

An overview of integrated care in the NHS

What is integrated care?

Research report

Sara Shaw, Rebecca Rosen and Benedict Rumbold

June 2011

Nuffield Trust work on integrated care

This report is part of the Nuffield Trust's extensive programme of work on integrated care, which is examining the potential of new forms of care that are intended to benefit patients and taxpayers. Other related projects include:

- *Integration in action: four international case studies*. A study of four international organisations that have attempted to improve integration between health and care services. Interviews, documentary analysis and literature review are used to identify the main stimuli for integration and the issues that help or hinder progress; drawing out lessons for the NHS.
- *Towards integrated care in Trafford*. A project that looks at the process of change and lessons learned to date in Trafford, where NHS organisations have been working on the development of an integrated care system across the whole health economy.

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

www.nuffieldtrust.org.uk/integratedcare

Acknowledgements

Our thanks go to Richard Gleave, Diane Gray, George Kissen, Dennis Kodner, Judith Smith and Sarah Smyth for their comments, all of which have helped to shape both the structure and content of this report.

'Integrated care' is a term that reflects a concern to improve patient experience and achieve greater efficiency and value from health delivery systems. The aim is to address fragmentation in patient services, and enable better coordinated and more continuous care, frequently for an ageing population which has increasing incidence of chronic disease. The search for ways to integrate care more effectively is a pressing policy concern. But what do we actually mean by 'integrated care'? This research report examines what is meant by 'integrated care'. It explores integrated care from an NHS perspective, identifies the concepts that underpin integrated care, suggests how these can be used to inform practical integration efforts both within and beyond the NHS, and sets out how integration might be measured.

Key points

- Under current Government proposals, new GP commissioning consortia will take over responsibility for £60 billion of the NHS budget. International experience suggests that the integration of primary and secondary care is vital to the delivery of efficient and effective care.
- Current reforms emphasise the need to integrate care more effectively. This emphasis reflects the long-standing concern in the NHS with how to address the division of care – across primary and secondary care in particular.
- Integrated care is an organising principle for care delivery that aims to improve patient care and experience through improved coordination. Integration is the combined set of methods, processes and models that seek to bring this about.
- Achieving integrated care requires that those involved with planning, financing and providing services have a shared vision, employ a combination of processes and mechanisms, and ensure that the patient's perspective remains a central organising principle throughout.
- There is an urgent need for more robust and high-quality evidence to inform decisions about how to develop integrated care. There is no single model of integrated care that is suited to all contexts, settings and circumstances. Researchers and policy-makers need to work together with practitioners to develop, evaluate and implement effective approaches.



An overview of integration in the NHS

The current focus on integrated care reflects a long-standing concern in the NHS with the organisation of care across three sectors of the health service (primary, secondary and tertiary). This can be thought of as ‘internal’ integration and is the main focus of this report. Furthermore, the organisational separation of health and adult social care services (with the exception of Northern Ireland) has been a further cause of service fragmentation for many users; representing a concern for ‘external’ integration. Concern about fragmentation typically focuses on a lack of service coordination for individual patients and, particularly, the structural and cultural isolation of generalist from specialist medicine, or adult social care from health care, which often results in patients experiencing discontinuity of care when they are transferred from home to hospital, or vice versa.

Table 1: Trends in integration initiatives

1980s	1990s	2000s
<ul style="list-style-type: none"> • coordinated working • shared planning • coordinated care • care programmes • case/care management 	<ul style="list-style-type: none"> • inter-agency working • intermediate care • shared protocols • managed care • disease management 	<ul style="list-style-type: none"> • inter-professional working • whole systems working • integrated delivery networks • patient-centred care • shared decision-making • integrated care pathways

The desire for better integration of care has been expressed in different ways. For example, multidisciplinary care was a particular concern in the 1960s; partnership working in the 1970s; and shared care and disease management in the 1980s and 1990s (see Table 1). What we now refer to as ‘integrated care’ is an umbrella term, encompassing diverse initiatives that seek to address fragmentation, but that differ in underlying scope and values (Stein and Reider, 2009).

From 1997 to 2010, the Labour Government emphasised a need for greater integration as part of the drive for improved quality, efficiency and patient outcomes. Initiatives such as ‘integrated care pathways’, ‘patient-centred care’ and ‘shared decision-making’ are examples of attempts to align clinical, managerial and service user interests, and to improve coordination of care for patients, in particular those with long-term conditions. New forms of health care organisation such as care trusts (Glasby and Peck, 2005), managed clinical networks (Woods, 2001), accountable care organisations in the US (Rittenhouse and others, 2009) and local clinical partnerships (Smith and others, 2009) are all examples of different attempts to reshape the way in which combinations of primary, secondary, community and adult social care services are organised and delivered.

Case study

Integrated mental health services in Milton Keynes

Milton Keynes is a new town with a strong history of partnership working and a community identity that is characterised by wanting to ensure the best for residents. Combined with support from local politicians, this has provided a strong foundation for joint working. In 2001 the primary care trust (PCT) and local council in Milton Keynes launched their first integrated service for mental health. Since this time, joint services have developed across mental health, learning disability and intermediate care; employing some 500 staff, ranging from consultant psychiatrists to social workers, nurses and equipment services.

Health and social care agencies in Milton Keynes have developed a structured approach to integrated care, maintaining their own organisational structures and systems and, where appropriate, pooling resources. The emphasis has been on joint administrative systems. Those involved have described themselves as 'dancing partners', working within and across existing organisations in order to better coordinate different services, share information and manage the transition of patients through elements of their care. For an area such as intermediate care, this has meant starting with the concept of rapid access, developing coordinated teams comprising nurses and social workers, and then, together, addressing problems of delayed discharge.

Across the local care economy, the focus on coordinating services is now seen as a mutual responsibility driven by a common belief that, together, health and social care agencies and professionals can make the best use of limited funding, promote wellbeing and address health inequalities. However, the policy drive for organisational integration of community services means that Milton Keynes may be required to more closely integrate with hospitals and/or general practices; health services that have not previously been involved in integrated care within Milton Keynes.

There is some emerging evidence of the benefits of integration within the NHS, for example in improving access to care, managing demand and reducing delayed transfers (Ham and de Silva, 2009). However, empirical research on the impact of integrated health systems in respect of clinical outcomes and value for money remains scarce (Armitage and others, 2009), with integration that is largely focused on bringing organisations together unlikely to bring about improvements in care for patients (Alakeson, forthcoming). Although there is some limited evidence that service integration improves clinical outcomes, the impact on costs is more mixed (Ham and de Silva, 2009; Ovretveit and others, 2010).

Current policy provides opportunities to extend integrated care, working towards an NHS that is 'less insular and fragmented' and facilitating working across health and social care boundaries, as well as between hospitals and practices (Department of Health, 2010).

Some integrated care initiatives tend to focus on integration which brings together various providers of health care within the NHS. For example, the introduction of National Service Frameworks (NSFs) in order to try and bring about more consistency and coordination of care for specific conditions, and across different sectors. Other initiatives tend to be concerned with integration between health and other services. Recent examples in the NHS in England have included merging regulators to facilitate joint inspection of health and social care providers; extending incentive payments to providers to encourage and reward joint working; and developing integrated mental health services across health and social care (see case study on page 5).

To date, discussions about improving service integration have typically focused on breaking down barriers across service providers. Integration can also involve coordination across commissioners and providers (Lewis and others, 2010). Current policy has rejected this approach (Department of Health, 2010), however, the development of GP commissioning consortia provides an opportunity to develop new forms of care and encourage increased integration via the involvement of secondary care clinicians alongside primary care teams (Ham and Smith, 2010).

What do we mean by integration and integrated care?

A recent review of the literature on integrated care revealed some 175 definitions and concepts (Armitage and others, 2009). Such diversity reflects what one commentator refers to as ‘the imprecise hodgepodge of integrated care’ (Kodner, 2009).

When considering integrated care, it is important at the outset to distinguish between integration and integrated care (see Table 2). Integrated care is an organising principle for care delivery with the aim of achieving improved patient care through better coordination of services provided. Integration is the combined set of methods, processes and models that seek to bring about this improved coordination of care. Accordingly, where the result of efforts to improve integration is beneficial for patient groups, so the outcome can be called integrated care (Kodner and Spreeuwenberg, 2002).

Table 2: Perspectives on integration and integrated care

What is integrated care?

Description

The patient’s perspective is at the heart of any discussion about integrated care. Achieving integrated care requires those involved with planning and providing services to ‘impose the **patient perspective as the organising principle** of service delivery’ (Lloyd and Wait, 2005: p7).

Example

Take the example of Torbay, an area with a high proportion of over-65s. Discussions driving integrated care have been characterised by “Mrs Smith”, a fictitious 85-year-old with a range of care needs and requiring coordinated support across health and social care. Mrs Smith has come to **represent vulnerable local residents at risk of falling between gaps in the service**. By focusing on Mrs Smith, care has been reorganised – and better integrated – around needs such as hers. The patient perspective provided the foundation for restructuring services. Supply-driven models of care provision are now out-of-date. The result is **local health and social care provision that is flexible, personalised and seamless**.

What is integration?

Description

It is the **processes, methods and tools** of integration that facilitate integrated care. Integration involves connecting the health care system (acute, community and primary medical) with other service systems (such as long-term care, education or housing services) (Leutz, 1999: p77–78).

Example

In Torbay, the concern to deliver better and more coordinated outcomes for patients led to the **establishment of a care trust** in 2005. The development of five integrated health and social care teams aligned to general practice, single assessment processes, and shared health and social care electronic records are processes that have facilitated integration. The focus is on **improving clinical, satisfaction and efficiency outcomes** (Leutz, 1999). The result of integration includes a reduction in delayed transfers of care in acute hospitals, improved social services’ ratings and enhanced access to intermediate care services. For Torbay this not only means improved outcomes, but also integrated care.

Connecting integrated care and integration

A focus on integrated care can help policy-makers, managers and practitioners decide on the model of care they wish to develop. They can draw upon a combination of processes and mechanisms that enable integrated care to develop. The term ‘integrative processes’ provides a link between the concept of integrated care (in terms of the ambition to deliver services across providers with minimal duplication and disruption, and with high-quality outcomes and patient experience) and the concept of integration (in terms of the methods and approaches used to align goals across professional groups, teams and organisations).

In the literature five main types of integration are typically described (see Table 3). Each type of integration is enabled through a range of integrative processes, some of which focus on systems and structures; others on less tangible aspects such as professional behaviour and teamwork. However, commentators tend to use diverse terms and, in some cases, focus on areas and processes of specific relevance to the integration project under consideration. For instance, recent government policy has encouraged health and care providers to consider integration in terms of aligned organisational structures and shared governance arrangements.

Table 3: Description of the five main types of integration and allied integrative processes

1. Systemic	Coordinating and aligning policies, rules and regulatory frameworks for example, policy levers emphasising better coordinated care outside of hospitals, central impetus for diversity of providers, development of national incentive schemes (for example the Quality and Outcomes Framework) or financial incentives to promote downward substitution.
2. Normative	Developing shared values, culture and vision across organisations, professional groups and individuals for example, developing common integration goals, identifying and addressing communication gaps, building clinical relationships and trust through local events, or involving service users and the wider community.
3. Organisational	Coordinating structures, governance systems and relationships across organisations for example, developing formal and informal contractual or cooperative arrangements such as pooled budgets or practice-based commissioning; or developing umbrella organisational structures such as primary care federations or local clinical partnerships.
4. Administrative	Aligning back-office functions, budgets and financial systems across integrating units for example, developing shared accountability mechanisms, funding processes or information systems.
5. Clinical	Coordinating information and services and integrating patient care within a single process for example, developing extended clinical roles, guidelines and inter-professional education, or facilitating the role of patients in shared decision-making.

Of the five processes outlined in Table 3, Rosen and others (2011) focus on normative, organisational, administrative and clinical as being particularly relevant to how organisations operationalise integrated care. They also draw out two additional types of integration – informational and financial. These are terms that have yet to filter through to the wider literature, but highlight the specific importance of integrative processes that facilitate shared access to clinical information and aligned financial initiatives across the organisations studied. Similarly, Kodner (2009) points to professional integration, drawing specific attention to the process of coordinating relationships across care professionals.

This varied use of language and terminology is not unusual: different commentators emphasise different aspects of integrated care and hence the different integrative processes involved. This can be confusing, but is indicative of the multifaceted nature of integrated care.

There is no hierarchy of integrative processes. Rather, the goals of any integrated care initiative will guide decisions about the processes that can best facilitate integrated care within any particular setting. It is unlikely that all types of integration will be relevant to every project. Decisions about which are most relevant will be guided by, for instance, the goals of the project, the stakeholders involved, existing local arrangements for health (and social) care and the available resources. However, there are additional points to bear in mind when thinking about how to integrate:

- **Some types of integrative processes will be more important than others.** For instance, where the goal of integration is to develop joint working across health and social care, an important focus will be on establishing work groups as a way of engaging care professionals in the operation of integrated care (Simoens and Scott, 2005); developing structures and processes to enable teams and/or organisations to work collaboratively towards common goals (Rosen and Ham, 2008); and/or building leadership and management capacity to facilitate partnership(s) (Feachem and Sekhri, 2005).
- **The interplay between different types of integration can influence the value that can be secured.** For instance, integrating administrative processes can significantly aid integration of clinical services into a single process (Shortell, 2000). Similarly, simply focusing on organisational integration in an attempt to integrate providers is unlikely to create improvements in care for patients (Ramsey and Fulop, 2008) and can fail to alter the way in which doctors practise medicine and collaborate with other health care professionals (Burns and Pauly, 2002), which also requires underpinning clinical and normative changes in teamwork and care delivery.
- **Integrative processes can have unintended effects.** For instance, whilst targeted financial incentives can provide a valuable means of changing clinician behaviour, they can also increase bureaucracy, motivate unintended behaviours such as gaming or cherry-picking (Oxman and others, 2008), and potentially counteract the development of shared values and working practices (Rosen and others, 2011).

Consideration needs to be given to the pace of change required when employing one or more integrative processes. There are fundamental ingredients of integration, including: professional and organisational alignment around shared goals; a supportive (and centrally facilitated) information, communication and technology environment; effective clinical leadership; and aligned financial incentives (Rosen and others, 2011). Taken together, all of these ingredients may not be essential to the development of integrated care. They may, however, smooth or accelerate the process of integration. The interplay between integrative processes potentially enhances integration, however, evidence with respect to which bundle of processes produces the best results is less certain.

There is a lack of evidence about which integrative processes are best suited to different settings. To support such decisions about how and where to integrate care, we now describe the additional conceptual features of integrated care, and provide a series of questions to ask to assist those involved in decision-making (see Table 4).

Understanding the key features of integrated care

Many descriptions of integrated care pay little attention to what constitutes this concept and hence make it difficult for people to be clear about what is intended and how that might be realised. Recent descriptions of integrated care emphasise how ‘separate but interconnected parts play complementary roles in order to accomplish shared tasks’ (Kodner, 2009: p8). These ‘interconnected parts’ include the different features described in Table 4: the goals and context of integration, types of integrative processes (see Table 3), and the breadth and intensity of integration. How these different elements interact will vary according to the specific integration initiative and setting in which it develops.

Our description of the features of integrated care builds on existing literature including: a review of evidence on integration for health care delivery systems (Mowlem and Fulop, 2005; Fulop and others, 2005); a review of integrated health care for people with chronic conditions (Oxman and others, 2008); work concerned with organisational integration (Shortell, 2000; Rosen and others, 2011); and descriptions of various models, concepts and theories underpinning integration (Leutz, 1999; Grone and Garcia-Barbero, 2001; Kodner and Spreeuwenberg, 2002; Simoens and Scott, 2005, Lloyd and Wait, 2005; Edgren, 2008; Ehrlich and others, 2009; Kodner, 2009; Stein and Reider, 2009; Lewis and others, 2010).

Table 4: Key prompts to assist with developing integrated care

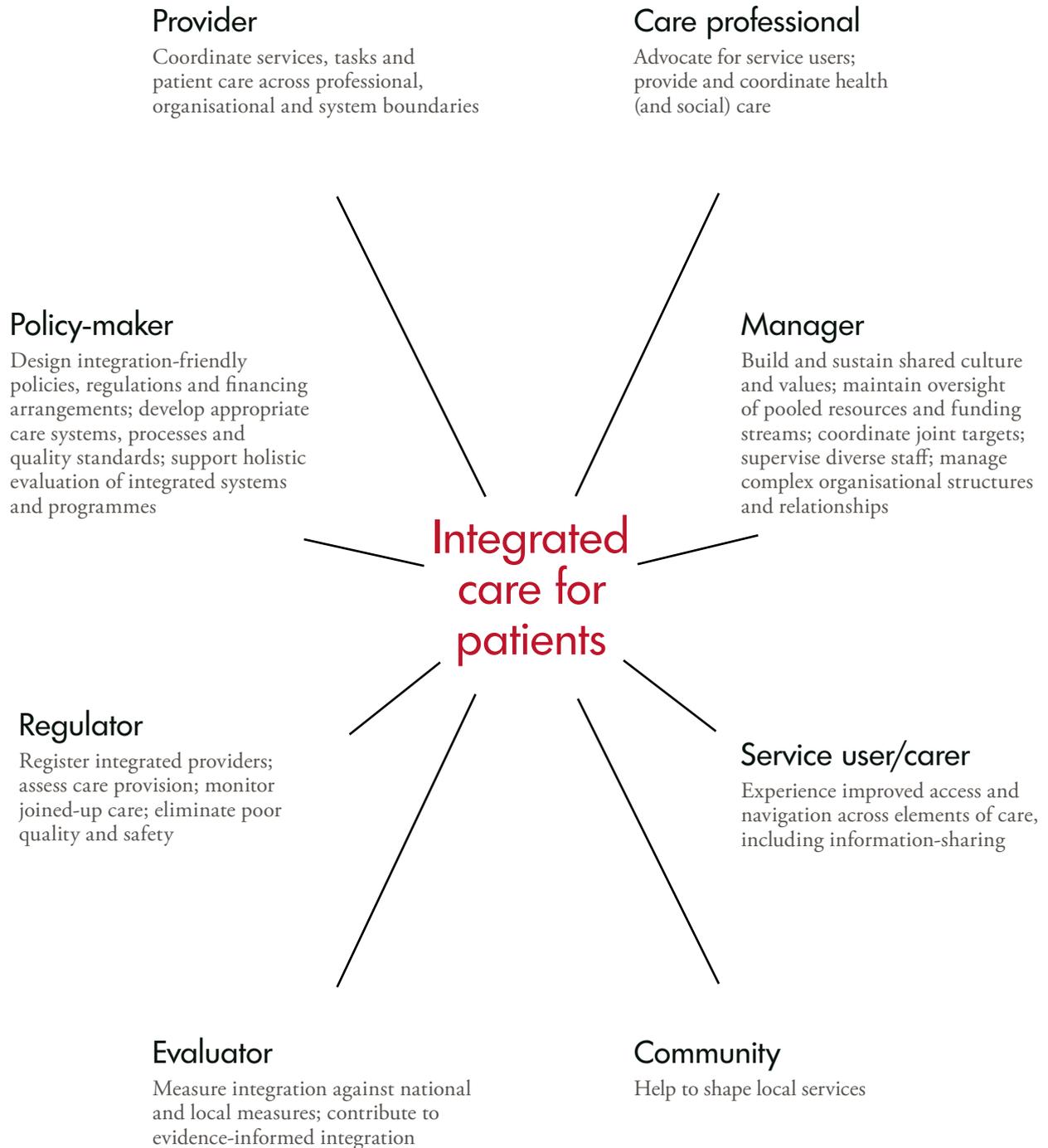
Feature	Key questions to ask
Goal	<p>a) What are you seeking to achieve by pursuing integrated care? What is the problem that you are addressing? Is integrated care the ‘best’ solution?</p> <p>b) What is the initial target service user group? How will you ensure that service users remain the organising principle for integrated care throughout? How will integrated care address inequalities for service user groups, as well as the wider community?</p> <p>c) How will you ensure organisational support for the goals of the project (for example, a senior officer responsible for delivery, a dedicated budget)?</p>
Context	<p>d) Is the proposed integration project associated with any other improvement programmes? How will this impact on local integration? What competing national or local agendas do you need to consider?</p> <p>e) Which sectors are involved and what is their role in relation to integration (for example, patients/public, primary care, acute care, third sector, private sector)? What are the potential consequences of integration on other parts of the health/social care economy?</p> <p>f) How will you bring in strong, visible leaders from each integrating organisation or group to champion the change? How will you ensure dialogue and consensus across stakeholders and/or organisations about the shared objectives of integration and about the need to spend resources differently?</p>
Type	<p>g) What are the most important integrative processes for your project (for example, joint administrative processes, aligning financial incentives, coordination of clinical services, developing shared values)? What existing structures, partnerships and processes can you build on? What will you need to start from scratch?</p> <p>h) How will commissioning arrangements support and enhance integration rather than perversely incentivise it?</p> <p>i) How will you ensure effective data sharing and management of information, both of which are crucial to the success of integration?</p>
Breadth	<p>j) How will vertical or horizontal integration (i.e. integration across different levels and/or aspects of the care system) contribute to the success of your project? How might you avoid a possible disconnect (for example, between horizontally integrated primary/community services and vertically integrated care pathways)?</p> <p>k) How will you address issues of choice, competition and contestability? How will you keep momentum and ensure a sustained focus on integrated care?</p> <p>l) How will you identify and align the incentives needed to support integration across professional groups, teams or organisations?</p>
Intensity	<p>m) How does the degree of integration (full integration, coordination or linkage) relate to your goals and the local context in which you are working?</p> <p>n) How will you ensure that integration within one part of a health economy does not result in inappropriate and/or increased fragmentation elsewhere?</p>

Table 4 sets out the main features of integrated care, along with questions that are likely to be raised when addressing each. It is designed as a series of prompts for policy-makers, managers and practitioners. Starting with the goal of integrated care, it is important to be clear what a specific integration initiative seeks to achieve. Clarity of goals is essential, not only as a means of generating shared objectives, but also in providing ongoing momentum to integration (Rosen and others, 2011). Integration projects driven by a focus on reducing service fragmentation for a group of patients are often more successful than top-down attempts to integrate care (Ramsey and Fulop, 2008), reinforcing the patient's perspective as being at the heart of integrated care.

It is now widely accepted that 'one size of integrated care does not fit all'. It is therefore vital to consider the context (that is different care settings and perspectives) in which a specific integrated care initiative develops. This might involve exploring current policy initiatives and/or considering structures and processes at higher provider and financing levels (Ovretveit and others, 2010). It might also involve considering the views of local practitioners, service users or managers (see Figure 1).

Taken together, the perspectives outlined in Figure 1 describe the main stakeholder concerns about integrated care. The goals of a specific integrated care initiative will guide which of these perspectives are most relevant.

Figure 1: Perspectives shaping integrated care



The extent of integration

Horizontal and vertical integration

There is a need to distinguish between horizontal and vertical integration. Horizontal integration focuses on competing or collaborating organisations, networks or groups in the health economy and might involve, for instance, grouping outpatient clinics within a geographic network of providers. Vertical integration focuses on networks and groups at different stages of care within the health economy (what some commentators refer to as the supply chain or care pathway) and might involve, for instance, the drawing together of a hospital with local community services.

Initiatives to integrate care have tended to focus on either horizontal or vertical integration – rather than both – at any one point in time. But this could result in disruption between integrated primary and community services on the one hand, and vertically integrated care pathways (that take patients from first contact to specialist to ongoing care) on the other (Goodwin, 2008; Lewis and others, 2010). The English system provides a good example of this, where there is an emphasis on streamlining services both vertically and horizontally, but at the expense of facilitating an effective integration of the two (Goodwin, 2008). For instance, rather than encouraging detachment of vertical and horizontal pathways by simply diverting referrals away from hospital-based clinics to community settings, it may be more beneficial to integrate generalists and specialists via care networks.

Competition and choice

Discussions about integrated care have raised concerns over the role of markets and competition in health care, with initiatives to encourage competition across hospitals and greater patient choice potentially making vertical and horizontal integration more difficult to achieve. For instance, at its worst, integration can be interpreted as a takeover bid ‘in which the interests of the smaller or less powerful group are completely submerged’ (Jones, 1972: p345), raising questions over contestability.

Questions remain over the role of competition in facilitating or impeding integrated working. Take the example of an emerging integrated care system in Trafford, where preserving choice between providers at different parts of the pathway is a major challenge in the face of current policy on choice and competition (Ham and Smith, 2010; Shaw and Levenson, forthcoming). The predominant focus in Trafford is to provide integrated services for the local community. However, with current policy emphasising choice for patients from any willing provider (Department of Health, 2010), similar integrated care systems or organisations may need to create access to alternative providers outside of the immediate network, in order to satisfy wider policy requirements for choice and competition (Lewis and others, 2010).

Emerging evidence indicates that integrated care provides opportunities for improving quality and increasing efficiency of care (see above), both of which are key elements of current policy. To achieve this, a balance is necessary between the need for competition in some areas of care and collaboration in others.

The intensity of integrated care

It can be helpful to think of different levels of integration similar to the model drawn from the work of Walter Leutz (shown in Figure 2). Other commentators make a distinction between 'integration' as what happens on organisational and managerial levels, and 'coordination' as what happens on clinical and service delivery levels.

Figure 2: Intensity of integration*



*Adapted from Leutz, 1999

Whatever the focus, integrated care initiatives rarely move smoothly along a continuum in a linear fashion from linkage, through coordination to full integration. As with any structural, organisational or behavioural change, the process of integrating care may involve complete transformation, for example creating new organisations and shared governance arrangements, or more limited shifts, such as building on a strong history of communication across health professionals to establish a clinical network supported by shared clinical information. The former is rare and, as a result, a small number of ‘boutique pilots’ tend to be frequently cited. Examples in the UK include:

- **Lanarkshire** – where the elderly people’s mental health day unit has developed a single line of management, shared governance, pooled budgets and fully integrated health and social care (see Rosen and others, 2011, for a detailed description).
- **Trafford** – where NHS organisations have come together to develop a new ‘integrated health system’ across primary, community and hospital care involving development of a new ‘integrated care organisation’ combined with innovative models of care supported by new technologies (see Shaw and Levenson, forthcoming, for a detailed description).

More common are initiatives involving coordination and linkage with, for instance, integrated care initiatives enabling alignment of goals and joined-up working.

It is essential to understand that movement between the different ‘levels’ shown in Figure 2 can happen both ways, in terms of more fully integrating – as well as potentially fragmenting – services. As Leutz points out: ‘one man’s integration is another’s fragmentation’ (Leutz, 1999). In other words, integration within one part of a health system may well facilitate movement along the continuum, but it can also result in fragmentation elsewhere.

The intensity of integration that is sought must relate to the goals and context in which those concerned with integrated care are working, including those of patients. However, there can be substantive disparity in the integrative aims of different stakeholders or organisational units. Seeking consensus about the potential intensity of integration is therefore an important first step.

Situations where the goals are driven by top-down attempts to integrate care (for instance, through mergers of service providers) are often less successful (Ramsey and Fulop, 2008). Successful integration projects are driven more by a focus on how to improve service fragmentation for a group of patients. The focus is likely to be on long-term conditions and care for older people due to the challenges of coordinating care for these groups. Internal factors can therefore have a key role to play with, for instance, the motivations and goals of individual health care professionals potentially an important catalyst (Simoens and Scott, 2005).

Evaluating integrated care

This report has highlighted the practical value of gaining greater conceptual clarity about integrated care. Along with greater conceptual clarity, there is a need for more robust and high-quality evaluation of integrated care. This would help address the lack of evidence available to inform decisions about integrated care. Further work is needed to identify:

- the specific problems of fragmentation that integrated care initiatives seek to resolve
- the impact of integrated care on patient experience and improved processes of care
- how integration changes patterns in the use of services (especially inpatient care)
- the impact on costs and outcomes (Ramsey and Fulop, 2008).

It is therefore vital that those pursuing integrated care consider how development and impact will be evaluated and measured.

Evaluations of integrated care initiatives tend to focus on the processes and outcomes involved. Any such examination also needs to account for the context in which integrated care develops, and the diverse perspectives (service user, provider and so on) and levels of health care provision involved. Traditional research methods (such as randomised controlled trials) are often not feasible as they fail to capture the context and evolutionary processes allied to integration (Vrijhoef, 2010).

Novel measurement approaches are being used to evaluate the integrated care pilots established by the Department of Health for England (Ling and others, 2010). The plan is to track the hospital use of a set of individuals receiving integrated care – both before and after the individual started to receive the care – using linked, administrative datasets. Since a robust comparator is essential, but randomisation is not possible, controls are selected retrospectively from within the large datasets. There has been a tendency for evaluation of integrated care to focus on ‘boutique pilots’ (indeed, given the current lack of available evidence, some of the examples within this paper are drawn from such sources), which has made it difficult to generalise findings to other health and care settings (Ouwens and others, 2005). The challenge for managers, clinicians and service users is to propose and support an evaluative component at the outset of any integrated care initiative. The aim should be to make a robust contribution to the emerging evidence base for integrated care, encouraging users, planners and decision-makers to become more directly involved in shaping evaluation, and appreciating where the big gains are to be made in developing better integrated care.

Those evaluating integrated care must be clear about the comparator used within any study. Appropriate choice of comparator is vital in reaching a view on the effectiveness of integrated care. For instance, the association between the features of integrated systems and high-performance systems may not imply causation. Evaluators therefore need to ensure clarity about whether they are comparing integrated against fragmented care; more against less integrated care; or a newly integrated model against a previous less integrated model.

Measuring the extent of integrated care

A key challenge for policy-makers and planners pursuing evaluation is to develop more suitable approaches to measuring and assessing integrated care. Such work requires sound theoretical underpinnings in order to guide evaluation and measurement, and the use of both quantitative and qualitative methods. Such an approach might help measure integration, for instance, not only in relation to the impact on health outcomes, but also improved quality of care, service user satisfaction, and effective relationships and systems.

To date, a limited range of methods has been used to measure integrated care (see Table 5). Typically, these focus on organisational and administrative integration (that is on structures and processes), with little assessment of outcomes. Indeed, few studies clearly describe the measurement tools and indicators that can be used to assess both the implementation and impact of integrated care (Armitage and others, 2009; Strandberg-Larsen and Krasnik, 2009). In addition, many evaluations of specific integrated care interventions fail to describe the previous model of service delivery and hence are unable to describe fully the potential additional benefits of integration (Vrijhoef, 2010).

Further work is needed to develop appropriate measures, tools and approaches. Drawing on the work of a number of commentators (Leutz, 1999; Kodner and Spreeuwenberg, 2002; Ahgren and Axelsson, 2005; Lloyd and Wait, 2005; Armitage and others, 2009; Strandberg-Larsen and Krasnik, 2009; Vrijhoef, 2010), this includes:

- Approaches to evaluating integrated care that:
 - situate it within wider health and care systems
 - acknowledge the level and combination of strategies used based on the challenges faced in obtaining appropriate quality care for local communities and user groups
 - consider the contextual factors that affect development and delivery.
- Standardised, validated tools and indicators that measure integration across different settings relative to a set of models, structures and processes.
- Focused, ‘off-the-shelf measures’ that suit a specific purpose or aspect of integrated care which can be applied by decision-makers and planners across diverse health and care systems and settings.
- Qualitative and mixed methods approaches (such as comparative case study research and/or realistic evaluation) that facilitate understanding of which integrative processes work, for whom, and in what circumstances.
- Longitudinal methods that move beyond simple snapshots of integrated care and follow integrative processes through time, allowing evaluators to assess not only the long-term implications for integrated delivery, organisation and outcomes, but also the way in which planned change is actually experienced for those with long-term conditions.

Table 5: Examples of existing methods for evaluating the extent of integrated care and its impact*

Method	Measuring	Example
Audit of medical records	Clinical integration	To explore the coordination of care for patients visiting a setting involving multiple providers
Analysis of register data on hospitalisation rates	Coordination and inter-sectoral integration	To assess the extent to which patients' hospital journeys take place in a coordinated way
Analysis of administrative datasets on hospitalisation rates compared to individually matched controls	Organisational, administrative and clinical integration	To assess the extent to which changes affect the hospital use of patients compared to matched controls
Self-assessment form for managers	Administrative processes supporting service coordination	To evaluate the degree of integration across local health care settings
Annual surveys and disclosure reports, and financial data	Administrative integration and intensity	To examine the relationships between a hospital's structural clinical integration and average total discharge cost per patient
Questionnaire survey for managers and clinical leaders	Clinical and administrative integration	To measure perceived levels of clinical and administrative integration, along with perceived effectiveness of these activities
Qualitative interviews with hospital executives	Organisational and normative integration	To examine the degree to which the processes of integrating doctors and hospitals are closely linked to the structure and content of integrated delivery systems
Interviews, web forms and workshops with service coordinators	Organisational and clinical integration	To produce a new measure of integration quantifying the extent, scope and depth of integration within and across organisations, sectors and services
Questionnaires, interviews and focus groups with staff and managers	Normative and organisational integration	To investigate the experiences of front-line staff working in integrated health and social care organisations

* Adapted from Strandberg-Larsen and Krasnik, 2009

Four key lessons

This report has examined what is meant by ‘integrated care’, clarifying the underpinning concepts and identifying the features relevant to integration across care settings. It concludes with four key lessons for those pursuing integrated care:

- 1 Integrated care is best understood as a strategy for improving patient care.** Integrated care is concerned with improving patient care through better coordination. A decision about the intensity of integration is essential, starting with links across services, coordinating teams or pooling resources. Where there is a strong history of partnership working, further steps to amalgamate into a single integrated organisation may be more feasible (although integration that is focused largely on bringing organisations together is unlikely to create improvements in care for patients).
- 2 The service user is the organising principle of integrated care.** Careful analysis of the goals of integration is critical in order to establish what might help or hinder progress. There is a need for a shared vision in which the service user perspective and patient experience is central. This will then shape how, when and where to integrate services in order to improve patient care. Policy-makers and practitioners should use the prompts provided in Table 4 to inform discussion and decision-making about when to integrate, how and why.
- 3 One form of integrated care does not fit all.** There is no one model of integrated care that is suited to all contexts, settings and circumstances. Careful analysis is needed about the different integrative processes that can support integration within a particular care setting. Decisions about which approaches are most relevant to a particular setting will be guided by the goals of the project, the needs of service users and other stakeholders involved, existing provision and available resources.
- 4 It is only possible to improve what you measure.** There is a shortfall in evidence of the impact of integrated care. What evidence there is tends to be drawn from a limited range of settings and initiatives, which focus on structures and processes, and involve limited assessment of outcomes or costs. Further work is urgently needed to identify what integrated care initiatives work best for whom, and in what circumstances. As integration is an ongoing process, evaluation can facilitate continual refinement.



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

References

- Ahgren B and Axelsson R (2005) 'Evaluating integrated health care: a model for measurement', *International Journal of Integrated Care* 5(31).
- Alakeson V and others (forthcoming) *Integrated Care and Efficiency* (working title). London: Nuffield Trust.
- Armitage GD, Suter E, Oelke ND and Adair C (2009) 'Health systems integration: state of the evidence', *International Journal of Integrated Care* 9(17), 1–11.
- Burns LR and Pauly MV (2002) 'Integrated delivery networks: a detour on the road to integrated health care?' *Health Affairs* (Millwood) 21(4), 128–143.
- Department of Health (2010) *Equity and Excellence: Liberating the NHS*. London: Department of Health.
- Edgren L (2008) 'The meaning of integrated care: a systems approach', *International Journal of Integrated Care* 8(e68).
- Ehrlich C, Kendall E, Muenchberger H and Armstrong K (2009) 'Coordinated care: what does that really mean?', *Health and Social Care in the Community* 17(6), 619–627.
- Feachem RG and Sekhri NK (2005) 'Moving towards true integration', *BMJ* 330(7494), 787–788.
- Fulop N, Mowlem A and Edwards N (2005) *Building Integrated Care: Lessons from the UK and elsewhere*. London: NHS Confederation.
- Glasby J and Peck J (2005) *Partnership Working Between Health and Social Care: The impact of care trusts*. Birmingham: Health Service Management Centre, University of Birmingham.
- Goodwin N (2008) 'Diagnostic delays and referral management schemes: how "integrated" primary care might damage your health', *International Journal of Integrated Care* 8(e78).
- Grone O and Garcia-Barbero M (2001) 'Integrated care: a position paper of the WHO European Office for Integrated Health Care Services', *International Journal of Integrated Care* 1(e21).
- Ham C and de Silva D (2009) *Integrating Care and Transforming Community Services: What works? Where next?* (Policy Paper). Birmingham: Health Service Management Centre, University of Birmingham.
- Ham C and Smith J (2010) *Removing the Policy Barriers to Integrated Care in England*. London: Nuffield Trust.
- Jones K (1972) *A History of the Mental Health Services*. London: Routledge.
- Kodner D (2009) 'All together now: a conceptual exploration of integrated care', *Healthcare Quarterly* 13(Sp), 6–15.
- Kodner DL and Spreeuwenberg C (2002) 'Integrated care: meaning, logic, applications, and implications – a discussion paper', *International Journal of Integrated Care* 2(e12).
- Leutz WN (1999) 'Five laws for integrating medical and social services: lessons from the United States and the United Kingdom', *Milbank Quarterly* 77(1), 77–110.
- Lewis R, Rosen R, Goodwin N and Dixon J (2010) *Where Next for Integrated Care Organisations in the English NHS?* London: Nuffield Trust.
- Ling T, Bardsley M, Adams J, Lewis J and Roland M (2010) 'Evaluation of UK integrated care pilots: research protocol', *International Journal of Integrated Care* 10.
- Lloyd J and Wait S (2005) *Integrated Care: A guide for policymakers*. London: Alliance for Health and the Future.
- Mowlem A and Fulop N (2005) *Integration of Health Care Delivery Systems: A review of the evidence*. London: King's College London.
- Ouwens M, Wollersheim H, Hulscher M and Grol R (2005) 'Integrated care programmes for chronically ill patients: a review of systematic reviews', *International Journal of Quality in Health Care* 17(2), 141–146.
- Ovretveit J, Hansson J and Brommels M (2010) 'An integrated health and social care organisation in Sweden: creation and structure of a unique local public health and social care system', *Health Policy* 97, 113–121.
- Oxman AD, Bjorndal A, Flottorp SA, Lewin S and Lindahl AK (2008) *Integrated Health Care for People with Chronic Conditions*. Oslo: Norwegian Knowledge Centre for the Health Services.
- Ramsey A and Fulop N (2008) *The Evidence Base for Integrated Care*. London: King's Patient Safety and Service Quality Research Centre.
- Rittenhouse DR, Shortell SM and Fisher ES (2009) 'Primary care and accountable care – two essential elements of delivery-system reform', *N Engl J Med* 361(24), 2301–2303.
- Rosen R, Mountford J, Lewis R, Lewis GHL, Shand J and Shaw S (2011) *Integration in Action: Four international case studies*. London: Nuffield Trust.
- Rosen R and Ham C (2008) *Integrated Care: Lessons from evidence and experience*. London: Nuffield Trust.
- Shaw S and Levenson R (forthcoming) *Towards Integrated Care in Trafford*. London: Nuffield Trust.
- Shortell SM (2000) *Remaking Health Care in America: The evolution of organised delivery systems*. San Francisco: Jossey Bass.
- Simoens S and Scott A (2005) 'Integrated primary care organizations: to what extent is integration occurring and why?', *Health Services Management Research* 18(1), 25–40.
- Smith J, Wood J and Elias J (2009) *Beyond Practice-based Commissioning: The local clinical partnership*. London: Nuffield Trust.
- Stein KV and Reider A (2009) 'Integrated care at the crossroads – defining the way forward', *International Journal of Integrated Care* 9, 1–7.
- Strandberg-Larsen M and Krasnik A (2009) 'Measurement of integrated delivery: a systematic review of methods and future research directions', *International Journal of Integrated Care* 8, 1–10.
- Vrijhoef B (2010) *Measuring the Impact of Integrated Care*. London, Nuffield Trust seminar, 26 March.
- Woods K (2001) 'The development of integrated health care models in Scotland', *International Journal of Integrated Care* 1, 1–10.

About the authors

Sara Shaw

Sara Shaw is a Senior Lecturer in Health Policy Research at Queen Mary, University of London and Visiting Senior Fellow at the Nuffield Trust. Her background is in medical sociology and policy studies. She has published widely on topics including the organisation of primary care, shaping health research policy and critical approaches to policy analysis. Her current research interests focus on health care commissioning and integrated care.

Rebecca Rosen

Rebecca Rosen is a Senior Fellow at the Nuffield Trust. She has a background in policy analysis and public health. She also works as a GP within a multi-site practice where she has led work to improve care continuity and quality for people with complex chronic health conditions.

Benedict Rumbold

Benedict Rumbold is a Fellow in Health Policy at the Nuffield Trust. He joined the Nuffield Trust in November 2008 having undertaken a PhD in ethics at Birkbeck College, where he also worked as a Sessional Lecturer. His current interests include rationing and priority-setting in health care. He is particularly interested in how health reforms seek to incorporate modern theories about justice and fairness.

For more information about the Nuffield Trust,
including details of our latest research and analysis,
please visit www.nuffieldtrust.org.uk

 Download further copies of this research report
from www.nuffieldtrust.org.uk/publications

 Subscribe to our newsletter:
www.nuffieldtrust.org.uk/newsletter

 Follow us on Twitter: [Twitter.com/NuffieldTrust](https://twitter.com/NuffieldTrust)

Nuffield Trust is an authoritative
and independent source of
evidence-based research and
policy analysis to improve
health care in the UK

59 New Cavendish Street
London W1G 7LP
Telephone: 020 7631 8450
Facsimile: 020 7631 8451
Email: info@nuffieldtrust.org.uk

 www.nuffieldtrust.org.uk

Published by the Nuffield Trust.
© Nuffield Trust 2011. Not to be reproduced
without permission.