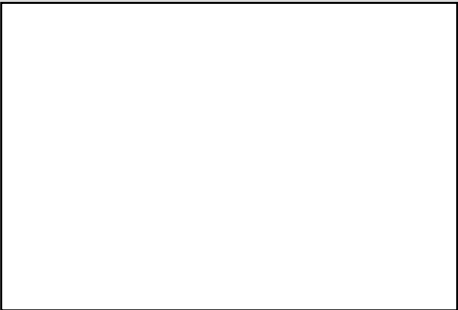
B.4.6

- 1.....Pharmacy
- 2.....Traditional Healer (type:_____)
- 3.....FCHV
- 4.....Private Clinic
- 5.....SHP
- 6.....HP
- 7.....PHCC
- 8.....DH
- 9.....Self care (specify:_____)
- 10.....Ayurvedic/homeopathic facility
- 11.....Other:_____

Appendix 3.10a

Health Facility Survey

Section C: Provider Treatment Behaviour (Vignettes)

(C.1) If a person came in here with a high-grade fever, what would you do? <i>Ask about tests he would perform, what he would examine, what he would say to patient, what treatment he would provide, would he refer etc.</i>	
(C.2) If a person came in here with a persistent cough for more than 2 weeks, what would you do?	
(C.3) If a young child came in here with diarrhoea, what would you do?	
(C.4) If a woman comes in here with vaginal discharge and abdominal pain, what would you do?	

Appendix 3.10a

Health Facility Survey

(C.5) If a boy comes in here with a broken leg, what would you do?

Section D: Provider Beliefs/Perceptions

(D.1) Feelings towards traditional healers

[D.1.1] How do you feel about traditional healers?

D.1.1 Record Response:

[D.1.2] How would you rate the services of traditional healers?

D.1.2

- 0.....poor
1.....fair
2.....good
3.....very good
4.....excellent

[D.1.3] Do you ever use the services of traditional healers?

D.1.3

- 0.....none of the time
1.....some of the time
2.....most of the time
3.....all of the time

Appendix 3.10a

Health Facility Survey

(D.2) What do you think are some of the major barriers patients face which prevent them from using government services? What do you think are some of the reasons for high underutilisation?	Record Response
(D.3) Why do you think so many people use the services of traditional healers/providers?	Record Response:
(D.4) How do you feel about private clinics/facilities?	Record Response:

Appendix 3.10a

Health Facility Survey

Section E: Distances to/from Facility:

Record distance in km if possible. If not, get an estimated time

(E.1) Distance to neighbouring VDC to East:	
(E.2) Distance to neighbouring VDC to West:	
(E.3) Distance to neighbouring VDC to South:	
(E.4) Distance to neighbouring VDC to North:	
(E.5) Distance to ward #1	
(E.6) Distance to ward #2	
(E.7) Distance to ward #3	
(E.8) Distance to ward #4	
(E.9) Distance to ward #5	
(E.10) Distance to ward #6	
(E.11) Distance to ward #7	
(E.12) Distance to ward #8	
(E.13) Distance to ward #9	
(E.14) Distance to next level facility (ie. HP, PHCC or DH)	
(E.15) Distance to facility after the facility listed in E.14 (ie. PHCC or DH or RH/ZH)	

Appendix 3.10a

Health Facility Survey

Necessary Equipment Checklist:

S.No.	Name of items	Quantity
1	Rubber Apron	2
2.	Plain Catheter (No. 12)	1 dozen
3.	Plain Catheter (No. 14)	1 dozen
4.	Foley's Catheter (No. 16)	6
5.	Foley's Catheter (No.18)	6
6.	Urobag	1 dozen
7.	Hot water bottle	2
8.	Macintosh Rubber sheet	12 meters
9.	Ryles Tube	7
10.	Test tubes	2 dozens
11.	Test tube holder	2
12.	Catgut suture	
	Plain 01	6
	Plain 02	6
	Chromic 01	6
	Chromic 02	6
13.	Disposable syringe needle (2 ml)	100
14.	Disposable syringe needle (5ml)	100
15.	Disposable syringe needle (30ml)	1 dozen
16.	Disposable needle (No.22)	50
17.	Disposable needle (No.23)	50
18.	Pricking needle	50
19.	Shaving set	2
20.	Measurement tape (1.5m)	2
21.	Suture needle (Round, Cutting)	6 packets
22.	Butterfly needle no. 22	1 dozen
23.	Butterfly needle no. 23	1 dozen

Appendix 3.10a

Health Facility Survey

24.	Soap (for handwashing)	3 dozens
25.	Detergent powder	6 packets
26.	A. B. Gauge (18x29cm)	12
27.	A. B. Bandage (90 cm)	1
28.	A. B. Cotton (450 gm)	20 rolls
29.	Rubber Gloves (No. 6.5)	1 dozen
30.	Rubber Gloves (No. 7)	1 dozen
31.	Gloves Powder	2 packets
32.	Adhesive Plaster	10 rolls
33.	Airway (Rubber) – different size	6
34.	Mattress (For examination table)	2
35.	Autoclave (Non electric)	1
36.	Kettle (5 litre)	2
37.	Wok (2 litre)	2
38.	Steel Wok 5 litres (For ORS)	1
39.	Tea Glass (for ORS)	6
40.	Steel Jug	1
41.	Table spoon	2
42.	Water filter	1
43.	Weighing machine (Adult)	1
44.	Weighing machine spring type (Child)	1
45.	Weighing machine (Neonate)	1
46.	Refrigerator (Kerosene or Electric)	1
47.	Heater (If there is electricity)	2
48.	Ceiling Fan (If there is electricity)	2
49.	Torchlight and Battery	3
50.	Icepack	50
51.	Vaccine carrier (for each VHW)	1
52.	IV set (Disposable)	24

Appendix 3.10a

Health Facility Survey

Necessary Instrument Checklist:

S. No.	Name of equipment or instruments	Quantity
1.	Thermometer	12
2.	Artery Forceps (Straight)	6
3.	Artery Forceps (Curved)	6
4.	Dissecting Forceps (Non toothed)	6
5.	Dissecting Forceps (Toothed)	3
6.	Sponge Holder	4
7.	Surgical Blade (No.3)	1 dozen
8.	Surgical Blade (No. 4)	1 dozen
9.	Knife Holder	2
10.	Needle Holder	2
11.	Chittle Forceps and Jar	2
12.	Tissue Forceps	2
13.	Surgical scissor	2
14.	Suture scissor	2
15.	Bandage cutting scissor	1
16.	Steel tray with cover	2
17.	Kidney tray (8 ounce)	6
18.	Steriliser steam	1
19.	Steel Gallipot (0.5 lit)	6
20.	Basin (5 lit)	2
21.	BP instrument	2
22.	Stethoscope	2
23.	Fetuscope	2
24.	Spirit lamp	2
25.	Tongue depressor	2
26.	Otoscope	1

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Health Facility Survey

Necessary Medicines Checklist:

S. No.	Name of medicines	Preparation	Dose
1.	Diazepam	Injection	10 mg
2.	Lignocaine	Injection	1% or 2%
3.	Acetyl Salicylic Acid	Tablet	100, 300 mg
4.	Ibuprofen	Tablet	200,400 mg
5.	Paracetamol	Tablet	500 mg
6.	Paracetamol	Syrup	125 mg/ml
7.	Chlorpheniramine	Tablet	4 mg
8.	Epinephrine	Injection	
9.	Pheniramine Maleate	Injection	22.75 gm, 1 ml
10.	Atropine	Injection	
11.	Diazepam	Tablet	5 mg
12.	Paraldehyde	Injection	2 ml, 5 ml
13.	Mebendazole	Tablet	100 mg
14.	Piperazine	Syrup	750mg/5ml
15.	Metronidazole	Tablet	200, 400 mg
16.	Benzyl Penicillin	Injection	10 mg
17.	Procaine Benzyl Penicillin	Injection	20 lakhs (200,000)
18.	Chloramphenicol	Capsule	250 mg
19.	Trimethoprim Sulfamethoxazole	Tablet	
20.	Tetracycline	Capsule	
21.	Amoxicillin	Capsule	250,500mg
22.	Diethyl carbamazine		
23.	Ferrous sulphate	Tablet	60 mg
24.	Hydrochlorothiazide	Tablet	
25.	Propanolol	Tablet	
26.	Gentian violet	Solution	1 %
27.	Acriflamin	Solution	
28.	Mercurochrome	Solution	
29.	Benzoic acid/Salicylic acid	Solution	
30.	Calamine	Lotion	
31.	Vaseline	Cream	
32.	Benzyl Benzoate Sulfur cream		
33.	Iodine	Solution	

Appendix 3.10a

Health Facility Survey

34.	Methylated Spirit		
35.	Savlon	Solution	
36.	Potassium Permanganate	Powder	
37.	Frusemide	Tablet	
38.	Aluminium Hydroxide	Tablet	250 mg
39.	Magnesium trisilicate	Suspension	500 mg
40.	Promethazine Hydrochloride	Tablet	25 mg
41.	Atropine	Injection	2ml
42.	Liquid Paraffin		
43.	Dexamethasone		
44.	Sulfacetamide	Injection/Tablet	
45.	Ephedrin	Nasal drop	
46.	Chloramphenicol	Eye drop	
47.	Glycerine sodium bicarbonate	Solution	
48.	Ergometrine		
49.	Aminophylline	Injection/Tablet	
50.	Epinephrine	Injection/Tablet	
51.	Salbutamol	Tablet	
52.	ORS	Powder	
53.	Glucose	Solution	5%
54.	Tetracycline	Ointment	
55.	Glucose Sodium Chloride	Saline	5%
56.	Sodium Chloride	Saline	0.9%
57.	Ringer Lactate	Saline	0.9 %
58.	Thiamine	Tablet	5mg
59.	Riboflavin	Tablet	5mg
60.	Retinol	Capsule	
61.	Nicotinamide		
62.	Pyridoxine		
63.	Dapsone	Tablet	10mg, 5mg
64.	Rifampicin	Tablet	300mg
65.	Ethambutol	Tablet	800mg
66.	Isoniazid	Tablet	
67.	Streptomycin	Injection	1 gm
68.	Thiacetazone and Isoniazid		

Appendix 3.10a

Health Facility Survey

69.	Primaquine		
70.	Folic Acid		
71.	Family Planning Methods		
	- Pills		
	- Condom		
	- Depo Provera		
72.	Iodine	Injection	
73.	Vaccines		
	- BCG		
	- DPT		
	- DT		
	- Polio		

Appendix 3.10a

Health Facility Survey

I. Necessary Preventative/Promotional Services:

Family Planning:

IUD		Depo	
Condoms		Oral contraceptive pills	

Safe Motherhood

Safe Deliveries		ANC	
PNC			

Immunization

DPT		BCG		Polio	
Measles		Tetanus Toxoid Vaccine		Rubella	

Control of Communicable Diseases

Diarrheal Disease		Leprosy		TB	
Malaria		STDs		HIV	
Environmental cleanliness teaching					

Nutritional Services

Weighing Babies/Growth Monitoring		Iodide Injections		Vit A Capsule	
Iron Tablets		Edu. About Breastfeeding		Treatment of severe malnutrition	

Appendix 3.10a

Health Facility Survey

VDC:

II. Necessary Treatment Services

Disease	Treatment protocol/Investigations Required (describe)
Wounds	
Fever	
Diarrhea	
Dysentery	
Cough/ARI	
Parasitic Infestation	
Leprosy	
TB	
AIDS	

Appendix 3.10a

Health Facility Survey

III. Necessary # of Rooms (check off):

- | | |
|---|---|
| - Waiting area for the patients | 1 |
| - Examination room | 1 |
| - Treatment room | 1 |
| - Registration or administration room | 1 |
| - Family planning or maternal and child health
program conducting room | 1 |
| - Store room | 1 |
| - Toilet | 1 |
| - Immunization room | 1 |

NHSB-MK Study Health Facility Interview Addendum:

VDC:_____SHP/HP/PHCC/OTHER

Respondent: Dr./HA/AHW/Nurse/Pharm/Lab tech/Peon/
ANM/FCHV/Assist/VHW/MCHW/Other:_____

1. For how many years has the facility been in operation?

No. of years

2. Does the facility have electric power? Y/N

- 2.1 Is the electricity always available during the times
when the facility is providing services?

ALWAYS AVAILABLE.....1

SOMETIMES INTERRUPTED.....2

- 2.2 What is the primary source of electric power?

CONNECTED TO GRID.....1

HYDROELECTRIC (LOCAL).....2

GENERATOR.....3

SOLAR.....4

OTHER.....5

3. What is the primary source of water at the facility?

PIPED WATER.....1

PUBLIC STANDPIPE.....2

HANDPUMP.....3

COVERED WELL/TUBEWELL.....4

OPEN WELL/NATURAL WELL.....5

STORAGE TANK.....6

CANAL/RIVER WATER.....7

OTHER.....8

- 3.1 Is the water outlet from this source available onsite
(500m from facility)? Y/N

- 3.2 Is there routinely a time of year when the facility
has severe shortages of or lack of water? Y/N

4. Does the facility have a separate latrine? Y/N

- 4.1 What is the functional status of the latrine?

FUNCTIONING, CLEAN.....3

FUNCTIONING, NOT CLEAN.....2

NOT FUNCTIONING.....1

5. Is there a working refrigerator in the facility? Y/N

6. Does the facility have: (a) blood pressure cuff? Y/N
(b) an examination table? Y/N

7. Which of the following tests does the facility/lab
perform? How much do each cost?

Type of Test	Tick is Yes	Fee
Blood Tests		
Urine Analysis		
Stool Analysis		
Malarial Parasite		
Pregnancy Test		
Mantoux Test (TB)		
Glucose Analysis		
Other:		
Other		

NHSB-MK Study Health Facility Interview Addendum:

8. Does the facility provide any of the following child health services? If so, how many times per month?

Service	# Days/Month	Outreach? Y/N
Routine Immunizations (DPT-HB-Hib-polio)		
Measles Immunization		
BCG Immunization		
Vit A Supplementation		
Rubella		
Tetanus Toxoid Booster		
Deworming		
Vision screening		
Consultation or curative services for sick child		
Growth monitoring		

- 8.1 Are routine immunizations offered every day? Y/N

- 8.2 Does the facility have any routine user-fees or charges for any child health services? Y/N

Explain:

9. Does the facility provide the following services? Circle

Antenatal Care Delivery Family Planning Injections

Diarrhea Tx Malaria Tx Minor Surgery/Stitches Tx of Broken bones

TB Tx HIV/AIDs Testing/Tx STD Testing/Tx Other

10. Is there a registration fee for any of the services? Y/N

FEE: _____

- 10.1 In the last month, how much did the facility receive as payment for registration fees and other charges?

	Rupees
Registration Fees	
Other Fees	
TOTAL	

11. Does the facility have beds for inpatient care? Y/N

NUMBER: _____

- 11.1 For Delivery? Y/N No.: _____

Specify type of bed/s available: _____

12. On average, how many patients does this facility treat each day?

12.1 IN-PATIENTS: _____

12.2 OUT-PATIENTS: _____

13. What are the three most common ailments that children come to this facility for treatment of?

1. _____ 2. _____
3. _____

NHSB-MK Study Health Facility Interview Addendum:

14. What are the three most common ailments for which adults seek treatment at this facility?

1. _____ 2. _____
3. _____

15. At present, does the facility have the following types of medicine?

Medicine Type	Y/N (if N, how long ago did they run out?)
Contraceptives	
ORS	
Analgesics (aspirin, pcm)	
Antibiotics (cotrim, pen.)	
Anti-malarials (chloroquine)	
Antehelminthic drugs (anti-worm drugs such as mebendazole)	
Iron Tablets	
Vit A Tablets	
Vaccines	
ARVs	
TB Drugs	

16. In the past 12 months, which of the above types of medicines were in short supply if any?

1. _____ 2. _____
3. _____

17. What is the source of your medicines and supplies?

NATIONAL MEDICAL STORES.....1

JOINT MEDICAL STORES.....2
LOCAL WAREHOUSE.....3
NGO/DONORS.....4
PRIVATE SOURCES.....5

17.1 When was the last time you received a routine supply of medicines, either that you ordered or that was part of a routine supply system?

WITHIN PRIOR 4 WEEKS.....1
BTW. 4-12 WEEKS.....2
MORE THAN 12 WEEKS.....3
NO ROUTINE SUPPLY.....4
DON'T KNOW.....5

17.2 Do you always receive a fixed quantity of meds or does the quantity vary according to recent need or activity level?

BASED ON ACTIVITY LEVEL.....1
STD. FIXED SUPPLY.....2
OTHER.....3
DON'T KNOW.....5

17.3 If there is a shortage of specific meds., btw orders, what is the most common procedure followed?

SPECIAL ORDER.....1
FACILITY PURCHASE.....2
CLIENT PURCHASE.....3
FACILITY BORROWS.....4
OTHER.....5

17.4 In the past 6 mo. Have you always, not always, or almost never received the amount of each medicine that you ordered? ALWAYS/ OFTEN / NEVER

NHSB-MK Study Health Facility Interview Addendum:

17.5 How long does it take for you to receive the medicines from the time you place the order to the time they arrive at your facility? (number of days)

DAYS: _____

18. Where do you store your vaccines?

FRIDGE.....1
VACCINE COOLER.....2
COLD WATER BATH.....3
OTHER.....4

19. How are injections given at this facility?

DISPOSABLE SYRINGES.....1
GLASS SYRINGES.....2
BOTH.....3

20. What sterilization method is most commonly used for sterilizing syringes and instruments at this facility?

BOILED WATER.....1
ELECTRIC STERILIZER.....2
STEAM PRESSURE.....3
AUTOCLAVE.....4
CHEMICAL STERILIZATION.....5
HEAT SOURCE (NON-ELECTRIC;
IE. STOVE or COOKER).....6

21. Which of the other following equipment do you use?

Equipment	Y/N	Equipment	Y/N
Hand Soap		Single-Use Hand Drying Towels	
Waste Receptacle with lid and liner		Sharps Container	
Disposable Latex Gloves		Disposable non-latex gloves	
Disinfectant		Disposable Needles	
Disposable syringes		Private Room (Number)	

22. If there is a serious medical emergency, where is the person referred?

Type of Emergency	Referred to?	Transport Used?	Distance in terms of time? (Days/Hrs)
Delivery			
Injury			
Psychiatric			

22.1 How much do patients typically spend on emergencies such as those above?

AMOUNT: _____

NHSB-MK Study Health Facility Interview Addendum:

23. How many hours a week is the facility open?

23.1 If the person in charge is not around, is the facility still opened? Y/N

If so, who is in charge? _____

23.2 What happens if a woman goes into labor or there is a serious health problem at night? _____

23.3 What happens if there is an emergency during the day, but nobody from the health facility is around?

24. CONDITION OF FACILITIES:

FLOOR:

SWEPT, NO OVIOUS DIRT OR WASTE? Y/N

COUNTERS/TABLES/CHAIRS:

WHIPED CLEAN-NO OBVIOUS DUST? Y/N

BROKEN EQUIPMENT, PAPER BOXES,
CLUTTER AROUND AREA

Y/N

WALLS:

REASONABLY CLEAN Y/N

DOORS:

NO OR MINOR DAMAGE Y/N

ROOF:

NO OR MINOR DAMAGE Y/N

NEEDLES OR SHARPS OUTSIDE
CONTAINERS

Y/N

SHARP CONTAINERS OVERFLOWING/
BROKEN

Y/N

BANDAGES OR NON-SHARP INFECTIOUS
WASTE OBSERVED OUTSIDE TRASH

Y/N

RATING OF FACILITY CLEANLINESS (1-5)

RATING OF QUALITY OF FACILITIES (1-5)

NHSB-MK Study Health Facility Interview Addendum:

PRIVACY OF EXAM ROOM:

AUDITORY / VISUAL/ BOTH/ NONE

25. AVAILABILITY OF OTHER EQUIPMENT

Item	Y/N	Condition
Infant Scale		
Child Scale		
Adult Scale		
Thermometer		
Timer		
Butterfly or scalp vein 21-23g or branula (intercath) 22-24g		
IV Fluid (D5NS, NS, ringers lactate)		
D5W IV Fluid		
Perfusion Sets		
Jar or pitcher for ORS		
Baby Warmer		
Birthing Kit		
Oxygen		

Take photographs of the following:

- Facilities (rooms, drug supply storage, birthing room, posters on the walls, beds, equipment)
- HMIS report for previous month
- Outside of the facility (a picture that shows the facility for the outside)
- OPD register for 1 month prior to the day of the interview
- IMCI register for 1 month prior to day of the interview
- Intake log book for 1 month prior to day of interview

25.1 Does the birthing kit contain the following? circle

SOAP SCISSORS/BLADE CLAMP/UMBILICAL TIE

ERGOMETRINE ORAL ERGO INJECTION

DECONTAMINANT IV FLUID SUTURES FORCEPS

GLOVES COTTON WOOL OTHER: _____

Appendix 3.11

Quantitative Research Team Selection, Training & Piloting

Selection of the Quantitative Research Team:

In order to select the best possible research team, I initially contacted my Nepali colleagues to ask for references of potential research assistants and compiled a short list. In addition to that, I put an advertisement in the local newspaper stating that I was looking for a research assistant who had a background in public health, who was fluent in both Nepali and English, who had experience living and working in rural areas, who had some experience conducting household surveys and who was capable of walking long distances. In response to my advertisement, I received 140 applications. In conjunction with my Nepali colleague I conducted a thorough review of all of the cover letters and resumes and ranked each of them on a scale based on their experiences, academic records and written English ability. I then shortlisted 40 candidates and had them come in to be interviewed in person. I asked them about their experiences, their interest in public health and their reasons for applying. I also had them all do a translation exercise to see how quickly they were able to translate between English and Nepali. I finally had them read a list of common illnesses in English and translate them each into Nepali on the spot. I rated them according to their ability to articulate themselves in English, their translation abilities, their relevant experiences, the quality of their questions and their level of interest. From that list of 40 I was able to narrow the selection down to three males and three women to assist with the data collection. A decision was made to ensure the team was gender balanced both for

the purpose of the interviews and for the purpose of my RAs personal safety. They represented a range of different backgrounds and ethnicities and came from different disciplines. One of my RAs was a graduate student in political science, one was a graduate student in psychology, one was a graduate student in anthropology and the others had either bachelors or masters in public health. They ranged in age from 23 to 30 years of age. They all had significant experiences conducting survey research and working as translators. One of them had even worked extensively in Makwanpur and was able to navigate the VDC very well.

During the data collection process, each of the RAs were assigned different roles and responsibilities to ensure that the collection process ran smoothly and that everything got accomplished in each VDC.

Training of the Quantitative Research Team:

All of the research assistants underwent an extensive training process in both Kathmandu and in Makwanpur District. For ten days they were trained in Kathmandu, followed by another ten days in the field. The trainings were designed to give them all a very good sense of the purpose of the study, the reason for the particular study design selected, and the logistics of the data collection process. They were also designed to encourage input on the data collection tools and process, and to foster a sense of study ownership. Moreover, they were designed to teach each of the RAs about data collection and research

methodology so that they might be able to conduct their own research studies in the future.

In order to encourage independent thinking, during each session I made a point of asking them why they thought I had made specific decisions or how they felt things might be done better or more efficiently. As a result of their input, I decided to have them work in teams of two, each covering three wards, rather than working individually. A significant amount of the training time was spent going over the different tools and making sure they were fully understood by all, and that the questions were being asked consistently and that the responses were being recorded uniformly. They all had the opportunity to do several mock interviews and to critique one another. They also had plenty of opportunity to practice the going over the clinical algorithms and recording patient symptoms as part of the diagnostic process (see Appendix 3.8).

After the training session in Kathamandu, the team spent another ten days in Makwanpur doing additional trainings in the field. Each RA carried out 10 interviews with households in Makwanpur to familiarize themselves with the survey under real conditions. They observed one another and offered feedback as well as got feedback from the study participants. I observed every interview using a checklist to assess them.

The checklist to assess each of the fieldworkers during their practice interviews addressed the following specific questions:

- 1) Did the fieldworker choose the household correctly using the random sampling method?
- 2) Was the fieldworker friendly?
- 3) Did the fieldworker introduce him/herself well?
- 4) Was the fieldworker respectful?
- 5) Did the fieldworker position him self on a level playing field with the respondent?
- 6) Did the fieldworker make a point of ensuring the respondents privacy in terms of where the interview was being carried out?
- 7) Did the fieldworker make the respondent feel comfortable?
- 8) Did the fieldworker properly explain the purpose of the study, the risks associated with it and get informed consent?
- 9) Did the fieldworker give the participant opportunity to refuse participation?
- 10) Did the fieldworker make sure to mention we are not affiliated with a hospital and are looking for their honest answers?
- 11) Did the fieldworker make sure to explicitly state we are not medical doctors and are not able to offer individual treatment?
- 12) Did the fieldworker make sure to say that we are not able to offer any rewards or incentives for participation
- 13) Did the fieldworker establish a good rapport with the interviewee?
- 14) Did the fieldworker speak clearly?
- 15) Did the fieldworker act professionally?
- 16) Did the fieldworker show engagement during the interview?
- 17) Did the fieldworker omit any questions by mistake?
- 18) Did the fieldworker document all responses clearly?
- 19) Did the fieldworker use the clinical algorithms correctly?
- 20) Did the fieldworker make sure to probe for illnesses and symptoms?
- 21) Did the fieldworker make sure to use specific dates or festivals to orient people to the exact timing of things?
- 22) Did the fieldworker allow the interview to flow smoothly?
- 23) Did the fieldworker have a good grasp of the questions?
- 24) Did the fieldworker read the questions as written and record the responses properly?
- 25) Did the fieldworker encourage questions and discussion at the end?
- 26) Did the fieldworker thank participant for their contribution?
- 27) Did the fieldworker answer all questions thoroughly and correctly?
- 28) Did the fieldworker provide the respondent with an information sheet and our contact information?
- 29) Did the fieldworker rush through the interview? Did s/he take too much time?

Piloting of the Quantitative Data Collection Instruments:

The piloting of the quantitative instruments and consent played a key role in checking their validity and sensitivity in the community and in helping me to devise the final versions in Nepali and English. The creation process involved the following five steps (1) Pre-piloting of various instruments and scales with a convenience sample at the household level in Makwanpur (2) Formal translation and back-translation of the instruments in conjunction with staff at Patan Hospital (3) Informal focus group discussions with Nepali colleagues and researchers in Kathmandu (4) Informal focus group discussions in Makwanpur district with villagers and (5) one-on-one piloting with a convenience sample at the household level.

(1) Pre- piloting:

The pre-piloting process involved a week-long trip to Makwanpur district with one translator. The goal of this step was to narrow down some of the questions we hoped to ask and to determine what scales might be most useful in assessing feelings about health services. It was also to determine if the two-week recall period would be sufficient to capture the illness burden. During this phase of the instrument design, my RA and I went door to door and asked people if they would be willing to answer a few questions about their health in the past two weeks and give us some input on different scales. Each interview only took ten minutes and resulted in us determining the following things: (1) The two week period for illness recall should be expanded to one month to increase the number

of illnesses we were able to document (2) Visual analogue scales were most effective for assessing pain in responses to illness (3) People had no difficulty using rating scales (poor, fair, good, excellent) to rate their feelings towards health services and preferred those scales to a 1-10 scale (4) Most people were able to recall the details of their illnesses very clearly within the month recall period, but sometimes were not able to recall the medicines they were given or the diagnosis they were told. The results of this pre-piloting phase allowed me to then develop the first version of our household survey.

(2) Translation and Back-Translation:

The translation process was discussed in the methods section itself, so it will not be touched upon here.

(3) Informal Focus Groups in Kathmandu:

Before piloting the survey in Kathmandu, two informal focus groups were organized with providers and patients in Kathmandu to solicit feedback on the first draft of the survey. The providers were culled from Patan Hospital and surrounding NGOs, and were selected based on their prior health research experiences and their experiences in Makwanpur. The patients were selected randomly from the outpatients attending the clinic at Patan Hospital that day, depending on their availability. Each person was given a copy of the survey prior to the FDG and we walked through the survey in detail during the FGD, going section by section to solicit feedback. The providers and patients were asked about the length, phrasing, clarity, content and potential responses for each

question. They were then asked to give their overall input in terms of whether they thought it would capture the data we hoped it would capture, how demanding it would be for the participants, whether or not they felt anything was missing or whether or not they felt any items were insensitive or should be excluded. As a result of their feedback, the questionnaire was modified and the coding categories were generated.

(4) Informal Focus Groups in Makwanpur:

Once the survey had been modified yet again, another trip was made to Makwanpur district with the research team to solicit feedback on the survey from the people and providers in Makwanpur. We chose to hold the FGD in two different VDCs in Makwanpur. Men and women were segregated to enable more thorough feedback from both genders. They were then told about the study and the purpose and asked what they thought and whether or not they felt people would be willing to participate. Each of the survey items were then asked to the group and they were told to respond in turn. After the entire survey was exhausted, they were each asked how they felt, what they felt was asked well, what they didn't understand, what they felt was missing, and how difficult they felt it was to answer the questions. As a result of the feedback from these focus groups, we made sure to include a more detailed tracer conditions list and to devise ways of anchoring people's memories better by using specific holidays. We also discovered that people needed to really be probed to get all of their symptoms and that they were not always aware of the proper type of provider they had consulted for treatment. To address the latter issue, a decision was

made that upon entering each new VDC we were going to map out all of the available health services that people were using in that VDC using key informants and simply by walking around. We would find out the names and locations of all of the providers to ensure that we were capturing accurate care-seeking behaviours and were accurately classifying pharmacies as pharmacies, private providers as private providers and SHPs as SHPs.

(5) One-on-One Household Piloting:

Finally, the last phase of the piloting process involved actually conducting test interview with 100 households selected based on convenience from several different wards within one VDC. The one-on-one piloting played a key role in finalising the order and timing of the questions and ensuring that people had no difficulties answering any of them. These interviews were also used to help generate further coding categories for the responses, to ensure that not too many answers were being coded as 'other' at the outset. Further, these interviews were used to test the consent procedure and make sure it was thorough and people did not feel any obligation to participate. As a result of the piloting, a decision was made to add visual aids to the knowledge-based questions and to ensure that each household member was asked in turn about his/her potential illnesses. A decision was also made to try to always approach the female spouse of the household head as the initial respondent because she was more often aware of whether or not someone in the household had been ill in the prior month. It was also determined that asking people to report the length of time it took them to get to a health facility was incredibly inaccurate and that it would be more useful to

use GPS mapping and my RAs documentation of the timing rather than the participants. This question was still asked, but it was corroborated against GPS estimates and my RA's distance and time calculations to produce the final times used in the write-ups.

Appendix 3.12

Preliminary Regression Model Creation

Overview of Explanatory/Independent Variables for Preliminary Models

From hundreds of potential variables which have been examined in the literature elsewhere as significantly impacting HSBs, the list was paired down to 66 explanatory variables of interest, based on their recurring significance in other contexts (although not yet examined in Nepal) and based on their significance in other HSB studies of Nepal.

HH Level SES Variables	Description of Variable	Corresponding Survey Question	Coding Scheme/Response Categories
No. HH Members	total number of members in the household	A.1.1: how many people live in this household (ie share 1 kitchen under 1 roof)	numerical value (continuous)
Crowding	number of household members per room	Calculation: (no. of HH members)/ (no rooms in HH)	numerical value (continuous)
No. Infants in HH	number of household members <1 year old	Calculated from question A.1.2	numerical value (continuous)
No. Children 1-5yo	number of household members 1 to 5 years old	Calculated from question A.1.2	numerical value (continuous)
No. Children 6-14yo	number of household members between 6 and 14 years old	Calculated from question A.1.2	numerical value (continuous)
No. People >60yo	number of household members >60 years old	Calculated from question A.1.2	numerical value (continuous)
No. Females in HH	number of females living in household	Calculated from question A.1.2	numerical value (continuous)
Income	Yearly income of entire household	(A.7) recorded in annual income	numerical value (continuous)
Land Ownership	how much land does household own (not including housing plot)	(A.9)	numerical value (continuous)
Land Price	cost of the household's land	calculated by taking the land_own_hect x cost of land in that VDC	numerical value (continuous)
Caste	caste of household	(A.2)	1=Brahmin, 2=Chhetri, 3=Muslim, 4=Newar, 5=Madhesi, 6=Tamang, 7=Gurung, 8=Chepang, 9=Magar, 10=Biswokarma, 11=Other Dalit, 12=Other, 13=Thakuri

Occupation	primary occupation of person paying household expenses	(A.4)	1a=subsistence farmer, 1b=commercial farmer (sells crops), 1c=animal husbandry, 2=migrant worker, 3=Business person, 4=Teacher/educator, 5=Other Government employee, 6=transport worker/driver, 7=construction worker/carpenter, 8=small shop owner, 9=tailor, 10=retired (pension), 11=unemployed (never worked), 12=porter, 13=other
Gender of HH Head	gender of the head of the household		M=0; F=1
Wealth Quintile	Composite index created from assets	Created using DHS method	1 – 5 (1=poorest; 5=wealthiest)
Education of Head	education of household head	(A.5)	0 = none, 1 = class 1-5, 2=class 6-8, 3=class 9-10, 4 = +2, 5=university

Illness Variables			
Diagnosis (ICD)	ICD classification of illness episode; general range	How would you categorize this illness using the ICD-10 codes - categorizations done by doctors using collection of symptoms and clinical algorithms	A00-B99, C00-D48, D50-D89, E00-E90, F00-F99, G00-G99, H00-H59, H60-H95, I00-I99, J00-J99, K00-K93, L00-L99, M00-M99, N00-N99, P00-P96, Q00-Q99, R00-R99, S00-T98
Illness Aetiology 1 °	aetiology beliefs primary	(B.4) What do you think was responsible for this sickness/problem? FIRST RESPONSE	01 food/diet/bad water; 02 humoral imbalance (hot and cold); 03 magico-religious/supernatural forces; 04 physical factors (ie fall allergy strenuous work); 05 exposure to impure person/thing; 06 infection microorganism; 07 moral misbehaviour of self/family; 08 weather/climate; 09 other natural factors (ie. stars/planets); 10 stress/other emotions; 11 Unsanitary environment; 12 Other; 13 Unknown;

Illness Aetiology 2 °	aetiology belief secondary	(B.4) What do you think was responsible for this sickness/problem? SECOND RESPONSE	01 food/diet/bad water; 02 humoral imbalance (hot and cold); 03 magico-religious/supernatural forces; 04 physical factors (ie fall allergy strenuous work); 05 exposure to impure person/thing; 06 infection microorganism; 07 moral misbehaviour of self/family08 weather/climate; 09 other natural factors (ie. stars/planets); 10 stress/other emotions; 11 Unsanitary environment; 12 Other; 13 Unknown;
Illness Aetiology 3 °	aetiology beliefs tertiary	(B.4) What do you think was responsible for this sickness/problem? THIRD RESPONSE	01 food/diet/bad water; 02 humoral imbalance (hot and cold); 03 magico-religious/supernatural forces; 04 physical factors (ie fall allergy strenuous work); 05 exposure to impure person/thing; 06 infection microorganism; 07 moral misbehaviour of self/family08 weather/climate; 09 other natural factors (ie. stars/planets); 10 stress/other emotions; 11 Unsanitary environment; 12 Other; 13 Unknown;
Illness Aetiology – Different beliefs	does household have multiple different beliefs regarding illness aetiology	recoding of previous illness aetiology questions	0 = only natural, internal or biological aetiology beliefs, 1 = only supernatural aetiology beliefs, 2 = natural and supernatural aetiology beliefs; BLANK IF aetiology is unk
No. of Days in Bed	number of days in bed because of illness (objective measure of severity from pt. response)	[B.5.1] Number of days in bed	numerical value; left blank for children 1.5 years and younger

No. of Days Unable to Work	number of days unable to work/perform regular household duties/ attend school/play normally (objective measure of severity)	[B.5.2] Number of days unable to work/perform regular household duties/attend school/play normally (in addition to those days during which were ill in bed)	numerical value (continuous)
Worry Rating	how much the illness worried respondent (subjective measure of severity)	[B.5.3] How much did this problem/illness concern/worry you?	1 not at all, 2 a little bit/somewhat, 3 a lot, 4 an extreme amount
Pt Severity Rating	severity of illness rated according to patient (subjective measure of severity)	[B.5.5] How would you rate the severity of this illness/condition	1 not at all severe, 2 somewhat severe, 3 very severe, 4 life-threatening
Pain Rating	how painful was this illness (subjective measure of severity)	[B.5.4] How would you rate your pain/discomfort? Use VAS from 1-6	Number 1-6 (1 is lowest level of pain, 6 is highest) (whole numbers only)
Objective Severity (weighted)	objective measure of severity weighted so that the number of days unable to work is worth less (half of the value) than the number of days in bed	Equation = no. days in bed + (0.5*no days unable to work)	numerical value (continuous)
Objective Severity (unweighted)	objective measure of severity without weighting (average of objective measures of severity -- ie the number of days in bed and number of days unable to work/attend school)	Equation = (no days in bed + no of days unable to work)/2	numerical value (continuous)
Subjective Severity (Avg)	subjective measure of severity created by combining the other three subjective severity measures from the patient data only (combining worry, severity rating and pain scale)	Equation = (patient severity rating + pain rating + worry rating)	numerical value (continuous)

DUSOI Rating	composite severity rating from doctor (Duke Severity of Illness Scale)	how severe would you rate this illness according to: symptoms, complications, prognosis and treatability. Calculated by adding all of these 4 categories up (0-5 each) dividing by 16 and multiplying by 100 (see equation below)	numerical value (continuous)
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Patient Characteristics			
Patient Gender	gender of person who is sick from illness being focused on	(B.1) patient gender	M=0, F=1
Patient Age	age of person who is sick from illness being focused on	(B.1) patient age	numerical value (continuous)

Health Facility Characteristics			
Distance from Tole	Distance to nearest government facility from the tole where HH is located	calculated using GPS coordinates, altitudes and haversine equation [from HF survey]	numerical, continuous
Drug Availability	Availability of medicines at closest government health facility	calculated by adding up all of the available drugs on the list (MAX = 78) [from HF survey]	0 = less than 50% of drugs available; 1 = 50% + drugs available
Equipment Availability	Availability of Equipment at closest government health facility	Calculated by adding up all of the available equipment on the list (if equipment is partially available, +1; if eq is fully available +2; is not available = 0 -- MAX Value = 104, which corresponds to +2 for all 52 items [from HF survey]	0 = less than 50% of equipment available; 1 = 50% + of equipment available
Instrument Availability	Availability of medical instruments at closest government health facility	Calculated by adding up all of the available instruments on the list (MAX = 52) + 1 if partially available, +2 if fully available, +0 if not available for all 26 items [from HF survey]	0 = less than 50% of instruments available; 1 = 50% + instruments available
Room Availability	Availability of rooms at closest government health facility	Calculated by adding up the total number of rooms available (Max should be 7, but some health facilities have more) [from HF survey]	0 = inadequate #, 1 = adequate #

Open Hours	Number of hours during which the closest government facility is opened less than the maximum of 6 hours	Calculated by subtracting 1 for each hour under the maximum	(-2) = facility opened for 4 hours/day; (-1.5) = facility opened for 4.5 hours/day; (-1) = facility opened for 5 hours/day; (-.5) = facility opened for 5.5 hours/day; (0) = facility opened for 6 hours/day -> converted also into a binary variable where 0= less than 6 hours and 1= 6+ hours
Treatment Quality	Composite of all treatment quality indices: cough, fever, diarrhea and wound care treatment algorithms	Calculated by adding correct number of steps executed for each of the individual treatment algorithms (MAX =33) - health providers were given vignettes and asked to complete a checklist about the care they would provide to patients with the given illnesses/conditions/symptoms	Whole number ranging from 0 to 33
Cost	Affordability of services at the closest government facility	Is there a registration fee at the facility?	1 = free of charge; 0 = registration fee
Preventative Services	Availability of preventative services at the closest government facility	Calculated by adding 1 for each available service (MAX=26)	0 = less than 50% of required services available; 1 = 50% + of required services available
Water Type	Type of water available at the closest government facility	From health facility survey	0 = canal/river, 1 = open well, 2=covered well, 3 = handpump, 4 = public standpipe, 5 = storage tank, 6= piped water

Electricity Type	Type of electricity available at the closest government facility	[from HF survey]	0 = none, 1 = solar, 2 = hydroelectric, 3 = generator
Outreach Services	Number of days per week during which outreach clinics are held through the closest government facility	[from HF survey]	(-1) = 0 days/month, 0 = 1 to 2 days/month, (+1) = 3 days/month; (+2) = 4 days/month, (+3) = 5 days/month
Staff Availability	Overall availability of staff at the closest government facility	calculated by subtracting the required number of staff from the actual number of staff (if the number is negative, the health facility is missing staff members, if it is 0 there are the correct number of total staff, and if it is positive, there are more staff members than required) [from HF survey]	Number ranging from -3 to +3, where +3 is three more staff than required and -3 is three fewer staff members than required
Facility Head Availability	Whether or not the closest government facility is missing the head (HA or AHW)	[from HF survey]	1 = head is not missing; 0 = head is missing
Female Staff Availability	Availability of female staff members at the closest government facility	Total number of female staff available in the facility [from HF survey]	numerical value (continuous)
Cleanliness	Cleanliness of closest government health facility	Calculated using a cleanliness checklist (MAX = 14) [from HF survey]	Whole number ranging from 0 to 14
Diagnostic Test Availability	Availability of diagnostic tests at the closest government facility	Calculated by adding 1 for each test available (Max = 7) [from HF survey]	0 = less than 50% of required tests available; 1 = 50% + of required tests available

Out of Hours Services	Availability of out of hours services at the closest government facility	Calculated by adding 1 if ambulance is available, adding 2 if ER services are available and adding 3 if inpatient services are available (MAX = 1 + 2 + 3 = 6) [from HF survey]	Whole number ranging from 0-6
Ratings: Health Personnel Practices & Conduct	Quality of services as rated by the household regarding health personnel practices and conduct	[C.4] How would you rate the services according to: Staff attitudes, clarity of health provider explanations, health provider respect of patients [from HF survey]	0 = poor, 1= fair, 2= good, 3= very good, 4 = excellent, blank if don't know/unable to respond
Ratings: Adequacy of Resources & Services	Quality of services as rated by household regarding adequacy of resources and services	[C.5] How would you rate the health facility in terms of avail of meds, avail of staff, avail of female providers, avail of water, avail of equipment, quality of bathrooms, cleanliness of facilities and privacy of exam rooms [from HF survey]	0 = poor, 1= fair, 2= good, 3= very good, 4 = excellent, blank if don't know/unable to respond
Ratings: Health Care Delivery	Quality of services as rated by household regarding health care delivery	[C.6] How would you rate the health facility in terms of quality of care/exam, wait time, quality of meds provided [from HF survey]	0 = poor, 1= fair, 2= good, 3= very good, 4 = excellent, blank if don't know/unable to respond
Ratings: Financial and Physical Accessibility/Affordability	Quality of services as rated by household regarding financial and physical accessibility/affordability	[C.7] How would you rate this health facility in terms of physical accessibility, affordability, ease of obtaining meds? [from HF survey]	0 = poor, 1= fair, 2= good, 3= very good, 4 = excellent, blank if don't know/unable to respond

Road Access	Road Accessibility of closest government health facility	Is the health facility road accessible?	0 = no, not road accessible, 1 = gravel road accessible, 2= paved road accessible
Toilet Quality	Quality of toilets at the closest government health facility	Does the health facility have a functional toilet?	0 = no toilet, 1 = not functional, 2 = not clean, functional, 3 = clean, functional
Distance to District Hospital	Distance between closest government health facility in VDC and the District Hospital	How far (in Km) is the health facility used by the people in this tole from the District hospital?	0 = above average distance; 1 = average or below
Distance to Primary Health Care Centre	Distance between closest government health facility in VDC and the nearest Primary Health Care Centre	How far (in Km) is the facility used by people in this tole from the nearest PHCC?	0 = above average distance; 1 = average or below ; N/A if the closest health facility is a PHCC

Knowledge Variables			
Nearest Health Facility	knowledge regarding the nearest government health facility	[A.10.1] What type of health facility is nearest facility to your house (in your own VDC)? Is it SHP, HP, PHCC?	0 = incorrect, don't know; 1 = correct, know
Lowest Level of Government Care	Knowledge regarding lowest level of gov care	[A.10.2] What is the lowest level of facility based government care in Nepal called? (answer: SHP)	0 = incorrect, don't know; 1 = correct, know
Referral System	knowledge regarding the referral system of government services	[A.10.3] If someone gets sick and goes to the HP for care, where is the health provider supposed to send the sick person if he cannot treat that person? (answer: PHCC)	0 = incorrect, don't know; 1 = correct, know

Free Essential Services Availability	Knowledge regarding availability of free essential care services at government facilities	[A.10.4] Can you tell me which government facilities offer free care and medicines? (answer: all three)	0 = incorrect, don't know; 1 = correct, know
Availability of Medical Doctors	Knowledge regarding availability of a medical doctor in the government system	[A.11.1] Can you tell me which government health facility should have a medical doctor available at it (answer: PHCC)	0 = incorrect, don't know; 1 = correct, know
Role of FCHV	Knowledge regarding role of FCHV	[A.11.2] Can you tell me what the FCHV does and who she is? - converted to a binary variable	0 = incorrect, don't know/minimal knowledge; 1 = correct, know/some or a lot of knowledge about roles and responsibilities
Ward-Level SES Variables			
Ward Infrastructure	Composite index breaking down ward into categories based on infrastructure	Calculated using factor analysis	1 = low infrastructure; 2=medium infrastructure; 3 = high infrastructure

Overview of Dependent Variable/Outcomes for Preliminary Models

While a handful of previous studies of HSBs have used delays to care-seeking as an important outcome measure, the majority have looked at provider choices broken down into a series of dichotomous decisions for regression purposes. In an effort to be as comprehensive as possible, and not simply to limit the outcomes to a single dichotomous choice, which would inevitably reduce the complexity of a very complex process, six different sets of models were run to examine not only the factors associated with greater likelihood of illness (a necessary starting point), or the factor associated with delays in care-seeking, but also the factors which influenced initial provider choices, specific provider choices, location of provider choices and numbers of providers utilised. By choosing to examine so many different outcome variables we were able to look at HSBs as an entire process and not just one decision – whether or not to seek care. This provided much richer data overall because it allowed us to understand what factors change as you move from one set of decisions to the next in the HSB process. The specific outcome variables can be found in at the end of this appendix.

Overview of the Different Sets of Outcome Variables for the Preliminary and Final Models:

- A Models** – Illness Episodes
- B Models** – Delays in Care-Seeking
- C Models** – Order of Treatment (care used initially and last)
- D Models** – Modalities of Care (specific providers used)
- E Model** – Number of Providers
- F Models** – Location of Care (within ward, within VDC)

Construction of the Preliminary Models:

Prior to running the final regression models, a series of preliminary logistical and linear regression models were run using each of the following categories of independent variables: household characteristics, patient characteristics, illness characteristics, health facility characteristics, and knowledge variables (table A). Each of these categories of variables were initially examined independently from each of the other categories – taking each in turn (ie. only looking at the household SES variables and the relationship to the outcome variables).

Table A

Overview of the independent variables which were used in the preliminary regression model analyses

Independent Variables/Input Variables for Preliminary Models		
Patient Characteristics	Gender *	
	Age ^	
	Head vs. non-head*	
Household Characteristics	Education of HH. Head❖	
	Annual Income (in NPR)⌘	
	Land ownership (in hectares)⌘; Land price (in NPR)⌘	
	Wealth Quintile□	
	HH size ⌘; Crowding (no. of HH members/rooms) ⌘	
	Caste❖	
	Household composition: No. of infants, children (1-5), children (6-14), females & adults >60 yo in HH⌘	
	Occupation of primary breadwinner❖	
Illness Characteristics	Severity ratings	Objective severity: no. of days in bed & no. of days unable to perform regular duties ⌘; weighted and un-weighted averages ⌘
		Patient worry❖
		Patient pain: VAS❖
		Patient severity rating❖
		Doctor severity rating ❖; DUSOI Scale❖
	Diagnosis: ICD Code❖	
	Primary, Secondary and tertiary Aetiology beliefs❖ Multiple different aetiology beliefs*	
Ward-Level Characteristics	Ward-level infrastructure score□	
Health Facility Characteristics	Distance from tole to nearest government facility (in km) ⌘;	
	Distance to government facility in own VDC⌘	
	Subjective quality ratings of government facility□	
	Objective quality ratings of nearest government facility – personnel, infrastructure, costs, equipment availability, hours, medicine availability, etc. (analysed individually and as composite) *□	
Knowledge Variables	Knowledge of free essential services *	
	Knowledge of FCHV *	
	Knowledge of availability of MBBS doctors in government system *	
	Knowledge of government health system structure*	
	Knowledge of the government referral system*	

KEY: ⌘ = continuous variable; □ = composite index (categorical variable);

❖ = categorical variable; *= Binary variable

For the logistical regression models, the following three categories of outcome/dependent variables were used: whether or not a household

experienced an episode of illness during the survey period (A models), the order in which various care options were sought (C* models) and the modalities of care used in household care trajectories (D* models), the number of providers used (E* model) and the location of where care was sought (F* models) (table X).

Table B

Overview of the dependent variables which were used in the preliminary logistical regression analyses

Dependent/Outcome Variables for Preliminary Models	
A. Whether or not a household experiences illness: Y/N? [Models A.1-A.3]	
C*. Treatment order: allopathic 1 st , 2 nd 3 rd ; traditional first 1 st , 2 nd 3 rd ; home 1 st , 2 nd 3 rd ; other 1 st , 2 nd 3 rd ; allopathic last: Y/N? [Models C.1.1-C.5.2]	
D*. Modalities of care: specific providers utilised [Models D.1*-D.7]	D.1* None vs. some
	D.2* Home vs. outside
	D.3* Traditional vs. allopathic
	D.4* Private vs. government
	D.5* FCHV vs.gov. facility
	D.6* Traditional vs. pharmacy
	D.7* Allopathic vs. pharmacy
E*. Number of Providers Used [Model E.1]	E.1* One provider vs. more than one provider
F*. Location where treatment was sought [Models F.1 & F.2]	F.1* Same ward vs. other ward
	F.2* Same VDC vs. Other VDC

Before the models were run, each of the categories of variables were examined independently following the same procedure for each category. SPSS (V.17.0, SPSS Inc., IL, USA) was used for all of the regression analyses. The following steps provide a generic overview of the procedure followed for the preliminary logistical regression analyses:

- 1) The correlations amongst all of the variables in a given category were determined using the Pearson correlation coefficient (see **Appendix 7.2**)
- 2) All of those variables which were significantly correlated ($p < 0.05$) with the dependent variable of interest were selected for further analysis
- 3) Test of multicollinearity were run on the variables selected in step 2 to determine if these independent variables were highly correlated with one

another. Because logistical regression is a sensitive technique, we decided to only include those independent variables whose variance inflation factor (VIF) was less than 2.5 (Allison, 1999).

- 4) Those independent variables that made it through step 3, were plugged into the preliminary regression model, and the effect size was determined using the WALD chi-squared test. Those variables for which the p-value was less than 0.05 were considered to have a statistically significant effect on the output variable examined, when controlling for other variables in that same category. Please note: for categorical input variables, the first category was always taken as the reference category and the other categories were analysed in relation to it.
- 5) In addition to the WALD test, the omnibus test of model coefficients was run, a Cox & Snell test was run, a Nagelkerke test was run and a Hosmer & Lemeshow test was run to determine if the model was fitting. For the Hosmer & Lemeshow test, if the p value was greater than 0.05, the model was considered a good fit.
- 6) The same procedure was repeated separately for each of the different output variables and each of the categories of independent variables, resulting in a total of 6 x 36 (216) preliminary logistical regression models being run

In addition to running 216 logistical regression models, 24 preliminary linear regression models were also running using the same categories of independent variables and examining the delay in care-seeking (in hours) as the dependent variable (B* models; table C).

Table C

Overview of the dependent variables which were used in the preliminary linear regression analyses

Dependent/Outcome Variables
B.1* length of time before seeking care outside home
B.2* length of time before seeking care from an allopathic provider
B.3* length of time before seeking care from an allopathic provider/pharmacist
B.4* length of delay between outside care option 1 and outside care option 2

Just like for the logistical regression models, each of the categories of input variables were examined independently first in order to determine which specific variables within the different categories were associated with delays in care-seeking. The following steps provide a generic overview of the procedure followed for the initial linear regression analyses:

- 1) Tested the output variables for normality in the following ways: visually using a histogram and using a Shapiro-Wilks test. Since output variables B.1-B.4 were not normally distributed, a log transformation of the output data was done
- 2) The correlations amongst all of the variables in a given category were determined using the Pearson correlation coefficient (same as was done for the logistical regression models).
- 3) All of those variables which were significantly correlated ($p < 0.05$) with the dependent variable of interest were selected for further analysis
- 4) Test of multicollinearity were run on the variables selected in step 3 to determine if these independent variables were highly correlated with one another. Because logistical regression is a sensitive technique, we decided to only include those independent variables whose variance inflation factor (VIF) was less than 10 (Allison, 1999).
- 5) Those variables that made it through step 4 were plugged into the preliminary regression models, and multiple linear regression models were run. An ANOVA test was run to determine how much of the model variance was explained by the independent variables with respect to the dependent variable. Please note: if the independent variable was categorical, a dummy variable was created and this was plugged into the model with the first dummy category considered as a reference.
- 6) In addition, a Fischer test was run to determine if the model was working.

Preliminary Regression Models A Output Variables: Illness Episodes [logistical regression]

Model Number/Explanation	(0)	(1)
A.1: Whether or not household had illness in the last 4 weeks	No	Yes
A.2: Whether or not household had illness in the last 2 weeks	No	Yes
A.3: Number of illness episodes total	1	2+

Preliminary Regression Model C Output Variables: Treatment Order [logistical regression]

Model Number/Explanation	(0)	(1)
C.1*: Home care first	No	Yes
C.2*: Allopathic provider first	No	Yes
C.3*: TH first	No	Yes
C.4*: Pharmacy first	No	Yes
C.5* Pharm+Allopathic Last vs TH last	TH or Other last	Allopathic &/or Pharm Last
C.6*: Other care first	No	Yes
C.7*: TH second	No	Yes
C.8*: Allopathic second	No	Yes
C.9*: Pharmacy second	No	Yes
C.10*: Home care second	No	Yes
C.11* TH third	No	Yes
C.12* Allopathic third	No	Yes
C.13* Pharmacy third	No	Yes
C.14* Home care third	No	Yes
C.15* Outside home first	No	Yes
C.16* Outside home second	No	Yes
C.17* Outside home third	No	Yes
C.18* Allopathic+Pharm or TH first	TH first	Allopathic &/or Pharm First

Preliminary Regression Model D* Output Variables: Modalities of Care [logistical regression]

Model Number/Explanation	(0)	(1)
D.1*: no care versus some care	None	Some
D.2*: home care only versus outside care	Home only	Outside care sought
D.3*: private versus government	Government services (before private)	Private clinic (before government)
D.4*: facility versus FCHV 1 st	FCHV (before facility-based care)	Facility-based government care (before FCHV)

Preliminary Regression Model E* Output Variables: Number of Providers [logistical regression]

Model Number/Explanation	(0)	(1)
E.1*: Provider numbers	1 provider sought	>1 provider sought

Preliminary Regression Model F* Output Variables: Location of Care [logistical regression]

Model Number/Explanation	(0)	(1)
F.1* Same VDC versus other VDC	Same VDC	Other VDC
F.2* Same ward versus other ward	Same ward	Other ward

Preliminary Regression Model G* Output Variables: Additional Models [logistical regression]

Model Number/Explanation	(0)	(1)
G.1* Home vs. Outside Care First	Home first	Outside first
G.2* TH vs. Allopathic	TH (1 st)	Allopathic (1 st)
G.3* TH vs. Allopathic/Pharm	TH (1 st)	Allopathic/Pharm (1 st)
G.4* Allopathic ONLY vs. TH ONLY	TH ONLY	Allopathic ONLY
G.5* TH ONLY vs. Allopathic/Pharm ONLY	TH ONLY	Allopathic/Pharm ONLY
G.6* TH vs. Pharmacy	TH (1 st)	Pharmacy (1 st)
G.7* Pharmacy vs. Allopathic	Pharmacy (1 st)	Allopathic (1 st)

Appendix 3.13

Construction of Wealth Quintile, Health Facility Quality, Ward-Level SES and Health Service Knowledge Composite Indices Using Factor Analysis

Overview of the Construction of Wealth Composite Indices Using Factor Analysis:

Ideally, wealth divisions should be done using detail consumption data. However, collection of consumption data is usually complex and involves a lot of underestimation. Thus, an indirect approach of measuring wealth has been developed and used in some of the well-known nationally representative surveys, such as the Demographic and Health Surveys. This section describes the process that was used to create the wealth quintiles and other composite indices used in this dissertation. The DHS method of principal component analysis was followed (Deaton & Zaidi, 2002; O'Donnell, van Doorslaer, Wagstaff & Lindelou, 2008; Rutstein & Johnson, 2004).

Wealth Quintiles: Indirect Estimation

Using this method wealth is derived from the condition of the household and the possession of specific household items (assets). With so many variables capturing so many different dimensions of household SES, it is often necessary to construct a single dimension using information from all the variables. This leads to the creation of a single wealth index. A statistical technique called Principle Component Analysis (PCA) is used to re-express the multivariate data and extract the number of dimensions (factors) required for this index creation (Pritchett, 2001; Vyas & Kumaranayake, 2006). For the purpose of this study, only one dimension was extracted as we wanted to have measurement of wealth. Since PCA is based on the correlation of the different variables and we want to extract only one dimension, physical

infrastructure variables and assets variables were converted into binary variables before applying the PCA. The PCA was carried out using PAWS v. 18.0.

Individual Variables Used in the PCA for Wealth Quintiles:

Household Infrastructural Variables (14 binary, 1 = Yes, 0 = No)

1. Wall type
 - a. Tin
 - b. Wood
 - c. Mud
 - d. Brick/Stone/Cement
2. Floor type
 - a. Dirt/Mud
 - b. Wood
 - c. Cement
3. Roof type
 - a. Temporary
 - b. Permanent
4. Toilet type
 - a. No toilet
 - b. Outdoors
 - c. Inside
5. Water supply type
 - a. Well/spring
 - b. Tap

Household Asset Variables (6 binary, 1 = Yes, 0 = No):

1. Transport
 - a. Oxcart
 - b. Bicycle
 - c. Motorcycle
2. Amenities
 - a. Radio
 - b. Fridge
 - c. Television

All 20 of these binary variables were included in the PCA to assign households to one of five wealth quintiles (1=poorest, 5 = wealthiest).

The Syntax Used in the Factor Analysis Process:

Part I:

`factorvars=wall_tin to assets_material_tv`

(This tells SPSS to include all the 20 binary variables i.e. from wall_tin to assets_material_tv as they appear one-after other in the database)

`/criteria=factors(1)`

(This tells SPSS to extract only one factor)

`/save reg (1,wealthm).`

(This tells SPSS to save the extracted factor score using Regression Method)

Part II:

`rank variables=wealthm1/ ntiles(5).`

(This tells SPSS to rank the saved factor score and then divide it into 5 equal parts).

`renamevars (nwealthm=wealthq).`

(This tells SPSS to re-name the generated variable into wealthq).

`variable label wealthm1 'Wealth score(continuous)'.`

(This tells SPSS to assign wealthm1 variable as Wealth score (continuous scale))

`variable label wealthq 'Wealth Index(quintiles)'.`

(This tells SPSS to assign variable label the variable wealthq.)

`value label wealthq 1 'poorest' 5 'wealthiest'.`

(This tells SPSS to assign value labels to wealthq, only the 1st and 5th values are labelled.)

`freqvars=wealthq.`

(This generates the one-way frequency table for wealthq)

SES Index(triplets)-HFQ					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Low	767	32.9	32.9	32.9
	Medium	728	31.2	31.2	64.1
	High	837	35.9	35.9	100.0
	Total	2332	99.9	100.0	

Wealth Index (quintiles)		No. Members in HH	Crowding	No. Infants in HH	No Children 1- 5yo	Income	Land	Land Price
1-poorest	Mean	5.76	3.42221	0.15	0.69	38149.53	0.465702	926112
	N	430	430	430	430	430	430	430
	Std. Dev	2.351	1.809249	0.354	0.787	34058.779	0.4137383	1683813
2	Mean	6.31	3.20714	0.15	0.76	50191.71	0.561647	988219
	N	504	504	504	504	504	504	504
	Std. Dev	2.499	1.520541	0.373	0.815	58146.19	0.5178409	1719002
3	Mean	6.06	2.89661	0.15	0.59	71680.79	0.507409	1566087
	N	479	479	479	479	479	479	479
	Std. Dev	2.31	1.449039	0.377	0.776	66238.294	0.6343765	2830543. 669
4	Mean	5.51	2.17488	0.12	0.43	96013.88	0.466782	3134912
	N	428	428	428	428	428	428	428
	Std. Dev	2.322	1.234133	0.331	0.662	60483.413	0.580462	5316522
5-wealthiest	Mean	5.48	1.55919	0.1	0.38	139416.43	0.41189	3743071
	N	493	493	493	493	493	493	493
	Std. Dev	2.249	0.893427	0.329	0.628	119046.078	0.9845444	5588134. 401
Total	Mean	5.84	2.64565	0.13	0.57	79632.5	0.483811	2070918
	N	2334	2334	2334	2334	2334	2334	2334
	Std. Dev	2.37	1.568434	0.354	0.752	82591.361	0.6636737	3988032

Table A. Relationship between Wealth Quintiles and other demographic variables. You can see how the mean changes.

Other Composite Indices:

This same process was followed for the creation of the Ward Level Index, the Health Facility Quality Index and Knowledge Composite Scores. The only difference was the number of categories was set as 3 instead of 5 as a decision was made to divide the factor scores into three categories rather than 5 categories.

Please see: http://en.wikipedia.org/wiki/Principal_component_analysis for formulae involved.

Individual Variables Used in the PCA for Health Facility Quality¹:

1. Personnel (3 Binary variables):

- a. Professional staff available (0=missing staff; 1 = not missing staff)
- b. Overall staff available (0=missing staff; 1 = not missing staff)
- c. Facility head available – (0=no, 1=yes)

2. Physical Facilities & Infrastructure (7 Binary variables)

- a. Number of rooms (0 = missing necessary rooms; 1 = have all necessary rooms)
- b. Exam room (0 = no separate exam room; 1 = separate exam room)
- c. Cleanliness (0 = score of <5 on HF cleanliness checklist; 1 = score of ≥5 on HF cleanliness checklist)
- d. Solar electricity (0=no; 1=yes)
- e. Other electricity (0= no, 1=yes)
- f. Piped water (0= no, 1=yes)
- g. Functional toilet (0= no, 1=yes)

3. Equipment & Medicines Availability (4 Binary variables)

- a. Drugs availability (0=<50% of the required medicines; 1= ≥50% of the required medicines)
- b. Equipment availability (0=<50% of the required equipment; 1= ≥50% of the required equipment)
- c. Instrument availability (0=<50% of the required instruments; 1= ≥50% of the required instruments)
- d. Inpatient bed availability (0=none; 1=1+)

¹ Please note that for the construction of this particular index, the specific factors included were based on the factors used in Acharya & Cleland's (2000) study on the quality of maternal and child health services in Nepal and from factors included in QI studies of health facilities from DHS.

4. Service Delivery (2 Binary variables)

- a. Treatment quality (0= followed <50% of the correct treatment protocols for vignettes; 1 = followed ≥50% of the correct treatment protocols)
- b. Volume of OPD cases (0 = less than the average volume of cases for the district; 1 = greater than or equal to the average volume of cases)

5. Service Availability (4 Binary variables)

- a. Preventative services available (0 = <50% of the mandated services; 1= ≥50% of the mandated services)
- b. Ambulance (0= not available; 1 = available)
- c. ER services (0=no; 1=yes)
- d. Inpatient services (0=no; 1=yes)

6. Physical Accessibility (4 Binary variables)

- a. Distance to DH (0=>10 km; 1= ≤ 10 km)
- b. Distance to PHCC (0=>5 km; 1= ≤ 5 km)
- c. Gravel road leading to facility (0=no; 1=yes)
- d. Paved road leading to facility (0=no; 1=yes)

All 24 of these binary variables were included in the PCA to assign health facilities in the sample to one of three categories: poor quality, fair quality, good quality.

Individual Variables Used in the PCA for Ward-Level Index²:

1. School Availability (3 Binary variables):

- a. Primary school available (0=no, 1=yes)
- b. Secondary school available (0=no, 1=yes)
- c. Lower secondary school available (0=no, 1=yes)

2. Household composition (1 Binary variable)

- a. Average household size in the ward (0=<6 members; 1=>6 members)

3. Electricity & Water Availability (3 Binary variables)

- a. Piped water available (0 = majority of households do not have piped water; 1 = majority of households have piped water)
- b. Solar electricity (0 = majority of households do not have solar electricity; 1 = majority of households have solar electricity)
- c. Other electricity (grid) (0 = majority of households do not have electricity via connection to the grid/hydropower; 1 = majority of households have electricity via connection to the grid/hydropower)

4. Availability & Accessibility of Health Services (3 Binary variables)

- a. Availability of health facility (0 = none available in ward; 1 = available in ward)
- b. Time to government health facility (0= ≥ 1 hour; 1 = <1 hour)
- c. Distance to government health facility (0 = ≥ 5km; 1 = <5km)

5. Infrastructure (2 Binary variables)

- a. Passable road (0 = no road leads to ward that can be driven on; 1 = at least one road leads to ward which can be driven on)
- b. Paved road (0=no; 1 = yes)

² Please note that for the construction of this particular index, the specific factors included were based on the NLSS community infrastructure variables and the World Bank Community scorecard.

6. Availability of other Services (7 Binary variables)

- a. Mill available (0=no; 1=yes)
- b. Post office available (0=no; 1=yes)
- c. Bus stop available (0=no; 1=yes)
- d. Market available (0=no; 1=yes)
- e. Hotel available (0=no; 1=yes)
- f. Telephone available (0=no; 1=yes)
- g. Shops available (0=no; 1=yes)

All 19 of these binary variables were included in the PCA to assign wards in the sample to one of three categories: low infrastructure, middle infrastructure, high infrastructure.

Individual Variables Used in the PCA for Knowledge Composite Index:

1. Knowledge of Health Workers Roles & Availability (2 Binary variables)

- a. Knowledge regarding the role of FCHV (0= none or a little knowledge; 1 = some or a lot of knowledge – from 4 point scale dichotomised into binary variable)
- b. Knowledge of the availability of doctors in the government system (0 = doesn't know; 1= knows)

2. Knowledge of Structure of the Government Healthcare System (3 Binary variables)

- a. Knowledge of the type of facility nearest to household (0= doesn't know; 1=knows)
- b. Knowledge of the lowest level of government care available (0 = doesn't know; 1= knows)
- c. Knowledge of referrals – where are the SHP/HP or PHCC supposed to send patients to (0 = doesn't know; 1= knows)

3. Knowledge of Essential Services (1 Binary variable)

- a. Knowledge of where free essential services are provided in the government system (0=doesn't know; 1= knows)

All 6 of these binary variables were included in the PCA to assign household knowledge to one of three categories: poor knowledge, fair knowledge, good knowledge.

Description from DHS Website:

Each household asset for which information is collected is assigned a weight or factor score generated through principal components analysis. The resulting asset scores are standardized in relation to a standard normal distribution with a mean of zero and a standard deviation of one. These standardized scores are then used to create the break points that define wealth quintiles as: Lowest, Second, Middle, Fourth, and Highest (<http://www.measuredhs.com/topics/Wealth-Index.cfm>).

Wealth quintiles are expressed in terms of quintiles of individuals in the population, rather than quintiles of individuals at risk for any one health or population indicator. This approach to defining wealth quintiles has the advantage of producing information directly relevant to the principal question of interest, for example, the health status or access to services for the poor in the population as a whole. This choice also facilitates comparisons across indicators for the same quintile, since the quintile denominators remain unchanged across indicators. However, some types of analysis may require data for quintiles of individuals at risk (<http://www.measuredhs.com/topics/Wealth-Index.cfm>).

Appendix 3.14a

Multicollinearity for C Models

Model C.1		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
		.756	.153		4.929	.000		
	(Constant)							
	Patient's Gender	-.031	.034	-.032	-.904	.366	.968	1.033
	Patient's Age	.001	.001	.046	1.219	.223	.839	1.192
	HH Education	.048	.028	.062	1.702	.089	.895	1.118
	HH Occupation	-.013	.014	-.035	-.935	.350	.822	1.217
	Wealth Index	.004	.015	.011	.247	.805	.617	1.620
	house_1-5 total no	-.022	.023	-.037	-.980	.327	.832	1.202
	HH Caste	.038	.023	.057	1.600	.110	.933	1.072
	Ward Index	-.030	.024	-.051	-1.268	.205	.738	1.355
	HFQ	-.101	.023	-.176	-4.435	.000	.747	1.340
	HF Distance	.011	.017	.026	.656	.512	.746	1.340
	HF Type	.007	.029	.009	.243	.808	.930	1.075
	HF Quality Rating	.014	.035	.015	.411	.682	.857	1.167
	ICD Code	-.045	.022	-.074	-2.017	.044	.880	1.137
	Illness Severity	-.079	.023	-.122	-3.453	.001	.949	1.053
	Knowledge	.011	.023	.017	.482	.630	.900	1.111

Model C.2		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
	(Constant)	-.067	.147		-.455	.650		
	Patient's Gender	.069	.033	.074	2.120	.034	.968	1.033
	Patient's Age	5.989E-05	.001	.003	.072	.942	.839	1.192
	HH Education	-.028	.027	-.038	-1.038	.299	.895	1.118
	HH Occupation	-.006	.013	-.019	-.491	.624	.822	1.217
	Wealth Index	.015	.015	.046	1.060	.290	.617	1.620
	house_1-5 total no	.008	.022	.014	.379	.705	.832	1.202
	HH Caste	-.012	.022	-.019	-.521	.602	.933	1.072
	Ward Index	-.005	.023	-.009	-.216	.829	.738	1.355
	HFQ	.050	.022	.092	2.313	.021	.747	1.340
	HF Distance	-.024	.016	-.059	-1.491	.136	.746	1.340
	HF Type	-.070	.028	-.089	-2.491	.013	.930	1.075
	HF Quality Rating	.032	.033	.035	.946	.345	.857	1.167
	ICD Code	.044	.021	.076	2.075	.038	.880	1.137
	Illness Severity	.052	.022	.085	2.407	.016	.949	1.053
	Knowledge	.053	.022	.088	2.423	.016	.900	1.111

Model C.3		Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.	Collinearity Statistics	VIF
		B		Beta			Tolerance	
	(Constant)	.505	.121		4.169	.000		
	Patient's Gender	-.030	.027	-.040	-1.130	.259	.968	1.033
	Patient's Age	-.002	.001	-.089	-2.365	.018	.839	1.192
	HH Education	-.032	.022	-.053	-1.446	.149	.895	1.118
	HH Occupation	-.001	.011	-.005	-.128	.898	.822	1.217
	Wealth Index	-.026	.012	-.097	-2.197	.028	.617	1.620
	house_1-5 total no	.004	.018	.008	.216	.829	.832	1.202
	HH Caste	-.024	.019	-.046	-1.278	.202	.933	1.072
	Ward Index	.014	.019	.031	.776	.438	.738	1.355
	HFQ	-.009	.018	-.021	-.518	.605	.747	1.340
	HF Distance	.006	.013	.017	.436	.663	.746	1.340
	HF Type	-.005	.023	-.008	-.229	.819	.930	1.075
	HF Quality Rating	-.016	.028	-.021	-.567	.571	.857	1.167
	ICD Code	.005	.018	.011	.301	.764	.880	1.137
	Illness Severity	.006	.018	.012	.324	.746	.949	1.053
	Knowledge	-.055	.018	-.112	-3.078	.002	.900	1.111

Model C.4		Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
	(Constant)	-.127	.094		-1.349	.178		
	Patient's Gender	-.013	.021	-.021	-.613	.540	.968	1.033
	Patient's Age	.000	.001	.031	.824	.410	.839	1.192
	HH Education	.010	.017	.020	.551	.582	.895	1.118
	HH Occupation	.017	.008	.078	2.072	.039	.822	1.217
	Wealth Index	.010	.009	.048	1.107	.269	.617	1.620
	house_1-5_total_no	.013	.014	.036	.949	.343	.832	1.202
	HH Caste	-.011	.014	-.027	-.766	.444	.933	1.072
	Ward Index	.013	.014	.035	.871	.384	.738	1.355
	HFQ	.061	.014	.173	4.370	.000	.747	1.340
	HF Distance	.008	.010	.032	.817	.414	.746	1.340
	HF Type	.050	.018	.098	2.772	.006	.930	1.075
	HF Quality Rating	-.032	.021	-.055	-1.478	.140	.857	1.167
	ICD Code	-.007	.014	-.019	-.517	.605	.880	1.137
	Illness Severity	.019	.014	.047	1.335	.182	.949	1.053
	Knowledge	-.010	.014	-.027	-.753	.451	.900	1.111

Model C.5		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
	(Constant)	.207	.141		1.473	.141		
	Patient's Gender	.034	.031	.042	1.097	.273	.950	1.053
	Patient's Age	.000	.001	.020	.477	.633	.798	1.253
	HH Education	.001	.025	.002	.041	.967	.891	1.122
	HH Occupation	.004	.012	.014	.343	.732	.822	1.217
	Wealth Index	.009	.013	.033	.714	.476	.645	1.549
	house_1-5_total_no	.031	.021	.062	1.478	.140	.817	1.224
	HH Caste	.048	.021	.090	2.306	.021	.938	1.066
	Ward Index	.004	.021	.009	.198	.843	.752	1.331
	HFQ	.066	.020	.141	3.293	.001	.766	1.305
	HF Distance	.009	.015	.026	.601	.548	.746	1.340
	HF Type	.014	.026	.022	.555	.579	.934	1.070
	HF Quality Rating	.100	.032	.128	3.122	.002	.845	1.184
	ICD Code	.011	.020	.023	.554	.580	.850	1.176
	Illness Severity	-.018	.020	-.034	-.887	.375	.939	1.065
	Knowledge	.025	.021	.049	1.227	.220	.881	1.135

No VIF is >2, which demonstrates that the multi-collinearity in this study is not an issue in the final models.

Appendix 3.14b

Multicollinearity for D, E, F Final Models

Model D.1		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
	(Constant)	.472	.103		4.581	.000		
	Patient's Gender	.051	.024	.069	2.178	.030	.969	1.032
	Patient's Age	.000	.001	-.019	-.576	.565	.837	1.194
	HH Education	.042	.020	.070	2.132	.033	.902	1.109
	HH Occupation	.013	.009	.049	1.434	.152	.829	1.206
	Wealth Index	.031	.010	.114	2.951	.003	.641	1.561
	house_1-5_total_no	.007	.016	.014	.427	.670	.839	1.192
	HH Caste	-.003	.017	-.007	-.206	.836	.943	1.060
	Ward Index	.007	.016	.016	.433	.665	.740	1.351
	HFQ	-.022	.016	-.051	-1.426	.154	.759	1.318
	HF Distance	-.006	.011	-.018	-.506	.613	.751	1.331
	HF Type	.046	.021	.072	2.237	.026	.932	1.073
	HF Quality Rating	.019	.024	.027	.801	.423	.867	1.153
	ICD Code	-.057	.015	-.124	-3.784	.000	.889	1.125
	Illness Severity	.078	.016	.156	4.962	.000	.969	1.032
	Knowledge	.025	.016	.052	1.576	.115	.897	1.114

Model D.2		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
		(Constant)	.253	.127	1.988	.047		
	Patient's Gender	.059	.029	.063	2.021	.044	.969	1.032
	Patient's Age	-.002	.001	-.073	-2.170	.030	.837	1.194
	HH Education	.018	.024	.024	.734	.463	.902	1.109
	HH Occupation	.024	.012	.071	2.112	.035	.829	1.206
	Wealth Index	.033	.013	.100	2.606	.009	.641	1.561
	house_1-5_total_no	.000	.019	.000	.005	.996	.839	1.192
	HH Caste	-.036	.020	-.055	-1.751	.080	.943	1.060
	Ward Index	.021	.020	.037	1.036	.300	.740	1.351
	HFQ	.000	.019	.000	-.012	.990	.759	1.318
	HF Distance	-.026	.014	-.064	-1.816	.070	.751	1.331
	HF Type	.042	.025	.053	1.659	.097	.932	1.073
	HF Quality Rating	.013	.029	.015	.458	.647	.867	1.153
	ICD Code	-.023	.019	-.040	-1.238	.216	.889	1.125
	Illness Severity	.141	.019	.227	7.254	.000	.969	1.032
	Knowledge	.000	.019	-.001	-.017	.986	.897	1.114

Model D.3		Unstandardized Coefficients		Standardize d Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
	(Constant)	-.061	.173		-.353	.724		
	Patient's Gender	-.023	.037	-.030	-.635	.526	.952	1.050
	Patient's Age	.001	.001	.047	.914	.361	.811	1.233
	HH Education	.049	.031	.077	1.594	.112	.913	1.096
	HH Occupation	.013	.015	.044	.867	.386	.822	1.216
	Wealth Index	.016	.016	.058	1.007	.314	.637	1.569
	house_1-5_total_no	-.010	.025	-.020	-.388	.698	.821	1.218
	HH Caste	-.035	.026	-.065	-1.362	.174	.932	1.073
	Ward Index	.042	.025	.088	1.670	.096	.761	1.314
	HFQ	.014	.024	.030	.559	.576	.740	1.351
	HF Distance	.028	.018	.085	1.585	.114	.733	1.364
	HF Type	-.042	.035	-.058	-1.214	.225	.937	1.067
	HF Quality Rating	-.008	.038	-.010	-.197	.844	.830	1.205
	ICD Code	.014	.024	.030	.590	.555	.838	1.194
	Illness Severity	.050	.024	.101	2.078	.038	.907	1.102
	Knowledge	.000	.025	.000	.005	.996	.858	1.165

Model D.4		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
		(Constant)	.326	.165	1.977	.049		
	Patient's Gender	.014	.035	.021	.410	.682	.951	1.052
	Patient's Age	.000	.001	-.019	-.345	.731	.788	1.270
	HH Education	.076	.030	.136	2.570	.011	.904	1.106
	HH Occupation	.010	.014	.040	.717	.474	.816	1.225
	Wealth Index	.006	.015	.024	.382	.703	.661	1.513
	house_1-5_total_no	-.015	.023	-.037	-.657	.512	.809	1.236
	HH Caste	.023	.024	.050	.968	.334	.937	1.067
	Ward Index	.003	.023	.008	.136	.892	.769	1.301
	HFQ	.006	.023	.016	.273	.785	.759	1.317
	HF Distance	-.014	.018	-.047	-.800	.424	.720	1.390
	HF Type	.030	.032	.048	.921	.358	.938	1.067
	HF Quality Rating	.075	.037	.114	2.038	.042	.810	1.235
	ICD Code	.051	.023	.122	2.214	.027	.835	1.197
	Illness Severity	.087	.024	.196	3.708	.000	.901	1.110
	Knowledge	-.014	.024	-.033	-.589	.556	.817	1.224

Model E.1		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
		(Constant)	.910	.159	5.738	.000		
	Patient's Gender	-.066	.035	-.070	-1.915	.056	.954	1.048
	Patient's Age	.000	.001	-.001	-.033	.973	.797	1.255
	HH Education	-.039	.029	-.051	-1.350	.177	.892	1.121
	HH Occupation	.003	.014	.010	.247	.805	.824	1.214
	Wealth Index	-.019	.015	-.056	-1.247	.213	.638	1.566
	house_1-5_total_no	-.028	.024	-.047	-1.188	.235	.817	1.223
	HH Caste	-.011	.024	-.017	-.452	.651	.940	1.064
	Ward Index	.163	.024	.282	6.825	.000	.749	1.335
	HFQ	-.119	.023	-.215	-5.270	.000	.764	1.309
	HF Distance	-.027	.017	-.066	-1.601	.110	.742	1.347
	HF Type	.035	.029	.044	1.193	.233	.933	1.072
	HF Quality Rating	-.106	.036	-.114	-2.929	.004	.845	1.183
	ICD Code	-.063	.022	-.109	-2.814	.005	.851	1.175
	Illness Severity	-.067	.023	-.108	-2.914	.004	.937	1.067
	Knowledge	-.001	.023	-.002	-.042	.966	.881	1.135

Model F.1		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
	(Constant)	1.401	.158		8.851	.000		
	Patient's Gender	.002	.035	.003	.071	.943	.954	1.048
	Patient's Age	-.001	.001	-.030	-.712	.477	.797	1.255
	HH Education	-.018	.029	-.025	-.642	.521	.892	1.121
	HH Occupation	-.025	.014	-.076	-1.848	.065	.824	1.214
	Wealth Index	-.001	.015	-.002	-.046	.964	.638	1.566
	house_1-5_total_no	.004	.023	.006	.155	.877	.817	1.223
	HH Caste	-.014	.024	-.022	-.574	.566	.940	1.064
	Ward Index	.008	.024	.014	.334	.738	.749	1.335
	HFQ	-.080	.023	-.151	-3.535	.000	.764	1.309
	HF Distance	-.053	.017	-.139	-3.208	.001	.742	1.347
	HF Type	-.013	.029	-.017	-.430	.667	.933	1.072
	HF Quality Rating	-.039	.036	-.044	-1.083	.279	.845	1.183
	ICD Code	-.052	.022	-.094	-2.308	.021	.851	1.175
	Illness Severity	-.066	.023	-.111	-2.885	.004	.937	1.067
	Knowledge	.003	.023	.006	.150	.881	.881	1.135

Model F.2		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
	(Constant)	.910	.159		5.738	.000		
	Patient's Gender	-.066	.035	-.070	-1.915	.056	.954	1.048
	Patient's Age	.000	.001	-.001	-.033	.973	.797	1.255
	HH Education	-.039	.029	-.051	-1.350	.177	.892	1.121
	HH Occupation	.003	.014	.010	.247	.805	.824	1.214
	Wealth Index	-.019	.015	-.056	-1.247	.213	.638	1.566
	house_1-5_total_no	-.028	.024	-.047	-1.188	.235	.817	1.223
	HH Caste	-.011	.024	-.017	-.452	.651	.940	1.064
	Ward Index	.163	.024	.282	6.825	.000	.749	1.335
	HFQ	-.119	.023	-.215	-5.270	.000	.764	1.309
	HF Distance	-.027	.017	-.066	-1.601	.110	.742	1.347
	HF Type	.035	.029	.044	1.193	.233	.933	1.072
	HF Quality Rating	-.106	.036	-.114	-2.929	.004	.845	1.183
	ICD Code	-.063	.022	-.109	-2.814	.005	.851	1.175
	Illness Severity	-.067	.023	-.108	-2.914	.004	.937	1.067
	Knowledge	-.001	.023	-.002	-.042	.966	.881	1.135

No VIF is >2, which demonstrates that the multi-collinearity in this study is not an issue in the final models.

Appendix 3.15

Interaction Term Example for Model B.1

Combination	Gender	Age ^Δ	HH Edu	HH Occup	Wealthq	hh 1to5 pop ^Δ	HH Caste	SESWL	SESHFQ	Dis ClosestHF ^Δ	CosestHF Type	AVG HF Qual ^Δ	ICD Code	ILL severe rating	SESKS
Gender															
Age	0.297														
HH Edu	0.126	0.515													
HH Occup	0.523	0.266	0.241												
Wealthq	0.986	0.062	0.930	0.897											
hh 1to5 pop	0.014	0.211	0.011	0.273	0.974										
HH Caste	0.308	0.463	0.521	0.194	0.765	0.319									
SESWL	0.219	0.208	0.117	0.582	0.195	0.195	0.197								
SESHFQ	0.323	0.708	0.799	0.438	0.002	0.896	0.318	0.001							
Dis ClosestHF	0.170	0.221	0.203	0.830	0.794	0.220	0.393	0.542	0.756						
CosestHF Type	0.303	0.169	0.002	0.063	0.484	0.258	0.754	0.618	0.155	0.864					
AVG HF Qual	0.710	0.778	0.233	0.877	0.878	0.256	0.748	0.198	0.844	0.891	0.817				
ICD Code	0.112	0.026	0.206	0.330	0.041	0.116	0.637	0.113	0.042	0.229	0.056	0.668			
ILL severe rating	0.520	0.451	0.497	0.959	0.049	0.949	0.251	0.896	0.506	0.891	0.405	0.354	0.321		
SESKS	0.428	0.394	0.154	0.005	0.095	0.641	0.115	0.598	0.634	0.29	0.203	0.421	0.065	0.525	
Δ These variables are used continous.															

1 Gender * HH 1-5 pop

2 Age*ICD code

3 HH Edu * HH 1-5 pop

4 HH Edu * Closest HF Type

5 HH Occup * SESKS

6 Wealthq * SESHFQ

7 Wealthq * ICD Code

8 Wealthq * Ill severity rating

9 SESWL * SESHFQ

10 SESHFQ * ICD Code

Correations are < 0.5 and VIF is also < 2

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	10.291	4	.036
	Block	10.291	4	.036
	Model	206.025	92	.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	555.988 ^a	.224	.368

a. Estimation terminated at iteration number 20 because maximum iterations has been reached. Final solution cannot be found.

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	13.653	8	.091

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1 ^a	pt_gender_cat(1)	-.780	.333	5.476	1	.019	.459	.239	.881
	pt_age	-.029	.010	9.439	1	.002	.971	.953	.989
	head_edu_cat3			2.198	2	.333			
	head_edu_cat3(1)	-.810	.546	2.198	1	.138	.445	.152	1.298
	head_edu_cat3(2)	-21.442	22164.919	.000	1	.999	.000	0.000	
	HHoccup_Recode2			10.500	4	.033			
	HHoccup_Recode2(1)	.366	.483	.573	1	.449	1.442	.559	3.717
	HHoccup_Recode2(2)	-.397	.603	.433	1	.511	.673	.206	2.193
	HHoccup_Recode2(3)	.097	.863	.013	1	.911	1.102	.203	5.983
	HHoccup_Recode2(4)	2.420	.796	9.234	1	.002	11.247	2.361	53.575
	wealthq			2.480	4	.648			
	wealthq(1)	.183	1.245	.022	1	.883	1.201	.105	13.779
	wealthq(2)	.410	1.332	.095	1	.758	1.507	.111	20.523
	wealthq(3)	1.872	1.399	1.790	1	.181	6.502	.419	100.994
	wealthq(4)	.365	1.755	.043	1	.835	1.440	.046	44.880
	house_15_total_no	-.573	.238	5.796	1	.016	.564	.353	.899
	Hhcaste_Recode			11.260	3	.010			
	Hhcaste_Recode(1)	.610	.383	2.544	1	.111	1.841	.870	3.898
	Hhcaste_Recode(2)	-.816	.523	2.437	1	.119	.442	.159	1.232
	Hhcaste_Recode(3)	.402	.785	.262	1	.609	1.495	.321	6.963
	seswl3			1.110	2	.574			
	seswl3(1)	.232	.448	.268	1	.605	1.261	.524	3.032
	seswl3(2)	.402	.384	1.092	1	.296	1.494	.704	3.174
	seshfq3			.745	2	.689			

seshfq3(1)	-.135	.743	.033	1	.856	.874	.204	3.746
seshfq3(2)	-.914	1.060	.743	1	.389	.401	.050	3.200
O46_distance_closestHF	.016	.115	.020	1	.888	1.016	.811	1.274
O45_facility_closest_type_cat			6.297	2	.043			
O45_facility_closest_type_cat(1)	-.285	.396	.518	1	.472	.752	.346	1.635
O45_facility_closest_type_cat(2)	2.324	.980	5.629	1	.018	10.221	1.498	69.735
O74_O77_HF_Quality_Avg	-.141	.243	.335	1	.563	.869	.539	1.399
O22_icd_recode_fin			.490	2	.783			
O22_icd_recode_fin(1)	-.275	.582	.224	1	.636	.759	.243	2.376
O22_icd_recode_fin(2)	-.447	.736	.370	1	.543	.639	.151	2.703
O35_ill_severe_rate_pt_cat			1.920	3	.589			
O35_ill_severe_rate_pt_cat(1)	.550	.949	.336	1	.562	1.733	.270	11.126
O35_ill_severe_rate_pt_cat(2)	1.086	.974	1.243	1	.265	2.961	.439	19.971
O35_ill_severe_rate_pt_cat(3)	-20.352	11420.254	.000	1	.999	.000	0.000	
sesks3			1.120	2	.571			
sesks3(1)	-.347	.388	.801	1	.371	.707	.330	1.512
sesks3(2)	-.413	.449	.842	1	.359	.662	.274	1.597
pt_gender_cat(1) by house_15_total_no	.568	.281	4.072	1	.044	1.765	1.016	3.063
pt_age * O22_icd_recode_fin			6.080	2	.048			
pt_age by O22_icd_recode_fin(1)	.009	.014	.417	1	.519	1.009	.982	1.037
pt_age by O22_icd_recode_fin(2)	.039	.016	5.985	1	.014	1.040	1.008	1.074
head_edu_cat3 * house_15_total_no			9.952	2	.007			
head_edu_cat3(1) by house_15_total_no	.846	.296	8.145	1	.004	2.329	1.303	4.163

head_edu_cat3(2) by house_15_total_no	2.095	1.298	2.605	1	.106	8.126	.638	103.446
head_edu_cat3 * O45_facility_closest_type_cat			2.234	4	.693			
head_edu_cat3(1) by O45_facility_closest_type_cat(1)	.562	.542	1.075	1	.300	1.754	.606	5.077
head_edu_cat3(1) by O45_facility_closest_type_cat(2)	-20.037	8003.882	.000	1	.998	.000	0.000	
head_edu_cat3(2) by O45_facility_closest_type_cat(1)	2.975	2.555	1.356	1	.244	19.597	.131	2931.391
head_edu_cat3(2) by O45_facility_closest_type_cat(2)	-18.628	12142.356	.000	1	.999	.000	0.000	
HHoccup_Recode2 * sesks3			19.590	8	.012			
HHoccup_Recode2(1) by sesks3(1)	-.871	.711	1.501	1	.220	.419	.104	1.685
HHoccup_Recode2(1) by sesks3(2)	-.713	.765	.868	1	.352	.490	.109	2.196
HHoccup_Recode2(2) by sesks3(1)	1.302	.751	3.000	1	.083	3.676	.843	16.032
HHoccup_Recode2(2) by sesks3(2)	.088	.860	.011	1	.918	1.092	.203	5.891
HHoccup_Recode2(3) by sesks3(1)	-1.053	1.201	.769	1	.381	.349	.033	3.674
HHoccup_Recode2(3) by sesks3(2)	.657	1.466	.201	1	.654	1.929	.109	34.102
HHoccup_Recode2(4) by sesks3(1)	-4.705	1.525	9.519	1	.002	.009	.000	.180
HHoccup_Recode2(4) by sesks3(2)	-2.850	1.180	5.833	1	.016	.058	.006	.584
wealthq * seshfq3			21.313	8	.006			
wealthq(1) by seshfq3(1)	-.144	.820	.031	1	.861	.866	.173	4.325

wealthq(1) by seshfq3(2)	-.541	1.006	.289	1	.591	.582	.081	4.183
wealthq(2) by seshfq3(1)	2.286	.907	6.358	1	.012	9.833	1.664	58.118
wealthq(2) by seshfq3(2)	-.498	.968	.265	1	.607	.608	.091	4.048
wealthq(3) by seshfq3(1)	-1.312	1.066	1.514	1	.218	.269	.033	2.176
wealthq(3) by seshfq3(2)	-3.650	1.255	8.456	1	.004	.026	.002	.304
wealthq(4) by seshfq3(1)	.229	1.476	.024	1	.877	1.257	.070	22.685
wealthq(4) by seshfq3(2)	-.649	1.488	.190	1	.663	.523	.028	9.645
wealthq * O22_icd_recode_fin			4.523	8	.807			
wealthq(1) by O22_icd_recode_fin(1)	.467	.698	.448	1	.503	1.596	.406	6.268
wealthq(1) by O22_icd_recode_fin(2)	-.722	.773	.872	1	.350	.486	.107	2.210
wealthq(2) by O22_icd_recode_fin(1)	.649	.842	.593	1	.441	1.913	.367	9.973
wealthq(2) by O22_icd_recode_fin(2)	-.133	.937	.020	1	.887	.876	.140	5.494
wealthq(3) by O22_icd_recode_fin(1)	.682	1.042	.429	1	.513	1.978	.257	15.236
wealthq(3) by O22_icd_recode_fin(2)	-1.401	1.177	1.419	1	.234	.246	.025	2.471
wealthq(4) by O22_icd_recode_fin(1)	-.020	1.296	.000	1	.988	.980	.077	12.428
wealthq(4) by O22_icd_recode_fin(2)	-1.469	1.283	1.311	1	.252	.230	.019	2.845
wealthq * O35_ill_severe_rate_pt_cat			5.850	12	.923			
wealthq(1) by O35_ill_severe_rate_pt_cat(1)	.092	1.192	.006	1	.939	1.096	.106	11.344
wealthq(1) by O35_ill_severe_rate_pt_cat(2)	-.484	1.242	.152	1	.696	.616	.054	7.025
wealthq(1) by O35_ill_severe_rate_pt_cat(3)	21.216	11420.254	.000	1	.999	#####	0.000	

wealthq(2) by O35_ill_severe_rate_pt_cat(1)	-1.787	1.204	2.202	1	.138	.167	.016	1.774
wealthq(2) by O35_ill_severe_rate_pt_cat(2)	-1.582	1.245	1.614	1	.204	.206	.018	2.359
wealthq(2) by O35_ill_severe_rate_pt_cat(3)	19.700	11420.254	.000	1	.999	#####	0.000	
wealthq(3) by O35_ill_severe_rate_pt_cat(1)	-1.019	1.269	.645	1	.422	.361	.030	4.339
wealthq(3) by O35_ill_severe_rate_pt_cat(2)	-.878	1.442	.370	1	.543	.416	.025	7.019
wealthq(3) by O35_ill_severe_rate_pt_cat(3)	20.383	11420.254	.000	1	.999	#####	0.000	
wealthq(4) by O35_ill_severe_rate_pt_cat(1)	-1.571	1.408	1.245	1	.265	.208	.013	3.282
wealthq(4) by O35_ill_severe_rate_pt_cat(2)	-2.151	1.441	2.229	1	.135	.116	.007	1.960
wealthq(4) by O35_ill_severe_rate_pt_cat(3)	-1.118	30297.883	.000	1	1.000	.327	0.000	
head_edu_cat3 * wealthq			1.201	8	.997			
head_edu_cat3(1) by wealthq(1)	-.098	.594	.027	1	.868	.906	.283	2.906
head_edu_cat3(1) by wealthq(2)	.031	.716	.002	1	.966	1.031	.253	4.198
head_edu_cat3(1) by wealthq(3)	-.385	.902	.182	1	.670	.681	.116	3.990
head_edu_cat3(1) by wealthq(4)	.768	.987	.605	1	.437	2.155	.312	14.903
head_edu_cat3(2) by wealthq(1)	17.684	22164.919	.000	1	.999	#####	0.000	
head_edu_cat3(2) by wealthq(2)	-.845	24727.420	.000	1	1.000	.429	0.000	
head_edu_cat3(2) by wealthq(3)	.912	29142.549	.000	1	1.000	2.490	0.000	
head_edu_cat3(2) by wealthq(4)	18.889	22164.919	.000	1	.999	#####	0.000	

seswl3 * seshfq3			15.619	4	.004			
seswl3(1) by seshfq3(1)	-1.172	.775	2.288	1	.130	.310	.068	1.414
seswl3(1) by seshfq3(2)	2.351	.989	5.653	1	.017	10.492	1.511	72.837
seswl3(2) by seshfq3(1)	.227	.690	.108	1	.742	1.255	.325	4.854
seswl3(2) by seshfq3(2)	.174	1.062	.027	1	.870	1.190	.149	9.541
seshfq3 * O22_icd_recode_fin			8.280	4	.082			
seshfq3(1) by O22_icd_recode_fin(1)	-.639	.742	.740	1	.390	.528	.123	2.262
seshfq3(1) by O22_icd_recode_fin(2)	.538	.770	.488	1	.485	1.712	.379	7.735
seshfq3(2) by O22_icd_recode_fin(1)	-2.486	1.006	6.100	1	.014	.083	.012	.599
seshfq3(2) by O22_icd_recode_fin(2)	.442	.845	.273	1	.601	1.555	.297	8.142
Constant	-.785	1.260	.388	1	.533	.456		
a. Variable(s) entered on step 1: seshfq3 * O22_icd_recode_fin .								

Appendix 3.16

Detailed Overview of Qualitative VDCs

This appendix presents a slightly more detailed overview of the VDCs where the qualitative interviews were carried out for this study.

Budhichaur, Chhattiwan and Dandakharka VDCs were purposively selected for the purpose of the qualitative research. Table A presents an overview of the population (no more recent data was available at the time of the interview).

VDC Name	Total Estimated Population	Population <1 Year Old	Population <5 Years Old
Budhichaur	2,429	75	359
Chhattiwan	25,072	778	3,706
Dandarkharka	4,392	136	649

Table A. Estimated population of selected qualitative VDCs based on 2006 data (from Makwanpur District Health Profile, 2007).

Budhichaur VDC is 11.5 miles (about 5-8 hours) from Hetauda, and is not accessible directly by road. In terms of infrastructure, almost all houses have private taps, toilets and electricity. Ethnically, it is comprised of predominantly Tamangs (~98%). The SHP has three rooms, four providers (2 AHWs, 1 MCHW, and 1 assistant), two beds and sees between 10-12 patients per day. The most common childhood illness treated there (as mentioned by the AHW) are diarrhoea, pneumonia and colds. The most common adult illnesses treated there are fever, cold and diarrhoea¹.

¹This data came from the health facility interview and not from the facility profiles, so this was based on self-report data and may not be completely accurate.

Dandakharka VDC is a slightly larger VDC than Budhichaur and is about 33 miles (2 days) away from Hetauda. Like Budhichaur, it is also not road accessible and requires about 4 hours of uphill walking to reach from the neighbouring VDC. Unlike Budhichaur, most households do not have electricity (although some have solar power) or toilets, and several of the wards have problems with water scarcity. Ethnically, it is a much more diverse VDC with a mixture of Magar, Gurung, Tamang, Chepang and Kami (Dalit) people. The HP has solar power and gets its water from the river. It has four rooms, five providers (2 HAs, 1 AHW, 1 ANM and 1 assistant), two beds and sees about 15 patients a day. The most common childhood illnesses seen there (as reported by the HA) are ARIs, diarrhoea and skin conditions. The most common adult illnesses are respiratory infections, eye infections and skin conditions.

Chhattiwan VDC is the largest (164 sq km) and least remote of the three VDCs. It is 10 miles (four hours) from Hetauda and is accessible directly via public transport. In terms of infrastructure, most of the households have electricity (78%) and toilets, and most people get their water from public standpipes. Ethnically it was comprised of a combination of Tamangs, Chhetris, Brahmins, Newars and others. The PHCC has electricity, five rooms, eleven providers (1 HA, 2 AHWs, 3 ANMs, 1 Lab Technician, 1 VHW, 1 MCHW and 2 assistants), three beds, an ER and sees about 30-40 OPD cases per day and 15-20 IPD cases per month. The most common childhood illnesses (as reported by the HA) are pneumonia, diarrhoea and skin infections. For adults they are pyrexia of unknown origin, skin infections and wounds.

Appendix 3.17

Understanding Steps 1 & 2 in the Care-Seeking Process

Since steps 1 and 2 in the care-seeking process were not the purview of this dissertation, I have opted not to include them in the body of the text. That being, these steps are a critical part of the overall care process, and during the interviews several themes emerged that were related to them. As a result a decision was made to include some of these themes in this appendix. This appendix addresses household perceptions of illnesses (including aetiology beliefs), and the emotional and cognitive processes that govern those immediate responses to an illness and those initial situational appraisal processes that follow before reaching step 3.

Steps in the Care-Seeking Process

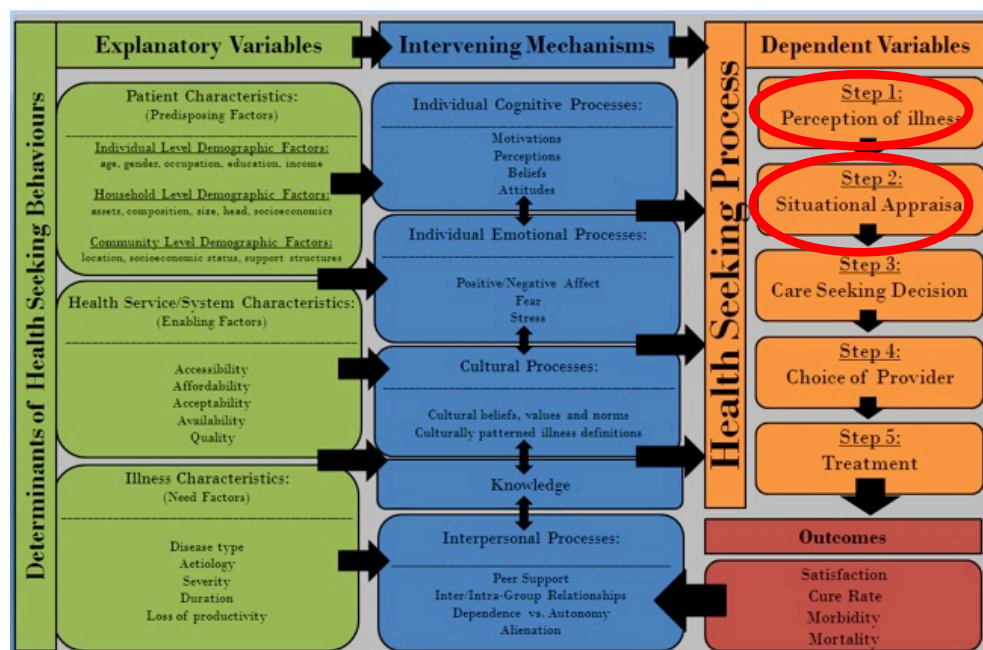
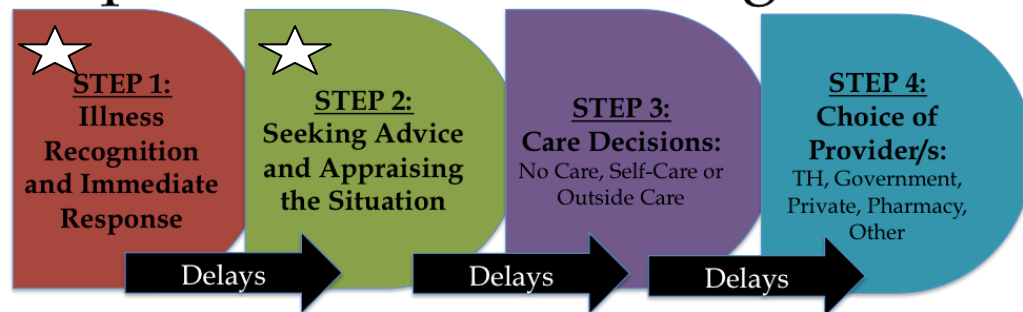


Figure A. Those components of the theoretical model which are circled in red or starred above will be covered in this particular section. The arrows indicate the relationships which this section will explore.

A3.19a Step 1: Perception of Illness

Perception of Illness: recognise symptoms, classify them and define them subjectively and objectively in terms of biomedical, cultural or combined constructs; determine illness severity (a process guided by cultural beliefs, previous experiences and biomedical knowledge)

The entire health-seeking process really begins with the recognition of illness. Before a household even makes any decisions about whether or not to seek care, the household must first perceive that someone is sick, which may not always be so straight-forward and may differ slightly from one context to the next or from one household to the next. In fact, many studies have shown that what constitutes an ‘illness’ often differs from one person to the next or one culture to the next since everyone has different thresholds, different defining criteria or different aetiology beliefs. In short, culture most often exerts the strongest influence on illness perceptions.

In Nepal, like in many other contexts, when an illness had no tangible cause, or was not experienced by others in the community, it was sometimes not even perceived as an illness, but rather as part of the natural course of things:

“It could be a disease, or maybe it just happens inside your own body.” ~T-AB-1.5 (57, M)

“It just came out of my own body.” ~T-MG-3.1 (30, F)

For others, when an illness had no discernable origin, it was identified as a strange feeling from within:

*“I think my strange feelings originated from my own body.”
~ T-AB-2.6 (57, F)*

For example, one woman said she knew she was ill because of the strange feelings of worms inside her head:

“I feel like worms are growing in my head. I feel like there is no brain inside my head any more. They bite so hard. Sometimes I think water has leaked into my brain and I feel like I will die instantly.” ~S-RS-1.5 (41, F)

Still, for others illness was characterised as a sudden change originating from unknown external forces, rather than internal ones. One woman, for example, described her illness as the feeling of suddenly being struck by something:

“Recently I almost died of an illness!...I was sitting outside and I felt like something suddenly captured me. I was puzzled for some time and thought I would die.” ~S-MG-4.4 (23, F)

Another man spoke about his feelings of suddenly being seized by an unknown force:

“I was about to bring my cows back when something seized me. Then I fell and lost consciousness.” ~S-RS-8.1 (61, M)

For some households, however, illness was not simply a nebulous feeling with an unknown cause, but rather the presence of an illness was much more black and white; It was discernible based on specific symptoms. One such symptom, which many households cited as a definitive sign of illness, was weakness:

*“If one has a disease, your body becomes very weak and you feel they can't do anything in the future. All body parts become weak. Even if a person suffering from disease looks healthy from the outside, inside the body loses its' firmness. So, a person suffering from a serious disease becomes very weak...It is like this: while walking, the whole body shivers and this body becomes loose. Your heart starts to quiver.”
~T-AA-4.5 (25, F)*

Weakness, according to several households, also manifests itself in one's inability to work normally:

"When you can't do heavy work, you have to think that someone has a disease, and that the disease is quite serious." ~ T-AA-1.1 (77, M)

Other households, said they were able to determine whether or not others were seriously ill by their appetites or sleep patterns:

"If an illness causes someone to not eat, cry and sleep all the time, then it is serious. If the ill person eats and walks around then s/he will be fine." ~S-MG-8.1 (29, F)

One woman spoke about her child's inability to consume milk while he was ill with pneumonia:

"At the time I thought it was dangerous...He was shivering...There was milk coming out of his nose while feeding. He didn't take any of it in." ~T-NK-9.1 (31, F)

Still, other households characterised illnesses by even more pronounced symptoms – loss of consciousness or difficulty breathing:

"A dangerous illness is one that causes unconsciousness and heavy breathing." ~T-MG-3.1 (30, F)

"If there is just a cough, then maybe it is not an illness. But, along with that cough, if there are other symptoms like fever, wheezing, difficulty expelling sputum, then the patient needs to be taken to the hospital. The illness is serious... We could tell she was sick. She had a headache and she used to repeatedly faint, remaining unconscious for about five minutes and then regaining consciousness." ~S-NK-1.1 (24, M)

Obviously, it also stands to reason, that in a community with a high incidence of diarrhoeal disease and pyrexia of unknown origin, fever, vomiting and loose stools were also seen as an indication of a serious, potentially terminal, illness:

"When someone has diarrhoea, they vomit and pass loose stools until there is no water in their body. After that is finished, the person dies as well." ~S-AB-1.5 (50, M)

In short, while it is sometimes difficult for households to pin down what constitutes an illness, and while some households perceive different feelings or symptoms as indicative of an illness, there tends to be some agreement that illnesses are manifested as deviations from the normal way of feeling and can be revealed by loss of appetite, weakness, unconsciousness or difficulty breathing amongst other, more commonplace, symptoms. This is not to say, however, that just because an illness is perceived, care is actually sought. Once an illness is perceived the household must appraise its situation to determine the next step in the process.

Illness Aetiology Beliefs:

In part households' differing beliefs about what constitutes an illness can be attributed to what they think might be causing it, namely their aetiology beliefs, which are shaped by culture and influenced by the broader social context. People tended to have a wide variety of different beliefs about what caused various illnesses, but all of the beliefs could be divided into one of four discrete categories. The majority of illness were said to be caused by internal factors such as bad food, old age or strenuous work (table A). Overall, 80% of illnesses were attributed primarily to internal, natural or biological factors, while only 8% were attributed primarily to supernatural/spiritual factors. While the majority of households (72%) believed a single illness only had a single cause, a sizable percentage (28%) believed a single episode could be caused by multiple different factors. In fact, fourteen percent of households believed concurrently in both supernatural and natural origins for a single illness episode. Eleven percent of households still had no idea about the cause of a given illness episode.

Table A. A breakdown of the different aetiology beliefs households had about their illnesses (from the household surveys).

1° Aetiology Beliefs	No. of HHs (%) n=1069	Specific Examples
Internal World	482 (45%)	Bad food, improper diet, humeral imbalance, physical factors (ie. old age, fall, allergies, strenuous work), moral misbehaviour of self or family, stress, other emotions, 'from within', bad blood
Natural World	235 (22%)	Weather, climate, stars, planets, tides
Supernatural World	90 (8%)	Ghosts, spirits, witches, curses, Gods
Biological Agents	144 (13%)	Flies, unsanitary environmental conditions, microorganisms, bacteria, viruses, parasites
Unknown	118 (11%)	

A more detailed look at household's aetiology beliefs can be found in the table of quotes from the qualitative interviews found on the next page.

Aetiology Belief	Quote/s (respondent age, gender)
Evil Spirits	Regarding a Sudden Loss of Consciousness: “Apparently an Ox had died last year by falling off the same cliff. I lived because God held out his arms to catch me.....There was probably an evil spirit roaming around there. There are evil spirits in that place. They say such things happen from time to time even now...It is said that there is something that makes people feel intoxicated, unconscious and causes them to fall. They say you don’t realize you are falling. A villager around there told me this....What happens in places where evil spirits seize you and intoxicate you is that there is a “Hyo”[a kind of evil spirit]. That is what intoxicates you and makes you fall. If you fall, you have to kill or chase away the “Hyo” of the place where you fell. You have to kill it at either sunrise or sunset.” (61, M)
Curse/Evil Intentions of Others	Regarding Pneumonia: “I asked what happened and he [TH] said it was due to ‘chuachut.’ He said that a woman had come to my house and she looked at him with evil intentions. I don’t know if that is true or not. I don’t know who came.” (27, F)
Eating/Food Habits	Regarding Typhoid: “Food is the factor that causes typhoid. Apparently, it occurs if you drink alcohol and eat meat. I am also someone who drinks alcohol and eats meat. We never know when we have fever and as we continue to eat such things, we suffer from typhoid.” (50, M) Regarding Pneumonia: “It starts with cough and cold. Then the mother eats everything including the sour kind of food and that affects the baby...The mother eats carelessly...Whatever the mother eats goes into her milk which the baby feeds on.” (17, F)
Inadequate Diet/Dirty Food	Regarding Typhoid: “It is ‘khaibigar.’ Once you have ‘khaibigar’ you become weak. You can’t digest anything you eat and you suffer from high fever... ‘Khaibigar’ means there is something wrong with what you eat. One’s strength wasn’t adequate, blood circulation couldn’t occur and the fever won over one’s body...If dirt gets into the food, then people certainly fall ill.” (54, F)
Alcohol	Regarding Tonsillitis: “Well, the reason could be that we eat a lot of spicy food and drink alcohol. When there are festivals, we invite people, we get invited as friends, we celebrate together and when we celebrate we have to drink. That is probably why it’s seen commonly.” (38, F)

'From Within'/ Eating Habits	Regarding Abdominal Pain/Gastritis: "Some people believe that witches or spirits cause illness, but I don't think such things happen. People have illnesses in their own bodies. So, why would one blame another for their illness? They should seek treatment instead....I should eat on time. Apparently, gastritis occurs if you don't eat regularly and on time, and it can be cured if you eat on time." (35, F)
Changing Seasons	Regarding Diarrhoea: "I think it happens mostly when the winter season ends and summer starts...We have to be careful during the months of Falgun, Chaitra, Baisakh and Jestha [February to July]." (50, M)
Cold Weather	Regarding Migraines: "I feel it might be because my head was hit by wind during the postnatal period....Cold wind. We have to walk around even during the period right after childbirth. In the village, we aren't allowed to rest inside our houses. We have to walk around like we would at any other time. Sometimes I think that is the reason." (41, F) Regarding a URTI: "He became ill because of the weather. You can't really control a child's behaviour. Even if you make him wear warm clothes and a hat, he removes them instantly. He doesn't know what's good for him and what's not. So, I think he is suffering from this illness because of the cold weather. I haven't thought about any other reasons." (24, M)
Hygiene/Unhygienic Environment	Regarding Undiagnosed Uterine Problems: "I think it might be because in the village we have to clean the cattle's dung and work in an unhygienic environment during our postnatal periods." (28, F) Regarding Pneumonia: "Cleanliness could be a factor. The mother needs to take care of her child's cleanliness and hygiene no matter how busy she is....I thought I was careful about this." (27, F)
External Environmental Factors: Smoke	Regarding TB: "I don't drink alcohol or smoke cigarettes. Perhaps, because I make alcohol I am exposed to the smoke that is formed from the fire used while making alcohol. I feel that is the reason....I have TB because it developed in my own body." (42, F)
External Factor/ Community Belief	Regarding an Ear Infection: "The elders used to say that when a mother feeds a baby her milk, the milk goes into the baby's ears and they get infected. I knew that but I don't know if milk has entered into my ears." (42, M)
Physical Factor/Heavy Work	Regarding TB: "I am thinking there is something wrong in my lungs....I also did work that involved lifting heavy loads ie. Stones, wood for around tso months. I also feel that this might be the reason." (36, M)

Bad Luck	Regarding a Fall Injury from Top of Bus: “It was bad luck. His daughter was also asking him to come inside, but he didn’t....If he had listened to his daughter and sat inside...When one has evil luck, one can’t really do much.” (Respondent 1, 44, F) “Even if I had not fallen from the bus, I definitely would have been injured some other way.” (Respondent 2, 46, M)
‘From Within’	Regarding Lower Abdominal Pain: “I feel it develops from deep inside...I think it has developed from inside my body. I don’ think it is due to external factors such as the cold weather and wind.”(22, F)
Emotional Problems/Stress/Worry	Regarding Schizophrenia: “I think he’s suffering from this illness because he lost a lot of money.....He used to be very stressed about money. Someone else took his land so he has developed mental illness. He keeps thinking about the same thing over and over again.” (18, M) Regarding Anxiety: “Other than that..I was suffering from gastritis from before this illness started. It had been a month since I started taking medicines; I was worried about that too. Sometimes I wonder if that worry caused this illness.” (18, M)
Germes	Regarding a URTI: “There are germs in the surrounding air we don’t know about that can cause sickness.” (24,M)
Other Natural Factors	Regarding Eye Injury: “My sisters say that because I did not go to the astrologer and consult with him when this house was built, such things are happening to me. I had actually gone to the astrologer and put the date this house was built on as Jestha 1. Yet, my friends and sisters say that I didn’t follow the proper procedure. Also, my buffalo died 9 days ago.” (33, F)
Multiple Beliefs: Cleanliness, Weather, Transmission from Others	Regarding Mumps: “Perhaps it is due to lack of cleanliness; farmers are unable to look after their children very well...The weather is also probably a factor. If not, the illness should be occurring all the time...Perhaps because it is a communicable disease. When one child in the school gets it, all the others seem to get this illness...They say it transmits if you share food. They [son and daughter] eat from the same plate being from the same household “ (40, F)

It is no wonder that in a pluralistic care setting such as that found in rural Nepal that multiple different illness aetiology beliefs abound, not only when looking from one household to the next, but also when looking within households or even within individuals holding multiple disparate beliefs. These beliefs range drastically from those in which

personal responsibility is important, to those that relinquish all responsibility and focus solely on external factors or the foul-play of others as the cause of illness. As can be seen from some of the quotes above, it tends to be females more often who blame themselves, their behaviours or their bodies for the resulting illnesses, whereas males tend to focus more on the external causes. Although by and large, certain diseases seem to loan themselves to particular belief systems dictated by the larger community in which an individual is embedded, there is still quite a lot of diversity of opinions for specific illnesses as well. Some illnesses, like pneumonia, seem to have more consensus on their causes – cold weather or unsanitary environmental conditions – whereas other illnesses draw a wide range of beliefs. Still, it is each aetiology belief rather than each illness type, which is uniquely suited to the multiple different care providers available for treatment.

A3.19a Step 2: Situational Appraisal

Situational Appraisal: weigh various illness factors against the perceived barriers and costs of seeking care and the perceived benefits of treatment (a process guided by cognitive and emotional processes and governed by individual's attitudes regarding illness and health services)

After a household has determined that their symptoms or odd feelings are an illness, the next step involves appraising their situation to determine if care should be sought – whether the barriers outweigh the costs – and if so, where to seek it.

Appraising one's situation before making an ultimate care-seeking decision is also another necessary step in the overall help-seeking process. Situational appraisal is both a rational and irrational process governed by emotional processes and cognitive processes. In order to understand ultimate care choices, it helps to also understand how households initially react to illness and how their beliefs and expectations of health services guide their situational appraisal, which in turn leads to their care decisions.

Emotional Processes: Reactions to Sickness

Part of the appraisal process involves the irrational emotional reaction to illness that most households undergo. Usually an emotional gut reaction precedes any rational decision-making on the part of the household. As much as emotions

dictate the ultimate care-seeking process, it is important to understand how families in the study area respond to illnesses on an emotional level.

Of course, it stands to reason, that most of the households interviewed responded to their illnesses with concern. Most households spoke about how worried they were when they first noticed the illness. They were worried about how to get treatment for their young children and unsure of what to do:

“I am extremely worried. I don’t know what to do. What could I possibly do for a two-month old kid; I can’t feed him medicines either. I am awfully worried. What do I do now?” ~S-MG-8.3 (26, F)

If it was an adult who was ill, they were worried about what this illness might mean for their children or their families:

“I was worried about my children who live in Kathmandu. I was worried because I was vomiting blood and I was scared about not having adequate blood in my body. I was worried about my son and my daughter. I thought I was dying and they hadn’t come to see me...How could I treat it? Everyone told me to go to the hospital immediately!” ~S-NK-5.1 (42, F)

They were worried about the logistics of seeking care far away from their homes:

“I was worried, wondering if something bad would happen. If I were to go somewhere, it is not nearby. It [SHP] is far. I was alone at home. My mother and father are old and I have to work in the fields as well.” ~S-MG-8.2 (25, F)

They were worried about how to balance treatment seeking-with taking care of their households:

“I had only children here; their father stays away with another wife. I was worried about how to get treated and also about my children.” ~P-AB-2.5 (30, F)

Most of all, there seemed to be a lot of people who were worried about death and who thought their illness might ultimately lead to death:

“Of course I was worried. I was scared for my death. For two to three day, I was sure I was going to die....I thought I would have to cure myself.” ~T-AB-1.5 (57, M)

“When you own son falls sick, then it is obvious that you feel something. I was worried that he might die.” ~T-AA-1.3 (43, F)

One household talked about how worried they were because of how dangerous they felt their child’s disease was, and how often such a disease resulted in death:

“What else would I feel. I was worried she [daughter] would die.....No other disease is this dangerous....Others don’t result in so many deaths. When someone has diarrhoea, they vomit and pass loose stools until there is no water in the body. After that is finished, the person dies. The hospitals are too far away.” ~S-AB-1.5 (50, M)

Those who were ill were worried about what would happen to their children and partners if they passed away:

“I was thinking I would die any moment. I was worried about my three children and my young husband. I was continually stressed thinking about my kids suffering if I die so young.” ~S-MG-2.7 (33, F)

“I thought the illness wouldn’t be cured and I would die and my children would have to suffer – these things crossed my mind.” ~T-AB-1.1 (30, F)

More specifically, they were concerned about how their children might respond to their loss:

*“I had thought I would die and my children would be devastated.”
~S-RS-8.1 (61, M)*

They were concerned they might pass away without getting to see their family members again:

“I wasn’t even able to walk. I would shiver. I thought I will have to die without getting to see my husband’s face again (as he was not here).” ~T-AB-1.3 (33, F)

For some, it was not so much an overriding sense of worry as it was stress – a stress which was greater when the patient was a child:

“I get more stressed when my child is sick than when I myself am sick.” ~S-AA-4.5 (23, F)

For others, though, they had already resigned themselves to their fates. They were concerned, but they felt there was little they could do about it:

“I am certainly worried. But, I think this is how it is and I go on with my life.” ~S-NK-1.3 (35, F)

This sense of hopelessness came up in several interviews:

“I had thought I would not be cured from it. My daughters scolded me and told me to be courageous, at least once. But, I told myself, my time has come, and if I have to die, I will die. “ ~T-AA-1.1 (77, M)

“This illness wasn’t even cured when I took him to the hospital and it keeps returning intermittently. I have already taken him to Kanti [private hospital] when he was five months old and spent a lot of money. I am not sure what to do. I feel like maybe there is no cure.” ~T-MG-3.1

Several households expressed that they thought that no treatment would work:

“I thought that the treatment wouldn’t work. I went to the hospital, TH, took herbs – nothing worked! So, I felt like I was going to die....It could be a high workload or my karma....It could be fate to die. That’s how I feel.” ~T-NK-9.4 (35, F)

While many households expressed a fair amount of nervousness over their illnesses, on the opposite side of the coin were those few households which did not seem all that concerned, and assumed their illnesses would be cured on its own:

“I thought it was nothing to be concerned about and assumed it will get better by itself. I didn’t care thinking it was just a minor illness caused due to the cold.” ~S-AB-2.4 (38, F)

One household talked about how they did not feel their typhoid was all that dangerous in comparison to other illnesses, because it was cured almost immediately after medicines were taken:

“Typhoid was treated after I took medicines. Then, perhaps it is not too dangerous. It’s not as dangerous as illnesses that affect the head. I have realized that the illnesses caused by stress are terrible....The illnesses caused by stress is mental illness.” ~S-AA-1.3 (54, F)

Appraising the situation, and ultimately making a health decision is a process governed in part by emotions – by fear of death, by hopelessness, by concern for other family members, by stress, by logistical apprehensions, and sometimes, on the opposite end of the spectrum, by a lack of concern.

Cognitive Processes: Beliefs about & Expectations of Health Services

While the initial response to an illness is usually an emotional one, it is often quickly followed by a more cognitive process of weighing the pros and cons of each potential care choice based on beliefs and expectations. These beliefs and expectations may be sculpted by previous encounters with the various services, by the reactions of other people in the village or by individual-household level factors. Although households do not always seek care in accordance with their expectations, these expectations do play a role in guiding the care-decision process.

Perhaps the biggest concern of most households were surprisingly their expectations for certain provider behaviours (which is often considered to be more of a concern of patients in developed countries, and is often not the focus of health behaviour studies in the developing world). In fact, many households mentioned that they felt the doctors/providers behaviour was of tantamount concern to the overall quality of health service delivery:

“They say patients are half cured by the doctor’s behaviour and manners... A doctor should be someone who increase patient’s confidence not those who decrease it. I feel that competent and well-mannered doctors could cure patient half way.” ~P-AA-1.6 (23, M)

For many households, they said they expected their health providers to be kind and capable:

“They [health workers] have to be capable and should be kind to patients going for checkups. They should be able to treat patients without being annoyed. If a doctor gets annoyed while examining a patient, then it is not good.” ~T-AA-1.4 (35, M)

They expected their providers to be mild-mannered and not get annoyed with their patients:

“I think those [health providers] who do not get angry or use abusive words to the patients are good people. Those who get irritated or annoyed with the patients and use abusive words to the patients are bad people. Those who always smile and ask you about the illness are good...He who doesn’t get angry or turn his eyes in irritation when asked for help is a good person.” ~T-AA-1.3 (43, F)

Not only did they feel certain personality traits were important, but also an air of professionalism, indicated by physical appearance:

“There are qualities like the personality and his physical appearance [of the health worker] which matter – one should believe he is a health worker just by seeing him. From his linguistic behaviour to everything. It would be better if he were confident.” ~P-MG-2.4 (23, M)

Households also felt this professionalism needed to be manifested in a certain amount of competence. Health providers should be competent and able to diagnose and treat accordingly:

“A doctor should be able to find out the diseases and act accordingly. Diseases of one kind and treatment of the other, that shouldn't be done. It is not good if you have a disease related to head and the doctor operates on the stomach. Treatment should be good.” ~P-MG-8.2 (41, F)

“The doctors should be able to diagnose the illness and prescribe medicines accordingly. Or, what is the use of a doctor who cannot diagnose an illness? There are a lot of doctors who get angry at you. I don't like the doctors like those. If they treat the patients with care, the patients become happy; their pain also subsides when a doctor treats them in such a manner ...It doesn't matter how beautiful the hospital looks from the outside; they should also have good doctors. No matter how dilapidated a hospital's building is, they should provide treatment and their patients should be cured.” ~S-AA-4.5 (23, F)

Even if that diagnosis came at the expense of his personality or his interpersonal communication skills:

“In spite of scolding, if he [the doctor] is able to cure, then it is good. What's the use of a calm doctor who cannot cure?” ~P-RS-7.3 (68, F)

For other households it was not just about appearance, competence or mannerisms, but about the amount of time health providers were willing to spend with patients to elicit their concerns:

“The more time a doctor spends, the better. The villagers usually feel nervous and forget to tell the doctor all the problems they have. The doctor should give them enough time to remember all of it and properly tell the doctor.” ~P-RS-1.1 (42, F)

“When patients visit him [the HA], he should properly examine the patients and provider treatment. They don't take much time to examine, but they should take time to explain the outcomes of the examination. We don't know anything about illnesses. They are the ones who know.” ~S-RS-8.1 (61, M)

Several households felt that a certain amount of time was necessary to enable the provider to listen to their problems and treat them properly:

“Once a patient goes to a doctor, the doctor should nicely ask them about their problems, treat them properly and understand what they want. If they don’t give the patient enough time, it is no use visiting them.” ~S-AA-4.4 (68, M)

It is not just about the amount of time spent examining patients, but the amount of time providers should spend explaining treatments and outcomes to patients:

“When patients visit him [the HA], he should properly examine the patients and provider treatment. They don’t take much time to examine, but they should take time to explain the outcomes of the examination. We don’t know anything about illnesses. They are the ones who know.” ~S-RS-8.1 (61, M)

Households felt that health workers are not simply there to run tests or dole out medicines, but to provide advice and suggestions for future care:

“They [health workers] should provide suggestions and advice. I like it when they advise on the dosage and frequency of medicines according to pain. I also like when they refer us to another place if they cannot treat it.” ~P-MG-2.6 (34, F)

In short, patients ultimately wanted to be treated with respect and provided with treatment:

“If they treat well and give medicines, than we will be thankful. But, if they ignore us and don’t give us medicines, we will be disappointed.” ~P-AB-1.3 (38, F)

Some households, however, had slightly greater expectations for their health services, which extended beyond their expectations of individual providers and to the larger healthcare system. They had expectations regarding the affordability of services:

“They should provide free services to ones who cannot afford them. This has started to happen recently.” ~S-RS-1.1 (42, F)

And the financial assistance that should be available to those in need:

“It would be better if they [government providers] would help us financially too. Some people don’t have money. If they support us financially it would be great. They should treat with the medicines they have, but support us financially if we have to go elsewhere.” ~P-AB-1.3 (38, F)

Other households had expectations for the availability of providers or health facilities:

“All facilities should be located in the village rather than in the next village. Doctors should be knowledgeable and stay for the entire shift.”

“We only want the care provider to be present when we seek treatment.” ~S-RS-2.6 (50, M)

Or expectations for the availability of specific services:

“To treat diseases, good doctors from different places should come here and treat people with broken legs and broken hands so that people won’t have to spend extra money by going other places.” ~T-AA-1.3 (43, F)

Or the availability of specific equipment:

“Here the doctor [HA] doesn’t do x-rays, so we have to go to other places for x-rays. It would be easier if this equipment were present...If there were video x-rays and other facilities present that would be very helpful. But that is still very far to come....Here certain treatments are not available, so patients have to be taken to other places. I wish those kind of treatment were available here as well.” ~T-AA-1.4 (35, M)

Or the availability of specific personnel:

“I think there should be permanent doctors [HA]. Sisters [nurses] are always changing. There should be doctors who are capable of curing patients coming from the village. There should be good service. Also, people from the village should come here [to HP] when they come, doctors should treat them nicely.” ~T-AA-7.6 (20, F)

It is very clear that most households have some expectations for their health services or health providers – whether they be expectations about the availability of services, equipment, personnel or facilities or whether they be expectations about the attitude, professionalism and competence of the specific providers. These expectations are what households also consider in the process of appraising their situation for the purpose of determining whether or not to seek care.

The next steps in the care decision-making process are obviously the decision about whether or not to seek care and where to seek care, which are covered in the dissertation body itself.

Appendix 3.18

Selection & Training of Qualitative Interviewers (RAs)

Since the interviewer is a critical component of the qualitative data collection process, it was very important to select interviewers who had some experience conducting interviews, who would not be perceived as threatening, who would be capable of remaining objective, who would be able to reflexively respond and adapt their line of questioning to the participants and who had had a strong understanding of the concepts behind the project. In order to meet these criteria, I solicited recommendations from Nepali colleagues to select two interviewers with significant experience and public health backgrounds, and decided to also include three of the RAs who had worked with me on the quantitative surveys because I knew how they worked, they all had the necessary background, I trusted them completely and most importantly they understood the study, the district and how to interview people there. In total five Nepali graduate students were selected (3 women and 2 men) to carry out the interviews¹. All of them were familiar with qualitative research and had some experience carrying out interviews, keeping field notes and transcribing interviews in similar settings.

In terms of their demographic characteristics, they ranged in age from 24 years old to 35 years old, and were culled from different ethnic groups to ensure ethnic diversity and minimise the effect of caste-bias on the interviewing process.

In order to ensure that the interviewers were comfortable with the study design and the process of carrying out the interviews, a week-long training session was held in Kathmandu to familiarise them with the data collection process and instruments and to make sure they had a chance to practice the interviews with one another first. After the week-long session in Kathmandu, they were all trained for another 10 days in Makwanpur district where they interviewed actual households. During this training process, they had the opportunity to observe one another, to comment on what worked and what didn't, and to practice note-taking and transcribing interviews. A Nepali colleague and I observed all of them do ten interviews each during this period, and gave them thorough feedback on the style and content. Upon returning to Kathmandu, my colleague and I listened to all of the recordings from their interviews, checked their notes and transcriptions against the recordings and gave more detailed content-related feedback. All of the interviewers were trained on the best methods for making people feel comfortable with them and were trained to remain as unbiased as possible throughout. They were also trained to tell people they were not affiliated with any health organisation, the government or any hospital and trained to phrase questions in such a way as to elicit the most truthful responses. For example, when asking about THs, they were trained to ask, *"In this village and many areas in Nepal, including Kathmandu, it is very common to use THs. Do you use THs when you get sick? Did you use a TH for this illness? Generally, how do you personally feel about them?"*

After the piloting phase, a decision was made that I would not be present during the interview process for fear that my presence in the villages may make people uncomfortable and bias the results even more. It was found during the piloting that people were initially wary of my presence, so even though it had been my intention to observe all the interviews, I felt this was not in the best interest of the study results. Plus, my lack of language skills would have also posed a problem.

Appendix 3.19

Ensuring Data Quality for the Qualitative Data

Since qualitative data is often criticised for not being rigorous enough, it is important to ensure the quality of the data throughout the process to enhance credibility, validity and dependability of the findings (Fitzpatrick & Boulton, 1994; Keenan, van Teijlingen & Pitchforth, 2005; Miles & Huberman, 1994; Taylor-Powell & Renner, 2003; Zhang & Wildemuth, 2009; Ziebland & McPherson, 2006). In order to do this, methods of triangulation (comparisons to other data sources) can be used as well as respondent validation -- sharing the findings with participants and soliciting their responses (Barbour, 2001; Creswell & Clark, 2007; Leech & Onwuegbuzie, 2007; Mays & Pope, 2000). Since this study involved a quantitative component, it was possible to triangulate the results from the qualitative component off of that. Key informant interviews and informal FGDs were also used as part of the triangulation process (although the results of these were not discussed anywhere in the body of the text). Given logistics involved, however, respondent validation was not used at this point in time, although the results were discussed with others familiar with the context. I hope to be able to use respondent validation of these results in the future, and am compiling specific reports for each of the VDCs where the data was collected.

In addition to these methods, it is important to leave an audit trail to document all original data and all decisions made throughout the process (Keenan, van Teijlingen & Pitchforth, 2005; Zhang & Wildemuth, 2009). For this study,

recordings, field notes, Nepali and English transcriptions were retained and each step and decision was carefully documented to retain dependability.

As Miles and Huberman (1994) point out, it is also important to maintain scepticism over the results and to question the representativeness of the sample. I made sure to include a wide range of different subjects who would represent a range of different households, patient, health facility, community and illness factors, so I could be sure the sample would be representative and not just selected on the basis of ease. I also maintained scepticism of the results throughout, constantly questioning and rethinking the findings.

Finally, as Taylor-Powell and Renner (2003) point out, it is also important to involve others in the feedback process as a way of checking data quality and the legitimacy of the findings. Once I had a preliminary analysis of my findings complete, I made sure to check it with colleagues familiar with the district and culture to solicit feedback and come to a better understanding of the findings.

Appendix 3.20a

Qualitative Topic Guide in English

Qualitative Interview Topic Guide Outline:

I. Section 1 – Demographics (pg 2)

- a. Record basic demographic and socioeconomic details of household, respondent and the ill individual

II. Section 2 – Initial Illness Narrative (pg 3)

- a. Understand how people narrate their illnesses and what general knowledge they have of them. If they don't have adequate knowledge of their illness they may not seek appropriate care or receive it.
- b. Understand how people think about and conceptualize their illnesses in their own words
- c. Understand what people initially value or find important when discussing their illnesses or illness episodes

III. Section 3- Explanatory Models (pg 4)

- a. Understand the cultural significance of certain diseases and illnesses, illness aetiology beliefs and the pathways people use for seeking care.
- b. Elucidates people's understanding of the physiological, natural, supernatural, psychological and biological causes of illness and their understanding of general pathophysiology

IV. Section 4 – Medical Attention and Response to Treatment (pg 5 - 6)

- a. Highlights utilization of the various health-care facilities, treatment pathways and treatment experiences for a specific illness episode (treatment narrative)
- b. Explores the functioning of various health services and people's personal interactions with the different facilities and their satisfaction with services
- c. Explores why people make the specific choices of providers that they make and who they consult in making these decisions. Gets at people's reasons for their medical choices

V. Section 5 – Previous Illness Experience (pg 7-8)

- a. Determine if the person has learned from or benefitted from previous illness experiences
- b. Determine if these previous experiences have influenced their current and future health-seeking processes (both for a specific illness or a specific provider)

VI. Section 6 – Future Illness (pg 9)

- a. Determine their future treatment plans and expectations of the health services
- b. Indirectly measure their satisfaction with their health-seeking decisions for this specific episode

VII. Section 7 – Health Beliefs, Expectations and Decision-Making Processes (pg. 10)

- a. Understand peoples' expectations and beliefs regarding providers and government services, and whether or not these expectations are being met by the services available
- b. Determine how people measure quality in their health services and providers
- c. Determine the conscious factors (self-reported) that go into people's health decision-making processes and choices
- d. Determine the extent to which people feel changes should be made to their available health services and providers

NHSB-MK Study Qualitative Interview Topic Guide

Screening Question:

- a. Introduce study/provide brief overview
- b. When was the last time anyone in this household was sick? (try to get cases that have occurred within the last month for minor illnesses, or within the last three months for major illnesses – be the judge of how well people are able to recall their illnesses)
- c. Probe with list of tracer conditions: did anyone in this house have any of the following illnesses in the last one to two months (see list) – similar probing to quantitative data collection
- d. Probe with facilities: did anyone in this house go to the FCHV, HP/SHP/PHCC, Hospital, Traditional healer in the last one to two months? If so, why?
- e. If yes to above, ask to speak with the ill person (do not conduct the interview with another family member unless the person is a child)

Before Starting the Interview:

- a. Take consent and write down participant name and get his/her signature and/or thumb print (do not assume they are literate and able to write their name)
- b. Turn on tape recorder and state the date, interview number, VDC and ward #
- c. Place the tape recorder in between you and the interviewer (make sure to monitor it during the interview to make sure it is running and that a little child does not accidentally turn it off)

--START OF INTERVIEW--

Section I – Demographics:

- a. Age (note down gender)
- b. How many people live in this household/share a kitchen?
- c. Who is the head of the household and what is your relationship to this person?
- d. Educational status – up to what class did you study? Can you read/write more than your name?
- e. Note caste and ask about religion (both)
- f. What is your occupation? What is the occupation of the household head? How do you earn your money?
- g. How much money do you typically spend each month on oil, food stuff, tuition fees etc.?
- h. Do you have the following assets: electricity? Solar? Mobile phone? Etc.
- i. How much land do you own?
- j. How many rooms (including up above) does your house have?
- k. Note down the housing materials (roof, floor, walls) – use power of observation

Section 2 - Initial Illness Narrative:

- a. What is the name of your illness? How else is it known in your village?
- b. What symptoms were present?
- c. When did the first symptoms appear? What symptom appeared first?
- d. How did you determine that you were sick?
- e. Was anyone else in your family sick?
- f. How did you feel when you realized you were ill? Scared? Fear? (wait for response first and only then probe further)
- g. What thoughts went through your mind when you realized you were sick?
- h. How much control did you feel you personally had over your body and over your illness when you were sick this time?
- i. How much control did you feel you had to prevent this illness from ever happening in the first place? What specific actions can/should be taken to prevent this illness?

Section 3 - Explanatory Models:

- a. How common is this illness in your village?
- b. What do you think is the cause for this illness? Your own thoughts or others'? Whose?
PROBES: weather, stress, behavior, anxiety, cleanliness and hygiene, food, water, humoral imbalance, spirits, magic, curse from someone, work or school load, family issues, community issues, any events in your family or community? (make sure to specifically ask about an event which may have caused it)
- c. Can you describe what your body felt like during this illness?
Shivering, fever (how much?), coldness, vomiting, restlessness? Do you know what was going on inside your body, happening to your body and/or mind during this illness?
- d. Do you think your illness was contagious? If so, who did you get it from? Who did you pass it to? How does it move/ how is it transmitted?
- e. Is this illness dangerous? Please describe severity. What is a severe illness? Who has had a severe illness? What was it?

Section 4 - Medical Attention and Response to Treatment:

- a. What did you do first when you noticed you were ill?
 - b. Did you take any home remedies or any medicine/herbs already available in your home first? If so, where did you get these from? What meds/herbs did you take? What were each of these herbs/medicines intended for?
 - c. Tell me more about all the different ways you tried to cure this illness. What did you do first, second, third, last? Where did you go? Did you perform puja or pray (if Christian)? (list all the places they went and listen for cues during the conversation if they went elsewhere, too. ie. TH) – PROBE with: Did you go to/use the FCVH, Pvt., Gov., Traditional Healer, Pharmacy, home remedies? (make sure to ask about each just in case they forget to mention something; note reaction especially when you ask about Traditional healer)
- Ask the following questions for each treatment episode sought outside of home: Can you tell me about your experiences with each of these providers mentioned above?

Follow-up with the following questions:

- d. Who did you consult with? Whose advice did you seek before you sought care from this provider? Is it necessary to seek anyone's permission before seeking treatment? Whose? Who did you seek help from? Why?
- e. Why did you seek treatment from this location/person? (from c above)
- f. How far is it to the health facility/healer? Time/distance? How did you go there?
- g. How long did you wait for treatment? How long did the provider spend with you? How long did you wait for any tests?

h. What advice did they give you? Diet restrictions? What questions did you ask? Were they answered? What information did they provide you with?

i. What test were run? What medicines or treatments were given? Type (ask to get the medicine packages if they are still available – if not available, ask them what each of the medicines were supposed to do)? What did the doctor tell you the medicines were supposed to do to cure you/your child? Did you comply with the treatment and do everything the doctor said? Did you partially comply? Why or why not? Would you have preferred more medicine, fewer? How would you have felt if you were offered injections? Is one better than/more effective than the other? How would you have felt if you were given no medicines?

j. How did you feel about the way the provider behaved? Was s/he friendly? Helpful? Did s/he listen to your complaints? In what ways do you think they could have been better or more responsive to your needs (if any)?

k. How long after taking medicine did you feel better? Did you continue medication after feeling better?

l. How much did you pay for each component of your treatment?

m. Are you satisfied? Why? Why not?

n. What other treatment options would you like for speedier or improved recovery? Other health care facilities? Other medical professionals? Other medicines?

Section 5 - Previous Illness Experience:

a. Were you sick with similar symptoms before? Was anyone else in your family sick with similar symptoms? How long ago was this?

b. Is there any difference in the treatment you/your family member sought then and now? What? Why were there differences?

c. Tell me all the different ways you tried to cure the previous illness. Where did you go? Did you perform puja? (list all the places, as much as they can recall, they went and listen for cues during the conversation if they went elsewhere, too. ie. TH)

→ Ask the following question regarding previous illness episode:
Can you tell me about your experiences with each of these providers from your last episode?

Follow-up Questions (no need to get into great detail here, just get a basic idea without too much information):

d. Who did you consult with? Whose advice? Who did you seek help from? Why?

e. Why did you seek treatment from this location/person?

f. How far is it? Time? How did you go there?

g. How long did you wait for treatment? How long did the provider spend with you?

h. What advice did they give you? Diet restrictions? What questions did you ask? Were they answered?

i. What medicines? Type? Did you comply?

j. How long after taking medicine did you feel better? Did you continue medication after feeling better?

k. Were you satisfied?

→ If person or other family member never had this illness or similar illness before, ask the following questions about the health facility (in reference to the provider choices mentioned in section 4 question c):
Make sure to ask about all the different providers they have mentioned consulting in Section 4, Question C

l. Have you ever used this provider/facility (from Section 4, c) before when seeking care for an illness? If so, what illness were you seeking care for? How long ago was this?

m. Can you tell me a little bit about your past experience with this provider/facility?

Follow-Up Questions: What type of care did they provide? What medicines? What tests did they run? How did they interact with you/treat you? Were you satisfied with the experience? Why/why not?

Section 6 - Future Illness:

a. How will you treat similar illness in the future? What will you do first? Any changes/differences? If so, why?

b. Will you use the same facility in the future for any episode of illness? Why/why not? What if the illness is more severe than it was this time, where will you go, what will you do? Why?

c. Are there any specific actions you or your family can take to prevent this illness from happening or to reduce the likelihood of getting this illness or a similar illness in the future?

Section 7 - Health Beliefs, Expectations and Decision Making Processes:

- a. Are you satisfied with the health options available to you? Discuss personal experiences related to the opinion
- b. What could the health provider have done to improve your experience for this most recent illness episode?
- c. What qualities should a good healthcare worker have? What do you like? How should he/she act or behave? How long should they spend with you? What about TH? Why do you go to a TH? What does a TH do that a provider can't (and vice versa)? On your most recent visit to the health provider or TH, do you feel s/he treated you this way? Why/why not?
- d. What qualities should a health facility have? Do you trust others' opinions about healthcare facilities or providers? Did the health facility you last used for this episode of illness have everything you expected or wanted? If not, what was missing and how could it have been improved?
- e. Was the person you consulted with at the health facility this most recent time an MBBS doctor? What is an MBBS medical doctor? How is this person different (or similar) than a health worker at HP or SHP?
- f. What factors are important when deciding where and with whom to seek treatment? How do you or your family make the decision to go seek care outside of your home? To use the FCHV? To use a private provider? To use a TH? To use a government facility?
- g. What changes would you like to make to health care delivery in your community? Improvements? What difficulties did you face this last time you used the health services?

Appendix 3.20b

Qualitative Topic Guide in Nepali

Section I: Demographic Information of Patient & Family :

१. परिवार संख्या
२. घरमूलीसंगको नाता
३. उमेर
४. महिला/पुरुष
५. यदि विरामी बच्चा हो भने, आमाको /बुवाको उमेर
६. पेशा:
७. जाति/धर्म
८. घरमूलीको पेशा
९. परिवारको मासिक आम्दानी
१०. घरजग्गा खेतबारी
११. सम्पत्ति: मोबाइल
- सोलार प्यानल
- विजुली बत्ती
- टेलिफोन
- साइकल
- टेलिभिजन
- बेलगाडा
- खाट
- सोफा/फ्रिज
- पंखा/हलो/शौचालय

Section II Initial Illness Narrative

१. तपाईंलाई लागेको रोग वा स्वास्थ्य समस्याको नाम के हो? तपाईंले यसलाई कसरी वर्णन गर्नुहुन्छ? के तपाईंले यस स्वास्थ्य समस्याको बारेमा केही भन्न सक्नुहुन्छ?
२. यो स्वास्थ्य समस्याको पहिलो लक्षण कहिले देखापऱ्यो? त्यो लक्षण के थियो? अरु घरपरिवारका सदस्यहरूलाई त्यो बेला केही स्वास्थ्य समस्या देखा परेको थियो? यदि बच्चा विरामी भएको थियो भने त्यसको लक्षण पहिला कसले देखेको थियो?
३. के तपाईंलाई यस्तो खालको लक्षण पहिला देखा परेको थियो? यस्तो खालको लक्षण अरु कसैमा देख्नुभएको थियो? यदि देख्नुभएको भए, कसमा?
४. आफू विरामी भएको कसरी थाहा पाउनुभयो? यो स्वास्थ्य समस्या भएको भनेर कसरी यकिन गर्नुभयो? यदि बच्चा विरामी भएको कसरी थाहा पाउनुभयो?
५. यसपाली विरामी भएको बेला तपाईंलाई के के भयो?
७. अरु पनि केही भयो कि, अरु लक्षण वा स्वास्थ्य समस्या केही छ कि?
८. आफू विरामी भएको बेला कस्तो महसुस गर्नुभयो? डर लाग्यो, चिन्ता लाग्यो, नराम्रो लाग्यो . . . यसको बारेमा भन्नु है त?
९. आफू विरामी भएको बेलामा के सोच्नुभयो? तपाईंको दिमागमा कस्तो कस्तो कुराहरु खेले?

Section : III Explanatory Models-Causes & Conditions of the problem

१. के यो खालको समस्या /विरामी तपाईंको गाउँघरमा कतिको छ त?
२. तपाईंको स्वास्थ्य समस्यालाई अर्को रुपमा/अर्को तरिकाले के भन्न सकिन्छ?
३. यो समस्या/रोग के कारणले लाग्यो होला? तपाईंको अनुभवमा यो समस्या कसरी भएको अथवा तपाईंलाई अरु कसैले यो समस्या यो कारणले भएको भनेर भनेको छ? अनि यो भन्ने मान्छे के स्वास्थ्यकर्मी नै हो त? अनि को मान्छे हो त्यो?
४. यो रोग लाग्ने अरु कुनै कारण छुन् कि?
५. यो रोग मौसम परिवर्तन/हावा पानी चेन्ज अथवा चिन्ता /पिर/सुर्तासँग सम्बन्धित छ त?
६. यही समय अथवा कारणले तपाईंलाई किन विरामी पायो त?
७. तपाईंलाई चिमारी हुँदा तपाईंको जीउमा /शरीरमा कस्तो महसुस गर्नुभयो र दिमागमा के के आए र खेले?
८. याद छ तपाईंलाई, तपाईं विरामी परेको बेला गाउँ घर छिमेकमा कुनै घटना केही घटेको थियो?
९. यदि घटेको भए, त्यो घटना र तपाईंलाई भएको समस्यामा कुनै सम्बन्ध छ ?
१०. तपाईंको स्वास्थ्य समस्या तपाईंको जीवनको कुनै घटनासँग सम्बन्धित छ? मतलब परिवारको समस्या/कामको समस्या /समाजको समस्या? यदि छ भने कुन समस्या र त्यो किन महत्वपूर्ण छ?
११. यो स्वास्थ्य समस्या हजुरको व्यवहारसँग सम्बन्धित छ? के यो समस्या तपाईंको कर्मको /कामको फल/नतिजा हो जस्तो लाग्दछ?
१२. के यो सरुवा /सर्ने रोग हो? के यो अरुलाई सछ्छ? तपाईं आफूलाई चाहिँ अरु कसैबाट सरेको पो हो कि ?

१३. यो रोग ठूलो हो /serious छ खतरनाक हो भनेर कसरी थाहा पाउने नि? तपाईंको विचारमा कुनै पनि रोग के भएमा खतरनाक /ठूलो /गम्भिर/serous हुन्छ?

Section IV : Medical Attention & Response to Treatment

१. विरामी भएपछि सबैभन्दा पहिला के गर्नुभयो त?
२. यो रोगको बारेमा कससँग सल्लाह लिनु भयो त ? यदि लिनुभयो भने, को सँग? कहाँ? तपाईंले उहाँहरूलाई के के भन्नुभयो? उहाँहरूबाट के के सल्लाह आयो त?
- (धामी-भाक्री/स्वयंसेविका/डाक्टर/अरु स्वास्थ्यकर्मी/स्वास्थ्य चौकी /औषधी पसले/उप-स्वास्थ्य चौकी /PHCC, निजी क्लिनिक (Pvt)
३. यदि तपाईंले कससँग मद्दत लिनुभयो भने त्यो मद्दतको बारेमा भन्नुस् न? त्यसपछि के भयो? मद्दत लिने निर्णय कसले गर्‍यो? तपाईं आफैले /तपाईंको श्रीमान/श्रीमतीले/बाबु आमाको वा अरु कसैले?
४. त्यही मान्छेसँग नै किन सल्लाह लिनुभयो? (यदि घरबाहिर उपचार नगरको ए, यो प्रश्न सोध्ने) तपाईंले अरु कससँग किन सल्लाह लिनु भएन त?
५. यो स्वास्थ्य समस्याको लागि तपाईंले कुनै परीक्षण गर्नुभयो त? अरु कुनै उपचार लिनुभयो त? के के लिनुभयो भन्नुस् त?
६. घरबाहिर उपचार गराउनु अघि, कससँग सोध्नु भयो? को सँग? किन? अनि के सल्लाह दिनु भयो त?
७. घर बाहिर उपचार गर्नुअघि तपाईंले घरमा उपचार गर्नुभयो कि? यदि गर्नुभयो भने, के गर्नुभएको थियो र किन?
८. यदि तपाईं उपचार गर्नु कुनै डाक्टर, भाक्री, स्वयं सेविका, अरु कुनै स्वास्थ्यकर्मीकोमा जानु भएको भए, उनीहरूले के भएको छ भने छ?

९. बाहिर उपचार गर्नको लागि तपाईंलाई कसैले अनुमति दिनु परेको थियो? एक ठाउँ भन्दा, बढी ठाउँमा उपचार गर्न जानु भएको थियो। यदि थियो भने कहाँ जानुभयो?
१०. Probe गर्ने TH /FCHV/health Post /SHPIPHCC/Pharmacy/private Clinic)
११. यो स्वास्थ्य समस्या हजुरको व्यवहारसँग सम्बन्धित छ? के यो समस्या तपाईंको कर्मको कामको फल /नतिजा हो जस्तो लाग्दछ?
१२. के यो सरुवा/सर्ने रोग हो? के यो अरुलाई सर्छ? तपाईं आफूलाई चाहिँ अरु कसैबाट सरेको पो हो कि?
१३. यो रोग ठूलो हो /serious छ /खतरनाक हो भनेर कसरी थाहा पाउने नि? तपाईंको विचारमा कुनै पनि रोग के भएमा खतरनाक/ठूलो गम्भिर /serous हुन्छ?
रोग के को आधारमा /के हुँदा/के भएमा गम्भिर हुन्छ? यसको बारेमा पनि केही भन्दिनु न ल?
११. अर्को ठाउँमा उपचार गर्दा, त्यहाँको मान्छेले के भएको छ भन्यो त?
१२. के स्वास्थ्यकर्मीले तपाईंलाई कुनै औषधी /व्यायाम वा खानेकुरामा बार्नु भन्यो? (वा आफ्नो कुनै बानी जस्तै जाडरक्सी खाने/चुरोट खाने..... सुधार्ने भनेर भने) सबै उपचार बारे /औषधी सल्लाह सहति सबै टिप्पे है त)
१३. तपाईंले उनीहरूले भनेजस्तै गर्नु भएको छ? किन? किन गर्नुभएन?
१४. उपचारले के कारणले काम गरेको होला?
१५. के कारणले उपचारले राम्रोसँग म नगरको होला? औषधी समयमा खानु भएन कि वा डाक्टरले भनेको जस्तो गर्नु भएन कि? किन?
१६. अरु कुनै उपचार/खाना /व्यायाम वा कुनै सहयोग लिनु भएको छ कि
१७. आफूले सोचेको तर लिन नपाएको कुनै उपचार छ कि?
१८. तपाईं उपचार गर्न जाँदा औषधि पाइयोस भन्ने सोच्नुहुन्छ? यदि भनेको जस्तो औषधी नभएको /नपाएको भए तपाईंलाई कस्तो महसुस हुन्थ्यो? के तपाईंलाई नर्रो लाग्थ्यो त? यदि तपाईंलाई

औषधिको साठी सुई दिएको भए राम्रो हुन्थ्यो जस्तो लाग्छ कि? के तपाईंलाई १ वटा भन्दा बढी/अलि धेरै औषधी दिएको राम्रो लाग्छ?

१९. बाहिर उपचार गर्नुभन्दा पहिले वा पछि आफैले केही उपचार गर्नु भएको थियो । भन्नाले आफैले कुनै औषधी किनेर खानुभएको थियो/स्वास्थ्यकर्मीको सल्लाह नलिइकनै?
२०. यो समस्या समाधान गर्न तपाईंले कुनै पूजा पाठ वा धर्मकर्म गर्नुभएको छ/थियो?
२१. यदि धामी भक्तीकोमा उपचार गर्नुभएको भए अथवा धामी भक्तीकोमा जाँदा उनीहरूले तपाईंले के गरिदिए हुन्थ्यो । कस्तो सेवा दिए हुन्थ्यो जस्तो लाग्छ? तपाईंले खोजे जस्तै सेवा पाउनु भयो त?
२२. तपाईंलाई अरु कस्तो कस्तो उपचार सेवा लिन मन लागेको छ, यदि उपचार सेवा नलिनभएको भए, किन नलिएको त?

Section V : Previous Illnesses experiences.

१. के यस्तो खाले स्वास्थ्य समस्या तपाईंलाई पहिला पनि देखा परेको थियो?
२. त्यो स्वास्थ्य समस्यालाई उपचार गर्न कति समय कुर्नु भएको थियो ?
३. यदि थियो भने रोगलाई समाधान गर्न के गर्नु भएको थियो? अहिलेकै तरिका समाधान गर्नुभएको थियो कि केही फरक थियो? कस्तो फरक थियो र किन?
४. उपचार अवधि कति थियो र उपचार गर्दा कति समय लाग्दो? (डाक्टरकोमा जाँच गर्दा कति र जम्मा कति समय औषधी खाएको? स्वास्थ्यकर्मीले तपाईंलाई कुनै सल्लाह दिनु भयो? कस्तो खाले सल्लाह दिनभयो? तपाईंले कुनै प्रश्न सोध्नु भयो त? अनि तपाईंले त्यो प्रश्नको जवाफ पाउनु भयो त?
५. तपाईंको परिवारको कुनै सदस्यलाई यस्तो किसिमको स्वास्थ्य समस्या थियो कि यदि थियो भने त्यसलाई सन्तो पार्न के गर्नु भयो तपाईंको तरिका अपनाउनुभयो कि फरक तरिका? फरक हो भने नि फरक?

७. पहिले गरेको उपचारको बारेमा केही भनिदिनुहोस् न? उपचार कस्तो लाग्यो? स्वास्थ्यकर्मी कस्ता थिए? कृपया यसलाई व्रयान गरिदिनुहोस् ।

Section VI : Future Health Seeking

१. भविष्यमा यस्तो स्वास्थ्य समस्या भयो भने तपाईं उपचार गर्न के गर्नुहुन्छ? हलि जस्तै कि फरक? किन -कारण भन्नुहोस्।
२. तपाईंले स्वास्थ्य प्रणालीमा कस्तो परिवर्तन देख्न चाहनुहुन्छ?

Section VII General Health System Knowledge

१. जस्तो कि विद्यालयको पनि विभिन्न तहहरू हुन्छन् नि, जस्तो प्राथमिक तह , निम्न माध्यमिक तह, माध्यमिक तह, त्यसरी नै स्वास्थ्य संस्थालाई पनि विभिन्न तहमा बाँडिएको छ के तपाईंलाई ती तहहरूबारे थाहा छ त? सबैभन्दा सानो तह अर्थात विरामी हुँदा सबैभन्दा पहिला जाने संस्था कुन हो त? प्रत्येक तहमा कस्ता कस्ता सेवाहरू उपलब्ध हुन्छन्? डाक्टरहरूले कुन स्वास्थ्य संस्थाबाट सेवा दिइरहेका छन् त? डाक्टर र अरु स्वास्थ्य कर्मीमा के भिन्नता देख्नुहुन्छ?
२. के तपाईंलाई वडाको महिला स्वास्थ्य स्वयं सेविकाको काम कर्तव्य बारे केही थाहा छ? उहाँहरूको काम के हो नि? उहाँहरूले खासमा के गर्नुपर्ने हो नि?
३. के तपाईंलाई विभिन्न स्वास्थ्य संस्थाहरूमा जाँदा र त्यहाँको सेवा प्रयोग गर्दा कति खर्च लाग्छ? थाहा छ?

Section VIII : General Health Beliefs & Expectations

१. तपाईं यहाँ पाइराखुभएको उपचारबाट सन्तुष्ट हुनुहुन्छ? पुरै सन्तुष्ट अलिअलि सन्तुष्ट? असन्तुष्ट?
 २. तपाईंलाई उपचार गर्नेले अरु के गरेको भए तपाईंलाई भन्नु राम्रो लाग्थ्यो? (यसपालीको रोगलाई विचार गरेर सोच्ने)
 ३. धेरैजसो तपाईंलाई यहाँ गरिने उपचार कस्तो लाग्छ? अनि महिला स्वास्थ्य सेविका दिदीले गर्ने उपचार चाहिँ कस्तो लाग्छ नि?
- अ.हे.व/एच/ए? वहाँले गर्ने के के कुरा राम्रो अथवा ठीक लाग्छ? के गर्न छुटेको जस्तो लाग्छ? यो के के छ?
४. असल स्वास्थ्य कर्मीमा के के गुण हुनुपर्छ? तपाईं विरामी भएर जादा के के जाँचोस् जस्तो लाग्छ? कस्तो व्यवहार गरेको मनपर्छ? के के उपचार गर्नुपर्छ जस्तो लाग्छ?
 ५. तपाईंको विचारमा धेरै समय पिएर जाँच्ने तर औषधी नदिने डाक्टर ठीक छ कि खुरुक्क औषधी मात्र लेखिदिने डाक्टर ठिक? कि औषधीको सट्टा सुई दिने डाक्टर ठिक, भन्नुस त ।
 ६. डाक्टर वा जाँच गर्ने मान्छेले कति समय लगाएर जाँच्नुपर्छ?
 ७. भन्नुस त, तपाईंले जचाउने ठाउँ राम्रो छ भनेर कसरी किटान -यकन) गर्नुहुन्छ? के भयो भने सो ठाउँ राम्रो खाले हुन्छ? कि गाउँमा अरु मानिसले त्यो ठाउँको बारेमा भनेको कुरामै विश्वास गर्नुहुन्छ?
 ८. धामी-भाँकीले लागू लागेका वा विरामीसँग कति समय दिएर हेर्नुपर्छ?
 ९. धामी भाँकीबाट तपाईं के आश गर्नुहुन्छ? उहाँले के के गर्नुपर्छ? वा के के गर्नुपर्दैन जस्तो लाग्छ? उहाँको व्यवहार कस्तो हुनुपर्छ त?
 १०. तपाईंलाई बढी विश्वास कसको लाग्छ? डाक्टरको भन्दा धामीभाँकीको बढी विश्वास लाग्छ कि? कि कम विश्वास लाग्छ? कि उति उति नै हो? न कसतो रोग हो? त्यसमा भर पर्ने हो कि?

११. तपाईं विरामी भएर उपचार गर्न जाँदा तपाईंको साथीहरु र छरछिमेकीले भनेको कुराहरु वा उहाँहरुले दिने सर सल्लाह कतिको महत्वपूर्ण हुन्छ?

Section IX : Health Care Provider

के कुराहरुको आधारमा तपाईं यी सेवाहरु लिनुहुन्छ ।

१. घर भित्र वा घर बाहिर
२. डाक्टरी उपचार वा धामी भाक्री
३. सरकारी वा प्राइभेट
४. औषधी पसल वा अन्य कुनै स्वास्थ्य संस्था
५. म.स्वा.स्व. से. वा अरु सरकारी संस्था
६. SHP/HP
७. SHP/HP वा PHCC
८. PHCC वा जिल्ला अस्पताल
९. जिल्ला अस्पताल वा काठमाडौंमा भएको अस्पताल
१०. तपाईंको गा.वि.स. मा भएको स्वास्थ्य संस्था वा अर्को गा.वि.स. मा भएको स्वास्थ्य संस्था
११. कहाँ र को बाट सेवा लिने भन्ने कुरा कसरी निर्णय गर्नुभयो? तपाईंले निर्णय लिँदा सबैभन्दा महत्वपूर्ण कुरा के हो त?

- के त्यो विरामी/रोगको प्रकार हो?
- रोगको गम्भिरता
- औषधीको उपलब्धता
- सेकीका उपलब्धता
- स्वास्थ्य सामाग्रीको उपलब्धता

- महिला कर्मचारीको उपलब्धता
- छरछिमकेहरुको सल्लाह
- परिवारको सल्लाह
- आफ्नो अनुभवहरु

तपाईंलाई उपचार गर्नको लागि कति समय कुन पन्यो ।

Factors Related :

- खर्च
- दुरी
- स्वास्थ्य कमीको उपस्थिति
- स्वास्थ्य सामाग्रीहरुको उपलब्धता, सेको किसिम
- स्वास्थ्य कर्मीको किसिम
- सेवाको गुणस्तर
- साथीहरुको सल्लाह

१२. तपाईंले लिने स्वास्थ्य सेवा र तपाईंको बच्चा/ले पाउने स्वास्थ्य सेवामा के फरक पाउनुहुन्छ? तपाईंको श्रीमान / श्रीमतीले पाउने स्वास्थ्य सेवा फरक छ? छोरा वा छोरीका आधारमा सेवा पनि फरक लिनुहुन्छ? १ वर्षभन्दा मुनिको, १-१० वर्षसम्मको र १० वर्षभन्दा माथिको मानिसले पाउने सेवा एउटै हो वा फरक छ?

Section X Hypothetical /Decision Modeling

१. मानौ यदि तपाई सामान्य विराम हुनुहुन्छ, स्वास्थ्य संस्था (TH/PVT/Govt/Allo/Pharmacy HP/PHCC) नजिकै छ र तपाईसँग पैसा पनि छ, त्यो बेला के गर्नुहुन्छ?
२. मानौ यदि तपाई ठीकठीकै विराम हुनुहुन्छ
.....के गर्नुहुन्छ?
३. मानौ यदि तपाई सिक्किस्त/एकदम विरामी हुनुहुन्छ
.....के गर्नुहुन्छ?
४. मानौ यदि तपाई सामान्य विरामी हुनुहुन्छ, स्वास्थ्य संस्था (TH/PVT/Govt/Allo/Pharmacy HP/PHCC) टाढा छ र तपाईसँग पैसा छ, त्यो बेला के गर्नुहुन्छ?
५. मानौ यदि तपाई ठीकठीकै विरामी हुनुहुन्छ, ...
.....के गर्नुहुन्छ?
६. मानौ यदि तपाई सिक्किस्त विरामी हुनुहुन्छ, ...के गर्नुहुन्छ?
७. मानौ यदि तपाई सामान्य विरामी हुनुहुन्छ, स्वास्थ्य संस्था नजिकै छ तर तपाईसँग पैसा छैन, त्यो बेला के गर्नुहुन्छ?
८. मानौ यदि तपाई ठीकठीकै विरामी हुनुहुन्छ, ...के गर्नुहुन्छ?
९. मानौ यदि तपाई सिक्किस्त विरामी /एकदम विरामी हुनुहुन्छ, ... के गर्नुहुन्छ?
१०. मानौ यदि तपाई सामान्य विरामी हुनुहुन्छ, स्वास्थ्य संस्था नजिक छैन र पैसा पनि छैन, त्यो बेला के गर्नुहुन्छ?
११. मानौ यदि तपाई ठीकठीकै विरामी हुनुहुन्छ के गर्नुहुन्छ?
१२. मानौ यदि तपाई सिक्किस्त विरामी हुनुहुन्छ.....के गर्नुहुन्छ?

Appendix 5.1

Illness Regression Models: 'A' Models

Table A. Pearsons Correlations for regression model A.1 (whether or not a household had an illness in the month prior to the interview)

HH SES Variables		No. Members	Crowding	No. Infants	No. Children 1-5yo	No. Children 6-14yo	No. People >60yo	No. Females	Income	Land Ownership	Land Price	Wealth Quintile	Illness?
No. Members	Pearson	1	.605**	.218*	.394**	.483**	.145*	.780**	.085**	.147**	.042*	-.086**	.095**
	Correlation												
	Sig. (2-tailed)		.000	.000	.000	.000	.000	0.000	.000	.000	.043	.000	.000
Crowding	N	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334
	Pearson	.605**	1	.178**	.373**	.409**	.007	.447**	-.233**	.054**	-.189**	-.432**	.163**
	Correlation												
No. Infants	Sig. (2-tailed)	.000		.000	.000	.000	.735	.000	.000	.009	.000	.000	.000
	N	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334
	Pearson	.218**	.178**	1	.040	-.052*	.035	.175**	-.034	.055**	.009	-.052*	.049*
No. Children 1-5yo	Correlation												
	Sig. (2-tailed)	.000	.000		.056	.011	.091	.000	.100	.007	.680	.012	.019
	N	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334
No. Children 6-14yo	Pearson	.394**	.373**	.040	1	.041*	-.026	.329**	-.068**	.009	-.053**	-.182**	.171**
	Correlation												
	Sig. (2-tailed)	.000	.000	.056		.048	.210	.000	.001	.652	.010	.000	.000
No. Children 6-14yo	N	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334
	Pearson	.483**	.409**	-.052*	.041*	1	-.103**	.386**	-.097**	.033	-.072**	-.192**	.064**
	Correlation												
No. Children 6-14yo	Sig. (2-tailed)	.000	.000	.011	.048		.000	.000	.000	.109	.000	.000	.002
	N	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334

No. people >60yo	Pearson	.145**	.007	.035	-.026	-.103**	1	.115**	.009	.105**	.079**	.060**	.001
	Correlation												
	Sig. (2-tailed)	.000	.735	.091	.210	.000		.000	.673	.000	.000	.004	.968
No. Females	N	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334
	Pearson	.780**	.447**	.175**	.329**	.386**	.115**	1	.099**	.080**	.041*	-.020	.075**
	Correlation												
Income	Sig. (2-tailed)	0.000	.000	.000	.000	.000	.000		.000	.000	.050	.337	.000
	N	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334
	Pearson	.085**	-.233**	-.034	-.068**	-.097**	.009	.099**	1	.056**	.287**	.429**	-.108**
Land Ownership	Correlation												
	Sig. (2-tailed)	.000	.000	.100	.001	.000	.673	.000		.007	.000	.000	.000
	N	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334
Land Price	Pearson	.147**	.054**	.055**	.009	.033	.105**	.080**	.056**	1	.400**	-.047*	.086**
	Correlation												
	Sig. (2-tailed)	.000	.009	.007	.652	.109	.000	.000	.007		.000	.024	.000
Wealth Quintile	N	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334
	Pearson	.042*	-.189**	.009	-.053**	-.072**	.079**	.041*	.287**	.400**	1	.277**	-.051*
	Correlation												
Illnesses	Sig. (2-tailed)	.043	.000	.680	.010	.000	.000	.050	.000	.000		.000	.013
	N	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334
	Pearson	-.086**	-.432**	-.052*	-.182**	-.192**	.060**	-.020	.429**	-.047*	.277**	1	-.213**
	Correlation												
	Sig. (2-tailed)	.000	.000	.012	.000	.000	.004	.337	.000	.024	.000		.000
	N	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334
	Pearson	.095**	.163**	.049*	.171**	.064**	.001	.075**	-.108**	.086**	-.051*	-.213**	1
	Correlation												
	Sig. (2-tailed)	.000	.000	.019	.000	.002	.968	.000	.000	.000	.013	.000	
	N	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table B.1 Cross tabs for education of household head and whether or not a household experienced illness in month prior

Education of Head	Illness Episode?		Total
	No	Yes	
None	707	597	1304
Class 1-5	372	325	697
Class 6-8	81	83	164
Class 9-10	69	45	114
Class 10+2/University	36	19	55
Total	1265	1069	2334

Chi-square (uncorrected) = 6.366, p-value = 0.174 (NS)

Table B.2 Cross tabs for caste and whether or not a household experienced illness in month prior

Caste	Illness Episode?		Total
	No	Yes	
Brahmin	91	51	142
Chhetri/Thakuri	121	103	224
Newar	131	66	197
Tamang	724	653	1377
Gurung	17	5	22
Chepang	44	75	119
Magar	100	76	176
Biswokarma	12	23	35
Other Dalit	14	14	28
Other	11	3	14
Total	1265	1069	2334

Chi-square = 47.62, p-value = 0.000

Table B.3 Cross tabs for occupation of household and whether or not a household experienced illness in month prior

Occupation	Illness Episode?		Total
	No	Yes	
Agriculture worker (farmer) - subsistence	487	450	937
Agriculture worker (farmer) - cash crops	215	211	426
Agriculture worker – livestock	25	26	51
Migrant worker	109	78	187
Business person	36	30	66
Teacher/educator	33	19	52
Other government employee	46	33	79
Transport worker/driver	65	34	99
Construction worker	114	89	203
Small shop owner	50	41	91
Tailor	13	9	22
Retired	11	4	15
Other	61	45	106
Total	1265	1069	2334

Chi-square (corrected) = 7.814, p-value = 0.005

Table B.4 Cross tabs for gender of household head and whether or not a household experienced illness in month prior

Gender of Head	Illness Episode?		Total
	No	Yes	
F	164	137	301
M	1101	932	2033
Total	1265	1069	2334

Chi-square (uncorrected) = 0.011, p-value = 0.915

Table B.5 Cross tabs for household wealth quintile and whether or not a household experienced illness in month prior

Wealth Quintile	Illness Episode?		Total
	No	Yes	
poorest	169	261	430
2	221	283	504
3	268	211	479
4	280	148	428
wealthiest	327	166	493
Total	1265	1069	2334

Chi-square (uncorrected) = 111.710, p-value = 0.000

Table C. Multicollinearity for regression model A.1

HH SES Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.314	.068		4.612	.000		
No. Members	-.003	.008	-.016	-.401	.689	.242	4.134
Crowding	.020	.009	.066	2.176	.030	.444	2.254
No. Infants	.048	.028	.036	1.706	.088	.893	1.120
No. Children 1-5yo	.057	.015	.092	3.913	.000	.732	1.367
No. Children 6-14yo	-.003	.010	-.007	-.281	.779	.618	1.619
No. people >60yo	-.010	.014	-.016	-0.730	.465	.866	1.155
No. Females	.010	.010	.033	1.016	.310	.380	2.630
Wealth Quintile	-.041	.009	-.125	-4.840	.000	.608	1.643
Education of Head	.020	.011	.041	1.870	.062	.835	1.197
Caste	.002	.006	.006	.266	.790	.921	1.086
Primary Occupation	.002	.003	.018	.808	.419	.867	1.154
Gender of Head	-.008	.029	-.006	-.270	.787	.955	1.047
Income	.000	.000	-.018	-.752	.452	.711	1.406
Land Ownership	.053	.016	.076	3.348	.001	.787	1.270
Land Price	.000	.000	.020	.829	.407	.705	1.419

Table D. Outputs for regression model A.1 (including only those variables with significant correlation without multicollinearity) followed by the model summary tables.

Variables in the Equation									
HH SES Variables	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)		
							Lower	Upper	
crowding	.045	.038	1.396	1	.237	1.046	.971	1.127	
No. Infants	.180	.128	2.002	1	.157	1.198	.933	1.538	
No. Children 1-5yo	.357	.064	31.177	1	.000	1.429	1.261	1.620	
No. Children 5-14yo.	.028	.041	.476	1	.490	1.029	.949	1.115	
caste_cat2			17.068	9	.048				
caste_cat2(1)	.347	.230	2.279	1	.131	1.415	.902	2.219	
caste_cat2(2)	-.019	.241	.006	1	.937	.981	.612	1.572	
caste_cat2(3)	.122	.198	.380	1	.538	1.130	.767	1.665	
caste_cat2(4)	-.583	.555	1.105	1	.293	.558	.188	1.656	
caste_cat2(5)	.457	.282	2.623	1	.105	1.579	.908	2.745	
caste_cat2(6)	.213	.246	.753	1	.385	1.238	.764	2.005	
caste_cat2(7)	.897	.414	4.706	1	.030	2.453	1.091	5.520	
caste_cat2(8)	.634	.461	1.889	1	.169	1.884	.764	4.650	
caste_cat2(9)	-1.113	.725	2.358	1	.125	.328	.079	1.360	
Occupation			15.990	12	.192				
Occupation (1)	.342	.128	7.207	1	.007	1.408	1.097	1.808	
Occupation (2)	-.079	.308	.066	1	.797	.924	.505	1.689	
Occupation (3)	-.081	.177	.209	1	.647	.922	.652	1.305	
Occupation (4)	.490	.278	3.123	1	.077	1.633	.948	2.813	
Occupation (5)	-.085	.314	.073	1	.787	.919	.496	1.701	
Occupation (6)	.236	.261	.817	1	.366	1.266	.759	2.113	

Occupation (7)	-.064	.239	.072	1	.789	.938	.587	1.499
Occupation (8)	.035	.166	.044	1	.833	1.036	.748	1.434
Occupation (9)	.476	.238	4.009	1	.045	1.610	1.010	2.567
Occupation (10)	-.169	.492	.117	1	.732	.845	.322	2.217
Occupation (11)	-.337	.597	.318	1	.573	.714	.222	2.300
Occupation (12)	.066	.223	.087	1	.767	1.068	.690	1.654
Gender of Head	-.133	.133	1.003	1	.317	.875	.675	1.136
Income	.000	.000	1.838	1	.175	1.000	1.000	1.000
Land Ownership	.432	.120	12.905	1	.000	1.540	1.217	1.949
Land Price	.000	.000	1.916	1	.166	1.000	1.000	1.000
Wealth Quintile -1			39.203	4	.000			
Wealth Quintile -2	-.240	.138	3.031	1	.082	.786	.600	1.031
Wealth Quintile -3	-.633	.142	19.800	1	.000	.531	.402	.702
Wealth Quintile -4	-.872	.158	30.431	1	.000	.418	.307	.570
Wealth Quintile -5	-.783	.173	20.446	1	.000	.457	.325	.642
Constant	-.280	.264	1.119	1	.290	.756		

a. Variable(s) entered on step 1: crowding, house_infant_total_no, house_15_total_no, house_614_total_no, caste_cat2, occup_prim_hh_exp_payer_cat, gend_person_pay_hh_exp_cat, income_house, land_own_hect, HH_land_price, wealthq.

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	214.404	33	.000
	Block	214.404	33	.000
	Model	214.404	33	.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	3002.839a	.089	.118

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	4.68	8	0.791

Table E. Pearson's Correlations for regression model A.2 (number of episodes experienced by a household)

HH SES Variables		No. Members	Crowding	No. Infants	No. Children 1-5yo	No. Children 6-14yo	No. People >60yo	No. Females	Income	Land Ownership	Land Price	Wealth Quintile	No. Illnesses
No. Members	Pearson Correlation	1	.605**	.218**	.394**	.483**	.145**	.780**	.085**	.147**	.042*	-.086**	.124**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	0.000	.000	.000	.043	.000	.000
	N	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	1069
Crowding	Pearson Correlation	.605**	1	.178**	.373**	.409**	.007	.447**	-.233**	.054**	-.189**	-.432**	0.056
	Sig. (2-tailed)	.000		.000	.000	.000	.735	.000	.000	.009	.000	.000	.065
	N	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	1069
No. Infants	Pearson Correlation	.218**	.178**	1	.040	-.052*	.035	.175**	-.034	.055**	.009	-.052*	0.049
	Sig. (2-tailed)	.000	.000		.056	.011	.091	.000	.100	.007	.680	.012	.112
	N	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	1069
No. Children 1-5yo	Pearson Correlation	.394**	.373**	.040	1	.041*	-.026	.329**	-.068**	.009	-.053**	-.182**	0.06
	Sig. (2-tailed)	.000	.000	.056		.048	.210	.000	.001	.652	.010	.000	.051
	N	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	1069
No. Children 6-14yo	Pearson Correlation	.483**	.409**	-.052*	.041*	1	-.103**	.386**	-.097**	.033	-.072**	-.192**	.072*
	Sig. (2-tailed)	.000	.000	.011	.048		.000	.000	.000	.109	.000	.000	.019
	N	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	1069

No. People >60yo	Pearson Correlatio n	.145**	.007	.035	-.026	-.103**	1	.115**	.009	.105**	.079**	.060**	.058
	Sig. (2- tailed)	.000	.735	.091	.210	.000		.000	.673	.000	.000	.004	.060
	N	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	1069
No. Females	Pearson Correlatio n	.780**	.447**	.175**	.329**	.386**	.115**	1	.099**	.080**	.041*	-.020	.084**
	Sig. (2- tailed)	0.000	.000	.000	.000	.000	.000		.000	.000	.050	.337	.006
	N	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	1069
Income	Pearson Correlatio n	.085**	-.233**	-.034	-.068**	-.097**	.009	.099**	1	.056**	.287**	.429**	-0.038
	Sig. (2- tailed)	.000	.000	.100	.001	.000	.673	.000		.007	.000	.000	.213
	N	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	1069
Land Ownership	Pearson Correlatio n	.147**	.054**	.055**	.009	.033	.105**	.080**	.056**	1	.400**	-.047*	0.031
	Sig. (2- tailed)	.000	.009	.007	.652	.109	.000	.000	.007		.000	.024	.318
	N	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	1069
Land Price	Pearson Correlatio n	.042*	-.189**	.009	-.053**	-.072**	.079**	.041*	.287**	.400**	1	.277**	-0.026
	Sig. (2- tailed)	.043	.000	.680	.010	.000	.000	.050	.000	.000		.000	.404
	N	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	1069
Wealth Quintile	Pearson Correlatio n	-.086**	-.432**	-.052*	-.182**	-.192**	.060**	-.020	.429**	-.047*	.277**	1	-0.059
	Sig. (2- tailed)	.000	.000	.012	.000	.000	.004	.337	.000	.024	.000		.055
	N	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	1069

Number of Illnesses (>1)	Pearson Correlation	.122**	.160**	.057**	.170**	.081**	.014	.090**	-.105**	.088**	-.049*	-.202**	1
	Sig. (2-tailed)	.000	.000	.006	.000	.000	.492	.000	.000	.000	.019	.000	
	N	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334	2334

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table F.1 Cross tabs for education of household head and whether or not a household experienced more than one episode of illness

Education of Head	More than One Episode?		Total
	No	Yes	
None	492	105	597
Class 1-5	272	53	325
Class 6-8	73	10	83
Class 9-10	37	8	45
Class 10+2/University	18	1	19
Total	892	177	1069

Chi-square (Uncorrected) = 3.498, p-value = 0.478

Table F.2 Cross tabs for household caste and whether or not a household experienced more than one episode of illness

Caste	More than One Episode?		Total
	No	Yes	
Brahmin	40	11	51
Chhetri/Thakuri	83	20	103
Newar	58	8	66
Tamang	549	104	653
Gurung	4	1	5
Chepeng	62	13	75
Magar	63	13	76
Biswokarma	20	3	23
Other dalit	11	3	14
Other	2	1	3
Total	892	177	1069

Chi-square (Uncorrected) = 3.814, p-value = 0.923

Table F.3 Cross tabs for household occupation and whether or not a household experienced more than one episode of illness

Occupation	More than One Episode?		Total
	No	Yes	
Agriculture worker (farmer) - subsistence	381	69	450
Agriculture worker (farmer) - cash crops	164	47	211
Agriculture worker (farmer) - livestock	22	4	26
Migrant worker	70	8	78
Business person	27	3	30
Teacher/educator	13	6	19
Other government employee	26	7	33
Transport worker/driver	28	6	34
Construction worker	71	18	89
Small shop owner	39	2	41
Tailor	8	1	9
Retired	4	0	4
Other	39	6	45
Total	892	177	1069

Table F.4 Cross tabs for gender of household head and whether or not a household experienced more than one episode of illness

Gender of Head	More than One Episode?		Total
	No	Yes	
F	125	12	137
M	767	165	932
Total	892	177	1069

Chi-square (uncorrected) = 6.917, p-value = 0.009

Table F.5 Cross tabs for household wealth quintile and whether or not a household experienced more than one episode of illness

Wealth Quintile	More than One Episode?		Total
	No	Yes	
poorest	218	43	261
2	229	54	283
3	169	42	211
4	126	22	148
wealthiest	150	16	166
Total	892	177	1069

Chi-square (uncorrected) = 9.076, p-value = 0.059

Table G. Outputs for regression model A.2 (including only those variables with significant correlation without multicollinearity) followed by the model summary tables.

		Variables in the Equation						
		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)
								Lower Upper
Step 1 ^a	No. Members	.132	.056	5.560	1	.018	1.141	1.023 1.274
	No. Children 6-14yo	.034	.077	.191	1	.662	1.034	.889 1.203
	No. Females	-.024	.082	.082	1	.775	0.977	.831 1.148
	Gender of Head	.709	.317	4.998	1	.025	2.032	1.091 3.783
	Constant	-3.066	.370	68.811	1	.000	.047	

a. Variable(s) entered on step 1: crowding, house_infant_total_no, house_15_total_no, house_614_total_no, caste_cat2, gend_person_pay_hh_exp_cat, income_house, land_own_hect, wealthq.

		Variables in the Equation					
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	-1.617	.082	386.323	1	.000	.198

Model Summary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	937.626a	.020	.034

Hosmer and Lemeshow Test			
Step	Chi-square	df	Sig.
1	3.880	8	.868

Appendix 5.3

Breakdown of illnesses based on specific diagnoses

ICD General Category	Disease	n	TOTAL/ ICD Cat	% of total illnesses
Certain Infectious & Parasitic Diseases (A00-A99)	Cholera	2		
	Typhoid	38		
	Bacillary Dysentery	77		
	Food Poisoning	5		
	Amoebic Dysentery	46		
	Giardiasis	34		
	Viral Diarrhea	1		
	Acute Gastroenteritis	132		
	Roundworm	1		
	TB	4		
	Trachoma	1		
	Meningitis	1	342	32%
Certain Infectious & Parasitic Diseases (B00-B99)	Herpes Simplex	2		
	Chickenpox	18		
	Measles	3		
	Viral Hepatitis	5		
	Mumps	3		
	Viral Fever	63		
	Tinea capitis	5		
	Hookworm	2		
	Helminthiasis	3		
	Scabies	3	107	10%
Disease of the blood and blood- forming organs (D50-D89)	Anemia	3	3	0.30%
Endocrine, nutritional and metabolic diseases (E00-E90)	Hypoglycemia	1		

	Dehydration	1		
	Hypokalemia	1	3	0.30%
Mental and Behavioural Disorders (F00-F99)	Schizophrenia	2		
	Psychosis	1		
	Globus hystericus	3		
	Anxiety	1	7	0.70%
Disease of the Nervous System (G00- G99)	Epilepsy	2		
	Migrain	10		
	Tension Headache	1		
	TIA	1	14	1.30%
Diseases of the Eye and Adnexa (H00-H59)	Conjunctivitis	18		
	Refractive Error	1	19	1.80%
Disease of the Ear and Mastoid Process (H60-H95)	Cellulitis of External Ear	1		
	Acute Otitis Media	6		
	Positional Vertigo	1		
	Vestibular Hyperacusis	1	9	0.84%
Diseases of the Circulatory System (I00-I99)	Rheumatic Heart Disease	1		
	Hypertension	4		
	Hypotension	7		
	Stroke	1		
	CVA	1		
	Haemorrhoids	1	15	1.40%
Diseases of the Respiratory System (J00-J99)	Common Cold	94		

	Coryza	1		
	Pharyngitis	34	w/thrush	
	Tonsillitis	4		
	URTI	135		
	Pneumonia	39		
	LRTI (including Acute Bronchitis)	16		
	Peritonsillar Abscess	1		
	Acute Exacerbation of COPD	3		
	Bronchial Asthma (+ Exacerbation)	8	335	31%
Diseases of the Digestive System (K00-K93)	Dental Caries	5		
	Acute Gingivitis	4		
	Aphthous Ulcer	3		
	Toothache	1		
	GERD	5		
	Peptic Ulcer	1		
	Gastritis	23		
	Dyspepsia	1		
	Appendicitis	1		
	Inguinal Hernia	2		
	Subacute Intestinal Obstruction	1		
	Alcoholic Hepatitis	1		
	Acute Cholecystitis	1	49	4.60%
Diseases of the Skin and Subcutaneous Tissue (L00-L99)	Impetigo	6		
	Boil + Abscess	3		
	Pyoderma	2		
	Pemphigus	1		
	Eczema	1		
	Contact Dermatitis	7		
	Psoriasis	2		

	Uticaria	20		
	Hidradenitis Suppurativa	1		
	Vitiligo	1	44	4.10%
Diseases of the Musculoskeletal System & Connective Tissue (M00-M99)	Rheumatoid Arthritis	1		
	Polyarthrosis	1		
	Bursitis	2		
	Osteoarthritis	2		
	Arthralgia	4		
	Cervical Spondylosis	1		
	Cervicalgia	1		
	Myositis	3		
	Neuralgia	1		
	Osteomyelitis	1		
	Costochondritis	1	18	1.70%
Diseases of the Genitourinary System (N00-N99)	Pyelonephritis	1		
	Renal stone	1		
	UTI	17		
	Prolapsed Uterus	1		
	Benign Prostate Hyperplasia	1		
	Mastalgia	1		
	Pelvic peritonitis	1		
	Pelvic Inflammatory Disease	4		
	Bacterial Vaginosis	1		
	Ovarian Cyst	1		
	Dysmenorrhea	6		
	Postmenopausal Symptoms	1	36	3.40%
Pregnancy, childbirth and puerprium (O00-O99)	Threatened Abortion	1		

	Postpartum Haemorrhage	1	2	0.19%
Certain Conditions Originating in the Perinatal Period (P00-P96)	Physiological Jaundice	1	1	0.09%
Symptoms, Signs and Abnormal Clinical and Laboratory Findings, Not Elsewhere Classified (R00-R99)	Allergic Cough	1		
	Chest Wall Pain	1		
	Non Specific Chest Pain	1		
	Viral Rash	1		
	Headache	3		
	Generalised Pain	3		
	Malaise & Fatigue	6		
	Syncope	1	17	1.60%
Injury, Poisoning and Certain Other Consequences of External Causes (S00-S99)	Facial Injury	1		
Different injuries relating to single body region	Head Injury	1		
	Eye Injury	2		
	Jaw Injury	1		
	Neck injury	1		
	Chest injury	2		
	Vertebral dislocation	1		
	Back sprain	3		
	Upper Limb Injury	3		
	Upper Limb Fracture	1		
	Injury to the finger	1		
	Hand Fracture	1		
	Hand injury	3		
	Hip injury	1		
	Knee Injury	3	1 meniscal	

			tear	
	Lower Limb Injury	9		
	Foot Fracture	1	35	3.30%
Injury, Poisoning and Certain Other Consequences of External Causes (T00-T98)	Fall Injury	1		
Multiple unspecified body regions	Insect Bites	1		
	Burn Injury	1		
	Snake Bite	2		
	Heat Syncope	1		
	Lightening Injury	2		
	Adverse Event of Vaccine	5	13	1.20%

Appendix 5.3

Visual analogue scale used to assess pain on the household survey

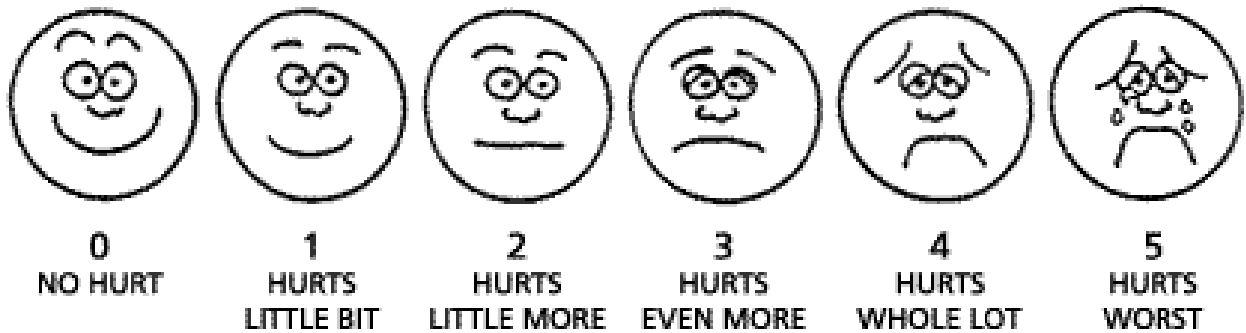


Figure A. This was the visual analogue scale (VAS) we used to assess pain as part of the subjective illness severity measures. This scale was selected after having pre-piloted and piloted different scales. This was the most well-responded to and the clearest in terms of what it was assessing. The scale was converted to a 1 to 5 scale for the purpose of analysis. This scale was taken from a Global Emergency Medicine resource blog:

<http://northwesternglobalem.wordpress.com/2012/05/26/drought-early-warning-systems-and-the-visual-analogue-scale-vas/>

Appendix 5.4

Relationships Among Different Severity Measures

As can be seen from the table, the majority of illness severity measures were highly correlated with one another, so in the final models, we only selected patient severity rating to use.

Illness Severity Ratings		No. Days in Bed	No. Days Unable to Work	Pain	Worry	Pt. Severity Rating	Objective Severity unweighted	Objective Severity Weighted	Subjective Severity Average	Dr. Severity Rating (1-10)	Dr. Severity Rating	DUSOI
No. Days in Bed	Pearson Correlation	1	.185**	.320**	.373**	.346**	.716**	.880**	.361**	.156**	.146**	.192**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	0.000	.000	.000	.000	.000
No. Days Unable to Work	Pearson Correlation	.185**	1	.202**	.266**	.260**	.817**	.617**	.249**	.151**	.120**	.154**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000
Pain	Pearson Correlation	.320**	.202**	1	.448**	.454**	.331**	.338**	.799**	.178**	.168**	.200**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000
Worry	Pearson Correlation	.373**	.266**	.448**	1	.784**	.391**	.411**	.751**	.245**	.227**	.269**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000
Pt. Severity Rating	Pearson Correlation	.346**	.260**	.454**	.784**	1	.372**	.393**	.771**	.231**	.222**	.267**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000

Objective Illness Severity Unweighted	Pearson Correlation	.716**	.817**	.331**	.391**	.372**	1	.922**	.379**	.210**	.180**	.225**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		0.000	.000	.000	.000	.000
Objective Illness Severity Weighted	Pearson Correlation	.880**	.617**	.338**	.411**	.393**	.922**	1	.394**	.167**	.148**	.204**
	Sig. (2-tailed)	0.000	.000	.000	.000	.000	0.000		.000	.000	.000	.000
Subjective Illness Severity Average	Pearson Correlation	.361**	.249**	.799**	.751**	.771**	.379**	.394**	1	.233**	.218**	.273**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000
Dr. Severity Rating (1-10)	Pearson Correlation	.156**	.151**	.178**	.245**	.231**	.210**	.167**	.233**	1	.956**	.746**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000		0.000	.000
Dr. Severity Rating	Pearson Correlation	.146**	.120**	.168**	.227**	.222**	.180**	.148**	.218**	.956**	1	.739**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	0.000		.000
DUSOI	Pearson Correlation	.192**	.154**	.200**	.269**	.267**	.225**	.204**	.273**	.746**	.739**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Appendix 5.5

Details of the Households from Qualitative Sample

HH Code	Age of Respondent	Gender of Respondent	Education of Respondent	Caste of Respondent	No. Of HH Members	Illness
T-AB-1.5	57	M	0	Moktan/Buddhist	2	Ulcer in mouth
T-AB-2.6	40	F	Primary	Yonzan/Hindu	8	Gastritis
T-AA-1.1	77	M	Class 1	Tamang/Buddhist	7	TB
T-AA-1.2	58	M	0	Tamang/Buddhist	10	Boils
T-AA-1.3	43	F	0	Tamang/Buddhist	9	Typhoid – son 15yo
T-AA-1.4	35	M	Class 5	Tamang/Hindu	6	Infected Boil
T-AA-4.5	25	F	Class 8	Gurung/Hindu	4	Pneumonia – daughter 3yo
T-AA-7.6	20	F	Class 10	Gurung/Hindu	7	Wound from sickle
T-AB-1.1	30	F	0	Pariyar/Hindu	6	Uterine Polyp
T-AB-1.2	26	F	Class 1	Moktan/Buddhist	8	Otitis Media
T-AB-1.3	33	F	0	Moktan/Buddhist	5	Food Poisoning
T-AB-1.4	21	F	0	Moktan/Buddhist	5	Pneumonia – son, 11 mo
T-MG-1.6	21	M	Class 8	Tamang/Buddhist	4	Infected Wound
T-MG-3.1	30	F	Informal Edu	Tamang/Hindu	5	High fever/ Meningitis Son, 6yo
T-MG-3.2	40	F	0	Tamang/Hindu	5	Pneumonia – daughter, 3yo
T-MG-3.3	22	F	0	Tamang/Buddhist	3	URTI – daughter, 1 mo
T-MG-3.4	64	M	0	Tamang/Buddhist	3	Typhoid

T-MG-3.5	35	F	0	Tamang/Buddhist	14	Measles – daughter, 1yo
T-NK-7.6	28	F	Class 3	Tamang/Buddhist	6	Burn – daughter, 2yo
T-NK-9.1	31	F	Class 3	Thagar/Hindu	5	Pneumonia – son, 11 mo
T-NK-9.2	21	F	Class 10	Magar/Hindu	6	Pneumonia – Son, 11 mo
T-NK-9.3	24	F	Class 12	Gurung/Buddhist	6	Typhoid – daughter, 7yo
T-NK-9.4	35	F	0	Chepong/Hindu	7	Typhoid
T-NK-9.5	22	M	Class 5	Chepong/Christian	18	TB – son, 1yo
T-RS-2.4	66	M	0	Chepong/Hindu	5	Dental Caries
T-RS-3.1	20	F	Class 1	Tamang/Hindu	3	PUO – son, 1yo
T-RS-3.2	30	F	0	Tamang/Hindu	4	URTI
T-RS-3.3	63	F	0	Tamang/Buddhist	5	Gastritis
T-RS-4.5	60	M	0	Gurung/Buddhist	14	TB
T-RS-4.6	38	M	Class 2	Gurung/Buddhist	6	Typhoid
S-RS-8.1	61	M	Class 2	Chhetri/Hindu	8	Fall Injury
S-RS-2.6	50	M	Class 3	Tamang/Buddhist	11	Typhoid
S-RS-2.2	42	M	Class 2	Tamang/Buddhist	7	Otitis Media
S-RS-1.5	41	F	0	Tamang/Buddhist	7	Migraine
S-RS-1.4	40	F	Class 3	Tamang/Buddhist	7	Mumps – son, 5yo
S-RS-1.1	42	F	Class 10	Tamang/Buddhist	4	Tonsillitis
S-RS-1.2	37	F	Class 3	Biswokarma/Hindu	7	Fracture – son, 7yo
S-RS-1.3	28	F	Class 5	Tamang/Buddhist	5	Dysmenorrhoea
S-NK-5.3	46	M	Class 4	Tamang/Buddhist	5	Fracture

S-NK-5.2	17	F	Class 2	Tamang/Buddhist	6	Diarrhoea – son, 1yo
S-NK-5.1	42	F	0	Tamang/Buddhist	5	TB
S-NK-1.3	35	F	Class 8	Tamang/Buddhist	4	Lower Abdominal Pain (unk)
S-NK-1.2	18	M	Class 8	Tamang/Buddhist	4	Schizophrenia – Father, 64yo
S-NK-1.1	24	M	Class 10	Tamang/Buddhist	9	URTI – son, 3yo
S-MG-8.3	26	F	0	Tamang/Buddhist	8	Sinus Infection – son, 2 mo
S-MG-8.2	25	F	Class 5	Tamang/Buddhist	6	Allergic Rash
S-MG-8.1	29	F	Class 1	Tamang/Hindu	5	PUO
S-MG-4.4	23	F	0	Chhetri/Hindu	9	Pneumonia – son, 6 mo
S-MG-3.5	22	F	Class 5	Chhetri/Hindu	4	Lower Abdominal Pain (unk)
S-MG-2.7	33	F	0	Tamang/Buddhist	5	Eye Injury
S-AB-5.3	28	F	Adult Edu	Tamang/Buddhist	9	Pneumonia – son, 6 mo
S-AB-5.3	18	M	Class 10	Tamang/Buddhist	6	Anxiety
S-AB-5.1	24	M	B.A	Magar/Hindu	8	Anxiety
S-AB-2.4	38	F	Adult Edu	Tamang/Buddhist	4	Tonsillitis
S-AB-1.6	25	F	Class 12	Lama/Buddhist	8	UTI
S-AB-1.5	50	M	Literate	Lama/Buddhist	7	Typhoid – daughter, 14yo
S-AA-8.2	25	F	Class 4	Brahmin/Hindu	4	Pneumonia – son, 6 mo
S-AA-8.1	18	F	Class 10	Brahmin/Hindu	10	Gastritis
S-AA-4.5	23	F	0	Tamang/Buddhist	3	Pneumonia – son, 1yo
S-AA-4.4	68	M	0	Chhetri/Hindu	11	Renal Problems

S-AA-1.6	36	M	Class 3	Tamang/Buddhist	8	TB
S-AA-1.3	54	F	0	Tamang/Buddhist	11	Typhoid
P-AA-1.1	31	F	0	Tamang/Buddhist	4	Pneumonia – daughter, 11yo
P-AA-1.2	28	F	Class 10	Tamang/Buddhist	3	Conjunctivitis
P-AA-1.3	28	F	Class 1	Jaisy/Hindu	8	Jaundice – son, 2 mo
P-AA-1.4	33	F	Class 3	Tamang/Buddhist	6	URTI – son, 2yo
P-AA-1.5	58	F	0	Dalit/Hindu	5	Broken Arm
P-AA-1.6	23	M	Class 11	Dalit/Hindu	8	Alopecia
P-AB-1.3	38	F	Literate	Chhetri/Hindu	6	Tonsillitis
P-AB-2.1	18	M	Class 10	Gurung/Hindu	4	Tonsillitis
P-AB-2.2	18	F	Class 8	Nyasur/Buddhist	7	Epilepsy
P-AB-2.5	30	F	Class 1	Chhetri/ Christian	8	Typhoid
P-AB-2.6	16	F	0	Ghale	5	Jaundice- son, 13 days
P-AB-2.7	42	F	Class 3	Lama/Buddhist	7	Ring worm – daughter, 9yo
P-MG-2.3	19	F	Class 8	Tamang/Buddhist	5	Anxiety
P-MG-2.4	23	M	University	Rai/Hindu	6	Gastric problems
P-MG-2.6	34	F	0	Rai/Hindu	8	Typhoid – son, 8yo
P-MG-8.1	33	F	0	Biswokarma/Hindu	6	Mumps – son, 14yo
P-MG-8.2	41	F	0	Tamang/Buddhist	6	Gastritis – daughter, 15yo

P-NK-1.3	77	M	Class 2	Tamang/Buddhist	6	Ring Worm, Glaucoma
P-NK-1.6	28	F	Literate	Tamang/Buddhist	4	Pneumonia – son, 4yo
P-NK-4.1	19	F	Literate	Rai/Hindu	5	Pneumonia – son, 1yo
P-NK-4.2	25	F	Class 5	Gurung/Hindu	9	Worms – daughter, 1yo
P-RS-7.1	50	M	Literate	Tamang/Buddhist	3	Typhoid
P-RS-7.2	44	F	0	Tamang/Buddhist	7	Common cold
P-RS-7.3	68	F	0	Chhetri/Hindu	2	PIDs
P-RS-7.4	49	F	0	Tamang/Buddhist	7	Costochondritis
P-RS-7.5	26	F	Class 6	Chhetri/Hindu	6	Common cold + fever
P-RS-8.6	30	F	0	Tamang/Buddhist	6	UTI

Appendix 5.6

Cost of Medicines from Pharmacies in the Sample

The next page provides an overview of the costs of different important medicines if they are purchased from the pharmacy. The data for these tables was obtained through pharmacy interviews with the pharmacies where the households in our quantitative sample were purchasing medicines most frequently.

MEDICINES	PHARMACIES						
	A	B	C	D	E	F	G
PCM	1Rs/tab	-	1Rs/tab	1Rs/tab	0.5/tab	0.6Rs/tab	1Rs/tab
Albendazole Tab	15Rs/tab	8-15Rs/tab	-	8Rs/tab	8-15Rs/tab	20Rs/tab	15Rs/tab
Amoxicillin Tab	10Rs/tab	10Rs/tab	9Rs/tab	9Rs/tab	9Rs/cap	9Rs/tab	9Rs/tab
Folic Acid	3Rs/tab	2Rs/tab	3Rs/tab	9Rs/tab	3Rs/cap	5Rs/tab	-
Calamine Lotion	45Rs/bottle	-	-	45Rs/bottle	40Rs/bottle	65Rs/bottle	-
Povide Iodine	50Rs/tube	90Rs/tube	50Rs/tube	80Rs/tube	80Rs/tube	150Rs/tube	-
ORS	8Rs/pkt	-	10Rs/pkt	8Rs/pkt	8-10Rs/pkt	10Rs/pkt	8Rs/pkt
Cipro Eye/Ear Drop	20Rs/bottle	13Rs/bottle	25Rs/bottle	18Rs/bottle	20Rs/bottle	15-20Rs/bottle	20Rs/bottle
Cipro Eye Ointment	15Rs/tube	-	15Rs/tube	20Rs/tube	15Rs/tube	16Rs/tube	-
Vit B Complex	3Rs/tab	75Rs/bottle	3Rs/tab	3Rs/tab	2-4Rs/cap	30Rs/cap	3Rs/tab
Cipro Tab	10Rs/tab	12Rs/tab	10Rs/tab	10Rs/tab	8-11Rs/tab	10Rs/tab	8Rs/tab
Frusemide Tab	1Rs/tab	<1Rs/tab	3Rs/tab	0.5Rs/tab	1Rs/tab	-	-
Dexamethasone Inj	15Rs/vial	-	16Rs/vial	-	15Rs/vial	7Rs/vial	20Rs/vial
Salbutamol Tab	1Rs/tab	-	1Rs/tab	1Rs/tab	0.8Rs/tab	10Rs/tab	1Rs/tab
Metronidazole Tab	-	25Rs/tab	4Rs/tab	30Rs/tab	24Rs/tab	20Rs/tab	25Rs/tab
Aluminium Hydroxide + Magnesium Hydroxide	-	80Rs/170ml	60Rs/bottle	2Rs/tab	2Rs/tab	-	-
Chloramphenical Eye Applicap	-	1Rs/piece	2Rs/piece	1.5Rs/piece	-	-	-
Atropine Inj	-	12Rs/vial	-	-	6Rs/vial	-	-
Benzoic + Salicylic Acid	-	45Rs/tube	-	-	60Rs/tube	-	-
Lignogaine Inj	-	-	25Rs/vial	-	-	-	40Rs/vial
Pheniramine Inj	-	-	5Rs/vial	8Rs/vial	13Rs/vial	-	-
Hyoscine Butylbromide Tab	2Rs/tab	-	3-5Rs/tab	4Rs/tab	4Rs/tab	5Rs/tab	6Rs/tab
Metochlopromide Inj	-	-	10Rs/vial	-	6Rs/vial	-	8Rs/vial
Ringer's Lactate Inj	-	-	35Rs/vial	45Rs/vial	60Rs/vial	95Rs/vial	35Rs/vial
Sodium Chloride Inj	-	-	30Rs/vial	-	45Rs/vial	-	35Rs/vial
Chlorpheniramine Tab	-	-	-	0.5Rs/tab	0.1Rs/tab	-	-
Sulfamethoxazole + Timethoprim	-	25Rs/tab	-	6Rs/tab	25Rs/tab	-	-
Clove Oil	-	-	-	30Rs/bottle	30Rs/bottle	20Rs/bottle	-
Atenolol Tab	-	-	-	3-6Rs/tab	15Rs/tab	-	-
Gentamycin Inj	-	-	-	10Rs/vial	8Rs/vial	9Rs/vial	-
Gamma Benzene Hexachloride	-	-	-	-	12Rs/bottle	-	-
Magnesium Sulphate Inj	-	-	-	-	8Rs/vial	-	-
Oxytocin Inj	-	-	-	-	23Rs/vial	10Rs/vial	-

Appendix 5.7

Photographs of Some of the Health Facilities from the
Quantitative VDCs



Kalikatar HP





Khairang SHP





Kulekhani SHP





Palung SHP





Drug supply shelves for two of the SHPs in the sample. Notice the contrast.



Appendix 5.8

Additional Qualitative Quotes from Chapter 5

Section 5.3a: Accessibility

“Everyone has to be carried or taken somewhere else for treatment without complaining about the rivers and difficult terrain.” ~S-AA-1.3 (56, F)

Section 5.3b: Affordability

“Medicines cost money for sure. Sir [HA] has gone away with medicines and I cannot continually go to get medicines.” ~T-NK-9.4 (35, F)

“Occasionally when they [the government health workers] happen to need money and when people who seem mentally ill come, they apparently manage to collect some money from them.” ~S-RS-2.2 (42, M)

The medicines they [Government health workers] bring here are sent by the government, shouldn't it be free? They charge money for it. They charge money even for ointment...for everything. There is a hospital in Kathmandu where they don't charge money for anything. They give all medicines for free. Instead, in our village where we should get medicines for free, we have to pay.” ~T-AB-1.3 (33, F)

“It is wrong to take money for the medicines in the HP, but they still charge” ~A-HSB-3.5 (40, M)

“Usually the health post doesn't have the medicines we need, so they prescribe the medicines themselves and send us to Hetauda to buy them.” ~S-AB-2.4 (38, F)

“The quality medicines that come are taken by the staff there [at health post]. I have seen them sell these medicines that come from the government. The old and expired ones are given to us” ~S-AB-1.5 (50, M)

“When he [AHW] stays here for three days he earns a minimum of 12-15,000 NPRs by selling the huge amount of medicine he brings.” ~S-RS-2.6 (50, M)

5.3c: Availability of Staff

“Sometimes they say they are closed when we visit. A patient only visits a health post in emergencies, so they should treat such cases even if they are closed.” ~P-MG-8.2 (41, F)

“Sometimes the HP is closed when we need it...when there are no staff there, we have to take people elsewhere. When we have an emergency

situation, we end up going to the next VDC [5 hours walk]...Despite being many government appointed staff, they are never here. We don't know why." ~T-NK-7.6 (28, F)

"If they [government health workers] stayed here it would be helpful. The only person who is here is the FCHV and she isn't even given a room at the school. The AHW sometimes doesn't show up for a whole month. We have to go to the health post and keep waiting despite it being so far. Who would want to go there?" ~S-AA-8.2 (25, F)

"The MCHW usually examines the patients. The only medicine she can give is 'cetamol.'...the MCHWs are there and they are the ones who do the work. It would be better if the doctor [HA] was present regularly." ~S-AB-5.1 (24, M)

"It is not just this one [AHW]; no AHW who is posted here stays here. Perhaps it is because this is a remote place. They just don't stay here; they come here for a day or two, stay up to a maximum of one week, leave and only return after 3 to 4 months. They come only to collect their salary." S-NK-1.1 (24, M)

Section 5.3d: Quality of Health Workers and Care

"They didn't examine me as I expected...I thought the sisters [ANMs] would examine it [wound], but they didn't. They only gave me medicines." ~T-MG-1.6 (21, M)

"Some doctors tell the patients when and how to take the medicines and then they just leave. They write it down too, but don't explain it clearly at all." ~S-AB-5.2 (18, M)

"They [government health workers] talk rude. They don't think of the consequences for if we weren't there, they wouldn't have gotten their salaries." ~P-NK-4.2 (25, F)

"His [AHWs] behavior is good. People say various negative things about him, but a health care worker doesn't behave that way; a health worker never behaves that way. They say he provides care to people depending on which political party they belong to etc. I don't believe that is the truth. He talks to people in a very straightforward manner without being diplomatic; he doesn't try to please people. He gives medicines for cheap and only gives medicines that are necessary unlike the others who give three to four kinds even if you just have a fever." ~S-RS-1.1 (42, F)

Section 5.3f: Availability of Medicines

"It would be nice if there were medicines for all kinds of diseases; at least for minor things like cut injuries if not for severe emergency cases. They have IV fluid available, but there is a need for so much more. They have nothing besides 'cetamol.' They should have treatment for diarrhea, pneumonia in kids etc." ~S-AB-1.6 (25, F)

Section 5.3f: Availability of Equipment

“Serious illnesses cannot be treated here, and if we break something we have to go to Kathmandu or Hetauda for x-rays. Recently I went to Palung to heal a fracture. It would be helpful if these services were also available here.” ~T-NK-9.1 (31, F)

5.3g: Quality of Medicines

“Even the facility here is a hospital [HP] but they only give expired and spoiled medicines....The reason we dragged that madehshi [old HA] out is because he gave out spoiled medicines...He only gave spoiled medicines and took money.” ~T-MG-3.4 (64, M)

“Here [SHP] there are not medicines for anything except fever and diarrhea, and even if there is, they are all ineffective. Otherwise why would there be a difference such that medicines here don't help at all while the ones we get from somewhere else help immediately; the medicines must be the same but why isn't it working? They usually have expired medicines...They should order appropriate medicines.” ~S-AB-1.6 (25, F)

Appendix 6.1

Herbs Used by Households in the Survey Sample

Many of the households in our household survey relied heavily on local herbs, culled from the surrounding woods, as an initial form of treatment for their illnesses. In fact, some households relied so heavily on them they would use herbs for treatment of everything. One household, for example, told us that they had even successfully treated a broken leg with herbs, so they never needed to consult allopathic doctors. In order to obtain this list, each household that mentioned using herbal medicines was asked specifically what herbs they used and if they could bring a sample for us to see. Photographs were taken of the herbs and their local names were collected. They were then all looked up in “A Handbook of Medicinal Plants of Nepal”¹ and in the book compiled by the Department of Plant Resources. “Medicinal Plants of Nepal.”² From the list compiled in the field, this list was generated for the most commonly used herbal remedies and treatments. If the plant did not have an English name, this column was left blank.

¹ Watanabe, T, Rajbhandari, KR, Malla, S, & Yahari, S 2005, *A handbook of medicinal plants of Nepal*, Ayurseed L.E.I, Oiso, Japan.

² Ministry of Forests & Soil Conservation, GoN 2007, *Medicinal Plants of Nepal: No. 3*, GoN, Dept of Plant Resources, Kathamandu.

English Name	Scientific Name	Uses
Prickly chaff-flower plant	<i>Achyranthes aspera L.</i>	Diuretic, laxative, expectorant, carminative, stomachic, anti-inflammatory and haematinic. Also useful in asthma, dyspepsia, colic, skin diseases, cardiac disorder and anaemia. Seed powder is used in the treatment of bleeding piles.
Sweet flag	<i>Acorus calamus L.</i>	Rhizome is carminative, relieves flatulence and increases appetite. Also useful in asthma and is expectorant. Also useful in diarrhoea and dysentery. Also used in flavouring drinks for perfumery and as vermifuge. Powdered roots are used as insecticide to protect grain storage from insects. Rhizome is used to get relief from cough, bronchitis, throat infection, headache and toothache. Powdered rootstock is eaten for the antihelminthic effect. Rhizome is ground with water and massaged on the body to get relief from body pain.
Mug-wort	<i>Artemisia indica Wild</i>	Stomachic, purgative, deobstruent, antispasmodic, antihelminthic, insecticide, and prescribed in infusion and electuary in cases of obstructed menses and hysteria. Cures asthma, itching, anorexia, gastritis, rheumatism, bronchitis, fever, headache, haemorrhage and diarrhoea. Externally it is used in skin diseases and foul ulcers
Indian Lilac, Margosa Neem tree	<i>Azadirachta indica A. Juss</i>	Leaves are useful in skin diseases, intestinal worms, ulcers, malarial and intermittent fever, liver complaint, diabetes, insecticide. Fruits are highly recommended for urinary diseases, piles, intestinal worms and leprosy. Seeds are useful in tumours, leprosy, skin diseases, intestinal worms, pulmonary tuberculosis, wounds, ulcers and diabetes. Oil is used in skin diseases, indolent ulcers, ringworms, scabies and malarial fever.

Rockfoil	<i>Bergenia ciliata</i> (Haw.) Sternb	Piles, tumours, urinary discharges, heart diseases, diseases of the bladder and lungs, tonic in fevers, diarrhoea, cough and dysentery, roundworms, tonic and carminative for women after childbirth.
Water pennywort	<i>Centella asiatica</i> (L.) Urban	Syphilis, leprosy, skin diseases. Leaf powder is given with milk in small doses in mental weakness and to improve memory. Used as blood purifier, diuretic, insecticide. Leaf stalk is used in toothache. Given in indigestion and nervousness. Plant is found used to get relief from burning sensation during micturition.
Salep, Marsh Orchid	<i>Dactylorhiza hatagirea</i> (D. Don) Soo	Tubers are used as tonic., expectorant, astringent, demulcent and highly nutritious. Also used in urinary trouble. Root powder is spread on wounds to control bleeding.
Rauwolfia, Serpent wood, Serpentine	<i>Rauwolfia serpentina</i> (L.) Benth. ex Kurz	Roots with bark is chiefly used in reducing blood pressure, sedative and hypnotic. Roots are also used in bowel disorder and fever. Should not be given to person suffering from bronchitis, asthma and gastric ulcers.
Prickly ash, Toothache tree	<i>Zanthoxylum armatum</i> DC.	Seeds and barks are used as a tonic in fever, dyspepsia and cholera. Fruits are used in toothache and considered as carminative and stomachic. Fruits, branches and thorns are also used as fish poison.
None	<i>Pogostemon benghalensis</i>	Root is remedy for haemorrhages, useful in uterine haemorrhage, antidote to scorpion-sting, and snake-bite. Fresh leaves are styptic, bruised and applied as cataplasm to clean wounds and promote healthy granulation.
None	<i>Mukia maderaspatana</i> (Linn.) Roem.	Plant is astringent, cooling, aromatic, antihelminthic, febrifuge and appetizer. It is useful in burning sensation, skin diseases, helminthiasis, diarrhoea, inflammations and foul ulcers.
Country fig, Cluster fig	<i>Ficus racemosa</i> Linn.	Roots are useful in treating dysentery. Bark is astringent, antidiabetic and used to wash wounds. Powdered leaves mixed with honey are given in bilious affections. Fruits are astringent, stomachic, carminative, given in menorrhagia and haemoptysis. Milky juice is used in piles and diarrhoea.

None	<i>Astilbe rivularis</i>	Rhizomes are used as tonic and powder is given in pre and post pregnancy as a tonic.
Nutmeg	<i>Myristica fragrans</i> <i>Houtt.</i>	Seeds are carminative, stomachic, and useful in flatulence, nausea and vomiting. Oil from dried kernels is aperient and carminative.
None	<i>Lindera neesiana</i>	Plant is aromatic, spicy and carminative. Powder of root and bark is used to relieve pain. Leaves and fruits are used in the treatment of skin diseases.
Thatch grass, Wild sugarcane grass	<i>Saccharum spontaneum</i> <i>Linn.</i>	Root is galactagogue and diuretic. Plant is laxative, aphrodisiac, useful in burning sensation, strangury, pthisis, vesical calculi, biliousness and certain diseases of blood.
Guava	<i>Psidium guajava</i> Linn.	Leaves are astringent for bowels, wounds and ulcers; their decoction used in cholera and for arresting vomiting and diarrhoea
None	<i>Vallaris solanacea</i>	Decoction of plant is applied on measles. Root is said to be useful in snakebite. Fruits are carminative and used in leprosy, bronchitis, diabetes, worms, ulcers and poisoning
Black plum, Java plum	<i>Syzygium cumini</i>	Bark is astringent to the bowels, good for sore throat, bronchitis, asthma, dysentery, diarrhoea and ulcers. Bark is also used as gargles and mouthwash. Extract of bark, seeds and also leaves are used in the treatment of diabetes. Seeds are good for diabetes.
Cumin	<i>Cuminum cyminum</i> <i>Linn.</i>	Fruits are stomachic, stimulant, carminative, astringent and used in dyspepsia and diarrhoea. Fruits are also used in spices and in veterinary medicine. Seeds are used in snake bite.
Persean acacia	<i>Albizzia julibrissin</i> var <i>mollis</i>	Bark is given to treat anxiety and insomnia, pulmonary abscess, cough and trauma. Flowers or flower buds are effective in insomnia, amnesia and feeling of constriction in the chest.
None	<i>Maharanga emodi</i>	Crushed roots boiled in rapeseed oil and filtered in applied as a hair tonic and also blackening. Plant has cooling, laxative, antihelminthic, alexipharmic properties. It is good in eye diseases and piles.
Musk scented rose	<i>Rosa moschata</i> J. herrm.	Flowers are beneficial in bilious affections, burning of skin and eye diseases

Lemon	<i>Citrus limon</i>	Fruits are refrigerant, appetizer, antiseptic, digestive, carminative, stomachic, antiscorbutic and in bilious vomiting
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Appendix 7.1

Chi-squared Preliminary Findings

Prior to running the final regression models, the relationship between the final explanatory variables and the output variables of interest were assessed using chi-squared tests. The results of some of those analyses – home care first, allopathic care first (broken down by government and private care), TH first, pharmacy first, allopathic care ever, TH ever and pharmacy care ever, care within the same VDC, care within the same ward and whether or not more than one provider was used – are presented graphically in this appendix to help illustrate the independent significant effect of each of the explanatory variables on each of the outcome variables of interest. Those with ‘**’ next to them were statistically significant at $p < 0.01$. Please note, only the results of the categorical explanatory variables are presented.

Order of Care:

Patient Variables:

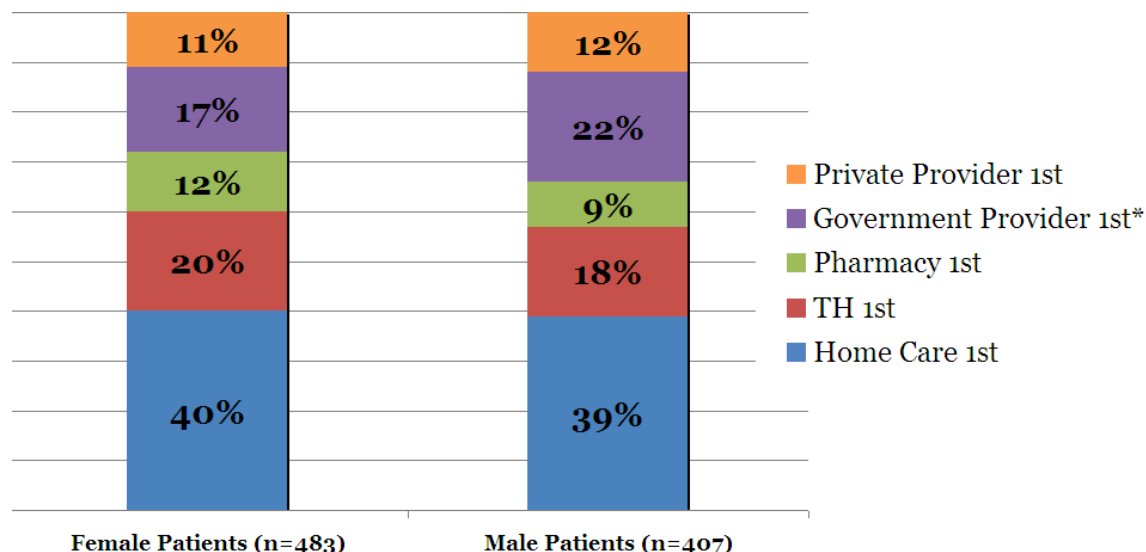


Figure A.1 Relationship between patient gender and type of care used first

Household Variables:

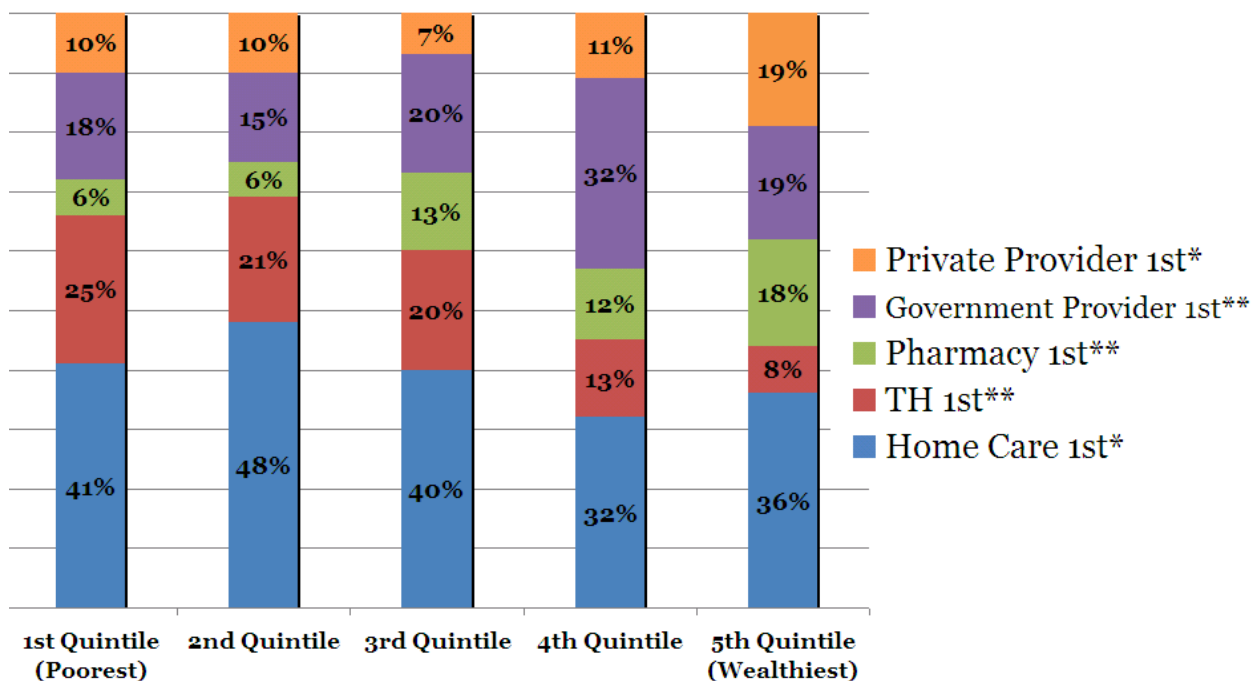


Figure B.1 Relationship between wealth quintile and first type of care used

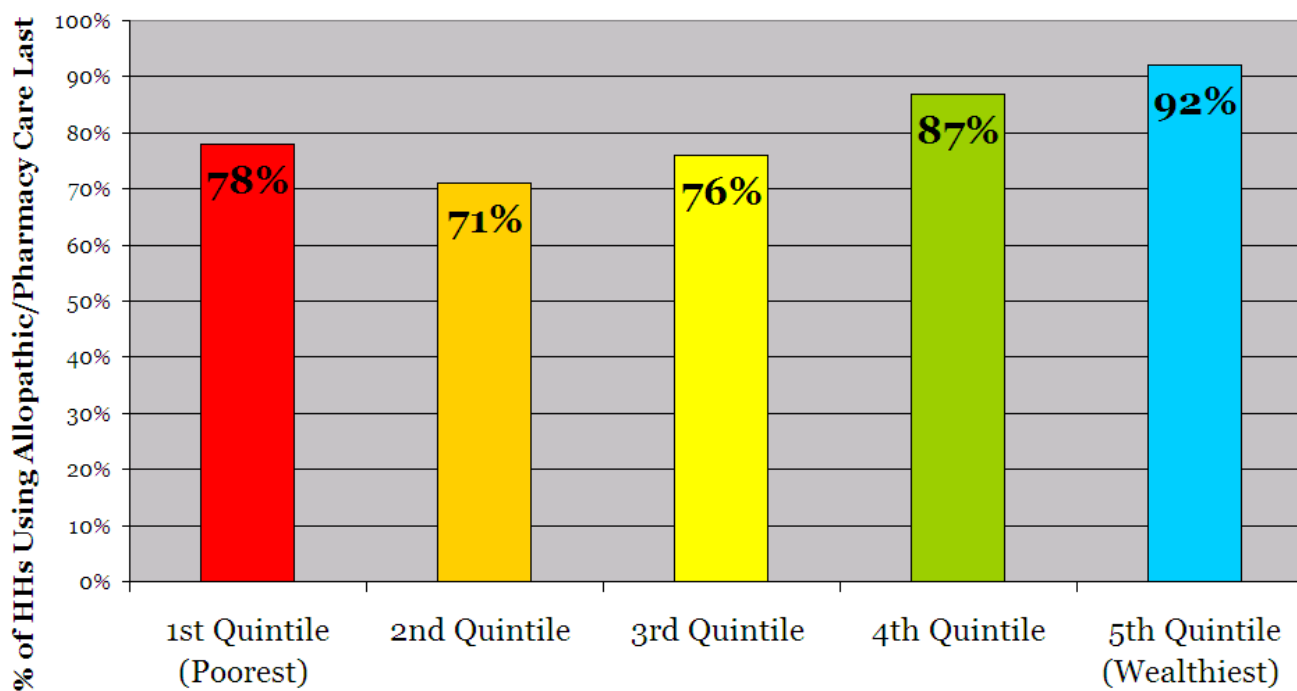


Figure B.2 Relationship between wealth quintile and whether or not allopathic/pharmacy care was used last

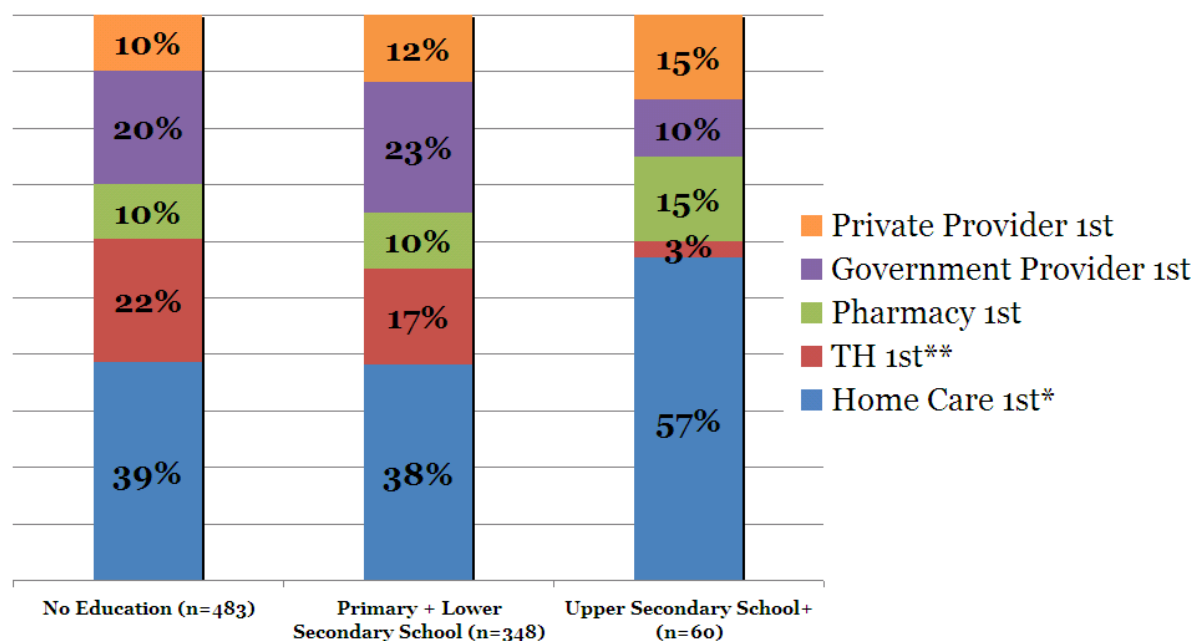


Figure C. Relationship between education and first type of care used

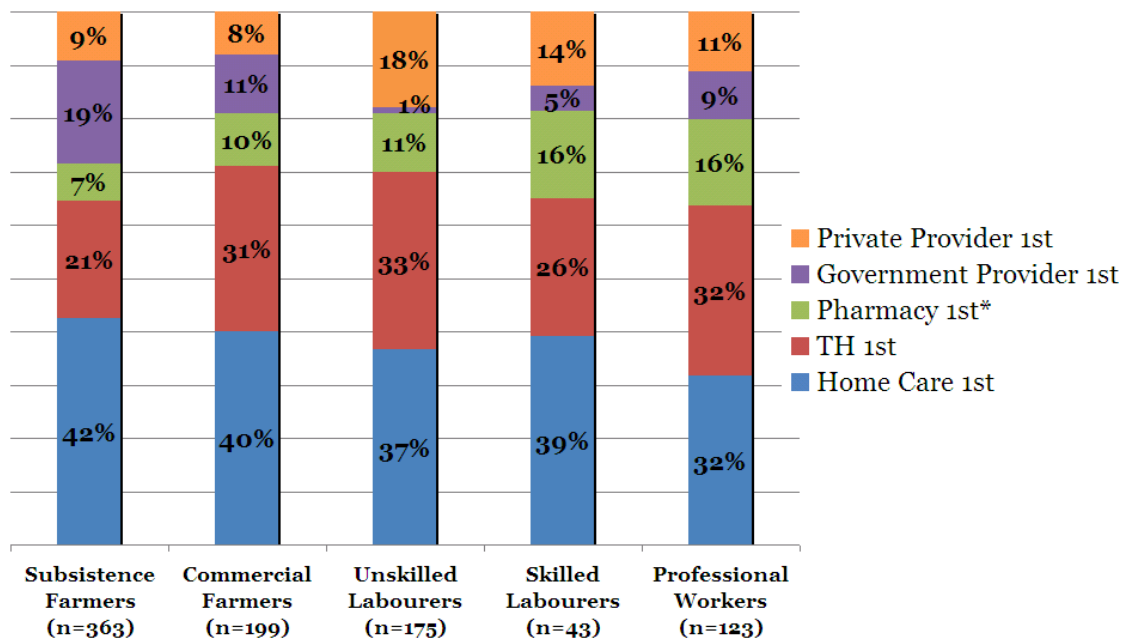


Figure D.1 Relationship between occupation and first type of care used

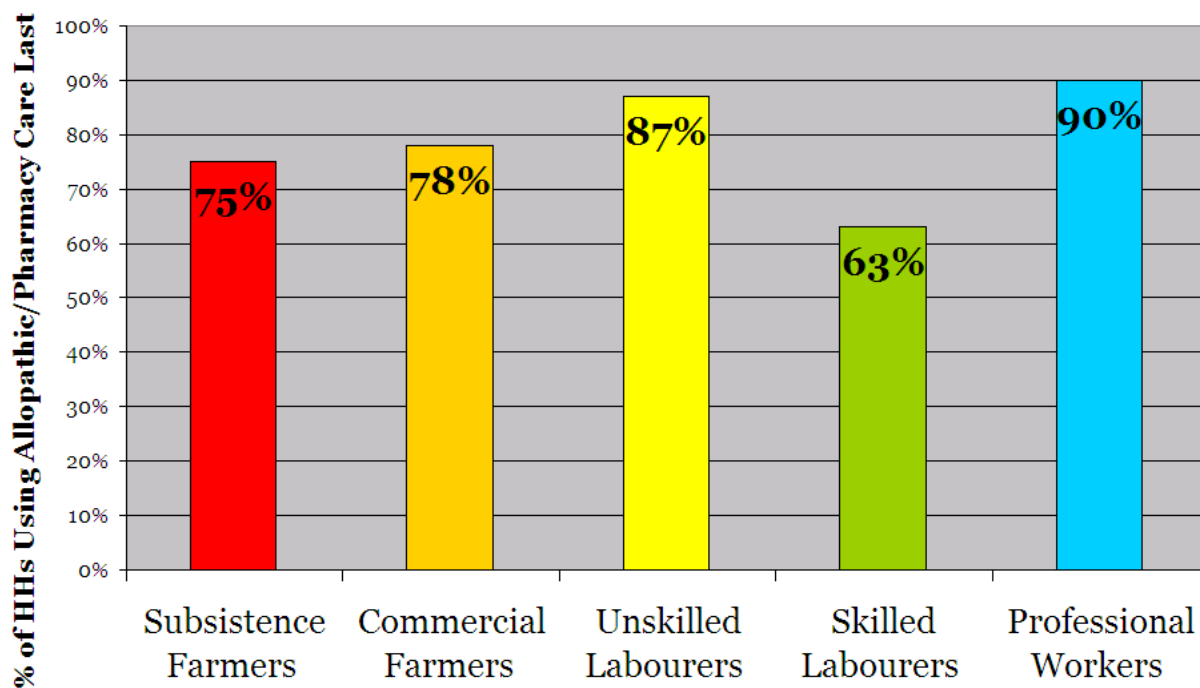


Figure D.2 Relationship between occupation and whether or not allopathic/pharmacy care was used last

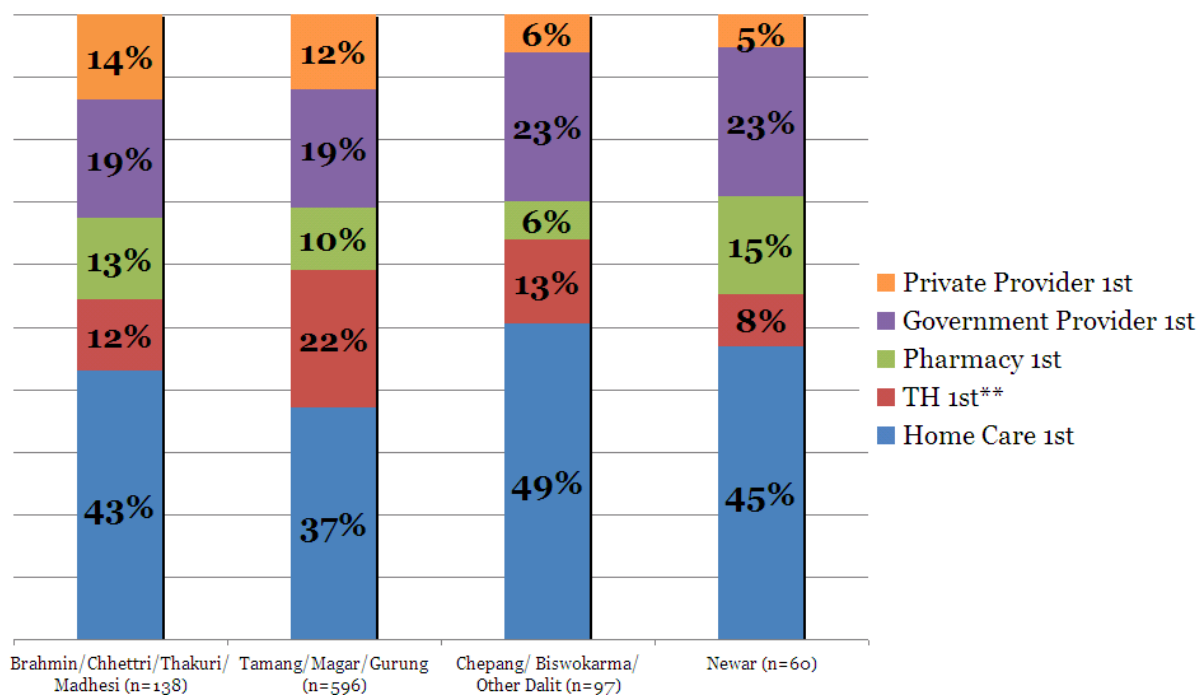


Figure E.1 Relationship between caste and first type of care used

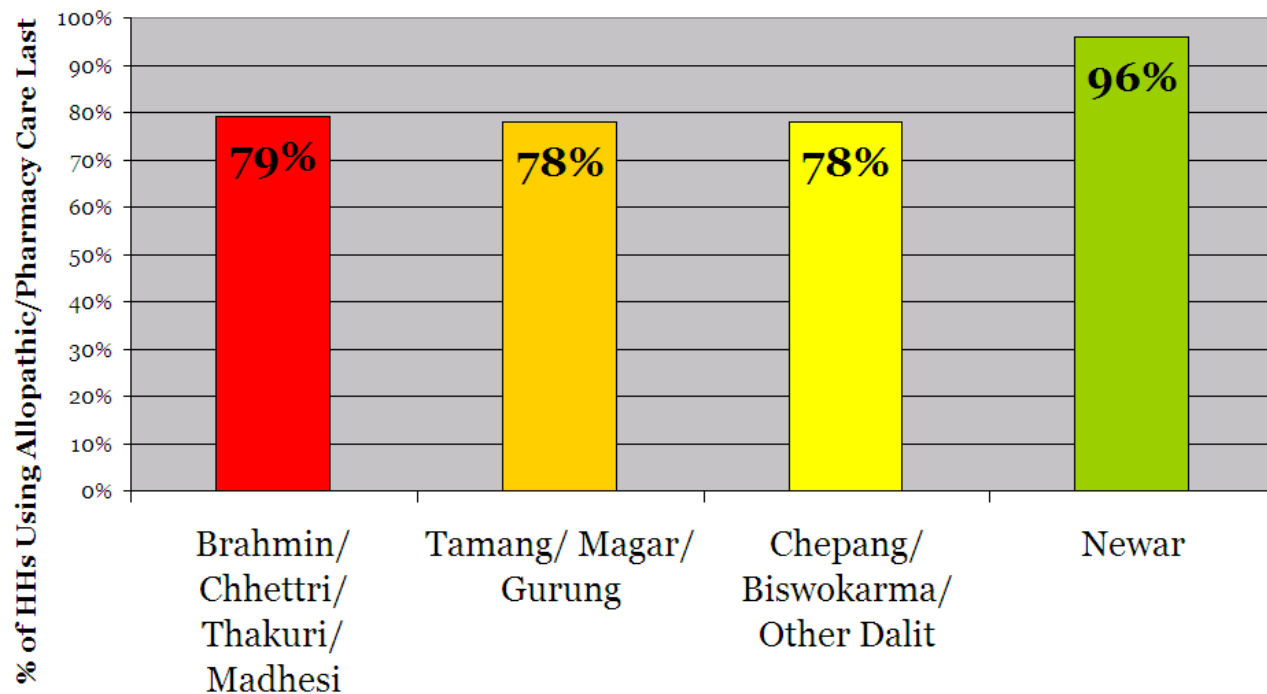


Figure E.2 Relationship between caste and whether or not allopathic/pharmacy care was used last

Community Variables:

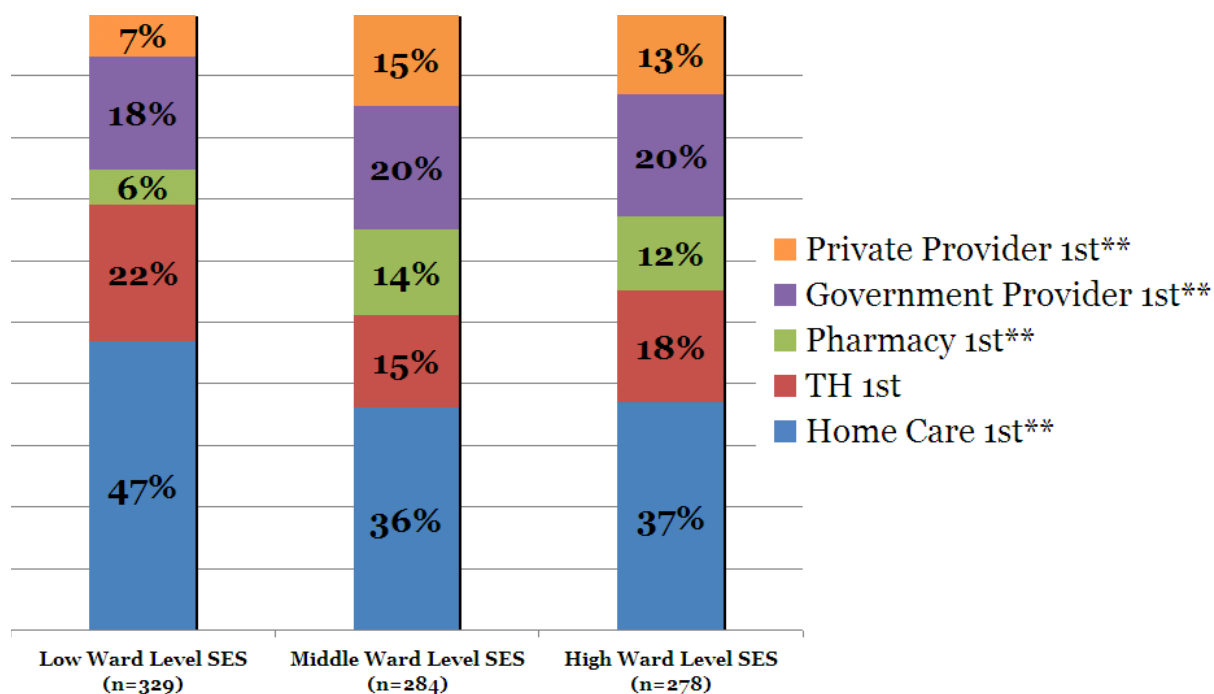


Figure F.1 Relationship between Ward index and first type of care used

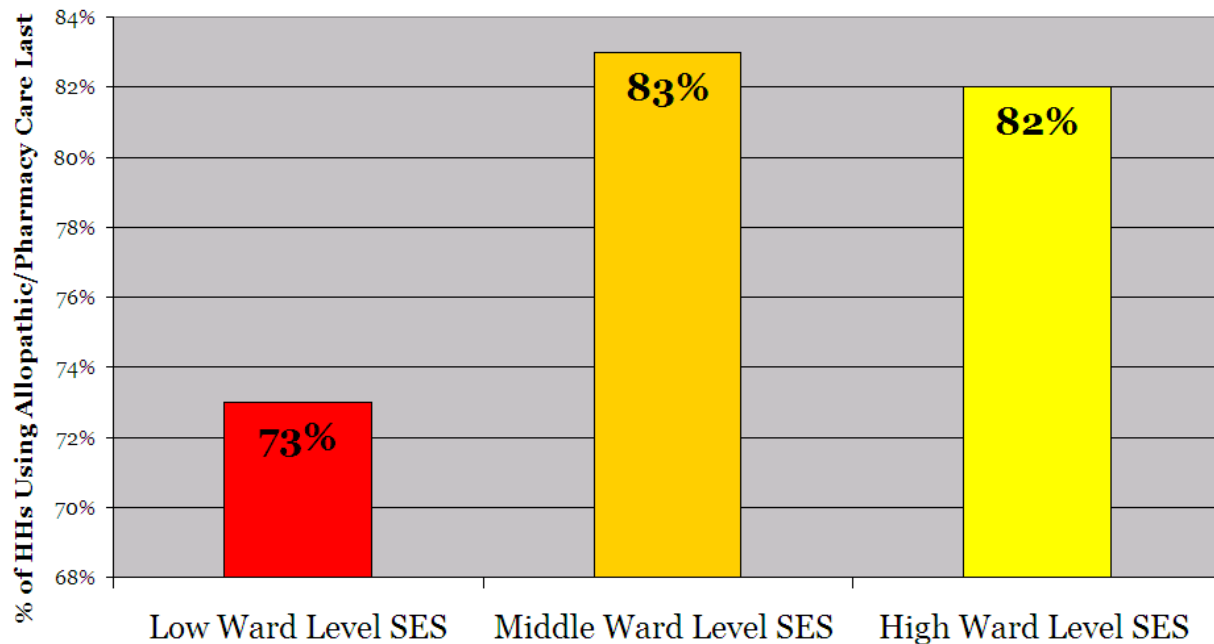


Figure F.2 Relationship between Ward index and whether or not allopathic/pharmacy care was used last

Health Facility Variables:

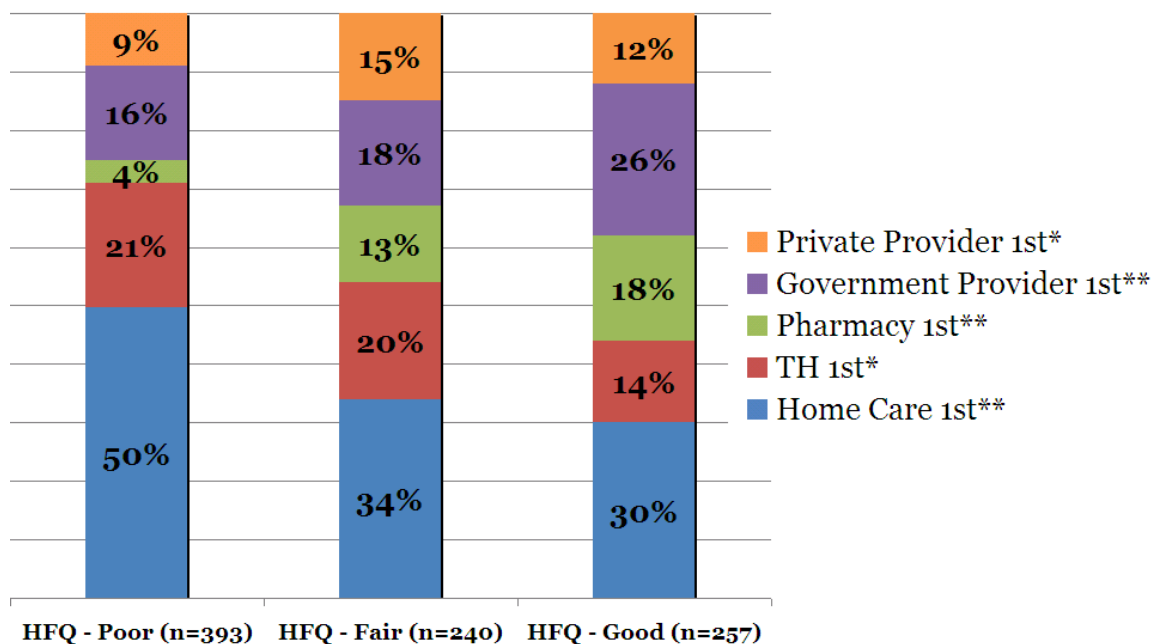


Figure G.1 Relationship between health facility quality and first type of care used

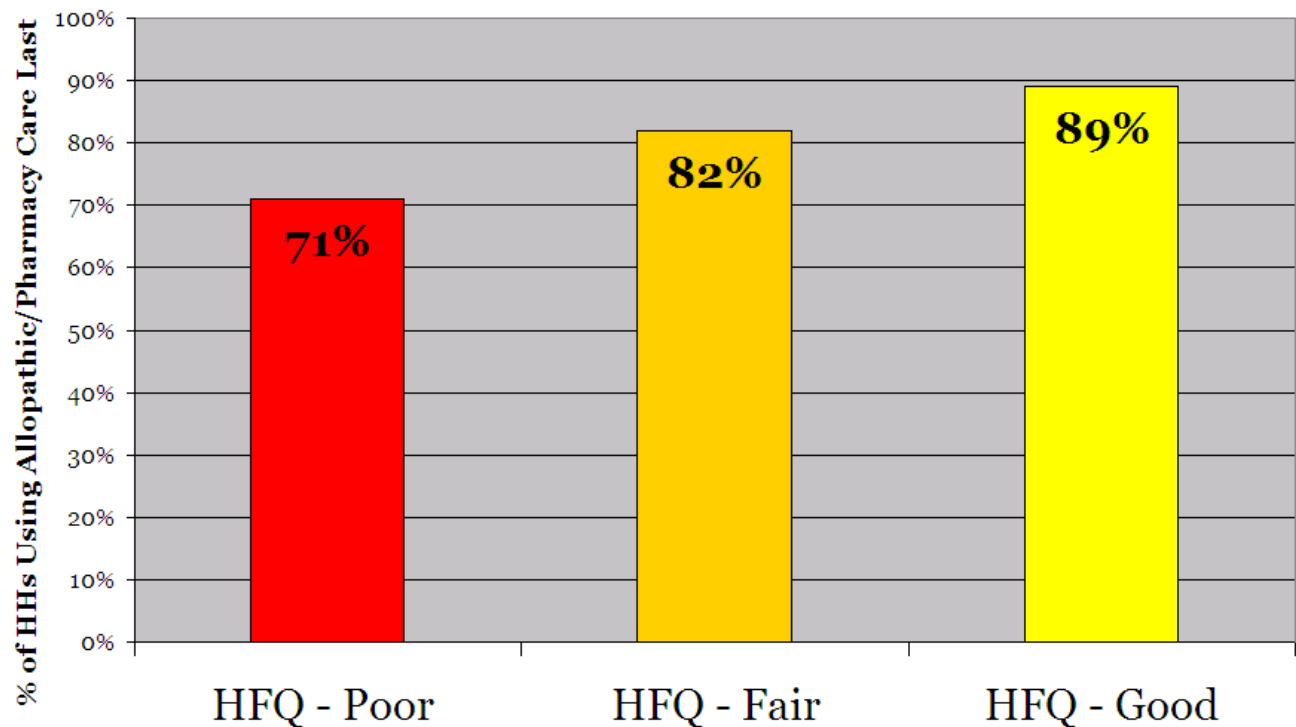


Figure G.2 Relationship between health facility quality and whether or not allopathic/pharmacy care was used last

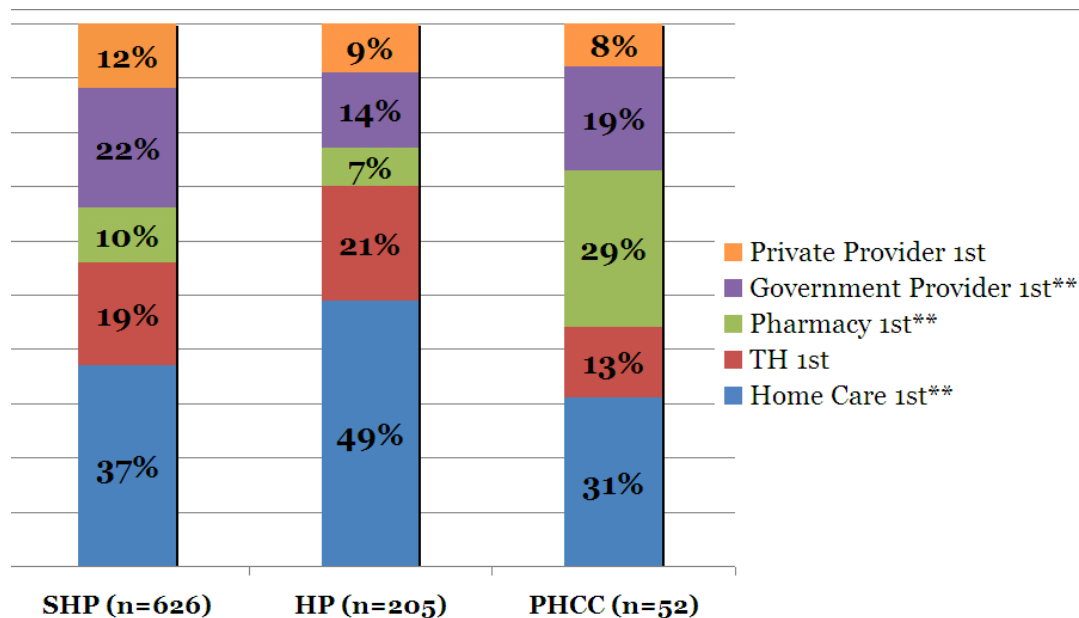


Figure H. Relationship between health facility type and first type of care used

Knowledge Variables:

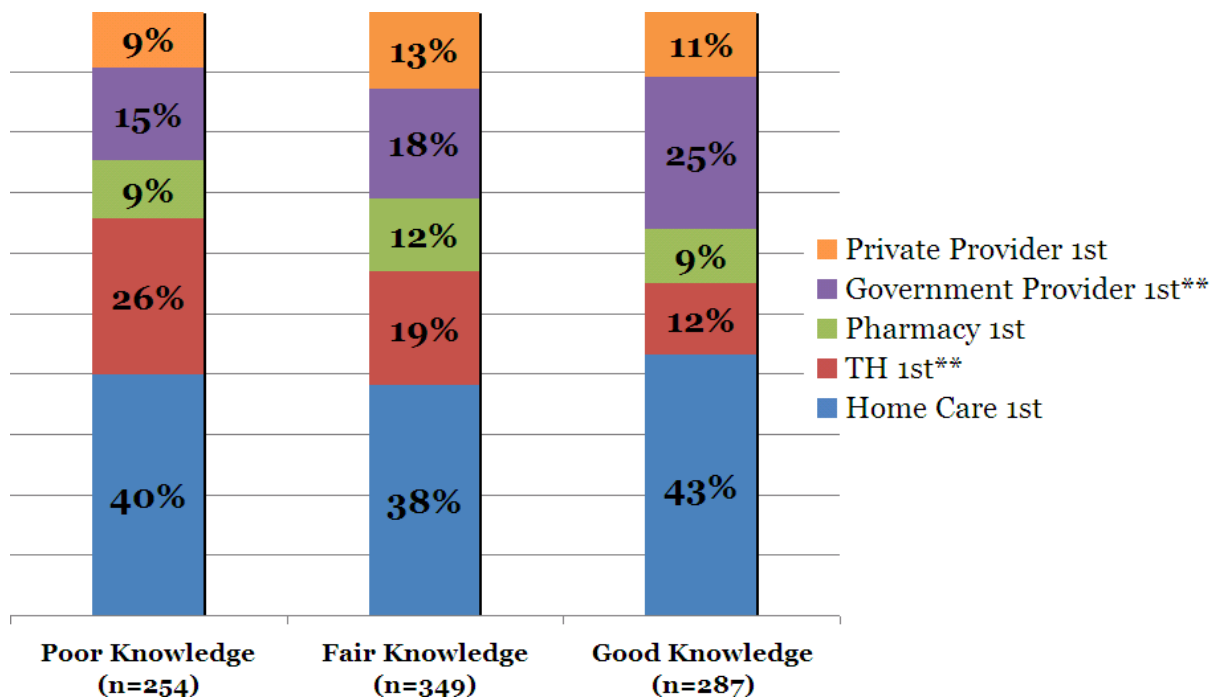


Figure H.1 Relationship between knowledge and first type of care used

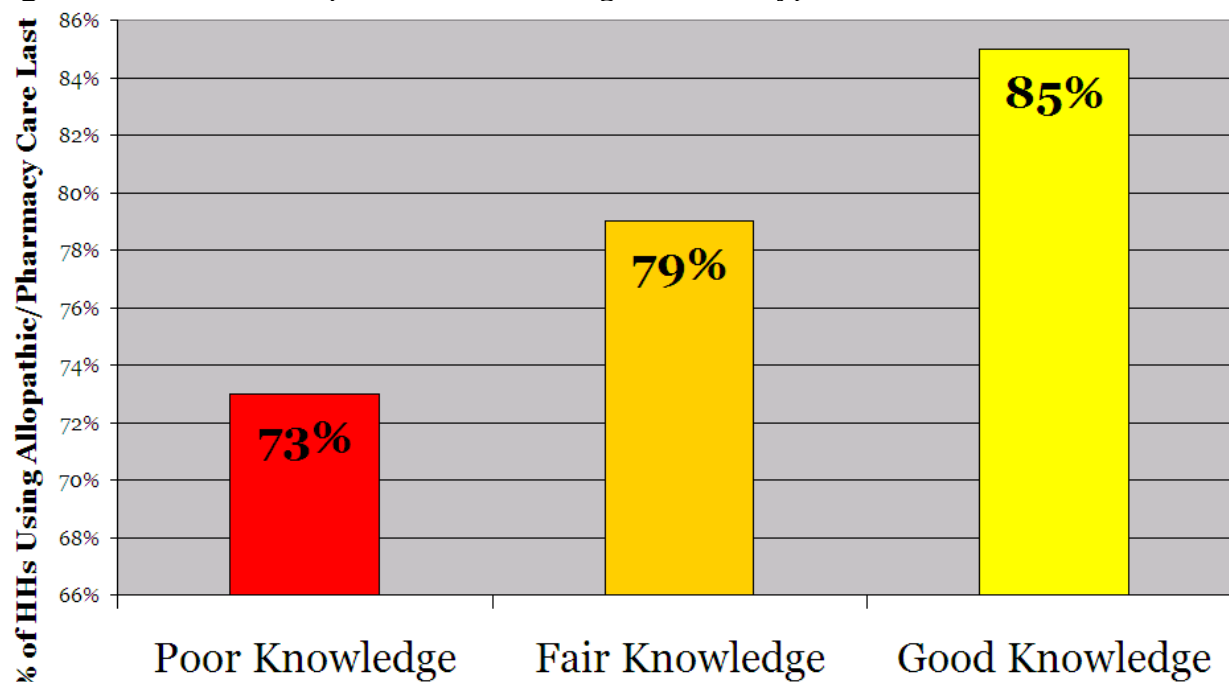


Figure H.2 Relationship between knowledge and whether or not allopathic/pharmacy care was used last

Illness Variables:

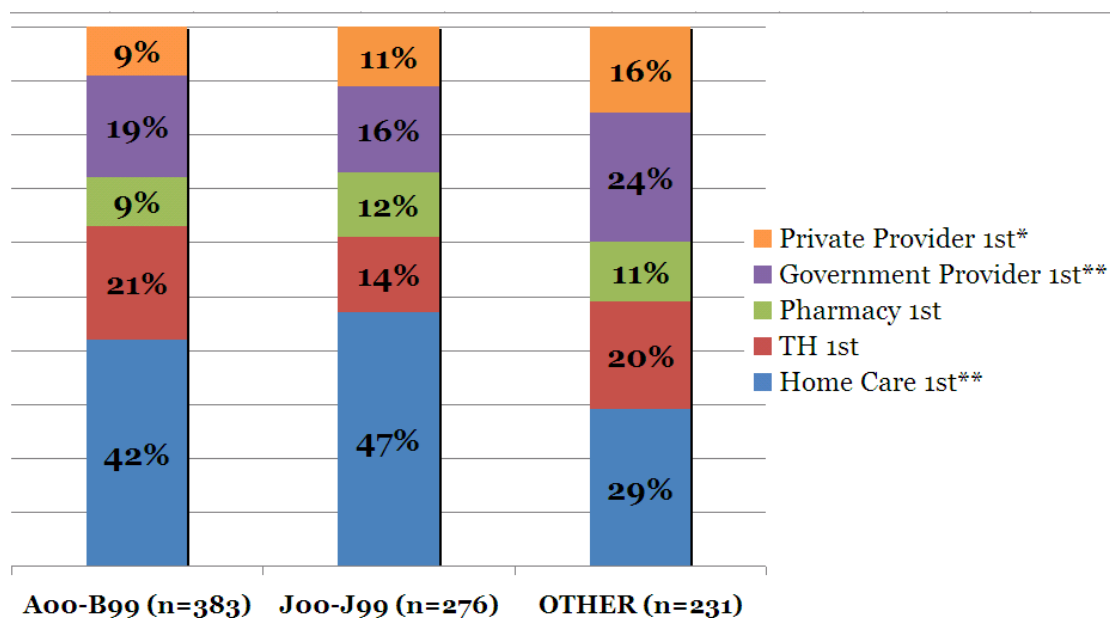


Figure I. Relationship between illness type (ICD code) and first type of care used

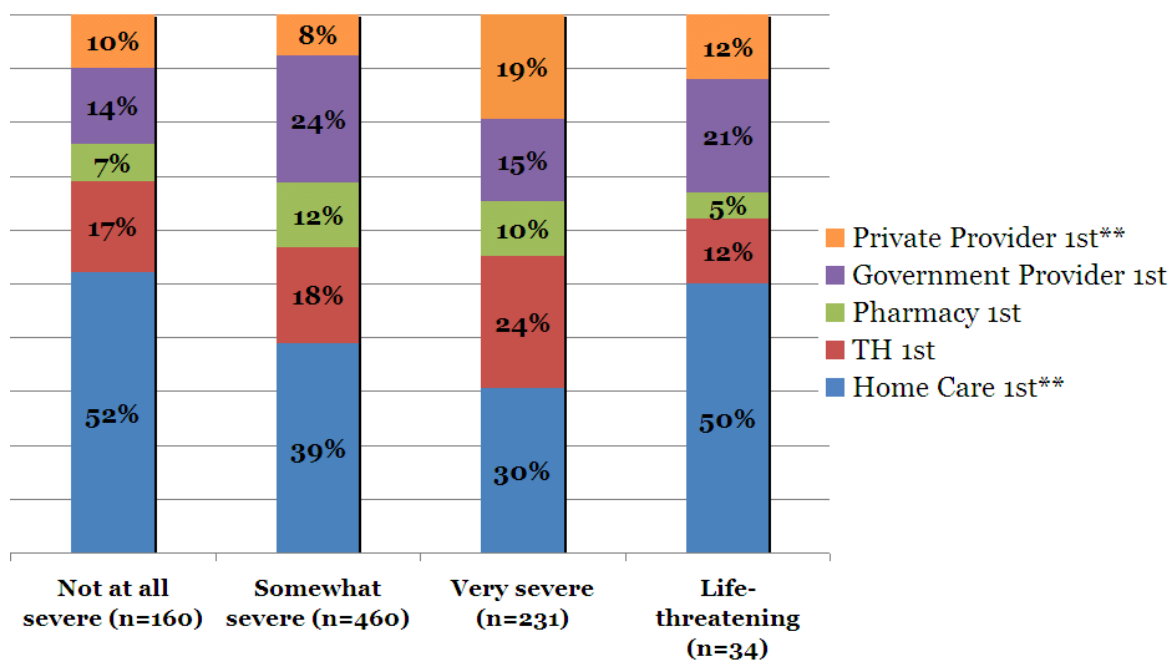


Figure J. Relationship between illness severity and first type of care used

Providers Used At Least Once:

Patient Variables:

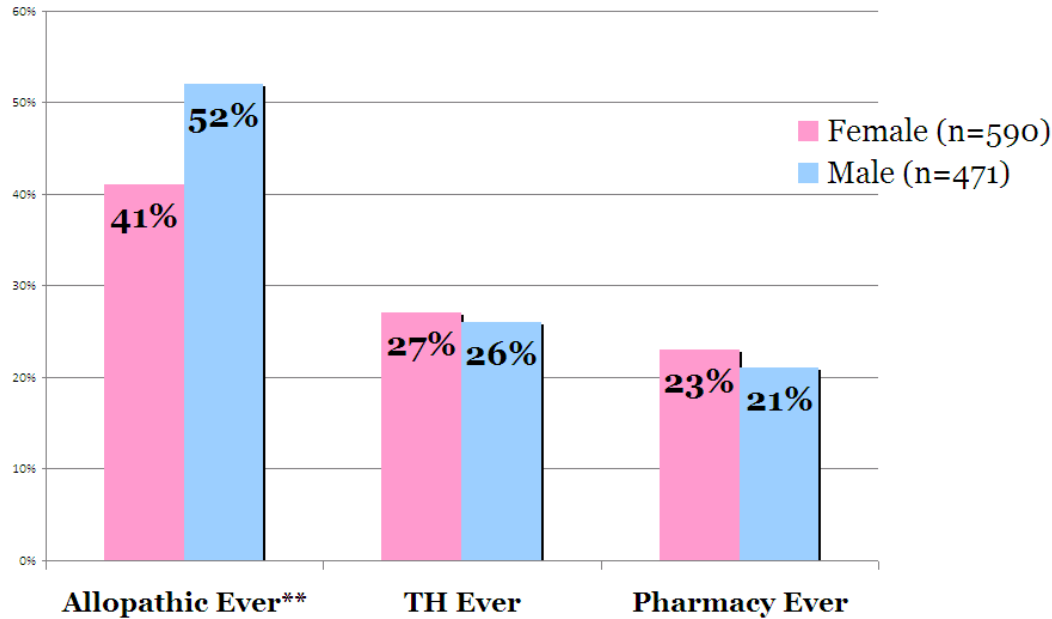


Figure K. Relationship between patient gender and whether or not a household used allopathic care ever, TH care ever and/or pharmacy care ever

Household Variables:

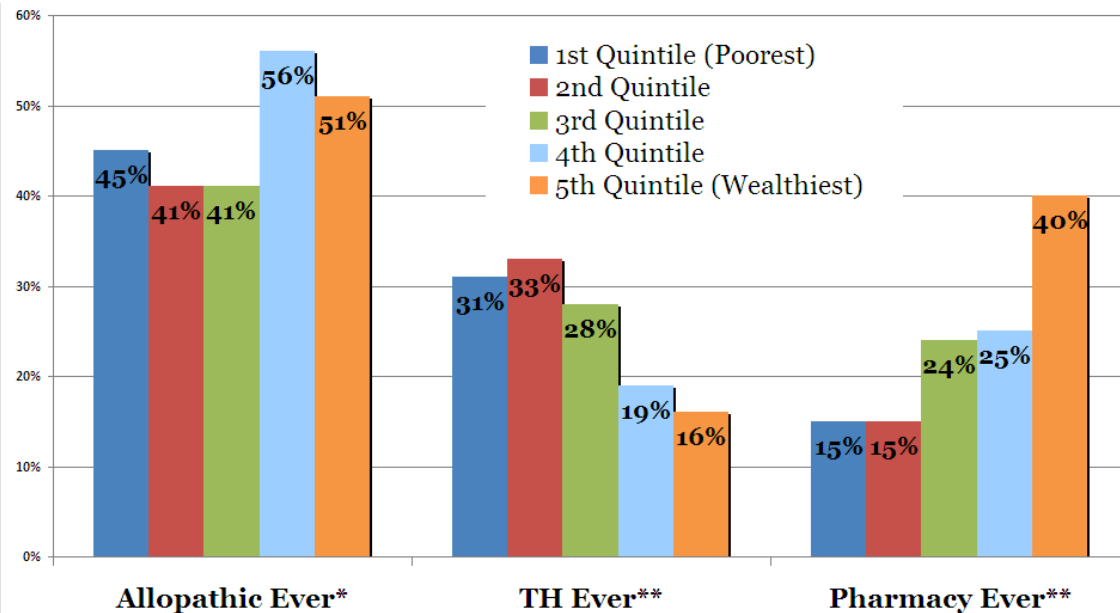


Figure L. Relationship between household wealth quintile and whether or not a household used allopathic care ever, TH care ever and/or pharmacy care ever

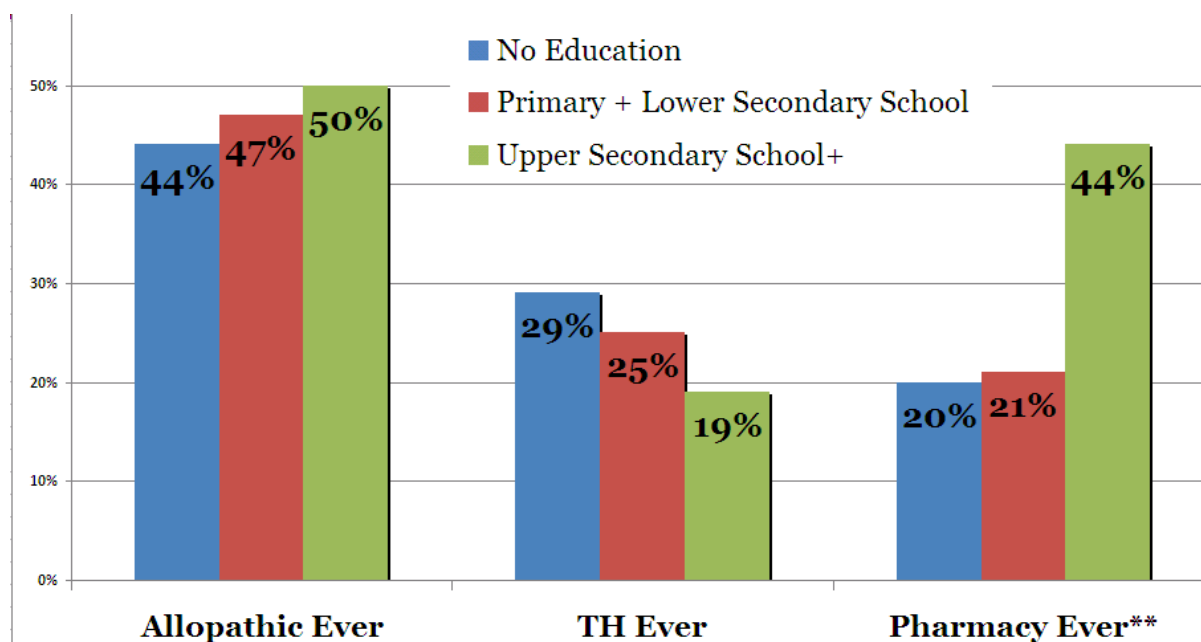


Figure M. Relationship between education of household head and whether or not a household used allopathic care ever, TH care ever and/or pharmacy care ever

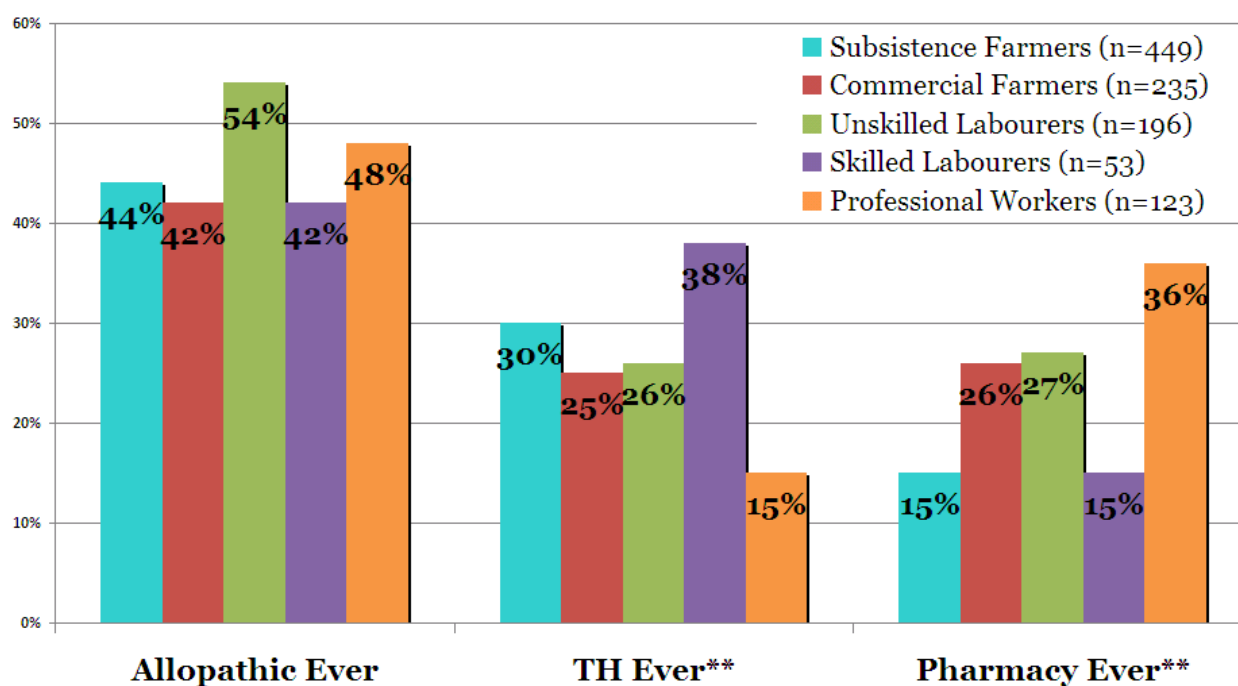


Figure N. Relationship between household occupation and whether or not a household used allopathic care ever, TH care ever and/or pharmacy care ever

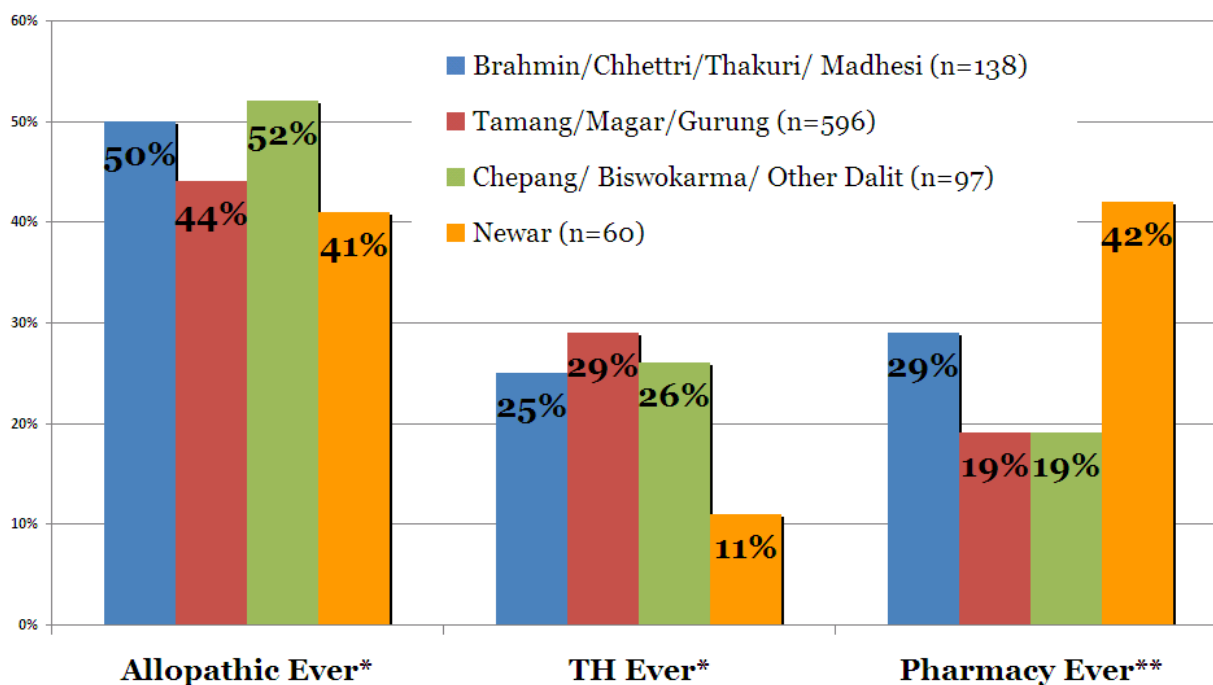


Figure O. Relationship between household caste and whether or not a household used allopathic care ever, TH care ever and/or pharmacy care ever

Community Variables:

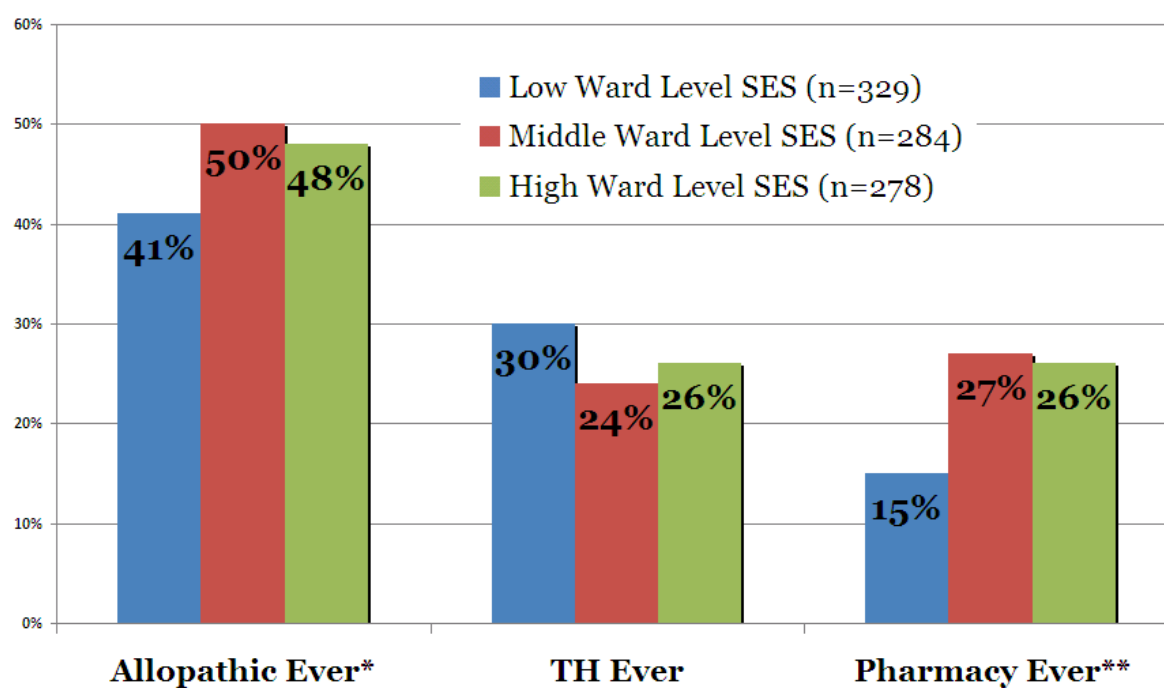


Figure P. Relationship between ward index and whether or not a household used allopathic care ever, TH care ever and/or pharmacy care ever

Health Facility Variables:

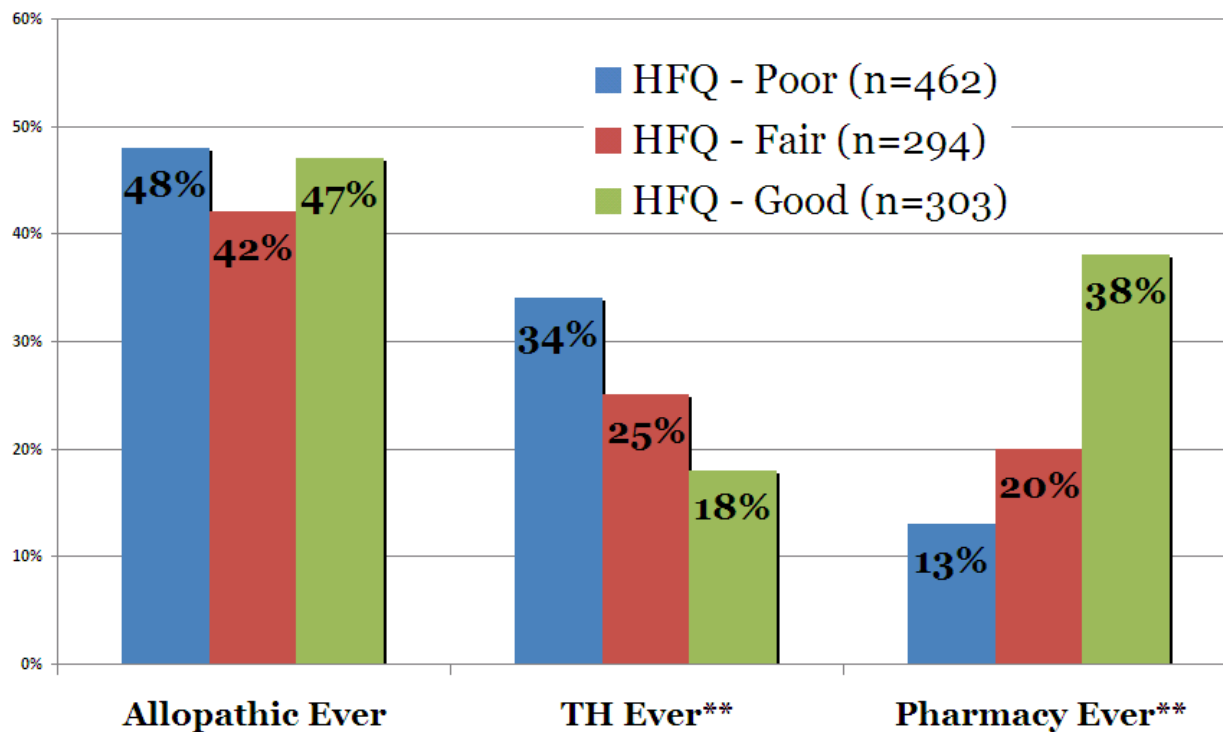


Figure Q. Relationship between health facility quality and whether or not a household used allopathic care ever, TH care ever and/or pharmacy care ever

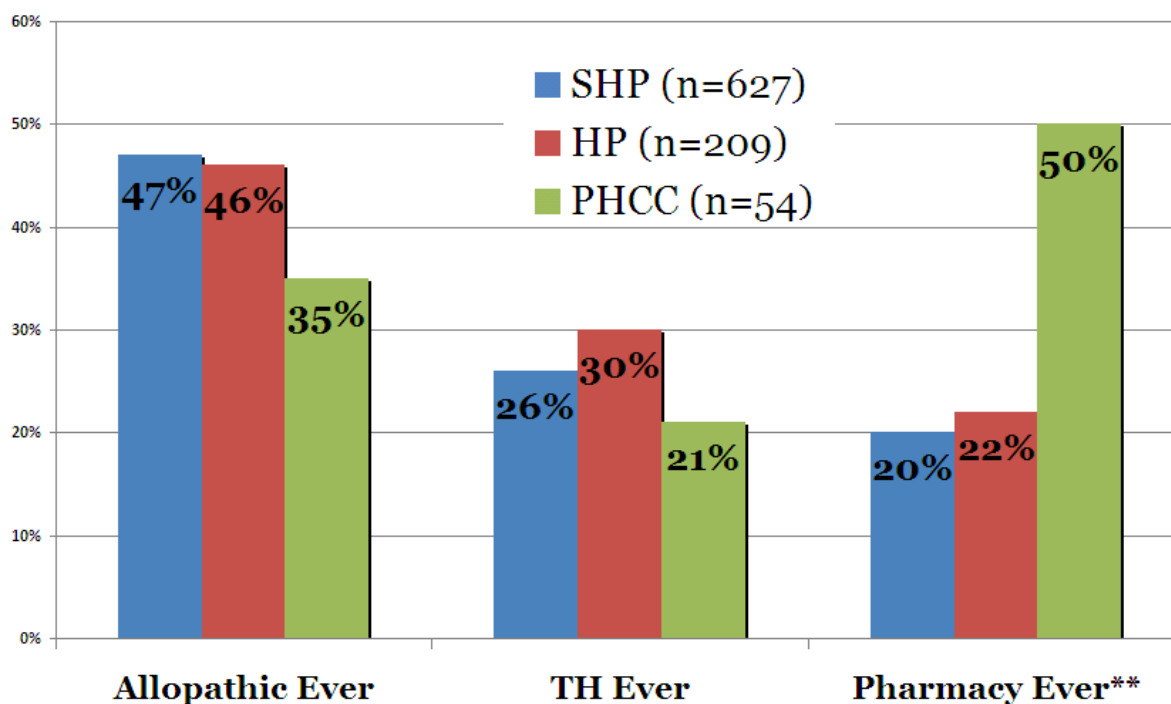


Figure R. Relationship between health type and whether or not a household used allopathic care ever, TH care ever and/or pharmacy care ever

Illness Variables:

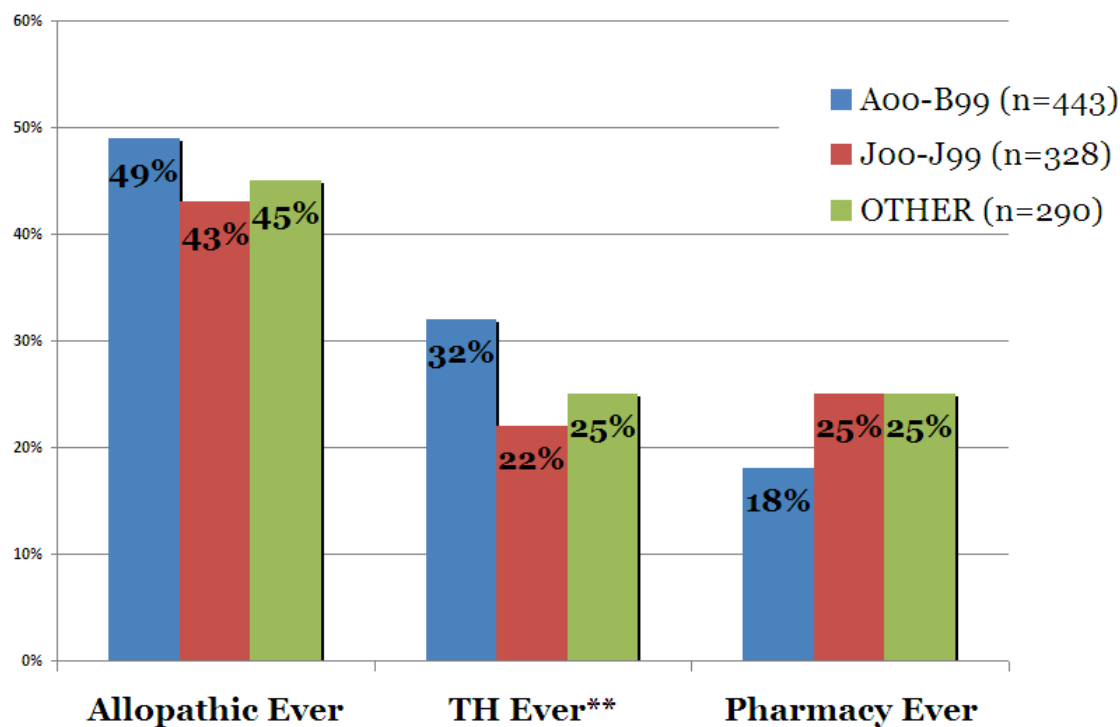


Figure S. Relationship between illness type (ICD) and whether or not a household used allopathic care ever, TH care ever and/or pharmacy care ever

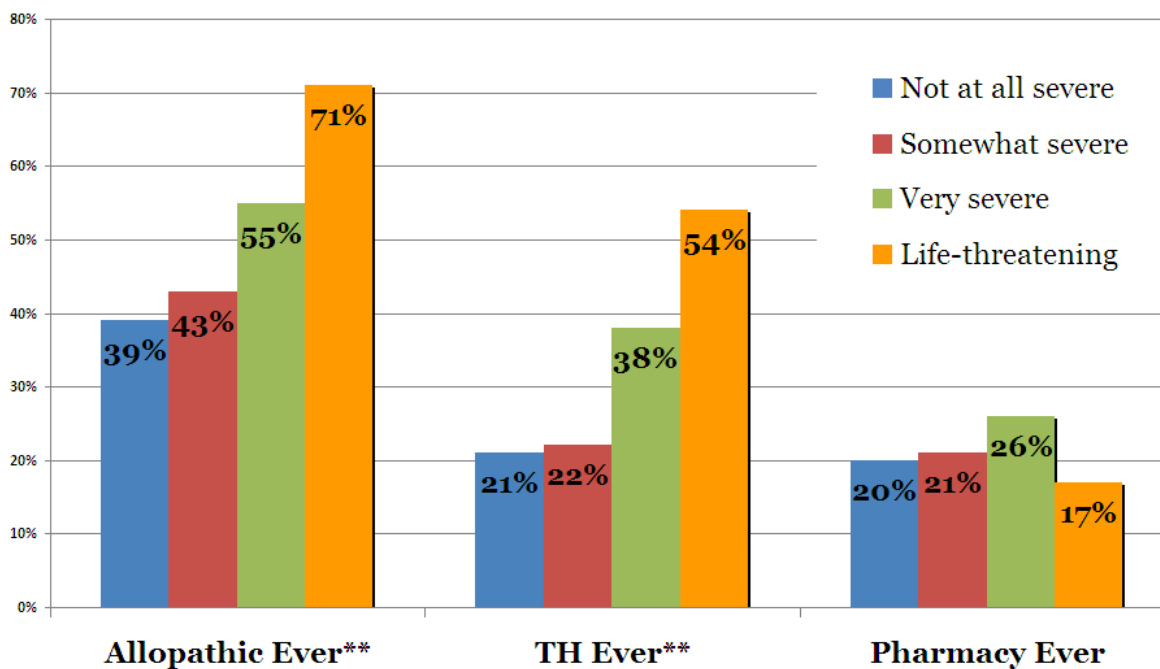


Figure T. Relationship between illness severity and whether or not a household used allopathic care ever, TH care ever and/or pharmacy care ever

Knowledge Variables:

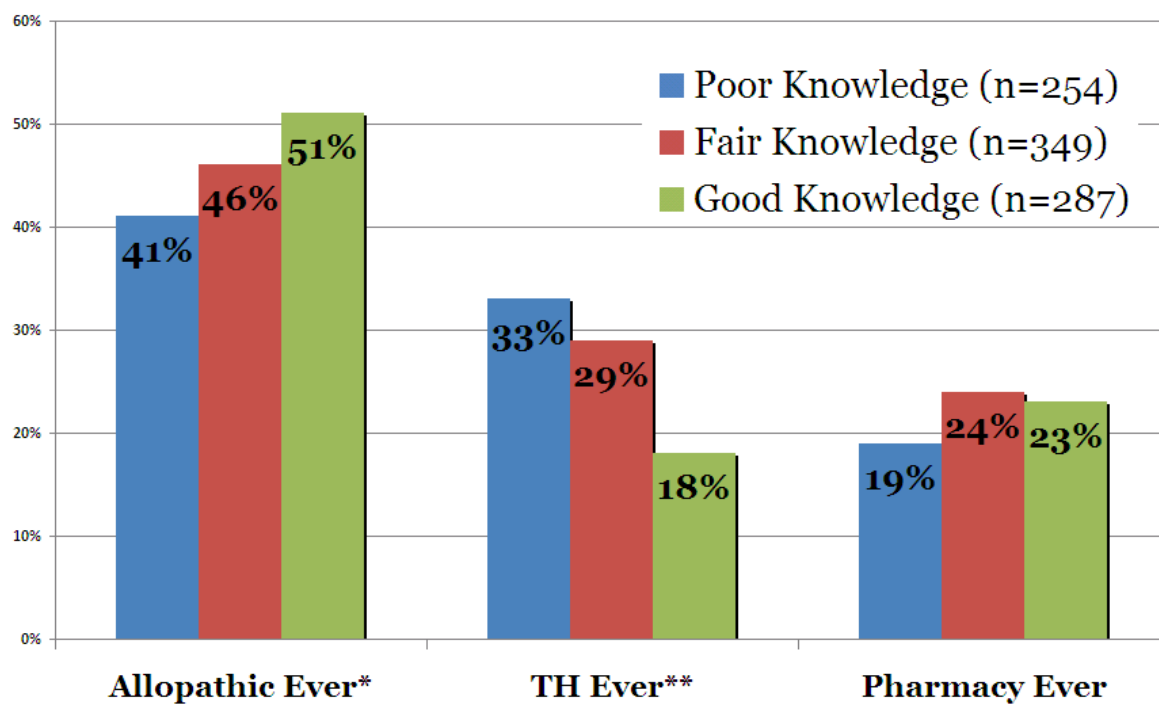


Figure U. Relationship between household knowledge of the health system and whether or not a household used allopathic care ever, TH care ever and/or pharmacy care ever

Location of Providers Used:

Patient Variables:

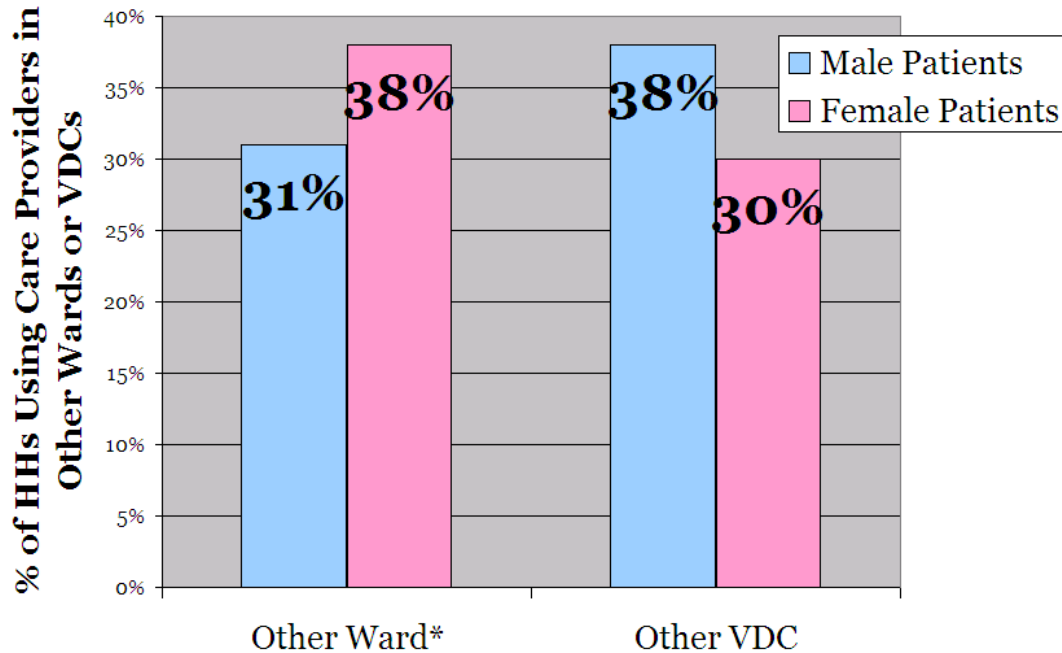


Figure V. Relationship between patient gender and whether or not a household used care within other wards or other VDCs

Household Variables:

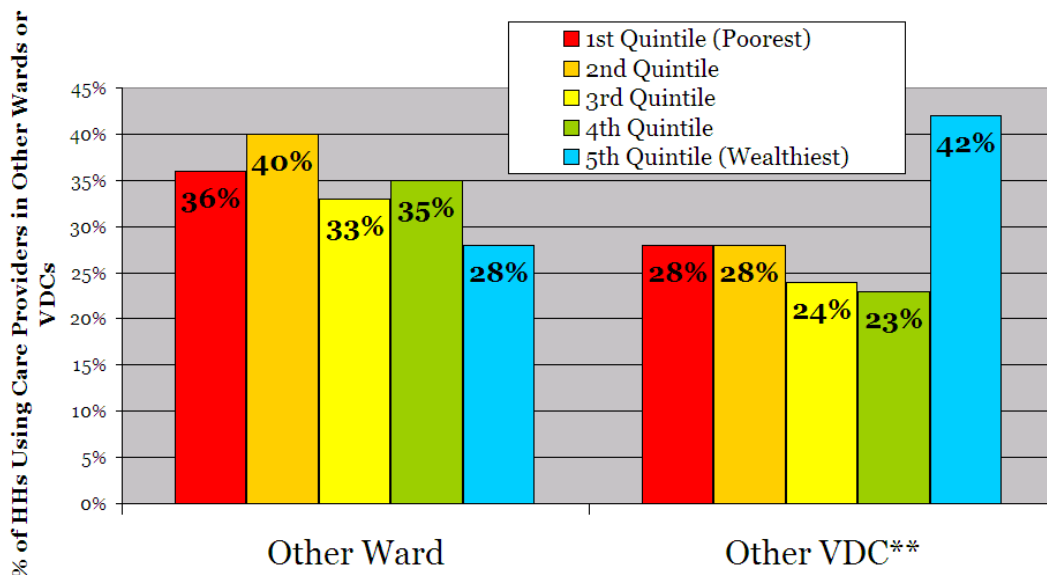


Figure W. Relationship between household wealth quintile and whether or not a household used care within other wards or other VDCs

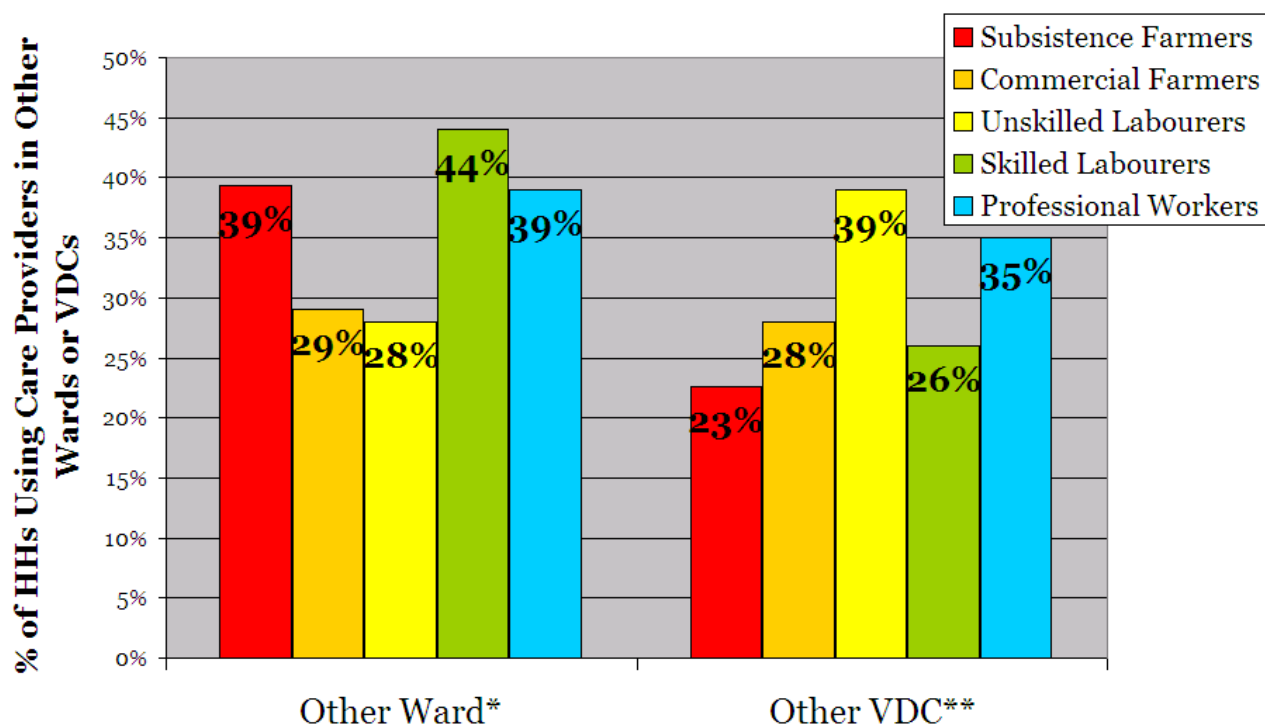


Figure X. Relationship between household occupation and whether or not a household used care within other wards or other VDCs

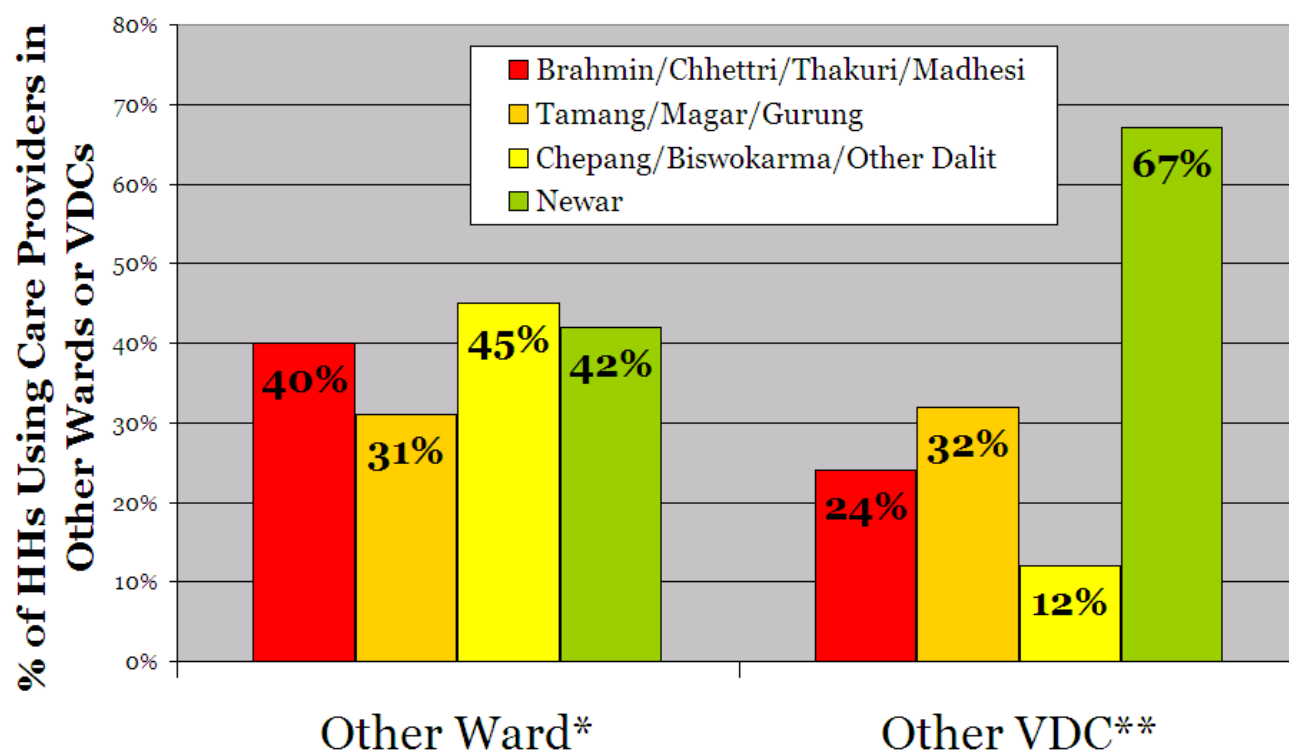


Figure Y. Relationship between household caste and whether or not a household used care within other wards or other VDCs

Community Variables:

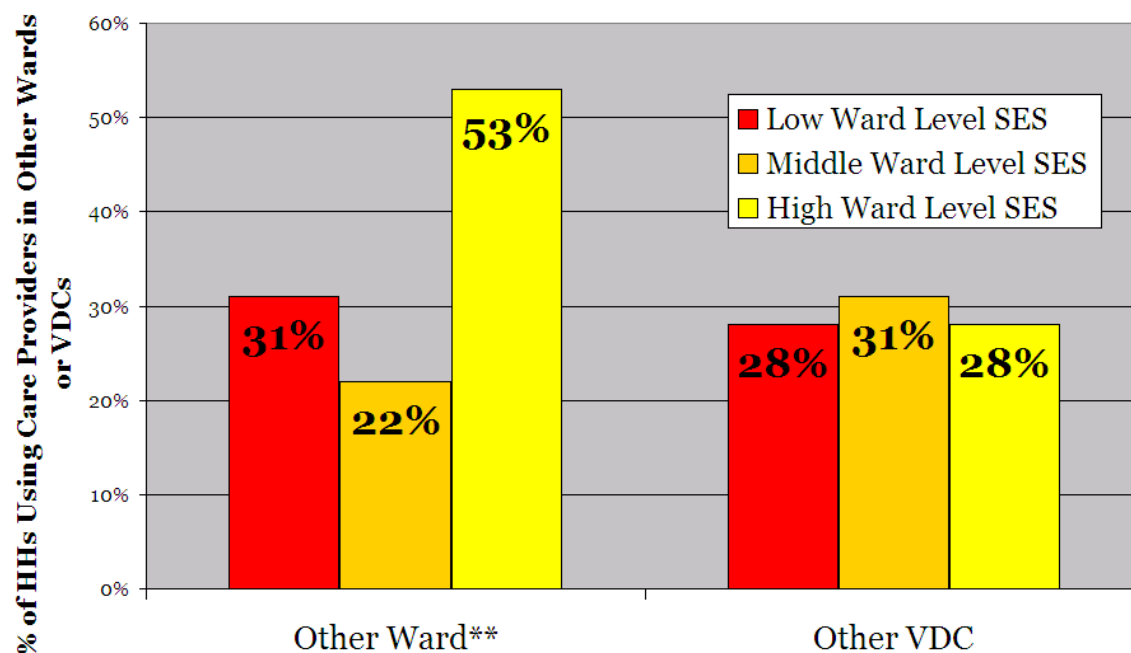


Figure Z. Relationship between ward index and whether or not a household used care within other wards or other VDCs

Health Facility Variables:

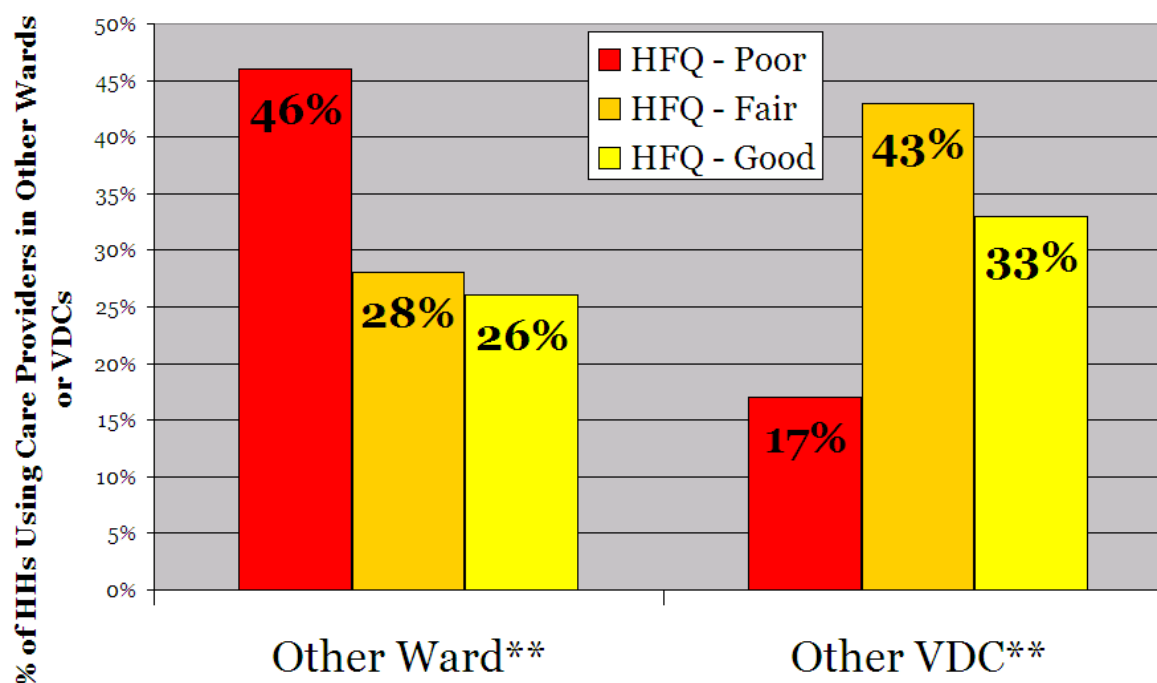


Figure AA, Relationship between health facility quality and whether or not a household used care within other wards or other VDCs

Illness Variables:

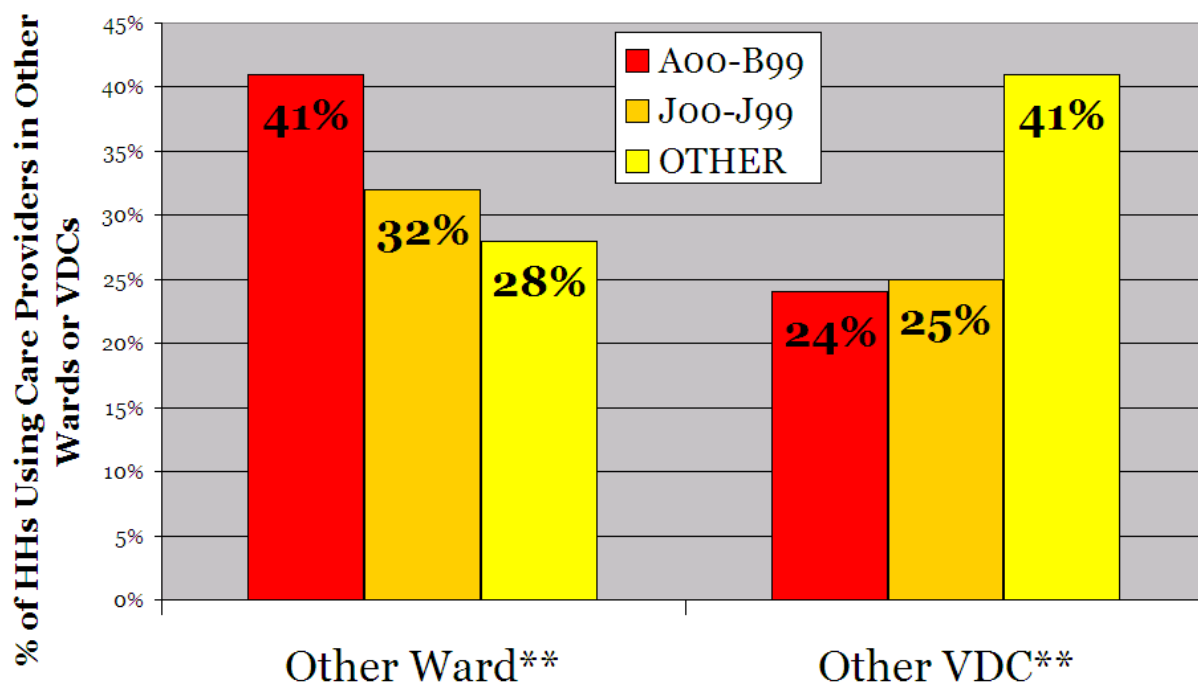


Figure BB. Relationship between illness types and whether or not a household used care within other wards or other VDCs

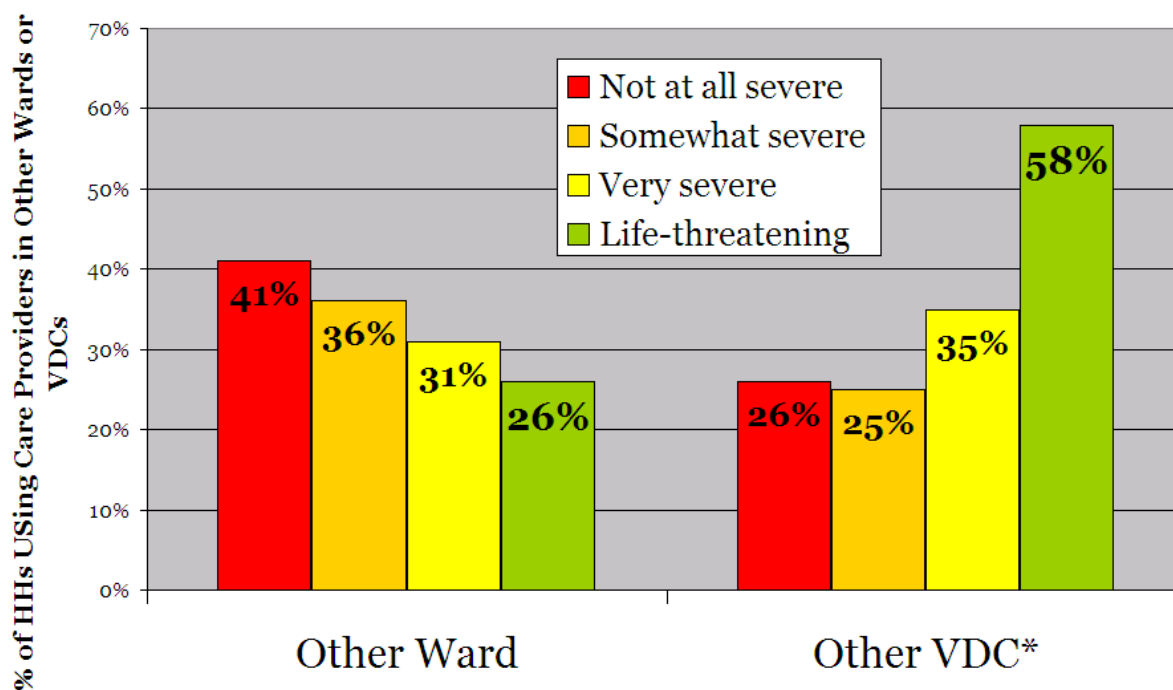


Figure CC. Relationship between illness severity and whether or not a household used care within other wards or other VDCs

Number of Providers Used:

Patient Variables:

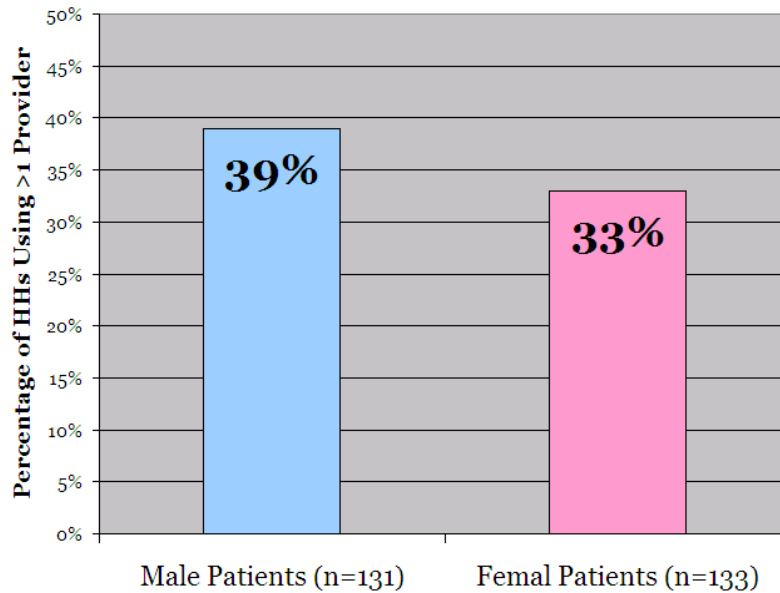


Figure DD. Relationship between patient gender and whether or not a household used more than one provider

Household Variables:

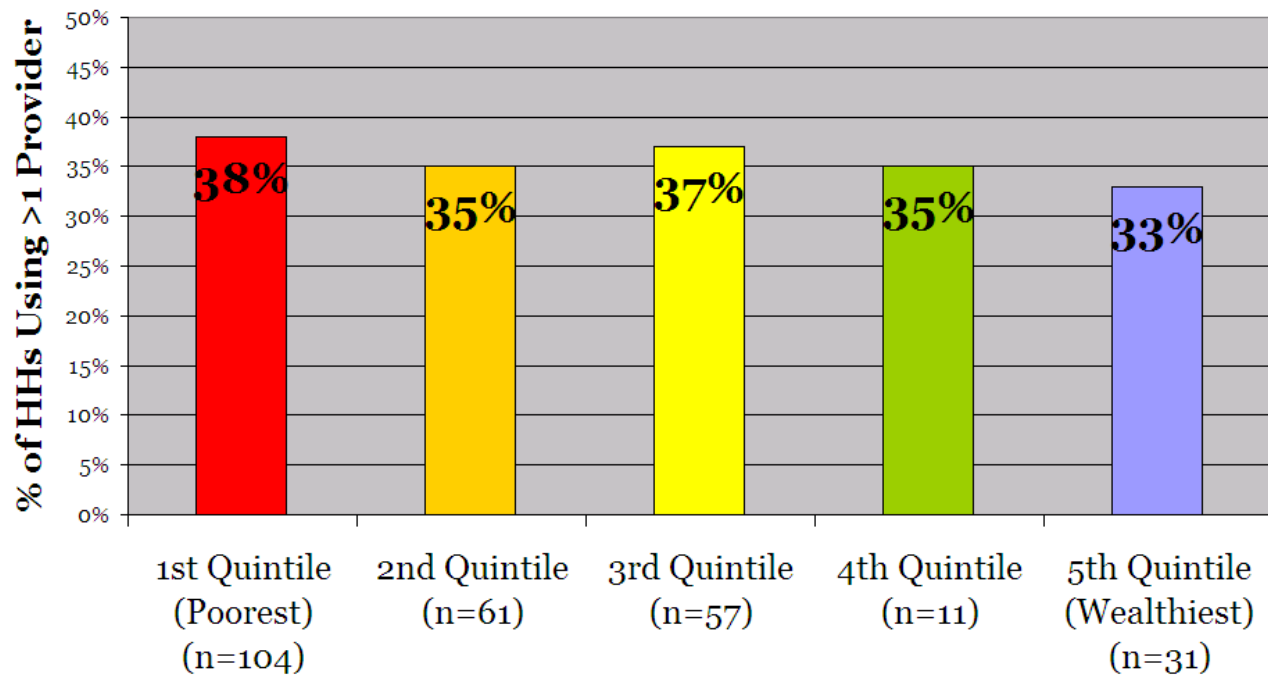


Figure EE. Relationship between wealth quintile and whether or not a household used more than one provider

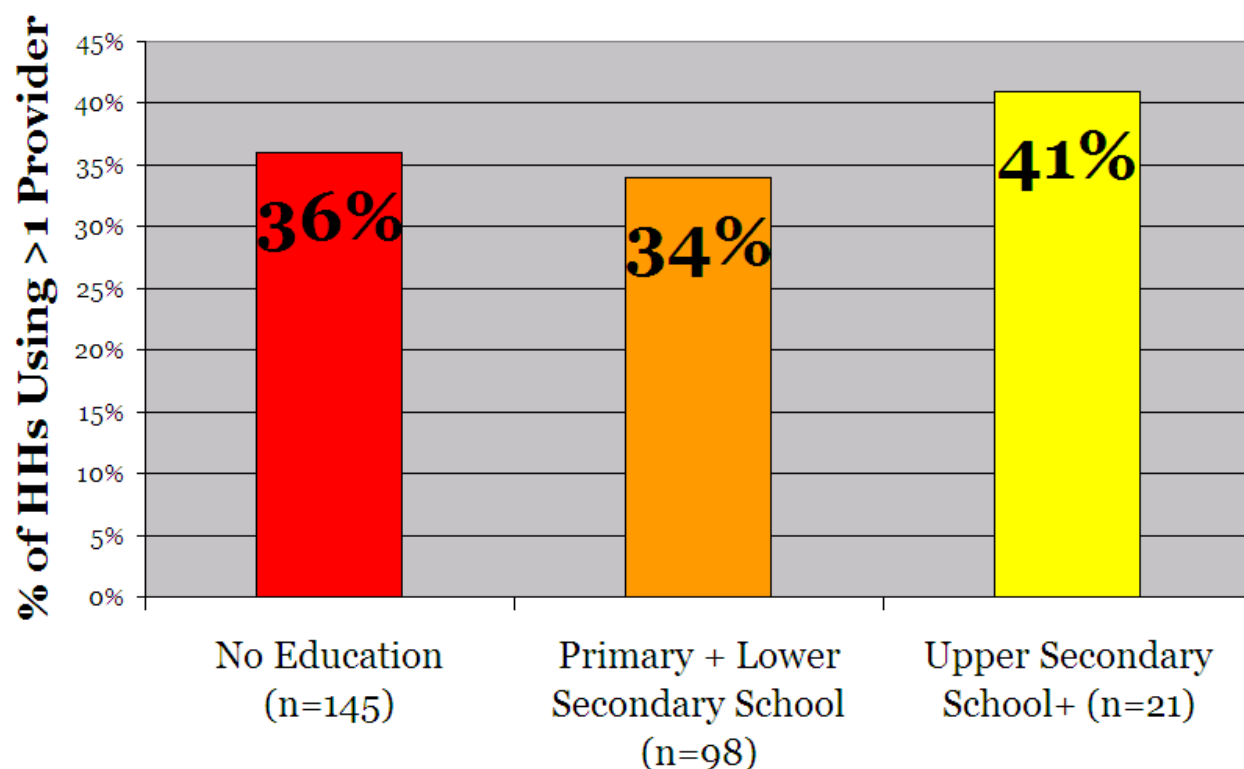


Figure FF. Relationship between household head education and whether or not a household used more than one provider

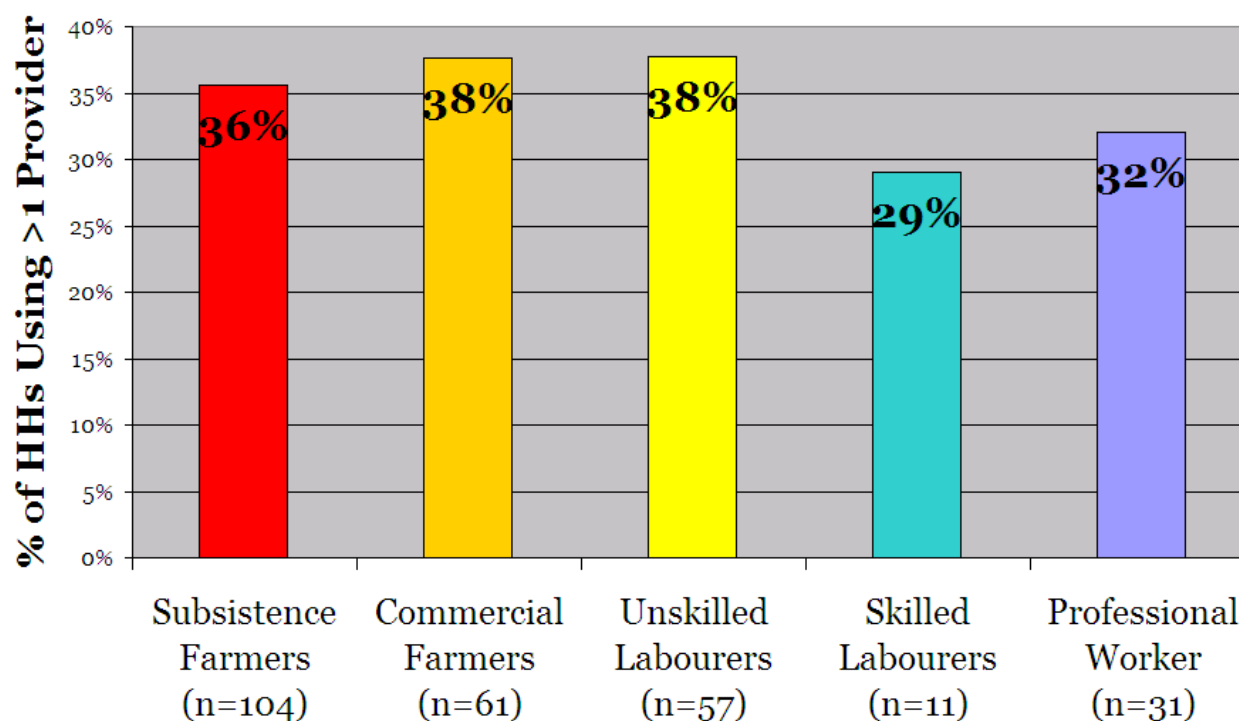


Figure GG. Relationship between household occupation and whether or not a household used more than one provider

Community Variables:

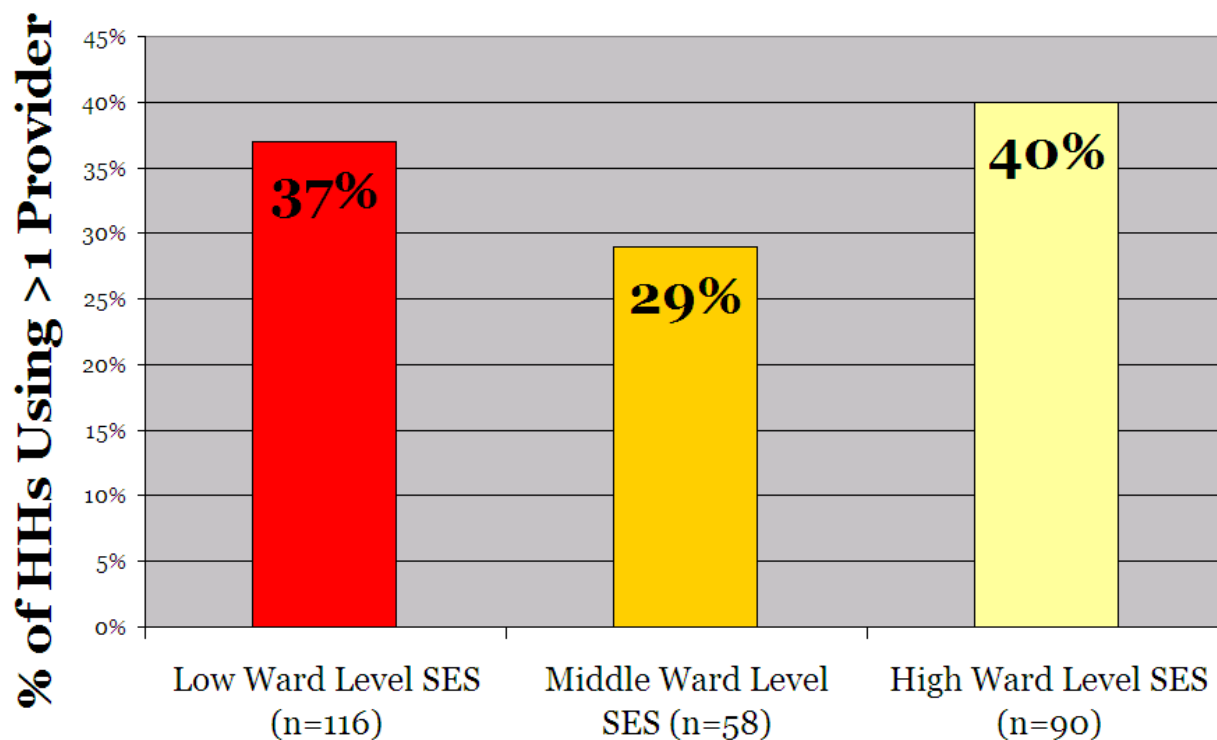


Figure HH. Relationship between ward index and whether or not a household used more than one provider

Health Facility Variables:

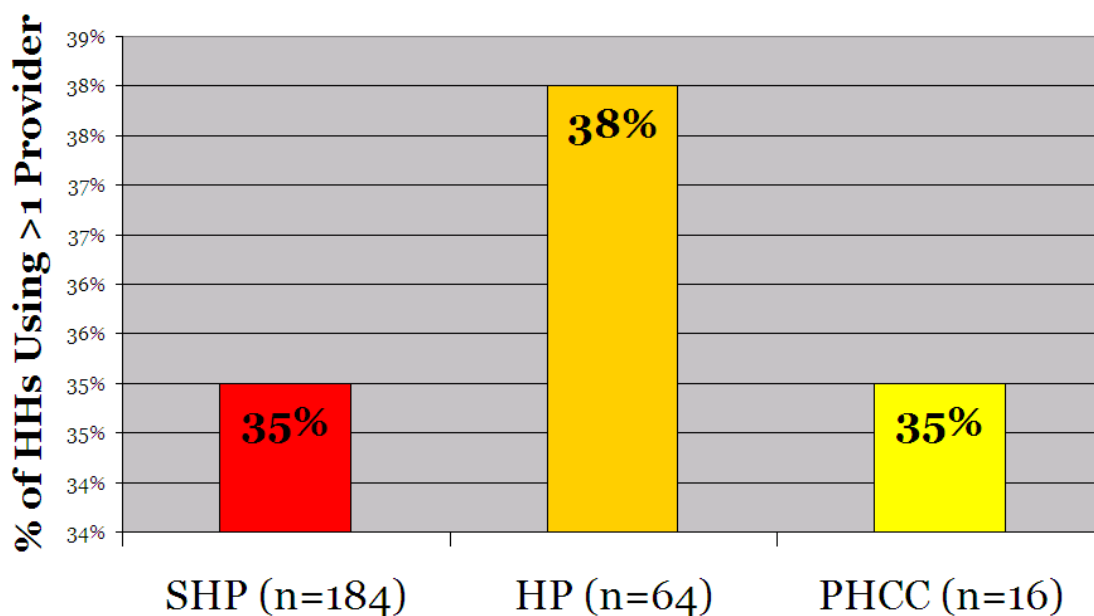


Figure II. Relationship between nearest health facility type and whether or not a household used more than one provider

Illness Variables:

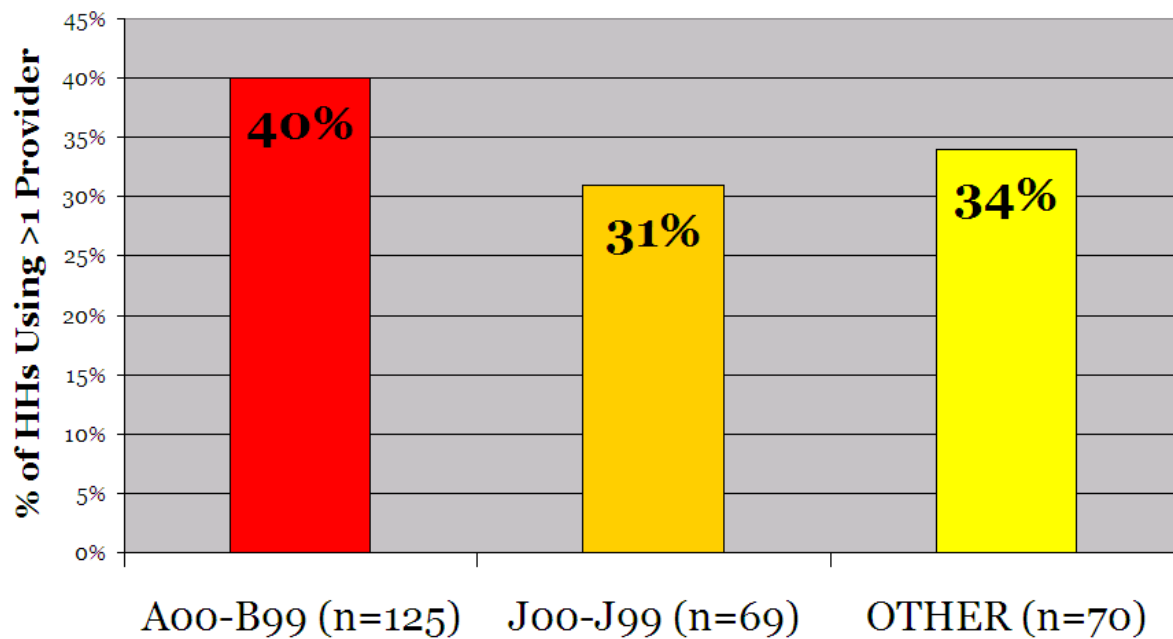


Figure JJ. Relationship between illness type (ICD code) and whether or not a household used more than one provider

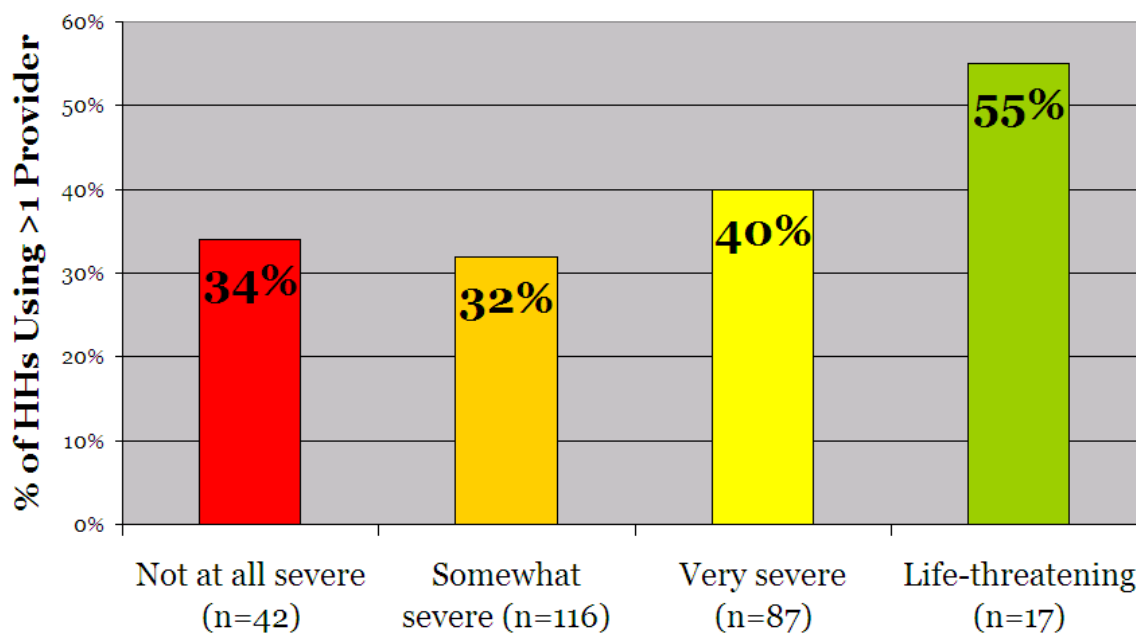


Figure KK. Relationship between illness severity and whether or not a household used more than one provider

PLEASE NOTE: Those analyses which seem to be missing from above were not significant at $p < 0.05$, so the graphs were not included in this appendix.

* significant at $p < 0.05$; ** significant at $p < 0.01$

Appendix 7.2a

Pearson Correlation Coefficients for Preliminary Models

Delay of Care “B*” Models: Pearson Correlation Coefficients

IVs: Household Variables

HH Level SES Variables	Pearson Correlation Coefficients			
	B.1*	B.2*	B.3*	B.4*
No. HH Members	NS	NS	NS	NS
Crowding	NS	NS	NS	NS
No. Infants in HH	NS	NS	NS	NS
No. Children 1-5yo	NS	NS	NS	NS
No. Children 6-14yo	NS	NS	NS	NS
No. People >60yo	NS	NS	NS	NS
No. Females in HH	NS	NS	NS	NS
Income	-0.096**	-0.096**	-0.103**	NS
Land Ownership	NS	NS	NS	NS
Land Price	NS	NS	NS	NS
Caste	NS	NS	NS	0.121*
Occupation	-0.108**	-0.108**	-0.110**	NS
Gender of HH Head	NS	NS	NS	NS
Wealth Quintile	-0.083*	-0.083*	-0.116**	-0.2**
Education of Head	-0.088*	-0.088*	NS	-0.133*

IVs: Patient Variables

Patient Characteristics	Pearson Correlation Coefficients			
	B.1*	B.2*	B.3*	B.4*
Patient Gender	NS	NS	NS	NS
Patient Age	0.107**	NS	NS	NS
Patient Role: Head?	NS	NS	NS	NS
Patient Role: Primary Respondent?	NS	NS	NS	NS

IVs: Illness Variables

Illness Variables	Pearson Correlation Coefficients			
	B.1*	B.2*	B.3*	B.4*
Diagnosis (ICD)	0.107**	0.089*	0.087*	NS
Illness Aetiology 1 °	0.079*	0.096*	0.175**	NS
Illness Aetiology 2 °	NS	NS	NS	NS
Illness Aetiology 3 °	NS	NS	NS	NS
Illness Aetiology – Different beliefs	NS	0.104*	NS	0.172**
No. of Days in Bed	NS	NS	NS	NS
No. of Days Unable to Work	0.132**	0.179**	0.112**	NS
Worry Rating	NS	NS	NS	NS
Pt Severity Rating	NS	NS	NS	NS
Pain Rating	NS	NS	NS	NS
Obj Severity (weighted)	0.074*	0.127**	0.101*	0.135*
Obj Severity (unweighted)	0.109**	0.165**	0.11**	NS
Subj Severity (Avg)	NS	NS	NS	NS
DUSOI Rating	NS	NS	NS	NS

IVs: Knowledge Variables

Knowledge Variables	Pearson Correlation Coefficients			
	C.1*	C.2*	C.3*	C.4*
Nearest Health Facility	NS	NS	NS	NS
Lowest Level of Government Care	NS	NS	NS	NS
Referral System	-0.09*	-0.148**	-0.092*	NS
Free Essential Services Availability	NS	0.1*	NS	NS
Availability of Medical Doctors	NS	NS	NS	NS
Role of FCHV	NS	-0.09*	NS	NS

IVs: Health Facility Variables

Health Facility Characteristics	Pearson Correlation Coefficients			
	B.1*	B.2*	B.3*	B.4*
Distance from Tole	0.083*	NS	NS	NS
Drug Availability	NS	NS	NS	-0.159**
Equipment Availability	NS	-0.112*	NS	-0.195**
Instrument Availability	NS	-0.113*	-0.079*	-0.195**
Room Availability	NS	NS	NS	-0.134*
Open Hours	NS	0.12**	NS	NS
Treatment Quality	0.085*	NS	NS	NS
Cost	NS	NS	NS	NS
Preventative Services	NS	-0.116*	NS	-.24**
Water Type	NS	-0.113*	NS	-0.147*
Electricity Type	NS	NS	NS	NS
Outreach Services	NS	NS	NS	NS
Staff Availability	NS	NS	NS	NS
Facility Head Availability	NS	NS	NS	-0.129*
Female Staff Availability	NS	NS	-0.092*	-0.16**
Cleanliness	NS	-0.124**	-0.082*	-0.202**
Diagnostic Test Availability	NS	NS	NS	-0.124*
Out of Hours Services	NS	NS	NS	NS
Ratings: Health Personnel Practices & Conduct	NS	NS	NS	NS
Ratings: Adequacy of Resources & Services	NS	NS	NS	NS
Ratings: Health Care Delivery	NS	NS	NS	NS
Ratings: Financial and Physical Accessibility/Affordability	NS	NS	NS	NS
Road Access	-0.077*	-0.101*	NS	-0.127*
Toilet Quality	NS	0.137**	NS	NS
Distance to District Hospital	0.08*	-0.204**	NS	0.178**
Distance to Primary Health Care Center	NS	NS	0.081*	NS

Order of Care “C*” Models: Pearson Correlation Coefficients

IVs: Household Variables

HH Level SES Variables	Pearson Correlation Coefficients																
	C.1*	C.2*	C.3*	C.4*	C.5*	C.6*	C.7*	C.8*	C.9*	C.10*	C.11*	C.12*	C.13*	C.14*	C.15*	C.16*	C.17*
No. HH Members	NS	-0.105**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.069**	NS	NS
Crowding	0.078*	-0.113**	0.075*	NS	-0.073*	NS	0.121*	NS	NS	NS	NS	NS	NS	0.060**	0.095**	NS	-0.073*
No. Infants in HH	NS	NS	NS	NS	NS	NS	NS	-0.121*	NS	NS	NS	0.181*	NS	NS	NS	NS	NS
No. Children 1-5yo	NS	NS	NS	NS	NS	NS	NS	-0.114*	NS	NS	NS	NS	NS	0.115**	0.099**	-0.150*	NS
No. Children 6-14yo	NS	-0.072*	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.063**	NS	NS
No. People >60yo	NS	NS	NS	NS	NS	NS	NS	0.123*	NS	NS	NS	-0.187*	NS	NS	NS	NS	NS
No. Females in HH	NS	NS	NS	0.083*	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.047*	0.047*	NS	NS
Income	NS	NS	NS	0.083*	0.13**	-0.161**	NS	NS	NS	NS	NS	NS	0.216*	0.216*	NS	NS	0.13**
Land Ownership	NS	NS	NS	NS	NS	NS	NS	NS	0.105*	NS	NS	NS	NS	0.048*	NS	NS	NS
Land Price	NS	0.071*	NS	NS	0.115**	-0.141**	NS	NS	NS	NS	NS	0.205*	NS	NS	NS	NS	0.115**
Caste	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-0.149*	NS
Occupation	NS	NS	NS	0.117**	NS	NS	NS	NS	NS	NS	NS	NS	0.191*	NS	NS	NS	NS
Gender of HH Head	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Wealth Quintile	NS	0.099**	-0.145**	0.139**	0.149**	-0.105*	NS	0.244**	NS	NS	NS	NS	NS	-0.068**	-0.089**	NS	0.149**
Education of Head	NS	NS	-0.117**	-0.117**	NS	NS	NS	NS	NS	NS	-0.205*	0.212*	NS	NS	NS	0.151*	NS

IVs: Illness Variables

Illness Variables	Pearson Correlation Coefficients																	
	C.1*	C.2*	C.3*	C.4*	C.5*	C.6*	C.7*	C.8*	C.9*	C.10*	C.11*	C.12*	C.13*	C.14*	C.15*	C.16*	C.17*	C.18*
Diagnosis (ICD)	NS	0.093**	NS	NS	NS	NS	-0.151**	0.127*	NS	NS	NS	0.178*	NS	0.073*	NS	NS	NS	NS
Illness Aetiology 1 °	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Illness Aetiology 2 °	NS	NS	0.168*	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.173**	0.14*	NS	NS
Illness Aetiology 3 °	NS	NS	NS	NS	NS	NS	-0.586*	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Illness Aetiology – Different beliefs	-0.408**	-0.164**	0.346**	-0.103**	-0.408**	0.259**	-0.149**	-0.126*	NS	0.222*	NS	NS	NS	0.086**	0.225**	0.176**	NS	-0.408**
No. of Days in Bed	NS	NS	0.107**	NS	NS	0.172**	NS	NS	NS	NS	NS	NS	NS	0.122**	0.19**	0.218**	NS	NS
No. of Days Unable to Work	NS	NS	0.083*	NS	NS	-0.107**	NS	-0.107**	NS	NS	NS	NS	NS	0.111**	0.089**	0.077*	NS	NS
Worry Rating	NS	NS	0.074*	NS	NS	0.099*	NS	-0.119**	NS	0.206*	NS	NS	NS	0.176**	0.135**	0.158**	0.197**	NS
Pt Severity Rating	NS	NS	NS	NS	NS	0.113*	NS	-0.133**	NS	0.199*	NS	NS	NS	0.146**	0.124**	0.148**	0.178*	NS
Pain Rating	-0.083*	NS	0.077*	NS	-0.083*	NS	NS	NS	NS	NS	NS	NS	NS	0.118**	0.188**	0.198**	NS	-0.083*
Obj Severity (weighted)	NS	NS	0.114**	NS	NS	0.128*	NS	NS	NS	NS	0.196*	NS	NS	0.144**	0.181**	0.195**	NS	NS
Obj Severity (unweighted)	NS	NS	0.119**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.151**	0.17**	0.17*	NS	NS
Subj Severity (Avg)	-0.077*	NS	0.07*	NS	-0.077*	0.113*	NS	-0.135**	NS	0.199*	NS	NS	NS	0.161**	0.17**	0.173**	0.162*	-0.077*
DIISOI Rating	NS	NS	0.12**	NS	NS	0.136**	NS	-0.170**	0.101*	NS	NS	NS	NS	0.109**	0.128**	0.148**	NS	NS

IVs: Patient Variables

	Pearson Correlation Coefficients																	
Patient Characteristics	C.1*	C.2*	C.3*	C.4*	C.5*	C.6*	C.7*	C.8*	C.9*	C.10*	C.11*	C.12*	C.13*	C.14*	C.15*	C.16*	C.17*	C.18*
Patient Gender	NS	0.67*	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Patient Age	NS	NS	NS	NS	NS	NS	NS	-0.135**	0.2**	NS	NS	NS	NS	NS	NS	0.114**	-0.133**	NS
Patient Role: Head?	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-0.084**	-0.069*	NS
Patient Role: Primary Respondent?	NS	NS	-0.074*	NS	NS	NS	NS	NS	0.143**	NS	NS	NS	NS	NS	NS	-0.098**	-0.132**	NS

IVs: Health Facility Variables

Health Facility Characteristics	Pearson Correlation Coefficients																
	C.1*	C.2*	C.3*	C.4*	C.5*	C.6*	C.7*	C.8*	C.9*	C.10*	C.11*	C.12*	C.13*	C.14*	C.15*	C.16*	C.17*
Distance from Tole	0.086*	-0.093**	0.086*	-0.087**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-0.168*
Drug Availability	-0.158**	0.086*	-0.158**	0.174**	0.116**	NS	NS	0.233**	-0.118*	NS	NS	0.179*	NS	NS	-0.1*	-0.071*	NS
Equipment Availability	-0.140**	0.071*	-0.140**	0.196**	0.14**	NS	-0.111*	0.285**	-0.11*	NS	NS	0.282**	NS	NS	-0.099**	NS	NS**
Instrument Availability	-0.109**	NS	-0.109**	0.201**	0.135**	NS	-0.98*	0.289**	NS	NS	-0.21*	0.32**	NS	-0.052*	-0.096**	NS	NS**
Room Availability	-0.106**	NS	-0.106**	0.157**	0.14**	NS	-0.122*	0.302**	NS	NS	NS	0.282**	NS	NS	-0.063**	NS	NS**
Open Hours	NS	NS	NS	NS	0.12**	NS	NS	NS	NS	NS	NS	NS	NS	NS	-0.045*	NS	-0.2**
Treatment Quality	0.119**	NS	0.119**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-0.06**	NS	NS**
Cost	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS**
Preventative Services	-0.085*	0.083*	-0.085*	0.161**	0.176**	NS	NS	0.166**	NS	NS	NS	0.328**	NS	-0.046*	-0.084**	NS	NS**
Water Type	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-0.191**
Electricity Type	-0.122**	0.108**	-0.122**	NS	0.091*	NS	NS	0.182**	NS	NS	NS	NS	NS	NS	-0.137**	-0.087**	NS
Outreach Services	NS	NS	NS	NS	0.096**	NS	NS	NS	NS	-0.191*	0.292**	NS	NS	NS	-0.058**	NS	NS**
Staff Availability	-0.1**	0.067*	-0.1**	0.071*	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-0.085**	-0.057**	NS**
Facility Head Availability	-0.113**	NS	-0.113**	0.135**	0.106**	NS	NS	0.239**	-0.177**	NS	-0.371**	0.317**	NS	NS	NS	NS	NS**
Female Staff Availability	NS	NS	NS	0.86*	NS	NS	NS	0.243**	NS	NS	NS	0.265**	NS	-0.046*	-0.087**	NS	NS**
Cleanliness	-0.076*	NS	-0.076*	0.124**	0.137**	NS	NS	0.204**	NS	NS	NS	0.316**	NS	-0.059**	-0.073**	NS	NS**
Diagnostic Test Availability	-0.083*	NS	-0.083*	0.12**	0.092*	NS	-0.112*	0.242**	NS	NS	NS	0.186*	NS	NS	NS	NS	NS**
Out of Hours Services	NS	NS	NS	NS	NS	NS	-0.102*	0.261**	NS	NS	NS	0.176*	NS	NS	NS	NS	NS**
Ratings: Health Personnel Practices & Conduct	NS	0.098**	NS	NS	0.142**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ratings: Adequacy of Resources & Services	-0.096**	0.12**	-0.096**	NS	0.153**	NS	NS	NS	NS	NS	NS	0.198*	NS	0.055*	NS	NS	NS**
Ratings: Health Care Delivery	NS	NS	NS	NS	0.095*	NS	NS	NS	NS	NS	NS	NS	NS	NS	-0.069**	NS	NS
Ratings: Financial and Physical Accessibility/Affordability	NS	0.077*	NS	NS	0.168**	NS	NS	NS	-0.103*	NS	NS	NS	NS	NS	NS	NS	NS
Road Access	-0.197**	0.132**	-0.197**	0.204**	0.194**	NS	NS	0.262**	NS	NS	NS	NS	NS	-0.049*	-0.135**	-0.087**	NS
Toilet Quality	-0.154**	0.125**	-0.154**	0.147**	0.12**	NS	-0.123*	0.184**	NS	-0.18*	NS	NS	NS	-0.053*	-0.138**	-0.085**	NS**
Distance to District Hospital	0.108**	0.111**	0.108**	-0.167*	-0.204**	NS	NS	-0.108*	NS	NS	NS	-0.282**	NS	NS	0.054**	NS	NS
Distance to Primary Health Care Center	NS	NS	NS	-0.089*	-0.079*	NS	NS	-0.164**	NS	NS	0.203*	-0.283**	NS	NS	NS	NS	NS

IVs: Knowledge Variables

Knowledge Variables	Pearson Correlation Coefficients																	
	C.1*	C.2*	C.3*	C.4*	C.5*	C.6*	C.7*	C.8*	C.9*	C.10*	C.11*	C.12*	C.13*	C.14*	C.15*	C.16*	C.17*	C.18*
Nearest Health Facility	NS	0.092**	-0.085*	NS	0.089*	NS	NS	NS	NS	NS	NS	-0.183*	0.18*	NS	NS	NS	NS	NS
Lowest Level of Government Care	NS	NS	-0.107**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-0.064**	NS	NS	NS
Referral System	NS	NS	-0.096**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-0.049*	NS	NS	NS
Free Essential Services Availability	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Availability of Medical Doctors	NS	NS	-0.098**	0.111**	0.108**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Role of FCHV	NS	0.105**	-0.09**	NS	0.077*	NS	-0.103*	NS	0.134**	NS	NS	NS	NS	NS	0.042*	NS	NS	NS

Choice of Provider, Location of Providers & Number of Providers “D*, E*, F*, G” Models: Pearson Correlation Coefficients

IVs: Household Variables

HH Level SES Variables	Pearson Correlation Coefficients													
	D.1*	D.2*	D.3*	D.4*	E.1*	F.1*	F.2*	G.1	G.2	G.3	G.4	G.5	G.6	G.7
No. HH Members	NS	NS	NS	NS	NS	NS	NS	-0.072*	NS	NS	NS	NS	NS	NS
Crowding	NS	NS	0.225**	NS	NS	0.1**	NS	NS	-0.130**	-0.138**	NS	-0.111**	-0.158**	NS
No. Infants in HH	NS	NS	NS	NS	NS	NS	NS	NS	-0.1*	-0.105**	-0.128*	-0.109*	-0.120*	NS
No. Children 1-5yo	NS	NS	NS	NS	0.105**	NS	NS	NS	-0.097*	-0.108**	NS	NS	-0.157**	NS
No. Children 6-14yo	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
No. People >60yo	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
No. Females in HH	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Income	0.087**	0.115**	NS	NS	NS	0.15**	NS	NS	0.105**	0.116**	0.161**	0.162**	0.193**	NS
Land Ownership	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.176**	NS
Land Price	NS	NS	NS	NS	NS	NS	NS	NS	0.104*	0.109**	NS	0.114**	NS	NS
Caste	NS	-0.069*	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-0.128*	0.099*
Occupation	0.063*	0.097**	0.09*	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.146**	-0.106*
Gender of HH Head	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Wealth Quintile	0.109**	0.129**	0.094*	NS	NS	NS	NS	NS	0.197**	0.220**	0.2**	0.227**	0.325**	-0.227**
Education of Head	0.099**	0.065*	NS	0.135**	NS	NS	NS	NS	0.128**	0.132**	0.125*	0.121**	0.209**	NS

IVs: Illness Variables

Illness Variables	Pearson Correlation Coefficients													
	D.1*	D.2*	D.3*	D.4*	E.1*	F.1*	F.2*	G.1	G.2	G.3	G.4	G.5	G.6	G.7
Diagnosis (ICD)	-0.081**	0.072*	0.102*	0.11*	NS	-0.112**	-0.094*	0.135**	NS	NS	-0.102*	NS	NS	NS
Illness Aetiology 1 °	NS	NS	0.09*	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Illness Aetiology 2 °	NS	NS	-0.192*	NS	0.176*	0.144*	NS	NS	-0.195*	-0.215**	-0.212*	-0.222*	-0.288**	NS
Illness Aetiology 3 °	NS	NS	NS	NS	NS	0.519*	NS	NS	NS	NS	NS	NS	-0.405**	NS
Illness Aetiology – Different beliefs	0.092**	0.154**	NS	NS	0.241**	0.137**	0.186**	NS	-0.418**	-0.426**	-0.568**	-0.586**	NS	NS
No. of Days in Bed	0.175**	0.213**	NS	NS	0.164**	NS	NS	NS	-0.122**	-0.141**	NS	NS	-0.2**	NS
No. of Days Unable to Work	NS	0.103**	NS	NS	0.124**	-0.099**	-0.112**	0.079*	NS	NS	NS	NS	NS	NS
Worry Rating	0.157**	0.222**	NS	0.115*	0.096**	NS	NS	0.084*	NS	NS	NS	NS	NS	NS
Pt Severity Rating	0.123**	0.199**	0.089*	0.162**	0.085*	-0.1**	-0.083**	0.081*	NS	NS	NS	NS	NS	NS
Pain Rating	0.177**	0.218**	0.098*	NS	0.146**	0.083*	-0.076*	NS	NS	-0.077*	NS	NS	NS	NS
Obj Severity (weighted)	0.16**	0.21**	NS	NS	0.173**	-0.091*	-0.079*	NS	-0.089*	-0.107**	NS	NS	-0.163**	NS
Obj Severity (unweighted)	0.136**	0.197**	NS	NS	0.175**	-0.109**	-0.105**	0.074*	NS	-0.085*	NS	NS	-0.131*	NS
Subj Severity (Avg)	0.176**	0.242**	0.112*	NS	NS	NS	NS	0.08*	NS	-0.073*	NS	NS	-0.111*	NS
DUSOI Rating	0.114**	0.152**	-0.093*	NS	0.135**	NS	NS	NS	-0.124**	-0.15**	NS	-0.099*	-0.254**	0.118**

IVs: Patient Variables

Patient Characteristics	Pearson Correlation Coefficients													
	D.1*	D.2*	D.3*	D.4*	E.1*	F.1*	F.2*	G.1	G.2	G.3	G.4	G.5	G.6	G.7
Patient Gender	NS	NS	NS	NS	NS	NS	NS	NS	0.093*	0.093*	0.127*	0.096*	NS	0.104*
Patient Age	-0.061*	-0.087**	NS	NS	-0.143**	-0.079*	-0.073*	NS	0.08*	0.08*	NS	NS	0.171**	NS
Patient Role: Head?	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Patient Role: Primary Respondent?	NS	-0.095**	NS	NS	-0.119**	NS	NS	NS	0.083*	0.083*	NS	NS	0.137**	NS

IVs: Health Facility Variables

Health Facility Characteristics	D.1*	D.2*	D.3*	D.4*	E.1*	F.1*	F.2*	G.1	G.2	G.3	G.4	G.5	G.6	G.7
Distance from Tole	NS	-0.146**	NS	-0.187**	NS	-0.166**	-0.089*	-0.074*	-0.098*	-0.118**	-0.111*	-0.086**	-0.185**	0.091*
Drug Availability	NS	0.087**	NS	0.107*	NS	-0.18*	-0.154**	0.102**	0.086*	0.13**	NS	0.143**	0.264**	-0.178*
Equipment Availability	NS	0.067*	NS	NS	NS	-0.132**	-0.117**	0.099**	0.098*	0.146**	NS	0.162**	0.298**	-0.198**
Instrument Availability	NS	NS	NS	NS	NS	-0.116**	-0.111**	0.08*	0.115**	0.169**	0.107*	0.178**	0.336**	-0.226**
Room Availability	NS	NS	NS	NS	NS	-0.131**	-0.085*	0.071*	0.111**	0.145**	0.107*	0.158**	0.272**	-0.151**
Open Hours	NS	NS	0.15**	NS	NS	-0.201**	NS	NS	NS	NS	0.118*	0.91*	NS	NS
Treatment Quality	NS	-0.068*	-0.182**	0.101*	NS	0.104**	NS	-0.084*	NS	NS	NS	NS	NS	NS
Cost	NS	NS	NS	NS	NS	0.079*	NS	NS	NS	NS	NS	NS	NS	NS
Preventative Services	NS	NS	NS	0.128*	NS	NS	-0.139**	NS	0.132**	0.164**	0.182**	0.208**	0.278**	-0.143**
Water Type	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Electricity Type	-0.091**	-0.76*	NS	NS	NS	-0.134**	-0.078*	0.068*	NS	0.087*	NS	0.088*	0.127*	NS
Outreach Services	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.087*	NS	NS
Staff Availability	-0.092**	NS	NS	NS	NS	NS	-0.086*	NS	NS	NS	NS	NS	0.102*	NS
Facility Head Availability	NS	0.066*	NS	NS	NS	-0.179**	-0.139**	0.107**	NS	0.112**	NS	0.139**	0.266**	-0.183**
Female Staff Availability	NS	NS	NS	NS	NS	-0.082*	NS	NS	NS	0.078*	NS	NS	0.156**	-0.108*
Cleanliness	NS	0.068*	NS	NS	NS	-0.143**	-0.077*	NS	0.097*	0.123**	0.107*	0.149**	0.217**	-0.112*
Diagnostic Test Availability	0.076*	0.082**	NS	NS	NS	NS	NS	NS	0.082*	0.104**	NS	0.106*	0.191**	-0.102*
Out of Hours Services	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.08*	NS	NS	0.143**	-0.095*
Ratings: Health Personnel Practices & Conduct	0.065*	NS	NS	NS	NS	NS	-0.129**	NS	0.138**	0.113**	0.249**	0.198**	NS	NS
Ratings: Adequacy of Resources & Services	NS	NS	NS	0.117*	NS	-0.109**	-0.163**	NS	0.128**	0.107**	0.218**	0.189**	NS	NS
Ratings: Health Care Delivery	NS	-0.089**	NS	NS	NS	NS	-0.08*	NS	NS	NS	0.139**	0.101*	NS	NS
Ratings: Financial and Physical Accessibility/Affordability	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.077*	0.22**	0.183**	NS	NS
Road Access	NS	0.125**	0.127**	NS	NS	-0.198**	-0.198**	NS	0.148**	0.197**	0.2**	0.245**	0.353**	-0.205**
Toilet Quality	NS	NS	NS	NS	NS	-0.117**	-0.148*	0.076*	0.118**	0.15**	0.138**	0.167**	0.25**	-0.14**
Distance to District Hospital	-0.102**	-0.141**	-0.157*	NS	NS	0.118**	0.199**	-0.1**	-0.193**	-0.219**	-0.275**	-0.273**	-0.331*	0.13**
Distance to Primary Health Care Center	NS	NS	NS	-0.149**	NS	NS	NS	NS	-0.089*	-0.104**	NS	-0.113**	-0.171**	NS

IVs: Knowledge Variables

Knowledge Variables	Pearson Correlation Coefficients													
	D.1*	D.2*	D.3*	D.4*	E.1*	F.1*	F.2*	G.1	G.2	G.3	G.4	G.5	G.6	G.7
Nearest Health Facility	0.073*	0.062*	NS	0.117*	NS	NS	NS	NS	0.138**	0.116**	0.127*	0.116**	NS	NS
Lowest Level of Government Care	NS	NS	NS	NS	-0.088*	NS	NS	NS	NS	0.085*	NS	NS	0.164**	NS
Referral System	NS	NS	NS	NS	NS	-0.089*	NS	NS	0.106**	0.096**	0.111*	0.086*	NS	NS
Free Essential Services Availability	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Availability of Medical Doctors	0.07*	NS	NS	NS	NS	NS	NS	NS	0.115**	0.124**	0.126*	0.13**	0.185**	NS
Role of FCHV	0.067*	NS	NS	NS	NS	NS	NS	NS	0.161**	0.146**	0.17**	0.141**	0.126*	NS

Appendix 7.2b

Results of Preliminary Logistic Regression Models [C*,D*,E*,F*]

Preliminary Model C.1* Home Care First

	Crude OR (95% CI)
Household SES Variables	
Crowding Index	1.10 (1.01-1.19)*
Ward Level SES Variables	
Ward-Level Composite Index	
SES 1 – lowest infrastructure (REF)	----
SES 2	0.608 (0.44-0.84)**
SES 3 – highest infrastructure	0.628 (0.45-0.87)**

* p<0.05 ** p<0.001

Preliminary Model C.2*: Allopathic Care First

	Crude OR (95% CI)
Patient Variables	
Gender	1.34 (1.00-1.78)*
Household SES Variables	
Crowding Index	0.907 (0.81-1.01)
Number of children 6-14yo	0.937 (0.82-1.07)
Land Price	1.0 (1.0-1.0)
HH-Level SES Quintiles	
Quintile 1 – poorest (REF)	----
Quintile 2	0.795 (0.52-1.22)
Quintile 3	0.848 (0.54-1.34)
Quintile 4	1.53 (0.93-2.51)
Quintile 5 -wealthiest	1.11 (0.68-1.82)
Ward Level SES Variables	
Ward-Level Composite Index	
SES 1 – lowest infrastructure (REF)	----
SES 2	1.72 (1.21-2.43)**
SES 3 – highest infrastructure	1.49 (1.05-2.12)*
Illness Variables	
Diagnosis: ICD Codes	
A00-B99 (REF)	----
H00-H59	#####
J00-J99	2.38 (0.74-7.69)
K00-K93	6.01 (1.58-22.8)**
L00-L98	5.03 (1.54-16.41)**
M00-M99	2.81 (0.51-15.38)

	N00-N99	0.419 (0.04-3.96)
	R00-R99	1.54 (0.39-6.62)
	S00-T98	3.08 (1.03-9.22)*
	ELSE	5.74 (1.84-17.89)**
Health Facility Variables		
	Health Personnel Practices & Conduct Ratings	
	Poor (REF)	----
	Fair	2.37 (0.28-20.11)
	Good	2.20 (0.26-18.61)
	Very Good/Excellent	3.17 (0.36-27.63)
	Financial & Physical Accessibility/Affordability Ratings	
	Poor (REF)	----
	Fair	2.41 (0.52-11.16)
	Good	2.62 (0.57-12.20)
	Very Good/Excellent	1.79 (0.36-9.0)
Knowledge Variables		
	Nearest Gov. Facility	1.41 (1.05-1.90)*

* p<0.05 ** p<0.001

Preliminary Model C.3*: TH First

		Crude OR (95% CI)
Household SES Variables		
	Crowding Index	1.004 (0.90-1.12)
	Education	
	None (REF)	----
	Class 1-5	0.832 (0.57-1.22)
	Class 6-10	0.720 (0.36-1.43)
	+2	0.255 (0.06-1.09)
	University	0.00 (0.000)
	Wealth Quintiles	
	Quintile 1 – poorest (REF)	----
	Quintile 2	0.851 (0.54-1.33)
	Quintile 3	0.846 (0.52-1.38)
	Quintile 4	0.477 (0.25-0.90)*
	Quintile 5 -wealthiest	0.353 (0.18-0.71)**
Ward Level SES Variables		
	Ward-Level Composite Index	
	SES 1 – lowest infrastructure (REF)	----
	SES 2	0.643 (0.43-0.97)*
	SES 3 – highest infrastructure	0.75 (0.50-1.12)

Illness Variables		
	Aetiology: 2° Beliefs	
	Internal Factors (REF)	----
	Natural Factors	2.04 (0.69-6.12)
	Supernatural Factors	1.94 (0.62-6.04)
	Biological Factors	1.04 (0.24-4.47)
	Aetiology: Different Beliefs	4.93 (1.6-15.2)**
	DUSOI Composite	1.00 (0.99-1.02)
Health Facility Variables		
	Affordability Index	0.485 (0.21-1.13)
	Health Personnel Practices & Conduct Ratings	
	Poor (REF)	----
	Fair	1.12 (0.22-5.67)
	Good	0.832 (0.17-4.15)
	Very Good/Excellent	0.635 (0.12-3.37)
	Distance to District Hospital	1.02 (1.0-1.05)*
Knowledge Variables		
	Nearest Gov. Facility	0.665 (0.45-0.97)*
	Lowest Level Gov. Care	0.621 (0.40-0.97)*
	Gov. Referral System	0.625 (0.40-0.98)*
	Availability of Doctor	0.371 (0.18-0.79)**

* p<0.05 ** p<0.001

Preliminary Model C.4*: Pharmacy First

		Crude OR (95% CI)
Household SES Variables		
	No. of Females	0.941 (0.85-1.04)
	Income	1.00 (1.00-1.00)
	Occupation of Head	
	Subsistence Farmer (REF)	----
	Commercial Farmer	0.984 (0.647-1.50)
	Animal Husbandry	1.17 (0.46-2.94)
	Migrant Worker	1.40 (0.79-2.46)
	Business Person	0.644 (0.24-1.76)
	Teacher	2.67 (0.99-7.19)
	Other Government Employee	1.14 (0.50-2.60)
	Transport Worker	1.31 (0.60-2.90)
	Construction Worker/ Carpenter	0.752 (0.42-1.35)
	Small Shop Owner	0.836 (0.39-1.81)
	Tailor	3.79 (0.33-43.19)
	Porter	0.995 (0.46-2.14)

HH-Level SES Quintiles			
	Quintile 1 – poorest (REF)		----
	Quintile 2		0.856 (0.56-1.31)
	Quintile 3		0.907 (0.56-1.46)
	Quintile 4		1.84 (1.11-3.04)*
	Quintile 5 -wealthiest		1.49 (0.89-2.52)
Ward Level SES Variables			
	Ward-Level Composite Index		
	SES 1 – lowest infrastructure (REF)		----
	SES 2		2.60 (1.46-4.61)**
	SES 3 – highest infrastructure		2.27 (1.27-4.09)**
Illness Variables			
	Aetiology: Different Beliefs		0.374 (0.15-0.95)*
Knowledge Variables			
	Availability of Doctor		2.42 (1.42-4.13)**

* p<0.05 ** p<0.001

Preliminary Model D.1*: None vs. Some Care

		Crude OR (95% CI)
Patient Variables		
	Age	0.993 (0.99-1.0)*
Household SES Variables		
	Wealth Quintiles	
	Quintile 1 – poorest (REF)	----
	Quintile 2	0.795 (0.52-1.22)
	Quintile 3	0.848 (0.54-1.34)
	Quintile 4	1.53 (0.93-2.51)
	Quintile 5 -wealthiest	1.11 (0.68-1.82)
	Occupation of Head	
	Subsistence Farmer (REF)	----
	Commercial Farmer	1.12 (0.71-1.78)
	Animal Husbandry	3.05 (0.71-13.20)
	Migrant Worker	1.15 (0.58-2.29)
	Business Person	0.595 (0.22-1.63)
	Teacher	2.60 (0.33-20.68)
	Other Government Employee	1.34 (0.38-4.74)
	Transport Worker	5.36 (0.70-41.16)
	Construction Worker/ Carpenter	1.07 (0.56-2.02)
	Small Shop Owner	2.51 (0.57-11.09)
	Tailor	0.607 (0.12-3.14)
	Porter	0.916 (0.40-2.09)

	Education of Head	
	None (REF)	----
	Class 1-5	1.24 (0.85-1.80)
	Class 6-10	1.52 (0.75-3.07)
	+2	2.16 (0.61-7.66)
	University	#####
Ward Level SES Variables		
	Ward-Level Composite Index	
	SES 1 – lowest infrastructure (REF)	----
	SES 2	1.86 (1.23-2.83)**
	SES 3 – highest infrastructure	1.26 (0.87-1.84)
Illness Variables		
	Aetiology: Different Beliefs	3.06 (1.36-6.90)**
	Worry	
	None (REF)	----
	Some	1.25 (0.64-2.44)
	A lot	4.85 (1.82-12.92)**
	Extreme	10.96 (0.95-126.5)
	Severity Ratings	
	Not at all severe (REF)	----
	Somewhat severe	0.985 (0.549-1.77)
	Very severe	0.695 (0.30-1.63)
	Life-Threatening	1.23 (0.11-13.78)
	DUSOI Composite Rating	1.01 (1.00-1.02)
Health Facility Variables		
	Electricity	
	None (REF)	----
	Solar	0.758 (0.17-3.42)
	Hydroelectric	0.608 (0.13-2.94)
	Generator	0.342 (0.07-1.58)
	Staff Availability	0.721 (0.51-1.01)
	Diagnostic Test Availability	1.09 (0.98-1.22)
	Distance to District Hospital	0.98 (0.95-1.01)
Knowledge Variables		
	Nearest Gov. Facility	1.42 (0.99-2.03)
	Availability of Doctor	1.96 (1.03-3.73)*
	FCHV Role	1.36 (0.97-1.9)

* p<0.05 ** p<0.001

Preliminary Model D.2*: Home vs. Outside Care

	Crude OR (95% CI)
Patient Variables	
Age	0.996 (0.99-1.00)*
Household SES Variables	
Wealth Quintiles	
Quintile 1 – poorest (REF)	----
Quintile 2	0.934 (0.65-1.34)
Quintile 3	1.08 (0.72-1.62)
Quintile 4	1.50 (0.92-2.46)
Quintile 5 -wealthiest	1.68 (0.96-2.95)
Caste	
Brahmin	----
Chettri	1.13 (0.49-2.62)
Newar	0.587 (0.24-1.45)
Tamang	0.799 (0.39-1.65)
Gurung	1.59 (0.16-16.24)
Chepeng	1.18 (0.49-2.84)
Magar	0.679 (0.29-1.60)
Biswokarma	0.352 (0.12-1.06)
Other	0.482 (0.11-2.03)
Other Dalit	0.670 (0.05-8.49)
Education of Head	
None (REF)	----
Class 1-5	1.120 (0.83-1.52)
Class 6-10	1.026 (0.61-1.74)
+2	1.113 (0.49-2.53)
University	1.330 (0.35-5.11)
Occupation of Head	
Subsistence Farmer (REF)	----
Commercial Farmer	0.965 (0.66-1.40)
Animal Husbandry	1.91 (0.75-4.89)
Migrant Worker	1.27 (0.72-2.23)
Business Person	0.514 (0.22-1.18)
Teacher	3.70 (0.80-17.14)
Other Government Employee	0.814 (0.35-1.88)
Transport Worker	1.95 (0.70-5.41)
Construction Worker/ Carpenter	1.13 (0.68-1.90)
Small Shop Owner	4.64 (1.35-15.96)*
Tailor	0.620 (0.14-2.70)
Porter	1.55 (0.74-3.27)

Ward Level SES Variables		
	Ward-level Composite Index	
	SES 1 – lowest infrastructure (REF)	----
	SES 2	1.95 (1.41-2.70)**
	SES 3 – highest infrastructure	1.57 (1.15-2.13)**
Illness Variables		
	Diagnosis: ICD Codes	
	Acute Gastroenteritis (REF)	----
	URTI	1.31 (0.69-2.47)
	Common Cold	1.90 (0.81-4.45)
	Viral Fever	2.15 (0.94-4.93)
	Pneumonia	4.59 (1.29-16.33)*
	Typhoid	5.89 (1.67-20.78)**
	Giardiasis	3.30 (1.15-9.46)*
	Pharyngitis	1.29 (0.53-3.14)
	Amoebic Dysentery	0.792 (0.34-1.82)
	Bacillary Dysentery	2.20 (0.81-5.97)
	Gastritis	1.11 (0.38-3.26)
	Chicken Pox	4.24 (0.83-21.65)
	Conjunctivitis	1.76 (0.50-6.23)
	UTI	3.32 (0.67-16.45)
	OTHER	1.82 (1.06-3.12)*
	Aetiology: Different Beliefs	2.61 (1.45-4.70)**
	Worry	
	None (REF)	----
	Some	1.11 (0.63-1.96)
	A lot	2.90 (1.35-6.26)**
	Extreme	4.70 (0.74-29.89)
	Severity Ratings	
	Not at all severe (REF)	----
	Somewhat severe	1.00 (0.62-1.63)
	Very severe	1.12 (0.56-2.25)
	Life-Threatening	1.61 (0.25-10.32)
	DUSOI	1.01 (1.00-1.02)
Health Facility Variables		
	Treatment Quality Composite Index	1.14 (0.98-1.34)
	Health Facility Head	0.485 (0.25-0.93)*
	Cleanliness	0.874 (0.76-1.01)
	Distance to District Hospital	1.01 (0.97-1.05)
Knowledge Variables		
	Nearest Gov. Facility	1.33 (1.01-1.75)*

* p<0.05 ** p<0.001

Preliminary Model D.3*: Private vs. Government

		Crude OR (95% CI)
Household SES Variables		
	Wealth Quintiles	
	Quintile 1 – poorest (REF)	----
	Quintile 2	1.02 (0.52-2.01)
	Quintile 3	0.543 (0.24-1.25)
	Quintile 4	0.625 (0.28-1.41)
	Quintile 5 -wealthiest	1.19 (0.56-2.54)
	Occupation of Head	
	Subsistence Farmer (REF)	----
	Commercial Farmer	0.798 (0.39-1.62)
	Animal Husbandry	#####
	Migrant Worker	1.48 (0.67-3.26)
	Business Person	0.175 (0.02-1.77)
	Teacher	1.66 (0.47-5.91)
	Other Government Employee	1.17 (0.31-4.45)
	Transport Worker	1.88 (0.67-5.31)
	Construction Worker/ Carpenter	0.786 (0.33-1.89)
	Small Shop Owner	0.419 (0.100-1.76)
	Tailor	2.05 (0.17-24.64)
	Porter	0.975 (0.30-3.21)
Ward Level SES Variables		
	Ward-level Composite Index	
	SES 1 – lowest infrastructure (REF)	----
	SES 2	2.59 (1.46-4.59)**
	SES 3 – highest infrastructure	2.07 (1.15-3.72)*
Health Facility Variables		
	Facility Hours	1.89 (1.29-2.76)**
Illness Variables		
	Severity Ratings	
	Not at all severe (REF)	----
	Somewhat severe	0.768 (0.40-1.49)
	Very severe	2.27 (1.15-4.50)*
	Life-Threatening	1.11 (0.32-3.81)
	DUSOI	0.983 (0.97-1.00)*

* p<0.05 ** p<0.001

Preliminary Model D.4*: Government Facility vs. FCHV

		Crude OR (95% CI)
Household SES Variables		
	Education of Head	
	None (REF)	----
	Class 1-5	1.94 (1.00-3.79)
	Class 6-10	2.43 (0.71-8.34)
	+2	4.13 (0.53-31.89)
	University	#####
Ward Level SES Variables		
	Ward-level Composite Index	
	SES 1 – lowest infrastructure (REF)	----
	SES 2	1.18 (0.62-2.26)
	SES 3 – highest infrastructure	1.89 (0.93-3.84)
Illness Variables		
	Severity Ratings	
	Not at all severe (REF)	----
	Somewhat severe	2.98 (1.24-7.20)*
	Very severe	3.64 (1.01-13.08)*
	Life-Threatening	#####
	Worry	
	None (REF)	----
	Some	0.477 (0.16-1.40)
	A lot	0.682 (0.16-2.84)
	Extreme	0.301 (0.02-4.37)
Health Facility Variables		
	Exam Room Availability	1.66 (0.87-3.15)
	Treatment Quality Composite	1.12 (0.95-1.33)
	Distance to PHCC	0.949 (0.88-1.02)
Knowledge Variables		
	Nearest Gov. Facility	2.02 (1.10-3.70)*

* p<0.05 ** p<0.001

Preliminary Model E.1*: One Provider vs. More than One Provider

	Crude OR (95% CI)
Patient Variables	
Age	0.988 (0.98-1.00)**
Household SES Variables	
No. of Children 1-5 y.o.	1.313 (1.09-1.59)**
Illness Variables	
Aetiology Beliefs 2°	
Internal Factors (REF)	----
Natural Factors	1.477 (0.56-3.87)
Supernatural Factors	3.456 (1.14-10.47)*
Biological Factors	0.903 (0.30-2.76)
Aetiology: Different Beliefs	2.096 (0.74-5.94)
DUSOI	0.986 (0.97-1.00)
Health Facility Variables	
Volume of OPD Cases	1.380 (1.02-1.87)*
Knowledge Variables	
Lowest Level Gov Facility	0.654 (0.46-0.93)*

* p<0.05 ** p<0.001

Preliminary Model F.1*: Own VDC vs. Other VDC

	Crude OR (95% CI)
Patient Variables	
Age	0.992 (0.99-1.00)*
Household SES Variables	
Crowding	1.099 (0.98-1.23)
Income	1.00 (1.00-1.00)**
Ward Level SES Variables	
Ward-level Composite Index	
SES 1 – lowest infrastructure (REF)	----
SES 2	0.863 (0.59-1.27)
SES 3 – highest infrastructure	0.996 (0.67-1.48)

* p<0.05 ** p<0.001

Preliminary Model F.2*: Own Ward vs. Other Ward

	Crude OR (95% CI)
Patient Variables	
Gender	0.714 (0.53-0.97)*
Illness Variables	
Diagnosis: ICD Codes	
Acute Gastroenteritis (REF)	----
URTI	0.539 (0.27-1.08)
Common Cold	0.576 (0.27-1.21)
Viral Fever	0.99 (0.42-2.32)
Pneumonia	0.68 (0.28-1.61)
Typhoid	0.402 (0.16-1.01)
Giardiasis	0.736 (0.29-1.88)
Pharyngitis	0.934 (0.32-2.77)
Amoebic Dysentery	1.71 (0.56-5.17)
Bacillary Dysentery	1.32 (0.51-3.39)
Gastritis	0.43 (0.11-1.75)
Chicken Pox	0.53 (0.13-2.18)
Conjunctivitis	1.30 (0.35-4.81)
UTI	0.753 (0.22-2.58)
OTHER	0.394 (0.22-0.71)**
Aetiology: Different Beliefs	3.041 (1.72-5.38)**
Knowledge Variables	
Government Referral System	0.654 (0.46-0.93)

* p<0.05 ** p<0.001

Appendix 7.2c

Results of Preliminary Linear Regression Models [B*]

I. Preliminary Model B.1* Delay to Outside Care

B.1a*: Patient Demographic Factors

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.119 ^a	.014	.012	77.723

ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	64305.509	2	32152.755	5.323	.005 ^b
Residual	#####	737	6040.848		
Total	#####	739			

Patient Characteristics	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	62.082	7.233		8.584	.000		
patient age	.312	.150	.084	2.084	.038	.830	1.204
proxy_resp	-9.397	6.574	-.057	-1.429	.153	.830	1.204

B.1b*: Household Demographic Factors

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.140 ^a	.020	.014	77.620

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	88108.392	4	22027.098	3.656	.006 ^b
Residual	4428302.120	735	6024.901		
Total	4516410.512	739			

Household Demographic Factors	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	80.644	6.528		12.354	.000		
Income	-4.499E-05	.000	-.046	-1.100	.272	.762	1.312
Wealth Quintile	-1.583	2.287	-.029	-.692	.489	.778	1.286
Education of HH Head	-4.445	3.140	-.054	-1.416	.157	.902	1.108
Occupation	-1.564	.836	-.074	-1.872	.062	.858	1.165

B.1c*: Community-Level Factors

Community-Level Factors		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
								Lower	Upper
Step 1a	Ward Index 1			2.552	2	.279			
	Ward Index 2	-.119	.196	0.371	1	.542	0.887	0.605	1.303
	Ward Index 3	-.323	.202	2.550	1	.110	0.724	0.487	1.076
	Constant	-1.486	.127	136.935	1	.000	0.226		

B.1d*: Illness Factors

Illness Factors	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	143.169	78.252		1.83	0.068		
ICD 1	13.711	20.281	0.08	0.676	0.499	0.092	10.888
ICD 2	-15.303	21.953	-0.042	-0.697	0.486	0.354	2.826
ICD 3	-65.733	19.431	-0.179	-3.383	0.001	0.464	2.156
ICD 4	-20.438	20.149	-0.051	-1.014	0.311	0.516	1.937
ICD 5	18.65	26.411	0.045	0.706	0.48	0.322	3.107
ICD 6	-50.431	23.943	-0.094	-2.106	0.036	0.651	1.537
ICD 7	-50.776	81.774	-0.082	-0.621	0.535	0.074	13.518
ICD 8	-35.16	25.658	-0.059	-1.37	0.171	0.695	1.44
ICD 9	-3.27	18.712	-0.01	-0.175	0.861	0.431	2.322
ICD Diagnosis Category 1	-46.017	16.689	-0.183	-2.757	0.006	0.294	3.403
ICD Diagnosis Category 2	-60.88	16.746	-0.241	-3.635	0	0.295	3.389
ICD Diagnosis Category 3	-66.421	17.742	-0.229	-3.744	0	0.347	2.881
ICD Diagnosis Category 4	-36.402	18.337	-0.111	-1.985	0.048	0.411	2.434
ICD Diagnosis Category 5	-56.81	19.181	-0.156	-2.962	0.003	0.463	2.158
ICD Diagnosis Category 6	-48.806	19.272	-0.133	-2.532	0.012	0.472	2.121
ICD Diagnosis Category 7	-42.028	19.397	-0.113	-2.167	0.031	0.479	2.09
ICD Diagnosis Category 8	-46.84	20.334	-0.114	-2.304	0.022	0.524	1.907
ICD Diagnosis Category 9	-64.233	22.761	-0.13	-2.822	0.005	0.609	1.642
ICD Diagnosis Category 10	-39.747	23.588	-0.076	-1.685	0.092	0.632	1.582
ICD Diagnosis Category 11	-57.433	20.382	-0.14	-2.818	0.005	0.522	1.916
ICD Diagnosis Category 12	-20.514	26.049	-0.037	-0.788	0.431	0.586	1.708
ICD Diagnosis Category 13	-45.375	24.92	-0.079	-1.821	0.069	0.685	1.461
ICD Diagnosis Category 14	0.571	77.435	0.001	0.007	0.994	0.076	13.113
ICD Diagnosis Category 15	-53.854	29.679	-0.097	-1.815	0.07	0.451	2.217
Illness Aetiology 1	-44.47	77.007	-0.283	-0.577	0.564	0.005	185.977
Illness Aetiology 2	-50.166	77.062	-0.262	-0.651	0.515	0.008	125.193
Illness Aetiology 3	-27.71	77.415	-0.105	-0.358	0.72	0.015	66.7
Illness Aetiology 4	-41.111	77.307	-0.182	-0.532	0.595	0.011	90.735
Illness Aetiology 5	-32.236	77.439	-0.125	-0.416	0.677	0.014	69.208

B.1e*: Health Facility Factors

Health Facility Factors	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	14.631	21.723		.674	.501		
Availability of Exam Room	-17.506	6.597	-.108	-2.654	.008	.807	1.239
Treatment Quality Index	4.435	1.653	.107	2.682	.007	.835	1.197
Road Access	1.244	4.148	.014	.300	.764	.598	1.671
Distance to DH	.482	.384	.055	1.255	.210	.704	1.420

B.1e*: Knowledge Factors

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.090 ^a	.008	.007	77.908

ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	36982.757	1	36982.757	6.093	.014 ^b
Residual	#####	738	6069.685		
Total	#####	739			

Knowledge Factors	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	67.607	3.307		20.444	.000		
Referral Knowledge	-16.326	6.614	-.090	-2.468	.014	1.000	1.000

II. Preliminary Model B.2* Delay to Allopathic Care

B.2a*: Patient Demographic Factors

This model did not work – none of the independent variables had a significant association with the outcomes

B.2b*: Household Demographic Factors

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.177 ^a	.031	.023	98.047

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	150696.065	4	37674.016	3.919	.004 ^b
Residual	4643215.861	483	9613.283		
Total	4793911.926	487			

Household Demographic Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	117.328	10.086		11.633	.000		
Income	-3.797E-05	.000	-.031	-.595	.552	.763	1.311
Wealth Quintile	-7.154	3.493	-.103	-2.048	.041	.796	1.257
Education of HH Head	-5.584	4.948	-.053	-1.129	.260	.910	1.099
Occupation	-1.820	1.358	-.066	-1.340	.181	.830	1.205

B.2c*: Community-Level Factors

Community-Level Factors

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	99.162	7.641		12.978	0		
Ward Index 2	20.855	10.872	-0.099	-1.918	0.056	0.76	1.316
Ward Index 3	-26.90	10.958	-0.127	-2.454	0.014	0.76	1.316

B.2d*: Illness Factors

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.179a	0.032	0.03	97.739

ANOVAa					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	152660.3	1	152660.283	15.98	.000b
Residual	4623624	484	9552.943		
Total	4776285	485			

Illness Factors	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta				Tolerance	VIF
(Constant)	72.43	5.217			13.883	0		
No. Days Unable to Work	5.127	1.283	0.179	3.998	0		1	1

B.2e*: Health Facility Factors

Health Facility Factors	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	111.423	69.714		1.598	.111		
Availability of Instruments	-.162	1.224	-.012	-.132	.895	.238	4.210
Exam Room Availability	-10.671	12.607	-.053	-.846	.398	.521	1.920
Preventative Services	.358	3.735	.007	.096	.924	.364	2.750
Water Type	-6.317	3.949	-.119	-1.600	.110	.366	2.732
Cleanliness	-6.825	5.399	-.136	-1.264	.207	.174	5.744
Subjective Rating	8.814	9.894	.100	.891	.373	.159	6.277
Road Access	8.954	9.039	.081	.991	.322	.303	3.299
Distance to DH	1.527	.686	.133	2.225	.027	.567	1.764

B.2e*: Knowledge Factors

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.199 ^a	.040	.034	97.536

ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	189499.649	3	63166.550	6.640	.000 ^b
Residual	4604412.278	484	9513.249		
Total	4793911.926	487			

Knowledge Factors	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	98.186	6.669		14.723	.000		
Referral Knowledge	-31.765	10.079	-.141	-3.152	.002	.997	1.003
Free Services Knowledge	44.594	19.079	.105	2.337	.020	.990	1.010
FCHV Knowledge	-18.434	8.884	-.093	-2.075	.039	.989	1.011

III. Preliminary Model B.3* Delay to Allopathic/Pharmacy Care

B.3a*: Patient Demographic Factors

This model did not work – none of the independent variables had a significant association with the outcomes

B.3b*: Household Demographic Factors

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.147 ^a	.022	.017	129.630

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	233859.972	3	77953.324	4.639	.003 ^b
Residual	#####	631	16803.947		
Total	#####	634			

Household Demographic Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	118.237	11.871		9.960	.000		
Income	-7.838E-05	.000	-.050	-1.119	.263	.791	1.264
Wealth Quintile	-6.634	3.987	-.073	-1.664	.097	.796	1.256
Occupation	-2.583	1.518	-.072	-1.701	.089	.862	1.161

B.3c*: Community-Level Factors

This model did not work – none of the independent variables had a significant association with the outcomes

B.3d*: Illness Factors

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.254a	0.064		0.045
				127.881

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	696613.1	13	53585.624	3.277	.000b
	Residual	10122821	619	16353.507		
	Total	10819434	632			

Illness Factors	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	87.111	18.085		4.817	.0		
ICD 1	-4.425	12.031	-.017	-.368	.713	.736	1.359
ICD 2	32.41	24.119	.055	1.344	.18	.899	1.113
ICD 3	-52.725	25.291	-.086	-2.085	.038	.895	1.118
ICD 4	21.985	26.491	.034	.83	.407	.902	1.109
ICD 5	72.258	30.159	.097	2.396	.017	.928	1.077
ICD 6	5.916	49.239	.005	.12	.904	.974	1.026
ICD 7	-3.292	39.858	-.003	-.083	.934	.952	1.05
ICD 8	1.026	46.262	.001	.022	.982	.967	1.034
ICD 9	8.048	23.852	.014	.337	.736	.893	1.119
Different Aetiology Beliefs 1	-27.101	16.734	-.09	-1.619	.106	.484	2.064
Different Aetiology Beliefs 2	11.433	28.363	.019	.403	.687	.711	1.406
Different Aetiology Beliefs 3	36.162	22.52	.083	1.606	.109	.568	1.759
No. Days Unable to Work	4.713	1.566	.12	3.01	.003	.95	1.052

B.3e*: Health Facility Factors

Health Facility Factors	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	111.126	38.524		2.885	.004		
Instrument Availability	-.461	1.001	-.026	-.461	.645	.480	2.082
Female Staff Availability	-4.940	9.154	-.037	-.540	.590	.337	2.965
Cleanliness	-1.389	3.758	-.021	-.370	.712	.465	2.150
Distance to PHCC	.772	1.247	.034	.619	.536	.525	1.906

B.3e*: Knowledge Factors

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.092 ^a	.008	.007	#####

ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	91613.533	1	#####	5.397	.020 ^b
Residual	#####	633	#####		
Total	#####	634			

Knowledge Factors	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	89.262	6.010		14.853	.000		
Referral Knowledge	-27.389	11.790	-.092	-2.323	.020	1.000	1.000

IV. Preliminary Model B.4* Delay between Outside Providers

B.4a*: Patient Demographic Factors

This model did not work – none of the independent variables had a significant association with the outcomes

B.4b*: Household Demographic Factors

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.239 ^a	.057	.047	79.958

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	102212.122	3	34070.707	5.329	.001 ^b
Residual	1681447.750	263	6393.337		
Total	1783659.873	266			

Household Demographic Factors	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	70.959	17.889		3.967	.000		
Wealth Quintile	-10.118	3.580	-.174	-2.827	.005	.945	1.059
Education of HH Head	-6.822	5.287	-.080	-1.290	.198	.933	1.072
Caste	5.227	3.230	.098	1.618	.107	.980	1.020

B.4c*: Community-Level Factors

Community-Level Factors

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	77.757	8.856		8.78	0		
Ward Index 2	14.703	12.803	0.052	1.148	0.251	0.761	1.314
Ward Index 3	-0.711	12.539	-0.003	-0.057	0.955	0.761	1.314

B.4d*: Illness Factors

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.135a	0.018	0.014	81.448

ANOVA					
Model		Sum of Squares	df	Mean Square	Sig.
1	Regression	32385.32	1	32385.317	4.882
	Residual	1744678	263	6633.755	.028b
	Total	1777063	264		

Illness Factors	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta				Tolerance	VIF
(Constant)	51.145	6.575			7.779	0		
Objective Illness Severity Weighted	2.745	1.242	0.135	2.21	0.028		1	1

B.4e*: Health Facility Factors

Health Facility Factors	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	88.833	8.373		10.610	.000		
Exam Room Availability	-43.285	10.283	-.250	-4.209	.000	1.000	1.000

B.4e*: Knowledge Factors

This model did not work – none of the independent variables had a significant association with the outcomes

Appendix 7.3a

Final Model B.1: Delay to Outside Care

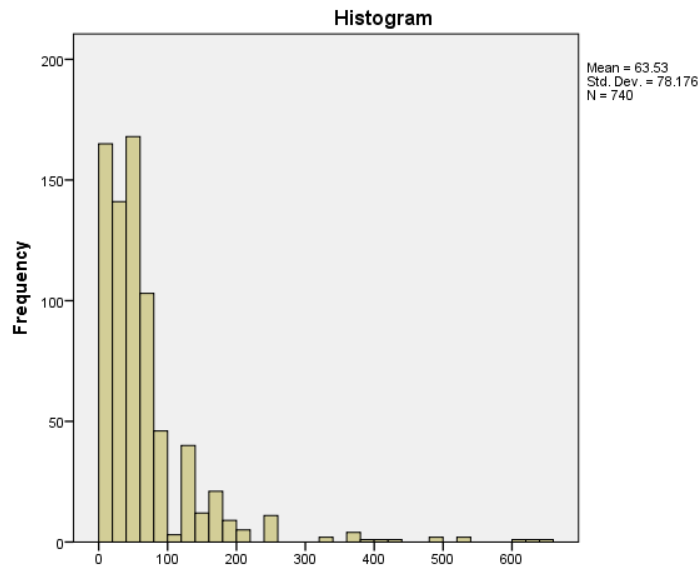


Figure A. A histogram which illustrates that the outcome variable is positively skewed. As a result, an attempt was made to transform the data

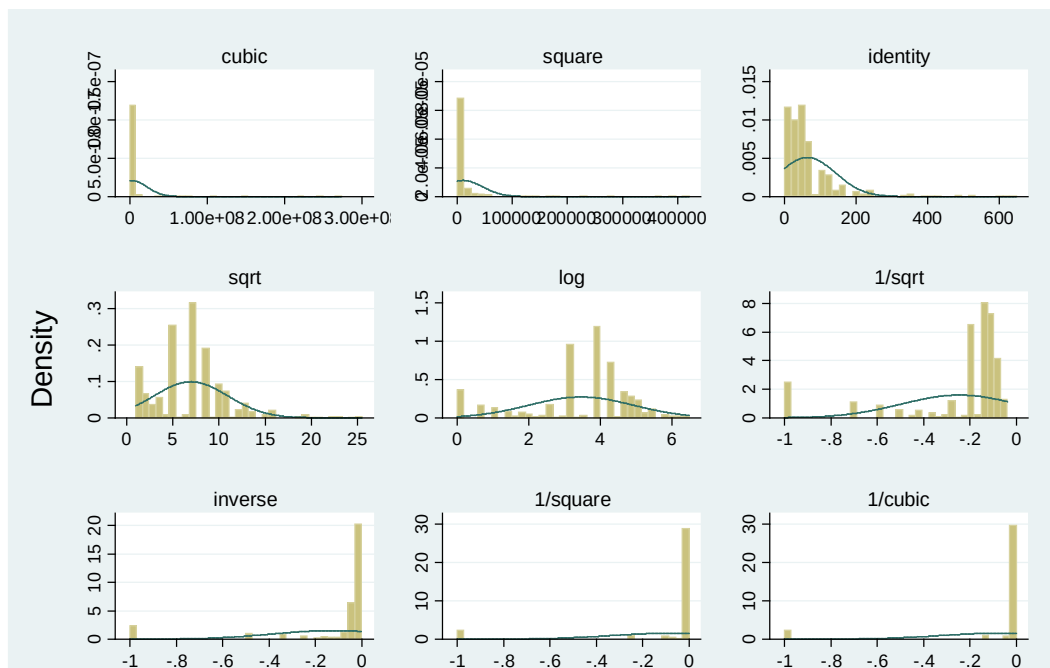


Figure B. Different histograms representing different data transformations attempted

Transformation	formula	chi2(2)	P(chi2)
cubic	$C_1_de \sim t^3$	.	0.000
square	$C_1_de \sim t^2$	.	0.000
identity	$C_1_de \sim t$	.	0.000
square root	$\sqrt{C_1_de \sim t}$	.	0.000
log	$\log(C_1_de \sim t)$	71.28	0.000
1/(square root)	$1/\sqrt{C_1_de \sim t}$	.	0.000
inverse	$1/C_1_de \sim t$	.	0.000
1/square	$1/(C_1_de \sim t^2)$	.	0.000
1/cubic	$1/(C_1_de \sim t^3)$	.	0.000

Figure C. STATA output illustrating different transformation types. This table shows that none of the transformation actually fully normalise the data. In this case, it is recommended to select the transformation with the lowest chi-squared value (UCLA, 2012).

One-Sample Kolmogorov-Smirnov Test					
		inc.1_delay_out side_ac	nlc.1_delay_out side_ac	src.1_delay_out side_ac	sr2c.1_delay_out tside_ac
N		740	740	740	740
Normal Parameters ^{a,b}	Mean	1.4664	3.3765	6.8867	2.4929
	Std. Deviation	.69955	1.61078	4.07703	.82041
Most Extreme Differences	Absolute	.233	.233	.133	.157
	Positive	.088	.088	.133	.079
	Negative	-.233	-.233	-.094	-.157
Kolmogorov-Smirnov Z		6.340	6.340	3.617	4.275
Asymp. Sig. (2-tailed)		.000	.000	.000	.000

Figure D. Since the STATA output did not reveal any chi-squared values, a K-S test was run. This test can be used for testing “goodness of fit.” It reveals that the chi-squared transformation with a constant added is the best transformation since it yields the lowest chi-squared value.

Model Summary ^a									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.045 ^a	.002	.001	4.06950	.002	1.471	1	733	.226
2	.110 ^b	.012	.009	4.05163	.010	7.480	1	732	.006
3	.132 ^c	.017	.012	4.04633	.005	1.959	2	730	.142
4	.153 ^d	.023	.013	4.04506	.006	1.115	4	726	.348
5	.186 ^e	.034	.018	4.03317	.011	2.071	4	722	.083
6	.190 ^f	.036	.019	4.03253	.002	1.231	1	721	.268
7	.190 ^g	.036	.015	4.04081	.000	.016	3	718	.997
8	.205 ^h	.042	.018	4.03383	.006	2.242	2	716	.107
9	.212 ⁱ	.045	.018	4.03367	.003	1.029	2	714	.358
10	.217 ^j	.047	.019	4.03161	.002	1.730	1	713	.189
11	.228 ^k	.052	.021	4.02729	.005	1.765	2	711	.172
12	.228 ^l	.052	.019	4.03283	.000	.023	2	709	.977
13	.228 ^m	.052	.015	4.04111	.000	.033	3	706	.992
14	.232 ⁿ	.054	.013	4.04327	.002	.623	2	704	.537

Figure E. Results of the final model with the transformed data

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.355	1	24.355	1.471	.226 ^a
	Residual	12139.095	733	16.561		
	Total	12163.450	734			
2	Regression	147.148	2	73.574	4.482	.012 ^b
	Residual	12016.301	732	16.416		
	Total	12163.450	734			
3	Regression	211.304	4	52.826	3.226	.012 ^c
	Residual	11952.146	730	16.373		
	Total	12163.450	734			
4	Regression	284.296	8	35.537	2.172	.028 ^d
	Residual	11879.154	726	16.362		
	Total	12163.450	734			
5	Regression	419.046	12	34.921	2.147	.013 ^e
	Residual	11744.403	722	16.266		
	Total	12163.450	734			
6	Regression	439.052	13	33.774	2.077	.014 ^f
	Residual	11724.397	721	16.261		
	Total	12163.450	734			
7	Regression	439.870	16	27.492	1.684	.045 ^g
	Residual	11723.580	718	16.328		
	Total	12163.450	734			
8	Regression	512.842	18	28.491	1.751	.027 ^h
	Residual	11650.608	716	16.272		
	Total	12163.450	734			
9	Regression	546.332	20	27.317	1.679	.032 ⁱ
	Residual	11617.117	714	16.270		
	Total	12163.450	734			
10	Regression	574.453	21	27.355	1.683	.029 ^j
	Residual	11588.997	713	16.254		
	Total	12163.450	734			
11	Regression	631.709	23	27.466	1.693	.023 ^k
	Residual	11531.741	711	16.219		
	Total	12163.450	734			
12	Regression	632.473	25	25.299	1.556	.042 ^l
	Residual	11530.977	709	16.264		
	Total	12163.450	734			
13	Regression	634.081	28	22.646	1.387	.090 ^m
	Residual	11529.369	706	16.331		
	Total	12163.450	734			
14	Regression	654.443	30	21.815	1.334	.111 ⁿ
	Residual	11509.007	704	16.348		
	Total	12163.450	734			

Figure F. ANOVA test for the final model. Reveals that all but blocks 13 & 14 are significant.

Table A. Block 14 of the final model B.1

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	7.245	.953		7.601	.000		
pt_gender_cat: Male	-.327	.311	-.040	-1.049	.294	.925	1.082
Patient's Age	.017	.008	.088	2.108	.035	.780	1.282
head_edu_cat3: Primary+Lower Secondary	-.209	.326	-.025	-.639	.523	.881	1.135
head_edu_cat3: Secodary + Tertiary	-.483	.680	-.030	-.710	.478	.758	1.319
HHoccup_Recode2: Commercial Farmer	.579	.420	.059	1.379	.168	.738	1.356
HHoccup_Recode2: Unskilled	.252	.429	.025	.587	.557	.744	1.345
HHoccup_Recode2: Skilled	-.701	.703	-.039	-.999	.318	.897	1.115
HHoccup_Recode2: Professional	.145	.543	.012	.266	.790	.670	1.493
wealthq: 2	-.267	.440	-.028	-.607	.544	.620	1.613
wealthq: 3	-.396	.487	-.038	-.812	.417	.597	1.674
wealthq: 4	-.707	.557	-.062	-1.270	.205	.564	1.773
wealthq: wealthiest	-1.165	.590	-.111	-1.977	.048	.429	2.329
house_1-5_total_no	-.283	.210	-.055	-1.350	.178	.810	1.235
Hhcaste_Recode: Tamang+Magar+Gurung	-.020	.458	-.002	-.043	.966	.479	2.088
Hhcaste_Recode: Chepang+BK+Other Dalit	.226	.633	.017	.357	.721	.607	1.648
Hhcaste_Recode: Newar	.236	.743	.014	.318	.751	.673	1.485
seswl3: Medium	-.383	.434	-.044	-.884	.377	.533	1.875
seswl3: High	-.932	.452	-.107	-2.064	.039	.497	2.014
seshfq3: Medium	-.600	.426	-.066	-1.408	.159	.619	1.616
seshfq3: High	-.292	.457	-.033	-.639	.523	.503	1.987
O46_distance_closestHF	.197	.147	.058	1.342	.180	.711	1.406
O45_facility_closest_type_cat: 2	-.742	.425	-.077	-1.747	.081	.699	1.430
O45_facility_closest_type_cat: 3	.582	.713	.034	.816	.415	.760	1.315
O22_icd_recode_fin: J00-J99	.021	.369	.002	.058	.954	.777	1.287
O22_icd_recode_fin: ELSE	.087	.399	.010	.218	.827	.696	1.438

O35_ill_severe_rate_pt_cat: Somewhat severe	.017	.445	.002	.038	.970	.450	2.223
O35_ill_severe_rate_pt_cat: Very severe	.121	.481	.014	.251	.802	.462	2.167
O35_ill_severe_rate_pt_cat: Extremely severe	.144	.843	.007	.171	.864	.774	1.292
sesks3: Medium	.419	.377	.051	1.111	.267	.649	1.541
sesks3: High	.222	.407	.025	.547	.585	.622	1.608

Model Summary ^d									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.041 ^a	.002	.000	78.188	.002	1.263	1	737	.261
2	.111 ^b	.012	.010	77.821	.011	7.968	1	736	.005
3	.137 ^c	.019	.013	77.680	.006	2.330	2	734	.098
4	.163 ^d	.027	.016	77.576	.008	1.496	4	730	.202
5	.180 ^e	.032	.016	77.561	.006	1.069	4	726	.371
6	.184 ^f	.034	.017	77.548	.002	1.237	1	725	.266
7	.186 ^g	.035	.013	77.680	.001	.180	3	722	.910
8	.195 ^h	.038	.014	77.659	.003	1.192	2	720	.304
9	.201 ⁱ	.041	.014	77.659	.003	1.006	2	718	.366

Model Summary ^d									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
10	.204 ^a	.042	.015	77.625	.042	1.549	20	714	.059
11	.209 ^b	.044	.015	77.599	.002	1.481	1	713	.224
12	.216 ^c	.047	.016	77.575	.003	1.216	2	711	.297
13	.221 ^d	.049	.015	77.605	.002	.729	2	709	.483
14	.223 ^e	.050	.012	77.740	.001	.182	3	706	.909
15	.224 ^f	.050	.010	77.831	.000	.173	2	704	.841

Figure G. Summary of the final model for the back-transformed/untransformed data

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7721.398	1	7721.398	1.263	.261 ^a
	Residual	4505495.449	737	6113.291		
	Total	4513216.847	738			
2	Regression	55976.781	2	27988.390	4.622	.010 ^c
	Residual	4457240.066	736	6056.033		
	Total	4513216.847	738			
3	Regression	84096.550	4	21024.138	3.484	.008 ^d
	Residual	4429120.297	734	6034.224		
	Total	4513216.847	738			
4	Regression	120101.222	8	15012.653	2.495	.011 ^e
	Residual	4393115.625	730	6017.967		
	Total	4513216.847	738			
5	Regression	145828.443	12	12152.370	2.020	.020 ^f
	Residual	4367388.404	726	6015.687		
	Total	4513216.847	738			
6	Regression	153268.475	13	11789.883	1.960	.021 ^g
	Residual	4359948.372	725	6013.722		
	Total	4513216.847	738			
7	Regression	156525.638	16	9782.852	1.621	.058 ^h
	Residual	4356691.209	722	6034.198		
	Total	4513216.847	738			
8	Regression	170906.867	18	9494.826	1.574	.061 ⁱ
	Residual	4342309.980	720	6030.986		
	Total	4513216.847	738			
9	Regression	183037.065	20	9151.853	1.517	.068 ^j
	Residual	4330179.782	718	6030.891		
	Total	4513216.847	738			

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
10	Regression	186719.161	20	9335.958	1.549	.059 ^a
	Residual	4302299.484	714	6025.630		
	Total	4489018.645	734			
11	Regression	195634.294	21	9315.919	1.547	.056 ^c
	Residual	4293384.350	713	6021.577		
	Total	4489018.645	734			
12	Regression	210272.714	23	9142.292	1.519	.057 ^d
	Residual	4278745.930	711	6017.927		
	Total	4489018.645	734			
13	Regression	219053.406	25	8762.136	1.455	.071 ^e
	Residual	4269965.239	709	6022.518		
	Total	4489018.645	734			
14	Regression	222348.515	28	7941.018	1.314	.130 ^f
	Residual	4266670.130	706	6043.442		
	Total	4489018.645	734			
15	Regression	224444.186	30	7481.473	1.235	.182 ^g
	Residual	4264574.459	704	6057.634		
	Total	4489018.645	734			

Figure H. ANOVA test for the final model for the back-transformed data.

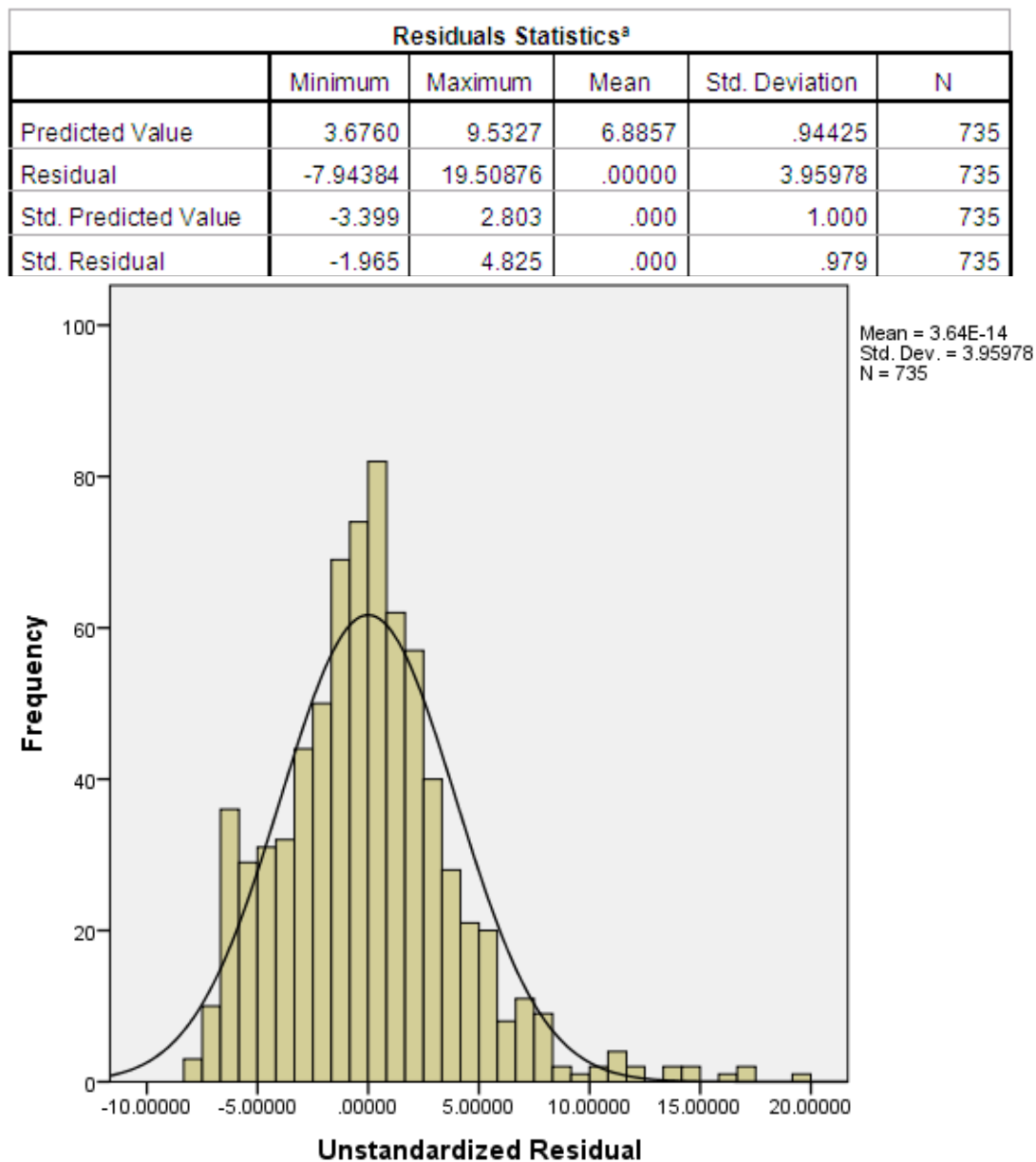


Figure I. Residual analysis for final model. Reveals that the residuals are somewhat positively skewed still despite the transformation.

Appendix 7.3b

Final Model B.2: Delay to Allopathic Care

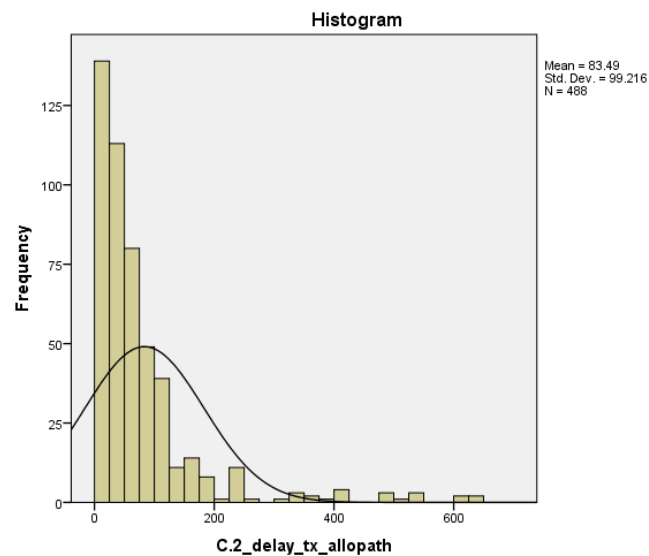


Figure A. A histogram which illustrates that the outcome variable is positively skewed. As a result, an attempt was made to transform the data.

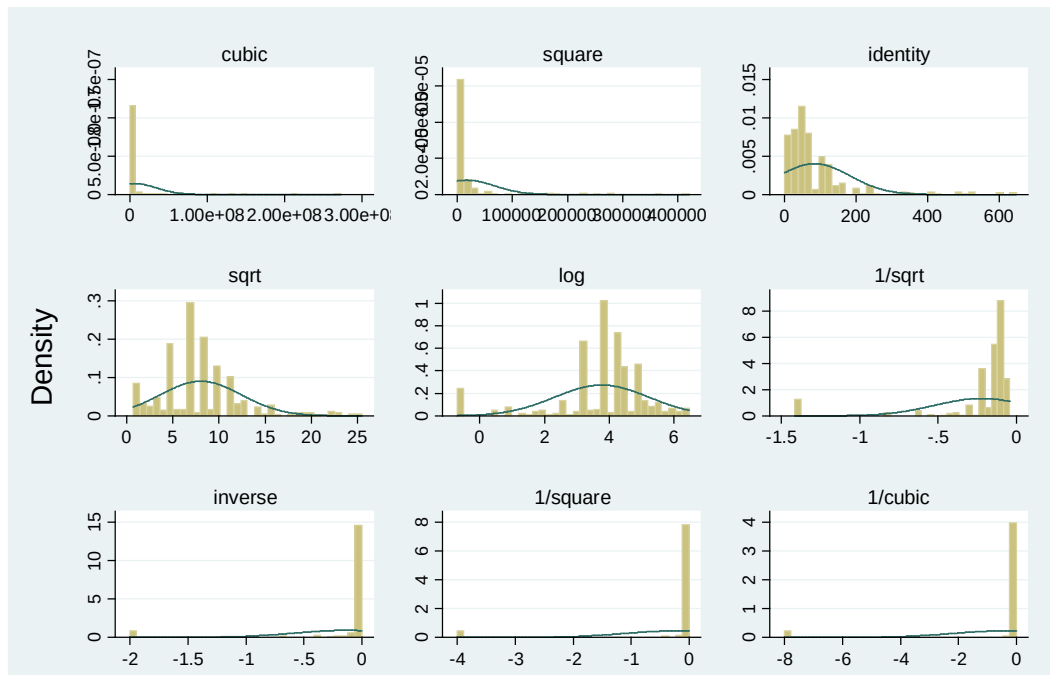


Figure B. Different histograms representing different data transformations attempted

Transformation	formula	chi2(2)	P(chi2)
cubic	C2_del~c^3	.	0.000
square	C2_del~c^2	.	0.000
identity	C2_del~c	.	0.000
square root	sqrt(C2_del~c)	.	0.000
log	log(C2_del~c)	.	0.000
1/(square root)	1/sqrt(C2_del~c)	.	0.000
inverse	1/C2_del~c	.	0.000
1/square	1/(C2_del~c^2)	.	0.000
1/cubic	1/(C2_del~c^3)	.	0.000

Figure C. STATA output illustrating different transformation types. This table shows that none of the transformation actually fully normalise the data. In this case, it is recommended to select the transformation with the lowest chi-squared value (UCLA, 2012).

One-Sample Kolmogorov-Smirnov Test						
		inc.2_delay_tx_al lopath_ac	src.2_delay_tx_al lopath_ac	invc.2_delay_out side_ac	sr2c.2_delay_out side_ac	nlc.2_delay_outsi de_ac
N		488	488	488	488	488
Normal Parameters ^{a,b}	Mean	1.6386	8.0281	.1392	2.7165	3.7729
	Std. Deviation	.63322	4.42466	.44124	.80640	1.45804
Most Extreme Differences	Absolute	.220	.130	.445	.152	.220
	Positive	.099	.130	.445	.086	.099
	Negative	-.220	-.096	-.377	-.152	-.220
Kolmogorov-Smirnov Z		4.866	2.881	9.826	3.364	4.866
Asymp. Sig. (2-tailed)		.000	.000	.000	.000	.000
a. Test distribution is Normal.						
b. Calculated from data.						

Figure D. Since the STATA output did not reveal any chi-squared values, a K-S test was run. This test can be used for testing “goodness of fit.” It reveals that the chi-squared transformation with a constant added is the best transformation since it yields the lowest chi-squared value.

Model Summary ^a									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.080 ^a	.006	.004	4.41351	.006	3.106	1	483	.079
2	.082 ^b	.007	.003	4.41732	.000	.168	1	482	.682
3	.115 ^c	.013	.005	4.41184	.007	1.598	2	480	.203
4	.158 ^d	.025	.008	4.40432	.012	1.411	4	476	.229
5	.213 ^e	.045	.021	4.37658	.020	2.513	4	472	.041
6	.213 ^f	.045	.019	4.38102	.000	.042	1	471	.837
7	.214 ^g	.046	.013	4.39359	.001	.103	3	468	.958
8	.234 ^h	.055	.018	4.38273	.009	2.161	2	466	.116
9	.239 ⁱ	.057	.017	4.38597	.003	.656	2	464	.519
10	.240 ^j	.058	.015	4.39027	.000	.091	1	463	.763
11	.246 ^k	.061	.014	4.39254	.003	.761	2	461	.468
12	.249 ^l	.062	.011	4.39859	.001	.366	2	459	.693
13	.253 ^m	.064	.007	4.40824	.002	.331	3	456	.803
14	.258 ⁿ	.066	.005	4.41274	.002	.535	2	454	.586

Figure E. Results of the final model with the transformed data

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	60.500	1	60.500	3.106	.079 ^b
	Residual	9408.403	483	19.479		
	Total	9468.903	484			
2	Regression	63.781	2	31.890	1.634	.196 ^b
	Residual	9405.122	482	19.513		
	Total	9468.903	484			
3	Regression	126.003	4	31.501	1.618	.168 ^b
	Residual	9342.900	480	19.464		
	Total	9468.903	484			
4	Regression	235.456	8	29.432	1.517	.148 ^b
	Residual	9233.447	476	19.398		
	Total	9468.903	484			
5	Regression	428.019	12	35.668	1.862	.037 ^c
	Residual	9040.884	472	19.154		
	Total	9468.903	484			
6	Regression	428.832	13	32.987	1.719	.054 ^b
	Residual	9040.071	471	19.193		
	Total	9468.903	484			
7	Regression	434.813	16	27.176	1.408	.133 ^b
	Residual	9034.090	468	19.304		
	Total	9468.903	484			
8	Regression	517.824	18	28.768	1.498	.086 ^b
	Residual	8951.079	466	19.208		
	Total	9468.903	484			
9	Regression	543.066	20	27.153	1.412	.111 ^b
	Residual	8925.837	464	19.237		
	Total	9468.903	484			
10	Regression	544.816	21	25.944	1.346	.140 ^b
	Residual	8924.088	463	19.274		
	Total	9468.903	484			
11	Regression	574.172	23	24.964	1.294	.165 ^b
	Residual	8894.731	461	19.294		
	Total	9468.903	484			
12	Regression	588.353	25	23.534	1.216	.218 ^{cd}
	Residual	8880.550	459	19.348		
	Total	9468.903	484			
13	Regression	607.644	28	21.702	1.117	.313 ^d
	Residual	8861.260	456	19.433		
	Total	9468.903	484			
14	Regression	628.494	30	20.950	1.076	.361 ^e
	Residual	8840.409	454	19.472		
	Total	9468.903	484			

Figure F. ANOVA test for the final model. Reveals that the model is significant up through block 5.

Table A. Block 5 of the final model B.2

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error				Tolerance	VIF
(Constant)	8.958	.557		16.097	.000		
pt_gender_cat: Male	-.789	.403	-.089	-1.958	.051	.974	1.027
Patient's Age	.007	.010	.032	.695	.487	.973	1.027
head_edu_cat3: Primary+Lower Secondary	.052	.421	.006	.123	.902	.937	1.068
head_edu_cat3: Secodary + Tertiary	-.424	.880	-.024	-.482	.630	.828	1.207
HHoccup_Recode2: Commercial Farmer	.489	.553	.045	.884	.377	.795	1.257
HHoccup_Recode2: Unskilled	-.041	.547	-.004	-.074	.941	.763	1.310
HHoccup_Recode2: Skilled	-.825	.996	-.039	-.828	.408	.919	1.088
HHoccup_Recode2: Professional	-.643	.718	-.047	-.896	.371	.727	1.375
wealthq: 2	-.110	.576	-.011	-.191	.849	.650	1.538
wealthq: 3	-.757	.635	-.066	-1.191	.234	.664	1.505
wealthq: 4	-1.011	.660	-.084	-1.532	.126	.666	1.502
wealthq: wealthiest	-1.924	.675	-.166	-2.852	.005	.595	1.681

Model Summary ^a									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.071 ^a	.005	.003	99.067	.005	2.459	1	486	.117
2	.086 ^b	.007	.003	99.055	.002	1.122	1	485	.290
3	.122 ^c	.015	.007	98.881	.008	1.856	2	483	.157
4	.169 ^d	.029	.012	98.601	.014	1.686	4	479	.152
5	.208 ^e	.043	.019	98.269	.015	1.811	4	475	.126
6	.208 ^f	.043	.017	98.371	.000	.011	1	474	.916
7	.209 ^g	.044	.011	98.652	.001	.101	3	471	.959
8	.219 ^h	.048	.011	98.646	.004	1.031	2	469	.358
9	.220 ⁱ	.049	.008	98.829	.001	.134	2	467	.875

Figure G. Summary of the final model for the back-transformed/untransformed data. Blocks 10+ have been excluded because they were found to be insignificant.

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24136.525	1	24136.525	2.459	.117 ^b
	Residual	4769775.402	486	9814.353		
	Total	4793911.926	487			
2	Regression	35142.680	2	17571.340	1.791	.168 ^b
	Residual	4758769.246	485	9811.895		
	Total	4793911.926	487			
3	Regression	71441.231	4	17860.308	1.827	.122 ^b
	Residual	4722470.695	483	9777.372		
	Total	4793911.926	487			
4	Regression	136999.388	8	17124.923	1.761	.082 ^a
	Residual	4666912.539	479	9722.156		
	Total	4793911.926	487			
5	Regression	206937.520	12	17244.793	1.786	.048 ^a
	Residual	4586974.407	475	9656.788		
	Total	4793911.926	487			
6	Regression	207046.382	13	15926.645	1.646	.070 ^a
	Residual	4586865.544	474	9676.932		
	Total	4793911.926	487			
7	Regression	209994.750	16	13124.672	1.349	.163 ^b
	Residual	4583917.176	471	9732.308		
	Total	4793911.926	487			
8	Regression	230055.874	18	12780.882	1.313	.174 ^b
	Residual	4563856.052	469	9731.036		
	Total	4793911.926	487			
9	Regression	232673.091	20	11633.655	1.191	.257 ^c
	Residual	4561238.835	467	9767.107		
	Total	4793911.926	487			

a. Dependent Variable: C2 delay tv allmonth

Figure H. ANOVA test for the final model for the back-transformed data. Blocks 10+ have been excluded because they were found to be insignificant.

Residuals Statistics ^a					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	4.5546	10.8298	8.0232	1.13954	485
Residual	-9.39719	17.58795	.00000	4.27379	485
Std. Predicted Value	-3.044	2.463	.000	1.000	485
Std. Residual	-2.130	3.986	.000	.969	485

a. Dependent Variable: src.2_delay_tx_allopath_ac

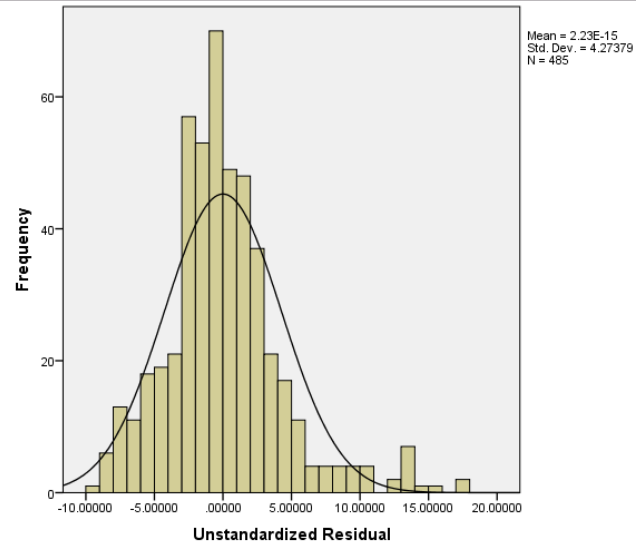


Figure I. Residual analysis for final model. Reveals that the residuals are somewhat positively skewed still despite the transformation.

Appendix 7.3c

Final Model B.3: Delay between Outside Care Providers

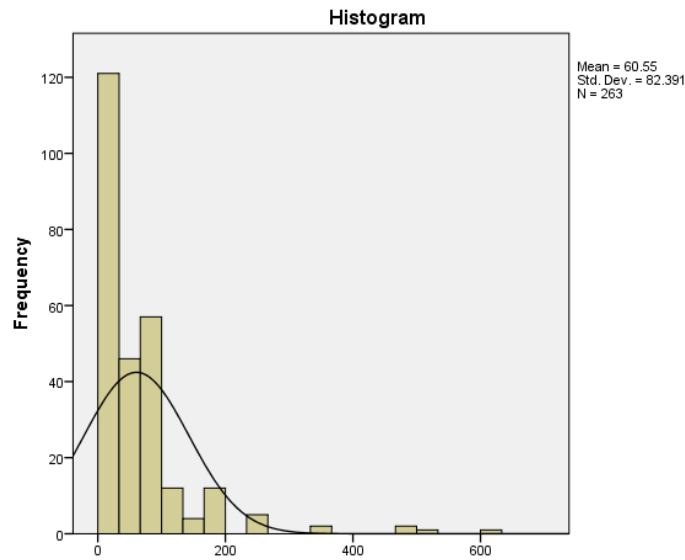


Figure A. A histogram which illustrates that the outcome variable is positively skewed. As a result, an attempt was made to transform the data

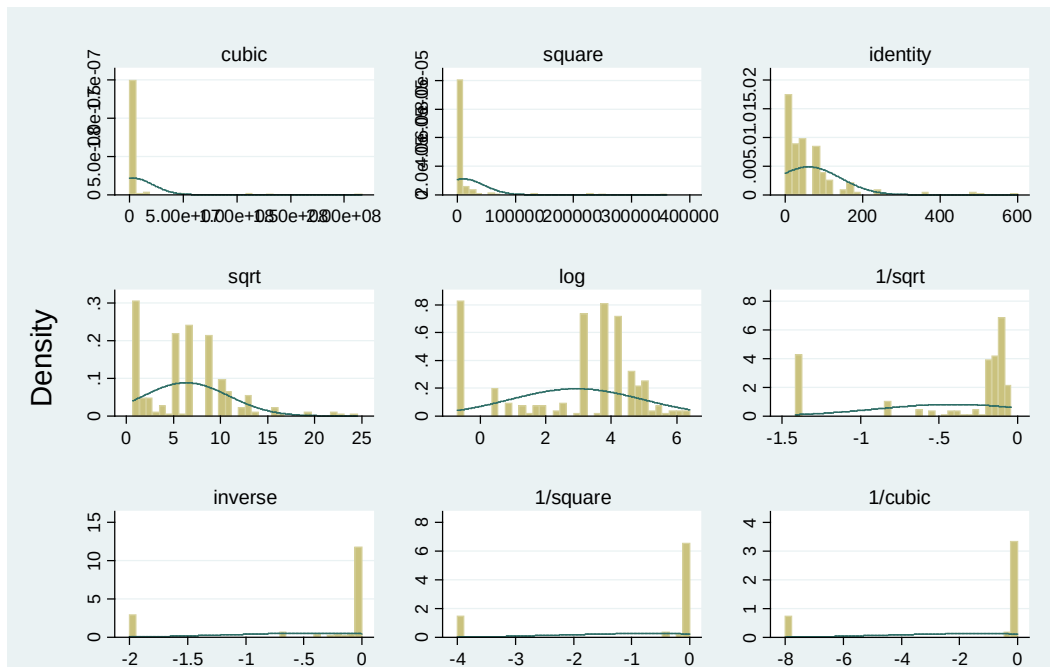


Figure B. Different histograms representing different data transformations attempted

Transformation	formula	chi2(2)	P(chi2)
cubic	$C4_del \sim c^3$	.	0.000
square	$C4_del \sim c^2$	.	0.000
identity	$C4_del \sim c$	.	0.000
square root	$\sqrt{C4_del \sim c}$	29.64	0.000
log	$\log(C4_del \sim c)$	29.02	0.000
1/(square root)	$1/\sqrt{C4_del \sim c}$	42.79	0.000
inverse	$1/C4_del \sim c$	53.82	0.000
1/square	$1/(C4_del \sim c^2)$	59.15	0.000
1/cubic	$1/(C4_del \sim c^3)$	59.73	0.000

Figure C. STATA output illustrating different transformation types. This table shows that none of the transformation actual fully normalise the data. In this case, it is recommended to selecte the transformation with the lowest chi-squared value (UCLA, 2012).

One-Sample Kolmogorov-Smirnov Test						
		lnC.4_delay_btw 1st 2nd ac	srC.4_delay_btw 1st 2nd ac	invC.4_delay_bt w 1st 2nd ac	sr2C.4_delay_bt w 1st 2nd ac	nlC.4_delay_btw 1st 2nd ac
N		263	263	263	263	263
Normal Parameters ^{a,b}	Mean	1.2742	6.3653	.4110	2.3297	2.9339
	Std. Deviation	.88783	4.54009	.74650	.97035	2.04429
Most Extreme Differences	Absolute	.240	.106	.378	.161	.240
	Positive	.137	.101	.378	.113	.137
	Negative	-.240	-.106	-.292	-.161	-.240
Kolmogorov-Smirnov Z		3.888	1.724	6.138	2.614	3.888
Asymp. Sig. (2-tailed)		.000	.005	.000	.000	.000

Figure D. Since the STATA output did not reveal any chi-squared values, a K-S test was run. This test can be used for testing “goodness of fit.” It reveals that the chi-squared transformation with a constant added is the best transformation since it yields the lowest chi-squared value.

Model Summary ^a									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.047 ^a	.002	-.002	4.55007	.002	.571	1	258	.451
2	.050 ^b	.003	-.005	4.55817	.000	.084	1	257	.772
3	.173 ^c	.030	.015	4.51237	.028	3.622	2	255	.028
4	.208 ^d	.043	.013	4.51738	.013	.858	4	251	.490
5	.279 ^e	.078	.033	4.47101	.034	2.308	4	247	.059
6	.291 ^f	.085	.036	4.46320	.007	1.865	1	246	.173
7	.294 ^g	.086	.026	4.48671	.002	.143	3	243	.934
8	.307 ^h	.094	.026	4.48580	.008	1.049	2	241	.352
9	.325 ⁱ	.106	.031	4.47557	.012	1.552	2	239	.214
10	.336 ^j	.113	.035	4.46687	.007	1.932	1	238	.166
11	.388 ^k	.150	.068	4.39001	.037	5.203	2	236	.006
12	.390 ^l	.152	.061	4.40447	.002	.227	2	234	.797
13	.393 ^m	.154	.052	4.42748	.002	.191	3	231	.902
14	.393 ⁿ	.155	.044	4.44512	.001	.085	2	229	.918

Figure E. Results of the final model with the transformed data

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.814	1	11.814	.571	.451 ^b
	Residual	5341.413	258	20.703		
	Total	5353.227	259			
2	Regression	13.556	2	6.778	.326	.722 ^c
	Residual	5339.672	257	20.777		
	Total	5353.227	259			
3	Regression	161.060	4	40.265	1.978	.098 ^d
	Residual	5192.167	255	20.361		
	Total	5353.227	259			
4	Regression	231.132	8	28.892	1.416	.190 ^e
	Residual	5122.095	251	20.407		
	Total	5353.227	259			
5	Regression	415.709	12	34.642	1.733	.050 ^f
	Residual	4937.518	247	19.990		
	Total	5353.227	259			
6	Regression	452.866	13	34.836	1.749	.052 ^g
	Residual	4900.361	246	19.920		
	Total	5353.227	259			
7	Regression	461.494	16	28.843	1.433	.127 ^h
	Residual	4891.733	243	20.131		
	Total	5353.227	259			
8	Regression	503.729	18	27.985	1.391	.136 ⁱ
	Residual	4849.498	241	20.122		
	Total	5353.227	259			

9	Regression	565.891	20	28.295	1.413	.117 ⁱ
	Residual	4787.336	239	20.031		
	Total	5353.227	259			
10	Regression	604.438	21	28.783	1.443	.100 ^k
	Residual	4748.789	238	19.953		
	Total	5353.227	259			
11	Regression	804.993	23	35.000	1.816	.015 ^j
	Residual	4548.234	236	19.272		
	Total	5353.227	259			
12	Regression	813.786	25	32.551	1.678	.026 ^m
	Residual	4539.441	234	19.399		
	Total	5353.227	259			
13	Regression	825.023	28	29.465	1.503	.056 ⁿ
	Residual	4528.204	231	19.603		
	Total	5353.227	259			
14	Regression	828.388	30	27.613	1.397	.090 ^o
	Residual	4524.839	229	19.759		
	Total	5353.227	259			

Figure F. ANOVA test for the final model. Reveals that all but blocks 13 & 14 are significant.

Table A (on next page). Block 14 of the final model B.3

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	8.928	1.483		6.020	.000		
pt_gender_cat: Male	.246	.565	.027	.436	.663	.934	1.071
Patient's Age	.018	.016	.081	1.160	.247	.751	1.332
head_edu_cat3: Primary+Lower Secondary	-.338	.605	-.036	-.558	.578	.870	1.149
head_edu_cat3: Secodary + Tertiary	-1.283	1.170	-.077	-1.097	.274	.734	1.362
HHoccup_Recode2: Commercial Farmer	.279	.807	.026	.346	.730	.646	1.549
HHoccup_Recode2: Unskilled	.100	.818	.009	.122	.903	.643	1.556
HHoccup_Recode2: Skilled	-.179	1.468	-.008	-.122	.903	.854	1.171
HHoccup_Recode2: Prof	-.742	1.121	-.052	-.662	.509	.599	1.669
wealthq: 2	-1.536	.832	-.144	-1.846	.066	.593	1.686
wealthq: 3	-2.452	.914	-.216	-2.683	.008	.558	1.792
wealthq: 4	-2.252	1.019	-.173	-2.209	.028	.588	1.700
wealthq: wealthiest	-3.245	1.114	-.268	-2.912	.004	.427	2.340
house_1-5_total_no	.615	.376	.111	1.636	.103	.793	1.261
Hhcaste_Recode: Tamang+Magar+Gurung	.485	.910	.050	.533	.595	.409	2.442
Hhcaste_Recode: Chepang+BK+Other Dalit	.020	1.157	.001	.017	.986	.546	1.831
Hhcaste_Recode: Newar	-.138	1.405	-.008	-.098	.922	.619	1.616
seswl3: Medium	-.042	.794	-.004	-.053	.958	.545	1.836
seswl3: High	.264	.802	.027	.329	.742	.531	1.884
sesfhq3: Medium	.253	.897	.023	.282	.778	.564	1.774
sesfhq3: High	-1.662	.889	-.174	-1.870	.063	.417	2.396
O46_distance_closestHF	-.334	.287	-.087	-1.161	.247	.642	1.558
O45_facility_closest_type_cat: 2	-2.432	.773	-.233	-3.147	.002	.660	1.515
O45_facility_closest_type_cat: 3	-.100	1.347	-.005	-.075	.941	.712	1.405
O22_icd_recode_fin: J00-J99	-.286	.713	-.028	-.402	.688	.761	1.314
O22_icd_recode_fin: ELSE	.273	.808	.026	.339	.735	.598	1.672

Model Summary ⁱ									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.032 ^a	.001	-.003	81.999	.001	.275	1	265	.600
2	.058 ^b	.003	-.004	82.057	.002	.627	1	264	.429
3	.150 ^c	.022	.007	81.582	.019	2.542	2	262	.081
4	.187 ^d	.035	.005	81.686	.012	.833	4	258	.505
5	.268 ^e	.072	.028	80.726	.037	2.543	4	254	.040
6	.274 ^f	.075	.028	80.743	.003	.891	1	253	.346
7	.275 ^g	.075	.016	81.218	.000	.017	3	250	.997
8	.287 ^h	.082	.016	81.247	.007	.909	2	248	.404
9	.294 ⁱ	.087	.012	81.377	.004	.606	2	246	.546

Model Summary ^g									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
10	.302 ^a	.091	.017	81.513	.091	1.222	20	243	.237
11	.312 ^b	.097	.019	81.425	.006	1.524	1	242	.218
12	.364 ^c	.132	.049	80.158	.035	4.856	2	240	.009
13	.377 ^d	.142	.052	80.021	.010	1.410	2	238	.246
14	.378 ^e	.143	.041	80.505	.001	.049	3	235	.986
15	.380 ^f	.144	.034	80.793	.001	.166	2	233	.847

g. Dependent Variable: C.4_delay_btw_1st_2nd

Figure G. Summary of the final model for the back-transformed/untransformed data

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1850.266	1	1850.266	.275	.600 ^b
	Residual	1781809.606	265	6723.810		
	Total	1783659.873	266			
2	Regression	6072.017	2	3036.008	.451	.638 ^c
	Residual	1777587.856	264	6733.287		
	Total	1783659.873	266			
3	Regression	39907.069	4	9976.767	1.499	.203 ^d
	Residual	1743752.804	262	6655.545		
	Total	1783659.873	266			
4	Regression	62138.595	8	7767.324	1.164	.321 ^e
	Residual	1721521.278	258	6672.563		
	Total	1783659.873	266			
5	Regression	128428.777	12	10702.398	1.642	.080 ^f
	Residual	1655231.095	254	6516.658		
	Total	1783659.873	266			
6	Regression	134238.123	13	10326.009	1.584	.090 ^g
	Residual	1649421.750	253	6519.454		
	Total	1783659.873	266			
7	Regression	134572.594	16	8410.787	1.275	.213 ^h
	Residual	1649087.279	250	6596.349		
	Total	1783659.873	266			
8	Regression	146573.663	18	8142.981	1.234	.235 ⁱ
	Residual	1637086.210	248	6601.154		
	Total	1783659.873	266			
9	Regression	154596.964	20	7729.848	1.167	.284 ^j
	Residual	1629062.908	246	6622.207		
	Total	1783659.873	266			

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
10	Regression	162340.231	20	8117.012	1.222	.237 ^b
	Residual	1614564.129	243	6644.297		
	Total	1776904.360	263			
11	Regression	172447.611	21	8211.791	1.239	.220 ^c
	Residual	1604456.748	242	6629.987		
	Total	1776904.360	263			
12	Regression	234845.266	23	10210.664	1.589	.047 ^d
	Residual	1542059.094	240	6425.246		
	Total	1776904.360	263			
13	Regression	252898.649	25	10115.946	1.580	.044 ^e
	Residual	1524005.711	238	6403.385		
	Total	1776904.360	263			
14	Regression	253845.279	28	9065.903	1.399	.095 ^f
	Residual	1523059.081	235	6481.102		
	Total	1776904.360	263			
15	Regression	256009.382	30	8533.646	1.307	.140 ^g
	Residual	1520894.978	233	6527.446		
	Total	1776904.360	263			

Figure H. ANOVA test for the final model for the back-transformed data.

Residuals Statistics ^a					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.1370	11.0874	6.3995	1.78841	260
Residual	-8.79351	15.94896	.00000	4.17976	260
Std. Predicted Value	-2.383	2.621	.000	1.000	260
Std. Residual	-1.978	3.588	.000	.940	260

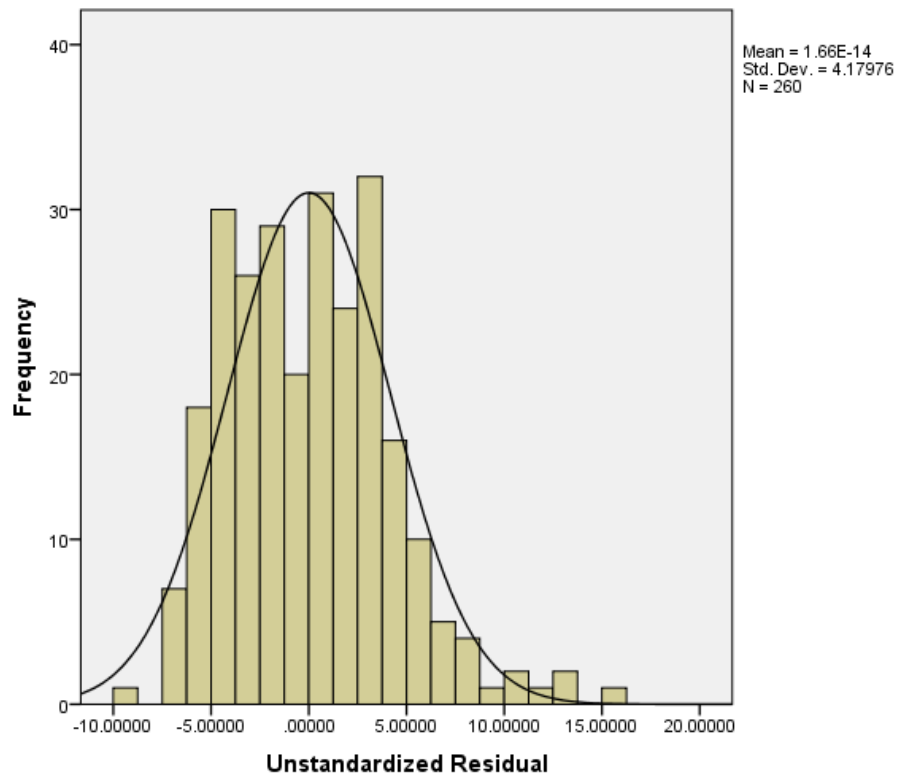


Figure I. Residual analysis for final model. Reveals that the residuals are somewhat positively skewed still despite the transformation.

Appendix 7.4a

Final Model C.1: Home Care First

Table A. Descriptive overview of Model C.1

Independent Variables		⁽⁰⁾ No. of HHs Not Using Home Care 1 st (% Total)	⁽¹⁾ No. of HHs Using Home Care 1 st (% Total)	P Values
Patient Variables				
	Patient Gender (M)	249 (61%)	158 (39%)	NS
Household SES Variables				
	No. of Children (1-5yo)			
	<i>None</i>	248 (59%)	175 (41%)	NS
	<i>1</i>	198 (64%)	113 (36%)	NS
	<i>2</i>	86 (61%)	56 (39%)	NS
	<i>3</i>	6 (50%)	6 (50%)	NS
	<i>4+</i>	1 (33%)	2 (66%)	NS
Occupation of Head				
	<i>Subsistence Farmer</i>	211 (58%)	152 (42%)	NS
	<i>Commercial Farmer</i>	118 (59%)	81 (41%)	NS
	<i>Unskilled Laborer</i>	111 (63%)	64 (37%)	NS
	<i>Skilled Laborer</i>	27 (63%)	16 (37%)	NS
	<i>Professional Worker</i>	72 (65%)	39 (35%)	NS
Education of Head*				
	<i>None</i>	296 (61%)	187 (39%)	NS
	<i>Primary + Lower Secondary</i>	217 (62%)	131 (38%)	NS
	<i>Secondary + Tertiary</i>	26 (43%)	34 (67%)	0.005
Household Caste				
	<i>Brahmin/Chhettri/Thakuri/Madhesi</i>	80 (58%)	58 (42%)	NS
	<i>Tamang/Magar./Gurung</i>	377 (63%)	219 (37%)	0.017
	<i>Chebang/ Biswokarma/ Other Dalit</i>	49 (51%)	48 (49%)	0.033
	<i>Newar</i>	33 (55%)	27 (45%)	NS
Wealth Quintiles*				
	<i>Quintile 1 – poorest</i>	126 (61%)	80 (39%)	NS
	<i>Quintile 2</i>	123 (53%)	110 (47%)	0.005
	<i>Quintile 3</i>	105 (60%)	69 (40%)	NS
	<i>Quintile 4</i>	83 (68%)	39 (32%)	NS
	<i>Quintile 5 -wealthiest</i>	102 (65%)	54 (35%)	NS

* p < 0.05; ** p < 0.01; *** p < 0.001

Independent Variables		(0) No. of HHs Not Using Home Care 1st	(1) No. of HHs Using Home Care 1st	P Values
Ward Level SES Variables				
	Ward-Level Composite Index**			
	SES 1 – lowest infrastructure	175 (53%)	154 (47%)	0.001
	SES 2	185 (65%)	99 (35%)	NS
	SES 3 – highest infrastructure	179 (64%)	99 (36%)	NS
Illness Variables				
	Illness Type (ICD Code)***			
	A00-B99	223 (58%)	160 (42%)	NS
	J00-J99	146 (53%)	130 (47%)	0.002
	Other Codes	169 (73%)	62 (27%)	0.000
	Illness Severity***			
	Not at all Severe	77 (48%)	83 (52%)	0.000
	Somewhat Severe	280 (61%)	180 (39%)	NS
	Very Severe	161 (70%)	70 (30%)	0.001
	Extremely Severe/ Life- Threatening	17 (50%)	17 (50%)	NS
Health Facility Variables				
	Closest Health Facility Type**			
	SHP	394 (63%)	233 (37%)	0.024
	HP	106 (51%)	103 (49%)	0.001
	PHCC	38 (70%)	16 (30%)	NS
	Health Facility Quality Composite Index***			
	Poor	200 (51%)	193 (49%)	0.000
	Fair	157 (65%)	83 (35%)	NS
	Good	181 (70%)	76 (30%)	0.000
Knowledge Variables				
	Knowledge Composite Index			
	Poor Knowledge of Government Services	153 (60%)	101 (40%)	NS
	Fair Knowledge of Government Services	216 (62%)	133 (38%)	NS
	Good Knowledge of Government Services	170 (59%)	117 (41%)	NS
TOTALS		539 (60%)	351 (40%)	890

* p < 0.05; ** p < 0.01; *** p < 0.001

Table B. R-Squared Overview for Model C.1

Variables Entered (Blockwise)	Cox & Snell R Squared Value	Nagelkerke R Squared Value
Patient Gender	0.000	0.000
Patient Age	0.000	0.000
Household Head Education*	0.011	0.015
Household Occupation	0.019	0.026
Household Wealth Quintile*	0.034	0.046
Number of Children (1-5yo)	0.034	0.046
Household Caste*	0.046	0.062
Ward Level SES Index*	0.055	0.074
Objective Quality Index for Nearest Government Health Facility**	0.068	0.092
Distance to Closest Gov Health Facility	0.069	0.093
Closest Gov Health Facility Type	0.070	0.094
Subjective Quality of Nearest Gov Health Facility	0.070	0.095
Illness Type (ICD Code)**	0.097	0.131
Illness Severity Rating**	0.122	0.166
Health System Knowledge Composite Index	0.123	0.166

* indicates a significant block at the $p < 0.05$ level

** indicates a significant block at the $p < 0.01$ level

Appendix 7.4b

Final Model C.2: Allopathic Care First

Table A. Descriptive overview of Model C.2

Independent Variables		⁽⁰⁾ No. of HHs Not Using Allopathic 1 st (% Total)	⁽¹⁾ No. of HHs Using Allopathic 1 st (% Total)	P Values
Patient Variables				
	Patient Gender (M)*	268 (66%)	139 (34%)	0.046
Household SES Variables				
	No. of Children (1-5yo)			
	<i>None</i>	292 (69%)	131 (31%)	NS
	<i>1</i>	212 (68%)	99 (32%)	NS
	<i>2</i>	102 (72%)	40 (28%)	NS
	<i>3</i>	8 (67%)	4 (33%)	NS
	<i>4+</i>	3 (100%)	0	NS
Occupation of Head				
	<i>Subsistence Farmer</i>	258 (71%)	105 (29%)	NS
	<i>Commercial Farmer</i>	138 (69%)	61 (39%)	NS
	<i>Unskilled Laborer</i>	117 (67%)	58 (33%)	NS
	<i>Skilled Laborer</i>	32 (74%)	11 (26%)	NS
	<i>Professional Worker</i>	72 (65%)	39 (35%)	NS
Education of Head				
	<i>None</i>	340 (70%)	143 (30%)	NS
	<i>Primary + Lower Secondary</i>	231 (66%)	117 (34%)	NS
	<i>Secondary + Tertiary</i>	46 (77%)	14 (23%)	NS
Household Caste				
	<i>Brahmin/Chhettri/Thakuri/Madhesi</i>	93 (67%)	45 (33%)	NS
	<i>Tamang/Magar./Gurung</i>	412 (69%)	184 (31%)	NS
	<i>Chebang/ Biswokarma/ Other Dalit</i>	69 (71%)	28 (29%)	NS
	<i>Newar</i>	43 (72%)	17 (28%)	NS
Wealth Quintiles**				
	<i>Quintile 1 – poorest</i>	147 (71%)	59 (29%)	NS
	<i>Quintile 2</i>	175 (75%)	58 (25%)	0.024
	<i>Quintile 3</i>	127 (73%)	47 (27%)	NS
	<i>Quintile 4</i>	70 (57%)	52 (43%)	0.002
	<i>Quintile 5 -wealthiest</i>	98 (63%)	58 (37%)	NS

* p < 0.05; ** p < 0.01; *** p < 0.001

Independent Variables		(0) No. of HHs Not Using Allopathic 1st (% Total)	(1) No. of HHs Using Allopathic 1st (% Total)	P Values
Ward Level SES Variables				
	Ward-Level Composite Index**			
	SES 1 – lowest infrastructure	248 (75%)	81 (25%)	0.002
	SES 2	182 (64%)	102 (36%)	0.022
	SES 3 – highest infrastructure	187 (67%)	91 (33%)	NS
Illness Variables				
	Illness Type (ICD Code)**			
	A00-B99	275 (72%)	108 (28%)	NS
	J00-J99	202 (73%)	74 (27%)	NS
	Other Codes	139 (60%)	92 (40%)	0.001
	Illness Severity			
	Not at all Severe	122 (76%)	38 (24%)	0.032
	Somewhat Severe	315 (68%)	145 (32%)	NS
	Very Severe	152 (66%)	79 (34%)	NS
	Extremely Severe/ Life-Threatening	23 (68%)	11 (32%)	NS
Health Facility Variables				
	Closest Health Facility Type**			
	SHP	412 (66%)	215 (44%)	0.001
	HP	164 (78%)	45 (22%)	0.001
	PHCC	40 (74%)	14 (26%)	NS
	Health Facility Quality Composite Index**			
	Poor	295 (75%)	98 (25%)	0.001
	Fair	162 (68%)	78 (32%)	NS
	Good	159 (62%)	98 (38%)	0.002
Knowledge Variables				
	Knowledge Composite Index**			
	Poor Knowledge of Government Services	191 (75%)	63 (25%)	0.015
	Fair Knowledge of Government Services	244 (70%)	105 (30%)	NS
	Good Knowledge of Government Services	181 (63%)	106 (37%)	0.006
TOTALS		616 (69%)	274 (31%)	890

* p < 0.05; ** p < 0.01; *** p < 0.001

Table B. R-Squared Overview for Model C.2

Variables Entered (Blockwise)	Cox & Snell R Squared Value	Nagelkerke R Squared Value
Patient Gender*	0.004	0.006
Patient Age	0.005	0.007
Household Head Education	0.008	0.011
Household Occupation	0.012	0.017
Household Wealth Quintile**	0.029	0.040
Number of Children (1-5yo)	0.029	0.040
Household Caste	0.030	0.042
Ward Level SES Index	0.035	0.049
Objective Quality Index for Nearest Government Health Facility	0.040	0.056
Distance to Closest Gov Health Facility*	0.046	0.064
Closest Gov Health Facility Type	0.051	0.071
Subjective Quality of Nearest Gov Health Facility	0.057	0.079
Illness Type (ICD Code)**	0.072	0.101
Illness Severity Rating*	0.081	0.114
Health System Knowledge Composite Index*	0.089	0.124

* indicates a significant block at the $p < 0.05$ level

** indicates a significant block at the $p < 0.01$ level

Appendix 7.4c

Final Model C.3: TH Care First

Table A. Descriptive overview of Model C.3

Independent Variables		⁽⁰⁾ No. of HHs Not Using TH 1 st (% Total)	⁽¹⁾ No. of HHs Using TH 1 st (% Total)	P Values
Patient Variables				
	Patient Gender (M)	337 (83%)	70 (17%)	NS
Household SES Variables				
	No. of Children (1-5yo)			
	<i>None</i>	354 (84%)	69 (16%)	NS
	<i>1</i>	250 (80%)	61 (20%)	NS
	<i>2</i>	108 (76%)	34 (24%)	NS
	<i>3</i>	11 (92%)	1 (8%)	NS
	<i>4+</i>	2 (67%)	1 (33%)	NS
Occupation of Head				
	<i>Subsistence Farmer</i>	285 (79%)	78 (21%)	NS
	<i>Commercial Farmer</i>	163 (82%)	36 (18%)	NS
	<i>Unskilled Laborer</i>	142 (81%)	33 (17%)	NS
	<i>Skilled Laborer</i>	35 (81%)	8 (17%)	NS
	<i>Professional Worker</i>	100 (90%)	11 (10%)	0.012
Education of Head**				
	<i>None</i>	379 (78%)	104 (22%)	0.016
	<i>Primary + Lower Secondary</i>	288 (83%)	60 (17%)	NS
	<i>Secondary + Tertiary</i>	58 (97%)	2 (3%)	0.002
Household Caste**				
	<i>Brahmin/Chhettri/Thakuri/Madhesi</i>	122 (88%)	16 (12%)	0.021
	<i>Tamang/Magar./Gurung</i>	464 (78%)	132 (22%)	0.000
	<i>Chebang/ Biswokarma/ Other Dalit</i>	84 (87%)	13 (13%)	NS
	<i>Newar</i>	55 (92%)	5 (8%)	0.034
Wealth Quintiles***				
	<i>Quintile 1 – poorest</i>	155 (75%)	51 (25%)	0.010
	<i>Quintile 2</i>	183 (79%)	50 (21%)	NS
	<i>Quintile 3</i>	138 (79%)	36 (21%)	NS
	<i>Quintile 4</i>	106 (87%)	16 (13%)	NS
	<i>Quintile 5 -wealthiest</i>	143 (92%)	13 (8%)	0.000

* p < 0.05; ** p < 0.01; *** p < 0.001

Independent Variables		(0) No. of HHs Not Using TH 1st (% Total)	(1) No. of HHs Using TH 1st (% Total)	P Values
Ward Level SES Variables				
	Ward-Level Composite Index			
	<i>SES 1 – lowest infrastructure</i>	256 (78%)	73 (22%)	0.037
	<i>SES 2</i>	240 (85%)	44 (15%)	NS
	<i>SES 3 – highest infrastructure</i>	229 (82%)	49 (18%)	NS
Illness Variables				
	Illness Type (ICD Code)			
	<i>A00-B99</i>	304 (79%)	79 (21%)	NS
	<i>J00-J99</i>	237 (86%)	39 (14%)	0.023
	<i>Other Codes</i>	184 (80%)	47 (20%)	NS
	Illness Severity			
	<i>Not at all Severe</i>	133 (83%)	27 (17%)	NS
	<i>Somewhat Severe</i>	383 (83%)	77 (17%)	NS
	<i>Very Severe</i>	175 (76%)	56 (24%)	0.009
	<i>Extremely Severe/ Life-Threatening</i>	30 (88%)	4 (12%)	NS
Health Facility Variables				
	Closest Health Facility Type			
	<i>SHP</i>	511 (81%)	117 (19%)	NS
	<i>HP</i>	166 (79%)	43 (21%)	NS
	<i>PHCC</i>	47 (87%)	7 (13%)	NS
	Health Facility Quality Composite Index*			
	<i>Poor</i>	310 (79%)	83 (21%)	NS
	<i>Fair</i>	193 (80%)	48 (20%)	NS
	<i>Good</i>	222 (86%)	35 (14%)	0.014
Knowledge Variables				
	Knowledge Composite Index***			
	<i>Poor Knowledge of Government Services</i>	188 (74%)	66 (26%)	0.000
	<i>Fair Knowledge of Government Services</i>	283 (81%)	66 (19%)	NS
	<i>Good Knowledge of Government Services</i>	253 (88%)	34 (12%)	0.000
TOTALS		724 (81%)	256 (19%)	980

* p < 0.05; ** p < 0.01; *** p < 0.001

Table B. R-Squared Overview for Model C.3

Variables Entered (Blockwise)	Cox & Snell R Squared Value	Nagelkerke R Squared Value
Patient Gender	0.001	0.002
Patient Age*	0.006	0.009
Household Head Education**	0.025	0.040
Household Occupation	0.029	0.047
Household Wealth Quintile*	0.042	0.068
Number of Children (1-5yo)	0.042	0.068
Household Caste*	0.054	0.087
Ward Level SES Index	0.057	0.092
Objective Quality Index for Nearest Government Health Facility	0.058	0.095
Distance to Closest Gov Health Facility	0.059	0.095
Closest Gov Health Facility Type	0.060	0.097
Subjective Quality of Nearest Gov Health Facility	0.068	0.111
Illness Type (ICD Code)	0.074	0.122
Illness Severity Rating	0.080	0.131
Health System Knowledge Composite Index*	0.089	0.147

* indicates a significant block at the $p < 0.05$ level

** indicates a significant block at the $p < 0.01$ level

Appendix 7.4d

Final Model C.4: Pharmacy Care First

Table A. Descriptive overview of Model C.4

Independent Variables		⁽⁰⁾ No. of HHs Not Using Pharmacy 1 st (% Total)	⁽¹⁾ No. of HHs Using Pharmacy 1 st (% Total)	P Values
Patient Variables				
	Patient Gender (M)	371 (91%)	36 (9%)	NS
Household SES Variables				
	No. of Children (1-5yo)			
	<i>None</i>	380 (90%)	43 (10%)	NS
	<i>1</i>	275 (88%)	36 (12%)	NS
	<i>2</i>	130 (92%)	12 (8%)	NS
	<i>3</i>	11 (92%)	1 (8%)	NS
	<i>4+</i>	3 (100%)	0	NS
Occupation of Head*				
	<i>Subsistence Farmer</i>	337 (93%)	26 (7%)	0.010
	<i>Commercial Farmer</i>	179 (90%)	20 (10%)	NS
	<i>Unskilled Laborer</i>	156 (89%)	19 (11%)	NS
	<i>Skilled Laborer</i>	36 (84%)	7 (16%)	NS
	<i>Professional Worker</i>	91 (81%)	20 (19%)	0.004
Education of Head				
	<i>None</i>	436 (90%)	47 (10%)	NS
	<i>Primary + Lower Secondary</i>	312 (90%)	36 (10%)	NS
	<i>Secondary + Tertiary</i>	51 (85%)	9 (15%)	NS
Household Caste				
	<i>Brahmin/Chhettri/Thakuri/Madhesi</i>	120 (87%)	18 (13%)	NS
	<i>Tamang/Magar./Gurung</i>	537 (90%)	59 (10%)	NS
	<i>Chebang/ Biswokarma/ Other Dalit</i>	91 (94%)	6 (6%)	NS
	<i>Newar</i>	51 (85%)	9 (15%)	NS
Wealth Quintiles**				
	<i>Quintile 1 – poorest</i>	193 (94%)	13 (6%)	0.031
	<i>Quintile 2</i>	219 (94%)	14 (6%)	0.012
	<i>Quintile 3</i>	152 (87%)	22 (13%)	NS
	<i>Quintile 4</i>	107 (88%)	15 (12%)	NS
	<i>Quintile 5 -wealthiest</i>	128 (82%)	28 (18%)	0.001

* p < 0.05; ** p < 0.01; *** p < 0.001

Independent Variables		(0) No. of HHs Not Using Pharmacy 1st (% Total)	(1) No. of HHs Using Pharmacy 1st (% Total)	P Values
Ward Level SES Variables				
	Ward-Level Composite Index**			
	SES 1 – lowest infrastructure	310 (94%)	19 (6%)	0.001
	SES 2	245 (86%)	39 (14%)	0.022
	SES 3 – highest infrastructure	244 (88%)	34 (12%)	NS
Illness Variables				
	Illness Type (ICD Code)			
	A00-B99	349 (91%)	34 (9%)	NS
	J00-J99	244 (88%)	32 (12%)	NS
	Other Codes	205 (89%)	26 (11%)	NS
	Illness Severity			
	Not at all Severe	149 (93%)	11 (7%)	NS
	Somewhat Severe	405 (88%)	55 (12%)	NS
	Very Severe	207 (90%)	24 (10%)	NS
	Extremely Severe/ Life-Threatening	32 (94%)	2 (6%)	NS
Health Facility Variables				
	Closest Health Facility Type**			
	SHP	565 (90%)	62 (10%)	NS
	HP	195 (93%)	15 (7%)	NS
	PHCC	39 (72%)	15 (28%)	0.000
	Health Facility Quality Composite Index***			
	Poor	378 (96%)	15 (4%)	0.000
	Fair	209 (87%)	31 (13%)	NS
	Good	211 (82%)	46 (18%)	0.000
Knowledge Variables				
	Knowledge Composite Index			
	Poor Knowledge of Government Services	230 (91%)	24 (9%)	NS
	Fair Knowledge of Government Services	308 (88%)	41 (12%)	NS
	Good Knowledge of Government Services	260 (91%)	27 (9%)	NS
TOTALS		798 (90%)	92 (10%)	890

* p < 0.05; ** p < 0.01; *** p < 0.001

Table B. R-Squared Overview for Model C.4

Variables Entered (Blockwise)	Cox & Snell R Squared Value	Nagelkerke R Squared Value
Patient Gender	0.002	0.005
Patient Age	0.004	0.007
Household Head Education	0.006	0.013
Household Occupation*	0.019	0.040
Household Wealth Quintile	0.029	0.061
Number of Children (1-5yo)	0.030	0.062
Household Caste	0.033	0.068
Ward Level SES Index**	0.035	0.073
Objective Quality Index for Nearest Government Health Facility	0.052	0.108
Distance to Closest Gov Health Facility	0.054	0.114
Closest Gov Health Facility Type	0.060	0.126
Subjective Quality of Nearest Gov Health Facility	0.063	0.133
Illness Type (ICD Code)	0.065	0.136
Illness Severity Rating**	0.078	0.164
Health System Knowledge Composite Index	0.079	0.165

* indicates a significant block at the $p < 0.05$ level

** indicates a significant block at the $p < 0.01$ level

Appendix 7.4e

Final Model C.5: Allopathic/Pharmacy Last

Table A. Descriptive overview of Model C.5

Independent Variables		(0) No. of HHs Not Using Allopathic/ Pharmacy Care Last (% Total)	(1) No. of HHs Using Allopathic/ Pharmacy Care Last (% Total)	P Values
Patient Variables				
	Patient Gender (M)	61 (18%)	274 (82%)	NS
Household SES Variables				
	No. of Children (1-5yo)			
	None	74 (21%)	274 (79%)	NS
	1	47 (18%)	210 (82%)	NS
	2	29 (25%)	89 (75%)	NS
	3	1 (11%)	8 (99%)	NS
	4+	0	2 (100%)	NS
Occupation of Head**				
	Subsistence Farmer	73 (25%)	217 (75%)	0.013
	Commercial Farmer	35 (22%)	125 (78%)	NS
	Unskilled Laborer	19 (13%)	131 (87%)	0.007
	Skilled Laborer	14 (37%)	24 (63%)	0.011
	Professional Worker	10 (10%)	86 (90%)	0.008
Education of Head				
	None	88 (22%)	312 (78%)	NS
	Primary + Lower Secondary	55 (19%)	228 (81%)	NS
	Secondary + Tertiary	8 (16%)	43 (84%)	NS
Household Caste				
	Brahmin/Chhettri/Thakuri/ Madhesi	26 (21%)	95 (79%)	NS
	Tamang/Magar./Gurung	108 (22%)	385 (78%)	NS
	Chebang/ Biswokarma/ Other Dalit	15 (20%)	59 (80%)	NS
	Newar	2 (4%)	44 (96%)	0.005
Wealth Quintiles**				
	Quintile 1 – poorest	37 (22%)	129 (78%)	NS
	Quintile 2	53 (29%)	127 (71%)	0.001
	Quintile 3	35 (24%)	108 (76%)	NS
	Quintile 4	15 (13%)	97 (87%)	0.041
	Quintile 5 -wealthiest	11 (8%)	122 (82%)	0.000

* p < 0.05; ** p < 0.01; *** p < 0.001

Independent Variables		(0) No. of HHs Not Using Allopathic/ Pharmacy Care Last (% Total)	(1) No. of HHs Using Allopathic/ Pharmacy Care Last (% Total)	P Values
Ward Level SES Variables				
Ward-Level Composite Index				
	<i>SES 1 – lowest infrastructure</i>	67 (27%)	185 (73%)	0.004
	<i>SES 2</i>	42 (17%)	201 (83%)	NS
	<i>SES 3 – highest infrastructure</i>	42 (18%)	197 (82%)	NS
Illness Variables				
Illness Type (ICD Code)				
	<i>A00-B99</i>	71 (23%)	238 (77%)	NS
	<i>J00-J99</i>	36 (16%)	183 (84%)	NS
	<i>Other Codes</i>	44 (21%)	162 (79%)	NS
Illness Severity				
	<i>Not at all Severe</i>	24 (20%)	99 (80%)	NS
	<i>Somewhat Severe</i>	65 (18%)	296 (82%)	NS
	<i>Very Severe</i>	50 (23%)	168 (77%)	NS
	<i>Extremely Severe/ Life-Threatening</i>	11 (35%)	20 (65%)	0.035
Health Facility Variables				
Closest Health Facility Type				
	<i>SHP</i>	106 (20%)	416 (80%)	NS
	<i>HP</i>	39 (23%)	128 (77%)	NS
	<i>PHCC</i>	6 (14%)	39 (86%)	NS
Health Facility Quality Composite Index***				
	<i>Poor</i>	90 (39%)	220 (61%)	0.000
	<i>Fair</i>	37 (18%)	165 (82%)	NS
	<i>Good</i>	24 (11%)	197 (99%)	0.000
Knowledge Variables				
Knowledge Composite Index				
	<i>Poor Knowledge of Government Services</i>	55 (27%)	152 (73%)	0.012
	<i>Fair Knowledge of Government Services</i>	61 (21%)	234 (79%)	NS
	<i>Good Knowledge of Government Services</i>	35 (30%)	197 (70%)	0.012
TOTALS		151 (21%)	583 (79%)	734

* p < 0.05; ** p < 0.01; *** p < 0.001

Table B. R-Squared Overview for Model C.5

Variables Entered (Blockwise)	Cox & Snell R Squared Value	Nagelkerke R Squared Value
Patient Gender	0.000	0.001
Patient Age	0.001	0.001
Household Head Education	0.002	0.003
Household Occupation**	0.028	0.044
Household Wealth Quintile**	0.049	0.077
Number of Children (1-5yo)	0.052	0.082
Household Caste*	0.063	0.100
Ward Level SES Index	0.063	0.100
Objective Quality Index for Nearest Government Health Facility**	0.086	0.136
Distance to Closest Gov Health Facility	0.086	0.138
Closest Gov Health Facility Type	0.088	0.140
Subjective Quality of Nearest Gov Health Facility**	0.102	0.163
Illness Type (ICD Code)	0.106	0.168
Illness Severity Rating	0.109	0.174
Health System Knowledge Composite Index	0.112	0.178

* indicates a significant block at the $p < 0.05$ level

** indicates a significant block at the $p < 0.01$ level

Appendix 7.5a

Final Model D.1: Some Care vs. No Care

Table A. Descriptive overview of Model D.1

Independent Variables		⁽⁰⁾ No. of HHs Using 'No Care' (% Total)	⁽¹⁾ No. of HHs Using 'Some Care' (% Total)	P value
Patient Variables				
	Patient Gender (M)	67(14%)	409 (86%)	NS
Household SES Variables				
	No. of Children (1-5yo)			
	<i>None</i>	90 (18%)	424 (82%)	NS
	<i>1</i>	60 (16%)	312 (84%)	NS
	<i>2</i>	20 (12%)	143 (88%)	NS
	<i>3</i>	5 (29%)	12 (71%)	NS
	<i>4+</i>	0	3 (100%)	NS
Occupation of Head				
	<i>Subsistence Farmer</i>	90 (20%)	364 (80%)	0.009
	<i>Commercial Farmer</i>	36 (15%)	201 (85%)	NS
	<i>Unskilled Labourer</i>	27 (13%)	174 (87%)	NS
	<i>Skilled Labourer</i>	10 (19%)	44 (81%)	NS
	<i>Professional Worker</i>	12 (10%)	111 (90%)	0.035
Education of Head				
	<i>None</i>	112 (19%)	485 (81%)	0.018
	<i>Primary + Lower Secondary</i>	60 (15%)	348 (85%)	NS
	<i>Secondary + Tertiary</i>	3 (5%)	61 (95%)	0.009
Household Caste				
	<i>Brahmin/Chhettri/Thakuri/Madhese</i>	17 (11%)	139 (89%)	0.046
	<i>Tamang/Magar./Gurung</i>	136 (19%)	599 (81%)	0.005
	<i>Chebang/ Biswokarma/ Other Dalit</i>	15 (13%)	97 (87%)	NS
	<i>Newar</i>	7 (11%)	59 (89%)	NS
Wealth Quintiles				
	<i>Quintile 1 – poorest</i>	54 (21%)	207 (79%)	0.030
	<i>Quintile 2</i>	50 (18%)	233 (82%)	NS
	<i>Quintile 3</i>	36 (17%)	175 (83%)	NS
	<i>Quintile 4</i>	25 (17%)	123 (83%)	NS
	<i>Quintile 5 -wealthiest</i>	10 (6%)	156 (94%)	0.000

* p < 0.05; ** p < 0.01; *** p < 0.001

Independent Variables		(0) No. of HHs Using 'No Care'	(1) No. of HHs Using 'Some Care' (% Total)	P Value
Ward Level SES Variables				
Ward-Level Composite Index				
	<i>SES 1 – lowest infrastructure</i>	82	330 (80%)	0.013
	<i>SES 2</i>	38	285 (88%)	0.007
	<i>SES 3 – highest infrastructure</i>	55	279 (84%)	NS
Illness Variables				
Illness Type (ICD Code)*				
	<i>A00-B99</i>	58	386 (87%)	0.014
	<i>J00-J99</i>	56	277 (83%)	NS
	<i>Other Codes</i>	61	231 (79%)	0.014
Illness Severity*				
	<i>Not at all Severe</i>	43	162 (79%)	NS
	<i>Somewhat Severe</i>	106	461 (81%)	0.035
	<i>Very Severe</i>	25	232 (90%)	0.001
	<i>Extremely Severe/ Life-Threatening</i>	1	34 (97%)	0.027
Health Facility Variables				
Closest Health Facility Type				
	<i>SHP</i>	135	629 (82%)	NS
	<i>HP</i>	36	210 (85%)	NS
	<i>PHCC</i>	4	54 (93%)	0.045
Health Facility Quality Composite Index				
	<i>Poor</i>	75	393(84%)	NS
	<i>Fair</i>	53	243 (82%)	NS
	<i>Good</i>	47	257 (93%)	NS
Knowledge Variables				
Knowledge Composite Index**				
	<i>Poor Knowledge of Government Services</i>	67	254 (79%)	0.009
	<i>Fair Knowledge of Government Services</i>	66	351 (84%)	NS
	<i>Good Knowledge of Government Services</i>	42	288 (87%)	0.031

* p < 0.05; ** p < 0.01; *** p < 0.001

Table B. R-Squared Overview for Model D.1

Variables Entered (Blockwise)	Cox & Snell R Squared Value	Nagelkerke R Squared Value
Patient Gender*	0.005	0.009
Patient Age	0.009	0.015
Household Head Education**	0.020	0.034
Household Occupation	0.028	0.047
Household Wealth Quintile	0.037	0.063
Number of Children (1-5yo)	0.038	0.065
Household Caste	0.041	0.069
Ward Level SES Index	0.044	0.075
Objective Quality Index for Nearest Government Health Facility	0.050	0.084
Distance to Closest Gov Health Facility	0.050	0.084
Closest Gov Health Facility Type	0.055	0.093
Subjective Quality of Nearest Gov Health Facility	0.056	0.095
Illness Type (ICD Code)**	0.068	0.114
Illness Severity Rating**	0.095	0.160
Health System Knowledge Composite Index	0.097	0.163

* indicates a significant block at the $p < 0.05$ level

** indicates a significant block at the $p < 0.01$ level

Appendix 7.5b

Final Model D.2: Home Care ONLY vs. Some Outside Care

Table A. Descriptive overview of Model D.2

Independent Variables		⁽⁰⁾ No. of HHs Using Home Care ONLY	⁽¹⁾ No. of HHs Using Outside Care (% Total)	P Values
Patient Variables				
	Patient Gender (M)	137	339 (71%)	NS
Household SES Variables				
	No. of Children (1-5yo)			
	<i>None</i>	164	350 (68%)	NS
	<i>1</i>	113	259 (70%)	NS
	<i>2</i>	45	118 (72%)	NS
	<i>3</i>	8	9 (53%)	NS
	<i>4+</i>	1	2 (67%)	NS
Occupation of Head				
	<i>Subsistence Farmer</i>	162	292 (64%)	0.004
	<i>Commercial Farmer</i>	75	162 (68%)	NS
	<i>Unskilled Labourer</i>	52	149 (74%)	NS
	<i>Skilled Labourer</i>	15	39 (72%)	NS
	<i>Professional Worker</i>	27	96 (78%)	0.022
Education of Head				
	<i>None</i>	196	401 (67%)	NS
	<i>Primary + Lower Secondary</i>	122	286 (70%)	NS
	<i>Secondary + Tertiary</i>	13	31 (70%)	NS
Household Caste				
	<i>Brahmin/Chhettri/Thakuri/Madhesi</i>	35	121 (78%)	0.013
	<i>Tamang/Magar./Gurung</i>	239	496 (67%)	NS
	<i>Chebang/ Biswokarma/ Other Dalit</i>	38	74 (66%)	NS
	<i>Newar</i>	19	47 (71%)	NS
Wealth Quintiles				
	<i>Quintile 1 – poorest</i>	93	168 (64%)	NS
	<i>Quintile 2</i>	103	180 (63%)	0.021
	<i>Quintile 3</i>	67	144 (68%)	NS
	<i>Quintile 4</i>	36	112 (76%)	NS
	<i>Quintile 5 -wealthiest</i>	32	134 (81%)	0.000

* p < 0.05; ** p < 0.01; *** p < 0.001

Independent Variables		(0) No. of HHs Using Home Care ONLY	(1) No. of HHs Using Outside Care (% Total)	P Value
Ward Level SES Variables				
	Ward-Level Composite Index***			
	SES 1 – lowest infrastructure	158	254 (62%)	0.000
	SES 2	78	245 (76%)	0.002
	SES 3 – highest infrastructure	95	239 (72%)	NS
Illness Variables				
	Illness Type (ICD Code)			
	A00-B99	133	311 (70%)	NS
	J00-J99	113	220 (60%)	NS
	Other Codes	85	207 (64%)	NS
	Illness Severity***			
	Not at all Severe	83	122 (60%)	0.001
	Somewhat Severe	203	364 (64%)	0.000
	Very Severe	40	217 (84%)	0.000
	Extremely Severe/ Life-Threatening	4	31 (89%)	0.011
Health Facility Variables				
	Closest Health Facility Type			
	SHP	240	524 (69%)	NS
	HP	78	168 (68%)	NS
	PHCC	13	45 (78%)	NS
	Health Facility Quality Composite Index			
	Poor	155	313 (67%)	NS
	Fair	94	202 (68%)	NS
	Good	82	222 (73%)	NS
Knowledge Variables				
	Knowledge Composite Index			
	Poor Knowledge of Government Services	113	208 (65%)	0.046
	Fair Knowledge of Government Services	119	298 (71%)	NS
	Good Knowledge of Government Services	98	232 (70%)	NS

* p < 0.05; ** p < 0.01; *** p < 0.001

Table B. R-Squared Overview for Model D.2

Variables Entered (Blockwise)	Cox & Snell R Squared Value	Nagelkerke R Squared Value
Patient Gender	0.003	0.005
Patient Age*	0.009	0.013
Household Head Education	0.013	0.018
Household Occupation*	0.024	0.033
Household Wealth Quintile**	0.038	0.054
Number of Children (1-5yo)	0.038	0.054
Household Caste	0.042	0.059
Ward Level SES Index	0.047	0.067
Objective Quality Index for Nearest Government Health Facility	0.049	0.069
Distance to Closest Gov Health Facility	0.052	0.073
Closest Gov Health Facility Type	0.057	0.080
Subjective Quality of Nearest Gov Health Facility	0.057	0.080
Illness Type (ICD Code)	0.062	0.088
Illness Severity Rating**	0.116	0.163
Health System Knowledge Composite Index	0.117	0.165

* indicates a significant block at the $p < 0.05$ level

** indicates a significant block at the $p < 0.01$ level

Appendix 7.5c

Final Model D.3: Private vs. Government Care (first)

Table A. Descriptive overview of Model D.3

Independent Variables		⁽⁰⁾ No. of HHs Using Government	⁽¹⁾ No. of HHs Using Private (% Total)	P Values
Patient Variables				
	Patient Gender (M)	196	48 (20%)	NS
Household SES Variables				
	No. of Children (1-5yo)			
	<i>None</i>	174	46 (21%)	NS
	<i>1</i>	140	43 (23%)	NS
	<i>2</i>	66	12 (15%)	NS
	<i>3</i>	7	0	NS
	<i>4+</i>	1	0	NS
Occupation of Head				
	<i>Subsistence Farmer</i>	164	35 (18%)	NS
	<i>Commercial Farmer</i>	85	15 (15%)	NS
	<i>Unskilled Labourer</i>	77	31 (29%)	0.019
	<i>Skilled Labourer</i>	17	6 (24%)	NS
	<i>Professional Worker</i>	45	14	NS
Education of Head				
	<i>None</i>	215	50 (19%)	NS
	<i>Primary + Lower Secondary</i>	150	42 (22%)	NS
	<i>Secondary + Tertiary</i>	23	9 (28%)	NS
Household Caste				
	<i>Brahmin/Chhetri/Thakuri/Madhesi</i>	60	19 (24%)	NS
	<i>Tamang/Magar./Gurung</i>	253	73 (22%)	NS
	<i>Chebang/ Biswokarma/ Other Dalit</i>	51	6 (11%)	0.044
	<i>Newar</i>	24	3 (11%)	NS
Wealth Quintiles				
	<i>Quintile 1 – poorest</i>	97	21 (18%)	NS
	<i>Quintile 2</i>	93	24 (21%)	NS
	<i>Quintile 3</i>	74	13 (15%)	NS
	<i>Quintile 4</i>	67	14 (17%)	NS
	<i>Quintile 5 -wealthiest</i>	57	29 (34%)	0.001

* p < 0.05; ** p < 0.01; *** p < 0.001

Independent Variables		(0) No. of HHs Using Government	(1) No. of HHs Using Private (% Total)	P Values
Ward Level SES Variables				
	Ward-Level Composite Index*			
	SES 1 – lowest infrastructure	147	21 (13%)	0.001
	SES 2	119	44 (27%)	0.014
	SES 3 – highest infrastructure	122	36 (23%)	NS
Illness Variables				
	Illness Type (ICD Code)*			
	A00-B99	182	34 (16%)	0.017
	J00-J99	111	31 (22%)	NS
	Other Codes	95	36 (27%)	0.024
	Illness Severity**			
	Not at all Severe	64	16 (20%)	NS
	Somewhat Severe	205	35 (15%)	0.002
	Very Severe	98	44 (31%)	0.000
	Extremely Severe/ Life-Threatening	20	4 (17%)	NS
Health Facility Variables				
	Closest Health Facility Type			
	SHP	278	79 (22%)	NS
	HP	94	18 (16%)	NS
	PHCC	16	4 (17%)	NS
	Health Facility Quality Composite Index*			
	Poor	185	35 (16%)	0.019
	Fair	90	35 (28%)	0.019
	Good	113	31 (22%)	NS
Knowledge Variables				
	Knowledge Composite Index			
	Poor Knowledge of Government Services	106	24 (18%)	NS
	Fair Knowledge of Government Services	146	44 (23%)	NS
	Good Knowledge of Government Services	136	33 (20%)	NS

* p < 0.05; ** p < 0.01; *** p < 0.001

Table B. R-Squared Overview for Model D.3

Variables Entered (Blockwise)	Cox & Snell R Squared Value	Nagelkerke R Squared Value
Patient Gender	0.001	0.002
Patient Age**	0.041	0.057
Household Head Education**	0.089	0.122
Household Occupation**	0.144	0.198
Household Wealth Quintile*	0.174	0.240
Number of Children (1-5yo)	0.175	0.241
Household Caste	0.179	0.246
Ward Level SES Index	0.183	0.252
Objective Quality Index for Nearest Government Health Facility**	0.213	0.293
Distance to Closest Gov Health Facility	0.213	0.293
Closest Gov Health Facility Type	0.223	0.307
Subjective Quality of Nearest Gov Health Facility	0.223	0.307
Illness Type (ICD Code)**	0.266	0.365
Illness Severity Rating*	0.284	0.391
Health System Knowledge Composite Index	0.293	0.403

* indicates a significant block at the $p < 0.05$ level

** indicates a significant block at the $p < 0.01$ level

Appendix 7.5d

Final Model D.4 Facility-Based Government Care vs. FCHV Care

Table A. Descriptive overview of Model D.4

Independent Variables		⁽⁰⁾ No. of HHs Using FCHV	⁽¹⁾ No. of HHs Using Facility (% Total)	P Values
Patient Variables				
	Patient Gender (M)	28	168 (85%)	NS
Household SES Variables				
	No. of Children (1-5yo)			
	None	23	151 (87%)	NS
	1	21	119 (85%)	NS
	2	14	52 (79%)	NS
	3	1	6 (86%)	NS
	4+	0	1	NS
Occupation of Head				
	Subsistence Farmer	28	136 (82%)	NS
	Commercial Farmer	12	73 (86%)	NS
	Unskilled Labourer	13	64 (83%)	NS
	Skilled Labourer	1	16 (94%)	NS
	Professional Worker	5	40 (89%)	NS
Education of Head*				
	None	42	173 (80%)	0.008
	Primary + Lower Secondary	16	134 (89%)	0.048
	Secondary + Tertiary	1	22 (96%)	NS
Household Caste*				
	Brahmin/Chhetri/Thakuri/Madhesi	5	55 (92%)	NS
	Tamang/Magar./Gurung	50	203 (80%)	0.001
	Chebang/ Biswokarma/ Other Dalit	3	48 (94%)	0.047
	Newar	1	23 (96%)	NS
Wealth Quintiles				
	Quintile 1 – poorest	18	79 (81%)	NS
	Quintile 2	15	78 (84%)	NS
	Quintile 3	9	65 (88%)	NS
	Quintile 4	13	54 (81%)	NS
	Quintile 5 -wealthiest	4	53 (93%)	NS

* p < 0.05; ** p < 0.01; *** p < 0.001

Independent Variables		(0) No. of HHs Using FCHV	(1) No. of HHs Using Facility (% Total)	P Values
Ward Level SES Variables				
	Ward-Level Composite Index			
	SES 1 – lowest infrastructure	27	120 (82%)	NS
	SES 2	19	100 (84%)	NS
	SES 3 – highest infrastructure	13	109 (89%)	NS
Illness Variables				
	Illness Type (ICD Code)			
	A00-B99	34	148 (81%)	NS
	J00-J99	17	94 (85%)	NS
	Other Codes	8	87 (92%)	0.034
	Illness Severity*			
	Not at all Severe	17	47 (73%)	0.006
	Somewhat Severe	31	174 (85%)	NS
	Very Severe	11	87 (89%)	NS
	Extremely Severe/ Life-Threatening	0	20	NS
Health Facility Variables				
	Closest Health Facility Type			
	SHP	44	234 (84%)	NS
	HP	13	81 (86%)	NS
	PHCC	2	14 (88%)	NS
	Health Facility Quality Composite Index			
	Poor	31	154 (83%)	NS
	Fair	14	76 (84%)	NS
	Good	14	99 (88%)	NS
Knowledge Variables				
	Knowledge Composite Index			
	Poor Knowledge of Government Services	21	85 (80%)	NS
	Fair Knowledge of Government Services	20	126 (86%)	NS
	Good Knowledge of Government Services	18	118 (87%)	NS

* p < 0.05; ** p < 0.01; *** p < 0.001

Table B. R-Squared Overview for Model D.4

Variables Entered (Blockwise)	Cox & Snell R Squared Value	Nagelkerke R Squared Value
Patient Gender*	0.011	0.016
Patient Age	0.018	0.027
Household Head Education	0.026	0.039
Household Occupation*	0.047	0.071
Household Wealth Quintile	0.061	0.091
Number of Children (1-5yo)	0.062	0.092
Household Caste	0.071	0.105
Ward Level SES Index	0.072	0.107
Objective Quality Index for Nearest Government Health Facility*	0.087	0.129
Distance to Closest Gov Health Facility	0.088	0.131
Closest Gov Health Facility Type*	0.104	0.155
Subjective Quality of Nearest Gov Health Facility	0.108	0.161
Illness Type (ICD Code)**	0.130	0.193
Illness Severity Rating	0.139	0.206
Health System Knowledge Composite Index	0.139	0.207

* indicates a significant block at the $p < 0.05$ level

** indicates a significant block at the $p < 0.01$ level

Appendix 7.5e

Final Model D.5 Allopathic Ever

Table A. R-Squared Overview for Model D.5

Variables Entered (Blockwise)	Cox & Snell R Squared Value	Nagelkerke R Squared Value
Patient Gender*	0.011	0.015
Patient Age	0.026	0.035
Household Head Education	0.027	0.036
Household Occupation*	0.034	0.046
Household Wealth Quintile	0.044	0.059
Number of Children (1-5yo)	0.045	0.060
Household Caste	0.049	0.066
Ward Level SES Index	0.052	0.069
Objective Quality Index for Nearest Government Health Facility*	0.056	0.075
Distance to Closest Gov Health Facility	0.063	0.085
Closest Gov Health Facility Type*	0.066	0.088
Subjective Quality of Nearest Gov Health Facility	0.077	0.103
Illness Type (ICD Code)**	0.083	0.110
Illness Severity Rating	0.105	0.141
Health System Knowledge Composite Index	0.106	0.142

* indicates a significant block at the $p < 0.05$ level

** indicates a significant block at the $p < 0.01$ level

Appendix 7.5f

Final Model E.1 One Provider vs. More than One Provider Used

Table A. Descriptive overview of Model E.1

Independent Variables		⁽⁰⁾ No. of HHs One Provider Only	⁽¹⁾ No. of HHs Using More than One Provider (% Total)	P Values
Patient Variables				
	Patient Gender (M)	207	131 (39%)	NS
Household SES Variables				
	No. of Children (1-5yo)*			
	None	246	106 (30%)	0.014
	1	154	105 (41%)	NS
	2	69	48 (41%)	NS
	3	6	3 (33%)	NS
	4+	0	2	NS
Occupation of Head				
	Subsistence Farmer	188	104 (36%)	NS
	Commercial Farmer	101	61 (38%)	NS
	Unskilled Labourer	94	57 (38%)	NS
	Skilled Labourer	27	11 (29%)	NS
	Professional Worker	65	31 (32%)	NS
Education of Head				
	None	257	145 (36%)	NS
	Primary + Lower Secondary	188	98 (34%)	NS
	Secondary + Tertiary	30	21 (41%)	NS
Household Caste				
	Brahmin/Chhetri/Thakuri/Madhesi	82	38 (32%)	NS
	Tamang/Magar./Gurung	318	179 (36%)	NS
	Chebang/ Biswokarma/ Other Dalit	44	30 (41%)	NS
	Newar	31	17 (35%)	NS
Wealth Quintiles				
	Quintile 1 – poorest	104	65 (38%)	NS
	Quintile 2	117	63 (35%)	NS
	Quintile 3	91	53 (37%)	NS
	Quintile 4	73	39 (35%)	NS
	Quintile 5 -wealthiest	90	44 (33%)	NS

* p < 0.05; ** p < 0.01; *** p < 0.001

Independent Variables		⁽⁰⁾ No. of HHs One Provider Only	⁽¹⁾ No. of HHs Using More than One Provider (% Total)	P Values
Ward Level SES Variables				
	Ward-Level Composite Index			
	<i>SES 1 – lowest infrastructure</i>	160	94 (37%)	NS
	<i>SES 2</i>	161	84 (34%)	NS
	<i>SES 3 – highest infrastructure</i>	154	86 (36%)	NS
Illness Variables				
	Illness Type (ICD Code)			
	<i>A00-B99</i>	185	125 (40%)	0.028
	<i>J00-J99</i>	151	69 (31%)	NS
	<i>Other Codes</i>	138	70 (34%)	NS
Illness Severity*				
	<i>Not at all Severe</i>	80	42 (34%)	NS
	<i>Somewhat Severe</i>	248	116 (32%)	0.032
	<i>Very Severe</i>	130	87 (40%)	NS
	<i>Extremely Severe/ Life-Threatening</i>	14	17 (55%)	0.023
Health Facility Variables				
	Closest Health Facility Type			
	<i>SHP</i>	341	184 (35%)	NS
	<i>HP</i>	103	64 (38%)	NS
	<i>PHCC</i>	30	16 (35%)	NS
Health Facility Quality Composite Index				
	<i>Poor</i>	197	116 (37%)	NS
	<i>Fair</i>	143	58 (29%)	0.016
	<i>Good</i>	134	90 (40%)	NS
Knowledge Variables				
	Knowledge Composite Index			
	<i>Poor Knowledge of Government Services</i>	124	84 (40%)	NS
	<i>Fair Knowledge of Government Services</i>	193	106 (35%)	NS
	<i>Good Knowledge of Government Services</i>	158	74 (32%)	NS

* p < 0.05; ** p < 0.01; *** p < 0.001

Table B. R-Squared Overview for Model E.1

Variables Entered (Blockwise)	Cox & Snell R Squared Value	Nagelkerke R Squared Value
Patient Gender	0.001	0.001
Patient Age	0.023	0.031
Household Head Education	0.025	0.034
Household Occupation*	0.027	0.037
Household Wealth Quintile**	0.029	0.039
Number of Children (1-5yo)	0.033	0.045
Household Caste	0.035	0.048
Ward Level SES Index	0.035	0.048
Objective Quality Index for Nearest Government Health Facility*	0.045	0.061
Distance to Closest Gov Health Facility	0.045	0.061
Closest Gov Health Facility Type	0.047	0.064
Subjective Quality of Nearest Gov Health Facility**	0.050	0.068
Illness Type (ICD Code)	0.055	0.075
Illness Severity Rating	0.070	0.096
Health System Knowledge Composite Index	0.077	0.105

* indicates a significant block at the $p < 0.05$ level

** indicates a significant block at the $p < 0.01$ level

Appendix 7.6a

Final Model F.1 Care In Own VDC vs. Other VDC

Table A. Descriptive overview of Model F.1

Independent Variables		⁽⁰⁾ No. of HHs Using Care in Same VDC	⁽¹⁾ No. of HHs Using Care in Other VDC (% Total)	P Values
Patient Variables				
	Patient Gender (M)	243	96 (28%)	NS
Household SES Variables				
	No. of Children (1-5yo)*			
	<i>None</i>	243	110 (31%)	NS
	<i>1</i>	186	73 (28%)	NS
	<i>2</i>	90	28 (24%)	NS
	<i>3</i>	7	2 (22%)	NS
	<i>4+</i>	1	1 (50%)	NS
Occupation of Head				
	<i>Subsistence Farmer</i>	226	66 (23%)	0.002
	<i>Commercial Farmer</i>	117	45 (28%)	NS
	<i>Unskilled Labourer</i>	93	59 (39%)	0.002
	<i>Skilled Labourer</i>	29	10 (26%)	NS
	<i>Professional Worker</i>	62	34 (35%)	NS
Education of Head				
	<i>None</i>	289	114 (28%)	NS
	<i>Primary + Lower Secondary</i>	204	83 (29%)	NS
	<i>Secondary + Tertiary</i>	34	17 (33%)	NS
Household Caste*				
	<i>Brahmin/Chhetri/Thakuri/Madhesi</i>	92	29 (24%)	NS
	<i>Tamang/Magar./Gurung</i>	336	161 (32%)	0.003
	<i>Chebang/ Biswokarma/ Other Dalit</i>	66	9 (12%)	0.001
	<i>Newar</i>	33	15 (31%)	NS
Wealth Quintiles				
	<i>Quintile 1 – poorest</i>	121	48 (28%)	NS
	<i>Quintile 2</i>	131	50 (28%)	NS
	<i>Quintile 3</i>	110	34 (24%)	NS
	<i>Quintile 4</i>	87	26 (23%)	NS
	<i>Quintile 5 -wealthiest</i>	78	56 (42%)	0.000

* p < 0.05; ** p < 0.01; *** p < 0.001

Independent Variables		(0) No. of HHs One Provider Only	(1) No. of HHs Using More than One Provider (% Total)	P Values
Ward Level SES Variables				
Ward-Level Composite Index				
	<i>SES 1 – lowest infrastructure</i>	184	71 (28%)	NS
	<i>SES 2</i>	170	76 (31%)	NS
	<i>SES 3 – highest infrastructure</i>	173	67 (28%)	NS
Illness Variables				
Illness Type (ICD Code)				
	<i>A00-B99</i>	237	74 (24%)	0.008
	<i>J00-J99</i>	165	55 (25%)	NS
	<i>Other Codes</i>	123	85 (41%)	0.000
Illness Severity*				
	<i>Not at all Severe</i>	90	32 (26%)	NS
	<i>Somewhat Severe</i>	274	90 (25%)	0.015
	<i>Very Severe</i>	141	77 (35%)	0.012
	<i>Extremely Severe/ Life-Threatening</i>	18	13 (42%)	NS
Health Facility Variables				
Closest Health Facility Type				
	<i>SHP</i>	377	148 (28%)	NS
	<i>HP</i>	120	49 (29%)	NS
	<i>PHCC</i>	29	17 (37%)	NS
Health Facility Quality Composite Index**				
	<i>Poor</i>	261	53 (17%)	0.000
	<i>Fair</i>	115	87 (43%)	0.000
	<i>Good</i>	150	74 (37%)	NS
Knowledge Variables				
Knowledge Composite Index				
	<i>Poor Knowledge of Government Services</i>	144	64 (31%)	NS
	<i>Fair Knowledge of Government Services</i>	224	75 (35%)	NS
	<i>Good Knowledge of Government Services</i>	158	75 (32%)	NS

* p < 0.05; ** p < 0.01; *** p < 0.001

Table B. R-Squared Overview for Model F.1

Variables Entered (Blockwise)	Cox & Snell R Squared Value	Nagelkerke R Squared Value
Patient Gender	0.001	0.001
Patient Age*	0.007	0.010
Household Head Education	0.008	0.012
Household Occupation*	0.025	0.036
Household Wealth Quintile	0.038	0.055
Number of Children (1-5yo)	0.039	0.055
Household Caste**	0.059	0.084
Ward Level SES Index	0.060	0.086
Objective Quality Index for Nearest Government Health Facility**	0.099	0.142
Distance to Closest Gov Health Facility**	0.106	0.157
Closest Gov Health Facility Type	0.109	0.157
Subjective Quality of Nearest Gov Health Facility	0.110	0.158
Illness Type (ICD Code)**	0.126	0.180
Illness Severity Rating**	0.141	0.202
Health System Knowledge Composite Index	0.144	0.206

* indicates a significant block at the $p < 0.05$ level

** indicates a significant block at the $p < 0.01$ level

Appendix 7.6b

Final Model F.2 Care In Own Ward vs. Other Ward

Table A. Descriptive overview of Model F.2

Independent Variables		⁽⁰⁾ No. of HHs Using Care in Same Ward	⁽¹⁾ No. of HHs Using Care in Other Ward (% Total)	P Values
Patient Variables				
	Patient Gender (M)*	235	104 (31%)	0.031
Household SES Variables				
	No. of Children (1-5yo)*			
	<i>None</i>	231	122 (35%)	NS
	<i>1</i>	168	91 (35%)	NS
	<i>2</i>	73	45 (38%)	NS
	<i>3</i>	8	1 (11%)	NS
	<i>4+</i>	2	0	NS
Occupation of Head				
	<i>Subsistence Farmer</i>	177	115 (39%)	0.041
	<i>Commercial Farmer</i>	115	47 (29%)	NS
	<i>Unskilled Labourer</i>	109	43 (28%)	NS
	<i>Skilled Labourer</i>	22	17 (44%)	NS
	<i>Professional Worker</i>	59	37 (39%)	NS
Education of Head				
	<i>None</i>	255	148 (37%)	NS
	<i>Primary + Lower Secondary</i>	191	96 (33%)	NS
	<i>Secondary + Tertiary</i>	36	15 (29%)	NS
Household Caste*				
	<i>Brahmin/Chhetri/Thakuri/ Madhesi</i>	72	49 (40%)	NS
	<i>Tamang/Magar./Gurung</i>	341	156 (31%)	0.004
	<i>Chebang/ Biswokarma/ Other Dalit</i>	41	34 (45%)	0.047
	<i>Newar</i>	28	20 (42%)	NS
Wealth Quintiles				
	<i>Quintile 1 – poorest</i>	109	60 (36%)	NS
	<i>Quintile 2</i>	108	73 (40%)	NS
	<i>Quintile 3</i>	96	48 (33%)	NS
	<i>Quintile 4</i>	73	40 (35%)	NS
	<i>Quintile 5 -wealthiest</i>	96	38 (28%)	NS

* p < 0.05; ** p < 0.01; *** p < 0.001

Independent Variables		(0) No. of HHs Using Care in Same Ward	(1) No. of HHs Using Care in Other Ward (% Total)	P Values
Ward Level SES Variables				
	Ward-Level Composite Index**			
	SES 1 – lowest infrastructure	175	80 (31%)	NS
	SES 2	193	53 (22%)	0.000
	SES 3 – highest infrastructure	114	126 (53%)	0.000
Illness Variables				
	Illness Type (ICD Code)*			
	A00-B99	184	127 (41%)	0.003
	J00-J99	149	71 (32%)	NS
	Other Codes	149	59 (28%)	0.022
	Illness Severity*			
	Not at all Severe	72	50 (41%)	NS
	Somewhat Severe	232	132 (36%)	NS
	Very Severe	151	67 (31%)	NS
	Extremely Severe/ Life-Threatening	23	8 (26%)	NS
Health Facility Variables				
	Closest Health Facility Type			
	SHP	348	177 (34%)	NS
	HP	102	67 (40%)	NS
	PHCC	31	15 (33%)	NS
	Health Facility Quality Composite Index			
	Poor	169	145 (46%)	0.000
	Fair	146	56 (28%)	0.011
	Good	166	58 (26%)	0.001
Knowledge Variables				
	Knowledge Composite Index			
	Poor Knowledge of Government Services	126	82 (39%)	NS
	Fair Knowledge of Government Services	198	101 (34%)	NS
	Good Knowledge of Government Services	158	75 (32%)	NS

* p < 0.05; ** p < 0.01; *** p < 0.001

Table B. R-Squared Overview for Model F.2

Variables Entered (Blockwise)	Cox & Snell R Squared Value	Nagelkerke R Squared Value
Patient Gender	0.003	0.004
Patient Age	0.004	0.006
Household Head Education	0.005	0.008
Household Occupation*	0.022	0.030
Household Wealth Quintile	0.026	0.036
Number of Children (1-5yo)	0.028	0.038
Household Caste**	0.044	0.062
Ward Level SES Index**	0.128	0.177
Objective Quality Index for Nearest Government Health Facility**	0.150	0.207
Distance to Closest Gov Health Facility	0.150	0.208
Closest Gov Health Facility Type	0.156	0.216
Subjective Quality of Nearest Gov Health Facility**	0.166	0.229
Illness Type (ICD Code)**	0.178	0.247
Illness Severity Rating**	0.193	0.267
Health System Knowledge Composite Index	0.195	0.271

* indicates a significant block at the $p < 0.05$ level

** indicates a significant block at the $p < 0.01$ level

Appendix 7.7

Final Regression Models for All Models which were Excluded from the Final Results (“G” Models)

G.1 Home Care First (0) vs. Outside Care First (1)

Explanatory Variables		Adjusted OR (95% CI)
Patient Variables		
	Patient Gender (M)	1.197 (0.88-1.64)
	Patient Age	0.996 (0.99-1.00)
Household SES Variables		
	No. of Children (1-5yo)	1.154 (0.94-1.42)
	Occupation of Head	
	Subsistence Farmer	----
	Commercial Farmer	0.921 (0.61-1.39)
	Unskilled Laborer	1.101 (0.71-1.72)
	Skilled Laborer	1.846 (0.86-3.99)
	Professional Worker	1.306 (0.74-2.30)
	Education of Head	
	None (REF)	----
	Primary & Lower Secondary	1.159 (0.84-1.61)
	Upper Secondary +	0.389 (0.20-0.77)**
	Household Caste	
	Brahmin/Chhettri/ Madehsi/Thakuri	----
	Tamang/Magar/Gurung	1.343 (0.85-2.13)
	Chepang/Biswokarma/ Other Dalit	0.713 (0.38-1.32)
	Newar	0.572 (0.28-1.19)
	Wealth Quintiles	
	Quintile 1 – poorest (REF)	----
	Quintile 2	0.675 (0.44-1.04)
	Quintile 3	0.709 (0.43-1.17)
	Quintile 4	1.002 (0.55-1.81)
	Quintile 5 -wealthiest	0.966 (0.52-1.81)
Ward Level SES Variables		
	Ward-Level Composite Index	
	SES 1 – lowest infrastructure (REF)	----
	SES 2	1.762 (1.15-2.70)
	SES 3 – highest infrastructure	1.325 (0.86-2.04)
Illness Variables		
	Illness Type (ICD Code)	
	A00-B99	----
	J00-J99	1.397 (0.90-2.18)
	Other Codes	1.602 (1.01-2.53)*

Illness Severity		
	Not at all Severe	----
	Somewhat Severe	2.431 (1.58-3.75)**
	Very Severe	3.292 (2.01-5.39)**
	Extremely Severe/ Life-Threatening	1.537 (0.65-3.66)
Health Facility Variables		
	Gov. Health Facility Distance	0.908 (0.78-1.06)
	Closest Health Facility Type	
	SHP	----
	HP	1.014 (0.66-1.55)
	PHCC	1.312 (0.60-2.89)
	Health Facility Quality Composite Index	
	Poor (REF)	----
	Fair	1.894 (1.23-2.92)**
	Good	2.141 (1.34-3.43)**
	Subjective Health Facility Quality Rating	0.908 (0.78-1.06)
Knowledge Variables		
	Knowledge Composite Index	
	Poor Knowledge of Government Services	----
	Fair Knowledge of Government Services	1.067 (0.72-1.57)
	Good Knowledge of Government Services	0.940 (0.62-1.42)

* p<0.05; **p<0.01

G.2 Allopathic (1) vs. Traditional Healer Care (0)

Explanatory Variables		Adjusted OR (95% CI)
Patient Variables		
	Patient Gender (M)	1.530 (1.04-2.25)*
	Patient Age	1.012 (1.00-1.02)
Household SES Variables		
	No. of Children (1-5yo)	0.923 (0.72-1.18)
	Occupation of Head	
	Subsistence Farmer	----
	Commercial Farmer	1.336 (0.80-2.23)
	Unskilled Laborer	0.862 (0.51-1.45)
	Skilled Laborer	0.572 (0.25-1.33)
	Professional Worker	1.226 (0.59-2.54)
	Education of Head	
	None (REF)	----
	Primary & Lower Secondary	1.096 (0.74-1.62)
	Upper Secondary +	1.725 (0.64-4.65)
	Household Caste	
	Brahmin/Chhettri/ Madehsi/Thakuri	----
	Tamang/Magar/Gurung	0.657 (0.37-1.17)
	Chebang/Biswokarma/ Other Dalit	1.318 (0.61-2.84)
	Newar	0.885 (0.32-2.44)
	Wealth Quintiles	
	Quintile 1 – poorest (REF)	----
	Quintile 2	0.771 (0.47-1.28)
	Quintile 3	1.068 (0.60-1.91)
	Quintile 4	1.976 (0.97-4.02)
	Quintile 5 -wealthiest	1.869 (0.87-3.99)
Ward Level SES Variables		
	Ward-Level Composite Index	
	SES 1 – lowest infrastructure (REF)	----
	SES 2	1.003 (0.59-1.70)
	SES 3 – highest infrastructure	0.822 (0.48-1.40)
Illness Variables		
	Illness Type (ICD Code)	
	A00-B99	----
	J00-J99	1.425 (0.90-2.26)
	Other Codes	0.879 (0.54-1.44)

	Illness Severity	
	Not at all Severe	----
	Somewhat Severe	1.486 (0.85-2.61)
	Very Severe	1.106 (0.61-2.02)
	Extremely Severe/ Life-Threatening	2.475 (0.88-6.97)
	Health Facility Variables	
	Gov. Health Facility Distance	0.967 (0.81-1.16)
	Closest Health Facility Type	
	SHP	----
	HP	0.963 (0.58-1.59)
	PHCC	0.478 (0.17-1.34)
	Health Facility Quality Composite Index	
	Poor (REF)	----
	Fair	1.026 (0.61-1.73)
	Good	1.649 (0.92-2.95)
	Subjective Health Facility Quality Rating	1.234 (0.84-1.82)
	Knowledge Variables	
	Knowledge Composite Index	
	Poor Knowledge of Government Services	----
	Fair Knowledge of Government Services	1.420 (0.90-2.24)
	Good Knowledge of Government Services	2.346 (1.40-3.94)*

* p<0.05; **p<0.01

G.3 Allopathic/Pharmacy (1) vs. TH (0) [First Choice Only]

Explanatory Variables		Adjusted OR (95% CI)
Patient Variables		
	Patient Gender (M)	1.388 (0.96-2.01)
	Patient Age	1.014 (1.00-1.02)**
Household SES Variables		
	No. of Children (1-5yo)	0.923 (0.73-1.17)
Occupation of Head		
	Subsistence Farmer	----
	Commercial Farmer	1.455 (0.89-2.37)
	Unskilled Laborer	0.950 (0.58-1.56)
	Skilled Laborer	0.680 (0.31-1.49)
	Professional Worker	1.408 (0.70-2.85)
Education of Head		
	None (REF)	----
	Primary & Lower Secondary	1.140 (0.78-1.66)
	Upper Secondary +	1.912 (0.74-4.96)
Household Caste		
	Brahmin/Chhettri/ Madehsi/Thakuri	----
	Tamang/Magar/Gurung	0.690 (0.40-1.21)
	Chebang/Biswokarma/ Other Dalit	1.275 (0.60-2.71)
	Newar	0.900 (0.35-2.34)
Wealth Quintiles		
	Quintile 1 – poorest (REF)	----
	Quintile 2	0.822 (0.51-1.33)
	Quintile 3	1.135 (0.65-1.97)
	Quintile 4	1.960 (0.99-3.86)
	Quintile 5 -wealthiest	1.871 (0.91-3.84)
Ward Level SES Variables		
Ward-Level Composite Index		
	SES 1 – lowest infrastructure (REF)	----
	SES 2	1.007 (0.61-1.66)
	SES 3 – highest infrastructure	0.813 (0.49-1.35)
Illness Variables		
Illness Type (ICD Code)		
	A00-B99	----
	J00-J99	1.757 (1.13-2.72)
	Other Codes	0.888 (0.55-1.42)
Illness Severity		
	Not at all Severe	----
	Somewhat Severe	1.721 (1.01-2.94)*
	Very Severe	1.271 (0.72-2.24)
	Extremely Severe/ Life-Threatening	2.306 (0.83-6.40)

Health Facility Variables			
	Gov. Health Facility Distance		0.973 (0.82-1.16)
	Closest Health Facility Type		
		SHP	----
		HP	1.093 (0.68-1.76)
		PHCC	0.761 (0.31-1.90)
	Health Facility Quality Composite Index		
		Poor (REF)	----
		Fair	1.176 (0.72-1.93)
		Good	2.060 (1.18-3.59)*
	Subjective Health Facility Quality Rating		1.180 (0.81-1.72)
Knowledge Variables			
	Knowledge Composite Index		
		Poor Knowledge of Government Services	----
		Fair Knowledge of Government Services	1.381 (0.90-2.12)
		Good Knowledge of Government Services	2.141 (1.31-3.51)**

* p<0.05; **p<0.01

G.4 Allopathic Only (1) vs. TH Only (0)

Explanatory Variables		Adjusted OR (95% CI)
Patient Variables		
	Patient Gender (M)	1.679 (0.94-3.01)
	Patient Age	1.00 (0.99-1.02)
Household SES Variables		
	No. of Children (1-5yo)	1.343 (0.89-2.03)
Occupation of Head		
	Subsistence Farmer	----
	Commercial Farmer	0.922 (0.45-1.88)
	Unskilled Laborer	1.056 (0.45-2.47)
	Skilled Laborer	0.257 (0.08-0.83)*
	Professional Worker	1.139 (0.36-3.66)
Education of Head		
	None (REF)	----
	Primary & Lower Secondary	1.078 (0.60-1.94)
	Upper Secondary +	2.419 (0.41-14.16)
Household Caste		
	Brahmin/Chhettri/ Madehsi/Thakuri	----
	Tamang/Magar/Gurung	0.705 (0.30-1.65)
	Chebang/Biswokarma/ Other Dalit	2.328 (0.67-8.04)
	Newar	1.421 (0.24-8.60)
Wealth Quintiles		
	Quintile 1 – poorest (REF)	----
	Quintile 2	0.594 (0.28-1.25)
	Quintile 3	0.663 (0.28-1.59)
	Quintile 4	1.466 (0.51-4.21)
	Quintile 5 -wealthiest	2.005 (0.52-7.70)
Ward Level SES Variables		
Ward-Level Composite Index		
	SES 1 – lowest infrastructure (REF)	----
	SES 2	0.897 (0.40-2.00)
	SES 3 – highest infrastructure	0.988 (0.43-2.26)
Illness Variables		
Illness Type (ICD Code)		
	A00-B99	----
	J00-J99	2.172 (1.03-4.58)*
	Other Codes	1.033 (0.52-2.06)
Illness Severity		
	Not at all Severe	----
	Somewhat Severe	1.497 (0.66-3.38)
	Very Severe	0.867 (0.36-2.11)
	Extremely Severe/ Life-Threatening	2.869 (0.45-18.48)

Health Facility Variables			
	Gov. Health Facility Distance		1.034 (0.78-1.36)
	Closest Health Facility Type		
	SHP		----
	HP		1.022 (0.49-2.15)
	PHCC		0.610 (0.11-3.46)
	Health Facility Quality Composite Index		
	Poor (REF)		----
	Fair		1.497 (0.72-3.13)
	Good		2.592 (1.01-6.64)*
	Subjective Health Facility Quality Rating		2.552 (1.38-4.73)**
Knowledge Variables			
	Knowledge Composite Index		
	Poor Knowledge of Government Services		----
	Fair Knowledge of Government Services		1.672 (0.84-3.34)
	Good Knowledge of Government Services		2.221 (1.03-4.80)*

* p<0.05; **p<0.01

G.5 Allopathic/Pharmacy (1) vs. TH/Other only (0)

Explanatory Variables		Adjusted OR (95% CI)
Patient Variables		
	Patient Gender (M)	1.614 (0.92-2.84)
	Patient Age	1.002 (0.99-1.02)
Household SES Variables		
	No. of Children (1-5yo)	1.276 (0.88-1.86)
Occupation of Head		
	Subsistence Farmer	----
	Commercial Farmer	1.207 (0.62-2.35)
	Unskilled Laborer	1.334 (0.61-2.93)
	Skilled Laborer	0.323 (0.11-0.96)*
	Professional Worker	1.554 (0.51-4.72)
Education of Head		
	None (REF)	----
	Primary & Lower Secondary	1.044 (0.60-1.82)
	Upper Secondary +	2.295 (0.44-12.11)
Household Caste		
	Brahmin/Chhettri/ Madehsi/Thakuri	----
	Tamang/Magar/Gurung	0.753 (0.34-1.67)
	Chebang/Biswokarma/ Other Dalit	2.392 (0.72-7.93)
	Newar	1.372 (0.25-7.44)
Wealth Quintiles		
	Quintile 1 – poorest (REF)	----
	Quintile 2	0.686 (0.34-1.38)
	Quintile 3	0.823 (0.37-1.84)
	Quintile 4	1.656 (0.61-4.51)
	Quintile 5 -wealthiest	2.553 (0.73-8.93)
Ward Level SES Variables		
Ward-Level Composite Index		
	SES 1 – lowest infrastructure (REF)	----
	SES 2	0.832 (0.40-1.74)
	SES 3 – highest infrastructure	1.006 (0.47-2.18)
Illness Variables		
Illness Type (ICD Code)		
	A00-B99	----
	J00-J99	2.594 (1.28-5.26)**
	Other Codes	0.954 (0.50-1.83)
Illness Severity		
	Not at all Severe	----
	Somewhat Severe	1.760 (0.82-3.79)
	Very Severe	1.247 (0.56-2.80)
	Extremely Severe/ Life-Threatening	2.040 (0.33-12.56)

Health Facility Variables			
	Gov. Health Facility Distance		0.865 (0.75-1.00)*
	Closest Health Facility Type		
	SHP		----
	HP		1.394 (0.71-2.76)
	PHCC		0.833 (0.17-3.97)
	Health Facility Quality Composite Index		
	Poor (REF)		----
	Fair		1.851 (0.93-3.70)
	Good		3.900 (1.63-9.31)**
	Subjective Health Facility Quality Rating		1.017 (0.79-1.31)
Knowledge Variables			
	Knowledge Composite Index		
	Poor Knowledge of Government Services		----
	Fair Knowledge of Government Services		1.353 (0.72-2.56)
	Good Knowledge of Government Services		1.787 (0.87-3.67)

* p<0.05; **p<0.01

G.6 Traditional Healer (0) Vs. Pharmacy Care (1) [First Outside Option]

Independent Variables		Adjusted OR (95% CI)
Patient Variables		
	Patient Gender (M)	0.913 (0.50-1.68)
	Patient Age	1.024 (1.01-1.04)**
Household SES Variables		
	No. of Children (1-5yo)	0.789 (0.52-1.19)
Occupation of Head		
	Subsistence Farmer	----
	Commercial Farmer	2.026 (0.90-4.57)
	Unskilled Labourer	1.850 (0.82-4.19)
	Skilled Labourer	1.835 (0.51-6.63)
	Professional Worker	3.183 (1.08-9.40)*
Education of Head		
	None (REF)	----
	Primary & Lower Secondary	1.431 (0.76-2.69)
	Upper Secondary +	2.763 (0.64-11.86)
Household Caste		
	Brahmin/Chhetri/ Madehsi/Thakuri	----
	Tamang/Magar/Gurung	0.628 (0.24-1.62)
	Chebang/Biswokarma/ Other Dalit	0.666 (0.15-2.92)
	Newar	0.891 (0.22-3.67)
Wealth Quintiles		
	Quintile 1 – poorest (REF)	----
	Quintile 2	1.054 (0.44-2.54)
	Quintile 3	1.409 (0.57-2.48)
	Quintile 4	2.128 (0.72-6.32)
	Quintile 5 -wealthiest	1.880 (0.64-5.57)
Ward Level SES Variables		
Ward-Level Composite Index		
	SES 1 – lowest infrastructure (REF)	----
	SES 2	0.911 (0.39-2.15)
	SES 3 – highest infrastructure	0.847 (0.35-2.07)
Illness Variables		
Illness Type (ICD Code)		
	A00-B99	----
	J00-J99	3.507 (1.76-6.99)**
	Other Codes	0.750 (0.32-1.74)
Illness Severity		
	Not at all Severe	----
	Somewhat Severe	3.203 (1.35-7.59)**
	Very Severe	2.248 (0.90-5.64)
	Extremely Severe/ Life-Threatening	0.745 (0.05-12.25)

Health Facility Variables			
	Gov. Health Facility Distance		0.960 (0.72-1.28)
	Closest Health Facility Type		
	SHP		----
	HP		2.579 (1.09-6.12)*
	PHCC		1.150 (0.36-3.69)
	Health Facility Quality Composite Index		
	Poor (REF)		----
	Fair		2.318 (0.97-5.54)
	Good		6.712 (2.57-17.54)**
	Subjective Health Facility Quality Rating		0.960 (0.72-1.28)
Knowledge Variables			
	Knowledge Composite Index		
	Poor Knowledge of Government Services		----
	Fair Knowledge of Government Services		1.661 (0.82-3.38)
	Good Knowledge of Government Services		2.263 (1.01-5.06)*

* p<0.05; **p<0.01

G.7 Pharmacy (0) vs. Allopathic Care (1) [First Outside Option]

Explanatory Variables		Adjusted OR (95% CI)
Patient Variables		
	Patient Gender (M)	1.583 (0.96-2.60)
	Patient Age	0.989 (0.98-1.00)
Household SES Variables		
	No. of Children (1-5yo)	0.987 (0.70-1.39)
Occupation of Head		
	Subsistence Farmer	----
	Commercial Farmer	0.494 (0.25-0.97)*
	Unskilled Laborer	0.566 (0.28-1.14)
	Skilled Laborer	0.738 (0.23-2.42)
	Professional Worker	0.458 (0.21-0.99)*
Education of Head		
	None (REF)	----
	Primary & Lower Secondary	0.901 (0.54-1.52)
	Upper Secondary +	0.640 (0.26-1.56)
Household Caste		
	Brahmin/Chhettri/ Madehsi/Thakuri	----
	Tamang/Magar/Gurung	0.940 (0.48-1.83)
	Chebang/Biswokarma/ Other Dalit	2.121 (0.67-6.68)
	Newar	0.863 (0.33-2.24)
Wealth Quintiles		
	Quintile 1 – poorest (REF)	----
	Quintile 2	0.826 (0.37-1.87)
	Quintile 3	0.839 (0.37-1.88)
	Quintile 4	1.380 (0.55-3.46)
	Quintile 5 -wealthiest	0.835 (0.34-2.02)
Ward Level SES Variables		
Ward-Level Composite Index		
	SES 1 – lowest infrastructure (REF)	----
	SES 2	0.826 (0.40-1.73)
	SES 3 – highest infrastructure	0.665 (0.30-1.47)
Illness Variables		
Illness Type (ICD Code)		
	A00-B99	----
	J00-J99	0.486 (0.28-0.85)*
	Other Codes	1.237 (0.65-2.37)
Illness Severity		
	Not at all Severe	----
	Somewhat Severe	0.744 (0.38-1.47)
	Very Severe	0.715 (0.34-1.50)
	Extremely Severe/ Life-Threatening	3.908 (0.45-33.79)

Health Facility Variables			
	Gov. Health Facility Distance		0.992 (0.78-1.27)
	Closest Health Facility Type		
	SHP		----
	HP		0.456 (0.22-0.95)*
	PHCC		0.345 (0.14-0.86)*
	Health Facility Quality Composite Index		
	Poor (REF)		----
	Fair		0.478 (0.24-0.97)*
	Good		0.395 (0.19-0.80)*
	Subjective Health Facility Quality Rating		1.468 (0.85-2.54)
Knowledge Variables			
	Knowledge Composite Index		
	Poor Knowledge of Government Services		----
	Fair Knowledge of Government Services		0.922 (0.49-1.75)
	Good Knowledge of Government Services		1.090 (0.55-2.15)

* p<0.05; **p<0.01

G.8 Traditional Healer Ever

Explanatory Variables		Adjusted OR (95% CI)
Patient Variables		
	Patient Gender (M)	0.936 (0.68-1.29)
	Patient Age	0.986 (0.98-0.99)**
Household SES Variables		
	No. of Children (1-5yo)	1.050 (0.85-1.29)
Occupation of Head		
	Subsistence Farmer	----
	Commercial Farmer	1.434 (0.75-2.74)
	Unskilled Labourer	1.390 (0.71-2.73)
	Skilled Labourer	1.578 (0.79-3.14)
	Professional Worker	2.460 (1.04-5.82)*
Education of Head		
	None (REF)	----
	Primary & Lower Secondary	0.935 (0.43-2.03)
	Upper Secondary +	0.866 (0.40-1.88)
Household Caste		
	Brahmin/Chettri/ Madehsi/Thakuri	----
	Tamang/Magar/Gurung	2.187 (0.85-5.66)
	Chebang/Biswokarma/ Other Dalit	2.834 (1.14-7.05)*
	Newar	1.278 (0.46-3.55)
Wealth Quintiles		
	Quintile 1 – poorest (REF)	----
	Quintile 2	1.147 (0.59-2.22)
	Quintile 3	1.376 (0.73-2.61)
	Quintile 4	1.272 (0.68-2.37)
	Quintile 5 -wealthiest	0.938 (0.48-1.84)
Ward Level SES Variables		
Ward-Level Composite Index		
	SES 1 – lowest infrastructure (REF)	----
	SES 2	0.729 (0.47-1.14)
	SES 3 – highest infrastructure	0.972 (0.64-1.49)
Illness Variables		
Illness Type (ICD Code)		
	A00-B99	----
	J00-J99	1.216 (0.81-1.83)
	Other Codes	0.812 (0.52-1.27)
Illness Severity		
	Not at all Severe	----
	Somewhat Severe	0.234 (0.10-0.55)**
	Very Severe	0.223 (0.10-0.49)**
	Extremely Severe/ Life-Threatening	0.524 (0.23-1.17)

Health Facility Variables			
	Gov. Health Facility Distance		0.913 (0.78-1.07)
	Closest Health Facility Type		
		SHP	----
		HP	0.596 (0.26-1.36)
		PHCC	0.619 (0.25-1.56)
	Health Facility Quality Composite Index		
		Poor (REF)	----
		Fair	2.347 (1.43-3.85)**
		Good	1.430 (0.88-2.31)
	Subjective Health Facility Quality Rating		1.016 (0.80-1.30)
Knowledge Variables			
	Knowledge Composite Index		
		Poor Knowledge of Government Services	----
		Fair Knowledge of Government Services	2.253 (1.46-3.48)**
		Good Knowledge of Government Services	1.776 (1.19-2.65)**

* p<0.05; **p<0.01

G.9 Pharmacy Ever

Independent Variables		Adjusted OR (95% CI)
Patient Variables		
	Patient Gender (M)	1.108 (0.80-1.56)
	Patient Age	1.001 (0.99-1.01)
Household SES Variables		
	No. of Children (1-5yo)	1.066 (0.85-1.34)
Occupation of Head		
	Subsistence Farmer	----
	Commercial Farmer	0.513 (0.29-0.90)**
	Unskilled Labourer	0.841 (0.48-1.48)
	Skilled Labourer	#####
	Professional Worker	0.395 (0.15-1.06)
Education of Head		
	None (REF)	----
	Primary & Lower Secondary	0.417 (0.21-0.81)**
	Upper Secondary +	0.396 (0.20-0.77)**
Household Caste		
	Brahmin/Chettri/ Madehsi/Thakuri	----
	Tamang/Magar/Gurung	1.025 (0.49-2.13)
	Chebang/Biswokarma/ Other Dalit	0.755 (0.38-1.50)
	Newar	0.938 (0.41-2.17)
Wealth Quintiles		
	Quintile 1 – poorest (REF)	----
	Quintile 2	0.539 (0.29-1.01)
	Quintile 3	0.648 (0.35-1.19)
	Quintile 4	0.702 (0.41-1.22)
	Quintile 5 -wealthiest	0.742 (0.42-1.33)
Ward Level SES Variables		
Ward-Level Composite Index		
	SES 1 – lowest infrastructure (REF)	----
	SES 2	0.723 (0.42-1.25)
	SES 3 – highest infrastructure	1.066 (0.69-1.64)
Illness Variables		
Illness Type (ICD Code)		
	A00-B99	----
	J00-J99	0.859 (0.55-1.33)
	Other Codes	1.221 (0.79-1.90)
Illness Severity		
	Not at all Severe	----
	Somewhat Severe	1.054 (0.35-3.21)
	Very Severe	1.814 (0.63-5.22)
	Extremely Severe/ Life-Threatening	2.570 (0.87-7.56)

Health Facility Variables			
	Gov. Health Facility Distance		0.957 (0.81-1.13)
	Closest Health Facility Type		
		SHP	----
		HP	0.501 (0.26-0.97)*
		PHCC	2.024 (0.89-1.37)
	Health Facility Quality Composite Index		
		Poor (REF)	----
		Fair	0.264 (0.16-0.44)
		Good	0.341 (0.21-0.54)
	Subjective Health Facility Quality Rating		1.056 (0.81-1.37)
Knowledge Variables			
	Knowledge Composite Index		
		Poor Knowledge of Government Services	----
		Fair Knowledge of Government Services	1.208 (0.76-1.93)
		Good Knowledge of Government Services	1.360 (0.92-2.02)

* p<0.05; **p<0.01

Appendix 7.8

Focus Group Discussion Summary

In addition to the qualitative interviews, a series of informal FGDs were run in the three VDCs where the qualitative interviews were taking place. These were only intended to contextualise and validate the data, so the results are not presented as part of this dissertation. That being said, the following is a summary of the pair-by-pair questioning results from the FGDs as they are pertinent to the main results of this study and help to corroborate some of what was found in the individual interviews and surveys:

Provider Types: Pair by Pair Questioning	FGD Responses
Home vs. Outside Care	- Weather: On rainy days, use home treatment - Costs: why spend so much when we can gather nearby herbs; home treatment doesn't involve costs - Treatment Failure: go to the hospital if herbs don't work - Symptoms: If vomiting is involved, seek outside care - Severity: for minor illness, use home care
Allopathic vs. TH	- Symptoms: based on the way the symptoms manifest themselves a decision can be made - Aetiology: TH if a ghost or god is involved; if one is possessed by something, use a TH - Specific Symptoms: headache = TH first; Heartburn = TH/home treatment; Vomiting = TH; fainting = TH; fever/chills = TH; dehydration = hospital - Treatment Failure: If TH doesn't cure, use medical - Severity: severe illness, take to hospital immediately - Referral: THs often refer patients they cannot treat to allopathic providers
Allopathic vs. Pharmacy	- Efficiency: pharmacy is faster
Private vs. Government	- Costs: If household has money, rush to private provider, if not, try government facility; medicines cost money - Facility Hours: private facilities are opened all the time, so someone falls sick at night, can go there
FCHV vs. Facility-Based Government Care	- Patient Demographics: if patient is a child, go to FCHV - Illness Severity: if it is not severe or is a common disease, use FCHV first and solicit advice
PHCC vs. DH	- Availability of Meds: some medicines are not available at PHCC and need to go to DH
DH vs. RH	- Quality: DH is much lower quality, so prefer RH for some complicated cases - Referrals: DH refers to other places if they cannot cure - Distance: DH is nearer, so use that more frequently - Convenience: if we have relatives nearer to one facility, we go there

Appendix 8.1

Overview of TH Rituals Performed

While chapter eight addressed the treatments provided by allopathic providers, it did not specifically address those treatments provided by THs, which are a bit more difficult to capture. Since this was not an anthropological study, however, TH rituals were only documented very briefly. Figure A below shows a breakdown of what percentage of TH visits involved each of the following rituals or treatments. As can be seen, the majority involved chanting of mantras and throwing of rice grains.

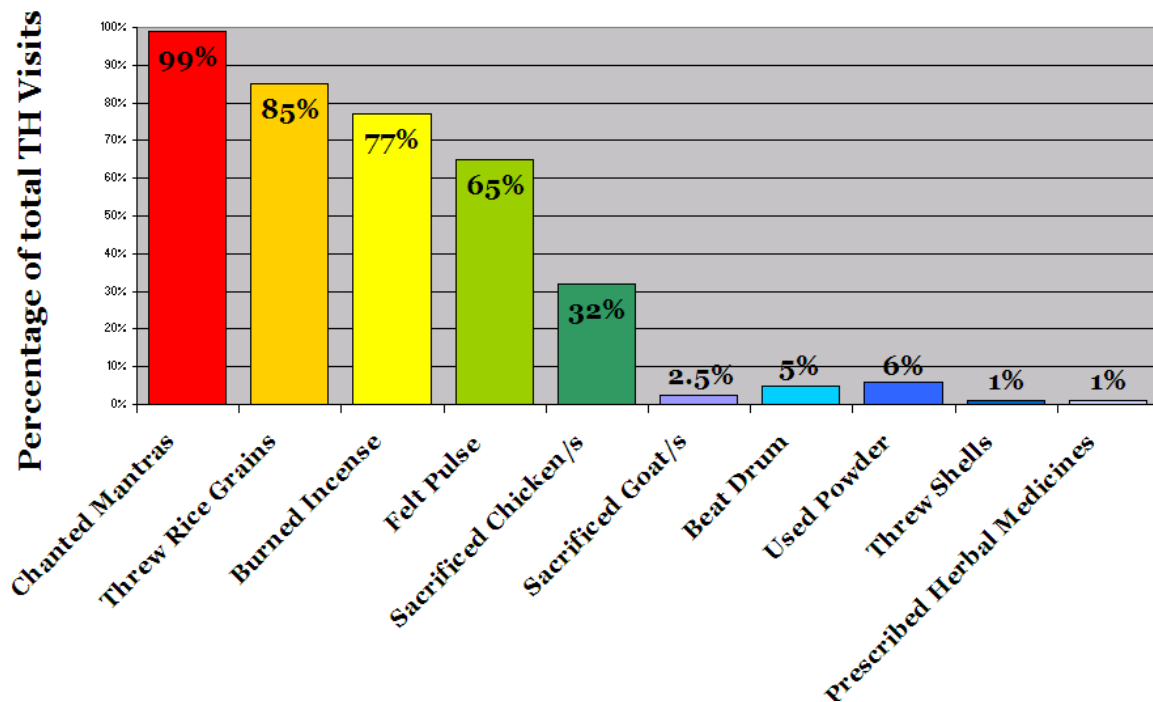


Figure A. An overview of the TH rituals performed for each of those households which visited a TH as part of their treatment trajectories (n=286).

Appendix 9.1

Plan for Dissemination of Results

It is very important to me that my dissertation be more than simply something that collects dust on a shelf somewhere. One of the reasons I opted to undertake this particular project was because I felt it was something that would be beneficial locally -- both for policy and program design. It was research that had not been done before in this context on such a large scale using mixed methods, and it seemed that during my preliminary visits and throughout my time in Nepal that it was something that many health organisations and local NGOs were interested in knowing more about, especially in order to understand the reasons for health service underutilisation, the implications of task-shifting and the barriers people face in accessing services at a household level. Moreover, while most studies on the quality of health services in Nepal have collected only a few quality metrics, this study took a much more multi-faceted look at local perceptions of and expectations for government health services and other health providers in the hopes that this information would offer valuable feedback on how to change and restructure government services so they are living up to peoples' expectations in name and in spirit.

More than simply contributing to local knowledge and practice, I also hoped that this study would have implications globally, and that the theoretical model which I created to guide this work would serve as the groundwork for future interdisciplinary HSB research studies. I also hoped that the methodology I

employed and the tools I created would serve to guide future research studies on this topic in other contexts.

That being said, in order for this study to have broader implications, I need to ensure that it gets adequately disseminated both locally, within Nepal, and internationally. My dissemination strategy involves a combination of local reports and factsheets, articles for publication in peer review journals in Nepal and internationally, meetings with people who might benefit from the results, presentations both locally and internationally and eventually a website with the results and tools available for download. The specifics are as follows:

(1) Presentations:

In order to ensure that the results are widely disseminated, I have made a point of presenting my results and findings throughout the process, and will continue to do so in the year to come. During my time in Nepal, I presented the preliminary findings at Patan Academy of Health Sciences (both to their students and as part of their grand rounds), at the Fulbright Commission/United States Education Foundation – Nepal to a mixed audience of professionals and students, at the Nepal Research Discussion Group’s weekly forum and at the International Educational Foundation’s South and Central Asia annual conference. I also presented the preliminary findings as part of the work in progress departmental seminar series at Oxford and recently presented the findings in a platform presentation at the Unite for Sight’s Annual Global Health Conference in New Haven, CT.

In addition to these presentations, it is my intention to return to Nepal again to present the results as part of a series of community-based discussions in Makwanpur district. I also plan to apply to present them at the upcoming Global Health Council's Global Health Conference and any other suitable conferences in the year to come.

In addition to the presentations I have given myself, my RAs have also continued to present their work on the project in their classes and in their local community organizations.

(2) Meetings:

More than just presenting the results at conferences, I feel it is important to target the findings to those groups which I feel might be able to use them the most to impact local realities and change service delivery for the better – the Ministry of Health and Population, Mother and Infant Research Activities, The Nepal Health Research Council, The Nepal Family Health Program, USAID, UNICEF, The WHO, The Makwanpur District Development Committee, GIZ etc. During my time in Nepal I met with each of these organizations individually to inform them about my project and to let them know my progress, and to let them know I would be in touch with them all upon completion to feed them the results. It is my intention to get in touch with each of these organizations in the year to come to make sure they understand the results and the implications and to discuss potential areas for intervention. I will create a two-page summary sheet targeted at each of the organizations highlighting the main findings and the ways

in which they can use these findings. I have also spoken to my RAs who still currently reside in Nepal about setting up some local meetings to present the findings in person to each of these groups and thank them for their contributions. I maintain a long list of local contacts for this purpose.

(3) Reports:

While the meetings will enable us to give a snapshot of the results to each of the local organisations which may benefit from them, a series of longer reports on the study findings will be distributed to these same organisations and to all organisations that work on health and development projects in Nepal along with several policy recommendation sheets and fact sheets for distribution. I plan to compile a report for each of the main study objectives and an additional report focusing specifically on how to measure health facility quality in this setting, which I hope may be a valuable tool for the MoHP in the future. In addition to these reports, I have been working to compile a pictorial book of public health findings from the study which will be accessible to the people of Makwanpur and will be in each SHP, HP and PHCC in the district. I will also be creating personalised fact sheets for each of the VDCs where the interview were carried out, and will leave a executive summary of the report at each of the local health facilities and in the District Development Committee and District Health Offices. I will also put a copy of the report on file at the Nepal Health Research Council Library and in the Patan Academy of Science library since they do their community health delivery project in Makwanpur district.

During my time in Nepal I wrote up one local report for the USEF newsletter, which detailed my research and the preliminary findings.

(4) Publications:

Finally, to ensure that the results are circulated more widely, I plan to publish the results both locally and internationally in peer reviewed journals. Although I have not yet had time to write up the results for publication, I have started outlining the articles, and I plan to publish the following tentative articles in the year to come (8 in total):

- An article on the creation of the comprehensive theoretical model of HSBs in *Health Policy and Planning* or *BMC Medical Research Methodology*
- An article on the descriptive quantitative findings from objective 1b in the *Journal of the Nepal Health Research Council* or the *Nepal Medical College Journal* or *Kathmandu University Medical Journal*
- An article on measuring quality in health systems in rural areas of developing countries using Nepal as a case study in *Health Services Research* or *BMC Health Services Research*
- An article on the logistic and linear regression models in the *Journal of the Nepal Health Research Council* and in *Tropical Medicine and International Health*, *Health Policy and Planning* or in the *Bulletin of the World Health Organization*
- An article on the quantitative and qualitative findings together in *Social Science and Medicine* and/or *Health Policy and Planning*
- An article on the qualitative findings related to perceptions of health services in *Medical Care*
- An article on the illness findings in *Journal of Epidemiology and Community Health*

Given how much data I have collected in the course of this project, there are a lot of articles I can write and plan to write, but my goal articles would be one or two in *Journal of Nepal Health Research Council* or *Kathmandu University Medical Journal*, one or two in *Social Science and Medicine*, and one or two in *Health Policy and Planning*. Given the types of research these journals publish and given

the size of this particular study, I am hopeful about getting publications in some of these places.

I hope that this multi-pronged dissemination plan will ensure that the results get used locally, and that rather than collecting dust, my dissertation can help to move and shape policy and practice.