Ideas that change health care

Integrated care

What is it? Does it work? What does it mean for the NHS?

The aim of this paper is to describe the different forms of integrated care and to summarise evidence on their impact. The paper is based on a major review published by The King's Fund (Curry and Ham 2010) and has been prepared in the light of the increased interest in integrated care arising out of the work of the NHS Future Forum and the government's response. Key messages are:

- integrated care takes many different forms and may involve whole populations, care for particular groups or people with the same diseases, and co-ordination of care for individual service users and carers
- there is good evidence of the benefits of integrated care for whole populations, as seen in organisations such as Kaiser Permanente, the Veterans Health Administration and integrated medical groups in the United States
- there is good evidence of the benefits of integrated care for older people as seen in areas like Torbay
- there is mixed evidence of the benefits of integrated care for people with long-term conditions like diabetes and for people with complex needs
- there is evidence of the benefits of care co-ordination for individual service users and carers, especially when multiple approaches are used together
- integrated care in the NHS needs to be pursued at all levels to overcome the risks of fragmentation, and of service users 'falling between the cracks' of care
- policy-makers need to act on the evidence not by promoting a preferred approach but by supporting clinical and managerial leaders to adapt the ingredients of integrated care discussed in this briefing to improve outcomes for the populations they serve.

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What is integrated care?

Integrated care takes many different forms. In some circumstances, integration may focus on primary and secondary care, and it others it may involve health and social care.

A distinction can be drawn between real integration, in which organisations merge their services, and virtual integration, in which providers work together through networks and alliances.

Both real and virtual integration may take place between providers operating at the same level, often referred to as horizontal integration, and between providers working at different levels, known as vertical integration.

In many cases, integrated care involves providers collaborating, but it may also entail integration between commissioners, as when budgets are pooled.

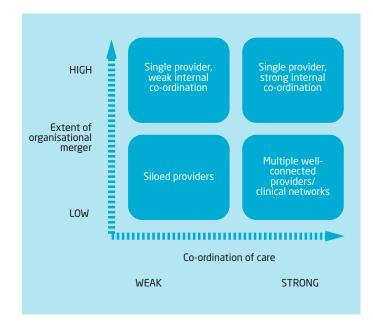
The most complex forms of integrated care bring together responsibility for commissioning and provision. When this happens, clinicians and managers are able to use budgets either to provide more services directly or to commission these services from others: so-called 'make or buy' decisions.

The limits to organisational integration

Evidence indicates that organisational integration will not deliver benefits if clinicians do not change the way they work. This has clear implications for NHS organisations involved in the transforming community services programme in which community services have been integrated with other organisations. The benefits of this programme will be realised only if mergers or organisational integration are used to promote clinical and service integration.

An alternative to organisational integration is to find ways of enabling organisations to co-ordinate their work more effectively. This is particularly relevant to the NHS in England, where health and social care are commissioned and provided by a wide range of organisations. The challenge will be to support the development of networks between these organisations and virtual or contractual integration where appropriate.

The accompanying figure below illustrates the range of options available to health and social care organisations.



The three levels of integration

In our review of the evidence on integration, we drew a distinction between integration at three levels:

- > the macro level at which providers, either together or with commissioners, deliver integrated care across the full spectrum of services to the populations they serve: examples include Kaiser Permanente, the Veterans Health Administration and integrated medical groups in the United States
- > the meso level at which providers, either together or with commissioners, deliver integrated care for a particular care group of people with the same disease or conditions: examples include care for older people, mental health, disease management programmes and managed clinical networks
- > the micro level at which providers, either together or with commissioners, deliver integrated care for individual service users and their carers through care co-ordination, care planning and other approaches.

Integrated care at the macro level

Kaiser Permanente

Kaiser Permanente is the largest non-profit-making health maintenance organisation in the United States, serving 8.7 million people in eight regions. It is a virtually integrated system in which the health plans, hospitals and medical groups in each region are distinct organisations linked through contracts. Kaiser Permanente is recognised as one of the top-performing systems in the United States with high levels of member satisfaction and excellent ratings for clinical quality. It is also one of the lowest-cost providers in most of the regions in which it operates. President Obama has described Kaiser Permanente as a highquality, cost-efficient provider that serves as a model for the rest of the United States.

Impact

Studies that have compared the NHS with Kaiser Permanente show that the NHS uses around three times as many bed days for older people with common conditions like hip fracture and stroke as Kaiser Permanente. Part of the explanation is that, compared with the NHS, Kaiser Permanente delivers more care out of hospital in large medical offices (analogous to polyclinics) and it also makes use of step-down facilities. A key feature of the Kaiser Permanente model is the emphasis placed on keeping members healthy and achieving close co-ordination of care through the use of the electronic medical record and teamworking.

The Veterans Health Administration

The Veterans Health Administration (VA) is an example of real integration in that it employs doctors, owns and runs hospitals and medical offices, and manages the full range of care within a budget allocated by the federal government. Although the VA is now recognised as a leader in the provision of high-quality care, this has not always been the case. In the mid-1990s it was seen as an inefficient bureaucracy delivering mediocre care, and it was only following the appointment of a new leader that its performance was transformed.

The transformation of the VA was based on its reorganisation into a series of regionally based, integrated service networks in place of the fragmented hospital-centred system that existed previously. Each network providers the full spectrum of care and is funded on a capitation basis. Network managers are held to account via a rigorous performance management system centred on clinical quality and outcomes. Like Kaiser Permanente, the VA has invested in IT and makes use of an electronic medical record.

Impact

Studies have shown that the shift to integrated service networks resulted in a 55 per cent reduction in bed day use and improvements in quality of care. There were also increases in visits to primary care and home care services. The VA has pioneered the use of telehealth ,and this has contributed to the emphasis on care in the home and reduced use of hospital and long-term care beds.

Integrated medical groups

Integrated medical groups, also referred to as multispecialty medical groups, are composed of doctors from a number of specialties who may be directly employed by an integrated system (as in the VA), have an exclusive relationship with such a system (as in Kaiser Permanente), or take on a budget with which to provide and commission all or some of the services required by the populations served. The degree of integration within groups varies from those that are loose alliances of practices that come together in independent practice associations to tightly organised groups based on a common culture and set of values. There are currently around 210 multispecialty groups with 50 or more doctors, some of whom have developed alliances with hospitals.

Impact

Studies have shown that medical groups working under capitated budgets in the 1990s reduced the use of hospital services both by avoiding inappropriate admissions and by cutting lengths of stay. They did do by requiring prior authorisation of referrals, using case management programmes and appointing hospitalists to take care of patients in hospitals. Recent research has shown the benefits of large integrated medical groups, including the use of electronic medical records, involvement in quality improvement, and the provision of preventive care. The caution about integrated medical groups is that many ran into difficulty when financial constraints increased and only those groups with effective leadership and management support were able to weather the storm.

Summary

Integrated systems in the United States take a wide variety of forms but share some of the same characteristics. These include:

- multispecialty medical groups
- aligned financial incentives
- information technology
- > the use of guidelines

- > accountability for performance
- > responsibility for defined populations
- > partnership between doctors and managers
- > effective leadership at all levels, and
- > a collaborative culture

Current health reforms in the United States are seeking to take learning from integrated systems forward through the development of accountable care organisations.

Integrated care at the meso level

Integration of care at the meso level focuses on care for particular groups of patients and populations, whether they are classified by age, condition or some other characteristic. Many of the examples of integration at this level are concerned with the needs of older people because of the challenges that this group presents in terms of their high utilisation of services and the risk that fragmented care will deliver poor outcomes. There are also examples of integrated care for people with longterm conditions as well as the use of 'chains of care' in Sweden and managed clinical networks in Scotland.

Care for older people

Examples of integrated care for older people that have been subject to evaluation include the North American Programme for All-inclusive Care for the Elderly (PACE), Integrated Services for Frail Elders (SIPA) and PRISMA programmes in Quebec, and three European examples: Rovereto, Vittorio Veneto and Torbay. While each example has some specific characteristics, they share a concern to enable frail older people to remain independent and to avoid the use of nursing homes and hospitals wherever appropriate. Studies have shown a range of benefits including improved health outcomes for older people, reduced utilisation of nursing homes and hospitals, and some evidence of cost savings

Experience in Torbay illustrates how these benefits have been realised in the NHS. Starting from recognition that health and social care services for older people were often fragmented, leaders in Torbay established an integrated health and social care team in Brixham to serve a population of 23,000 people. The team brought together expertise from adult social care and community health services and was co-located under a single manager at the local community hospital. The team worked closely with general practices in Brixham to identify and support older people at risk of admission to hospital.

Integrated teams were subsequently established in four other localities and were given control over pooled health and social care budgets. These budgets were used to increase the provision of intermediate care to support people to remain independent and to enable a rapid response to be made to their needs. Experience in Torbay showed the critical importance of health and social care co-ordinators within the integrated teams. Co-ordinators are not trained professionals and their role is to work closely with professional staff and managers to provide the right care in the right place at the right time. Teams are now able to access information about patients and service users from the integrated information systems that have been established.

Having focused initially on creating integrated teams and aligning their work with general practices, the primary care trust and local authority agreed to merge their functions by creating a care trust. This was done in 2005 and provided a platform on which to build on and extend early achievements.

Impact

Studies have shown that as a result of integration Torbay has reduced the use of hospital beds, achieved very low delayed transfers of care from the hospital to the community, and it has rates of emergency admissions and re-admissions to acute hospitals that are much lower than in areas with a similar demographic profile. There have also been reductions in the use of residential care, increases in the use of home care, and there are high rates of use of direct payments in social care. The performance of adult social care has improved from a low base as a result of integration.

Long-term conditions

There are examples in many different countries of integrated care focused on the needs of people with specific long-term conditions such as diabetes, heart failure and chronic obstructive pulmonary disease.

Disease management, as it is sometimes known, has been taken forward in the United States and more recently Germany as well as in the NHS in order to tackle fragmentation between different providers. A variety of approaches have been adopted with the aim of offering a co-ordinated approach that combines patient education and self-management support, care planning, and primary and specialist care.

Impact

The diversity of approaches means that it is difficult to provide an overall assessment of the impact of disease management. Studies have shown some benefits in relation to reduced use of hospitals, especially for emergency admissions, processes of care and patient satisfaction. However, evidence on cost effectiveness and cost savings is often lacking or inconclusive. Despite these caveats, there continues to be interest in the use of disease management for people with long-term conditions, both for people with single conditions and for those with more complex needs where different forms of case management have been used.

Chains of care and managed clinical networks

A common way to co-ordinate and integrate care for patients and populations with specific conditions has been to establish care pathways and networks. This approach has been developed in Sweden and is known as chains of care. A chain of care seeks to meet the needs of patients with a certain condition by linking primary care, hospital care and community care through care pathways, based on local agreements between providers. A typical chain of care might include a screening element in a primary care centre, treatment plans being developed at a specialist centre at the local hospital and then rehabilitation provided in the community.

Similar in some ways to chains of care, managed clinical networks have been established in Scotland to strengthen co-ordination of care between organisations and clinicians. Managed clinical networks were conceived on a number of scales (from local to regional to national) and with a range of scopes – for people with a particular condition (eg, diabetes), across various specialties (eg, neurology) and for particular functions (eg, emergency care). These networks do not require the creation of new organisational entities or physical facilities but rather they seek to broker care across providers for patients with a particular condition in a form of virtual integration.

Impact

Studies have shown that chains of care have had limited impact and they underline the challenges involved in overcoming professional and organisational barriers to integrated care. Evidence on managed clinical networks is more mixed with some evidence of benefits albeit with variations between networks. A recent study of partnership arrangements in the Scottish NHS - often seen as a counterpoint to arrangements in England with its emphasis on the commissioner/provider split and the use of competition - was similarly cautious about the impact of these arrangements.

There is more positive evidence from experience in England with the establishment of specialist networks for stroke care. These networks concentrate specialist care in fewer units able to offer the best possible care and ambulances transport patients direct to these units where appropriate. In London early results suggest that 400 lives a year are being saved by the reconfiguration of stroke services.

Integrated care at the micro level

Integration of care at the micro level is concerned with the co-ordination of care for individual patients and carers. Many health care systems assign responsibility for care co-ordination to a specific individual or team, often general practitioners and others working in primary care. In recognition that much co-ordination activity is not medical, these systems also employ coordinators from nursing and other backgrounds, as in the example of health and social care co-ordinators in Torbay described earlier.

The tools of care co-ordination are many and varied and include:

- the use of care plans and care planning, as in the Care Programme Approach for people with mental health problems
- the use of case managers as in the Evercare programme and related initiatives

- the use of virtual wards in which integrated teams, often including case managers, support patients with complex needs living in the community
- the use of personal health budgets and direct payments to enable patients and users to decide on the care they need
- the use of information technology, including the electronic medical record, to enable patients and professionals to access information
- > the use of telehealth and telecare to support patients and users to live independently in the community

Impact

Many of these tools are used in the examples of integration at the macro and meso levels of care. Studies have shown mixed evidence of impact with a recent review suggesting that the use of multiple approaches to care co-ordination is more effective than approaches that rely on a single strategy.

Lessons for the NHS

This briefing shows that integrated care takes many forms and has been pursued at different levels.

- Organisational integration appears to be neither necessary nor sufficient to deliver the benefits of integrated care, notwithstanding the achievements of integrated systems such as the Veterans Health Administration.
- Alternative approaches based on virtual or contractual integration, as in Kaiser Permanente, hold just as much promise because the benefits of integration arise primarily when clinical teams and services are brought together and incentives are aligned to support service improvement.
- Clinical commissioning groups can learn from the experience of integrated medical groups in the United States, including the challenge of managing budgets when finances become constrained.
- Health and social care integration for older people has been shown to reduce the use of hospitals and improve outcomes and the arguments for spreading examples of good practice, as in Torbay, are compelling.

- Disease management for people with long-term conditions also has potential, although the evidence is more mixed than in the case of older people.
- Clinical networks to improve outcomes in the provision of specialist care such as stroke services have shown promising results but further evaluation is needed.
- Integrated care for individual service users and carers designed to strengthen care coordination can bring benefits, especially when multiple approaches are used together.

Where next?

The government's response to the report of the Future Forum indicates that integrated care will play an increasingly important part in the NHS in the future. The challenge now is to act on the evidence and to do so at scale. Projects such as the integrated care organisation pilots set up by the previous government will offer valuable learning for the future, but the financial and service challenges facing the NHS demand a more ambitious approach.

It is clear from the research summarised in this paper that there is no one 'best' way of delivering integrated care. The government should therefore avoid prescribing what should be done and should encourage a period of testing and evaluation of different approaches. These approaches need to cover large populations (covering a city or county for example) and a range of groups: older people, people with particular diseases or conditions, and people requiring access to specialist services.

As this happens, it will be important to draw on experience from other sectors. The use of supply chains in manufacturing, for example, shows how organisations can collaborate, often on a long-term basis, to mutual benefit and to deliver products that customers want. Clinical networks in the NHS and integrated care involving collaboration between organisations have some similarities with supply chains and suggests that this kind of approach may be a more effective alternative than organisational integration.

It is essential that social care as well as the NHS is involved in the work that is done and that active encouragement is given to the involvement of the independent sector, including third sector organisations. As this happens, there would be value in allowing active experimentation with new ways of procuring and paying for integrated care, such as the use of lead providers who subcontract with others, and payment systems that go beyond the tariff to explore the use of capitated budgets and incentives for high -quality care. The role of clinical commissioning groups and the NHS Commissioning Board in commissioning integrated care will be particularly important.

Integrated care offers an opportunity to make a reality of care closer to home. In systems like Kaiser Permanente, acute hospitals are seen as cost centres rather than profit centres and incentives are aligned to support a focus on prevention, primary care and care in the community. The financial challenges facing the NHS require an urgent reorientation in this direction to enable care to be delivered in appropriate and cost-effective settings.

This paper summarises the evidence brought together in, Clinical and Service Integration: the route to improved outcomes, published by The King's Fund in November 2010. Available at: www.kingsfund.org.uk/publications/ clinical_and_service.html

A full reference list is included in that publication.

The King's Fund has an extensive programme of work on integrated care and is providing support to NHS organisations, local authorities and their partners in facilitating integration. Please contact us if you would like to learn more about our work.

Highlights

- GP and Whole System Leadership: This programme supports GPs and other leaders in health and social care. The focus is on addressing a problem or issue that has an impact on health care within the whole system. The participants improve their leadership capabilities by applying their learning to real problems.
- > Contact Liz Thiebe (I.thiebe@kingsfund.org.uk)

NHS Kaiser Permanente Partnership: Six areas of the NHS in England are adapting lessons from Kaiser Permanente in the USA, working together in a learning network which we facilitate. The partnership is now in its eighth year.

> Contact Beccy Ashton (b.ashton@kingsfund.org.uk)

NHS and Local Government Integration: Building on our expertise in social care as well as health care, we are supporting local authorities and their partners in a number of areas in establishing health and wellbeing boards in the context of the changes set out in the Health and Social Care Bill.

> Contact Richard Humphries (r.humphries@kingsfund.org.uk)

Study Visits: Every year we offer opportunities for NHS leaders to visit examples of high-performing integrated systems outside the UK. Future visits include Group Health Cooperative in Seattle, Kaiser Permanente in California, the Veterans Health Administration in Washington DC, and integrated medical groups in Massachusetts.

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Research and Evaluation: Our development work is underpinned by knowledge of integrated care drawn from research and first-hand experience of working with integrated systems in the UK and other countries. The evidence base on which we draw is summarised in Clinical and Service Integration: the route to improved outcomes by Natasha Curry and Chris Ham, published in 2010. We are also actively involved in work on care co-ordination and case management for people with long-term conditions.

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Integrated Care and NHS Reform: The Fund is working with the Nuffield Trust and the Department of Health in thinking through the place of integrated care in the next stage of NHS reform, following the report of the NHS Future Forum and the government's response. This includes developing ideas for a series of demonstration projects that might test the potential benefits of integrated care on a scale commensurate with the challenges facing the NHS in the future.

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