Royal College of Physicians | Future Hospital

Integrated care – taking specialist medical care beyond the hospital walls

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A report to the Royal College of Physicians Future Hospital Programme

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The purpose of this report

This report represents views from front-line physicians, hospital trainees, academics, GPs and lay partners on how the physician community, the Royal College of Physicians (RCP) Future Hospital Programme and other organisations can support, develop and deliver integrated care. It details urgent changes that are required to make integrated care and the NHS Five Year Forward View a reality.

This report highlights key processes and ingredients that are required for integrated care, and it provides a valuable resource for clinicians and service leads to develop and deliver integrated care. Recommendations to inform the future activity of the RCP Future Hospital Programme and its partners are detailed in this report. The report also provides guidance to policymakers, think tanks and strategy writers for integrated care.

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Foreword

I am delighted to introduce this report, which has been produced and developed on behalf of the RCP Future Hospital Programme by Dr Anne Dornhorst and Dr Sufyan Hussain.

The Future Hospital Commission report,[1] published by the RCP in 2013, constitutes a radical reinvention of medical care: promoting an integrated, person-centred approach and including recommendations that enable patients to receive early diagnosis and treatment, fully supported and delivered in a location that best suits their needs. The interests of patients were paramount in the report and remain a key focus of the Future Hospital Programme, which was set up to implement the Commission's recommendations in practice. The Future Hospital Commission responded to five major challenges that are facing acute hospital medical services:

- increasing clinical demand in the face of reduced facilities for acute medical care
- the changing needs of patients, with a growing number of patients aged over 65 years of age and patients with multiple conditions necessitating a holistic and integrated service
- poor continuity of care
- inadequate arrangements for out-of-hours care in hospitals
- an imminent workforce crisis in both career and training grades of medical staff.

The achievement of truly integrated care planning and delivery is key to addressing these challenges for both patients and medical staff.

The NHS Five Year Forward View,[2] published in 2014, built on many of the issues and recommendations that were covered by the Future Hospital Commission report. The Five Year Forward View identified priorities for action, and emerging plans speak to these priorities. For example, the NHS England vanguard programme has now commenced. Key learning from the vanguard sites, which supports physicians to deliver innovative models of care, will no doubt inform future practice. However, for many physicians the issues are near and present, and the medical workforce is already considering the challenge of working outside of the acute hospital and the challenges to traditional ways of working that are consequent upon this.

This report focuses on integrated care from the physician's perspective, including matters such as job planning, contracts and training. All of the issues that are discussed in the report should be addressed, and the learning shared, in support of the vision of both the Future Hospital implementation programme and the Five Year Forward View.

When implementing integrated care, much emphasis is currently placed on models that have worked elsewhere; this puts at risk the gain from co-design that focuses on the needs of the local population and the availability of services, and it fails to correct inadequacies in current care. The authors have spoken with physicians across the country to explore successful strategies for delivering integrated care models.

I am grateful for everyone's contributions to this important piece of work. We in the Future Hospital team have learnt that one fundamental for success is having a supported programme of engagement where patients are partners in their care and they co-design, with healthcare professionals and others, the model of integrated care that best meets their needs. This process is common to all successful ventures and it remains true to the central theme of the Future Hospital Programme, where patients' needs and active participation in service design and implementation are central to effective service delivery.

Anita Donley, clinical vice president

Executive summary

This report is a timely reminder for physicians to involve patients and people with long-term conditions in service development as the NHS faces so many challenges in terms of both workforce and resource. As a member of the RCP's Patient and Carer Network, I am delighted to see here the continuing emphasis on ensuring that the patient's needs are central to the care that is provided, as was outlined in the Future Hospital Commission report.

For patients, especially those with long-term conditions, and frail and older patients, the value of a seamless integrated approach to care that involves the patient, carer, providers outside of hospital and specialist physicians is an obvious and efficient way to support the patient journey through an illness or treatment.

We clearly need to develop systems and approaches that support this to improve the quality of care and to maximise the use of the limited resources that are available. We need to see the value of supporting patients with a long-term condition to self-manage where possible. We need to equip them with skills and access to technology such as telemedicine and easy access to their own care record, which will allow them to self-manage effectively and safely.

I am especially pleased to see that co-production is a key and integral part of this report. Patient engagement in designing services is identified as a major success factor in nearly all of the case studies presented in this report. Patients are a huge untapped resource. They know their needs and what works for them. Bringing patients, carers and health professionals together to design services means that a new relationship can be established, on equal terms, creating opportunities to understand what is important to all when creating new ways of working. This will facilitate the development of strong personal relationships between the individuals and care teams that support holistic care goals. This is identified as 'relational continuity' in the report as one of the three main factors of an integrated care approach.

I don't underestimate the challenges that are involved in making this a reality. Even the process of accessing medical records today in an integrated way is immensely difficult. For physicians, these approaches are not always 'second nature'. Physicians have mostly been trained and have practised in settings that have 'delineated', not integrated services. Working in partnership with their patients has not always been valued or prioritised as part of any training, either through medical school or after qualifying as doctors.

Patients too must play their part. As experts in their own care of a long-term condition, the ability to provide support to others, especially at the time of diagnosis, is currently undervalued and underutilised. Patients can play a useful part in the education and training of doctors, to help them to model true patient engagement in their practice. Patients can ensure that the services that are being designed are realistic for patients and the multidisciplinary care team, while recognising the leadership and expertise of the specialist physician. If integrated care approaches allow patients to access that expertise in different ways and in different settings that minimise disruptive, difficult and often multiple journeys to see different doctors, so much the better!

Margaret Hughes, RCP Patient and Carer Network representative

Section I – Introduction

This report complements the RCP Future Hospital Programme's work[1] and discusses the opportunities and challenges for clinicians in delivering integrated care as envisaged in the 2014 NHS Five Year Forward View.[2] The Five Year Forward View promotes integrated care being delivered by teams from across the health and social care system with patients as equal partners in their care.

Integrated care is central to NHS England's long-term strategy plan[1,3] and it is seen as the best way to deliver improvements and efficiencies in healthcare that are both patient centred and locally provided.[1] This is a view echoed by patients and front-line clinical staff.[4,5] Central to this is the recognition that many medical services, especially those for patients with long-term conditions, are delivered outside the hospital. While this may initially appear to be a threat to some hospital-based consultants, in reality it provides a genuine opportunity for the profession to collaborate with multidisciplinary health professionals to help shape, lead and deliver sustainable specialist services for individual patients and across local populations. The NHS landscape has changed and it continues to do so. To ensure that we can deliver coordinated care around people's physical, psychological and social needs, we must also change how, where and with whom we work.

All the contributors to this report have suggested ways in which the physician community, the RCP Future Hospital Programme and other organisations can support the development and delivery of speciality care as envisaged in the NHS Five Year Forward View.[2]

What is integrated care?

Before we redesign services and training programmes to deliver integrated care, it is essential to understand what we mean by 'integrated care'. In a 2009 systematic review of 326 peer-reviewed papers, 175 different definitions and concepts of integrated care were identified.[6] In a 2012 joint report to the Department of Health by The King's Fund and the Nuffield Trust, integrated care was defined as: 'an organising principle for care delivery that aims to improve patient care and experience through improved coordination'.[3]

Other definitions capture the concept that integrated care involves both the patient's and the population's health, as defined in the joint statement on integrated care by the RCP and the Royal College of General Practitioners (RCGP)[7] and a Health Education England report on foundation training,[8] which states that integrated care fulfils:

> *the need for continuous and coordinated care that puts the patient perspective at its heart, reshaping traditional 'silo' working and enabling the planned and efficient delivery of care both within – and beyond – the NHS.*

Dr Martin McShane, medical director for long-term conditions for NHS England, nicely sums it up as: 'Integrated care – is a team game', emphasising that it involves collaborative working across professional and geographical boundaries with three essential core components:

1 *management continuity* – policy, contracts, operational frameworks and incentives to support collaborative professional working
2 *informational continuity* – the information about the individual is owned and held by the person and is available to them and other healthcare professionals
3 *relational continuity* – strong personal relationships between the individuals and care teams to support holistic care.

Integrated care includes population health

The health and wellbeing boards (HWBs) were created in 2012 by the secretary of state for health[9] to oversee integrated commissioning services that address social, economic and environmental determinants of health across populations. Integrated care services have become part of a wider population health system that includes other NHS organisations, local authorities, the third sector, other local partners, patients and the public. The introduction of the Better Care Fund, co-commissioning, and the vision for citywide commissioning (as planned for Liverpool[10,11] and for Greater Manchester's 2.8 million residents through the £6 billion Greater Manchester Health and Social Care Devolution plan)[12] are all examples of how commissioning initiatives are addressing population health through integration.

The NHS Five Year Forward View emphasises the tripartite role of the NHS in wellbeing, non-communicable disease prevention and lifestyle support. It promotes joint commissioning between NHS providers and local government authorities with new models of care that bring multiple providers together, eg the multispecialty community provider (MCP) model.[2,10,13] These care models encourage collaborative partnership working between a number of providers, including hospitals, GP practices and others, to provide out-of-hospital integrated care.

Why do we need integrated care?

The NHS is facing unprecedented financial and workforce challenges that include treating increasing numbers of people with complex health and social care needs. The 'triple integration agenda' between primary and secondary care; physical and mental health services; and health and social care is designed to address these challenges.[2]

The aspirations of greater integration are to:

1 improve patient care and experience through improved coordination

2 reduce fragmentation and duplication of care across care services and enable better support when needed from other healthcare providers through multidisciplinary team (MDT) working

3 provide a more cost-efficient healthcare system for patients with long-term conditions and patients with complex medical and social needs.

Integrated care through greater provider partnership working

The NHS Five Year Forward View strongly encouraged provider partnership working for the development of integrated care services to deliver locally agreed health and social care outcomes.

NHS England and Monitor have statutory duties to enable integrated care, while clinical commissioning groups (CCGs) and HWBs have statutory duties to promote and encourage the local delivery of integrated care. Radical changes in how integrated care is commissioned have started with the establishment of 29 vanguard sites across the country, supported by an NHS £200 million transformation fund.[14] These sites cover large local populations and will pilot new models of care with single umbrella organisations that include hospital specialists, GP practices and other community health and social care teams commissioned to deliver integrated care locally.[10,14]

Other vanguard models being piloted include partnerships between primary and acute care systems (PACSs) that involve acute hospital providers, GPs, and community and mental health services to provide integrated acute and out-of-hospital services.

What does it mean for patients and carers?

A more integrated healthcare system is welcomed by individuals and patient groups.[4] The range of individual and community care needs will vary and will have to be accommodated by locally owned care models. Therefore, one model of care will not fit everyone. Integrated healthcare systems need to allow seamless movement of patients through services to access different levels of specialist support in an integrated care model. It is therefore essential that patients and their carers are involved as valued equal partners in designing these new models and services from the start. This will mean them being involved from the time of strategic planning and defining the policy stages, maintenance and evolution, through to the ongoing monitoring and evaluation of the delivery of integrated care services.

What does it mean for hospital services?

As CCGs move away from tariff contracts based on individual patient activity to those centred on population health outcomes, hospital services will need to share responsibility for population health through partnership working with other providers.

Specialist services will need to evolve and adopt innovative ways, both physical and non-physical (eg electronic), to support primary care as planned non-acute clinical work moves to the community.[15,16] This will include educational support for patient self-management and for primary and community healthcare teams; active participation in MDT community case management; and care planning for patients with long-term conditions.[16] Moving non-acute work to the community should enable doctors within the hospital to better support the acute medical services 24 hours per day, 7 days per week.[1,17]

The evolving role of the hospital consultant

The role of the hospital consultant will need to evolve from supporting and providing a hospital-based specialist service to supporting clinical teams to deliver care in the community.[14,16,18,19] Consultants of the future will need to take on a triple role to provide:

1 a specialist service across primary and secondary care
2 support to generalists and MDTs managing a clinical service within the community
3 training for generalists and MDTs to manage a clinical service within the community.

What do we need to do?

Hospital consultant involvement in integrated care is not new; however, the evolving new NHS landscape requires different ways of working to deliver integrated care. This report focuses on the key ingredients that are needed to make integrated care a reality. The contributors have identified opportunities that the Future Hospital Programme at the RCP could consider to try to achieve the aspirational goals of integrated care.

Key points

- **Integrated care is the delivery of care across organisations with the patient's and the population's health as the central focus.**
- **Integrated care is a key priority for the NHS and for the RCP Future Hospital Programme.**
- **Hospital teams will need to support specialty care services outside the hospital setting, through partnership working with other healthcare providers.**
- **Commissioning of integrated care services for patients with long-term conditions will focus on a range of care services improving population health and wellbeing.**

Section II – Lessons from contributions and case studies

Developing integrated care – processes, key ingredients and generic lessons from case studies

The integrated care case studies in this report have successfully taken routine care from the hospital setting into a specialist-supported primary care environment, with measurable benefits to standards of care. They have similar key ingredients to those emphasised in The King's Fund reports *Specialists in out-of-hospital settings*[15] and *Acute hospitals and integrated care*[16] (see Box 1). All the integrated care models describe in the case studies were developed over time to meet local health needs and with the patient at the centre of the service. All the models relied on a process to ensure partnership building with other provider groups, patients, carers and commissioners. They all provided support for patients and healthcare professionals, with education embedded in all service models, and developed care pathways and referral criteria for specialist referral.

Box 1 Key ingredients for integrated care

1. a shared vision across organisations and professions, built around the user's perspective and supported by an ongoing process for co-design, continued stakeholder engagement and improvement
2. partnerships with primary care and other organisations to connect care
3. co-production, co-design and patient engagement
4. funding (contracts, commissioning and overcoming conflicts of interest)
5. job plans, contracts and person specifications to support medical specialists
6. training for integrated working
7. leadership
8. management, governance and administrative support
9. shared information systems
10. communication
11. proactive care with patient education, self-management, care and support planning
12. mechanisms to evaluate quality, outcomes and performance.

Fig 1 Web of support for integrated care – fundamental structures and processes required for delivering integrated care across organisations

Common barriers to integrated care include short-term service contracts, funder–provider split, competing organisational budgets, activity-based tariff, inadequate resources, continual organisational change, inadequate training, poor management support from acute trusts and the lack of an evidence base for ensuring sustainable, effective services.

Key point

Integrated care models need to develop over time to meet local health needs through partnership building with other provider groups, patients, carers and commissioners.

Developing sustainable models for integrated care

A rush to find off the shelf solutions will lead to the translocation of new models from one area to another without a full understanding of the unconscious impact of complex organisational

change: skillmix of local driving personalities, IT infrastructure, geography, and conflicts of interest. Any one of these factors can derail an otherwise successful intervention from another locality. (Dr Kate Fayers, community diabetologist, West Hampshire Community Diabetes Service)

No one model fits every context, and we should be cautious of too-rapid organisational changes when setting up new services. As demonstrated by the Northumbria diabetes service (case study 1), the integrated care case studies in this report used an ongoing process for development, engagement and evaluation with multiple stakeholders, and including patients. This process is essential, and attempting to replicate models established in other areas risks failure.

Case study 1: Lessons from the Northumbria diabetes service – an archetype for a process to develop a sustainable model

The Northumbria diabetes service has lasted over 15 years and serves a mixed area of post-industrial urban deprivation on Tyneside and a dispersed population in rural Northumberland. It has approximately 80 GP practices and is delivered for practical purposes to five localities, with each locality of practices supported by a specialist diabetes team. Since it was established, the service has been able to adapt to successive organisational restructures. Currently, the Northumbria diabetes service is potentially facing another restructure, as the acute care trust becomes a vanguard site.

The local Northumbria diabetes service is based on implementing care and support planning across the region with a population of 550,000 people. There is joint ownership of the governance between specialist and primary care through formal locality focused steering groups. Their role is to oversee the programmes; to ensure that services are available; to set priorities; and to monitor, evaluate and quality assure the care that is delivered.

Like the other models described in this report, there are clear guidelines that have been co-created for secondary care referral and specialist support for primary care and education.

Measurable outcomes from the Northumbria model include implementing National Institute for Health and Care Excellence (NICE) evidence-based practice guidelines on insulin analogue prescribing across North Tyneside and Northumberland CCGs. For example, this has brought yearly cost savings of around £1.75 million when compared with regional or national average costs for insulin prescribing, while maintaining glucose control in the best quartile nationally.

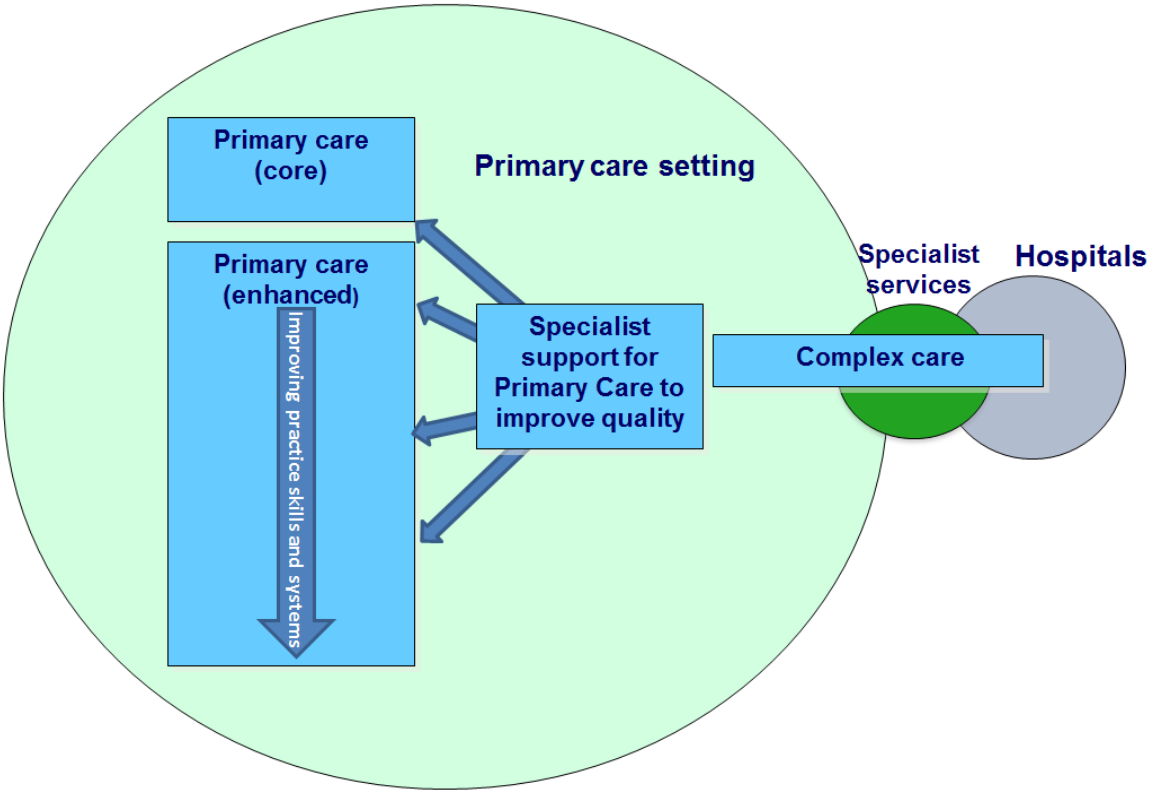

Fig 2 The 'shape' of the Northumbria diabetes service (adapted with kind permission from Cumbria Diabetes)

The process of developing sustainable models for integrated care

A common failing within the NHS is a lack of appreciation of the significant time and resource investment that is required in the process for developing sustainable integrated care models. At the heart of this process is ensuring that the user's (patients' and carers') perspective is central to the organisation of services. The Northumbria diabetes service's experience demonstrates the process, and the generic steps that are required are described below and outlined in Fig 4.

1 Define local needs

Any approach to developing an integrated care model must look at the needs of the population that is being served, in all the settings in which care takes place, which requires a local (health-economy wide) collaborative understanding. There needs to be clinical, organisational, commissioning and service-user leadership for this, and a willingness to invest in success up front. It won't happen just by 'wishing it to be so'.

The model, pathways, measures and structures of governance need to be built on these local needs but they must be collectively held (or collectively commissioned to be held by one partner on behalf of all partners). We need to recognise the context of wider policy and frameworks, such as the commissioning domains and NHS England's priorities. At a more practical level, there are national service frameworks (NSFs) and NICE guidance that broadly constrain or direct what can be done.

2 Enable 'co-design' and stakeholder facilitation

I can't emphasise enough how difficult it is to get a whole system programme going without co-design and stakeholder facilitation. Ownership comes from the process – without ownership and

getting the detail right, it will not work. (Dr Nick Lewis-Barned, consultant physician, RCP clinical fellow for shared decision making and support for self-management, Northumbria Healthcare NHS Foundation Trust)

While it is often ignored, it is critically important that the process of developing a model is done within the health community and with its service users, and that the model is owned by all the participants. Commissioners must play a central role in making sure that this takes place. Trust must be developed, and there must be clear aims and ground rules for the process itself.

Because the process of developing the model requires the engagement of all the key stakeholders, it should start with the identification of high-level principles that can be universally agreed; that is, principles that inform what people with a particular condition believe is best for themselves and what is of wider benefit to the health economy. If these principles are not agreed, then much of what is developed in the model may not 'stick'.

One of the ways this can happen is through stakeholder events. These do require an up-front investment of time and organisation, and some considerable facilitation skill. The events ought to produce an over-arching vision, set of aims and objectives and a logic model, which describes the measurable processes required to achieve the desired vision.

3 Co-produce the model

The co-produced model should match local needs with the delivery of care, and it should identify broadly what services are needed where, where governance sits and how the whole system will be held together. The model will form the basis for building structures for funding, governance, operational framework and management.

4 Co-produce pathways

Pathways should be developed to describe patient journeys and clarify criteria for direct specialist care. The pathways should be based on the model structure, professional skillmix and availability. As a result, the pathway will establish the roles of healthcare professionals at various points of patients' care.

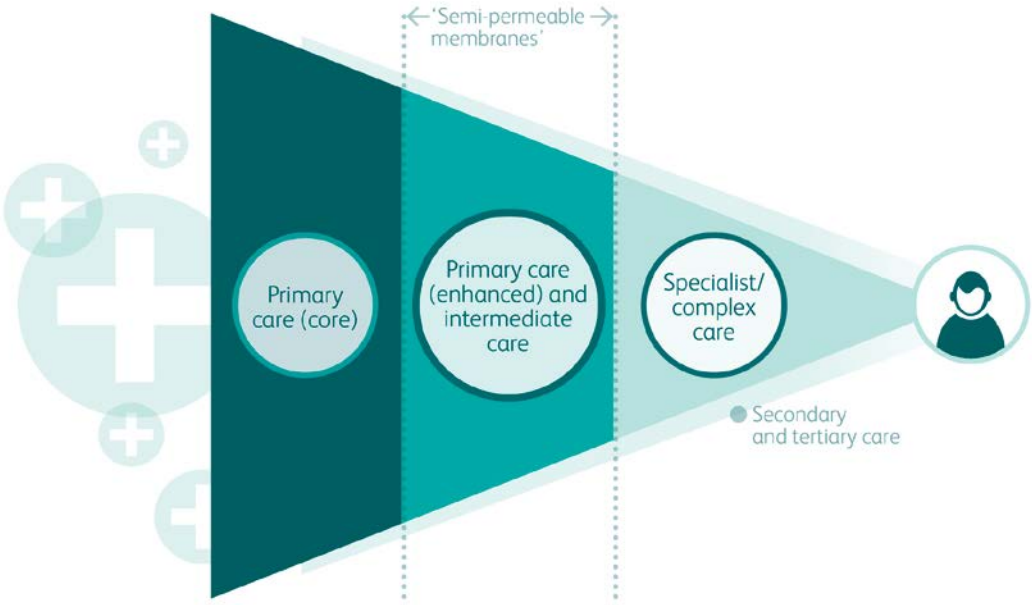

Fig 3 Working across the 'semi-permeable membranes' of integrated care, which allow patients and specialists to seamlessly move as part of an integrated service depending on need

The role of specialists should span across the traditional boundaries to deliver specialist care in the hospital and support primary care out of the hospital. The jointly agreed lines of division act as 'semi-permeable membranes', and are critical for the viability of this model (Fig 3). These can be based on population stratification or disease categorisation to define where patients receive the best care (*right care, right person, right place*). This approach was used in the Northumbria diabetes service (case study 1), with physicians working as part of specialist teams across different settings.

Other models have developed jointly agreed lines of division between primary and secondary care. An example of this is the 'super six' diabetes specialty areas that remain under secondary care (Box 2). The actual term 'super six' comes from the Portsmouth Model of Diabetic Care, which used a pathway based on this model to discharge 90% of the hospital diabetic caseload to primary care while decreasing acute diabetic emergency hospital admissions.[20,21] Other medical specialities will have their own locally agreed equivalent model.

Box 2 A co-designed pathway – the 'super six' diabetes speciality areas that require secondary care and outpatient follow-up

1. inpatient diabetes services
2. antenatal diabetes services
3. diabetic foot services
4. diabetic nephropathy (individuals who are on dialysis or who have progressive decline of renal function)
5. insulin pumps
6. type 1 diabetes (individuals with poor diabetes control or who are young people).

5 Identify the support needed to develop models and pathways

It is important to identify support structures that are needed to develop the models and pathways, such as patient and professional education, remote access to specialist opinion, information technology (IT) support, care planning requirements and evaluation. These support structures are expanded on in the case studies later in this report.

6 Enable co-evaluation

Co-evaluation is a critical aspect of model design that is often ignored. Sustainable models require an ongoing, transparent process to ensure improvement by learning from experience and evaluating the services across the various stakeholders with shared accountability.

The development of sustainable models requires time and resources to ensure that there is an ongoing process of co-design, continued stakeholder engagement and improvement. The user's (patients' and carers') perspective should be the 'organising principle' of service delivery across organisations.

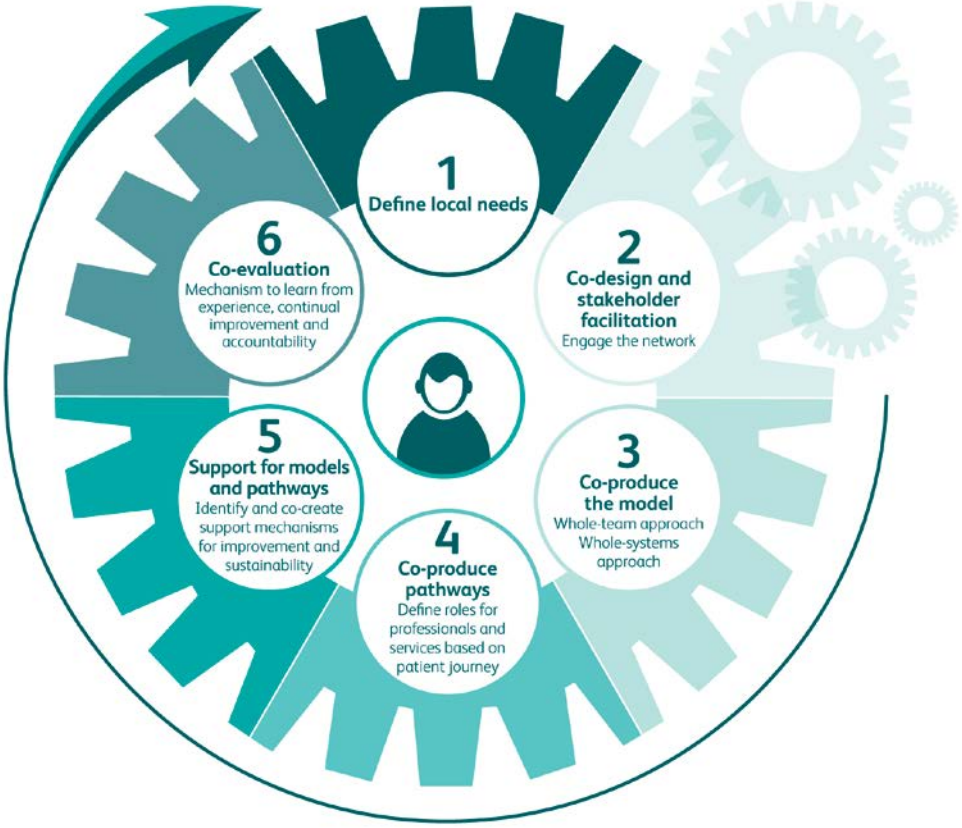

Fig 4 The process for developing sustainable models for integrated care

Key point

No one model fits every context, so the development of integrated care models requires engagement from all local stakeholders with a collaborative understanding of the complexities of the local health needs.

Partnerships with primary care providers

Integrated care requires new ways of working and links between organisations and individuals, rather than new organisations. The fundamental aspect of the models of integrated care that are illustrated in this report is partnership working between primary and secondary care. In this regard, the role of secondary care is to build relationships with primary care teams through educational support and multidisciplinary working, to ensure that high-quality speciality care is accessible outside hospital clinics.

Connecting and supporting care with linked partnerships

An example of partnership working and a prerequisite for integrated working is the development of joint locally agreed primary and secondary care pathways that clearly delineate which patients need direct access to specialist care and which patients need support extending through the designed models outside the hospital boundaries (as discussed on pages 15–16). Further examples include supporting primary care through multidisciplinary support via communication and meetings. This allows close coordination and shared care, as well as aligning service delivery with continued professional training for MDTs, as demonstrated in the Tower Hamlets and Newham case studies below (case studies 2 and 3 respectively).

Integrated care in east London – MDT support for GP networks from secondary care

Over the last 5 years, two London diabetes models of integrated care have worked across two of England's most socially deprived boroughs: Tower Hamlets and Newham (see case studies 2 and 3 below). Both case studies focus on the strength of MDT support for location-based GP collaborative groups.

Tower Hamlets and Newham are east London boroughs with populations that have complex health needs. The boroughs have high deprivation scores, high ethnic minority populations, high unemployment rates and a high prevalence of diabetes and undiagnosed diabetes.[22–24] The two boroughs' integrated diabetes care services illustrate the strength of hospital specialist teams working with GP networks (Tower Hamlets) and GP clusters (Newham).

Case study 2: Tower Hamlets diabetes MDT support and meetings

In Tower Hamlets, 35 GP practices are geographically grouped into eight networks of four to five practices.[25] Six times per year, a consultant attends each network to undertake a 2-hour MDT meeting with GPs, practice nurses, dietitians, DSNs and diabetes psychologist. This provides an opportunity for shared education, review of the key performance indicators (KPIs) for the diabetes care package, and communication on local diabetes care initiatives including updates on guidelines and the drug formulary etc.

In Tower Hamlets, the consultants also offer actual or virtual community-based MDT clinics, to review the management of challenging patients (eg frequent non-attenders and house-bound patients) and, on request, a consultant undertakes a combined consultation with a GP or practice nurse.

This model has resulted in Tower Hamlets having better improvements for blood pressure and cholesterol control than any other CCG in England over a 2-year period.[25] The success of this model helped to promote the development of other similar models centred on partnerships between primary and secondary care including neighbouring Newham (case study 3), and contributed to the Tower Hamlets Integrated Provider Partnership becoming one of the initial vanguard sites.

Case study 3: Newham diabetes MDT support and meetings

In Newham, nine clusters of six to eight GP practices from a defined location were formed in 2012. Each cluster has locally agreed incentives for providing extended diabetes care services, such as insulin initiation and performance against agreed targets. Each GP cluster has a linked consultant diabetologist (from Barts Health, Newham University Hospital) and a linked community diabetes specialist nurse (DSN) (from East London NHS Foundation Trust). The centrepiece of the Newham care model is the GP cluster case-based MDT meetings, which last 2–2.5 hours and are held 1–2 monthly, predominately within GP practices. At these MDT meetings, case studies from each practice are discussed by the group, facilitated by the consultant, resulting in agreed action points that are recorded in the patient's primary care record. Opportunities for key learning points are taken.

These MDT meetings also provide a forum to discuss secondary care discharges and referrals. Under the locally agreed extended primary care service for type 2 diabetes, the GPs, the practice nurse and the nurse practitioner are remunerated for MDT meeting attendance. Between these meetings, the GP practices can contact their linked diabetologist or community DSN by phone or email for patient management advice.

Since April 2013, the Newham GP clusters' engagement with this model of care has been good: of the 142 planned MDT meetings, only 16 (11%) were cancelled, and the diabetologist attendance was 100%. Of the 59 Newham CCG practices, 40 (68%) have provided at least one representative at 75% or more of the meetings, and these 40 practices represent 15,284 (67%) of the 22,682 registered patients with diabetes in Newham.[26] This model of MDT working with GP practice groupings has helped to improve KPIs of diabetes care in Newham. The National Diabetes Audit data (**www.hscic.gov.uk/nda**) demonstrated that in 2013/14, Newham CCG achieved 46% on the composite target for HbA1c (a marker of overall glucose control), blood pressure and cholesterol, compared with 37% in 2011/12 and 38% in 2012/13. This performance is among the best in London (and in England and Wales) and has been achieved during a time when performance across England and Wales has stalled.

Multiprofessional educational support for primary care

The Tower Hamlets and Newham integrated care models have invested in upskilling local primary healthcare teams through both their MDT working and supporting other teaching programmes. Currently, 94% of Newham GP practices have at least one healthcare professional (GP / practice nurse / nurse practitioner) who has attended an extended diabetes education practice course. In more than half of the practices, at least one GP and one practice nurse or nurse practitioner are formally trained in insulin initiation and they maintain their skills in this area. Similarly, in Tower Hamlets, all health professionals delivering diabetes care have attended an accredited diabetes course. Educational support is provided by the specialist teams for care planning, insulin initiation programmes and delivering accredited structured patient education programmes.

This working model is likely to expand as more GP practices collectively form service provider groups such as federations, clusters, networks or MCPs and PACSs to deliver extended out-of-hospital services.[2,14,27]

The benefits of shared working

The case studies in this report highlight a number of other examples where collaborative working between primary and specialist services was a key ingredient in improved care (Box 3). GPs, practice nurses and nurse practitioners report major benefits from such shared working practices: they welcome the opportunity to discuss their patients' cases face to face with the specialist team but, in addition,

they report the benefits of sharing their experiences with colleagues in a supportive and learning environment. Over time, they have reported improved confidence in their patient management and decision making around therapies etc. They have also expressed an element of surprise at the patient-centred approach taken by physicians, believing this to be more characteristic of primary care.

Physicians also report similar subjective benefits: they enjoy the continuity of care for some of the most complex patients, who may be initially discussed at an MDT meeting prior to referral to secondary care, and then discussed again by the linked physician after the patient has been seen in clinic. Specialist support for MDTs in primary care also provides a forum to address the aspects of long-term conditions that cannot be treated simply by a change of pharmacological prescription.

> *It promotes a different approach centred on engagement and education, psychological support, shared decision making and timely opportunism.* (Dr Graham Toms, consultant diabetologist, Newham)

Box 3 Partnerships with primary care – lessons from case studies

- A collaborative 'do it together' culture between primary care and secondary care in the Northumbria diabetes model (case study 1) allowed joint education session delivery and local guidelines that promoted education, adherence and learning across the sectors.
- Primary care networks, federations and hubs facilitate effective partnerships with secondary care, as noted in the Tower Hamlets and Newham diabetes models (case studies 2 and 3), by pooling together GP resources and allowing the specialist to allocate their limited time in an effective manner.
- Close communication between the specialist and the GP is essential to ensuring that complex care needs are coordinated and delivered in a responsive fashion by the MDT to patients at home, as noted in the community independence service (case study 4 below).
- Strong relationships between primary and secondary care allowed supportive commissioners to partner with the acute trust to develop the South Manchester Nursing Home case management team (case study 6 below).
- A key initial step in developing the Derby diabetes model (case study 5) was a joint re-design of the models of care and leadership in new collaborative organisations that focused on population health between primary and secondary care.

Key points

- **The involvement of specialist physicians in primary care MDT meetings facilitates the development of joint pathways of care, management guidelines and referral criteria that are required for integrated care.**
- **Secondary care educational support for primary care can be delivered in primary care MDT meetings in which the cases of patients with complex conditions can be discussed.**

Partnerships with a range of care providers

Health and social care are working to align more closely to provide more holistic care: this will require a range of care providers to work together.

Case study 4 below describes how an acute trust working with community providers has built a service to support older patients at home while retaining direct access to specialists and acute hospital treatment when required in a planned, defined admission. It highlights the opportunities to deliver integrated care in this setting and the necessary funding, operational framework, management, governance structures and IT support that is required. The related issues around training, job plans, contracts and leadership for this service are discussed in the 'Commissioning, job contracts and job planning for sustainable integrated care specialist services' section on page 26.

Case study 4: Community independence service and medicine for older patients services at Imperial College Healthcare NHS Trust – a continuum of services supporting complex older patients' care via multiple providers

The community independence service (CIS) is a multidisciplinary health and social care team that provides coordinated nursing, therapy, psychiatric liaison and social care input to local residents. The aim is to enable people to be supported in their own homes and to remain independent.

The 'virtual ward' is a morning MDT meeting at which a geriatrician and a local GP based in the community hub support the CIS team to discuss patients who are identified as being at high or escalating risk of hospital admission. If required, patients are then seen at home by the most appropriate team members. The 'virtual ward' communicates directly with the patient's own GP and liaises with the hospital's acute geriatric team.

This service also closely links with other older persons' services such as the older persons' rapid access clinic (OPRAC) 5 days a week and a GP direct phone line to a consultant geriatrician for advice or referral to OPRAC. Patients who are felt to be at high risk of hospital admission can then be seen within a few days in this one-stop, all-day centre by an MDT with access to full diagnostics, therapy assessment and secondary care expertise.

Within accident and emergency (A&E) and the acute admissions ward there is a system of direct referral to a consultant geriatrician, who works together with a team of hospital and community therapists to facilitate discharge where appropriate. When immediate discharge is not felt to be the best option, there is a frailty unit where complex patients can stay for 24–48 hours. The service also links with an acute assessment service for older people admitted to hospital called the older persons' assessment and liaison team (OPAL).

The CIS provides a 7-day 'in-reach' team to the acute trusts, which supports early hospital discharge planning by providing therapists, nurses and carers at the patient's home immediately after discharge, or direct referral for review on the 'virtual ward'.

Although these services still require a robust evaluation, their strengths are that historic communication difficulties between agencies have been removed, and that patients move between services according to need. By providing a range of acute and sub-acute services linked with social care, they offer an alternative to the single choice of home versus long-stay admission to an acute hospital bed. The enablers and barriers learnt from setting up the CIS are shown in Table 1 below.

Table 1 Enablers and barriers learnt from setting up the CIS

Enablers	Barriers
National and local priority to support the care of older people out of hospital	Unsustainable funding streams
Proactive support of the CCG to develop the services	Multiple organisations involved: contractual and funding hurdles
Better Care Fund support	Lack of management structures and governance processes to support cross-organisation working
Experience from an integrated care pilot undertaken in the preceding years in north west London	Information sharing of records, laboratory results, care plans etc
Consultant leadership and flexible support	Dependent on full team engagement and enthusiasm
Good communication between different healthcare teams and local authority agencies	Fixed-term not substantive contracts for CCG-funded posts, which impacts on consultant appointments and continuity of leadership
New patient-focused care pathways to ensure efficient transfer within the service to support care in the most appropriate setting	Lack of trained consultants for this type of work
Flexible job plans to allow dedicated working in community/integrated services	Offering this level of care as part of 7-day services
Engagement from acute hospital teams for support with older patients with more complex conditions	
Email and telephone advice and communication between secondary care and other care providers	

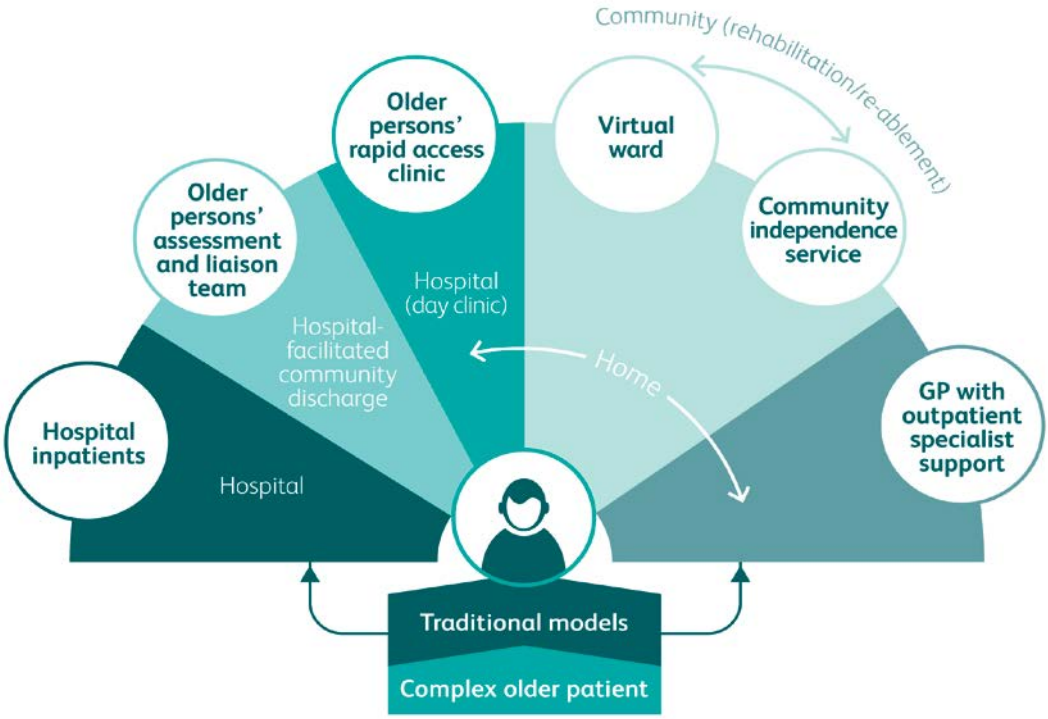

Fig 5 Community integrated services providing a range of connected acute and sub-acute services linked with social care

For a further example, see Fig 1 (The Medical Division remit: circle of patient-centred care) in the 2013 report from the Future Hospital Commission to the RCP entitled *Future hospital: caring for medical patients*.

Can we make 7-day integrated care services a reality?

The above case study emphasises the importance of delivering care outside usual working hours for patients with complex conditions, a view echoed in other reports.[17]

The potential benefits of a 7-day service approach is improved care and reduced weekday work pressures; however, the financial and manpower implications of delivering this service cannot be ignored.[28] Working 5 days in a 7-day service is likely to impact on workforce retention and recruitment across the spectrum of healthcare professionals, due to the knock-on effects on work–life balance. The creation of models of multiple providers that include acute hospital trusts with shared clinical patient records may well result in support coming from the acute trust, as this is staffed 24/7. The Tower Hamlets diabetes model (case study 2) provided out-of-hours advice from the acute trust's diabetes specialty registrars (StRs) on call, which was made possible by the shared primary and secondary care IT programme.

Key points

- **Patients with complex conditions require coordinated care from different providers working across physical health, mental health and social care, and the acute and community care settings.**
- **Acute trusts may be able to provide limited support to other care providers through partnership working with the provision of 24/7 out-of-hospital services.**

Co-production and patient engagement for integrated care

> *If we are really going to transform the NHS, it's not just our systems that are going to make it happen, it's our customers, the patients, who we need on-board: they are the truly untapped 'free' resource that any health economy needs to engage and bring fully into the team.*
> (Fatimah Vali, patient and public involvement officer, Macmillan Cancer Support)

What is co-production?

Co-production is a move from the acceptance or expectation that a healthcare professional does something to the patient or for the patient, to one where both the patient and the healthcare professional work together or co-produce health in partnership.[29] It centres upon the idea of patients and professionals working together across work or organisational boundaries. Co-production brings together the individual patient, group, and/or community as equal partners in the planning, implementation and evaluation of their health and wellbeing.

Why do we need to co-produce?

> *I hear the same repeated themes in my conversations with patients and carers about what they want from healthcare professionals. They want to feel included. Not just to manage their own health needs but for the co-design and development of our health services.* (Philip Sheridan, Patient Carer Community, University of Leeds)

Co-production is the fundamental first step to improving and re-shaping health services to provide integrated care services with the patient and population as the central focus.

> *To achieve integrated care, those involved with planning and providing services must impose the user's perspective as the organising principle of service.* (The King's Fund, *Integrated care for patients and populations*, 2012)[3]

How do we co-produce?

Co-production will require healthcare professionals to examine some of the values and the assumptions around the influence and control that comes with their role. Techniques are needed to understand, explore and find solutions to complex problems that affect patients, carers and fellow professionals, as are skills such as facilitation, care coordination, care planning and advocacy. These complementary skills will need to be learnt and practised with the same dedication that is given to the clinical skills that are learnt in medical training.

A variety of methods, approaches and examples can be given of excellent resources and programmes, such as in north-west London and Leeds.[30–35] It also requires the creation and delivery of programmes to train patients and carers to become effective lay partners. In essence, co-production requires professionals to engage in an ongoing dialogue to answer some simple questions: 'Who do you work for?' and 'Who's needs do you meet when you make an important decision about an individual's or a community's health needs?'.

Integrated care – the RCP Patient and Carer Network's perspective

Generally, many patients currently have little or no knowledge about how the delivery of integrated care will affect them. From the patients' and the carers' perspective, there will be potential anxiety about the transfer of care to community healthcare teams that have not previously been known to

them. There will be a need to reassure individuals about the positives to be derived from locally delivered clinical services that are part of larger integrated teams that link primary and secondary care with social care.

There will be a need to explain the benefits of the greater integration of clinical and social services to patients and carers, and how this will reduce fragmentation of care, especially among older and more vulnerable members of our communities. Local services providing care for patients with long-term conditions closer to home will lessen the need for patients and carers to travel long distances to hospital clinics; the reliance on and expense of ambulance transport services; and the frustrations around hospital car parking. A more locally delivered clinical service should spare patients and carers the irritation of multiple hospital outpatients appointments that often over run and are re-scheduled multiple times, as well as the need to repeat their medical history at each encounter.

As more integrated services are rolled out, it will be important that the benefits of these new services are communicated in a positive way to allay anxiety and to reassure patients and carers that access to highly specialised services will be retained to all those who need it. Another benefit that needs to be communicated is that a well-staffed integrated care team with close access to social care and other ancillary support services will be better able to provide crisis management within the home for frail older patients, those in residential care and patients with a long-term condition, to prevent unnecessary hospital admissions.

Individual patients, carers and those working in the third sector are a potentially valuable and unused resource for promoting and supporting integrated care. Those living with long-term conditions are often experts in self-managing their condition, and working with the integrated care team could provide peer support to others, especially at the time of the initial diagnosis.

A more personalised approach to locally delivered integrated care teams is to be welcomed. Meanwhile, it is important that the expectations around integrated care remain realistic, and this can best be done through the involvement of patients and carers in all aspects of the development of these clinical services and training.

(Margaret Hughes, RCP Patient and Carer Network member)

The need for patient engagement with health services redesigns

> *If the process is easier and more appealing, we will engage better!* (Jens Birkenheim, patient and founder of Xperio Health, diabetes services mapping and feedback service)

Convenience and accessibility are often highlighted as key to improving engagement for those with long-term conditions. Patients with long-term conditions often have multiple appointments for different aspects of the same condition over many years, and they can lose motivation to attend. Attending an appointment can mean arranging time off work or studies, arranging childcare and enduring a long commute. It can also involve the patient waiting to see a different professional at almost every visit, at times in a rushed manner, repeating information they have given previously, and receiving variable levels of care, some of which could have been offered as advice remotely.

> *Well, young and middle-aged patients also loathe the process and experience of attending hospital services that are designed for those with complicated conditions and are therefore less suited to their own needs.* (Jens Birkenheim)

Integrated care needs to focus on improving convenience and accessibility to make the process easier for patients. Possible solutions include re-shaping joint services to offer care or appointments closer to home where feasible; establishing one-stop or joint clinics; and adopting simple technology such as e-consultations, telephone or video consultations to reduce the number of hospital visits.

Key points

- **Users of health services need to be equal partners in the design of health services.**
- **Health services need to be designed around the patient to ensure easy accessibility and convenience.**

Commissioning, job contracts and job planning for sustainable integrated care specialist services

Commissioning for integrated care

Commissioning models provide financial incentives that affect behaviour. Following the Lansley reforms, the Health and Social Care Act and the NHS Five Year Forward View,[2,9,36] a number of important changes have occurred in commissioning structures and policies. Key policy reports summarise these changes for integrated care[10,13,37] and propose new models of commissioning and provider organisation structure. Their ability to overcome the hurdles in integrated care in the NHS remains to be seen. For physicians, commissioning impacts on their service duration and personal job contracts. At present, some of the problems for commissioning integrated care for medical conditions include there being different commissioning and contractual models; separate budgets for different aspects of care; competitive retendering with multiple providers; and a lack of clear outcome measures for population health and integrated care.[38] The vulnerability of an excellent integrated service falling victim to contractual changes in commissioning is illustrated in case study 5 below.

Case study 5: Lessons from the Derby diabetes integrated care model – problems with sustainability when repeatedly faced with competitive retendering

Integrated diabetes care in Derby began following discussions between hospital-based consultants and local GPs.[39] These took place during the mid-2000s, when there was a significant political push to move almost all diabetes care out of the hospital into the community. There was a recognition on all sides that if this went ahead without the engagement of hospital services, it could lead to a significant increase in primary care workload and the effective demise of the local hospital diabetes service. However, from a hospital perspective, the diabetes service was not able to cope with the increased demand in both the numbers and complexity of patients with diabetes.

Multiple meetings between clinicians took place over 12–18 months. The discussions centred on ensuring the best outcomes for the whole population of people with diabetes, as well as making sure that those patients who needed specialist support were able to access it quickly. The importance of re-working the model of care was highlighted, and at all times there was an equal balance of representation of primary and secondary care. This resulted in two new organisations (jointly owned and run by clinicians from primary and secondary care) being set up to deliver integrated diabetes care. One was specifically set up only for diabetes and the other was set up a year later with a much larger remit to provide a basis for joint care of patients with multiple long-term conditions.

The key enabler for both organisations was the relationships that were built up between the clinicians. These took time to develop, but as trust grew between the organisations, they were able to share the risk of the project as well as the benefits. Clinical engagement continued to be a priority both within the hospital and with GPs who were not intimately involved in the discussions at the start of the project. Time was also spent keeping hospital senior management staff appraised of the integrated service and aware of the clinical, financial and reputational implications of the service to the trust.

The organisations ran for 6 and 4 years respectively, until the end of their contracts. Despite showing significant improvements in clinical care and financial savings, the CCG has yet to award the organisation the new contract. This has been a huge disappointment to the clinicians involved in the service both in primary and secondary care. It does however raise the question of the sustainability of joint ventures between primary and secondary care and how such services can provide sustainable long-term solutions.

The impact of competitive retendering of integrated services

Short cycle competitive re-tendering can have a negative impact on the sustainably of clinical services and on clinical consultant contracts. Competitive re-tendering, perhaps unsurprisingly, can create a competitive rather than collaborative approach to cross-boundary working with neighbouring organisations. This can place unnecessary hurdles in the way of truly integrated patient care. The NHS Five Year Forward View sets out a vision that accommodates, indeed sees as essential, specialists in both community and hospital placement.

> *The policy and incentives commissioned need to be shaped to support professional collaboration – not drive a wedge.* (Dr Kate Fayers, community consultant)

The diabetes model in Derby (case study 5) was based on the formation of a single umbrella organisation with partnerships between provider groups that included hospital-based specialists, GP practices and other community health and social care teams: an organisational model that is sometimes referred to as an accountable care organisation (ACO). Despite support for such organisations to provide NHS list-based GP and hospital services in recent directives,[2,3] the Derby case study (case study 5) emphasises the problems created by competitive retendering that compromise the sustainability of such joint ventures. Current European competition regulation around competitive tendering has the potential to open up contracts to any qualified provider.[40] Ensuring continuity of services locally may be facilitated with the formation of the newer provider organisation models, such as the PACSs and MCPs that in the future will ideally work more closely with commissioners to tailor services for their local population. These contracts are complex, and there needs to be greater transparency in the whole tendering process. It is unclear whether the new models of care that include PACS, MCPs and any other ACOs will be subjected to the same retendering processes as highlighted in the diabetes model in Derby (case study 5). It is not only the models of care delivery that are changing, but the whole commissioning processes is evolving too (**www.rcplondon.ac.uk/guidelines-policy/commissioning-system-payment-and-structures-nhs**).

Outcome-based commissioning that sees fixed-value (block) CCG contracts replaced with contracts that reward outcomes rather than activity may, if they are more universally adopted, improve service sustainability. This form of commissioning involves a capitation payment to a provider or a group of providers to cover the majority of the care provided to a target population, such as patients with multiple long-term conditions, across different care settings with aligned incentives to deliver integrated services that deliver specified health outcomes.[41]

Commissioning integrated care may also become more sustainable through co-commissioning that sees CCGs and local authorities jointly commission integrated services that deliver local health that includes public health, wellbeing and social care using the Better Care Fund to help support social care within the service.[10,37] Since April 2015, over 70% of CCGs across the country have secured co-commissioning responsibilities from NHS England to take on greater 'delegated' commissioning of GP services, in a move to support integrated care. Other supportive examples of integrated commissioning include the year of care tariff; longer-term contracts; and measures and metrics that link inputs with outcomes (Improving Access to Psychological Therapies (IAPT) services are an excellent example of this, as they measure access but also recovery and information that supports quality).[42]

Contract duration – implications for consultants employed in a community post

Community consultants require robust contracts and realistic job plans. As CCGs are obliged to open up many community contracts to competition under the any qualified provider rules and commissioning cycles typically run for 3–5 years, consultant contracts can potentially move from one service provider to another, including to private non-NHS organisations.

Community consultants may operate outside traditional acute trust provision or in partnership with community and acute providers. There are a number of different clinical and contracting models but many of them share a limited duration (3–5 years) with associated KPIs.

Community consultant posts approved by the RCP may be hosted by any appropriate NHS provider, typically a community or acute trust. It is important going forward that consultants working in community posts are supported by the RCP. Short-term service contracts have the potential to reduce the influence and security of those holding community positions. They may give the impression that postholders (and the services that they contribute to) are temporary. As a result, attracting high-quality applicants to community positions may be challenging. Similarly, short-term community contracts may not attract those hoping for posts that offer opportunities for education and research. Consultants who work for a community service that is not re-commissioned may be able to 'TUPE' (Transfer of Undertakings (Protection of Employment) Regulations) across to a new provider. Moving to a private provider is understandably seen as a 'risk' to working terms and conditions. Links with postgraduate education and research may be broken. Acute trust postholders are unlikely to be subject to this degree of 'churn' and uncertainty.

These 3- or 5-year service contracts currently put clinical consultants at the centre of constant change: initially implementing new models of care at the start of the commissioning cycle, and later contributing to bid writing, ready for the next round of commissioning. Consultant involvement in this process is key, and needs to be supported. Estimated consultant time varies depending on the extent of consultant involvement in contract development. In complex service contracts, as in west Hampshire, the estimated consultant time for contributing to a recent successful bid for community diabetes services was 100 hours.[38] In the future, closer collaborative working on these contracts between clinical providers, management teams and commissioners should not only lessen the work burden for the clinician but also improve the overall quality of these contracts.

Community-based specialist physicians are unlikely to have received any specific training to support this activity that consumes large amounts of time, and they may not be given ring-fenced time for it in their job plans.

Realistic job planning

An ideal integrated care job plan should adequately support clinical sessions with supporting professional activity (SPA) time that accounts for service management, travel and other activities that are often not well understood by acute management teams. Community working may mean that 'corridor conversations' are infrequent, and community job plans must include adequate time to meet colleagues and team members. Having Future Hospital Programme approved examples of job plans would support those who wish to manage the demands of acute and community care.

The consultant contract should have time built in to support the triple aim of providing a service, support and capacity building. By definition, consultant job plans that support an integrated service must offer the postholder adequate time to travel to and meet colleagues across the different sectors. For those contracted by a community trust, honorary contracts with acute trusts may form the foundation for positive relationships with acute trust colleagues. Community consultants should attend and be included in local specialty and strategy meetings. The recent report *Collaboration in clinical leadership*[43] highlights how secondary care doctors can make a difference when working for CCG governing bodies. Furthermore, community-based specialists also need to be given the time to contribute to essential professional activities: research, quality improvement, innovation and education etc.

Key points

- **Short-cycle competitive re-tendering has a negative impact on the sustainably of out-of-hospital clinical services.**
- **Consultant job plans for integrated care need to include sufficient clinical sessions with SPA time for service and personal development.**

Training physicians for integrated care

Any transition towards integrated care will require a different way of working and different cultural expectations of working practices and roles. There needs to be an active focus on equipping and training doctors with the knowledge, skills and behaviours that will foster integrated working.

The role of the future physician

As highlighted earlier, hospital-based consultants of the future must play an important role in integrated care.[12] The role of the future consultant physician, taken from our case studies and other examples, are listed below (Box 4).

Box 4 The role of the future consultant physician in developing, delivering and leading integrated care

- coordinate the delivery of specialist care in multiple settings for patients in a geographical area
- provide acute and specialist hospital links in the community
- partner with primary care and MDTs in the planning of care and MDT meetings
- provide support and education to empower professionals in primary and intermediate care settings, as well as extended role development for staff (eg nurse consultants)
- provide specialist support and care via innovative ways including email, telephone, virtual clinics, video conferencing and practice surgeries etc
- support patient engagement, co-design and co-production of services

- develop and co-design information systems, communication tools, quality improvement, audit, monitoring and critical evaluation strategies for services
- develop management, governance and strategic planning for integrated services and prevention programmes
- as a respected clinician with permanency within the service, provide leadership to influence, inspire and motivate good working practices and change across sectors.

For an example, see Fig 4 **(**Extended roles for physicians in the community) in the 2013 report from the Future Hospital Commission to the RCP entitled *Future hospital: caring for medical patients*.

Changes across medical education are required to equip the future workforce with the necessary skillmix to lead and deliver roles in integrated care. Medical training is an area that is not addressed in detail in previous policy and strategy documents on integrated care. All the contributors to this report have stressed the need for greater shared training and contact with other healthcare professionals to take place outside the hospital setting. In this section, we highlight the barriers and how they may be overcome.

Undergraduate medical training

Currently, medical school training does not adequately train future doctors for integrated working. Cross-organisation and cross-discipline training, community placements and population health are not important features of the curriculum. Potential opportunities for undergraduate training on integrated working are listed in Table 2, together with the current barriers.

Table 2 Opportunities and barriers for undergraduate training on integrated working

Opportunities	Barriers
Longitudinal integrated clerkships that allow students to follow the patient journey in multiple settings over time with a focus on MDT working	A majority of teaching in fundamental specialties is directed by hospital-based consultants
Increased exposure to primary care as a medical student	Placements are often focused on one aspect of patient care, limiting natural integration
Further education, for example intercalated degree programmes (eg General Practice BSc) or special study modules	A significant percentage of placements are timetabled in a hospital environment
Formal teaching on communication and a patient-centred approach in longitudinal attachments	A majority of lecture-based teaching is currently provided by hospital-based consultants
	Minimal formal teaching is currently provided by the MDT
	Population health as well as other non-biomedical skills for integrated care are not adequately promoted in the curriculum

The contributors to this report advise that changes required to undergraduate training programmes to support integrated care include:

1 having more GPs with a specialist interest and integrated care physicians to deliver the curriculum, allowing a greater focus on chronic disease management

2 increasing exposure to integrated care by having joint delivery of teaching in the community by a specialist and a GP.

Postgraduate training

Integrated care is a key priority for the NHS, and was widely referred to in the *Broadening the foundation programme* report,[8] the Health Education England (HEE) mandate[44] and in reports for the Institute for Innovation and Improvement,[45] the NHS Forum[46] and in the Future Hospital Commission (FHC) report.[1] It was also a major focus of the Shape of Training report:[47]

> *Patients and the public need more doctors who are capable of providing general care in broad specialties across a range of different settings. This is being driven by a growing number of people with multiple co-morbidities, an ageing population, health inequalities and increasing patient expectations.*

Reports such as these have driven local education and training boards (LETBs) to start to commission postgraduate medical education that aims to develop medical staff who are competent to work in an integrated healthcare system. There is a significant focus from HEE and the individual LETBs to support medical workforce planning and educational commissioning that fosters doctors with the right skills, values and behaviour to meet the changing needs of patients over the next 15 years. However, at present, views collated from trainees, physicians, postgraduate dean's and RCGP faculties discussed in this section all highlight one significant theme: the fundamental limitations in postgraduate training for consultant physicians in an integrated care role. This section outlines some of the barriers that need to be addressed urgently to meet the NHS Five Year Forward View.

Difficulties in training specialty registrars / specialty trainees in medicine for integrated care

Lack of exposure to integrated care settings and MDT settings

> *If we don't train or learn together why would we expect us to suddenly work naturally together?*
> (Dr James Bartlett, ST7 acute medicine trainee)

If trainees train exclusively in one health environment (eg a hospital) the boundaries to integrated care seem large and opaque, and the knowledge, skills and behaviours of those on the other side of the interface are unknown. Training needs to cross these boundaries. There is a lack of training and exposure to collaborative working with other allied health professionals, managerial staff, primary care, mental health services, social services and patient groups. These links can be developed in combination with shared quality improvement projects to further develop new ways of thinking and working.

Packed curricula with limited time and focus on specialist aspects

An already packed curriculum, pressure for shortened training, the European Working Time Directive (EWTD) and heavy service commitments make anything outside of core 'clinical' competences difficult

to achieve. Relying on traditional educational practices or the goodwill of already overstretched physician trainees to acquire these new skills does not seem likely to lead to improvement. To date, integrated care is one of 27 specialist modules in the training curriculum; higher specialist training for physicians is focused on specialty, with integrated care being a lower priority.

Lack of emphasis on non-biomedical skills

Doctors need to understand how systems and people work in order to help influence and transform them. Such skills, which include leadership training, must not be thought of as an 'extra' and should be offered to all trainees by integrating these skills into the assessments for training.

Lack of policy awareness

Health policies around integrated care do not feature in junior doctor training programmes. Consequently, junior doctors can have limited awareness of the changes in health policy and NHS structures. Lacking awareness of these key health policies leads to junior doctors' disenchantment with joining up care and supporting care in out-of-hospital settings.

Negative cultures for cross-discipline training

Any transition towards integrated care will require a different way of working and different cultural expectations of working practices and roles. There will need to be an active focus in training on the knowledge, skills and behaviours that will foster integrated working.

Perfecting specialist craft is perceived to be more important than integrated care

The lack of knowledge and experience in leading and developing community services means that trainees, exclusively exposed to hospital medicine, value hospital practice over other career choices. Community specialist posts may be seen as second best rather than deserving of talented individuals with excellent specialist knowledge and leadership capabilities. This may be a fundamental reason for the slow adoption of new models of integrated community care. The result has the potential for a downward spiral and the possible creation of a sub grade of consultant that the RCP has been keen to avoid.

Interprofessional speciality barrier and path dependency

> *The tendency for careers in medicine to be seen as single paths mitigates against integrated care.* (Dr Neil Munro, GP)

The main barrier to closer working across different specialties – and more appropriate training of health professionals – lies in the traditional competitiveness between specialties. From early on in training, specialists tend to encourage and select those trainees who they think might be competent in their field. The tendency for careers in medicine to be seen as single paths also impedes integrated care.

To promote the training of doctors for integrated care working, a general change in attitude is needed that results in doctors valuing specialities other than their own. Raising awareness of what other specialties and services can offer patients and their families would go a long way to promoting cohesive working. The emphasis should be on teamwork.

The lack of flexibility in medical careers

If there were more flexibility in medical careers with doctors being able to delay their final career choice, change direction mid career or pursue combined or portfolio careers, then there could be more acceptance of working across specialties. The current system of promoting early career choice may be effective in terms of manpower planning, but it does not encourage the development of alternative career structuring. This point is addressed in Shape of Training, in which the opportunities for doctors to change roles and specialties throughout their careers is one of its key objectives.[47]

Barriers to commissioning training programmes

Trainees may be blinded to both the significance of community posts and the vast opportunities that they can offer. This is counterintuitive in the face of the recently published NHS Five Year Forward View[2] and policy.[16]

> *In order for LETBs to commission training which supports integrated care, training placements need to take place in integrated services.* (Dr Andrew Frankel, postgraduate dean for Health Education South London)

Lack of consensus on the definition of integrated care

Having a clear definition of integrated care within postgraduate medical education will allow both local education providers and LETBs to be clear about which training programmes, initiatives and projects support this and, therefore, about which should be designed, commissioned and delivered.

The need for suitable out-of-hospital training environments for medicine

In order for LETBs to commission training that supports integrated care, training placements need to take place in integrated care services. Postgraduate doctors in training (PGDTs) need to be exposed to services that are centred around the needs of patients (not the service) and that take a collaborative, cohesive approach. This will require both a cultural change within NHS organisations and strong leadership to support the transition of training posts. Services need to provide training placements that are outside of the acute setting, and that are of a high quality and provide suitable experiences to meet the learning needs of the PGDT. For example, a PGDT may have placements that span the acute sector, and community and private/voluntary sector organisations. Within such placements, LETBs (and training programme directors and educational supervisors at a local level) need to ensure that there are sufficient and appropriately trained supervisors in place, who meet the General Medical Council (GMC) standards for training. This may be difficult to establish in organisations that are unfamiliar with training.

Excellent training environments and consultant role models will be key in terms of changing working practices, attitudes and behaviours that will facilitate integrated working.

Contractual barriers

Another barrier to supporting training in integrated care is managing contractual issues that relate to a PGDT working across organisations. This can include issues around indemnity, which can raise significant concerns for doctors working outside the NHS and can now arise as services may be commissioned by any qualified provider.

Acute rotas

In terms of releasing trainees, acute trusts often require trainees to support the acute take and may not see community placements as essential. Consequently, trainees have little exposure to community placements and even less exposure to the service improvement skills that form a major part of the role. Trainees are therefore not being adequately trained for the jobs that are likely to be created over the next 5 years.

Suggested changes to facilitate integrated working

Box 5 summarises possible changes to postgraduate training to promote training for integrated care.

Box 5 Suggested changes to postgraduate training to facilitate integrated working

1. establish an 'integrated care common stem' training scheme
2. introduce integrated care quality improvement projects (eg 'Learning to make a difference') and audits
3. focus on integrated care assessments at the Annual Review of Competence Progression (ARCP)
4. enable joint educational sessions and placements outside of traditional training programmes that focus on the skills and behaviours that strengthen links and improve shared decision making and communication with other groups
5. improve the balance between trainees' reflective learning and core clinical service provision
6. create new integrated training systems that could lead to conjoint qualifications, eg MRCP and MRCGP, promoting joined-up thinking and breaching existing specialist boundaries
7. ensure that trainees deliver multidisciplinary teaching sessions during training
8. ensure that trainees attend and contribute to local strategy and commissioning meetings
9. introduce 'person-centred working', 'care and support planning' and 'patient and public involvement' as part of the training curriculum.

Embedding community training into the curriculum

Lessons from *Broadening the foundation programme*

At present, the training of postgraduate doctors occurs in specific training programmes depending on medical specialty. However, there are large-scale examples of training for integrated working, and these examples highlight how the educational environment can drive service delivery transformation. The *Broadening the foundation programme* report[8] suggests fostering an approach that encourages foundation doctors to encounter and manage patients across specialty boundaries, and to develop skills in managing patients in the community who have long-term conditions and physical and mental health issues. This initiative has trigged a redistribution of training posts from acute care to the community, and has reshaped service delivery with a focus on having healthcare professionals with the right skillmix and competencies within the care team rather than focusing on the number of PGDTs. The Broad Based Training Programme[8] is a new 2-year core training programme that was piloted in August 2013, which allows PGDTs to rotate through 6-month placements in general practice, psychiatry, paediatrics and medicine. The aims of the Broad Based Training Programme are to create a broad-based practitioner who is adept at managing complex patient presentations; to promote greater integration and understanding among the specialties involved in the programme; and to ensure that trainees have a

firm grounding in the provision of patient-focused care. Currently, Health Education South London is piloting a curriculum change that will see trainees spend 6 months working in the community. This pilot, and the case study from South Manchester described below (case study 6), provide a model of training to support integrated working within medical specialties.

Community-based StR rotation

In the future, introducing a fixed, community-based StR rotation into a training programme is likely to become the norm rather than the exception. This is especially likely in those specialities that will be delivering integrated care across traditional healthcare boundaries involving different healthcare providers. The case study below describes one such opportunity in geriatrics.

Case study 6: The South Manchester Nursing Home Service StR rotation

The University Hospital of South Manchester trains around four specialty trainees in geriatric medicine per year, with one StR working full time in a dedicated community post with the South Manchester Nursing Home Service, barring hospital on-calls. This service provides proactive and reactive care to around 300 residents in all eight nursing homes in south Manchester. The team is made up of consultants, the community StR, advanced practitioners and nursing staff. The hospital-based consultants work across the acute trust and the community, and they have close working relationships with the mental health service, to jointly manage complex physical and mental health issues.

This training opportunity includes three reactive sessions, two proactive sessions (which include family meetings for anticipatory care planning), two sessions in an intermediate care unit and one day-hospital clinic. Trainees mature clinically as they learn to deliver care independently out of hospital with remote support from consultants. The learning opportunities include weekly MDT discussions of complex cases and involvement in audit and quality improvement projects.

> *An extremely positive and unique experience, allowing me to appreciate first-hand the complexity of community care.* (Dr Shelly Gajree, a care of the elderly trainee on this scheme)

Curriculum for integrated care

Each medical specialty's curriculum needs to ensure that trainees receive the necessary exposure to integrated care that they will need for future service delivery. Curricula need to be reviewed to ensure that they support competencies and skills that can be used outside of acute care settings and that they create doctors who take a holistic, patient-focused approach. Curricula may need to be aligned across medical specialties to promote cohesiveness and shared training pathways. Changes to curricula may be the driving force needed to support the movement of training posts and transform service delivery towards an integrated model. Below is a case study from the British Thoracic Society (BTS) about the development of the curriculum for integrated respiratory physician training.

Case study 7: BTS Working Group on Integrated Respiratory Care – curriculum for integrated training

The present situation

Many consultants in respiratory medicine have been involved for some years in integrated healthcare approaches to the care of those with respiratory illness. Such involvement has included community provision for those with tuberculosis, home ventilation services, collaboration with palliative medicine

services, and admission avoidance and assisted discharge services for those with chronic obstructive pulmonary disease (COPD). When subjected to rigorous evaluation, such integrated approaches have demonstrated significant improvements in outcomes and a reduction in disease burden.

Over the last decade and a half, an increasing number of consultants in respiratory medicine have taken up sessional commitments in the community, ranging from one or two sessions per week to a nearly full-time commitment, and now the first specialist training post has been established in London to provide specific training for such a role. The BTS is aware of over 20 consultants working in this manner and has available vignettes, provided by many of these consultants, which demonstrate their potential roles and their diversity of involvement. Such roles can involve running both virtual and real chest clinics in the community, medical support for pulmonary rehabilitation and assisted discharge schemes, in-reach services to mental health units and case finding initiatives. A draft job description and person specification for such posts is available on the BTS website (**www.brit-thoracic.org.uk/**), and the BTS has other examples from recently advertised positions. These roles are likely to continue to diversify to include involvement in community sleep services, leading local reviews of those dying from asthma and providing medical input into the community follow-up of an increasing population with idiopathic pulmonary fibrosis.

Training needs

At present, most consultants in integrated respiratory care have come predominantly from hospital-based respiratory medicine consultant posts although, more recently, some have been appointed from the StR grade. The BTS believes that, for the time being at least, postholders should maintain sessions in the hospital service, to facilitate access to investigations, for CPD reasons, for mentoring and for support. This is for continuing professional development (CPD) reasons, for mentoring and for support. They should also take part, where appropriate, in general admissions services. The amount of time spent in a hospital service may vary according to whether the postholder is entering an integrated care post after many years spent as a hospital consultant or as a recent StR.

Many of the patients who are cared for by a consultant in integrated respiratory care will have long-term medical conditions and their respiratory condition is likely to be complicated by multiple comorbidities. The current respiratory medicine curriculum for trainees, especially sections E21 and E28 (**www.jrcptb.org.uk/sites/default/files/2010%20Respiratory%20Medicine.pdf**), if comprehensively undertaken, remains especially appropriate for those planning a career in integrated respiratory care. In addition, the BTS Working Group on Integrated Respiratory Care has suggested that it is essential in the future for all StRs to have some experience of primary care at least once during their training, probably twice a year and late in the course of their training.

In the community, trainees should see ‘all-comers’, like GPs and practice nurses do. Such experience can be obtained by sitting in on normal GP surgeries, and this should include three to four clinical sessions. The trainee should also appreciate the type of respiratory and medical conditions with which patients attend primary care. Such experience can be obtained by the trainee undertaking three to four clinics themselves with patients selected by receptionists, GPs or practice-based nurses. Such cases would then be discussed with the respiratory interested GP or, where available, with an established consultant in integrated care. Primary care experience should include triage and home visiting, attendance at practice meetings, primary healthcare team meetings and participation in advanced care planning and the Gold Standards Framework (**www.goldstandardsframework.org.uk/**) meetings discussing palliative care patients. Respiratory trainees should have additional experience of working in a community clinic, in an

MDT setting, so that they appreciate working in a team where doctors, nurses, physiotherapists, pharmacists and physiologists share responsibilities and have common core skills overlain with additional specialist skills. Furthermore, trainees should know and understand the role of the home oxygen assessment team and spend time with them. They should also experience pulmonary rehabilitation in action, and understand and recognise the role of individuals within the pulmonary rehabilitation team. Attendance at a nursing home clinical review would be highly desirable, as would attending a local 'Breathe Easy' group or similar, to understand the role that patient groups play in support and education.

Trainees should attend and actively contribute to the local respiratory interest group; experience working at CCG/HWB level to understand how commissioning works; attend at least one locality and one CCG/HWB board meeting; and demonstrate an ability to work outside of the hospital setting, thinking on their feet without the immediate backup of radiology or laboratory diagnostics. Achieving such training may be by secondment to act as an StR in integrated respiratory care, preferably working for a minimum of 3–6 months with an established consultant in integrated respiratory healthcare and in conjunction with a GP with a specialist interest in respiratory healthcare. Trainees should be aware of the value of attending BTS short courses on integrated respiratory care and the Primary Care Respiratory Society UK's (PCRS-UK's) respiratory leadership workshops.

Training the future physician workforce – immediate changes needed

Community services are uniquely placed to offer holistic training to all doctors, regardless of their grade. By understanding the gap between primary care, generalist services and specialist services, community-based specialist physicians can develop a dialogue that gets to the heart of patient care. This underpins the view that doctors are 'guests in their patients' lives', supporting those with long-term conditions to manage their condition nearer to home and supporting those who are close to the patient.

Training programmes must capture the vast untapped implicit knowledge base of doctors in training and find ways of supporting and empowering them as change agents. Integration must happen at all levels in order for it to work effectively; simply targeting 'leaders' will make change skin deep and fragile, therefore change must be from the bottom up.

Key points

- **The undergraduate and postgraduate medical training curricula need to ensure that the future workforce is equipped with skills required for integrated care.**
- **Undergraduate and postgraduate curricula should include greater multiprofessional training and community training placements.**

Leadership for integrated care

> *The doctor's frequent role as head of the healthcare team and commander of considerable clinical resource requires that greater attention is paid to management and leadership skills regardless of specialism. An acknowledgement of the leadership role of medicine is increasingly evident.* (Tooke, *Aspiring to excellence*, 2008)[48]

The attributes required for leadership to influence change are the ability to motivate, empower and inspire others to think and consequently behave differently.[49] This can come from setting a direction or

vision, leading by example, overcoming resistance and helping others to realise their true potential. Leadership requires a clear sense of motivation, purpose, responsibility and accountability. This cannot be achieved by simply assigning lead titles.

Ensuring that integrated care delivery succeeds will require leaders who can create, communicate and lead transformation across the different health and social care sectors.[37,50] Strong leadership is necessary to provide culture change in hospital services and training, and across the organisations needed for integrated care delivery.

Although this leadership could come from any discipline, consultant physicians are in a strong position to provide it through their collective experience and front-line roles, combined with the permanency of their appointments, which enables them to see the bigger picture while living with the consequences of transformational change.

Clinicians will need leadership development to drive the large-sale transformation required to shape future integrated out-of-hospital services. If physicians are to be effective in their roles, an understanding of the organisational structures and systems both within and outside the NHS and of change leadership are as essential as biomedical knowledge.

Key points

- **Strong clinical leadership skills are required for consultants to lead on the whole-system and transformational changes that are necessary for the development and delivery of integrated care services.**
- **Clinicians need to receive support and training to undertake the leadership roles that are required for the development and delivery of integrated care services.**

Management and governance for integrated care

Integrated care requires robust management, governance and operational frameworks to be in place. As organisational structures and models of care delivery change, governance and management processes will need to adapt accordingly. Many acute trusts are not experienced in out-of-hospital care and will need different management structures and performance indicators to support and promote out-of-hospital care delivery and multi-organisation working. As illustrated with the Northumbria model for diabetes (case study 1), there needs to be joint ownership of the governance between specialist and primary care. In Northumbria, this was done through formal steering groups in Northumberland and North Tyneside, with agreed terms of reference to oversee, monitor, evaluate and quality assure the care that was delivered.

The development of shared integrated care pathways across primary and secondary care that incorporate local and national guidelines into everyday practice can be used to reduce variations in patient care, to manage clinical risk and to feed into clinical governance. Agreed patient pathways can be incorporated into the organisational strategy for quality improvements; other structures that need to be in place are:[51]

1 formal partnership agreements outlining clear roles and responsibilities from all partnerships from the start
2 mechanisms to ensure that the organisation's work is conducted in an open, transparent and accountable manner

3 independent evaluations of KPIs for performance management and audit quality improvement plans (QIPs)
4 involvement of patients and carers throughout the development of a partnership.

Key points

- **Joint governance structures between different provider groups facilitate integrated care and cross-organisational working.**
- **Acute sector management structure, processes and performance targets need to align to support integrated care.**

Information sharing and communication technology

> *And woe betide any clinician who feels safer that patients and other teams can't access records – 'do no harm' is also about 'here's your record to keep an eye on, to learn from, to contribute to, to spot the errors in and share'.* (Dr Amir Mehrkar, GP, chief clinical information officer for Hampshire Health Record and digital clinical champion for NHS England)

Information sharing for integrated care

Sharing updated patient information is fundamental to the delivery of integrated care. It is a key theme in many NHS policy documents.[2,34]

Sharing accurate and up-to-date information with all providers within and beyond the organisational care boundaries is central to the delivery of integrated care. This enables safe and effective care, which reduces frustration for all, while making the best use of scarce resources, including time. The use of technology in healthcare needs to accelerate in line with other sectors. Effective informatics programmes have the potential to transform information silos into visible patient health and social care records that follow the patient through the myriad of health and social care settings. Effective integrated care will require specialist involvement in co-design of information systems.

> *Our inability to link data is harming people to an extent which is not readily appreciated (as we can't make the invisible visible!).* (Dr Martin McShane, medical director for long-term conditions, NHS England)

Case study 8: Tower Hamlets diabetes service – shared informatics as a key enabler

A major enabler to the success of the Tower Hamlets model (detailed in case study 2) was that both the general practices and secondary diabetes care used the same clinical information system and shared IT infrastructure. This allowed a shared diabetes record, with ongoing quality assurance, evaluation and monitoring by the Queen Mary Clinical Effectiveness Group. It also allowed the production of monthly data of GP performance against the diabetes care package KPIs, and alerted networks and practices to potential areas for improvement. This example of MCPs sharing a clinical information system is proof of the concept that a shared information exchange can drive up integrated care for those with long-term conditions.

There is a need for systems that can create shared care records that communicate to patients and across healthcare teams. To create workable systems that are information rich and intelligent, the overall design content and presentation has to be clinically relevant.

Enablers and barriers to information sharing

For information sharing to happen, there needs to be 'interoperability' between electronic health records, or the capacity for different computer systems to 'talk to each other'. Standards are needed at a local and national level, to develop interoperable systems that can update each other in real time. Any solution will need to be co-designed between IT professionals, patients and healthcare teams. Clinician and management engagement is central to success, to ensure that technical solutions are designed and implemented appropriately. However, the lack of an overarching robust information governance and organisational culture for the different provider groups is a barrier. Other enablers and barriers are listed in Table 3.

Table 3 Enablers and barriers for sharing patient information across organisations

Enablers	Barriers
Interoperability (sharing of data)	Information governance
Defined standards	Organisational culture
Education and training	Information systems and technical support
Cross-organisation strategy	Patient communication and consent
Resources	Requirements for services and systems
Ease of use and self-feedback, including analytics and visualisation	Limited evidence base

Case study 9: Hampshire Health Record (HHR) – integrating records can help save millions of pounds for the NHS while improving care delivery

The Hampshire Health Record (HHR) is an innovative collaborative project across CCGs, NHS trusts and local authorities in Hampshire. It has resulted in a shared health and social care record that doctors, nurses, social workers and pharmacists can access; it also has a patient access portal. This flow of digital care information connects disparate care settings and has been successfully integrated into routine primary and secondary care practice. To date, more than 87 million documents have been shared on the system. Future development will include improved patient accessibility, support for care planning and further use of patient involvement across sectors.

The project started with the aim to support out-of-hours emergency care, and it was initially marketed to emergency departments, admission wards and out-of-hours GPs. Subsequently, it was marketed to community care in south-east Hampshire, which included occupational therapy, physiotherapy, chiropody and community nursing. This then enabled MDT discussions, and for Single Assessment Process and Common Assessment Framework projects to be recorded and shared. Clinical champions were key enablers, as they coordinated the development of the HHR, and promoted and implemented the shared health record across various settings.

In Hampshire, the HHR has been successfully integrated into the routine work of primary and secondary care clinicians. Staff and patient feedback has been positive, and suggests that there have been improvements in efficiencies and better utilisation of staff and patient time, particularly in integrated care settings. An analysis of outcomes suggests that the care information in the HHR helps to save the NHS millions of pounds each year, and work is ongoing to analyse these benefits more precisely.

Communication technology

> *Technology is significantly under-utilised in most patient–doctor relationships. It has the potential to deliver cost-effective care through innovative ways of working.* (Dr Keith Bradley, former professor at Harvard Business School and founder of HealthPad)

The NHS Five Year Forward View[2] promotes developing technologies to support innovative ways of delivering out-of-hospital specialist care. Recent reports share this view.[34] It is not practical or feasible for consultants to personally deliver healthcare to a large population in different locations. When designed and used appropriately, telemedicine and IT programmes offer a solution. Telemedicine has the potential to be a convenient, accessible and cost-effective way to communicate and disseminate specialist advice, and to share information and discussions between professional providers remotely.[52] This can be done using telephone, email, video consultations, smart messaging, remote monitoring, social media and online tools. Widely available devices can remotely monitor physiological data such as blood pressure, body temperature, pulse oximeters, spirometers and blood glucose etc. These data can be used in diagnosis and disease management, although critical evaluation of their effectiveness for use in long-term conditions is still required.

Telemedicine has the potential to be a powerful interactive tool to communicate, motivate and educate patients when it is embedded within the electronic patient-accessible care records. Commissioners will need to be remunerated for e-consultations and 'virtual consultations' using the newer technologies, and adequate time will need to be given to consultant job plans to support and develop these newer ways of working.

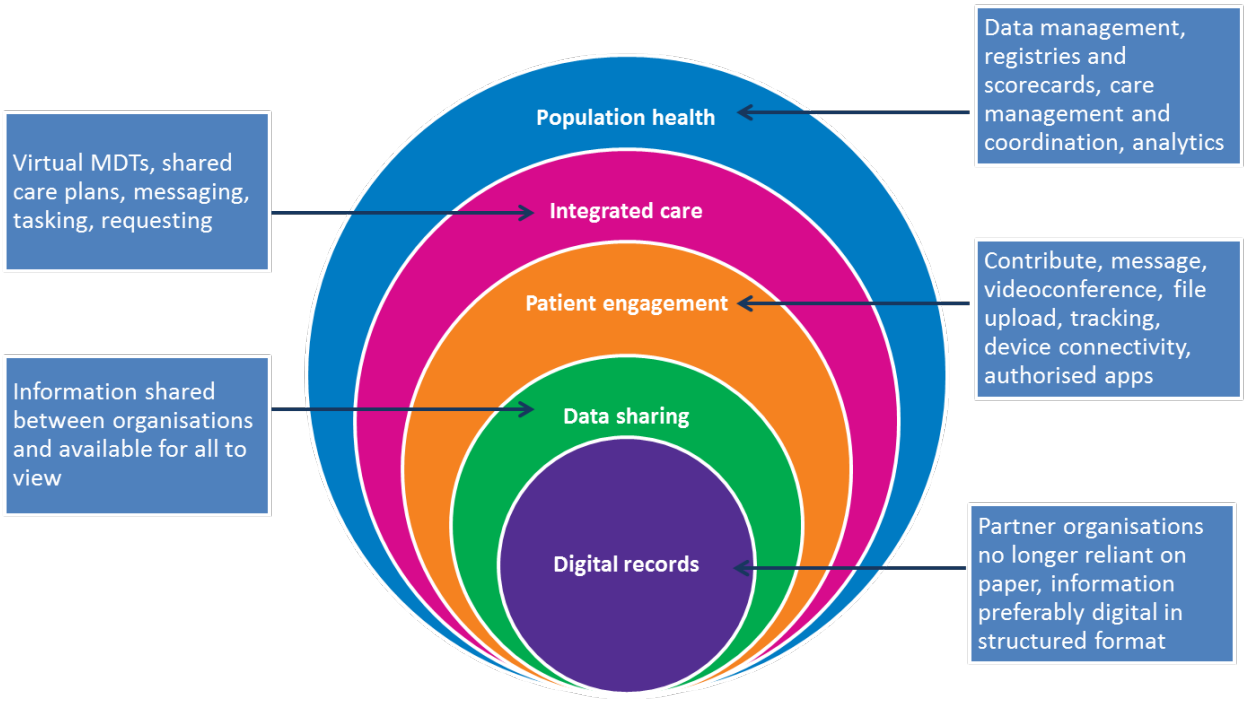

Fig 6 The multiple levels of information sharing and communication for optimal integrated care services (adapted with permission from North West London Care Information Exchange project)

Key points

- **Sharing information at a patient and whole-systems level is a key requirement for integrated care.**
- **Patient access to information enables self-management, improves motivation and engagement, and allows patients or carers to integrate care.**
- **A greater use of technological advances has the potential to improve communication to patients and across teams delivering integrated care.**

Self-management and care and support planning

Patient self-management of long-term conditions

Empowering individuals and communities to manage their own health and wellbeing is central to delivering services for patients with long-term conditions.[2,34] For those with long-term conditions, living well with their condition(s) requires both truly collaborative consultations with clinicians through care and support planning, and then ensuring that local services are identified and available to support the plans that are made. Effective self-management can reduce the burden on health services and the contacts needed with healthcare services.[53]

> *The peer support and learning provided by people with diabetes – and a limited number of specialist healthcare professionals who also use the #DOC – has been transformational for me.*
> (Lis Warren, layperson, on the international diabetes online community, known as #DOC)

Care and support planning recognises that people with long-term conditions make almost all of the day-to-day decisions about their care. It is designed to involve them as partners in their plans within a clinical context. Commissioning that is built around the aggregated needs identified in these consultations has the potential to integrate physical health services, mental health services and social care and will help to meet the needs of all, including vulnerable patients.

This means more than simply providing information. It means supporting people to develop skills and capabilities and, based on the collective identified needs across the health community, it means shaping current services and stimulating non-traditional service provision. There are a number of key elements to this (Box 6).[33]

Box 6 Improving self-management for patients with long-term conditions

1. care and support planning
2. structured patient education using appropriate adult learning approaches
3. advanced clinician consultation skills such as health coaching and motivational interviewing
4. accessible patient information in a range of formats
5. community-based support for patients and carers
6. peer support including use of expert patients
7. use of new technologies such as telehealth to support patients to access and be able to use their personal health information.

Care and support planning

> *We need to move from a strictly biomedical model to one which puts the individual's goals central to their care. The first question should be 'what matters most to you?'. This should establish the goals the individual seeks to enhance their quality of life (and death). Many of those goals will be biomedical but some will require adapting the evidence base, especially in cases of multimorbidity.* (Dr Martin McShane, medical director for long-term conditions, NHS England)

Care and support planning: the house of care model

The house of care approach is the best-known and evaluated method to deliver care and support planning. It is both a metaphor and a checklist for the planning and delivery of person-centred care. As a metaphor it identifies the key areas that contribute to truly collaborative planning and decision making. As a checklist it enables local health communities to identify very specifically what is already in place, and what still needs to be developed for this to become a reality that meets individual needs irrespective of the person's condition. The visual representation of this framework is a 'house of care'.[54]

Fig 7 The house of care as a framework to develop partnership working for people with long-term conditions, no matter what their conditions

The provision of proactive, person-centred care planning using the 'year of care' approach[55] was central to the Tower Hamlets model (case study 2). GP networks were remunerated for delivering network enhanced services (NES) that provided both a diabetes care package and care planning.[25] This resulted in improved outcomes in relation to the uptake of all nine National Diabetes Audit processes (72% – highest in England); perceived involvement in care rising from 52% to 82%; and better blood pressure and cholesterol control.[25] Since 2010, this approach to delivering care and support planning is being adopted across England and Scotland in a range of health communities, across diverse conditions and in the context of specialist care, multi-morbidity and integrated care, and is highly adaptable.[56,57] This should increase care and support planning, which has previously been variable in its implementation.[58]

While there is still work to do in developing an intra-operable IT infrastructure for the sharing of information, as is the case for integration more widely, the 'house of care' approach is particularly helpful in supporting a single plan for people with multi-morbidity that reduces fragmentation of care

across multiple settings. For care and support planning to become embedded in clinical practice using this approach, engagement across all care settings is needed.

Key points

- **Improving self-management is an essential part of care for people who have long-term conditions.**
- **Collaborative care and support planning allows people, with health professionals, to develop plans that meet individual, sometimes complex needs and improve outcomes.**
- **Plans developed this way can be held by people, and shared and used across organisational boundaries**

Evaluation and research

Focusing on health and wellbeing – population health

It is easy to confuse population health with public health.[59] All medical specialities need to develop a proactive approach to understanding where and how their speciality fits into the population health agenda: to promote health and wellbeing and to reduce inequalities.

Traditionally, drives for integrated care have focused on reactive aspects of care, eg acute crises or care for frail and older patients with complex conditions. Improving health and wellbeing at a population level will require a more proactive approach with emphasis on the broader population[60] (Fig 8). The NHS Diabetes Prevention Programme is an example of such a commitment to improving healthcare in 'at-risk' individuals. With the rising costs of healthcare, the increasing prevalence of non-communicable diseases and an increasing population of older people, such approaches are necessary for the sustainability of our health services and wider economy.

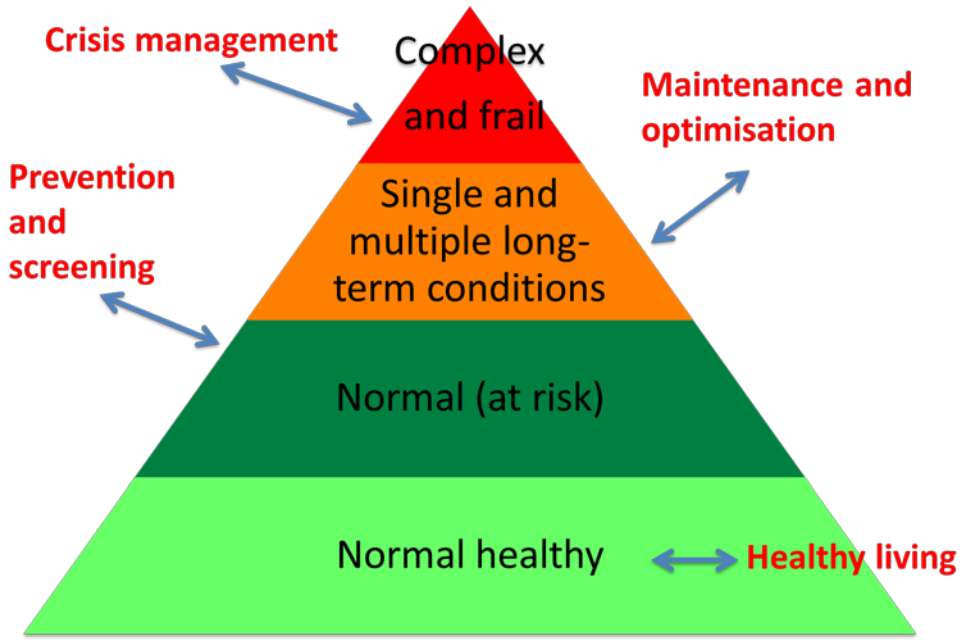

Fig 8 The population health paradigm: care delivery for the health and wellbeing of different sections of the population

Can integrated care improve population health?

Integrated care is part of the bigger picture of population health.[58] The NHS Five Year Forward View sees integrated care translating into improvements in population health and wellbeing by linking different parts of the NHS and bringing health and social care together.

A hurdle to gaining universal acceptance of this agenda among medical professionals is the lack of a strong evidence base to support what is a resource heavy exercise.[6,61,62] However, the general consensus that this should be the direction of travel is powerful, especially given the apparent support from patients and patient groups.[4,33,54]

There needs to be rigorous evaluation of the evidence base that supports integrated care as a model of healthcare that provides a cost-effective way of delivering high-quality care for patients with long-term conditions outside the hospital to a broad population. The lack of a strong evidence base may be due to heterogeneity in the definition of integrated care and the variation in descriptions of the interventions, settings and components of the care that is analysed. The last decade of healthcare reorganisation has made critical evaluations of these services difficult, as meaningful economic and health outcome evaluations need to be conducted over extended periods of relative health service stability.

The development of tools to evaluate models of integrated care

New clinical models and a drive for innovation have led to the development of exciting and bespoke projects across the NHS. However, few long-term data are available to support preferred models of care according to evidence. Measures for community service are often difficult to define, derive from historic commissioning decisions and may not truly measure the change itself. Furthermore, the success of a community service may be diluted across an entire healthcare economy, making outcomes hard to measure.

Evaluation tools to quantify meaningful biomedical and person-centred health outcome measures for integrated care services for the different medical specialities need to be developed. Physicians need to play a strong role in determining these metrics.

Due to the above issues and short time frames, rigorous academic evaluation for integrated care remains a challenge. In the future, collaborations between academic institutions, physicians and commissioners could provide the robust and objective evaluation that is needed.

Case study 10: Tower Hamlets diabetes service – collaborating with universities for evaluation

Collaboration with a university's quality and effectiveness department allowed an academic evaluation of the Tower Hamlets diabetes service (case study 2). The department provided essential performance data over a 10-year period for patients with diabetes in the primary care networks that were involved, which allowed ongoing improvements and formed a basis of a peer-reviewed publication.[21]

The need to develop medical research in out-of-hospital settings

The shift to community-based provision of care for patients with long-term conditions means that many patients who were previously 'housed' in a traditional hospital clinic are now managed successfully by community-based specialists / specialist physicians working alongside primary care colleagues: GPs and practice nurses. Community-based specialists have an opportunity, and a responsibility, to offer these patients access to research opportunities.

Recruitment of patients with long-term conditions to clinical trials, especially those in the earlier stages of their disease, will become increasingly difficult. By having specialist consultants embedded in community clinics, physicians will be able to identify larger study cohorts than hospital clinicians could previously access.

Key points

- **It is important for integrated services to promote health and wellbeing at a population level.**
- **Physicians need help to establish an evidence base with performance metrics and evaluation tools, and to promote research in population health and integrated care via collaborations with academic institutions.**

Section III – Recommendations for the RCP Future Hospital Programme to promote and develop integrated care

Central to the Future Hospital vision of the RCP is improving the care of medical patients by bringing medical specialist care closer to the patient, whether they are in hospital or in the community. This care should be integrated, so that it is coordinated to provide continuous, seamless care as seen from the perspective of the patient, irrespective of the number and range of staff, carers and organisations that are involved in its delivery.

Recommendations

The recommendations in this report are aligned to the seven workstreams that make up the RCP's Future Hospital Programme. We recommend that the RCP supports a range of work to develop, implement and evaluate models of integrated care in these seven areas with partner organisations.

1 Quality and standards

- promote a culture of shared working with patients as partners
- consider inviting acute trusts and partner organisations to apply to become integrated care development sites to pilot and evaluate the recommendations highlighted in this report
- promote a culture for collaborative cross-organisational working
- highlight integrated care as a key element for the management of patients with a long-term condition and endorse policies in relation to this through RCP publications and conferences.

2 Patient-centred care

- highlight the importance of co-production and stakeholder facilitation in the development of integrated care
- develop programmes for patients to be effective lay representatives
- promote and evaluate patient and carer involvement and self-management in developing accessible integrated care services.

3 Information sharing and communication

- promote a culture where professionals have a responsibility to ensure that information is updated, shared and accessible to patients, carers and other care providers (in real time)
- promote the use of shared information across organisations to develop tools for anticipatory healthcare that can be used in integrated settings.

4 Workforce

- work with HEE and other partners to improve training in integrated care for all physicians; senior trainees who wish to lead integrated care services should have the opportunity to develop additional expertise and skills, eg as an RCP integrated care fellow
- support physicians to deliver and lead the development of integrated care with appropriate job planning and substantive contracts
- embed integrated care projects that extend beyond organisational boundaries into physician postgraduate training

- offer coaching, mentoring and a discussion forum for trainees and consultants through Future Hospital Programme / RCP supported networks
- evaluate and forecast the financial, resource and workforce retention or recruitment implications of moving from a 5-day integrated care model to a 7-day service.

5 Education and training

- promote the need for the changes in medical training to support integrated care, out-of-hospital care delivery, collaborative multiprofessional working and co-production
- support and facilitate undergraduate and postgraduate cross-organisation projects that enhance the provision of integrated care.

6 Academia and research

- promote the evaluation of the impact of models of integrated care, particularly in relation to patient outcomes, experience and wellbeing
- support work with organisations such as the NHS Leadership Academy, the Health and Social Care Information Centre (HSCIC) and the RCGP to develop academic training schemes for those who aspire to develop and lead services across sector and organisational boundaries.

7 Organisational/system development

- provide forums to share experiences and identify specialists who have managed to successfully develop integrated care models, to support other specialties and organisations
- support physicians to lead and develop operational frameworks, management and governance structures within acute trusts with job plans that allow ring-fenced time for these roles
- promote research that leads to greater understanding of population health requirements and how this relates to the commissioning, development and delivery of integrated care services.

Section IV – Conclusion

The need to integrate care in the NHS has never been stronger. If we are to see the much needed improvements and efficiencies in care delivery, it will be necessary to integrate care services across organisations and around the needs of our patients. Our efforts to align services over the last few decades have met considerable difficulties. Indeed, this will be a complex journey. However, recent strategic developments in the NHS and a consensus on integrating care across patients and the staff and organisations involved in care delivery present a unique opportunity to shape future services to make integrated care a reality.

In this report, the case studies and contributions from a broad section of clinicians demonstrate real examples of physicians who have led the way to integrate services. These have highlighted key themes as well as future opportunities that require urgent development. The priority areas for physicians are listed below.

Key priority areas for physicians

1 Ensure that the patient's and carer's perspective is the organising principle of service delivery across organisations.
2 Support population health and wellbeing outside the hospital walls, while offering specialist care within the hospital and being an advocate for patient groups with specialist needs within the population.
3 Evolve medical training and curricula to ensure that physicians of the future are equipped with the additional skills to deliver integrated services.
4 Ensure that organisations that deliver care support consultants with appropriate job plans, contracts, management structures, governance frameworks and information systems to deliver integrated care.
5 Evaluate the effects of health service redesign on patients' and the population's health and wellbeing.

As the NHS enters an era of new, evolving models of care (as outlined in the NHS Five Year Forward View),[2] physicians will need to lead the development of out-of-hospital specialist integrated services with patients, carers and other providers as equal partners. This will allow specialist support to be accessible to a wider population earlier than was previously the case, while ensuring that physicians remain active in delivering specialist and sub-specialty care in the hospital. A failure to seize this opportunity would represent a huge missed opportunity for physicians to lead in making a difference in the care of the population.

Appendix – abbreviations

ACO	accountable care organisation
ARCP	Annual Review of Competence Progression
CPD	continuing professional development
DSN	diabetes specialist nurse
EWTD	European Working Time Directive
FRCS	fellow of the Royal College of Surgeons
GIM	general internal medicine
GMC	General Medical Council
HEE	Health Education England
HHR	Hampshire Health Record
HSCIC	Health and Social Care Information Centre
HWB	health and wellbeing board
IAPT	Improving Access to Psychological Therapies
KPI	key performer indicator
LETB	local education and training board
MCP	multispecialty community provider
MDT	multidisciplinary team
MRCGP	member of the Royal College of General Practitioners
MRCP	member of the Royal College of Physicians
NES	network enhanced services
NESTA	National Endowment for Science, Technology and the Arts
NICE	National Institute for Health and Care Excellence
NSF	national service framework
OPRAC	older persons' rapid access clinic
PACS	primary and acute care system
PBC	practice-based commissioning
PCRS-UK	Primary Care Respiratory Society UK
PGDT	postgraduate doctors in training
QiP	quality improvement plan
RCGP	Royal College of General Practitioners
SPA	supporting professional activity
StR	specialty registrar
TUPE	Transfer of Undertakings (Protection of Employment) Regulations

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