

Title:

Barriers and facilitators to integrating primary and specialist healthcare in the UK:
a narrative literature review

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Abstract

Background: Many national policies propose integration between primary and specialist care to improve the care of people with long-term conditions. There is an increasing need to understand how to practically implement such service redesign. **Aim:** This paper reviews the literature on the barriers to, and facilitators of, integrating primary and specialist healthcare for people with long-term conditions in the United Kingdom to inform the development and implementation of similar initiatives in integration. **Methods:** Medline and Cinahl databases were searched and fourteen articles discussing factors hindering or enabling integration were identified. The factors were extracted and synthesised and key lessons were tabulated. **Results:** Successful integration of care requires synchronised changes on different levels, a well-resourced team, a well-defined and evidence based service, agreed and articulated new roles and responsibilities and a willingness among the healthcare professionals to co-work and co-learn. Barriers to successful implementation of integrated care include a lack of commitment across organisations, limited resources, poorly functioning IT, poor co-ordination of finances and care pathways, conflicting objectives and conflict within teams. **Conclusion:** The examples of integrated working provide insights into problems and solutions around inter-organisational and inter-professional working that will guide those planning integration in the future.

Keywords: integration, primary care, specialty care, healthcare, barriers, facilitators, change

Introduction

A need to integrate care for people with long-term conditions

The current structure of the health service - with primary care professionals managing access to specialist care - should in principle be able to offer whole-person care which allows early identification of disease, timely and appropriate interventions, and prompt management of complications. However, in reality, the current structure is fragmented with care providers working across different organisations which are driven by different priorities, metrics, outcomes, and budgets. In the context of what can be contradictory care arrangements, delivering person-centred care that is clinically effective, safe, timely, efficient and equitable is challenging.

In response, there has been a policy drive to re-design how care for people with long-term conditions is delivered. A view emphasising the role of integrated care was expressed by NHS England in *Integrated care and support: our shared commitment*¹ and the *Five Year Forward View*.² Furthermore, organisations representing healthcare professionals have also proposed ways to dissolve traditional boundaries between general practice, community services, hospitals and social care; such bodies include the British Medical Association,^{3,4} the Royal College of Physicians (RCP),^{5,6} the Royal College of General Practitioners (RCGP),^{7,8,9,10} and the Royal College of Nursing.¹¹ A joint RCP and RCGP¹² statement promoted service design models which were focused on establishing joint management and delivery structures to provide co-ordinated care and to develop inter-professional leadership and teams spanning services and settings which are driven by shared outcomes.

These policy documents and professional bodies propose that service development and care delivery should be driven by person-centred co-ordinated care. They propose novel ways of closer working between different parts of the health service, and flexibility while developing new models of care (no 'one size fits all' approach). National guidelines and regulatory, financial and incentive schemes provide a starting point for organisations to develop services accordingly to their local specifications. Without explicit and detailed programmes ready to be implemented, many organi-

sations across the country have been testing new and innovative solutions; about 50 NHS Van-
guards, 25 Pioneers, 15 primary care home rapid test sites have been supported by the NHS Eng-
land, while 8 Future Hospital development sites have been supported by the RCP.

Options of integration between primary and specialty care

Integrated care is defined as *‘an organising principle for care delivery that aims to improve patient care and experience through improved coordination’* with integration being *‘a combined set of methods, processes and models that bring it about’*.¹³ There is a combination of ways by which in-
tegrated care may be organised, ranging from simple linkage, through coordination, to full integra-
tion. The most complete form of integration has been recommended for the care for people with
severe, complex and long-term needs,¹⁴ but such full integration does not necessarily mean organ-
isations merging. Indeed, improving the way different parts of the health service work together
around the needs of patients has been voiced as being more effective in terms of improving pa-
tient outcomes than a structural change.^{4,15}

The ways in which different parts of the health service can seek to achieve more integrated care
with partnerships and networks between organisations (virtual integration) without structural
change are numerous and include:

- joined-up or integrated care pathways
- chains of care (the needs of patients with particular conditions are met through care pathways that link different parts of the health system; networks of providers who work together through contractual agreements with commissioners; chains of care take responsibility for the budget and as such commissioners’ agreements with providers specify volume, cost, quality and method of delivery)
- managed clinical networks (networks of providers but without budgetary responsibility)
- care planning (co-production of a personalised care plan by a care coordinator and patient with the coordinator overseeing the plan and brokering care over multiple providers)
- case management (nurse led and community based planning and coordinated care)
- disease management (similar to case management but with a focus on populations, may include multidisciplinary discussion of care, patient and provider education)
- co-location (professionals from different organisations being located in and potentially working together from the same place to offer a common service, e.g. community-based or specialist outreach clinics, location of a specialist health or social worker in a primary care setting)
- contractual agreements between organisations (similar but more formal approach than that of shared guidelines or protocols; it is to guarantee adherence to joined-up activities)
- multidisciplinary teams (regular communication or meetings between professionals working in different organisations, joint discussion of cases, joint decision making and multi-disciplinary assessments)
- shared guidelines and/or protocols
- virtual teams (a virtual team typically involves staff from different organisations who work together informally through networks and alliances to present a unified service; the management and the structure of each organisation participating in the virtual team remain separate)
- virtual wards (virtual wards combine the case management and multidisciplinary team approaches; multidisciplinary assessment of patients’ care needs take place for those who have been selected via risk stratification techniques for ‘admission’; their care remains home based and is coordinated by a case manager and regularly reviewed by the team with the GP maintaining overall responsibility for the patient).⁴

The simplified models of care involving organisational changes have been suggested with two models focusing on a range of arrangements for community providers:

- Multispecialty Community Providers (MCP) (extended group practices forming federations, networks or single organisations offering a wide range of care using a broad range of professionals; primary care employing consultants or taking them on as partners, senior nurses, consultant physicians, geriatricians, paediatricians and psychiatrists working alongside community nurses, therapists, pharmacists, psychologists, social workers and other staff with an aim of shifting the majority of outpatient consultations and ambulatory care out of hospital settings)
- Primary and Acute Care Systems (PACS) (single organisations providing list-based GP, hospital, community and mental health services).²

Barriers to and facilitators of integrating care

In their joint statement, the RCP and the RCGP¹² recognised the need to identify local barriers to integrated working in order to inform and influence national policy. In this paper, we focus on barriers to and enablers of integration between primary and specialist care with consideration of the wider context of changes in the healthcare in the UK. The objective of this review is to inform the development and implementation of new integration programmes.

Method

Search strategy

CINAHL and Medline databases were searched for journal articles discussing barriers to integration of primary and specialist healthcare for people with long-term conditions. Search strategy included the following terms: (((("primary care" OR "general practice") AND ("secondary care" OR "specialist care")) AND (integrat* OR collaborat*)) AND (barrier* OR obstacle* OR challenge* OR facilitat* OR enable* OR implement* OR adopt*)) AND (England OR Wales OR Ireland OR Scotland OR UK OR Britain OR United Kingdom)).ti,ab. The search was limited to articles published in English since 2000 and also to publications related to healthcare in the United Kingdom. The search was broad and not limited to any particular health condition to enable cross-disciplinary learning.

Results

The search of the academic databases identified 47 abstracts with fourteen full-text articles included in the analysis. 33 abstracts were excluded based on the pre-specified exclusion criteria: not primary/secondary care interface, not a long-term or chronic condition, or no description of facilitators or barriers to integration of care. Articles discussing issues related to problems in delivery of healthcare across primary and specialist services and suggesting implementation of integrated care were also excluded as they did not directly address the barriers or facilitators related to organisational integration.

Of the fourteen articles included into the final review there was one systematic review,¹⁶ 12 original research studies, and one discussion article. The publications covered six clinical areas: mental health,^{16,17,18} diabetes,^{19,20,21} chronic obstructive pulmonary disease,^{22,23} musculoskeletal condition,²⁴ cardiovascular disorder,²⁵ and glaucoma.²⁶ The particular issues in healthcare management across long-term conditions included problems of working together between primary and secondary care related to poor relationships and different perceptions of priorities or standards,^{28,29} and

the role of integrated health records in integration of care.³⁰ Table 1 describes the studies while table 2 in the next section summarises the barriers and facilitators identified in them.

The papers included ranged from those solely focused on barriers to and facilitators of integration to those giving some insight into barriers and facilitators while describing various aspects of clinical practice, clinical education or health service functioning. The assessment of the papers was challenging because of the variety of service specifications, the multiple methodologies used to evaluate integration and the level of detail included. These made drawing definite conclusions difficult.

Table 1 provides a description of the reviewed papers with a focus on determining the type of evidence considered, the study design if the paper reported on an original piece of research, the elements of integration, the outcome measures of service transformation, and any support provided to implement the new service.

Table 1. Details of the reviewed papers							
study	aim	study design	sample	limitations	intervention	measure	outcomes
Agius et al., 2010 —— depression	to bring together all the studies on shared or collaborative care in depression	narrative review of trials, systematic reviews, meta-analyses until mid 2009; description of a shared care service for depression in Luton		mostly limited to studies carried in the USA	shared collaborative care with primary and secondary care doctors (training of GPs in the treatment of depression and the provision in primary care of a nurse specialist or another professional to impart psycho-education, ensure concordance with medication and provide psychotherapy) Luton shared care service - training of staff and funding to deliver service	depression outcomes and cost benefits	-improved treatment outcomes -increased doctor and patient satisfaction -some cost-benefits despite increased immediate costs -Luton service dissolved due to lack of funding (a cost saving measure) -stepped model for treatment of depression is focusing on facilitation of access to secondary care and discharge back to primary care, rather than focusing on optimising outcomes of care

Table 1. Details of the reviewed papers							
study	aim	study design	sample	limitations	intervention	measure	outcomes
Ahmed et al., 2014 —— patient safety	to determine the views of General Practice Educational Supervisors regarding the qualities and attributes of a safe GP and the perceived trainability of these safety skills and to compare the results with those generated by a study of hospital doctors	a prospective survey of all GPES in Scotland	50% of GPES completed the survey				

Table 1. Details of the reviewed papers

study	aim	study design	sample	limitations	intervention	measure	outcomes
Bernstein, 2011 — musculo-skeletal conditions	to determine how GP consortia can lead the development of integrated musculo-skeletal services	description of the service-redesign process; pre and post processes and outcomes measures	Ealing interface service including all GP practices	no control group	<p>intervention:</p> <ul style="list-style-type: none"> - 'See and Treat' interface clinic model - most patients being managed in primary care and fast routes to secondary care - interface service to provide expertise in diagnosis, triage and management of musculoskeletal problems not requiring surgery <p>bundle of interventions when developing integrated service:</p> <ul style="list-style-type: none"> - GP consortia leading an integrated service - GP consortia deliver service redesign by coordinating primary care development, local commissioning of community services and the acute commissioning vehicles responsible for secondary care - GP consortia with strong clinical leadership, inbuilt organisational and professional learning - input into commissioning by a dedicated commissioner, the core strategy group, the practice-based commissioning leads, PCT commissioning the community provider - PCT clinical advisor liaising with those inputting into commissioning to ensure coherent commissioning - a GP champion - high profile GP education programme with appointed education lead - referral guidance - block contract 	<p>interface performance indicators:</p> <ul style="list-style-type: none"> - community treatment - outpatient attendances - surgical conversion rates 	<ul style="list-style-type: none"> - 86% of patients presenting to GPs managed in primary care and community settings - a fall in specialist opinions occurring in secondary care from 100% in 2005 to 73% in 2010 - the surgical conversion rate for onward referral from the interface service is 70% compared with 30% from GP referrals direct to secondary care - 10% reduction in GP referrals into the secondary service - inappropriate referrals to secondary service dropping to 1% - a saving of £1 million recurrent per year

Table 1. Details of the reviewed papers

study	aim	study design	sample	limitations	intervention	measure	outcomes
Campbell et al, 2004 mental health services	to evaluate the effects of PMS on the quality of primary mental health between 1998 and 2001	multiple longitudinal qualitative case studies; semi-structured interviews with the key staff within practices (GPs, practice nurses, practice managers) and outside managers (health authority and primary care group/trust); context-mechanism-outcome model of organisations used to do the analysis	a purposive sample of six first wave PMS sites which had specifically planned to improve their mental healthcare; a diversity of aims relating to mental healthcare	limited data sources without patient evaluation, analysis of prescribing indicators, hospital admission and referral rates	-each pilot site presented a diversity of aims relating to MH care with PMS being introduced across the sites; three sites had a specific focus on mental health, two incorporated MH objectives into a wider quality agenda and one addresses MH as part of a health education programme -the sites varied regarding the role of PMS -mechanisms: named mental health leads leading the pilot, additional resources to fund new clinical posts, working towards PMS targets, links with voluntary sectors, links with secondary care, links with local authority, teamwork, protocols, guidelines and procedures	aims and targets for each pilot site	successful quality improvement was associated with effective collaboration with community and secondary care; new contractual arrangement (PMS) but contractual changes were not in themselves sufficient to improve care but had to be accompanied by five mechanisms: clear goals, effective teamwork within the practice, routine use of protocols and audits, additional resources, effective collaboration -no difference between practice or trust led initiatives -no single effect of the new contractual arrangement (PMS)
England and Lester, 2005 mental health services	to examine effects of healthcare policy on the development of integrated mental health services in England	case studies of the primary/secondary interface for people with serious mental illness	three case studies drawn from a narrative review of literature (1997-2003)	abstract case studies	-horizontal integration in primary care -horizontal integration in secondary care -vertical integration across the interface between primary and secondary care		-an integration rhetoric/reality gap in practice

Table 1. Details of the reviewed papers

study	aim	study design	sample	limitations	intervention	measure	outcomes
Featherstone and Keen, 2012 — diabetes	to understand how an integrated electronic health record system was used by healthcare staff in the treatment and management of diabetes patients	observational study of the use of an integrated EHR during patients' consultations with healthcare staff conducted over 3 month period	12 patients (9 from surgeries using EHR and 3 from surgeries not using EHR) were followed through 31 consultations	no information on selection process of patients	setting up and using a shared EHR between primary and secondary care		not all HCPs used the EHR; EHR can support more integrated care; unresolved issues in implementing the system across all services and settings highlight the governance problems when systems are developed locally but are then extended across organisational and professional boundaries
Hull et al, 2014 — COPD	to evaluate a system change to enhance COPD care delivery in a primary care setting	quality improvement programme; observational study using routinely collected data between 2010 and 2013	36 GP practices (all practices) in Tower Hamlets PCT; all patients with spirometry values indicative of COPD	practices not randomised to the intervention; other factors may have affected primary care management of COPD during the period of intervention - uncertainty between the intervention and the observed outcomes	intervention: 1)collaborative working between practices (networks) 2)shared financial incentives 3)engagement between primary and secondary clinicians investment: 1)financial investment 2)organisational investment 3)behaviour change: IT-driven performance feedback, educational facilitation, financial performance incentives	care package key performance indicators: -number of COPD cases on network registers -number of care plans completed in the previous 15 months -number of referrals to community-based pulmonary rehabilitation -annual influenza immunisation -smoking cessation -emergency hospital admission for COPD	-increase by 21% in identification of COPD cases -increase by 33.5% in completed care plans -increase by 25% in pulmonary rehabilitation referrals -increase in rates of annual flu immunisation -small increase in smoking -fall in the emergency admissions

Table 1. Details of the reviewed papers							
study	aim	study design	sample	limitations	intervention	measure	outcomes
Mc Hugh, 2013 — diabetes	to examine the barriers to, and facilitators in, improving diabetes management from the general practice perspective, in advance of the implementation of an integrated model of care in Ireland	qualitative design using semi-structured interviews	purposive sample of 29 practitioners and two practice nurses nominated by the practices as the lead healthcare professional responsible for diabetes; participants represented the diversity of diabetes care arrangements in Ireland	only primary care perspective, mostly of the GPs			
O'Connor et al., 2013 — diabetes	to explore GPs' and practice nurses perceptions of barriers and facilitators to the proposed transfer of diabetes care to general practice	qualitative descriptive design with focus groups	55 GPs and 11 practice nurses in 5 focus groups representing urban, rural and mixed practices in the Irish Mid-West region; fully or partly computerised	sampling-participants were volunteers interested in participating in a discussion on diabetes care; participants from one region only but good GP and practice profile representation			

Table 1. Details of the reviewed papers							
study	aim	study design	sample	limitations	intervention	measure	outcomes
Pinnock et al., 2009 — COPD	to explore the current and planned respiratory services and the roles of people responsible for change	semi-structured interviews with the person responsible for driving the re-configuration of respiratory services	a purposive sample of 30 Primary Care Organisations in England and Wales representing a wide spectrum of attitudes to the re-configuration of respiratory services; geographical spread with a range of population size and demography	sampling participants were interested in developing respiratory service; only one person from the PCO interviewed; limited inference about the direction of the observed relationship between clinical engagement and breadth of service provision, and the impact of confounding factors			
Price et al., 2014 — cardiovascular disorders	to discuss evidence on approaches to shifting care from secondary to primary care	a discussion paper					

Table 1. Details of the reviewed papers							
study	aim	study design	sample	limitations	intervention	measure	outcomes
Rea et al., 2007 — chronic conditions	to share experiences of chronic care management in Counties Manukau, NZ	comparative reflections on the chronic care management and integrated care projects around New Zealand and the UK					
Rushfort et al., 2016 — diabetes	to synthesise qualitative evidence on primary care physicians' and nurses' perceived influence on care	qualitative systematic review of 32 studies	MEDLINE, Embase, CINAHL, PsycInfo, ASSIA databases searched from 1980 until March 2014 inclusive of English language studies				
Syriogiannis et al., 2015 — glaucoma	to describe the pattern of glaucoma-service delivery in Scotland and identify areas for improvement	a glaucoma-survey questionnaire sent to all consultant glaucomatologists in Scotland with 13 out of 16 responding					

Barriers to and facilitators of integration of care

The identified barriers that halted or hindered integration included:

- lack of commitment to integration by the organisations involved
- conflicting organisational interests
- insufficient resources to develop the integrated service
- inadequate mechanisms of payments between the organisations
- poor exchange of information on patient health records between healthcare professionals
- poor co-ordination of care across the integrated service
- insufficient focus on patients' needs and wishes when planning and delivering care,
- moving care to primary care without up-skilling the workforce
- tensions between healthcare professionals because of uncertainties over their new roles and responsibilities
- misunderstandings over priorities in care
- resistance to change

Among the factors that supported the development and implementation of integration were:

- well defined and evidence based service
- general practices working together
- well-resourced team equipped with additional finance, time and team members,
- shared goals and values across organisations
- improved electronic communication
- fostering commitment and enthusiasm for joint-working
- monitoring care quality and performance.

Table 2 summarises both the barriers to and enablers of integration.

Table 2. Barriers to and facilitators of integration of care		
Barriers to integration		Source
organisations not committed to change	integration aborted due to altered service strategy	Campbell et al., 2004
	uncertainties about health service reorganisations	Campbell et al., 2004
organisations prioritising conflicting interests	keeping the split of management and commissioning with key issue being access to secondary care and discharge back to primary care maintaining focus on the facilitation (or gate-keeping) of these processes rather than focusing on actually optimising outcomes of care	Agius et al., 2010

Table 2. Barriers to and facilitators of integration of care

limited resources	space constraints at the surgeries preventing in-clinics	Campbell et al., 2004
	financial constraints	Pinnock et al., 2009
	increase in workload and shortage of staff	Hull et al, 2014; O'Connor et al., 2013
	lack of targeted remuneration and financial incentives	McHugh, 2013; O'Connor et al., 2013
poor co-ordination of finance processes	inadequate mechanisms for enabling the shift of finance from hospitals to community care	Campbell et al., 2004
poor exchange of information between professionals	difficulty to access information from secondary care	Campbell et al., 2004
	single patient record not being used due to technical problems, compatibility problems, governance problems	Featherstone and Keen, 2012
poor co-ordination of care	professionals individually negotiating rules for accessing patient records	Featherstone and Keen, 2012
	difficult to access specialist advice (GPs not knowing the consultants well enough)	England and Lester, 2005
	poor co-ordination and communication across the interface (e.g. about non attendance by follow-up patients; uncertainty when patients would be called or recalled by specialty service)	England and Lester, 2005; McHugh, 2013
	no consistent arrangements for discharge from primary to secondary care or shared care services in primary care	Syriogiannis et al., 2015
non-person centered care	lack of mechanisms to look into patient's need and wishes	Hull et al., 2014
lack of skills in primary care	paucity of formal training in primary care	England and Lester, 2005; Pinnock et al., 2009
tensions in inter-professional teams	a lack of understanding of the culture of primary care	England and Lester, 2005
	differences in perception of core safety attributes	Ahmed et al., 2014
	defensive attitudes	England and Lester, 2005; Rea et al., 2007
	lack of interest in cooperation, entrenched attitudes, antagonism	Pinnock et al., 2009
	uncertainty over roles and responsibilities	England and Lester, 2005; Rushfort et al., 2016

Table 2. Barriers to and facilitators of integration of care

Enablers of integration		
strong model of care	intervention based on existing guidelines	Price et al., 2014
	clearly defined structure, defined actions, roles and responsibilities	Price et al., 2014; Campbell et al., 2004
	clear and fast routes to secondary care	Bernstein, 2011
new roles to support integration	named lead (a GP)	Campbell et al., 2004
inter-practice working	a GP champion	Bernstein, 2011
	clinical leadership	Campbell et al., 2004; Bernstein, 2011
	working with GP consortia	Bernstein, 2011
	devolving resource and responsibility to groups of local providers (not individual practice)	Hull et al., 2014
bringing clinicians together	onsite clinics (secondary care and community care and primary care)	Campbell et al., 2004
	MDT meetings	Hull et al., 2014
	rapid access to advice by e-mail or telephone	Hull et al., 2014
	enhanced self-care	Price et al., 2014
	follow-up monitoring	Price et al., 2014
	availability of nursing support	McHugh, 2013
additional resources	GP education	Bernstein, 2011
	additional financial resources	Campbell et al., 2004
fostering and maintaining commitment and enthusiasm for joint working	community practice nurse dedicated time	Campbell et al., 2004
	knowledge sharing - organisational and professional learning	England and Lester, 2005; Hull et al., 2014; Bernstein, 2011
	shared goals and values	England and Lester, 2005
	respect for the autonomy of the different groups involved	England and Lester, 2005

Table 2. Barriers to and facilitators of integration of care

	the surrender of professional territory where necessary	England and Lester, 2005
	enabling healthcare professionals to learn about each other's settings and strengths	England and Lester, 2005
monitoring of care quality and performance	investment in an IT backbone to support the development of real-time information on clinical performance	Hull et al., 2014
	analysis of key performance indicators with clinical leads working with practice teams to support delivery	Hull et al., 2014; Price et al., 2014

Discussion

We discuss the findings from the reviewed papers in the context of the literature on integration of health and social care in the UK. The recommendations derived from the merged literatures, include:

- appraise the options before pursuing integration
- synchronise change at all levels of the healthcare system
- address the unexpected consequences of change
- engage stakeholders in developing intervention
- train the workforce for collaborative working
- facilitate sharing of information, resources and patients

This discussion focuses on six areas above. The first three were not described in this literature review, but were identified from the wider integration literature in health and social care. The first two areas - an options appraisal and addressing change at all levels of the healthcare system - are covered only by one paper selected for this review (Berstein, 2011). The third area of this discussion highlights the need to consider unexpected consequences of interventions, a factor rarely considered.

The last three areas arise from this literature review and cover the importance of developing the intervention collaboratively, training the workforce to work in a different way and ensuring that the infrastructure is in place to support the integrated model. If overlooked, any of these six areas may undermine the intervention; if addressed, they enable the intervention of integration to thrive. Finally, the discussion summarises the findings from the review and presents recommendations and a checklist for integrating care.

Appraise the options before pursuing integration

With policies and healthcare professional bodies promoting integration of care, there is a risk of perceiving integration as the best solution to current problems in the health services in England without fully considering why and when integration may/may not bring improvement. The Health and Social Care Act 2012³² promotes provision of care in an integrated way when it is considered

that it would improve the quality and outcomes of those services and reduce inequalities between persons with respect to their ability to access those services.

The World Health Organisation,³³ summarising learning from the Cochrane Review,³⁴ suggested that too often integration is seen as a quick and safe solution leading to no, or inadequate, change. There are a variety of reasons for such failure of integrated care:

- Integration is not a simple cure for a health service that doesn't work. Before implementing integration, an underlying problem should be identified and addressed with integration only if appropriate.
- Integrating everything into one package may not be necessary nor beneficial. There are many variations possible on the continuum of integration.
- Integration is not a cure for inadequate resources. Integrating two separate programmes may bring savings but integrating new activities into an existing system requires adequate funding.
- There are more examples of policies in favour of integrated services than examples of actual implementation. New policies, translated into working practices, should be reflected in the documents and procedures.
- Quality of care can be adversely affected by integration. Hence it must be regularly monitored as with any change in health service.

Synchronise change at all levels of the healthcare system

Integration may fail when the need for change is initiated at one healthcare level without clear facilitation of that change at other organisational levels.³⁵ Whether a top-down or bottom-up approach is taken, both carry risks to integration.

For example, in the case of a top-down approach, difficulties with integration may stem from a high-level centralised push for integration without adequate buy-in from all stakeholders, who may not be ready for change and are concerned about rushed implementation. Integration of care initiatives across the United Kingdom have usually been driven by centralised initiatives between different parts of the healthcare system with mixed results. This strategy, does not always allow organisations and professionals the time needed to rationalise the change and prepare for it, leading to the immature adoption of ideas, which in turn results in a gap between integration rhetoric and reality.¹⁷ Policy can drive organisational restructure and reform but does not necessarily provide the essential ingredients for professional collaboration.¹⁷

In the case of a bottom-up approach, integration may fail when initiatives are not aligned with the priorities pursued higher up the organisational hierarchy. Local plans may be hindered by policy barriers³⁶ and structural changes³⁷ proscribed centrally. Unrelated organisational changes may also impact on the changes happening at the team or individual level.³⁸ While primary and secondary care doctors may want to work together in a single team this level of integration may be hindered by separate management structures.¹⁶ As a result, healthcare professionals continue to focus on referring patients from one service to another and other organisational priorities, instead of optimising outcomes of care. The suggested way forward would be for the service to be restructured to enable collaborative working towards shared goals. Relying on the intrinsic motivation of the healthcare professionals is not enough to drive and sustain change if the change is not actively supported at other levels of the system; for example, shifting diabetes care for people with uncomplicated type 2 diabetes from secondary care to primary care and sharing the management of patients with complicated type 2 diabetes between primary and secondary care with-

out the targeted remuneration for diabetes management (decided at the health system level) and providing adequate resources in primary care (decided at the organisational level).²⁰

Address the unexpected consequences of change

Successful integration can have unexpected negative consequences. It is common to assume that integration and its individual components will have a positive effect however, negative (sometimes paradoxical) consequences have been identified.¹⁷ For example, the introduction of a new service aimed at complex patients in an underserved population, may lead to large numbers of referrals of people with non-complex problems limiting the service's ability to adequately treat the patients for whom it was set up. Shifting outpatient clinics, enabling specialists to operate clinics within primary care surgeries, can lead to a de-skilling of general practitioners. Attaching trained workers to primary care teams, e.g. community nurses to support people in primary care settings, can lead to confusion over roles and responsibilities with resulting inefficiency and both duplication and gaps in the service.

Engage stakeholders in developing intervention

A key element of successful integration is co-production of the new model of care with all stakeholders who are involved in, and affected by, care. It may be especially difficult when the scope of intervention is wide and target multiple populations³⁹ and also where there is a history of negative working between organisations involved.⁴⁰

However it may be unclear who is best suited to represent a particular group of interest or organisation. There are at least two issues to consider: whether clinicians or managers who should take this role; and who has the knowledge and skills required for service transformation. One study identified engagement of clinicians from both primary and secondary care in planning, implementation and governance of the programme as a key factor in the success of the integrated services by allowing diverse perspectives to influence the service development and aligning objectives.²³ In contrast, a lack of clinical engagement has been identified as a threat to integration. The main causes for concern are a lack of interest in the new ways of working, the absence of 'buy-in' from general practitioners and insufficient clinical leadership.^{23,37} These risks have been mitigated by managers encouraging and facilitating clinical engagement (e.g. nominating leads), and clinical leads assuming the role of champions and mentors.²³ Practice-based commissioning was perceived as a potential mechanism of increasing clinical involvement.²³

Even when stakeholder engagement happens, there can still be obstacles to good communication and relationships including personal, professional and organisational conflicts of interest and poor perception of other stakeholders.^{27,41} A systematic review of governance models for integrated primary/secondary care recommended pursuing a number of strategies to overcome these challenges: a shared vision focused on patient safety and quality care, a commitment to partnership, strong leadership and the implementation of necessary reforms for transformation at all levels of the healthcare system.⁴¹

Train the workforce for collaborative working

Problems can arise when healthcare professionals are not sufficiently trained or supported to collaborate in an integrated care setting.^{17,23,38,42,43} From the perspective of doctors, members of the British Medical Association shared their experiences of organisational mergers

including mergers of acute trusts, PCT clusters, and community and acute trusts; they stated that the most important enablers to integration were related to ethos and relationships including collaborative culture, good professional relationships, and effective clinical leadership.⁴⁴

Shifting specialist care to primary care without equipping the primary care professionals with the knowledge, skills and competences needed to deliver good quality care within an agreed service specification will result in demoralisation, reduced clinical engagement and outcomes that are not as good as expected. The barriers to provide education is paucity of formal training¹⁷ and a limited remit to provide education by specialists.²³

Even where there is adequate education for healthcare professionals, the education and training is often segregated, and as a result does not encourage healthcare professionals to work together towards the same goal. Inter-professional education is seen an enabler to learn about each other's settings and strengths and encourage a culture of collaboration and mutual respect.¹⁷ A specific example of the latter is education and training in health informatics for integrated care. This is particularly important given that health informatics is seen as one of the pillars of integrated care.⁴⁵ Gaps have been observed in the health informatics education and training for medical, nursing and health professionals.³¹ It is not realistic to prepare the workforce for all informatics systems while they are educated at the pre-registration level as the systems vary across the health services but developing some competencies at this stage may support the healthcare professionals while working in an integrated setting, including communication between multidisciplinary teams, clinical information standards, collation and management of electronic healthcare records, information governance and data protection legislation. The student training opportunities to acquire these competencies are scarce both during the medical, nursing and allied health professions pre-registration education and clinical practice.³¹

Facilitate sharing of information, resources and patients

Monitor (previously the UK healthcare regulator and now part of NHS Improvement) recognised a number of areas where obstacles could arise affecting willingness and/or ability to share information, resources and service users. These included:

- quality of IT and communication system
- operating procedures between services (e.g. different performance frameworks, finance systems, planning and budgeting)
- transfer of funds from one institution to another and tariff concerns
- risk aversion among health professionals
- service users choosing alternative providers
- governance (lack of clarity who has clinical and/or organisational responsibility)
- clinical practice (differences in how to treat patients)
- cultural differences (e.g. different management styles, extent of delegation of authority, clarity over objectives)
- measurement of integrated care (lack of clear guidelines on how to measure integrated care).⁴⁶

Practical implications - a checklist

Integration is a complex process which depends on a wide range of stakeholders and factors and which is expected to occur in a health economy that is constantly changing due to new priorities,

regulations and lack of resources. For those involved in integration of care, the checklist provided below, based on the review may assist in deciding what is working well and what needs more attention. Having been alerted to key elements in integration, those leading the service transformation will need to assess, monitor, measure and evaluate the extent of integration. A number of resources are available to help achieve this (for example the NHS Improvement resourcesⁱ).

Table 3. Checklist

	In your integrated care project, have you considered...	YES	NO
Initial considerations	Have the reasons for underperforming in the existing arrangements been identified? Is there confidence that integration will help to address these issues?		
	If there is negative history of working between organisations involved, has it been recognised and discussed between the stakeholders?		
	Has it been considered if the existing collaboration mechanisms could be build on?		
Model of care	Has the new service been designed based on evidence and guidelines?		
	Is the vision (structure and aims) of the new service clearly defined?		
	Is it clear who will lead and take responsibility for the new service?		
	Has the scope of the new service been agreed on?		
	Has the split between management and commissioning been addressed? (Is the focus on optimising care rather than gate keeping?)		
	Have the shared outcomes been agreed on?		
	Has the payment and incentive system been aligned with the shared outcomes?		
	Has a risk of patients using an alternative provider been considered?		
	Has it been considered if resources and responsibilities could be shared between the general practices?		
Patient-centred care	Are there mechanisms to look into patient's needs and care preferences?		
Organisation level	Has it been considered what national/local transformation programmes could be used to pursue integration?		
	Are the organisations involved committed to integration?		
	Is the organisational environment stable?		
	Are the interests of organisations involved in integration non-clashing?		

Table 3. Checklist

	In your integrated care project, have you considered...	YES	NO
	Is there executive buy-in?		
Project delivery	Have the resources to manage the project been allocated?		
	Is there a project management process in place?		
	Are the resources to achieve the project's aim sufficient?		
	Are managers on the integrated project facilitating and encouraging clinical engagement?		
	Are all organisations and stakeholders represented on the project team?		
	Is the vision of the integrated care service shared in the team?		
	Is the vision reflecting the local needs? Is there buy-in from all stakeholders?		
	Are the team members committed to change? Are they ready to commit their time?		
	Has the timescale been agreed on?		
Clinical leadership	Is there a strong clinical leadership?		
	Is there a strong primary care leadership?		
	Are the clinical leads taking roles of champions and mentors?		
Working together	Has working together been enabled, e.g. onsite clinics, MDT meetings?		
	Has knowledge sharing been enabled, e.g. formal training, MDT meetings?		
	Is the access to specialist advice easy and timely?		
	Is there confidence across primary care to access specialist advice?		
	Do healthcare professionals in the integrated service feel respected by each other?		
	Are the management styles and extent of delegation of authority consistent?		
Coordination of care	Are shared guidelines/protocols in place?		
	Is the route to specialist care clear and fast?		

Table 3. Checklist

	In your integrated care project, have you considered...	YES	NO
	Are there consistent arrangements for discharge or shared care services in primary care?		
	Is there a mechanism in place to indicate where the patient is in the integrated service, for how long and what are the next steps?		
	Has exchange of information on patient health records been enabled?		
	Is the care plan shared?		
Operating procedures	Are unified performance frameworks in place?		
	Is transfer of funds between organisations enabled?		
Workforce planning	Does primary care workforce have skills to deliver care expected in the new service?		
	Are new roles and responsibilities clear?		
	Are the healthcare professionals trained to use new IT solutions?		
	Are the healthcare professionals open to the new ways of working?		
	Has it been considered if there is a need for new skills in the system?		
	Has it been assured that the new arrangements will not deskill primary care?		
Monitoring processes and outcomes	Have the care quality, processes and performance monitoring mechanism been put in place?		
	Is there a system in place to recognise and address unexpected consequences of change?		

Conclusion

This review of the barriers and facilitators of integrating care for long-term conditions from across the UK provides insights into the development and implementation of coordinated primary and specialty care. Three recommendations transpire from the review: 1) there is a need for detailed reporting about the processes and interventions involved in the development and implementation of the integrated projects, e.g. Bernstein, 2011, 2) there is a need for comparative studies determining what elements of interventions are effective and in what configuration, e.g. Campbell et al., and 3) there is a need for a more systematic approach to the evaluation of the key enablers and barriers identified during development and implementation of integrated services. Too often the barriers/facilitators referred to as ‘key’ to integration are not supported by rigorous investigation.

Many authors of the reviewed papers identified 'key' factors of integration spanning the health system to the individual healthcare professional level and covering advice both relevant to managing change and improving clinical practice. The listed mechanisms, acting as facilitators were usually associated with more comprehensive integration. Each mechanism may bring change but only their combination can secure full integration

The 'key' factors identified fell into the following themes:

- a) strategy: overcoming inter-organisational divides¹⁷; addressing the broader strategic issues of each organisation²³, positive collaboration with health authority, hospitals, and community based secondary care¹⁸
- b) clinical engagement in the development and implementation: engagement in the planning, implementation and governance of the programme and in contributing to the educational support in the MDT meetings²²; strong clinical leadership, a core strategy group, a GP champion, all coordinating primary care development, local commissioning of community services and the acute commissioning responsible for secondary care²⁴; clear aims and vision shared between practice staff, community trust partners, and the health authority¹⁸
- c) inter-professional working: overcoming inter-professional differences by knowledge sharing, respect for the autonomy of the different groups involved, the surrender of professional territory where necessary¹⁷; good teamwork¹⁸; providing for local educational needs²³; the presence of multidisciplinary teams (integrated primary and secondary clinical teams or integrated primary and secondary care clinicians with management)²³
- d) coordination of care: easy access to secondary care^{16,21}; linked information systems²⁰;
- e) resources: remuneration for chronic disease management²⁰; appropriate investment in infrastructure and resources^{18,20,21,22}; time resource²¹; workforce resource²¹; sufficient services particularly in the community²⁰
- f) clinical practice: common medication guidelines across primary and secondary care¹⁶; shared protocols^{18,20,21}
- g) culture of learning: inbuilt organisational learning and professional learning for providers at every stage of the care pathway from general practice, interface services to secondary care²⁴, real-time information on clinical performance relevant to both clinicians and commissioners²²

There has been a rapid increase in the number and diversity of new models of integrated care, stimulated by the Five Year Forward View². The NHS England Vanguard sites, including integrated primary and acute care systems (PACS) and multispecialty community providers (MCPs), are coming to the end of their two-year pilots after being selected in 2015. PACS and MCPs have demonstrated, in over one year, that the growth in emergency admissions and bed days from the base year has been lower than for non-new care models, but it has yet to be identified what elements have contributed to the success and what could be replicated elsewhereⁱⁱ. The NHS England Integrated Care Pioneers, developing and testing new and different ways of joining up health and social care services since 2014, underwent an early evaluation to describe implementation of the programmes and barriers to and facilitators of integration. Although integration has been on the national agenda, the Pioneers identified national issues, including the legal framework for contracting/commissioning and information governance as persisting issues.

The national context has been changing though and those barriers are being challenged. New commissioning models include outcome-based commissioning at a population level (the Rightcare approach) and person-centred care commissioning at an individual and

population level (the House of Care approach). With general practices consolidating to create more sustainable organisations, and working collaboratively through federations to deliver healthcare at scale, even up to CCGs merging, new opportunities for collaboration will arise.

The current changes in commissioning with new solutions being tested around the country provide novel mechanisms of integrating care. Whether by pulling budgets between organisations providing an integrated service to increased buying power and better planning of resources or by remuneration of integrated working to motivate collaboration, the options are numerous and there is increasing flexibility in developing them locally. These solutions will however only change our understanding of what works for whom if there is careful analysis of the contracting process and comprehensive evaluation of the commissioning outcomes.

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