

The World Health Organization (WHO) and Knowledge Translation in Maternal, Newborn, Child and Adolescent Health and Nutrition

The Strategic and Technical Advisory Group of Experts (STAGE) for Maternal, Newborn, Child, and Adolescent Health and Nutrition.*

Email: stagemncahn@who.int

Abstract

The Strategic and Technical Advisory Group of Experts (STAGE) for Maternal, Newborn, Child, and Adolescent Health and Nutrition (MNCAHN) was established in 2020 to advise the Director-General of WHO on issues relating to MNCAHN.^{1 2} STAGE is made up of people from multiple low-middle income and high-income countries, has representatives from multiple professional backgrounds, and with diverse experience and interests.

To achieve universal health cover and the Sustainable Development Goals (SDGs), MNCAHN services must be improved in quality and equity of access and be responsive to evolving technical guidance. This requires knowledge translation and implementation of WHO and other guidelines. Countries need effective and responsive structures for adaptation and implementation, strategies to improve guideline uptake, education and training, and mechanisms to monitor quality and safety. This paper outlines some areas that could be considered.

* STAGE members are: Fadia Al Buhairan, Koki Agarwal, Narendra Kumar Arora, Sabaratnam Arulkumaran, Zulfi Bhutta, Fred Binka, Arachu Castro, Mariam Claeson, Blami Dao, Gary Darmstadt, Trevor Duke, Mike English, Fadi Jardali, Mike Merson, Rashida Abbas Ferrand, Alma Golden, Michael Golden, Caroline Homer (Chair), Fyezah Jehan, Caroline Kabiru, Betty Kirkwood, Joy Lawn, Song Li, George Patton, Marie Ruel, Jane Sandall, Harshpal Singh Sachdev, Mark Tomlinson, Peter Waiswa, Dilys Walker, Stanley Zlotkin.

Introduction

To achieve the Sustainable Development Goals (SDGs), maternal, newborn, child and adolescent health and nutrition (MNCAHN) services must improve in quality and in equity of access. This is relevant in all countries, and requires knowledge translation across the health system, and at a community level. Knowledge translation has many components (Panel).^{3,4} It is a two-way learning process, requiring engagement and learning with policy-makers, national and sub-national governments and health managers, health care workers, families and communities, sectors outside health that are crucial for MNCAHN, and often engagement with media. It should utilise existing experience and evidence, explore new technologies, and maintain and build on knowledge of past success. The work of knowledge translation involves implementation of national, local and WHO guidance. This paper, from the Strategic and Technical Advisory Group of Experts (STAGE) for MNCAHN,¹ proposes some areas that WHO and countries can act upon to improve this. The opinions were generated through four online meetings of a Knowledge Translation Working Group between April and October 2020, presented to the whole STAGE group for discussion and refinement, and documented in a report that was presented to WHO in November 2020. This paper summarises the report.

Translation of WHO technical and program guidance

For the implementation of WHO's guidance and improving quality of MNCAHN care, there are several obstacles. These include:

- **Number, complexity, and appropriateness of guidelines.** Countries receive a significant amount of technical evidence-based guidance from WHO and other sources. This can be confusing to health care workers, and guidelines may not be appropriate to their context. Countries need processes for choosing and developing guidelines and standards that are relevance to their context.
- **Limited resources at a country level for knowledge translation and dissemination.** Resources are often limited to determine policy, adapt technical guidance and operational tools, and provide training. And resources are often tied to donors' priorities, which tends to be different from countries priorities, so there is often a mismatch rather than an overall deficit of funds. New guidelines are slow to reach health-care workers, managers, and the people for whom they are intended. There are deficits in sharing WHO guidelines and evidence in appropriate forms for pre-service and in-service education of health-care workers; integration of WHO guidelines within courses offered by colleges and schools of health care worker training is often slow or not done at all.
- **Health system constraints.** Health systems limitations make guideline implementation challenging. Constraints include inadequate numbers, rapid turnover and inequitable distribution of health care workers; absence of continuing professional development programmes; lack of mentoring and supervision for health care workers; irregular supplies of drugs, equipment and other commodities in order to implement guidelines; inadequate strategies for engaging the private sector; and competing or commercial interests, or even frank corruption. In addition, there are limited auditing or quality improvement processes to monitor guideline uptake, adherence, and programme effectiveness.
- **Limited community engagement and communication:** Communication must be in appropriate languages and use media that will promote appropriate demand. Lack of engagement that limits guidelines being incorporated into practice extends to informal health-care providers, for example traditional birth attendants, un-registered pharmacies, and other healers who are not a part of the formal health system. Until recently, WHO's online media presence was mostly pitched at high-level communication. WHO videos are mostly in English, and many of the videos on the WHO YouTube channel are press conferences by senior WHO officials.⁵

- **Limited engagement of non-health sector actors:** engagement of stakeholders outside the health sector is necessary for some health guidance – education, agriculture, finance, labour, community development, urban planning – government and non-government. These sectors are important for the implementation of health programs aimed at addressing the social and economic determinants within the SDGs.

WHO and many countries have made recent progress in knowledge translation: some new WHO guidelines are digital and modifiable, which prepares the pathway for them to be incorporated into country digital platforms, WHO developed a specific toolkit for guideline adaptation which was tested in the context of antenatal care guidelines.⁶ WHO is establishing practice networks to support peer learning and exchange. WHO is also introducing the living guidelines concept, which facilitates rapid updating when new evidence become available.⁷

Recommendation 1: National and regional technical advisory groups and sub-national committees

To foster continuous progress requires basic data systems and monitoring and evaluation (M&E) approaches, standardisation of guidelines, adaptation of guidelines to the local context, and communication. National Technical Advisory Groups (TAGs) have been developed over the years for programmes such as HIV, Tuberculosis, and Immunisation..⁸ Many countries have committees that oversee policy in maternal and child health, however they often have limited statutory endorsement and limited resources to ensure they function optimally and are sustained. Some TAGs have come to the fore in many countries because of COVID, but they should not just be for emergencies, we should seize the opportunity to embed these for the long run.

STAGE recommends that WHO support member states to strengthen or implement national MNCAHN Technical Advisory Groups (TAGs), many of the functions of which are outlined below. We also recommend that WHO support sub-national MNCAHN committees, as such health authorities (states, provinces or districts depending on the political structures) are often the drivers of implementation in devolved states and closer to where health services are delivered for the majority of women and children. In general, it is best to build on the structures and committees that already exist.

WHO can play a normative and technical role in enabling such structures to develop and deliver on their functions. WHO also has a role in ensuring all external partners recognise the authority of such national and local committees as the peak national technical bodies in MNCAHN. This would foster alignment and respect for national autonomy.

The criteria and terms-of-reference below are principles and indicative only, and local needs may dictate a different approach. It is important that TAGs are established within national regulatory structures in order to support the credibility of TAG recommendations and their accountability to national governments.

National MNCAHN TAGs should be the peak technical advisory body for MNCAHN in a country. They provide advice to the management or key personal of the Ministry of Health or directly to executive government, and they provide policy and practice updates and recommendations to health managers, health care workers, and other stakeholders. They are ultimately accountable to the Ministry of Health which sets the terms-of-reference. The set-up and functions may include the following:

- Endorsement from the National government as 'statutory or standing bodies', existing long-term, with properly defined terms of reference and governance.
- Review and oversee the collection of essential primary data in MNCAHN and use this to guide policy and recommendations.

STAGE Recommendations on Knowledge Translation

- Provide leadership and technical guidance on adoption, adaptation and dissemination of new evidence-based guidelines framed within the context of existing national policies or strategic plans, legislation, health system data, equity, and socioeconomic context.
- Support capacity building for monitoring and evaluation, data synthesis, and implementation research.
- Initiate and oversee a National MNCAHN Quality Improvement (QI) Program. Such a program may cover all aspects of quality improvement, including health facility accreditation, education, standards and assessment, audit, small group problem solving, and communication of local initiatives in order to address the health system bottlenecks in improving quality of care. Such a program could include supporting “Centers of Excellence in MNCAHN”, including health facilities at a district or sub-national level (not just tertiary referral or academic hospitals in the often-traditional notion of excellence).
- Oversee an annual or periodic “State of the Nation’s Mothers, Newborns, Children and Adolescents” report that brings together data on health, education and other SDG targets. This would be an important monitoring and evaluation exercise leading to follow-up and actions at national and sub-national level, and accountability.
- Strategic thinking at country level on how often to update guidance, and how to do it: from ‘simple’ changes (e.g. substitution of one drug for another) to more complex changes (e.g. shifting a task from one cadre to another).
- Advocate for funding, resource mobilisation and technical support, to enable recommendations to be implemented.

The functions that a national TAG takes on will depend on its existing capacity but WHO should be able to help countries to grow these capacities and support resource mobilisation across partners.

Membership. The membership of the national TAG should be decided in-country. Membership should ensure intellectual independence, allow for a range of perspectives, and support the broad alignment and dissemination of key decisions. Members could include personnel skilled in epidemiology and with MNCAHN disease burden knowledge, professional associations, key academic / university personnel, sub-national representatives, implementing stakeholders and sectors beyond health, such as education, finance and law, and the private health sector where relevant. Consumer, community, and civil society representatives, such as women’s groups, a community leader, indigenous groups may also be relevant. Membership should also include frontline health workers who will be tasked with implementing the guidance and policies. Such a committee should have manageable size with people prepared to give adequate time, plus a functioning secretariat.

Regional or multi-country TAGs for MNCAHN would provide WHO Regional Directors and countries in the respective regions with MNCAHN strategic priorities and technical recommendations in light of new global guidance and its regional relevance. Regional or multi-country TAGs would support exchange of information and experience, and national capacity building.

Sub-national (state, province, or district) **MNCAHN committees** are needed to operationalise recommendations from national TAGs in countries with devolved systems and/or large, diverse populations, and to oversee local operations and monitoring. Such committees exist in some form in some places, but they are often not resourced and not accountable to a national group or to the community – such governance mechanisms are important. Sub-national or local committees should have wide representation, including frontline health workers, and ensure that consumers and civil society (e.g., community leader, women’s group, representatives of other sectors such as a teacher) have a voice in decision making.

Recommendation 2: Strategies to improve guideline uptake

STAGE recommends that WHO:

- **Produce a limited number of consolidated MNCAHN guidelines, bringing together all recommendations, which are updated as new evidence becomes available.** This would reduce confusion as to which guidelines or recommendations health care workers should follow and countries should invest in implementing. Guideline topics should be based on countries' needs. If updates are too frequent this also causes confusion so changes need to be consolidated and implemented in cycles that national systems can manage. This approach would strengthen longer-term incorporation of WHO guidelines and recommendations into the health system culture. Such consolidated guidelines should be easily adaptable to promote ownership, for example, enable co-branding by national ministries of health or professional associations. They may be in digital forms, in addition to the traditional concept of guideline books. Such consolidated guidelines would be the go-to source for all technical norms in that discipline. There are examples of this already that could be built upon.^{9,10} In the development of such resources, the input of frontline workers, such as a midwives, paediatric nurses or community health workers should be sought, as such cadres of health care workers will be asked to implement such guidance. And there should be education and training resources linked to these guidelines, for use by health services, ministries of health and schools and colleges of health worker training for pre-service education and continuing professional development.
- **Develop an operational handbook for MNCAHN that provides programmatic and training guidance for implementation which can be adapted and owned at national level.** Such a handbook could include guideline adaptation tools, programmatic advice, decision-making tools for frontline staff, training aides, and recommendations on management, training, supervision, monitoring and evaluation, integration of services, quality improvement and implementation research.
- **Where appropriate, support the coordination of guidelines between other agencies that produce health guidelines,** including international professional bodies, international non-governmental organisations, UN and bilateral agencies. If there are strong differences of opinion, WHO may be able to support conflict resolution based on scientific evidence. At a national level, coordination of guidelines should be taken by national structures (ministries of health, professional associations, MNCAHN TAGs), supported by WHO.
- **Encourage and support national Ministry of Health guideline websites in all countries,** to house locally adopted and endorsed guidelines and operational handbooks. Many ministries of health in low- and middle-income countries (LMICs) have rudimentary and outdated websites, so capitalising on digital needs to address this local need is important. Work is also needed to support digital platforms for mobile phone and other app-related approaches to find ways to enable health care workers to have easy access to the guidance.
- **Support National MNCAHN Quality Improvement Programs.** A QI program may be multi-faceted, including health facility accreditation, education, standards and assessment, audit, small group problem solving, and communication of local initiatives in order to address the health system bottlenecks in improving quality of care. It is not WHO's role to initiate such a national program, but technical support and endorsement will be invaluable. Other QI programs (e.g. HIV, immunisation) may offer opportunities for synergies and joint learning.
- **Develop a new WHO program of support to institutions of health care worker training in LMICs** to increase the teaching of WHO guidelines and address the health system gap. In many low-income settings, colleges of nursing, midwifery, medical, and allied health training are underfunded and under-resourced, and output is inadequate to meet demands. This stifles progress toward all the health-related SDG targets. The inequities in health worker numbers, distribution and training, and the tragic consequences have been starkly highlighted by the COVID-19 pandemic. Under-resourcing and lack of support to health care worker training institutions needs to be addressed to meet human system needs, and it is vital that WHO, governments and partners contribute to this. A WHO program of support to schools and colleges of health care worker training could lead to greater incorporation of WHO guidelines into curricula, increased capacity

of educators, more funding for health worker training institutions through global projects and local budgets, facilitate links with other organisations that would support such institutions, (including accreditation bodies), and produce curricula for nursing and other health professional training that could be adapted locally.

- **Develop child health nurse training as a post-graduate course, supported by WHO**, where such training does not exist. This is analogous to the strong support WHO and other agencies have given to midwifery training globally in recent decades. Due to the complexity of child, neonatal and adolescent health in the SDG era, there is much more to be learned than can be taught in pre-service general nursing courses. A generic curricula could be developed, based on WHO guidelines, which would bring together all relevant guidelines and consolidate information from other 'short-courses' into a 1-2 year practical post-graduate course (Primary child health care, Nutrition, Hospital care, Newborn care, HIV, Tuberculosis, EPI, Adolescent health, Care of children with chronic conditions, Child protection, Disability, QI). The course would encompass prevention and treatment and teach principles of family centred care and equity. Such professional development in child and adolescent health is also needed for non-physician clinicians and allied health workers such as pharmacists and physiotherapists.
- **Develop more multi-media outputs such as videos in multiple languages to be shown through the WHO YouTube channel and other platforms.** WHO should explore capacity to be more creative, engaging and multi-lingual in its communications. More videos could target an audience of health care workers in the field, families and communities. This would take resources: skilled people and time, including an adolescent who understands use of social media. WHO endorsed YouTube clips could also tell local stories of successful implementation – even encourage end-users to make videos of their own lessons learnt; these could be developed at a local or national level, and reviewed or endorsed by WHO if suitable. WHO may also consider developing or evaluating digital mobile Apps that are linked to WHO guidelines.

Recommendation 3. Monitor gaps in knowledge translation at a national and local level, and report lessons learned from operational research in implementation of MNCAHN care

STAGE recommends that WHO and countries establish processes to identify the gaps in implementing recommendations for MNCAHN. Identification of such gaps needs to be grounded in problems faced by those who directly manage and deliver services in the field, supported by routinely collected MNCAHN data, and recognise country autonomy to adapt recommendations to their context. TAGs and sub-national committees, local universities, public health research institutes, and professional associations have an important role in this at a national level.

Similarly, there is value in reporting where implementation of MNCAHN guidelines and models of integrated care have been successful. This could, for example, include exemplar case studies of models of care or guideline implementation that are clearly articulated, and explore objectively the elements of that success and the challenges. Policy makers, system managers and clinicians would benefit from such examples.

WHO should also support sharing of lessons and success between TAGs. This would include between-country and continuous long-term learning, so that there is a memory and cumulative strengthening of what works.

WHO has an ongoing role in assisting countries to address gaps related to program planning, setting of priorities, organisation of training, logistical support, monitoring and evaluation, and financing.

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STAGE Recommendations on Knowledge Translation

Panel 1.

Knowledge translation components and processes:

- Knowledge synthesis (including analysis of research, guideline development, policy briefs, investment cases, development of user-friendly guidance)
- Dialogue / exchange (deliberative dialogue for guideline development, adoption and budget allocation)
- Adaptation to the context so that policy and guideline formulation takes account of local feasibility, affordability, social and cultural values and preferences, including those of health care users, and equity (is it fit for purpose in the environments where most needed)
- Evidence-informed programme design, monitoring and evaluation
- Activities where knowledge, guidelines or recommendations are used in the provision of health care or other services
- Appropriate training and incorporation of new guidelines into the health culture and local health education
- Behaviour change to enhance the use of such a guideline or recommendation in ways that enhances health at an individual and population level
- Evaluation of reach, uptake, acceptability and effectiveness