

INTEGRATED CARE: LESSONS FROM EVIDENCE AND EXPERIENCE

Report of the 2008 Sir Roger Bannister Annual Health Seminar

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BACKGROUND

With an aging population and an increasing prevalence of chronic disease, ever more people require care and support services from organisations that cross the boundaries of health, social care, housing and voluntary organisations.

A wealth of studies report that people with chronic, complex health problems – particularly older people – are often confused by the array of services they are faced with, receive duplicate interventions, and find it hard to understand where to turn with specific problems. They value initiatives to coordinate care and simplify their journey through the health and social care systems. Equally, with pressure to deliver elective care in community settings and prevent avoidable ill health, integration and collaboration between generalists and specialists – GPs, consultants, specialist nurses and other clinicians – is increasingly important.

Key points

- all health care systems face the challenge of achieving closer integration of care, to meet the needs of aging populations and increased prevalence of chronic diseases
- research evidence and international experience contain pointers for how integrated care might develop in England following High Quality Care for All
- the starting point should be clinical and service integration rather than organisational integration, with a focus on improving patient experience, clinical outcomes and value for money
- there should be a rigorous process for selecting pilots to take part in the programme being developed by the Department of Health in England, with the bar set high for proof of organisational support, experience of collaborative working, effective working

- relationships and a track record of bringing about change
- the pilots need to put in place appropriate governance arrangements, incentives that support rather than hinder integration, and mechanisms for sharing information
- patient choice should be built into the pilots to ensure consistency with the health reform programme and to avoid the creation of unresponsive monopolies
- there is uncertainty about the scale needed to achieve effective integration and manage risk, and the experience of the pilots needs to be carefully evaluated
- the Department of Health needs to allow sufficient time for the pilots to demonstrate results, as integration is not a quick fix and it may incur costs before it demonstrates returns.



These challenges are universal, faced as much in Europe and America as in England. The search is on for ways to improve the coordination of patient care and to integrate services from the numerous organisations needed to deliver timely, efficient and high-quality care. In line with other policy objectives, this must be achieved while preserving patient choice and maintaining an element of competition between providers.

To help explore these issues, the Nuffield Trust convened a seminar at Leeds Castle in September 2008 on the topic of integrated care for people with chronic diseases. The participants are shown at Appendix 1. This paper summarises the discussions, drawing on the contributions made by the main speakers at the seminar about research evidence and the US experience of integration. It is intended as a contribution to the continuing debate in England on ways of encouraging the development of integrated care following the completion of the NHS Next Stage Review and publication of *High Quality Care for All* (Darzi 2008).

Defining integration

In its most complete form, integration is a single system of needs assessment, commissioning and/or service provision that aims to promote alignment and collaboration between the cure and care sectors. The goals of integration are to enhance quality of care, quality of life, patient outcomes and efficiency in the use of resources. Integration may be 'horizontal' between primary, community and/or social care organisations. Or it may be 'vertical' between primary, community and hospital services, with or without social care. In addition, it may be 'real' or 'formalised' through organisational mergers or 'virtual' in the form of networks between different organisations underpinned by contracts or informal agreement.

These effects of integration are typically experienced at the *micro-level* of individual patient experience. Here the term integration may be used interchangeably with coordination to describe the close collaboration between different professionals and teams required to deliver timely, efficient and high quality interventions.

At a *meso-level*, integration may describe organisational or clinical structures and processes designed to enable teams and/or organisations to work collaboratively towards common goals. Examples include clinical pathways that cross primary and secondary care, integrated health and social care teams and may include shared IT, administration and data systems that support timely and efficient sharing of processes (such as booking appointments) or information.

At a *macro-level*, integration will typically describe structures and processes that link organisations and support shared strategic planning and development. Examples include merged provider organisations that span health and social care services (such as care trusts); integrated payer and providers organisations (such as Kaiser Permanente); or the virtual integration achieved through joint strategic planning processes linking health and social care.

Glendenning (2002) describes some core characteristics of integrated organisations. Integration is more likely when several of the following are evident:

- joint goals
- very close-knit and highly connected networks of professionals
- little concern about reciprocation, underpinned by a mutual and diffuse sense of long-term obligation
- high degrees of mutual trust
- joint arrangements which are 'core business' rather than marginal
- joint arrangements covering operational and strategic issues
- shared or single management arrangements
- joint commissioning at macro- and micro- levels.

In many discussions, integration is not well defined but is suggested as a promising solution to the problem of fragmentation.

Evidence on integration

Ramsay and Fulop's (2008) summary of published research on integrated care shows that most research has focused on process measures rather than outcome measures with the majority of reports on American experience. Methodology for economic evaluation has been weak, supporting only limited inference about the cost-effectiveness of integrated services. Presenting her findings around different *structural* forms of integration in health care, Fulop summarised the evidence to date in three main groups:

• Integration of payer and provider has been found to result in improved partnerships between participating organisations and greater focus on case management and information technology (IT) use. Impact on admissions and cost of

- care is under-evaluated, with only weak evidence available.
- Integration of providers shows some evidence of improved partnerships and increased capacity but limited evidence on cost and improved health outcomes. Progress was found to be limited by poorly coordinated national policy initiatives.
- Virtual integration through networks was also explored, with mixed results in relation to impact on communications and limited evidence on cost and clinical outcomes. There was also some evidence of staff resistance to changing roles.

Fulop presented eight practical lessons from published literature to guide the future development of integrated services in the NHS (see Box 1).

Box 1. Practical lessons for integration

- 1. Be very clear about the reasons for which integration is pursued and reflect carefully on whether integration is the best way to achieve stated goals.
- 2. Don't start by integrating organisations which may not bring about improvements for patients. A more promising place to focus is services and clinical relationships, with the consequences for organisations and structures being considered subsequently.
- 3. Ensure the local context will support integration requiring trust between partner organisations and teams; supportive local leaders; a culture of quality improvement and effective communications and IT.
- 4. Do not overlook cultural differences between potential partner organisations and work to overcome these.

- 5. Protect community services in initiatives to integrate acute services with primary and community services.
- 6. Create the right incentives which may involve risk- and gain-sharing, and incentives for frontline staff.
- 7. Don't assume economies of scope and scale. There is little evidence that integration increases efficiency; start-up costs may wipe out savings and where economies do exist, it may take time to harvest them.
- 8. Be patient: establishing effectively integrated services takes time, and it may take even longer to deliver measurable changes in outcomes and patient satisfaction.



LESSONS FROM THE US

Richard Gleave summarised US experience of integration, based on a recent study of four US integrated care organisations (ICOs), and interviews with senior staff from several others. Integration in the US is occurring mainly in response to perverse incentives in the operation of health insurance and fragmentation in the delivery system.

Gleave described four main types of ICO in the US, recently identified by the Commonwealth Fund (Shih *et al* 2008):

- Multi-speciality group practice or integrated delivery system combining a clinician group and an insurance plan (with or without linked hospitals). Example: Kaiser Permanente.
- Multi-speciality group practice or integrated delivery system combining a clinician group and hospitals without a linked insurance plan.
 Example: The Mayo Clinic.
- Networks of independent clinicians with aligned incentives to share guidelines, monitor outcomes and share administrative services.
 Example: Hill Physicians.
- Government facilitated network of clinicians, clinics and other service providers working in partnership for government funded patients with government resources and support.
 Example: Community Care of North Carolina.

There is considerable variation in the organisations within each category as well as between them. While acknowledging very substantial differences between US and UK contexts, Gleave highlighted three groups of generalisable lessons for the NHS. These relate to integrated governance, risk and incentives; and integrated IT systems.

Many different models of **integrated governance** have emerged as systems and networks adapt to their local market and regulatory contexts. Shortell and Casalino (2008) have proposed the creation of "accountable care systems", defined as "entities that...implement organized processes for improving quality and controlling costs...and...that are held accountable for results". Gleave notes that hierarchical control systems are typically complemented by horizontal mechanisms of partnership working and that successful governance is always built upon strong clinical leadership and robust management processes. In addition he identifies the following lessons for the UK:

- A diversity of approaches to governance among ICOs could enable the development of locally sensitive and practical governance structures.
- Governance structures are only truly effective at enabling integrated care if they are combined with a culture that prompts the delivery of integrated care. This is clearly shown in the experience of integrated payer systems.
- When there is a network of partner organisations working together, there needs to be clarity about who is accountable for ensuring the delivery of integrated care. In the US one approach is to create a new entity tasked with bringing together the network, while an alternative is to clearly designate one of the existing partners as accountable.

In terms of risk management and the use of incentives, formally integrated organisations and systems (such as Kaiser Permanenente, Veterans Health Administration and Health Partners) are developing sophisticated approaches to aligning incentives within the organisation and minimising risk. Integrated networks have developed strategies to share and transfer financial risk between health plans and providers. Four potential lessons for ICOs are identified:

 There are increasingly sophisticated risk adjustment methodologies, to ensure that capitated payments for providers recognise varying levels of clinical need associated with different levels of illness.

- To incentivise the delivery of integrated care, the balance between 'risk minimisation' (usually associated with vertical integration) and 'risk transfer/sharing' (as in virtual integration) needs to be addressed.
- The different funding streams and payment mechanisms need to be aligned so that all parties are incentivised to work together and rewarded for providing integrated care.
- There is a need to develop robust internal management systems to minimise provider risk. Integrated hospital—physician systems have developed 'service line management' that could be used across care settings. Service line management focuses on medical conditions and patient groups that require the expertise of different specialists and services.

Integrated health information technology is essential in enabling the integration of care, integration of services and integration of structures. Four specific lessons from the US are:

- there are alternatives to large comprehensive IT systems, that work well in network models of integration
- the prime IT focus must be on systems to improve the coordination of care for patients
- there should be a focus on member/patient access to information through an interactive web portal
- the IT systems should also support the information flows required for effective performance management and peer review.

APPLYING LEARNING IN THE NHS

The bulk of discussion at the seminar focused on practical approaches to support the ICO pilots proposed in *High Quality Care for All* (Darzi 2008) and other teams and organisations pursuing the same goals. The pilots have been launched to encourage health, social care and other services to achieve more personalised, equitable and responsive care and better outcomes. A further aim for the pilots is to strengthen evidence on the effectiveness of integrated care and support rapid learning about implementation.

In the course of wide-ranging discussions, ten key 'principles' emerged about how best to support the development and mainstreaming of integration.

1. Form should follow function

Participants were adamant that the starting point for integrated services should be improving patient experience, clinical outcomes and value for money.

This approach will enthuse clinicians more than visions of new types of organisation and increase the likelihood of clinical engagement. It also gives a focus for evaluation using patient reported outcomes and clinical measures as well as evaluating changes in organisational characteristics and processes.

Alongside improving patient experience, participants stressed the need to pursue population and health promotion goals. The chances of this will be maximised if ICO pilots are formed around the registered populations of GP practices. With this starting point, many possible services and organisational forms could emerge to address defined goals, and the central challenge will be to build that characteristics identified by Glendenning (2002) across whatever organisational form emerges.



2. Create a receptive context for change

Several factors were identified as important for creating a context in which integrated organisations can thrive. Some were national – such as the need for tolerance or 'waivers' (such as a 'holiday' from national policy) in relation to selected financial, data governance and employment regulations – and others were local, such as ensuring there is high-level 'buy-in' to integration efforts across all participating organisations, with a clearly focused and understood vision for care or set of objectives.

Greater freedoms to pool budgets, transfer data between organisations and to encourage individuals to work for more than one organisation were identified as important tolerances. Other factors that would create a supportive context include strengthening commissioning — particularly commissioning for outcomes and monitoring performance. Progress on defining and measuring outcomes and the identification of a single, primary outcome measure across health and social care could galvanise and incentivise participating organisations.

One way to create the right context is through a rigorous selection process for pilot status, setting a high bar for proof of organisational support, past experience of collaborative working and proven track record of change through robust and systematic implementation. In the absence of these factors, it is unlikely that the pilots will be able to demonstrate results in the timescales envisaged by Ministers.

3. Robust governance and transparent accountability

Governance encompasses high-level or system-wide ways to 'keep ICO's honest' and local mechanisms to support transparency and assure quality. The former includes the extent to which choice, contestability, regulation and contractual mechanisms were the best means to ensure high-quality care in integrated care organisations. The latter focused more on public reporting of performance and outcomes; patient feedback; and commissioning to ensure good practice and maintain quality.

Richard Gleave's presentation emphasised the importance of strong 'integrated management', in which clinical and general managers trust and support each other and work toward shared goals. This is particularly important where multiple organisations are involved in an integrated pilot. His proposal for hierarchical control systems (board and sub-committee systems with reporting mechanisms and accountability, as illustrated by the case study below), complemented by horizontal mechanisms of partnership working, raises questions about whether good governance *requires* the formation of a single organisational entity to fulfil the goals of integration, or whether effective inter-organisational reporting and risk management can be developed.

Developing the structures, skills and high-trust relationships required for effective governance within and across organisations will be challenging and will take time and require support. A start-up phase for ICOs was felt by some to be essential, along with the resources and support to develop the necessary infrastructure, processes and governance skills. Careful review of ICO proposals to assess their plans for governance and accountability will be an essential part of a robust selection process.

Case study: Tayside Diabetes Network governance arrangements

The Tayside Diabetes Managed Clinical Network Board is charged by NHS Tayside Board with the responsibility of providing the strategic lead for diabetes services across NHS Tayside, for setting service development objectives and for assuring the clinical and operational governance of the NHS Tayside Diabetes Service, including the provision of agreed standards of service across the Tayside Diabetes Network.

Its membership includes broad representation from primary care, including all three community health partnerships, secondary care, diabetes specialist nursing, allied health professionals, public health medicine, health service management and service users.

Source: www.diabetes-healthnet.ac.uk/mcn/groups/groups.aspx

The Group reports to the Chief Executive of NHS Tayside Board. It has joint chairs from primary and secondary care who are the responsible officers for diabetes services in Tayside, reporting to the Medical Director and Chief Executive of NHS Tayside, who have ultimate responsibility for the delivery of such services. The joint chairs are responsible for analysis of any critical or significant event occurring within the service provided by the Network brought to their attention by the Data Governance Sub-group or other parties and, if required, would report this to the Clinical Governance Committees of NHS Tayside Board or its operating divisions. The Network Board meets quarterly.

4. Align incentives

For acute trusts, primary care-led integration to deliver care in community settings presents both threats and opportunities. The immediate financial disincentives are obvious, but these can be mitigated over time. Integration could help to manage problem areas for acute trusts such as pressures associated with growing accident and emergency attendance or appropriately reducing admissions for treatment for which the national tariff is below the local cost of delivering care in hospital. Alternatively, integration may allow growth in an area of clinical strength, to replace services that transfer to the community. Joint strategic discussions between ICO leaders, PCTs and acute trusts were seen as essential to create sustainable integration plans and avoid perverse

incentives for acute trusts to disrupt community-based integration within a health economy.

For GPs and primary care colleagues, the financial incentives associated with integration are likely to be an important determinant of progress. Several participants argued that without a designated (probably risk-adjusted and capitated) budget for a defined population, linked to real transfer of financial risk and real opportunities for profits, there would be not enough 'grit' in the system to drive change. Testing out the impact of allocating a full capitation budget to a integrated group involving GPs, specialists and community clinicians serving the population in a locality should be an explicit aim of the pilot programme.



Given the history of general practitioner (GP) resistance to taking on extra financial risk and the under-development of data and information systems, one proposal was to take a phased approach to financial risk, with none required in the first year, partial financial risk in year two and ICOs going fully at risk by year three – for both profit and loss. This may require support from private sector organisations with relevant expertise in managing financial risk. Recognising the challenges involved, there were strong arguments for testing such an approach in a small number of pilots in the first instance, particularly in areas able to demonstrate requisite clinical and managerial leadership and adequate information systems.

Many areas were identified in which urgent progress is needed in developing incentives – for example 'unbundling' Payment by Results (PBR) tariffs, developing year-of-care budgets or tariffs, developing a quality add-on for PBR to incentivise high performance, and new regulations on pooling budgets across organisations (or at least waiving existing regulations for ICO pilots). If the Department of Health (DH) does not take these issues forward then local action will be needed, and indeed may be preferable.

5. Integrate the data

The effective development of financial incentives will depend partly on a step change in the ability of ICOs to integrate and analyse data for different purposes. Peer review of clinical performance, assessment of need to target people for case management and other support, risk-adjusted budget allocation, performance monitoring of new services and management of at-risk budgets are interrelated activities that are all dependent on accurate, integrated and well analysed data.

Recent progress with risk adjustment has demonstrated that data can be linked across acute and primary care and increasingly across social care too. The application of risk prediction to guide clinical interventions was seen as an essential element of effective integration, allowing ICOs to target scarce resources according to need. These data functions were seen as so important that there should be a requirement in the ICO pilots that all participating organisations should be willing to pool data to support integration.

Skills development in this area was felt to be essential along with tolerance of ICOs that develop local solutions to national challenges – such as how to integrate clinical, social care and financial data into a single data set in a way that can be replicated and scaled up. The possibility of adapting implementation of the Data Protection Act and Caldicott regulations were discussed as ways to speed up approvals for data sharing.

Case study: Hill Physicians Medical Group, California – sharing data and IT

Hill Physicians is a large mutli-speciality medical group, bringing together 3,000 GPs and specialists in over 1,600 locations. The group is over 25 years old and has used many different approaches to create an organisational culture focused on quality improvement and shared standards of practice across previously atomised small practices. Their adoption of electronic medical records (EMR) is supporting data integration and analysis and illustrates the challenges and opportunities associated with making more effective use of clinical information.

Launched in 2005, only five groups used the record initially, with a target to increase the number to 18 in the first year and a five-year rollout programme thereafter. By mid-2008 189 physicians in 48 practices had implemented the EMR, in practices covering over 200,000

Source: Hill Physicians

patients. Clinical and administrative data is pooled in a data warehouse and mined to support ten key initiatives. These include risk prediction, pharmacy management, behavioural therapies, administrative functions, performance and financial management, educational programmes and a programme to encourage a healthy work–life balance for doctors.

With computer systems and electronic records already in place in English general practice, the challenge here is win support for pooling data by demonstrating the added clinical value that shared data can deliver. Learning from Hill Physicians' experience, ICOs could take a phased approach to data sharing, working initially with enthusiasts to demonstrate the benefits. Alternatively, participating practices could be required to share clinical data.

6. Preserve choice

Several participants argued that choice was the best way to drive quality and efficiency in ICOs. Others argued that alternative mechanisms can be used such as effective governance systems, central directives, and targets and regulation. They saw choice as potentially less important to patient groups – such as the frail elderly – who have most to gain from integrated services and least ability to choose or to travel between different providers.

At a system level, choice between competing ICOs was suggested as a way to combine support for

integration and choice, with, perhaps three ICOs established in a typical primary care trust (PCT). While theoretically attractive, the experiences of GPs who are currently developing integrated clinical groups suggested it would be hard to bring all the GP practices in a PCT into an ICO.

At a patient level, choice through support for self-management and shared treatment decisions were seen as crucial elements of high quality integrated services. The baby-boom children of now-aging parents with multiple long-term conditions were seen as key advocates of choice, who will drive improvements in current services. Also important is



allowing patients who are served by ICOs the ability to choose specialist care outside of the network. In addition, the extension of personal budgets into areas of health care may drive change and create small pockets of competition that create a constant pressure on ICOs to improve services.

7. Scale is important

Given the level of agreement that ICOs will need integrated data systems, at-risk budgets and sophisticated governance arrangements, questions arose about what size of ICO would be needed to support these characteristics.

There was no clear answer in terms of population size required and to a large extent this will be determined empirically by the population size required to manage an acceptable level of financial risk on a risk-adjusted capitated budget. However, there was a general feeling that ICOs serving at least 50,000 people would probably be in a reasonable position to manage these issues. Parallels were drawn with the experiences of fund-holding and total purchasing groups, where research showed that more rapid progress was made by smaller groups that did not have to spend time building high-trust relationships across multiple organisations.

One aim of the ICO pilots is to support learning so that other organisations can replicate and scale up successful models. It may be that the start-up advantages of working in a small group will create benefits that balance out the smaller financial base on which to carry financial risk and invest in IT and data analysis. The inclusion within the pilot programme of organisations covering smaller and larger populations should enable there to be greater clarity about whether size really does matter.

8. 'It's the relationships, stupid'

Glendenning's list of common characteristics of integrated organisations (see page 2) includes shared goals, high trust, close networks and shared processes – each of which takes time to develop. For ICOs, these characteristics must develop across clinical teams, primary and acute care organisations and in many cases across the organisational and cultural divides of health and social care, assuming that they do not exist at the outset.

GP participants shared their experiences of developing clinical groups with an interest in integrated care. The gradual evolution of shared goals; trust between group members; relationships with external organisations and adequate knowledge and understanding of the requirements of commissioners, regulators, accountants and others had taken months or years to develop. The role of judiciously compiled data to build or strengthen relationships around an area of common challenge was also noted with data comparing local performance with other units seen as effective at galvanising clinician interest and defining work programmes.

In situations where generalists and specialists had succeeded in developing a shared (and hopefully evidence based) vision of integrated services, other factors had sometimes disrupted progress. These included pressure on consultants from acute trust CEOs not to develop competing services and slow progress with accessing data and information or pooling budgets. Examples of effective strategic relationship building across PCT, primary and acute clinicians and acute trust managers were also given with service developments progressing well where these high trust relationships had been established.

The 'high-bar' selection process for ICOs will need to probe carefully for evidence of effective and impactful existing relationships between collaborating organisations. This may also be an area for support in the early stages of ICO pilot development, to ensure that shared goals and values are firmly embedded.

Case study: Working Together for Health in Birmingham and Solihull

Working together for Health is a partnership between Birmingham East and North PCT, Solihull Care Trust and the Heart of England NHS Foundation Trust. It was launched after six senior staff from the three organisations visited Kaiser Permanente in Northern California and saw the potential for integrated services, led by inspirational clinicians, to deliver improvements in care.

A series of presentations to trust boards secured high-level commitment across all three organisations to a set of shared principles for Working Together for Health and resulted in organisational strategies to support the partnership's goals. Clinician interest was built through a series of events to develop a shared understanding of integrated health and social care. Relationships between clinicians across participating organisations have developed and deepened during time spent developing the programmes and through travelling, working and socialising together.

Source: Ham (2008)

A cluster of initiatives (including orthopaedic triage services, chronic obstructive pulmonary disease, and an integrated diabetic and renal service) have led hospital and community clinicians to work together to develop common standards of clinical practice and integrated care pathways.

At an organisational level the partnership requires a high level of trust between the three organisations and there have been times when relationships have been tested through commissioning decisions that have challenged the hospital trust. Overall, clarity of roles and responsibilities has been helped by the development of eight 'commissioning principles'. An integrated Working Together for Health programme board provides leadership of the work.

9. It takes time to make integration work

The need for high-trust relationships and shared goals and values will inevitably shape the nature and duration of the start-up phase of any ICO pilot. However, the formation and development of these relationships cannot be rushed, re-emphasising the need for a pilot selection process that thoroughly tests the integrity and effectiveness of existing working relationships.

Other essential elements of the start-up phase include:

- strategic discussions with local acute trusts
- establishing robust governance arrangements
- integrating data sources and compliance with data protection regulations
- agreeing outcome and value for money metrics
- developing robust reporting systems
- developing local financial incentives
- exploring options for local budgetary 'innovations'.



Each will take time and effort to achieve and a combination of practical and technical support in these areas for pilots along with waivers of selected regulatory requirements could speed the journey to effective integrated service delivery.

Pressure to report early findings from the ICO pilots was highlighted, but participants felt it may take several years before integration resulted in significant improvements in clinical outcomes. This raised questions about what interim results could be reported to demonstrate their impact before they have achieved demonstrable changes in clinical outcomes – the subject of the final principle for ICO development on evaluation.

10. Evaluation has to support diverse expectations and provide robust results

The Department of Health prospectus for ICOs describes five desired outcomes from the pilots:

- rapid improvements in quality of care and in health and equity
- improved patient and user satisfaction and quality of life
- improved partnerships in care provision
- more efficient use of resources
- improved relationships, governance and risk management between participating organisations.

In addition the DH aims to develop an efficient process for sharing and implementing improvements and a robust contribution to the evidence base. However, learning from the American Medicare Chronic Care Improvment Demonstration sites suggests that a single *primary* outcome is needed, to measure impact and allow direct comparison between organisations.

Change in health care utilisation – measured by hospital episode system data and costed in line with healthcare resource group (HRG) tariffs – would be one measure for which uniform data are

available across all organisations. A cluster of additional measures of health care utilisation, clinical and functional outcome and patient experience with qualitative data on the processes of integration would all form part of an evaluation, alongside the single comparable end point. If data integration is a requirement for ICO pilots, then early involvement of an evaluation team could help to establish data collection to support evaluation from the earliest stages of the pilot.

The methodological design of an evaluation was briefly discussed, with suggestions that observational methods comparing pilot and other comparable populations could allow ongoing comparison of activity and impact and reporting of interim. It would be important to ensure comparability of populations on a number of factors including 'risk' of future utilisation and cost, using a well-recognised method of risk stratification such as PARR (patients at risk of rehospitalisation) (Billings *et al* 2006).

While a randomised controlled trial (RCT) is the best method to use to evaluate the impact of integrated care, in practice an RCT may not be possible. In this case it would be useful to learn how else complex interventions have been evaluated elsewhere in the NHS, for example the POPP evaluation, which used a 'difference in difference' analysis (University of Hertfordshire 2007). The need to keep pilot sites dynamic and able to evolve and incorporate additional practices and interventions was also noted, recognising that this may disrupt an evaluation for which intervention and control groups are tightly defined. The tension between the methodological rigour of a randomised trial and the likelihood of dynamic change in ICO pilots requires careful consideration when developing the evaluation of ICOs.

NEXT STEPS

The Nuffield Trust welcomes the ICO pilot programme and sees it as a signal that integration of care is central to the policy agenda, alongside choice and access. So what are the next steps for clinicians and others who are enthusiastic about integrated care? There is no single 'best way' to achieve integration, but there are common ingredients for success that can form the basis of a local action plan.

- Ensure that improved patient care remains the main objective of every proposal and that overall the goals of pilot projects are clearly articulated and shared. Use this as the starting point for deciding the structures and processes needed for integration and the rationale for clinical engagement.
- Involve local acute trusts and their clinicians in the strategic development of integration plans.
 They need time to adjust to changes in patient flows that might result and develop alternative service lines if their consultants are to become involved in integrated services.
- Invest in creating integrated teams and/or organisations with shared goals and values.
 It takes time and effort to build the relationships, trust and clinical leadership required for effective management and successful integration.
- Ensure that pooling clinical, and where possible, social care data is a condition of approval for integrated care organisations to support needs assessment, risk stratification, outcomes monitoring and performance management.
- Undertake work to unbundle tariffs, and identify risk-adjusted budgets and resources that can be allocated to an integrated team or service.

- Start early to develop robust governance arrangements. These must clearly identify the roles and responsibility of each participating group in relation to performance, quality and risk and be linked to transparent accountability arrangements.
- Map the existing financial and non-financial incentives that affect all potential members of an integrated care service. Consider local micro-incentives that will influence the professional practice of all involved – perhaps taking advantage of the need to participate in the forthcoming quality-linked pay for performance system called CQUIN.

Nationally, there will be a need for waivers of selected rules and regulations governing NHS activity. The DH ICO Prospectus emphasises its support for experimentation and willingness to support some risk taking. Of particular importance will be:

- support for IT innovation through ICO pilots where these are out of line with ongoing developments in Connecting for Health
- national leadership on outcome measurement to support outcome evaluation of integrated services
- national guidance on governance and accountability arrangements for different forms of integrated organisation; rapid learning and efficient dissemination of early experiences will be particularly important here
- support in setting risk-adjusted capitated budgets where appropriate, in advance of there being a national person-based, risk-adjusted method of resource allocation to practice-based commissioning (PBC) groups.



CONCLUSION

As the integrated care pilots are taken forward, it is important to recognise that integration is not a panacea. In a seminal analysis of experience of integration in the US and the UK, Leutz (1999) crystallised the nature of the challenges involved in this policy area in his five laws of integration:

- 1. You can integrate all of the services for some of the people, some of the services for all of the people, but you can't integrate all of the services for all of the people.
- 2. Integration costs before it pays.
- 3. Your integration is my fragmentation.
- 4. You can't integrate a square peg and a round hole.
- 5. The one who integrates calls the tune.

The NHS integrated care pilots will need time to work through these challenges and to demonstrate the benefits of integration for patients. Policy-makers need to avoid rushing to judgement about the progress of the pilots and ensure that the policy context facilitates closer integration of services, and supports clinical and managerial leaders within the NHS to demonstrate proof of concept.

REFERENCES

Billings, J, Dixon, J, Mijanovich, T, Wennberg, D (2006) 'Case finding for patients at risk of readmission to hospital: development of algorithm to identify high risk patients', *BMJ* 333; 327–331.

Professor the Lord Darzi of Denham KBE (2008) High Quality Care for All: NHS next stage review final report. Cm7432. TSO.

Glendenning, C (2002) 'Breaking down barriers: integrating health and care services for older people in England', *Health Policy* 65: 139–151.

Ham, C (2008) Integrating NHS Care: Lessons from the front line. Nuffield Trust.

Leutz, W (1999) 'Five laws for integrating medical and social services: Lessons from the United States and the United Kingdom', *The Millbank Quarterly* 77(1): 77–110.

POPP National Evaluation Team (2008) National Evaluation of Partnerships for Older People: Interim report of progress. PSSRU. Available at www.dh.gov.uk/en/SocialCare/Deliveringadult socialcare/Olderpeople/PartnershipsforOlderPeople Projects/index.htm

Ramsay, A and Fulop, N (2008) *The Evidence Base for Integrated Care.* Summary of research evidence prepared for the Department of Health.

Shih, A, Davis, K, Schoenbaum, S et al (2008) Organizing the U.S. Health Care Delivery System for High Performance. New York: Commonwealth Fund.

Shortell, S and Casalino, L (2008) 'Health care reform requires accountable care systems', *JAMA* 300: 95–97.

University of Hertfordshire (2007) *National Evaluation* of Partnerships for Older People Project Briefing Paper: Cost-effectiveness, Measuring Effects: Emergency bed day use. Available at www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_079423

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Cyril Chantler	Chairman	King's Fund
David Colin-Thomé	National Director for Primary Care	Department of Health
Diane Gray	Director of Public Health	Milton Keynes NHS Foundation Trust
Gary Belfield	Director of Commissioning	Department of Health
George Solomon	GP – Executive Committee Member	Sandwell Primary Care Trust
Ian Atkinson	Director of Performance	Sheffield PCT
James Mountford	Engagement Manager	McKinsey & Company
Jennifer Dixon (Co-chair)	Director	The Nuffield Trust
Jennifer Grant	Manager	McKinsey & Company
Jeremy Porteus	National Programme Lead (Networks)	Care Services Improvement Partnership
Baroness Julia Cumberlege (Co-chair)		House of Lords
Mark Goldman	Chief Executive	Heart of England NHS Foundation Trust
Massoud Fouladi	Medical Director	Circle Health
Naomi Fulop (speaker)	Director, National Institute for Health Research King's Patient Safety and Service Quality (PSSQ) Research Centre	King's College London
Nick Goodwin	Senior Fellow	King's Fund
Nicolaus Henke	Director	McKinsey & Company
Oliver Bernath	Managing Director	Integrated Health Partners
Ranjit Gill	Practice-based Commissioning Chair	Stockport PCT
Rebecca Rosen (co-facilitator)		Ferryview Health Centre
Richard Gleave (speaker)	Performance Director	Department of Health
Richard Lewis	Director, Health	Ernst & Young
Stephen Dunn	Director of Strategy	East of England NHS
Sue Roberts	Chair, Reference Group for the Ongoing Conditions Care Stream	Cumbria PCT
Tim Kelsey	Chair of Management Board	Dr Foster Ltd
Tim Richardson	GP	Surrey NHS

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Integrated Delivery Systems (May 2008)

ABOUT THE NUFFIELD TRUST

The Nuffield Trust is a charitable trust, carrying out research and policy analysis on health and health services. Its focus is on the reform of health services to improve the efficiency, effectiveness, equity and responsiveness of care.

Publications and up-to-date information on the Trust's activities are available at

www.nuffieldtrust.org.uk

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