Integration in action: four international case studies

Research report

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Nuffield Trust work on integrated care

This research report is part of the Nuffield Trust's programme of work on integrated care, which is examining the potential of new forms of care that are intended to benefit patients and taxpayers. It also forms part of our work to examine international best practice and use this intelligence to inform policy-making and practice in the UK.

A research summary is also available to download from:
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Other related projects include:

- *What is integrated care?* A research report examining what is meant by integrated care, what concepts underpin it, and how these can be used to inform practical integration efforts within and beyond the NHS.

- *Towards integrated care in Trafford* A project that looks at the process of change and lessons learned to date in Trafford, a health system that is in the process of working towards an integrated care approach for the whole health economy.

Further details of our integrated care work can be found at:
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Overview

Integrated care has been a goal for the English health service for decades. This report explores how to strengthen integration between services in order to improve health outcomes, patient experience of care and value for money from available resources. It describes work to improve integration in four international organisations:

1. a government-funded network to improve access to and quality of Medicaid services in North Carolina, United States (US)

2. an independent practice association in upstate New York, US

3. a Dutch organisation providing support to general practitioners (GPs) to deliver integrated care for diabetes and other chronic conditions

4. a Scottish health and social care partnership.

Case study data were collected through semi-structured interviews with clinicians, managers, patients and academics, and supplemented by documentary analysis and literature review. Through these case studies, this report identifies the main stimuli for integration, describes the practical approaches taken to strengthen integration and the factors that help or hinder progress.

Key findings

In each site, work to improve integration was influenced by factors external to the case study organisations, including national policy, changes in payment systems, budget pressures and regulatory requirements. The extent to which these factors created a supportive context for change varied between sites and at times they constrained progress.

Within the case study organisations the operational methods used to develop integrated care could be grouped into six interrelated sets of activities, described in this report as 'integrative processes'. These processes were developed in close collaboration with professional leaders, communicated clearly to front-line staff and adapted in response to changes in external context, feedback from staff and assessment of their impact.

The six groups of integrative processes identified were:

1 **Clinical** – delivering consistent and standardised clinical care to patients along the whole continuum of care.

2 **Informational** – developing clinical and managerial information systems to support aligned practice across different care settings, communication between clinical teams, outcome measurement and performance management.

3 **Organisational** – such as developing governance arrangements within and between institutions, and designing organisational structure to aid integration.

4 **Financial** – such as joint budgetary arrangements and payment systems across organisations.

5 **Administrative** – administrative support (for example, shared human resource management and seconded staff) to support small practices and build links with the parent case study organisation.

6 **Normative** – such as identifying, communicating and operationalising the shared vision, goals and values across individuals and organisations.

These processes were developed and repeatedly adapted if the context changed (for example, through new policies, payment systems or changes in the local workforce). Thus integration was a dynamic process, and there was no 'off-the-shelf' set of integrative processes that was suitable for all settings.

The interactions between different integrative processes – particularly organisational, clinical, financial and informational – were reported to result in their mutual reinforcement, with each supporting the delivery of the other. These interactions were enabled by normative and administrative integrative processes, creating a web of activities to align incentives, coordinate professional behaviour and deliver integrated care to patients and populations.

For example, shared electronic information between two of the case study organisations and their member clinicians was particularly useful for supporting coordinated clinical practice, monitoring the performance of integrated services and providing feedback to reinforce progress with integration. Clinical integrative processes were supported by the electronic information systems, and further enabled by normative and administrative integrative processes such as team development to build shared goals, values and working practices.

Three distinct types of integrated care were observed across the case study sites:

Supported adherence to evidence-based guidelines to standardise care across institutional boundaries and professional groups

For service users, this meant that all clinicians who were participating in clinical integration programmes were supported to work to the same protocols, and with the same thresholds for intervention, irrespective of the location of care and the specialty of the clinician.

Integrated multi-professional teams: care coordination for people with complex problems

For people with complex health and social care problems, and/or those with significant gaps in care, a lead clinician or social worker, working closely with a multi-professional team, proactively sought to address gaps, liaise between different providers and manage transitions between care settings.

Ad hoc arrangements for integrated pathways between general practitioners and specialists

This allowed patients to receive care in new ways. For example, electronic triage through review of clinical data by specialists avoided the need for some patients to attend outpatient clinics; treatment by GPs according to care plans from specialists who had reviewed clinical data; access to selected areas of medical records supporting self-management and self-organisation of care by patients.

Conclusion and recommendations

Successful integration is an ongoing adaptive process rather than a one-off initiative. Skilled and trusted leaders with excellent communication skills are essential for developing and implementing integrative processes, and for winning support from professionals to change their practice. The trust required to do this takes years to develop. External stimuli for integration – such as changes in payment systems or regulation – can trigger new initiatives, but it is organisational systems and processes, and the work of teams and individuals that ultimately achieve the alignment and coordination associated with integration to deliver step changes for patient and population benefit.

The role of the case study organisations as 'integrator organisations', leading the alignment and coordination of services across team and organisational boundaries, offers a potential model for English service providers seeking to develop integrated networks. The 'integrative processes' described in this report potentially could enable networks of organisations to deliver integrated care to a wider population group.

At national level

Several proposals in the White Paper *Equity and Excellence: Liberating the NHS* (Department of Health, DH, 2010a), the subsequent Health and Social Care Bill and the government response to the report of the NHS Future Forum (Department of Health, 2011) have the potential to support integration between health services and between health and social care. These include: the centrality of patients' needs as the basis around which care should be organised; a focus on whole pathways or systems of care, reinforced through the requirement for whole pathway outcome measures; and the introduction of health and well-being boards to help promote whole-system integration. The requirement that Monitor should support integration where this will improve quality of care and the involvement of GPs, specialists and nurses in clinical commissioning groups and clinical senates may further strengthen this area of policy. The case studies here offer insights into how policy and regulation could be developed and implemented to support integration between services:

1   An early priority for Monitor will be to link the regulation of integration to a requirement to demonstrate improved patient experience and clinical outcomes, as seen in the Greater Rochester Independent Practice Association case study. Regulations could also promote choice and competition within integrated systems where possible (for example by including more than one provider of a specific service within an integrated network).

2   Standard contracts and outcome measures are needed that will promote the coordination of care between providers and measure outcomes across whole pathways of care. This would encourage the delivery of care through clinical networks or integrated care organisations, and encourage clinical commissioning groups to commission services from such providers.

3   There should be an audit of all current methods of paying for clinical care, in order to assess the extent to which they encourage integrated care for people with chronic, complex health and social care needs. The development of the national tariff in particular needs to be aligned with this objective. To this end, Monitor and the NHS Commissioning Board should work together to develop a pricing strategy to incentivise integration where it provides better quality and more efficient care.

4   The NHS Commissioning Board should support local commissioning groups to develop new ways to secure integrated services: for example, through commissioning from integrated provider organisations. Local organisations should be allowed to develop bundled payments and local tariffs for key conditions and pathways. This is particularly important in long-term conditions, where fee-for-service incentives for episodes of hospital care are inconsistent with community-based models and do not encourage keeping patients well in community settings. Furthermore, innovative forms of payments *within* provider networks should be piloted.

For clinical commissioning groups and providers

1   Local government and clinical commissioning groups should actively promote integration between health and care services, and between different health care providers for people with long-term conditions and those requiring services from multiple providers. For example, this could happen through commissioning services from integrated service providers, and leading service redesign work to develop integrated care pathways and integrated provider networks.

2   Providers should focus on developing a full set of integrative processes, with mutually supportive links between clinical, organisational, informational and financial processes, in order to enable the delivery of integrated care for patients. Four areas where focused, practical support for integration could be particularly useful for providers and commissioners are:

   – help with developing integrated governance arrangements that can develop strategic objectives for integration and respond rapidly to changes in the policy, regulation, financial and organisational context

   – developing methods for linking, analysing and sharing information on clinical care and finance through a focus on data interfaces rather than developing new IT systems

   – providing education and training to develop a workforce with the skills and values needed to deliver integrated care, organised around the needs of patients

   – evaluating the impact of changes on how care is delivered and paid for – this should include the ability to measure impact across whole pathways of care and multiple providers, and evaluating patients' views through patient-reported outcome and experience measures.

1. Introduction

Background and policy context

The NHS is entering a period of unprecedented economic challenge (Hunter, 2010), and the need to deliver greater value (that is, better health and patient experience from cost-effective services) is more pressing than ever. A larger proportion of demand, and thus expenditure, on the NHS is coming from the increasing numbers of frail older people and those with chronic, complex health problems who receive care from many different providers. For these groups of individuals, the challenge for health services is to try to provide more proactive preventive care, better care coordination and integration across different providers, including health and social services.

Integration here describes a set of methods, processes and tools to support the alignment and coordination of health and care services. The term describes both a set of activities and the ability to coordinate functions and activities across separate teams and operating units. *Integrated care* describes the end products of integration in terms of services, designed around patients' needs to deliver high-quality, cost-effective care and high levels of patient satisfaction.

Problems of fragmentation, duplication and poor coordination across services jeopardise safety, outcomes, efficiency and good patient experience (Institute of Medicine Committee on Quality of Health Care in America, 2001), and are shown to be prevalent across health systems in many different countries (Schoen and others, 2008). The causes of such 'clinical linkage deficiencies' (Halvorson, 2007) are several, including professional differences between providers (Vrijhoef and Wagner, 2009) and misaligned financial incentives (Enthoven, 2009). Many have found that fully integrated delivery systems are associated with higher performance (Asch and others, 2004, Ashton and others, 2003; Feachem and others, 2002; Shih and others, 2008).

In theory, the NHS is the ultimate integrated health system, with a single national payer which owns and funds a network of providers working broadly towards the same overall goals. Yet historic budgetary, contractual, professional, accountability, governance and cultural divisions between general practice and hospitals, and between the NHS and local authority-funded social care, have tended to obstruct progress towards good quality coordinated care. Furthermore, some aspects of recent policies – for example, the promotion of competition between providers and ways of paying them – have got in the way of developing better coordination and integrated care, fuelling hospital activity and slowing the development of community based alternatives with integrated pathways between them. Despite the fact that care coordination has been a policy goal for the NHS over many decades (Rumbold and Shaw, 2010), progress has been slow.

However, in the last five years there has been much greater recognition of the economic challenge arising from the increasing health needs and demands from older patients and those with complex chronic conditions. Many policies and initiatives have encouraged coordination and integration across health and social care. For example, the flexibilities in the *Health and Social Care (Community Health and Standards) Act 2003* have allowed budgets for health and social care to be pooled locally; the creation of Care Trusts through the *Health and Social Care Act 2001*, and the duty of partnership between health and social care, underpinned by a joint strategic needs assessment announced in the 2006 White Paper, *Our Health, Our Care, Our Say* (DH, 2006a).

Within the NHS there have been a range of initiatives to encourage integrated care for people with long-term conditions, for example:

- case management by community matrons (DH, 2005)

- mergers between community service providers and hospital or mental health trusts which could (but will not necessarily) result in more integrated care (DH, 2009a)

- a set of integrated care pilots (DH, 2009b) heralded by the *Next Stage Review* (DH, 2008a).

Some innovative work has resulted, for example in Cumbria, Redbridge and Torbay (Ham and Smith, 2010). These efforts are laudable, but remain unusual. Furthermore, these organisations need encouragement and help to progress in the face of the formidable obstacles that exist (Ham and Smith, 2010). The broad picture is that across the country, the effort to improve integration still falls way short of what is now needed, given the unprecedented economic challenge.

Quality standards and outcome measures will be developed across clinical pathways (DH, 2010c) and the use of such measures may drive commissioners to buy integrated services provided by multiple service providers, using 'bundled' payments across a service or pathway of care. They will also stimulate providers to focus on the outcomes they need to achieve and to design coordinated pathways of care around them.

The financial incentives associated with global budgets held by clinical commissioning groups may also stimulate more integrated working within primary care (for example, by employing social workers or community specialists within practices) to minimise use of costly hospital services. Some practices and hospitals in the NHS are exploring the idea of collaborating by pooling budgets for hospital care, jointly examining quality indicators across a pathway, and developing shared governance. However, the extent to which these radical efforts will be encouraged is as yet unclear – for example, how they will be viewed by the new economic regulator.

Overview of the report

This report adds to existing case studies that describe how people in other health systems are facing the same issues and have tried to develop integrated care, drawing out lessons for the NHS in England. Much of the focus in previously published case studies has been on organisations that have matured over many decades, such as Kaiser Permanente in California, Geisinger Health System in Pennsylvania, or the Veterans' Administration in the US. The aim of this work was different: to study organisations in other countries that were relatively young in their development of integrated care (as in the NHS) and had organisational characteristics that were similar to the NHS, in order to identify the factors that supported or hindered integration.

Four diverse case studies are considered in the report:

1. a government-funded network to improve access to and quality of Medicaid services in North Carolina, US

2. an independent practice association in upstate New York, US

3. a Dutch organisation providing support to GPs to deliver integrated care for diabetes and other chronic conditions

4. a Scottish health and social care partnership.

Chapter 2 describes the methods for the case studies and the approach to analysis. Chapter 3 briefly describes the case study organisations, outlines their work on integration and describes the different types of integrated care that they deliver (with a fuller description of each organisation provided in Appendix 2). Chapter 4 presents the key ingredients for integration identified in the four case study sites. Chapter 5 summarises the findings from the case studies and considers their implications for policy and practice in the NHS in England.

This report is intended to help policy-makers who are crafting policies to develop greater integrated care within the NHS, and people who are trying to manage such developments on the ground.

2. Study design and methods

Selection of case studies

The organisations selected were those actively attempting to integrate health, or health and social care, across different providers. They were relatively young in their development, and had some characteristics similar to the NHS. Thus, examples were sought where multiple doctors in small practices (similar to English GPs) were working collaboratively, or where there was integration between health and social care services.

There are no validated and widely used measures of integration with which to select study sites. Instead, leading academics, policy-makers and practitioners with an established interest in integrated care (see Appendix 1) were approached and asked to nominate three services or organisations outside England that they consider to be at the leading edge of work on integration across health and/or social care services; the cases should be recognised as making good progress and to be achieving integration that was deemed to be associated with high-quality care. In addition, the experts were asked to identify datasets or measures that would support comparison of the extent of integration and quality of care provided between different organisations.

A long list of nominated organisations was compiled and clustered according to organisational type: whether structurally integrated into a single 'system' or operating as a network; and whether they included a payer function. No measures were identified that would allow direct comparison between them (that is, across international boundaries) of the quality of care offered, or of the extent to which care was integrated. Instead, four study sites were selected from the long list according to the following criteria:

- variety in organisational type in the final selected list
- variety in the scope and scale of integration work in the final selected list
- having a population focus to efforts to integrate care
- working across independent practitioners in community settings
- at least one site to be working across health and social care.

Clearly this is not a scientifically rigorous selection of sites, neither were the present authors able to identify sites using objective measures as 'high performing' organisations, as was done in a previous study of five high-performing managed care organisations (Dixon and others, 2004). Nevertheless, it is a list with face validity according to our expert advisers.

Data collection

Case study data were collected through semi-structured interviews and document analysis. The interview guide combined open questions on how interviewees understood the term 'integration'; the goals that the organisation was pursuing through integration; and the factors that supported or hindered integration. Specific prompts were made on the influence of factors internal to the site:

- data and information systems

- financial and non-financial incentives

- governance arrangements

- leadership

- the characteristics of teams and individuals.

Other questions were also asked about the characteristics of the wider health system.

Interviews were conducted with senior executives, clinicians and managers from each organisation, with between nine and 15 interviews conducted at each site.

In the absence of internationally comparable datasets on the extent of integration and the quality of integrated care, no attempt was made to compare quantitative data on the case study organisations, or the outcomes that they achieved.

Analysis

Interview tapes were transcribed and augmented by field notes and document analysis. First, the transcripts were reviewed in order to understand the range of ways in which the interviewees understood the term 'integration', and to gain an overview of how they described integration work. Then data were re-examined to explore interviewee comments on the key ingredients for integration, their views on the main facilitators and barriers along the way, and on how the external context influenced their integration work. The analysis was informed by the conceptual model of integrated care by Shaw and others (2011), which identified five key integrative processes.

Emerging hypotheses were reviewed against the full dataset and modified to accommodate contradictory views. Summaries of the key findings and emerging hypotheses were sent to the interviewees for comment on accuracy and to obtain their views on the findings.

3. The case study organisations

The four case study sites selected were:

- Community Care North Carolina (CCNC), North Carolina, US

- Greater Rochester Independent Practice Association (GRIPA), New York State, US

- Regionale HuisartsenZorg Heuvelland (RHZ), Maastricht, the Netherlands

- North Lanarkshire Health and Care Partnership, Scotland.

Table 3.1 summarises some key features across the four sites (page 16).

Community Care North Carolina

CCNC is funded through the state Medicaid programme to improve the quality, cost, accessibility and utilisation of services for Medicaid (low-income, uninsured) recipients. The stimulus to develop more integrated care was because of known duplication and fragmentation of care for Medicaid patients, and pressure to reduce the state Medicaid budget – both of which stimulated innovation in service delivery.

CCNC's programmes result in more integrated care by linking patients to a named primary care doctor, and supporting a consistent standard of care for common conditions across different physician practices through adherence to evidence-based guidelines and disease management programmes for high-prevalence conditions. Selected patients also receive case management and care coordination services, and CCNC builds links between doctors, hospitals, social services and other community providers.

CCNC uses multiple methods to promote integration through coordinated and standardised clinical practice. These include locally adapted clinical guidelines, case management services, data review and analysis, and feedback on clinical practice. At the time of the case study, the programme covered more than 3,000 physicians who provide care for more than 880,000 Medicaid enrollees across the state. In return for a US$2.50 payment per patient per month for people under 65 years, and US$5 per month for those over 65, participating physicians, supported by CCNC staff and resources, adhere to disease management protocols for common chronic conditions and agree to report selected data to CCNC. Selected patients with complex health problems also receive care coordination services from CCNC staff.

The central CCNC programme office provides medical leadership, operational support (for example, information technology (IT) and data analytics) and developmental support to 14 regional networks. The network offices receive US$3 per Medicaid-enrolled patient per month in order to support physicians in the CCNC programme. Each network is led by a medical director and network manager, and employs a case management team that may include nurses, pharmacists, social workers and selected other staff, depending on local need. The network offices work with participating doctors to disseminate guidance, support and monitor changes in clinical practice, and enable more integrated care to be delivered to patients.

The factors enabling or hindering integration within CCNC are summarised in Box 3.1 (page 17).

Table 3.1: Comparison of the main characteristics of the case study organisations			
	Community Care North Carolina	**Greater Rochester Independent Practice Association**	**Regionale HuisartsenZorg Heuvelland**	**North Lanarkshire Health and Care Partnership**
Location	North Carolina, US	New York State, US	Maastricht, the Netherlands	North Lanarkshire, Scotland
Target population	All residents of North Carolina insured through Medicaid (poor and homeless).	Patients who have enrolled for clinical integration and are registered with physicians who participate in clinical integration.	Registered patients with diabetes on lists of RHZ GPs (additional chronic disease-treatment combinations have been developed since the case study).	Four groups of North Lanarkshire residents: older people and people with mental health problems, addictions and disabilities.
Type of organisation	Central network office supporting 14 regional networks across North Carolina. Regional offices give support to doctors serving Medicaid patients to improve quality and continuity.	Membership organisation for independent physicians in Rochester, New York and surrounding area.	Membership organisation for all GPs in the Maastricht area.	Partnership between NHS Lanarkshire and North Lanarkshire Council.
Types of integrated care seen in each site	Supported use of evidence-based guidelines. Disease management for high-prevalence conditions. Care managers and multidisciplinary care coordination teams for people with complex needs.	Supported use of evidence-based guidelines. New types of virtual consultation between GPs and specialists. Care managers and multidisciplinary care coordination teams for people with complex needs.	Supported adherence to guidelines and standardised care for diabetes and chronic obstructive pulmonary disease (COPD). Multidisciplinary, integrated teams to manage people with severe diabetes.	Integrated health and social care teams to coordinate and standardise health and social care provision for older people with mental health problems. Collaboration between community nursing and social care teams to coordinate care for people at high risk of hospital admission.

> ### Box 3.1: Factors influencing progress – Community Care North Carolina
>
> **Enablers of integration:**
>
> - Governance and incentives: monthly payment to networks and participating physicians who agree to follow care pathways and allow CCNC auditors to review clinical records; networks report clinical performance to central CCNC office.
> - Integrated electronic information system (evolving) with data feedback to doctors.
> - Active medical leadership in charge of developing care standards and resources and raising awareness about expected standards of practice.
> - Multi-professional teams supporting care coordination and review of selected high-risk patients.
>
> **Challenges to successful integration:**
>
> - Slow uptake by some physicians – limited consequences for non-compliance.
> - Relatively limited resources of regional networks.
> - CCNC has no performance management role or other line management authority over local providers, so its influence on clinical practice is indirect.

Greater Rochester Independent Practice Association

GRIPA is an independent practice association which provides administrative and clinical support to around 800 member physicians serving a mixed urban and rural population in upstate New York. The doctors are mainly in small, independent practices (similar to GP practices in England), and include primary care physicians and specialists.

GRIPA's clinical integration work began when it was prevented from negotiating with insurers on behalf of its members unless it met the characteristics set by the Federal Trade Commission (FTC) of a 'clinically integrated system'. In order to comply with this definition, GRIPA drew on many of the improvement tools and processes that it had established during the previous decade to support 'risk contracting' (where it received an annual sum per patient to provide full care, dividing any savings made between member physicians). It received FTC approval as a clinically integrated organisation in 2007. Since then, GRIPA has implemented a clinical integration programme to improve and standardise the quality of care provided by the IPA's member doctors.

For the patients of GRIPA's member physicians, clinical integration has resulted in more standardised care, with participating doctors working to shared, evidence-based clinical standards and actively seeking to address gaps in care for each patient. For those with complex health problems, GRIPA's case managers work to coordinate care from different providers and avoid the duplication and confusion associated with transfers between services. The clinical information system used to support clinical integration allows secure information sharing between generalists and specialists, permitting new forms of virtual consultation in which the patient may not need to be physically present in the clinic.

The factors enabling or hindering integration are summarised in Box 3.2 (page 18).

Box 3.2: Factors influencing progress – Greater Rochester Independent Practice Association

Enablers of integration:

- Development of a web-based clinical portal accessible to clinicians and, in part, to patients, and a central data repository to synthesise and analyse clinical data.
- Tools (for example, 'point-of-care' alerts) to support and prompt best clinical practice.
- Governance and incentive arrangements to support clinical practice, in line with agreed guidelines and pathways (still evolving).
- Respected medical leaders and high trust in GRIPA based on past track record and delivery.
- Multi-professional team supporting care coordination, case management and pharmacy management.

Challenges to successful integration:

- Time and resources needed to obtain FTC approval as an integrated system.
- Benefits to doctors are limited until at-risk clinical integration contracts have been negotiated with insurers and employers.

Regionale HuisartsenZorg Heuvelland

RHZ is an umbrella organisation for all 89 GPs in Maastricht, the Netherlands, which has a population of 170,000. It was established in 2006 to redesign diabetes care in the Maastricht region and grew quickly in response to national policy to improve care for people with chronic conditions. A system of integrated payments was developed for specific disease-treatment combinations (DTC; or 'DBC' in Dutch). Insurers buy a pre-agreed annual package of diabetic care for an agreed sum of money per patient, which is adjusted to reflect case severity.

The stimulus for integration was both political, in response to national policy, and practical, due to the requirement by insurers to negotiate DBCs with GP groups rather than individual practices. In combination, these factors triggered a rapid growth of RHZ to support GPs and enable them to deliver integrated diabetes care.

The DBC for diabetes includes multiple modules of care for different levels of severity of diabetes. Modules may be provided by GPs and specialist nurses in the community or, for people with complex diabetes, by hospital specialists. There are explicit criteria for transferring patients between the two settings: DBCs are negotiated region-by-region with insurers in response to local agreements between specialists and generalists about who will provide each module in the DBC pathway. In Maastricht, where hospital specialists are salaried (and with little personal financial incentive to retain clinical responsibility for diabetic patients), around 95 per cent of diabetes care is now provided through the primary care DBC. The DBC budget includes funding for specialists to review selected patients and advise on their future management, without taking on long-term responsibility for a patient. Multidisciplinary, integrated teams involving GPs,

nurses, hospital specialists and other clinicians are now the norm – only care for severe and complex diabetes is led by hospital doctors. This situation is different in some regions, where GPs have a more limited role in diabetic care.

For patients in Maastricht, the DBCs should result in standardised care consistent with local guidelines. They will receive care from multi-professional teams, with agreed triggers for specialist input to deal with complex clinical problems. In addition, those with more severe chronic conditions will benefit from the care coordination undertaken by specialist nurses.

As well as negotiating chronic care contracts with insurers, RHZ has launched other DBCs, including one for the treatment of patients with COPD. It provides administrative support, education and training, data and IT infrastructure and other support to GPs, and employs practice nurses, seconding them to GPs to support chronic disease management.

The factors enabling or hindering integration are summarised in Box 3.3.

Box 3.3: Factors influencing progress – Regionale HuisartsenZorg Heuvelland

Enablers of integration:

- High levels of trust between GPs, specialists, nurses and other relevant stakeholders (for example, dieticians and physiotherapists) built through previous collaboration.

- Specialists are salaried by the hospital, so income is not affected by transfer of work to GPs.

- Developmental support from RHZ and local GP leaders to raise awareness about the diabetes DBC, engage the GP community in service developments and monitor performance.

- MediX web-based diabetes electronic record, allowing shared clinical information and supporting guideline implementation and performance review.

- Planned increase in provider competition, by developing a competitive market in diabetes care, driving GPs to act together to improve care.

- Consistent and highly respected medical leaders in the Maastricht community.

- Involvement of all relevant health care providers of diabetes services, and some patient involvement in the development of the DBC protocol, to create broad support for its content and implementation.

Challenges to successful integration:

- Policy of separate DBCs for primary and specialist care has divided GPs and specialists, and fragmented incentives around community-based diabetic care.

- Development of a single-condition service risks creating 'silos' for chronic conditions and fragmenting care for people with multiple, chronic, complex problems.

North Lanarkshire Health and Care Partnership

The North Lanarkshire Health and Care Partnership in Scotland brings together the work of North Lanarkshire Council and NHS Lanarkshire to deliver better integrated services to four care groups: older people, and people with disabilities, addictions and mental health problems. The partnership builds on many years of joint work, in particular a cluster of partnership agreements developed between 2002 and 2004. It reflects the emphasis in NHS Scotland on the role of networks and partnerships as drivers of quality and efficiency. A joint governance and accountability framework was launched in 2008 to formalise the arrangements for partnership working.

The stimulus for integration was a central policy initiative, called Joint Future (Scottish Executive, 2000), and other subsequent national policy documents. From a service user or patient perspective, the partnership has driven the establishment of integrated health and care teams with links to wider health, social care and voluntary sector resources. Many people now benefit from a single shared assessment – refined in response to user feedback – and from members of integrated teams working to shared protocols, pursuing common outcomes and, in some cases, able to refer directly to each other's services without going via a GP.

The integrated governance framework establishes the mechanisms by which the strategy is set and implemented across each care group, allowing adjustment for geographic variations and creating accountable local groups ('care partnership groups') to operationalise integrated care locally. It also sets out the reporting arrangements through which each tier of the partnership is accountable for delivery against the national community care outcomes framework and other locally agreed performance standards and outcome measures. There is no emphasis on using financial incentives.

The result is integrated health and social care teams for older people with mental health problems, and collaboration between community nursing and social care teams through shared standards and processes to improve quality.

The factors enabling or hindering integration are shown in Box 3.4 (page 21).

Box 3.4: Factors influencing progress – North Lanarkshire Health and Care Partnership

Enablers of integration:

- Joint vision shared by senior officers in both health and social care linked to joint governance system to drive integration across four key care groups and spanning all localities.
- History of partnership working and joint planning over many years.
- Skilled leaders with the ability to 'win the hearts and minds' of front-line staff.
- Staff commitment and strong sense that integration is 'doing the right thing for service users'.
- Joint training and development including job shadowing, joint education, and organisational development work.
- Taking an incremental approach and seizing opportunities as they arise.

Challenges to successful integration:

- Inconsistencies in national policy (for example, employment conditions and pension rights are different for health and social care).
- Difficulties in developing a supportive IT system.
- Variable progress in different localities and care groups, dependent on local leadership.

4. Key ingredients for progress with integration

External stimuli and systemic integration

In each case study site, a cluster of 'stimuli' was identified that were external to the study organisations, but which drove their work on integration. Three groups of external influences were particularly important: national policy, legal and regulatory requirements, and local payment systems.

National policy was a direct prompt for integration in the Netherlands, where the creation of DBCs or integrated payment systems for the management of common chronic conditions had led GPs to form collectives in order to negotiate DBC contracts with insurers. Equally, the Joint Future policy in Scotland (Scottish Executive, 2000) had stimulated closer working between health and social care over several years, which is reflected in the shared strategic vision and partnership working between health and social care. This was important for translating the implications of national policy into meaningful changes across four service groups in North Lanarkshire.

Changes in reimbursement rates were also important external influences. The prospect of reduced payments to doctors by insurers was a key driver of integration in GRIPA and RHZ. In CCNC, reductions in the state Medicaid budget created the prospect of significant reductions in physician incomes and an openness to trying new ways of providing more cost-effective care. Equally, US anti-trust legislation and the requirement that collaboration between physicians must be linked to integrated care that provides benefits to patients, underpinned GRIPA's clinical integration programme.

None of the observed influences was sufficient on its own to drive integration, but each created a significant external stimulus to focus on this issue. However, it was also the case that external stimuli could hinder progress. For example, inconsistencies in national policy in Scotland dictated different terms and conditions for health and social services employees, making it harder to build integrated teams. And data protection regulations in North Carolina restricted the sharing of selected health care information between different professionals. On balance, integration can be seen as primarily an organisational challenge that is easier to achieve where policy, regulation and payment systems combine to create systemic integration, supporting the alignment of incentives and cooperation between organisations. However, progress was still hindered by inconsistencies in national policy – such as differences in the terms and conditions of health and social services employees – which make it harder to build integrated health and social care teams.

Six integrative processes observed within the case study organisations

A group of six organisational processes was observed across the four study sites. These were adapted in response to local organisational factors and influences in the external environment, in order to improve integration and deliver integrated care.

Clinical integrative processes

These aimed to achieve consistent clinical standards across different care settings (for example community clinics, hospitals and day centres). They were underpinned by guidelines in clinical settings or shared working practices – such as a shared single assessment – in the health and social care context. They resulted in shared standards of care across different groups and operational units. The approach used by CCNC across participating Medicaid doctors is illustrated in Box 4.1 (page 24).

In GRIPA and RHZ, real-time prompts from clinical information systems were introduced to remind clinicians about gaps in care that should be addressed. At CCNC, a case management information system is under development to provide clinical information across a multi-professional group of case managers, aiding the coordination of clinical care.

Arrangements were in place in each site to deliver care coordination that could bridge gaps between different service providers, reduce duplication and create consistency in the care provided to users. In North Lanarkshire, these were focused on aligning the goals and working practices of health and social care professionals in order to deliver improvements in care outcomes.

Overall, the clinical integrative processes observed across the sites included the following ingredients:

- use of population registers to deliver clinical prompts to clinicians

- standardisation of care for common conditions through supported adherence to evidence-based guidelines

- clinical prompts and gap analyses for patients on disease registers

- care coordination targeted at individuals with complex problems and a high risk of clinical deterioration, delivered by multi-professional teams

- peer review and professional incentives to change clinical practice.

Informational integrative processes

This was a challenging aspect of integration in each site and an area of significant variation between them. Electronic medical or care records were not in universal use, so integration of information across a case pathway required either a web-based portal that could operate in parallel with existing records (as seen in GRIPA, RHZ and under development in CCNC), or an electronic link between different systems (as seen in North Lanarkshire). In addition, data protection regulations restricted the scope for data sharing and required explicit rules about rights of access to confidential data. The range of data that could be shared was different in each site, requiring detailed local rules to be developed.

Each study site had invested to develop an information system to support integration, although with different levels of ambition and degrees of success. Across the four sites the following were observed (although each was not observed in every site):

- use of population registers to identify gaps in care and preventive care opportunities in support of clinical integration

- clinical 'point-of-care' prompts to support adherence to guidelines and standardise care along clinical pathways and across organisational boundaries

Box 4.1: CCNC – aligning clinical practice and reducing fragmentation

In line with its overall vision, CCNC supports Medicaid doctors to practice in line with evidence-based guidance for common chronic conditions.

The CCNC central office works with network medical directors to identify common chronic conditions (for example, diabetes and asthma) and high-cost patients (for example, frequent users of Accident & Emergency) on which to focus disease management initiatives. Support for evidence-based best practice includes diagnostic aids, treatment guidelines, clinical assessment tools, and information resources for patients and clinicians. Ensuring that these resources influence clinical practice is the core role of the regional networks. They are disseminated and implemented in several ways, including distributing printed material, educational events, visits from medical directors, distributing data on adherence to guidelines and the incentive for adherence associated with monthly per-patient payments.

At present, monthly data reports are disseminated to Medicaid physicians with aggregated data about their performance on selected clinical indicators for each condition.

A web-based information technology system is under development to monitor adherence to guidelines and, eventually, to deliver 'point-of-care' prompts (during consultations) about gaps in care that need to be addressed.

Figure 4.1: CCNC heart failure treatment guideline distributed to participating Medicaid doctors

- patient access to parts of the medical record to support self-management (for example, checking results) and self-organisation (for example, booking appointments)

- secure messaging and shared access to selected clinical data between primary and specialist clinicians, enabling new forms of consultation and advice-seeking

- data and information sharing between multi-professional teams for care coordination

- performance review and benchmarking clinical practice.

GRIPA had invested heavily in developing a clinical information system to support standardisation of care across clinical settings in line with evidence-based guidelines, and to create links between community and hospital doctors to allow new forms of consultation (see Box 4.2, page 26). The system ran in parallel with the medical records of member physicians (most of which were still paper-based), and was either used by administrative staff to flag patient notes with an alert about the need for specific interventions, or used directly by doctors through a web interface on a desktop computer. The system was also used to compare and disseminate information on clinical performance.

GRIPA has faced many challenges in designing and building a clinical information system. Managing data security and privacy issues was described as the 'number one challenge', requiring extensive work to define rules for sharing and accessing data, and to engage and win trust from clinicians. With data quality central to the integrity of its patient registry, a full-time staff member is employed to manage the registry and reconcile information from different sources (for example, if data for a single patient are sent with different name spellings). Other challenges have included selecting and managing system developers, agreeing on system architecture, and importing data from partner organisations (for example, the local hospital) in which current IT systems are being phased out.

In contrast, North Lanarkshire had invested in software to link health and social care records. Developed at the time that a single shared assessment was introduced, the system aimed to create shared access to health and social care records. However the interface was described by some interviewees as 'slow', 'cumbersome' and 'more of a hindrance than a help'. Some had found alternative ways to share data, including resorting to joint paper records. However, health care data were used for the risk stratification of patients through the Scottish Patients at Risk of Readmission and Admission tool, and this was welcomed as a way of targeting joint community nursing and social care interventions.

CCNC and RHZ fell between these two situations. CCNC is developing a web-based central data repository to support disease management and risk stratification, and to facilitate performance review. In RHZ, a web-based diabetes record system (MediX) has been introduced to support clinical encounters in line with DBC guidelines. The system has been adapted from an existing software package and can provide real-time prompts to clinicians. It supports the entry of free text and allows performance review, and work is underway to link MediX with existing electronic medical records in GP practices. As a result GPs must enter data twice, increasing the potential for error; some interviewees expressed concern about the inefficiency of the system and a preference for developing an integrated electronic medical record.

Box 4.2: Building data integration – the GRIPA *Connect* system

GRIPA had invested in the GRIPA *Connect* web portal, schematically illustrated in Figure 4.2. The portal pools several sources of patient data and enables clinicians to use the data during consultations or for related communications. The system supports best practice and reduces the likelihood of duplication of investigations through:

- 'point-of-care' alerts for physicians about gaps in care
- 'care opportunity reports' summarising gaps in care for defined populations of patients (for example, patients with a particular condition)
- generating physician achievement reports summarising clinical performance for priority conditions, allowing benchmarking and comparison
- secure messaging between permitted clinicians and access to test results and selected clinical notes.

The right to access data is tightly regulated and permitted doctors must have a relationship with a patient, achieved by having been consulted by the patient on at least one previous occasion, having ordered a test on the patient or receiving a referral through the web portal from another doctor with an established relationship with the patient.

GRIPA aims to extend the range of data collected (see Figure 4.2) to give a fuller clinical picture to participating clinicians and to support additional functions in future. The system does not link to care coordination software yet, so care coordinators' notes and assessments are separate and not directly available to physicians.

Figure 4.2: Proposed data feeds to GRIPA *Connect* web portal
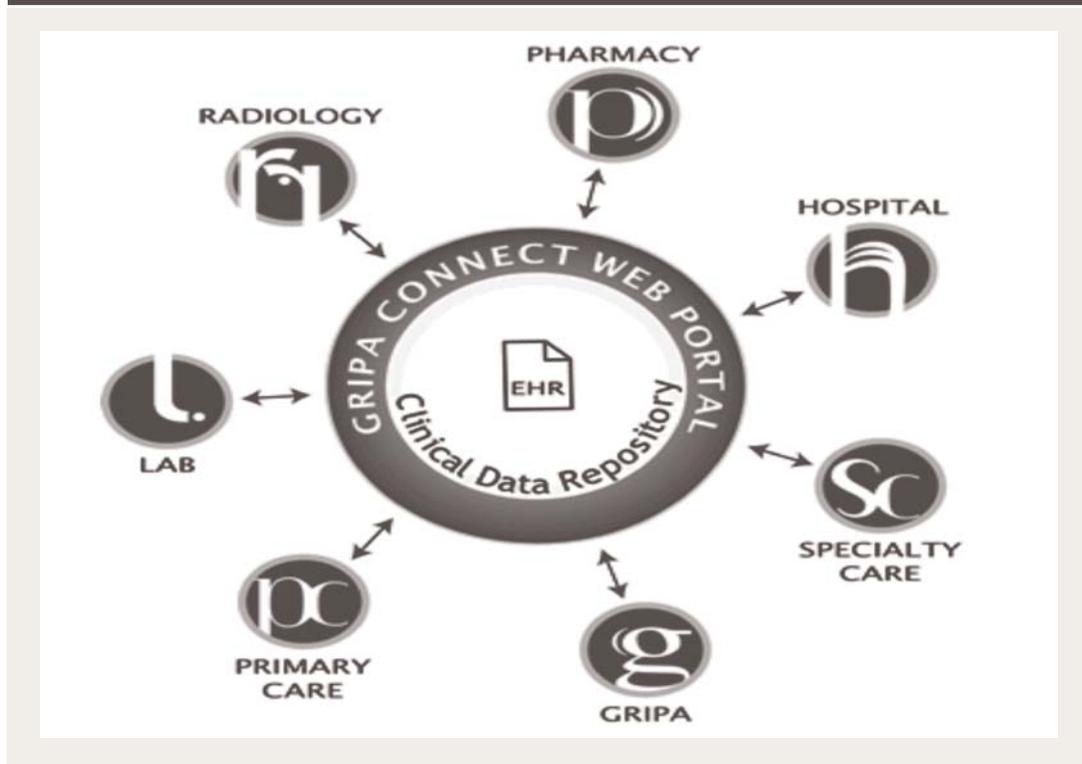
Organisational integrative processes

These processes relate to the governance arrangements between participating organisations. They encompass: the relationships between organisations (for example, partnership, structural integration through merger, contractual relationship); the arrangements in place to define and implement goals and objectives; and the assurance frameworks to ensure that agreed objectives are achieved. Each site had crafted different governance arrangements, summarised in Box 4.3, in response to local context.

The governing bodies of the case study sites had to drive integration across networks and partnerships without directly employing the clinicians and care workers whose professional behaviours they were seeking to change. North Lanarkshire's partnership between health and social care staff had integrated governance arrangements defining the responsibilities and accountabilities of health and social care teams (some integrated and some working collaboratively) at different levels of the partnership (localities and care groups).

As membership organisations, GRIPA and RHZ operated their clinical integration programmes through a contractual relationship with physicians. CCNC has a contractual relationship with its 14 member networks which, in turn, contract with Medicaid physicians to participate in CCNC programmes in return for a monthly payment. RHZ holds contracts with individual GPs. These governance arrangements had to incentivise and coax professionals into new forms of practice, rather than managing them more directly as employees.

Each organisation had a central board or governance group, entirely or largely populated by doctors and, in Lanarkshire, also by social care professionals. The groups set goals and priorities and agreed the range of integrative processes needed to achieve them (such as the use of clinical information, shared administrative support, incentives, peer review). In two sites there were also local governance groups (Regional Networks in North Carolina; Local Health and Care Partnerships in North Lanarkshire). Working with professional leads, their roles fell between governance and assurance of service quality within their own area and supporting local implementation: encouraging peers to adhere to agreed pathways and guidelines, and promoting the use of processes to support clinical and functional integration. In addition, ad hoc, task-based advisory groups were used in GRIPA and CCNC, with members drawn from local communities to develop condition-specific guidance that could be owned by the professional community. A summary of the governance arrangements in all four sites is shown in Box 4.3 (page 28).

Common to all four sites was clarity of vision about the goals of integration, developed by trusted professional members of the governance board and clearly communicated to front-line staff. In GRIPA and RHZ, where a key focus of integration was on supporting adherence to guidelines, this was understood to contribute to high-quality care, improve cost-effectiveness and be linked to financial rewards. In CCNC and North Lanarkshire, a wider range of goals was pursued including better health outcomes, improved client experience and new ways of working (the 'medical home' in North Carolina and the multi-professional health and social care team in North Lanarkshire). Accountability for progress towards goals was achieved through the systematic monitoring and reporting of progress, with explicit rewards and sanctions for clinical performance in two sites and a pre-paid monthly sum to encourage adherence to agreed standards in CCNC.

Box 4.3: Summary of governance arrangements in each site

Community Care North Carolina

The key philosophy is 'voluntariness' with limited use of contracts between CCNC and doctors, a modest financial incentive to participate in CCNC programmes, and no real sanctions for non-compliance.

The **Central State-wide Clinical Directors Group** involves medical directors from each network and executive officers from the central office. It sets priorities on the disease groups to be covered and reviews regional performance.

The **Regional Medical Management groups** develop regional plans to improve care for priority conditions, oversee dissemination of priorities and support tools, and review physician performance with quarterly reporting to the central group.

The **multi-professional implementation teams** provide care coordination services and support the implementation of agreed disease management programmes by front-line clinicians.

Greater Rochester Independent Practice Association

Three committees oversee clinical integration work:

The **Clinical Integration Committee** sets the clinical priorities and strategic direction for clinical integration. Six specialists and six generalists for staggered three-year terms are selected by the medical director from a list of nominees produced by GRIPA members and ratified by corporate board members.

Specialty advisory groups bring together GPs, specialists and other clinicians to develop guidelines for cost-driving conditions that affect GRIPA patients.

The **Quality Assurance Council** has 16 members who are appointed for one year at a time by lottery. It reviews the practice of poorly performing physicians and recommends a corrective action plan to help these doctors improve their care. Sanctions could include withholding gain-share or removal from the group, but this has not yet happened.

Clinicians receive a stipend for involvement in governance groups and an attendance allowance for meetings. There is monthly review and reporting of a panel of clinical indicators across priority conditions for all physicians. There is also an incentive system for doctors linked to fulfillment of clinical criteria.

Regionale HuisartsenZorg Heuvelland

RHZ's core philosophy is that health care professionals decide on the protocols to be followed by member GPs.

A board of three GPs meets weekly to set strategy and oversee progress towards the development and implementation of DBCs.

A small area GP leaders group meets with the board every six weeks to identify issues to be addressed and to agree strategy.

General membership meetings are held every six months to review and comment on RHZ policies and emerging strategy.

Patient input: A client panel gives patient perspectives on clinical protocols. There is patient group involvement in the development of DBC protocols and a patient survey to assess experience of treatment under DBC.

Quarterly performance reporting is carried out, based on data from the MediX electronic diabetes record.

There is patient involvement in the design of DBC clinical protocols and through satisfaction enquiries.

North Lanarkshire

A multi-tiered governance structure with remit and accountability for each tier designed to encourage integration across all the joint service care groups and each locality of North Lanarkshire.

The **North Lanarkshire Health and Care Partnership** feeds into North Lanarkshire Council through the North Lanarkshire Partnership. It sets strategic goals and reviews progress through annual reports from each care group partnership board, and produces twice-yearly summaries of activity and outcomes.

Four Care Group Partnership Boards are North Lanarkshire-wide and jointly headed by NHS and North Lanarkshire Council senior staff. They report annually to the Partnership.

Partnerships 4 Change: a patient forum that feeds patient views directly into the Partnership board.

Six Locality Health and Care Partnerships report to the Care Group Partnership boards. They oversee operational progress (quarterly reports) across all four care groups in each locality.

Locality planning groups: Operational groups supporting the work of front-line staff. They report activity, outcomes and operational problems to Locality Health and Care Partnerships.

Financial integrative processes

These processes relate to budgetary arrangements and payment systems in place across the organisations participating in integration. Again, this was an area of difference between sites, which varied in their use of micro-incentives (that is payments linked to the performance of specific tasks) and the financial context in which they operated (Box 4.4, page 30).

The external financial influences on the case study sites were described in Chapter 3. In three sites (CCNC, GRIPA and RHZ), local financial incentives were used to reward specific clinical tasks. Thus, CCNC used a prospective, per-person per-month payment to Medicaid doctors in return for adhering to evidence-based guidelines and submitting selected data for audit. GRIPA and RHZ used retrospective financial micro-incentives linked to the quality of care delivered and adherence to clinical guidelines. Both were refining ways to link financial rewards to integrated practice. Figure 4.3 illustrates how clinical data are used in GRIPA for physician performance reports, benchmarking the practice of individual doctors against their peers, and providing data on which allocation of financial rewards is based.

Figure 4.3: GRIPA *Connect* clinical integration physician achievement report
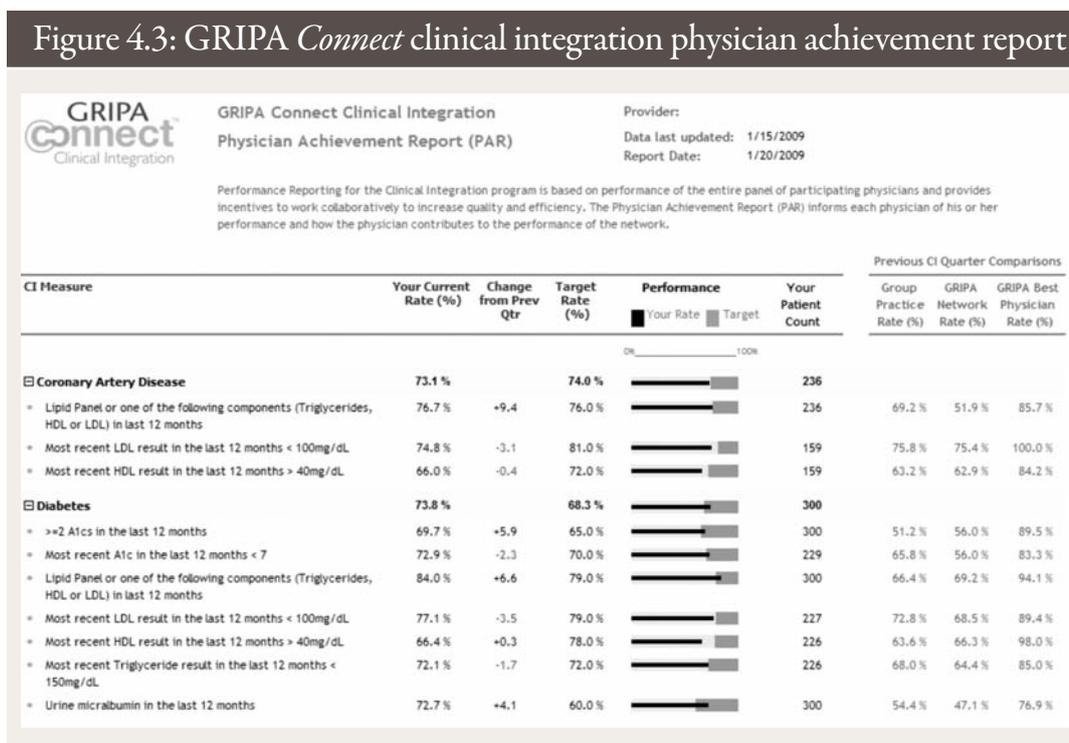
In North Lanarkshire, financial incentives were not used for front-line staff, although some managers received performance-related pay linked to achieving better service outcomes through better integrated care. The main motivation towards integration was reported to be professional commitment to the vision of better quality care, and a governance system focused on improving outcomes.

> ## Box 4.4: Summary of micro-incentive systems in the case study sites
>
> **Community Care North Carolina:** There is a monthly payment for each Medicaid patient registered with a physician participating in the CCNC programme, in return for offering continuity of care and disease management, and supplying data to CCNC. Payment varies from US$2.5 to US$5 depending on the age of the patient. No further financial rewards or sanctions were applied to participating doctors.
>
> **Greater Rochester Independent Practice Association:** Money is allocated to each physician according to relative performance against agreed performance measures. Typically there is a 70 per cent difference between highest and lowest payment.
>
> **Regionale HuisartsenZorg Heuvelland:** Payment for each patient contact as determined by the DBC protocol. Any savings made from the DBC contract with insurers (for good primary care management and low use of specialist referrals) is allocated as a gain share amongst doctors.
>
> **North Lanarkshire Health and Care Partnership:** No micro financial incentives are used for clinical staff. Middle grade managers are on a performance-related pay system linked to integration and improvement against the national outcomes framework. Key incentives were described as being professional – service improvement and better care for individuals.

Administrative integrative processes

These processes relate to administrative and functional links across participating organisations (for example, human resource management and seconded staff). They are particularly useful for small groups of practising physicians, which may lack the necessary scale to run these functions efficiently. Examples include: shared administrative functions such as contract and claims management; central employment of shared staff; and joint education and training across professional groups and organisations.

> ## Box 4.5: Administrative integration in action – support for small practices at RHZ
>
> In addition to its key role as a the DBC contract holder, RHZ is developing its role in providing administrative support to its member practices. This is achieved in several ways, including:
>
> - managing the secondment of specialist nurses, with sessional placements in member practices
> - procuring selected products (for example, stationery) to secure economies of scale
> - developing staff training programmes.

As an independent practice association, GRIPA had a key role in supporting the management of its member practices, aiming to reduce the burden of administrative work and free up time for developing clinical practice. RHZ undertook a similar role for member practices, offering administrative support and with plans to do more in future (Box 4.5, page 30). North Lanarkshire had an integrated management structure and had developed shared procedures for those health and care services that were not fully integrated.

Normative integrative processes

These processes relate to developing shared values and aligned professional standards across participating individuals, groups and organisations. They were particularly important for bringing together health and social care teams in North Lanarkshire, where health and social care professionals had worked previously in different organisations with different accountability arrangements, working practices, and management and reporting arrangements.

The approach to normative integration was different in each case study site, but it was clear that across all four, the purpose of integration was to improve the quality of care provided and users' experiences of care. This mission helped both to select the right staff into the organisations concerned, and develop trust in each other. Methods to achieve this, which are summarised in Box 4.6, included:

- the central role of professional leaders in establishing goals and values

- communication of goals and values to front-line staff by trusted leaders

- techniques such as job shadowing, in order to understand different professional roles

- social events to unite participating individuals.

Professional leadership and trust

Each case study site had one or two people who were described as 'leaders' by multiple interviewees. The 'leaders' were widely respected in their professional community, typically had worked locally for many years and had been associated with previous successful developments. Their commitment to, and enthusiasm for, integration was critical for progress, as was their ability to communicate their vision among their colleagues, including the potential benefits for patients and staff. They were visible, had regular contact with front-line staff and were supportive of colleagues when they encountered barriers to integration. They fulfilled a range of roles, as follows:

- identifying and demonstrating the values that underpinned efforts towards greater integration

- identifying the goals of integration as members of executive committees and governance groups

- communicating agreed goals through group and individual meetings

- engaging professionals and building involvement and understanding

- maintaining clarity of vision and emphasising the benefits of integration to patients and staff

- one-to-one meetings, either to 'sell the vision' or support individual clinicians identified through benchmarking data as less adherent to agreed protocols.

In addition to clinical and social care leaders, senior general managers in two sites were described as being instrumental to progress with integration. Their roles were different from clinician leaders, working across different groups and institutions and acting as 'diplomats' if tensions arose and 'speaking many languages' of different professional groups.

Trust was highlighted as a key ingredient for integration by several interviewees. Clinical leaders argued that their ability to 'sell' their message about integration depended on them trusting that the arrangements in place would improve care, or would allow the detection of deteriorating quality. Clinicians and care workers who were not leaders explained that their involvement in integration work was partly due to their trust in the people who were leading it.

However, building trust was reported to take a long time. In each site, work to strengthen integration was founded on a decade of prior work in which trusting relationships had grown slowly. Most of the physicians interviewed for this study were not employed by the case study organisations. They were linked together through their involvement with the case study organisation, and were willing to participate in this because of their trust in the colleagues who were leading the work and belief in the mission.

Box 4.6: Normative integrative processes – creating a shared culture and values

Sinclair Integrated Day Service, North Lanarkshire
The Sinclair Integrated Day Service offers day care for older people with mental health problems, delivered by an integrated health and social care team. The service was developed in consultation with users and carers. It links the day centre with activities run in other community settings through the work of community link workers.

Developing an integrated workforce for this service has required staff from different professional backgrounds to work in new ways: adopting new goals and values, blending their roles and referring directly to each other in some cases. This has been helped by a history of joint working between health and social care services, but hindered by differences in the terms and conditions determined by national differences.

The underlying principles for further developing joint working arrangements were identified as openness, mutual trust and respect, commitment, an ability to compromise, shared beliefs and values, and sustained effort. Building on these principles, practical steps to improve mutual understanding of the roles and responsibilities of different professionals included job shadowing, joint training and developing shared protocols.

An integrated management structure for the service has supported the implementation of shared working practices, as has the pursuit of shared outcomes, as defined in the national framework.

Interactions between integrative processes

The case studies highlight a significant interplay between the six integrative processes described above in their contribution to improved integration (illustrated in Figure 4.4 below). The interactions between organisational, clinical, informational and financial integrative processes – particularly between governance arrangements, financial incentives and clinical information – were particularly notable. Crucially, the integrative processes were shaped and enacted by professional leaders. Finally, it is important to note that there was no obvious association between structural arrangements and the kinds of integrative process in use.

Figure 4.4: Interplay between integrative processes and the enabling influences of effective leadership, clear communications and high trust

Skilled leadership

High-trust relationships

Consistent communication

Organisational integrative processes

Informational integrative processes

Integrated care focused on patient needs

Financial integrative processes

Clinical integrative processes

Administrative integrative processes

Normative integrative processes
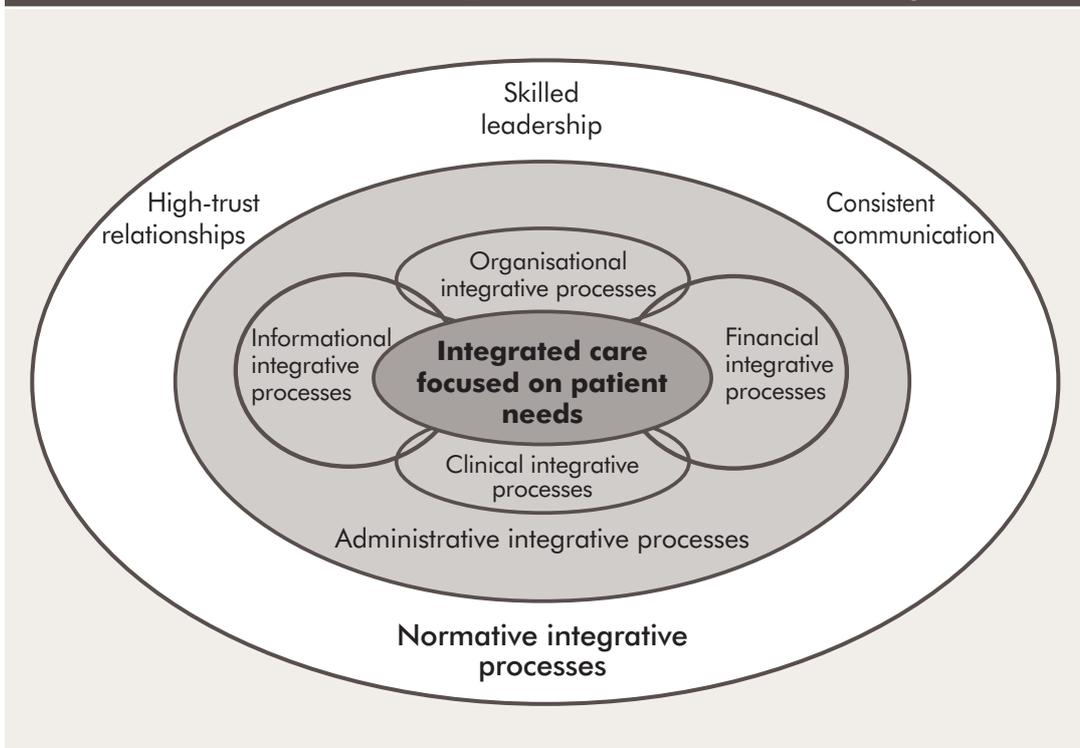
5. Discussion

Broad findings

This was a small study of four organisations that sought to identify generalisable features of use to the NHS from diverse international initiatives. The sites revealed the influence of six sets of factors – integrative processes – which, between them, acted synergistically and drove progress towards integrated care. The structural merger of organisations was not necessary to achieve integrated care. The case studies also underlined the fundamental importance of building shared vision and goals across different providers or teams, and of trusted and respected clinical leaders.

Limitations of the methodology

The methodology used in the study to select the sites had a number of limitations. First, there were no comparable measures that could be used across the four sites to judge the impact of their efforts to integrate, specifically the quality of care that resulted. Second, there was no measure that could indicate the 'strength' of integration that had actually been achieved. In line with similar studies (Baker and others, 2008), the authors had to be guided by nominations from international experts on integrated care. Third, the study collected data at a single point in time and was unable to examine firsthand how approaches to integration adapted over time in response to external stimuli and changes in organisational context. Instead, the authors were dependent on interviewee accounts of these processes – interviewees who were, in the main, enthusiasts about the services the authors visited. The authors spoke to only a few patients who had experienced the services, and very few sceptics.

Consistency of findings

Despite these limitations, the authors believe that there are useful findings for the NHS, in part due to the consistency of the findings across the sites, and with similar studies and more conceptual work on integration and integrated care. The six integrative processes identified here have similarities with the different types of integration highlighted in the conceptual analysis of integration by Shaw and others (2011), and Ramsay and others (2009). Identifying informational integrative processes as a distinct 'type' of integration differs from these two conceptual models, but highlights the practical importance of data and IT in aligning and coordinating service provision.

The integrative processes found in the case studies are also similar to those used in health systems in which integration has been associated with high-quality, cost-effective care (Feacham and others, 2002; Shih and others, 2008). A wider body of research describes similar interactions between integrative processes and higher care quality in other settings. For example, Feachem and Sekhri (2005) considered the integration of leadership and management to drive a partnership between governance and administration (equivalent to organisational integrative processes) as a key element of integrated health care. The roles of care coordination, clinical decision support (equivalent to clinical integrative processes) and 'interoperable information infrastructure' (equivalent to informational integrative processes) to establish and track metrics on processes and quality were identified by the Commonwealth Fund as

fundamental to high performance (Shih and others, 2008). Robinson and others (2009) have linked better performance with higher uptake by medical groups of the IT needed to support the delivery of standardised clinical care (larger medical groups tend to have better infrastructure; Rittenhouse and others, 2008).

While evidence on the impact of direct financial incentives (financial integrative processes) on the quality of care is mixed (Christianson and others, 2009), research has linked the use of micro-incentives to higher quality care in English general practice (Lester, 2008). Work on high-performing health systems by Baker and others (2008) describes a range of characteristics associated with high-quality care, including: culture, value and identity (consistent with normative integrative processes); effective communication channels; resources and administrative support for skills training (administrative integrative processes); and the need for time and change management support.

External context can help drive progress

A cluster of factors external to the case study organisations significantly influenced their work to develop integrated care. Payment systems and the regulatory regime appeared more influential in the US study sites, while a national policy push to promote integrated care appeared more so in the two European sites. In some ways, the combined impact of these factors resulted in 'systemic' integration that helped to align incentives for integration, but these factors also could hinder progress.

For example, the Joint Future policy in Scotland (Scottish Executive, 2000) was a key driver of integration in North Lanarkshire, but differences in the terms and conditions of service for health and social care staff, as set out in national contracts, had made the development of integrated teams more difficult. Equally, American anti-trust legislation was reported to have driven GRIPA to develop clinical integration, linking the approval for collaboration between doctors to a requirement to demonstrate the clinical benefits that collaboration would achieve. However, changes in insurance payments made it harder to recruit patients to their clinical integration programme. In CCNC, cuts in Medicaid payments had triggered care coordination activities, but data protection regulations constrained the development of this care coordination for some patients.

These contradictions and inconsistencies did not represent absolute barriers to integration, but they did slow progress and highlight the challenge of aligning external factors to achieve integration on the ground. Ham and Smith (2010) describe similar opportunities and barriers in relation to five innovative examples of integrated care in England. This all underscores the need for policies, payment regimes and regulatory frameworks to be consciously designed to act synergistically, in order to support integration in selected areas of health and social care.

Leadership within and across organisations is key

Leaders in the case study organisations created a persuasive vision of how services could be better coordinated across teams and organisations, and provided the leadership, infrastructure and support to achieve the vision. Leaders were mainly clinicians (medical doctors) who led the development of aligned professional practice for defined populations of patient, and ensured that information and reporting systems were in place to hold providers accountable for the quality of care delivered to patients.

The organisations that they led could be seen as 'integrator organisations': a term proposed by Berwick and others (2008) for organisations contributing to the 'Triple Aim' of improved patient experience, population health and reduced cost. A related idea was

proposed by Fisher and others (2007) under the name of 'accountable care organisations', and are the focus of much interest in response to US plans for health care reform (Luft, 2010). Although such organisations are only just developing, it is intended that they will involve groups of health care providers that join forces to take responsibility for the quality, budget and overall care of a population of patients. These accountable care organisations may be hospitals that extend into communities through links with physicians working in the community or vice versa, and which are held accountable for the care of a defined population over time rather than for single episodes of care.

Such developments will require lead organisations to work across team and organisational boundaries, as seen in these case studies, and the integrative processes described in this report potentially could enable integrator or accountable care organisations to deliver integrated care across a wider population group.

Integration can be real or virtual

As noted above, in the four case study sites, different providers were not structurally integrated; instead, they had developed six integrative processes to support integration. Similar processes can be seen in structurally integrated organisations that deliver high-quality care (Shih and others, 2008). For example, Kaiser Permanente and Geisinger Health System – both integrated delivery systems combining hospitals, payers and medical groups – use processes to support integration that are very similar to those witnessed in the case studies (Chu, 2009; Steele, 2009). Both organisations had spent decades developing and refining the infrastructure, systems, values and culture that underpinned the array of integrative processes used.

The challenge of aligning goals, values and professional practice across teams and organisations is considerable, and the case studies provided some insights into how to achieve this. However, it is also important to note that attempts to develop integration met with resistance in some quarters, for example:

- clinicians who were slow to adopt new practices, particularly with other professions

- technical barriers – for example, problems with shared information systems

- information deficits requiring labour-intensive efforts to obtain data

- misaligned financial incentives.

Normative integrative processes were crucial for integration across partnerships and networks, and particularly across health and social care, as underlined by others (Dickinson and others, 2007; Glendenning, 2003). All four case study sites had to devote a lot of ongoing effort to achieve this.

Implications for national policy

Equity and Excellence: Liberating the NHS (DH, 2010a) establishes a new policy context for integration. While systems for regulation, accountability and measuring outcomes are all under development, there is a window of opportunity to promote a supportive context for integration. In their recent review of the policy barriers within the English NHS to integrated care, Ham and Smith (2010) identified a cluster of issues that need to be addressed. These include:

- the tension between choice and competition and potential reductions in choice that may be associated with integration

- the incentives associated with Payment by Results and foundation trust status that reward hospital activity in preference to integrated, community-based services

- regulatory and assurance frameworks that divert managerial and clinician attention away from integration

- public resistance to service reconfiguration that may be needed to support integrated care.

These tensions have been highlighted in many responses to the White Paper *Equity and Excellence: Liberating the NHS* (DH, 2010a) and in listening events held by the NHS Future Forum (Field, 2011). The case studies offer insights into how further policy could be developed and enacted to support integration.

A regulatory framework that encourages integration
A new regulatory framework outlined in technical papers supporting the White Paper (DH, 2010b) and subsequent recommendations of the NHS Future Forum, should balance the aim to promote competition between providers with the potential benefits of collaboration and integration in services for people with complex health and care needs. It is not clear at present how Monitor will view vertical integration or mergers in health care. On the one hand, such mergers may increase consolidation, thus decreasing the potential for competition, and on the other, they may achieve significant efficiency gains.

In the US, the draft regulations following the Patient Protection and Affordable Care Act of 2010 may be instructive here. Regulators are defining a range of organisations that can come together to become accountable care organisations, which will be eligible to share savings if they meet a set of quality indicators for coordinated and integrated care for Medicare patients (the Federally-funded health service for the over-65s). Accountable care organisations will be exempt from anti-trust law if they fulfil certain requirements, and the new economic regulator could learn from these developments in the US, namely how to balance the benefits of vertical integration without undermining competition.

A financial framework that encourages integration
At present, a range of payment mechanisms in the NHS (to institutions and professional groups through national contracts) does not necessarily support attempts to integrate care, or provide higher quality and efficiency. An audit of such payment mechanisms, looked at through the lens of trying to improve quality of care for patients across a pathway and to improve efficiency, should be done now which could help to inform the future strategy of, for example, Payment by Results and national contracts for staff. The intended development of 'best practice pathways' based on National Institute for Health and Clinical Excellence (NICE) evidence and built into standard national contracts used by clinical commissioning groups is welcome. However, more radical attempts to bundle payment across a pathway could be supported and piloted, in its extreme form allowing provider networks to take on a capitated budget for an enrolled population, akin to that envisaged for US accountable care organisations.

Support for innovative approaches to commissioning integrated services
The potential contribution of commissioning to the delivery of integrated care is explored by Lewis and others (2010) and Smith and others (2010), with commissioning seen as a possible method for supporting alignment and coordination among service providers. The NHS Commissioning Board will need to support local clinical

commissioning groups to develop innovative ways to commission integrated services. Options include the following:

1 **Commissioning through global budgets for a single integrated service**
   This can be achieved through a single contract with a lead provider organisation (see, for example, Suffolk Integrated Sexual Health Service*). The lead contractor can provide or subcontract the necessary services including hospital, community and preventive services. In this model, tariff payments for hospital activity can continue (as a mechanism to pay for selected episodes of care), or could be replaced by a global payment that is at risk if the whole service overspends (participating providers each take a share of losses).

2 **Commissioning integrated services using *Health and Social Care Act 2006* financial flexibilities**
   Where health and social care integration is sought, clinical commissioning groups could encourage the use of pooled budgets for integrated services in primary care settings, and develop ways to commission services from partnership organisations using financial flexibilities to support integration.

3 **Commissioning through global budgets for integrated 'sectors' of care**
   These could be developed through a contract between a commissioning group and an integrated provider organisation. The integrated provider is incentivised by a global capitated budget to maintain health and provide services in order to reduce costly hospital admissions and provide services for a defined population. Use of the NHS tariff for hospital activity could be maintained or replaced by a fixed budget allocated to the hospital from the global budget. Each participating organisation is at risk for overspending, and gain-sharing arrangements can be used to incentivise high-quality care that will lower overall service use.

4 **Targeted micro-incentives**
   These can be used to align incentives for individual practitioners in order to change professional practice. The case studies illustrated how carefully designed payments linked to specific activities act as micro-incentives to support the achievement of corporate objectives around integration. Already in use in the primary care Quality and Outcomes Framework and the Commissioning for Quality and Innovation Payment Framework (DH, 2008b) in acute trusts, they could be further developed to support the goals of integration.

   Our understanding of how to develop effective incentives is limited (Christianson and others, 2009), and in line with findings in North Lanarkshire, financial micro-incentives are not a necessary driver of integration and high-quality care. Nevertheless, incentives were identified as one of the key ingredients of integration in the other three case studies.

National outcome measures that encourage integrated service provision
There are methodological challenges in assessing the outcomes of integration (see, for example, Stranberg-Larsen and Krasnik, 2009; Vrijhoef and others, 2009). There is a case to be made for taking a different approach and identifying system utilisation measures that can be influenced by coordination between service providers. Among the

*http://suffolkish.org

possible measures identified in *Transparency in Outcomes: A Framework for the NHS* (DH, 2010c) are emergency admission rates for ambulatory care sensitive conditions and for specific conditions which can be reduced by well-coordinated, community-based provision. Similar measures were among those used to evaluate care coordination programmes in the US (McCall and others, 2008), and while evidence for the cost-effectiveness of the programmes was weak, care coordination services and methods to align care across primary, hospital and community services were used to improve these outcome measures. A combination of local and national outcome measures – some from the NHS Commissioning Board and some locally selected – could act as an important stimulus for integration between health services and health and social care services.

Implications for organisations seeking to develop integration

The case studies suggest that organisations should spend time developing the following areas (although others also may be important): leadership, governance, information and staff training and development.

Leadership

The leaders in the three health case study sites were well-established clinicians in their communities, trusted by their peers and with a long track record of supporting change and improvement. Nevertheless, the challenge of engaging their fellow clinicians, working in independent practices and over whom they had no direct control, was considerable.

The crucial role of professional champions in leading change and improvement in health and social care has been much discussed, and was particularly emphasised by the former health minister Lord Darzi (2008). Numerous resources are available to develop leadership skills in doctors and other professionals, although these go only part of the way in promoting professional leadership of integration work. In the NHS there are, as yet, very few clinicians leading such networks or organisations, although the introduction of clinical commissioning groups may help to develop a new generation of leaders.

Leaders' attention should be focused on developing a full set of integrative processes, with mutually supportive links between clinical, organisational, informational and financial processes, in order to enable the delivery of integrated care for patients.

Governance

'Integrated governance' can describe the arrangements through which organisations organise and control all their functions, or it can describe governance arrangements that cross organisational boundaries. Guidance on the former is available through the NHS *Integrated Governance Handbook*, where integrated governance is described as:

Systems, processes and behaviours through which trusts lead, direct and control their functions in order to achieve organisational objectives, safety and quality of service and in which they relate to patients and carers, the wider community and partner organisations (DH, 2006b: 10).

While this touches on relationships with patients and partnership organisations, guidance in this area is underdeveloped.

A key role of the governing body is to support the creation of shared goals, values and understanding of professional roles across participating organisations, teams and individuals. With numerous partnership and network arrangements across health and

social care, many different governance arrangements are already in place. Research is needed to assess which are most effective for driving the development of high-quality integrated services that improve quality, patient experience and efficiency.

It is of note, in the two American sites, that little attempt was made to involve the local population in shaping the strategy of the organisation through governance.

Information technology

Two of the case study sites demonstrated the benefits of sharing and linking data better to support integrated care, and revealed the many challenges involved in achieving shared access to clinical information.

Developing data linkages and web interfaces between different care settings (GP clinics, hospitals, social care departments) requires a range of skills. These include:

- the procurement and contract management of IT suppliers

- technical expertise to customise products in order to meet organisational needs

- leadership skills to encourage clinicians to adopt and use the system

- analytic skills to compare and evaluate clinician performance within data protection regulations.

Despite these challenges, a cluster of primary care trusts (such as NHS Redbridge and Hammersmith and Fulham PCT) have developed local bespoke solutions by linking GP, community hospital and some social care data. Tower Hamlets PCT has connected GPs and community services using a web-based version of the EMIS GP electronic record system (Barr, 2009). Furthermore, there is growing expertise in synthesising and analysing the linked datasets that emerge to identify individuals at risk of ill-health and predict when they will need services, and presenting the results in an accessible format (see, for example, Bardsley and others, 2010). Rapid dissemination of these skills is needed to enable wider implementation of informational integrative processes.

Staff training and development

Successful normative integration requires staff to be introduced to the values, goals and working practices of integrated care at the earliest opportunity – ideally starting during their induction into new posts and periodically reinforced. Training and development focused on designing and delivering services based on patient needs and preferences were also valuable in the case study sites, along with joint training across professional groups and inter-professional education sessions. More innovative approaches such as job shadowing can help members of multi-professional groups to understand the roles, responsibilities and organisational culture of colleagues from other organisations or care sectors.

Appendix 1: List of organisations nominated as possible case studies

Organisation	Host country	Expert advisers
Almere Health System	The Netherlands	Nick Goodwin
Brand New Day Health Maintenance Organisation, California	USA	Rich Bringewatt
Capital Health	USA	Dennis Kodner
Catalan Health System	Spain	Chris Ham
Commonwealth Care Alliance	USA	Rich Bringewatt
Community Care North Carolina (CCNC)	USA	Commonwealth Fund
Eldercare	USA	Rich Bringewatt
Geisinger Health System	USA	George Isham, Karen Davis, Meredith Rosenthal, Patrick Courneya, Steve Schoenbaum, Robert Burns, Lawrence Casalino, John H. Cochran
Greater Rochester Independent Practice Association (GRIPA)	USA	Lawrence Casalino
Group Health Puget Sound	USA	George Isham, Patrick Courneya, Karen Davis, Don Berwick
Harvard Vanguard Medical Associates	USA	Steve Schoenbaum
Health Care Partners	USA	Commonwealth Fund
HealthPartners	USA	Karen Davis, Lawrence Casalino, Don Berwick
HELIOS Hospital Systems	Germany	Jennifer Dixon
Henry Ford Health Care System	USA	Jack Cochrane

Organisation	Host country	Expert advisers
Integrated Services in the Practice of Discharge and Home Care (PALKO)	Finland	Peter Thistlethwaite
Intermountain Health Care	USA	Robert Burns, Lawrence Casalino, John H. Cochran
Jonkapping County Health System	Denmark	James Mountford, Chris Ham
Kaiser Permanente	USA	Frede Olesen, George Isham, Karen Davis, Meredith Rosenthal, Steve Schoenbaum, Robert Burns, Lawrence Casalino, Don Berwick
North Lanarkshire Health and Care Partnership	Scotland	Anne Hendry
On Lok	USA	Rich Bringewatt
Project and Research on Integration of Services to Maintain the Autonomy (PRISMA)	Canada and France	Peter Thistlethwaite
QuadMed	USA	Patrick Courneya
Regionale HuisartsenZorg Heuvelland (RHZ)	The Netherlands	Bert Vrijhoef
South Central Foundation, Alaska	USA	Don Berwick
The Mayo Clinic	USA	Meredith Rosenthal, Steve Schoenbaum, John H. Cochran
Torbay Care Trust	England	Peter Thistlethwaite
Veterans' Administration Health Service	USA	Frede Olesen, Sheila Leatherman, Steve Schoenbaum
Virginia Mason Health System	USA	Meredith Rosenthal
Visiting Nurse Service of New York	USA	Dennis Kodner

List of expert advisers

Expert adviser	Title and organisation
Don Berwick	President, Institute for Healthcare Improvement, now Director, Centres for Medicare and Medicaid
Rich Bringewatt	President, National Health Policy Group, Washington, DC
Robert Burns	Director, Wharton Center for Health Management and Economics, University of Pennsylvania
Lawrence Casalino	Chief, Division of Outcomes and Effectiveness Research, Cornell University
John H. Cochran	Executive Director, The Permanente Federation, Kaiser Permanente
Patrick Courneya	Medical Director for Care Delivery Systems, HealthPartners
Karen Davis	President, The Commonwealth Fund
Jennifer Dixon	Director, Nuffield Trust
Nick Goodwin	Senior Fellow, The King's Fund
Chris Ham	Chief Executive, The King's Fund
Anne Hendry	National Clinical Lead for Quality and Consultant Physician in Geriatric Medicine, North Lanarkshire Health and Care Partnership
George Isham	Chief Health Officer, HealthPartners
Dennis Kodner	Global Thought Leader on Integrated Care, Partner at Integrated Care Group, LLP
Sheila Leatherman	Research Professor, Department of Health Policy and Administration, University of North Carolina
James Mountford	Director of Clinical Quality, UCL Partners
Frede Olesen	Chair, National Danish Cancer Association
Meredith Rosenthal	Associate Professor of Health Economics and Policy, Department of Health Policy and Management, Harvard School of Public Health
Steve Schoenbaum	Former Senior Vice-President, The Commonwealth Fund (retired)
Peter Thistlethwaite	Editor, *Journal of Integrated Care*
Bert Vrijhoef	Professor of Chronic Care, Tilburg University

Appendix 2: Background information on case study sites

Community Care North Carolina

> ### Box A.1: Community Care North Carolina (CCNC)
>
> CCNC is funded through the state Medicaid programme to improve the quality, cost, accessibility and utilisation of services for Medicaid (low-income, uninsured) recipients. CCNC's programmes result in more integrated care by linking patients to a named primary care doctor, and supporting a consistent standard of care for common conditions across different physician practices. Selected patients also receive case management and care coordination services, and CCNC builds links between doctors, hospitals, social services and other community providers.

Vision for integration

At CCNC, integration is about reducing the fragmentation and duplication that patients experience as they move between multiple doctors. The Medicaid fee for service payment system does not encourage continuity of care, and patients typically see a different doctor for each health problem that they have. CCNC requires patients to register with a single primary care physician in a 'medical home'* to improve continuity of information and the relationship between doctor and patient. In addition, consistency of care for common conditions and communication between different doctors are seen as essential elements of integrated care, and CCNC promotes adherence to evidence-based guidance and care coordination for people with complex problems through its disease and case management work. One interviewee described CCNC as "putting the broken bits of Humpty Dumpty together again". Another described integration as a philosophy to counter the reactive, episodic nature of acute care, in which longitudinal relationships between doctor and patient are essential – particularly at times of transition between services.

History

CCNC was launched in 2002, building on earlier work of the Carolina Access programme to improve access to primary care and reduce fragmentation for Medicaid enrolees. CCNC extended this remit to include care coordination and disease management. A key driver for CCNC's work has been pressure on the state Medicaid budget and the risk that cuts could reduce eligibility for Medicaid, cut the range of services available for Medicaid patients and reduce physician reimbursement rates (currently high, at 95 per cent of Medicare rates). CCNC's underlying vision of 'economising through quality improvement' bridges the aspirations of Medicaid

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*A medical home is a primary care clinic providing comprehensive and coordinated care for registered patients with a doctor-led multi-professional team, a focus on access, quality and safety, and payment systems that incentivise continuity, quality and reduced hospital use.

administrators and physicians, and drives their ongoing pursuit of less fragmented and higher quality care.

Organisational form

CCNC is administered through a central programme office and its clinical programmes are implemented through 14 semi-autonomous Regional Networks. The programme office sets strategy, provides organisational support for the Regional Networks (IT development, data analytics and so on). It monitors network progress and performance against an agreed contract in return for a US$3 per-patient per-month payment, and supports the development and piloting of new approaches to care.

The networks are led by local physicians working with a senior network manager and a mixture of pharmacists, social workers, nurses and others, and build links with local hospitals, health departments and social services. They have local discretion over the design and implementation of interventions and local control over how best to achieve greater integration in their own region.

Methods used to improve integration

CCNC's approach to integration reflects its commitment to community-based, clinician-led change. The organisation is clear that it is running a clinical change programme to support a consistent standard of care across all physicians, not a system to control funding, and that clinician engagement and supportive management will be more effective than rigid regulation. The main methods used are as follows:

- linking individuals to a named primary care doctor (the 'medical home')
- developing and implementing evidence-based disease management programmes to improve outcomes for patients with high prevalence chronic conditions
- care managers to coordinate services for individuals with complex problems
- pharmacy management to reconcile drugs prescribed by different providers and reduce interactions and duplication
- developing an integrated electronic information system to collect, analyse and disseminate clinical information to physicians and monitor delivery of clinical programmes.

Disease management priorities and programmes are developed centrally by network medical directors, who then lead dissemination and implementation work in their own area. Central CCNC functions include clinical support (tools and resources for disease management); setting payment rates/financial incentives; developing IT infrastructure for disease and case management; and the collection, analysis and dissemination of data on physician adherence to protocols.

Regional Network support for integration is shaped by the Network Medical Management Group and tailored to local circumstances. Thus, the skill mix of the case management team will reflect local health and care needs regarding addictions, mental health, chronic conditions and so on. Personal contact between network medical directors and participating physicians is central to dissemination work, and regular communication between case managers and primary care physicians is a key element of care coordination work.

Greater Rochester Independent Practice Association

Box A.2: Greater Rochester Independent Practice Association (GRIPA)

GRIPA is an independent practice association which provides administrative and clinical support to around 800 member physicians serving a mixed urban/rural population in up-state New York. The doctors are mainly in small, independent practices (similar to English GP practices) and include primary care physicians and specialists. Since 2007 GRIPA has implemented a clinical integration programme.

Vision for integration

GRIPA's vision for integration was shaped by the legal definition of a clinically integrated system set by the FTC:

> an active and ongoing program to evaluate and modify the clinical practice patterns of... physicians... so as to create a high degree of inter-dependence and collaboration... to control costs and ensure quality (Federal Trade Commission, Department of Justice, Statement of Antitrust Enforcement Policy in Health Care, 2006: #8.b.1).

In practice, this involved introducing evidence-based guidelines for selected clinical conditions, using clinical information systems and other mechanisms to support their implementation, and developing care coordination systems for people with complex problems.

History

GRIPA was founded in 1996 to negotiate and manage capitated risk contracts with local insurers for its member physicians and hospitals. Between 1996 and 2005 GRIPA held capitated 'risk-contracts' for a total of up to 120,000 people (receiving a fixed monthly sum for each patient in return for providing a comprehensive range of care). Using a range of incentives for adherence to local protocols, referral criteria, and disease and care management initiatives, GRIPA paid doctors a share of savings if patient care could be delivered for less than the capitated amount paid by insurers.

The stimulus to introduce clinical integration came when local insurers stopped risk contracting and returned to individual price setting with doctors or practice groups. This reduced incomes – particularly for primary care physicians – who were keen to return to collective price negotiations with insurers. While US anti-trust legislation prohibits agreements among private, competing individuals or businesses that could unreasonably constrain competition, the FTC created an exception in relation to clinical integration as described above, and after a two year-long review, the FTC approved GRIPA as a clinically integrated organisation.

Organisational form

GRIPA is a small membership organisation working collaboratively with physicians and hospitals, aiming to make better health care easier to deliver and less costly for patients. It provides medical, business and technology management services to doctors in order to

simultaneously improve the quality and efficiency of health care. It is a membership-based organisation with more than 800 primary care and specialist physicians, of which more than 650 work in community practice.

Methods used to improve integration

GRIPA's integration work combines disease management of common chronic conditions, case management of people with complex health problems and significant gaps in care and preventive care for selected conditions. Disease management programmes use locally adapted clinical guidelines, driving clinicians to adhere to them through web-based electronic prompts with linked data collection, performance review and financial micro-incentives. There is shared accountability for meeting clinical standards, and incentives are aligned across all the doctors that treat a particular patient. This improves the standardisation and consistency of care experienced by patients for selected high-prevalence conditions.

For individuals with more complex health problems, GRIPA uses multi-professional case management teams to coordinate services, address gaps in care, communicate between different providers, support self-management by patients and their carers, and reduce duplication and fragmentation.

Developing and implementing a bespoke clinical information system is central to GRIPA's integration work, as are financial incentives based on clinician performance in pre-agreed areas of care. GRIPA also provides administrative support to practices, reducing organisational workload for physicians and freeing up time to improve clinical care.

Regionale HuisartsenZorg Heuvelland

Box A.3: Regionale HuisartsenZorg Heuvelland (RHZ)

RHZ is an umbrella organisation for all 89 GPs in Maastricht, the Netherlands (population 170,000). It was established in 2006 to redesign diabetes care in the Maastricht area. It grew quickly after national policy was introduced to improve care for people with chronic conditions. A system of integrated care was developed for specific disease-treatment combinations (DTC, or 'DBC' in Dutch). Insurers buy a pre-agreed annual package of diabetic care for an agreed sum of money per patient (adjusted to reflect case severity). RHZ negotiates with health insurance companies on behalf of member GPs and holds the contracts for integrated diabetes services.

Vision for integration

The short-term vision for integration work between RHZ, GPs and hospital specialists in Maastricht was set by national policy on DBCs for chronic conditions. It focused on developing, implementing and monitoring agreed clinical pathways and standards of care for people with diabetes and COPD. However, RHZ also had a longer term vision for integration, based on supporting closer working between its member GPs, developing links between GPs, other health professionals, social care and community organisations, and developing innovative new roles for primary care.

Interviewees in Maastricht also understood the concept of integration in other ways. Some linked the term to holistic individual patient care combining wellness, prevention and cure, and the organisation of services around individual needs and preferences. Others described integration in organisational terms, as the links between generalists, specialists, hospital and community, and noted the role of payment systems, IT and data in supporting them. While interviewees clearly understood the short-term vision of implementing diabetes and COPD DBCs, they held diverse views on where integration might lead them in future. This diversity reflected a rich history of collaborative research in Maastricht between GPs, specialists and academics.

History

RHZ was launched in 2006 to improve diabetes care in Maastricht and grew rapidly after the launch of national DBC policy on integrated provision for diabetes. It brought together all local GPs under an umbrella organisation that negotiates on their behalf with insurers and provides administrative and developmental support to practices. Although Maastricht was not a national pilot site for DBCs, RHZ has introduced two DBCs by building on a ten-year history of collaboration and innovation between academics, hospital specialists and GPs to improve chronic care in the Maastricht area. Local disease management programmes for a cluster of chronic conditions – including diabetes – had been established and evaluated already, and had built trust and interdependencies between participating GPs, specialists, nurses and academics. RHZ was able to harness existing interest in disease management and recruit clinician leaders with an established record of improving chronic care.

Organisational form

RHZ is a membership organisation for Maastricht GPs. At the time of the case study, all local GPs were members. Each GP clinic is an independent business and RHZ is funded through a top-slice of the DBC contract value. RHZ coordinates and oversees selected activities, including negotiating with insurers, governance of DBC implementation, and education and development support for practices. RHZ only manages the primary care DBC. Maastricht University Hospital contracts with insurers for the specialist DBC under which people with severe, hard-to-control diabetes are managed by hospital specialists.

Methods used to improve integration

Current integration work is focused on implementation of the diabetes and heart disease DBCs. The key methods used are as follows:

- local adaptation of an integrated disease management protocol by leading GPs

- specialists, specialist nurses and others are involved in providing care and developing new protocols for the DBC work

- implementation of a web-based information system to support change

- use of financial micro-incentives that are linked to agreed standards of clinical practice, in order to encourage standardised clinician behaviour among clinicians

- education and training to support practice development around DBCs

- development of new professional roles to support the DBC – particularly in the form of practice nurses and specialist nurses working in community settings

- additional practice development to encourage GPs to work more closely together.

It is important to note that local variations in the arrangements for integrated care arise because the clinical content and price of each DBC is negotiated region-by-region with insurers, with the balance of care between GPs and specialists reflecting detailed negotiation.

In Maastricht, where specialists are salaried employees of the local teaching hospital, up to 95 per cent of diabetic care is now covered by the primary care DBC, with support from outreach clinics run by specialists. In other regions, where specialists are paid a 'fee for service' for managing chronic conditions, they have agreed to much less care being transferred to GPs through the primary care DBC, and required more of the diabetes care pathway to be delivered by specialists.

RHZ has introduced a web-based diabetes electronic record to support practice in line with DBC standards, and undertakes regular review of clinical metrics and reporting of clinical activity. These data allow for distribution of funding to GPs for diabetes care in line with clinical performance against agreed standards. It also provides administrative support to GP practices, education and training to support DBC delivery, and is employing nurses to provide chronic disease management in GP surgeries. Additional DBCs were under development at the time of the case study, and audits and evaluations of the diabetes DBC were due to begin.

North Lanarkshire Health and Care Partnership

Box A.4: North Lanarkshire Health and Care Partnership

The North Lanarkshire Health and Care Partnership brings together the work of North Lanarkshire Council and NHS Lanarkshire to deliver better integrated services to four care groups; older people, and those with disabilities, addictions and mental health problems. The partnership builds on many years of joint working, and a cluster of partnership agreements developed from 2002 to 2004, and reflects the emphasis in Scottish health policy on networks and partnerships rather than competitions and market forces as drivers of quality and efficiency. A joint governance and accountability framework was launched in 2008 to formalise the arrangements for partnership working.

Vision for integration

Interviewees in North Lanarkshire defined integration in relation to individuals and organisations. For individuals, it was about holism: addressing all of a person's needs, irrespective of whether they are health or social care issues; avoiding disruptive transitions between providers in which delay or duplication result from poor communication; and professionals learning each other's skills to deliver aligned and coordinated care. For organisations, integration was about finding ways to work together in pursuit of common

goals and standards for care services. There was a practical focus on supporting individuals and teams to work together to improve care for individuals, with differences of opinion on whether this is best done through co-located teams with integrated management, or through aligning the practices of distinct health and social care teams.

History

There was no clear start date for North Lanarkshire's integration work, with current arrangements building on years of close collaboration between the NHS and local government. Some interviewees dated it to the launch of a key Scottish Executive Joint Future initiative in 2000 on the future of health and social care, while others dated it to the implementation of a single shared assessment process. Formal arrangements for integration, embodied in joint governance arrangements, were launched in 2008.

Organisational form

This is a formal partnership between NHS Lanarkshire and North Lanarkshire Council. The Health and Care Partnership Board is the main governance group providing strategic direction for integration work across four care groups in each locality of North Lanarkshire (older people, and those with addictions, disabilities and mental health problems). Objectives identified by the board are modified for each care group through four Care Group Partnership Boards, and these are adapted for each locality through Locality Health and Care Partnerships.

Beneath these governance groups a diverse collection of integrated front-line service providers is emerging – ranging from fully integrated teams to health and social care staff working to shared protocols and aligned performance measures. Thus, for example, integrated care for older people with mental health problems in the Coatbridge locality is provided through an integrated day centre with a fully integrated and jointly managed health and social care team. In contrast, care management for people with long-term conditions at high risk of hospital admission is provided through collaborative working between health and social care teams using shared assessments, common protocols and shared outcome measures.

Methods used to improve integration

Integrated governance arrangements have established an accountability framework for reporting on and delivering shared outcomes defined in the National Community Care Outcomes Framework. In addition, team and organisational development work has been important to create common values across health and social care staff, as has the development of operational management arrangements to support integration. These vary across care groups and localities, from fully integrated management of integrated teams to separate health and social care management structures with shared policies and procedures, pursuing common goals.

Progress has been aided by creating and communicating a joint vision of what can be achieved through closer integration. The emphasis has been on benefits to service users, better outcomes, improved access to high-quality care and better value for money. The role of professional leaders in harnessing national initiatives – Joint Future and the National Community Care Outcomes Framework – to create and communicate this

vision, along with shared improvement goals and outcome measures, has been crucial in winning support for change from front-line practitioners.

Unlike the other case study sites, there are no financial micro-incentives for front-line staff (although selected managers receive performance-related pay, partly dependent on these outcomes), and there is limited use of IT to support integration.

Interviewees described variable progress across localities and service areas, with enthusiastic champions and early adopters driving change in some localities, and care groups and others only just off the starting blocks. Ongoing barriers to integration were said to include professional resistance to change, the tensions caused by differences in terms and conditions, and technical difficulties in developing reliable data and information.

Find out more online at: www.nuffieldtrust.org.uk/integratedcare

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