

ACROSS THE POND – LESSONS FROM THE US ON INTEGRATED HEALTHCARE

Richard Gleave



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Richard Gleave, Harkness/Health Foundation Fellow 2007–08



The Nuffield Trust
FOR RESEARCH AND POLICY
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ABOUT THE NUFFIELD TRUST

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¹ The scheme, sponsored by The Commonwealth Fund, allows health professionals to spend up to 12 months in the United States as a Harkness Fellow in Health Care Policy and Practice.

FOREWORD

Integrated care has long been something of a holy grail for the NHS: though it is something everyone agrees is desirable, there is less agreement on how to overcome the very real challenges to implementation. In response to this, and the recent Government announcement of the establishment of integrated care pilots, the Nuffield Trust is undertaking a growing programme of work on integrated care combining seminars, research, briefing papers and advisory work.

This report, by recent Harkness fellow Richard Gleave, combines first-hand observations of how integrated care operates ‘across the pond’ in the United States, with suggested lessons for the UK’s health system. These lessons are important for policy-makers and for health and social care managers; they will be built on by further Trust work during 2009.

I do hope you will read this report with interest, and are able to engage with further Trust work in this important area.

Dr Jennifer Dixon

Director

The Nuffield Trust

EXECUTIVE SUMMARY

Despite its single-payer structure, the NHS has often struggled to deliver integrated care to patients. The announcement of the integrated care pilots in *High Quality Care for All* (Darzi 2008) provides an opportunity for the NHS to experiment with new, radical approaches to the integration of care. The proposal was partly influenced by the experience of integrated health care systems around the world; this report seeks to explore some of the specific lessons from the United States.

The development of integrated care in America has been a response to the potentially perverse incentives in the operation of the health insurance market and the fragmentation in the delivery system. The conceptual framework for integration is different from the model in the English NHS and so, for example, there is little to be learned from the American experience about the integration of health and social care services. However, important lessons from the American experience can be identified and these can be grouped under three cross-cutting themes:

Lesson 1

There are many different models of **integrated governance** in the US but the successful approaches are always built upon strong clinical leadership and robust management processes. In addition, specific potential lessons include:

- A diversity of approaches to governance among integrated care organisations (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 responsible.
- Corporate governance systems in integrated organisations operate in a wider regulatory environment which is designed for fragmented delivery systems. Thus governance systems in integrated organisations need to be able to meet both the internal (integrated) and the external (non-integrated) requirements.

Lesson 2

American integrated health care systems have sophisticated approaches to **risk management and the use of incentives**. The integrated payer systems seek to align incentives within a single organisation to minimise risk, whereas the integrated networks have developed strategies to share and transfer risk between health plans and providers. Four potential lessons for ICOs are identified:

- There are increasingly sophisticated risk adjustment methodologies being developed to set capitated payments for providers.
- 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 reflected in the payment systems.
- There is a need to manage income from different sources and payment systems, so that the delivery of integrated care is properly funded and incentivised.
- There is a need to develop robust internal management systems to minimise provider risk. Hospital–physician integrated systems have developed service line management that could be used across care settings.

Lesson 3

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.
- Integrated delivery systems are in the ‘consumer health information business’, resulting in a focus on member/patient access through an interactive web portal.
- The IT systems can also support the information flows required for effective performance management.

INTRODUCTION

To international observers, the ‘single-payer’ system in the UK seems to be the ultimate integrated health care system but, at a local level, NHS organisations have often struggled to deliver integrated care to patients. Government policy has focused on the delivery of national targets and system reform, so although the need to improve the integration of care was debated, for example in the Your Health, Your Care, Your Say consultation, there were few powerful national policy levers put in place to drive effective integration. Instead the impetus to improve came from the commitment of key individuals, both managers and clinical staff, who developed local projects to coordinate care and form collaborative partnerships.

With the Next Steps Review, there has been a renewed interest in facilitating the delivery of integrated care and, as the agenda for the Clinical Summit in November 2007 demonstrated, the international dimension has been central to exploring options. *High Quality Care for All* (Darzi 2008) sets out twin goals of “placing a new emphasis on enabling NHS staff to lead and manage the organisations in which they work” and to “provide more integrated services for patients” (p.13). However the answers are not known and the new primary and community care strategy (DH 2008) explains that the “integrated care organisation” (ICO) pilots are an opportunity for the case for integrated care to be unequivocally made and the advantages and disadvantages of different models to be evaluated.

Within the US there has been a renewed interest

in health reform over the past couple of years, stimulated both by state-level initiatives, such as in Massachusetts, and the policies of various presidential candidates. Although the headline debate has been about universal coverage, there has been growing recognition of the need for reform of the delivery reform, which Sage (2007) has argued has been ‘the 800-pound gorilla’ in the room. The debate about improving the organisation of healthcare has often focused on ways in which the coordination of care can be improved, though often the discussion has focused on improving network and partnership working rather than through the creation of integrated delivery systems. There are a number of lessons for the US from recent reforms in the UK and, though there is considerable interest in the Quality and Outcomes Framework, it is the combined impact of a range of policies that could enable reformers in the US to focus on improving the effectiveness of their delivery systems.

This report starts by exploring the differences between the conceptual models of integration between the UK and the US and then identifies potential lessons for the NHS from the US experience under three headings – integrated governance, risk management and the use of incentives, and the role of integrated information technology.

The experience of larger integrated systems, especially the Veterans Health Administration and Kaiser Permanente California regions, has had a significant influence on the policy debate about integrated care in the UK. However, the

potential lessons from the medium-sized and smaller integrated systems and other network models that are working to develop integrated delivery has not been extensively covered in the literature. This report draws on a detailed piece of qualitative research into performance improvement systems in four such systems (see Box 1) and on meetings with the leaders of a range of network organisations from around the US. The four case studies were selected using a purposive sampling frame informed by expert opinions. They were also chosen because they had core features that were common between the sites to enable meaningful comparison – thus all four case studies were not-for-profit integrated systems with a plan and physicians under single or quasi-single ownership. However, the four locations had different business models and governance systems, which allowed for insightful contrasts to

be identified. For example, the sites had different relationships between the health plan and the delivery system, including both ‘closed systems’, where only patients who were members of the health plan were entitled to access the delivery system, to ‘open systems’ where the doctors and hospitals would treat patients from with any insurance plan. The case studies also varied in the degree of direct management control over the hospitals, which ranged from a long-term close contractual relationship to direct line management.

Box 1: Summary of the four integrated system case studies

Kaiser Permanente Colorado

KP Colorado is a region within the Kaiser Permanente group of organisations based in Denver, Colorado. It is composed of a health plan (with 480,000 members) and a medical group (of 800 physicians). The medical group does not see patients from other health plans and does not own any hospitals, but has formed a close long-term relationship with a group of hospitals.

Kaiser Permanente North West

KP North West is also a region within Kaiser Permanente based in Portland, Oregon. It is composed of a health plan (with 477,000 members), a medical group (of 1,000 clinicians) and one hospital. It closed a second hospital several years ago, leading to both a consolidation of services and to forming new contractual relationships with several hospitals. The medical group and hospital do not treat patients from other health plans.

Geisinger System Pennsylvania

The Geisinger System is based in rural northeast Pennsylvania and comprises a hospital system (three acute hospitals) and a medical group (of about 800 physicians). It has a health plan of 215,000 members but this does not offer managed care/HMO products and only comprises 30 per cent of the activity within the delivery system.

Health Partners Minnesota

Health Partners is based in Minneapolis/St Paul, Minnesota. It is a health plan of 750,000 members, a medical group of 700 physicians and one large teaching hospital. The health plan contracts with a range of medical groups and hospitals as well as with the in-house providers, while the medical groups and hospital treat patients from other health plans.

DIVIDED BY A COMMON LANGUAGE – INTEGRATION IN THE UK AND US

Although integration of care is a topical issue in both the US and the UK, there are significant differences between the approaches to integration in each country. Leutz (1999) noted that “the term integration has taken on a wide range of meanings...as it can signify anything from the closer coordination of clinical care for the individuals to the formation of MCOs (managed care organisations) that either own or contract for a wide range of medical and social support services”. Thus the World Health Organization’s definition of integrated care (cited by Fulop, 2008) as “a concept bringing together inputs, delivery, management and organisation of services related to diagnosis, treatment, care, rehabilitation and health promotion” focuses on the organisation of the delivery system.

Ham *et al* (2008) identify four types of integration that are relevant for the current debate in the NHS:

- the integration of GPs and other primary care professionals into a primary health care team
- the integration of the primary health care team with other community-based health professionals
- the integration of this community-based team with social care
- the integration of this health and social care team with hospital specialists.

Traditionally the focus in the NHS has been on ‘horizontal integration’ (between health and other care professionals working together and between

bringing different providers together in mergers) and on integration between health and social care. In England the relationships between primary and secondary care have often been derived from a market-orientated model of purchaser and provider. Fulop (2008) points out that integration can also be used to describe attempts to bring together the funding and delivery of health care; the organisation of the NHS in Scotland, Wales and Northern Ireland is based on this conceptual model.

American approaches to integration are usually based on a different conceptual framework, which seeks to respond to both potentially perverse incentives in the operation of the health insurance market and the fragmentation in the delivery system, which has evolved over many decades. Thus in the US, integration is often closely associated with the development of managed care, though it would be incorrect to see the two as synonymous.

Managed care is an umbrella term used to describe a wide range of different models of care covering both health care insurers and providers. The US National Library of Medicine (2008) defines managed care as “health insurance plans intended to reduce unnecessary health care costs” while Porter and Teisburg (2006) say that the original idea of managed care was that “a primary care physician close to the patient would ensure that the care delivered was neither too much nor too little, involved appropriate specialists and reflected individual patients’ needs and values” (p.76).

Box 2: Managed Care**Health insurance vehicles**

- Health maintenance organisation (HMO)
- Preferred provider organisation (PPO)

Healthcare delivery vehicles**1. Physicians**

- Solo practice
- Independent practice association (IPA)
- Group practice

2. Hospitals

- Physician hospital organisation (PHO)
- Integrated payer–provider system

Box 2 sets out the key programmes that are usually seen as part of managed care. The main vehicle is the health maintenance organisation (HMO), which is an insurance product that uses pre-paid capitated payment to a physician or group of physicians (usually combined with a requirement that referral to a specialist is made by a PCP) so they are often linked with group practice or independent practitioners associations (IPAs). Enthoven and Tollen (2004) call this a “delivery system HMO” in contrast to the “carrier model” where the insurance company contracts with a network of providers (a virtually integrated model). Preferred provider organisations (PPOs) are another insurance product that is more likely to use negotiated fee-for-service payments with a specified network of physicians and hospitals and so have a much weaker association with providers seeking to deliver integrated care.

The managed care insurance sector has often been associated with particular models for organising the delivery system. Because most physicians in the US are self-employed and work alone or in small partnerships – 48 per cent work in one- or two-handed practices – managed care is often

linked with organisations that bring physicians and hospitals together. One option for physicians is employment by a group practice – either single specialty or multi-specialty – but only one per cent of doctors work in a group of more than 150, though some self-employed physicians have grouped together to form independent practice associations (IPAs). Large group practices often own and run hospitals, creating a model called physician hospital organisation (PHOs), but these remain relatively unusual as more often doctors will have admitting privileges to a hospital that provides inpatient care to their patients.

The models of delivery system associated with managed care are often seen as integrated systems but the concept of integration here is very different from that in the UK. Bazzoli *et al*'s (1999) typology of integration focuses on the relationship between the three key parties in the American health care systems – the payers, the physicians and the hospital sector. Integrated systems are seen as those that bring together two or three of these parties. Many integrated systems bring together hospitals and physicians into a single organisational form, such as the PHO. These are well placed to win contracts from HMOs and PPOs but they will treat patients who have traditional indemnity insurance, both from employers and from the government programmes. Other integrated systems, such as Kaiser Permanente, bring together all three parties to create a single system of payer, hospitals and physicians.

In practice there can be major financial and legal barriers to doctors and hospitals seeking to work together to provide integrated care, which has led Burns and Muller (2008) to make an important distinction between economic and clinical integration. The former is focused on the financial arrangements that bind parties together to maximise profit or income, while the latter is a range of tools through which hospitals and

doctors work together to improve patient care and population health. The so-called ‘Stark’ legislation concentrates on the financial arrangements and limits the ability of a physician to refer a patient to a medical facility in which the doctor has any financial interest, including receipt of any payment from the facility. The Federal Trade Commission seeks to promote clinically integrated networks, which they define as “an active and ongoing program to evaluate and modify practice patterns by the network’s physician participants and creates a high degree of interdependence and cooperation among the physicians to control costs and ensure quality” (FTC 1996). Several networks have had to spend millions of dollars to demonstrate that they meet this definition.

Thus Bazzoli *et al* (1999) draw a distinction between systems and networks – a system has some common ownership between at least two of the three components and thus is “vertically integrated” while a network is an affiliation of separate organisations committed to working together and uses contractual mechanisms to create “virtual integration”. Burns and Pauly (2002) reviewed the creation of “integrated delivery networks” in the US. They looked at horizontal and vertical integrations in the hospital sector and concluded that they generally failed to improve economic performance. During the 1990s there was significant merger and takeover both horizontally between hospitals and vertically between hospitals, physician group practices and insurance companies to create HMOs.

The development of integrated systems does not happen in isolation but is also the consequence of specific socio-economic, political and regulatory forces. These drivers are crucial in setting the context for different models of integration and help to explain why certain parts of the US have a concentration of integrated systems. The cluster of systems around California has developed in response to the dominance of the HMO insurance

product and because of the pioneering work of Kaiser Permanente, which grew out of an extensive occupational health scheme set up in the 1930s (Smilie 2000). The state has set up a specific regulatory framework for managed care and passed legislation that practising physicians can only be managed by qualified physician leaders. The Pacific Northwest has a similar long history of group practice and managed care while in New England a different history and market structure also led to a sizeable managed care sector and a pattern of strong physician involvement in both academic and non-academic hospitals.

Minnesota and Wisconsin also have a number of integrated health systems based on both managed care insurance products and on physician group practice. These states have strong traditions of settlers from Scandinavia and northern Europe bringing with them a model of social health insurance. Group physician practice developed in primary care settings to support rural and urban communities while the Mayo family founded their hospital in Rochester, Minnesota at the end of the 19th century. Doctors who had worked at the Mayo Clinic moved on and set up similar systems in other states, but the local political context was also an important factor in the development of integrated models. For example, in Minnesota only ‘not for profit’ insurance companies are allowed to provide coverage.

There are some important issues in the UK where the American experience offers little insight and the lessons from Europe and Canada may be of greater interest. There has been a vigorous debate in America over the past couple of years about the creation of ‘medical homes’ or ‘advanced medical homes’ which make the primary care physician responsible for the coordination of care for a designated ‘panel’ (or list) of patients. However, the model of GPs working as part of a multidisciplinary primary health care team has deep roots in the NHS. Partnership and

integrated working in the NHS with non-health partners also has a long – though often difficult – history, whereas the American focus has been on developing transactional systems to improve the transitions between different care settings, often called “hand-offs” (Naylor 2007).

There have been discussions in both the UK and the US about whether it would be helpful to produce an ‘integration index’. In the US a private consultancy company called Verispan (2008) has produced an annual assessment of the 100 most integrated delivery networks, focusing on hospital–physician networks. Although their precise methodology is confidential, they seek to combine performance on a number of indicators and various measures of integration to produce a ranked list of networks.

This and similar discussions illustrate a crucial issue that is essential for all conceptual models of integrated care. Integration is not a goal in itself but is a feature frequently associated with the delivery of high-quality care. This is important to remember in the subsequent discussion of three areas (governance, risk management and IT) where there are lessons for the NHS from those American health care organisations that seek to deliver an integrated service. Specific initiatives of interest to the UK are also developed by organisations that place little priority on delivering an integrated service. However, there is a body of reviews and reports which demonstrate that the integrated organisations explicitly and systematically seek to introduce innovations and service improvements that increase the coordination of both care and partnership working between health professionals. Whether this is because they are committed to high-quality care rather than specifically focused on delivering integrated care is a theoretical question because, as shown below, their definition of high-quality care includes integration.

INTEGRATED GOVERNANCE

Integrated care challenges traditional models of organisational governance because it requires individuals, teams and organisations to work across boundaries. A conventional definition of corporate governance is “the system by which business corporations are directed and controlled” (OECD 2004). This model has accountability and responsibility aligned as individuals, teams or organisations are held to account for their own performance. Most governance systems are designed to hold the component parts of the organisation to account for delivering the key corporate goals. Even within a balanced scorecard approach, the focus is on delivering a series of functional goals in areas such as finance, customer satisfaction and human resources.

In the successful American integrated health care systems, there are different models of integrated governance where these hierarchical control systems are complemented by horizontal mechanisms of partnership working. However, the prime focus of the integrated governance systems in these integrated systems is not to ensure integration at any price but to ensure that the organisation is successful; integration is a key component of that success.

These systems have developed ways of ensuring teams and individuals deliver integrated care within the core organisational accountability systems. Rarely are there specific targets or rewards for ‘integrated delivery’, or is it a dedicated domain within the performance management system or executive scorecard. This is because the recruitment, induction

and continuous development of staff focuses on ensuring staff understand how to work as part of an integrated system and it is the role of local physician and administrative leaders to demonstrate the central role of integration in delivering the specific service and financial goals. If there are problems with an individual’s understanding and behaviour, then this would be seen as a weakness in the way the organisation had developed the member of staff and further support would be provided. Integrated working, especially between primary and specialist care, is assumed to be the approach that clinical and administrative staff adopt to do business.

The network models have less developed governance systems and generally have fewer mechanisms to develop the cultural aspects of effective governance, but the comparisons can be illuminating for the UK. From both the systems and the networks, there are four potential lessons for ICOs about developing integrated governance in the NHS:

1. A diversity of approaches to governance among ICOs can enable the development of locally sensitive and practical governance structures. However, all successful approaches are built upon strong clinical leadership and robust management processes through the organisation. Delivery of high-quality integrated care requires the basic building blocks of high organisational performance to be in place.

Empirical studies do not reach any definitive conclusions about the effectiveness of specific

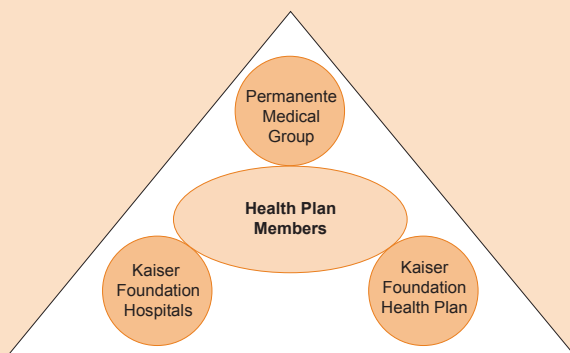
organisational structures and governance mechanisms in enabling the delivery of high-quality integrated care. Tollen (2008) notes, in her review of the literature on physician groups, that it is unclear which organisational features are causally linked to high-performance integrated delivery but the research shows two correlations. Firstly, organised medical groups outperform IPAs and single-handed medicine on quality process measures, but the difference is

clearer for preventative health rather than chronic disease management measures (Freidburg *et al* 2007 and Gillies *et al* 2006). Secondly, where physician groups are affiliated with a hospital or a health plan, they have lower costs and are more likely to use the care systems and process that should lead to better outcomes (Sterns 2007).

However, policy analysts and commentators have looked at high-performing organisations across the US and developed a number of descriptive

BOX 3: DIFFERENT STRUCTURES TO ENABLE INTEGRATED WORKING

Kaiser Permanente (KP) is composed of three legally separate bodies. The doctors are employee partners of a regional Permanente Medical Group, which is a for-profit company. This model has developed partly because California state law that requires practicing doctors to be managed only by other physicians. The Health Plan and the Hospitals Foundation are two not-for-profit foundations with one board of directors and management structure. As all three parties have agreed to work almost exclusively with each other, they operate as an integrated system.



Source: GRIPA

Health Partners Minnesota provides a similar range of services to KP under a single organisational structure, but it is a member-governed not-for-profit company with the board of directors voted in by the membership of the health plan.

Hill Physicians' Group is an independent practice association (IPA) in Northern California which is open about its ambition to compete with Kaiser Permanente but through using a network organisation (McDermott 2008; Woo and Van Duren 2008). It is owned and led by physicians but with an exclusive contract with a management company called PriMed. PriMed is contracted to run the business model for the IPA and is paid between nine and eleven per cent of the IPA's capitation income. The IPA holds capitation contracts with health plans and negotiates its own payment rates with physicians. Two of the key features of the organisation are the strong target culture, which is reinforced by a pay-for-performance scheme that increases PCP remuneration by an average of 30 per cent, and the requirement for physicians to produce and follow clinical guidelines.

Greater Rochester IPA (GRIPA) is an IPA in Rochester, New York State, which brings together 770 independent physicians. It has responded to the decline in income from HMOs by developing a different business model that focused on providing a more integrated model of care. They developed 'GRIPA Connect' which is a programme of clinical integration focusing specifically on using IT and care management guidelines to bring together office and hospital care with diagnostics and therapeutics (Nielsen and Lange 2008).

classifications of different models of integrated organisation. The Appendix summarises four recent publications, all of which identify the large and medium-sized integrated payer–provider delivery systems as the most tightly integrated model; Box 3 describes the governance arrangements in two such systems.

However, the ICO pilots in the NHS will be significantly smaller than these systems and, because the usual model of general practice in the UK is of independent contractors working in small groups, there is also important learning from the models of integrated governance that are being considered by networks of providers. American commentators describe a range of different governance mechanisms that are used to bring together independent providers to improve the coordination of care for patients and the partnership working between health professionals. At the heart of effective integrated governance is the need to have accountability for performance and thus Shortell and Casalino (2007) propose that “accountable care systems” should be clearly identified. These are “entities that are able and willing to do two things: first implement organised processes for improving the quality and controlling the costs of medical care; second be held accountable for results” (p.3).

ICO pilots will vary in their structure but they are more likely to be similar in structure to some of the network models, especially the models of independent practice associations (IPAs), which enable self-employed doctors to work together. Although some of these network organisations are focused on negotiating contracts with health plans rather than on improving the quality and organisation of clinical services there are pockets of excellent practice, two of which are briefly described in Box 3.

2. It is important to look beyond the governance structure to see what enables these organisations to deliver integrated care. A second potential

lesson is **that governance structures are only truly effective at enabling integrated care if they are combined with a culture that prompts the delivery of integrated care.**

In looking at the four integrated payer case studies (Kaiser Permanente (KP) North West, KP Colorado, Health Partners and Geisinger), the cultures of the organisations showed many similarities that were crucial to the successful delivery of integrated care to their members. The senior management and medical culture focused on the concept of integration as part of the ‘cultural glue’ that defined the mission of the organisation and drove high performance. Managers and clinical staff working around the system all described three types of integration that were crucial in helping the system improve its performance – the coordination of care for the individual patient; the integrated working of different physicians; and their teams and the integration of payer and delivery system (see Box 4).

However, there are a number of important failures, which are less frequently explored. Gitterman *et al* (2003) show how the Kaiser Permanente model was dependent on a set of wider socioeconomic and political factors being in place to enable the internal cultural drivers and aligned incentives to be successful. Sidorov (2003) documents the failed attempt to merge the Geisinger system with an academic medical centre, because of the cultural differences between the two organisations.

Integrated payer systems have a strong and common culture of ‘integrated governance’ which underpins the different integrated governance structures that have evolved around the US. Though the network organisations may aspire to have many cultural features that enables integrated governance, their business models require a different approach. In Northern California, senior leaders in the three main

BOX 4: CULTURE AND INTEGRATED GOVERNANCE

The culture supporting integrated governance in the case studies had four key characteristics. Firstly, there was a commitment to excellence – a desire and ambition not just to improve but also to be among the very best. Secondly, integration led to collective accountability for performance. The systems had a strong chain of accountability through the organisations and there was little evidence of blaming others for an inability to deliver. Thirdly, a commitment to the health of the membership was crucial for all four organisations even when, as with Geisinger, it had been introduced in the past decade rather than being part of the organisation's history. Fourthly, there was a partnership between physicians and administrators: interviewees would refer to other types of organisation they had worked in where lip-service was paid to this partnership but that in this role, it was real and genuine.

The four organisations also had some important similarities in how they related to the external world. There were two different, but related, external marketplaces that were crucial to the organisations and helped shape the internal culture. The first marketplace was local, where

employers and state government agencies were key players. The goal for the system was to maximise its market share and the currency was membership numbers, which were driven primarily by price rather than quality. For an integrated payer system insurance companies, other medical groups and hospital networks were all competitors for different parts of the business. The second marketplace was a national and international market where the currency was ideas and innovations and the competitors were other integrated systems who have international reputations (though they may not be associated with a health plan as are the Mayo Clinic and academic medical centers). There is not direct competition for members but the goal is to enhance the system's reputation among policy foundations, academics and federal government by driving excellent performance. In all the case studies, the first marketplace tended to shape the specific organisational structure while the second was more important in driving the culture of the organisation. This may help explain why integrated payer systems look different but have much in common.

networks that compete with Kaiser (Hill Physicians, Sutter Group and John Muir Group), all express their desire to copy the perceived strengths of Kaiser in creating an integrated system, though they want to adapt this to their own organisational model.

3. The third possible lesson is, when there is a network of partner organisations working together, there needs to be clarity about who is responsible for ensuring the delivery of integrated care. Some commentators suggest that new intermediary organisations are created to establish and coordinate integrated working between the existing parties, while others favour

designating an existing organisation as responsible for ensuring integration.

'Value-based purchasing' is a widely discussed concept in the US and is often seen as the vehicle through which payers can exert greater influence and enable a more coordinated pattern of health care purchasing and provision in a locality. Silow-Carrell and Alteras (2007) review the work of coalitions of payers that have been created to create collective leverage over the providers through using the tools of 'value based purchasing'. In Massachusetts the intermediary is a state entity to use the leverage of health insurance for state employees while in California,

the Pacific Business Group for Health is a coalition of employers which not only undertakes collective negotiations with health plans and providers, but also has established a set of quality and patient safety metrics used to drive up standards.

The alternative approach is to designate an existing organisation accountable for ensuring that integrated care delivers tangible benefits. Berwick *et al* (2008) propose an “integrator” organisation that accepts responsibility for the delivery of the “Triple Aim” of improved experience, improved health and reduced cost for a defined population. They are explicit that this role could be fulfilled by an insurer, a group of primary care physicians or a hospital but note that it is probably most clearly seen in an integrated payer–delivery system such as KP.

Although this proposal aims to address the weakness of the accountability system in the US, the Triple Aim project does have some potential lessons for the NHS and at least one primary care trust (PCT) has already signed up to the programme. Berwick *et al* (2008) are clear that the integrator must be a single organisation and not what they call “a market dynamic” so it can “induce coordinative behaviour among health service suppliers” (p.763). Given the large potential for confused accountability in integrated working, it is important that a single organisation is clearly in the lead though this must be supported by a collaborative model of leadership. They also distinguish between “micro” (patient- and family-level) and “macro” (system-level) integration, arguing that the integrator needs to operate at both levels, with each level of integration supporting the other.

4. Corporate governance systems in integrated organisations operate in a wider regulatory environment that is designed for fragmented delivery systems. Thus governance systems in integrated organisations need to be able to meet both

the internal (integrated) and external (non-integrated) requirements. In America the corporate headquarters function in integrated systems and networks actively manage relationships with the external environment to ensure that the unusual features of integrated systems does not lead to disadvantage. The complex regulatory framework in the US has federal and state components; both sets of requirements focus separately on individual elements within the delivery system and make little allowance for the special characteristics of integrated delivery. There is active regulation of the hospital and insurance sectors, though much less regulation of the physician’s outpatient office and day care sectors. Thus the regulatory framework is based on an implicit assumption that these activities are separate. ICOs within the NHS are going to work across the traditional boundaries used by both performance management and regulatory systems and so the corporate level governance structure will need to look two ways – interpreting the frontline integration model for the external environment and translating the requirements of the system to the specific local model of integrated working. Care trusts have encountered similar challenges when they have had to provide information and evidence to both the Healthcare Commission and the Commission for Social Care Inspection, and so the new Care Quality Commission has an opportunity to create a regulatory framework that assesses integrated delivery.

In summary, the key lessons from the US are that it is appropriate and necessary to develop a variety of models of integrated governance structures. Integrated structures are not enough, as they need to be supported by a culture of integrated governance, and the approach to integration in the model of care delivery and the model of governance need to be aligned and to reinforce each other. Thus the American experience is that integrated governance,

underpinned by the purposeful management of culture, creates a strong set of non-financial incentives and drivers to deliver integrated care. The American experience though also has some important lessons about the role of financial incentives in promoting integrated care.

RISKS AND INCENTIVES

American integrated health care systems have developed sophisticated approaches to risk management and the use of incentives. The integrated payer systems usually seek to align incentives within their organisation to minimise risk (a strategy of vertical integration) while the integrated networks tend to develop contracts to share and transfer risk between health plans and providers (virtual integration).

Both approaches have potential lessons for ICOs and individual pilots will need to decide how to balance the ‘risk minimisation’ and ‘risk-sharing’ approaches. There is a spectrum of models ranging from the ICO operating like a medical group or IPA working under contract for a PCT (greater virtual integration) to an ICO behaving like a payer running or in partnership with the providers (greater vertical integration). However, in America the balance of ‘make’, ‘buy’ and ‘ally’ decisions is not simply separated between the payer and provider. Payers often develop in-house teams, for example in disease management, and providers contract and partner with other providers. Thus along the spectrum, ICOs can hold “firm budgets” which “in some cases... could include most of the care required by the population” and they “will choose whether to provide all of the pathway themselves (for example, by incorporating different clinicians within their teams) or to subcontract provision to others” (Lewis and Colin-Thomé 2008), though the balance will vary.

In making decisions about balancing the risk of

providing in-house and delivering with a partner/contractor, there are four aspects of payment reform that offer potential lessons for ICOs.

1. More sophisticated risk adjustment methodologies for capitated payments are being developed which offer potential lessons for budget setting in ICOs. One of the prime concerns about HMOs has been patient selection (‘cream-skimming’) and thus there has been a drive to ensure fair reimbursement for higher-risk patients. With the introduction of Medicare Advantage in 1997, the Centers for Medicare and Medicaid Services (CMS) started to develop different models of capitated funding to pay private insurers for covering those over 65. The risk adjustment model is undergoing constant refinement but it is based on about 180 hierarchical condition categories (HCCs), which group the diagnoses (not procedures) of patients from hospital admissions and physician office visits (Pope *et al* 2004). Each HCC has a reimbursement attached to it and the model includes cost consequences of the complexity of multiple HCCs identified for a single member. However, there has been some controversy around the funding levels within Medicare Advantage – for example Medpac’s (2007) analysis would suggest that doctors working with capitated payments should be able to deliver services at lower cost, yet the capitated payment has run to 112 per cent of the comparable fee-for-service payments.

Though this does not undermine the value of the methodology, it demonstrates that greater

sophistication does not automatically ensure improved value for money. In the US these methodologies have been used to allocate resources to the payer function within an integrated system, but, as they cover only one of the payer's sources of income, it is less clear how they could be used to help the payer function set internal budgets for its providers. However, within the NHS there is essentially a single income stream from the Department of Health via PCTs, and so these tools are potentially powerful, as they can assist in setting an appropriate budget for integrated payer-provider functions. Thus the Department of Health is reviewing practice-based commissioning budget-setting methodologies (DH 2006) and the principles behind HCCs could be adapted for payment to ICOs in a UK context, just as the approach pioneered by the use of diagnosis-related groups (DRGs) was adapted to the healthcare resource group (HRG) system of hospital reimbursement.

2. The balance between the 'risk minimisation' and 'risk transfer/sharing' approaches needs to be reflected in the payment systems used to incentivise the delivery of integrated care.

In the US the debate about the advantages and disadvantages of the different payment systems associated with vertical and virtual integration continues. However, the reviews of the empirical literature are far from conclusive about the impact of payment systems in incentivising physician and organisational behaviours. The literature indicates that the core payment system does not have a significant effect on behaviours. Miller and Luft (2002) and Chuang *et al* (2002) have looked at published studies on the impact of the HMO insurance payment model and the pre-paid group practice payment model for physicians respectively. Both papers conclude that neither payment system has a detrimental effect on quality but neither do they have a significant

beneficial effect. Miller and Luft conclude that "quality-of-care results in particular are heterogeneous, which suggests that quality is not uniform – that it varies widely among providers, plans (HMO and non-HMO), and geographic areas" (p.63).

Over the past decade there has been a focus on varying payments at the margin to incentivise particular behaviours among providers. In addition to the basic fee-for-service or capitated payments, hospital and physician providers are eligible for additional targeted 'pay for performance' (P4P) payments for delivering a specific set of pre-agreed performance measures, usually quality process measures. Christianson (2007) reviewed the literature on physician P4P schemes and concluded that the controlled studies which compared P4P against non-P4P performance "provide little evidence that financial incentives improved quality of care" (p.11) while every evaluation of a specific P4P scheme "found improvement in one or more quality indicator" (p.12). Of particular interest to integrated care have been the physician P4P schemes to improve the coordination of care (see Box 5).

P4P schemes may have a role in ICOs but the research evidence is based mainly on fee-for-service systems and thus a key requirement is the alignment of the incentives between the funding model used to set ICO budgets and any 'variable/marginal' payment systems. For example, Health Partners uses a capitation model but it decided to use the incentive of withholding a marginal payment to improve patient safety. It was the first plan to not pay hospitals for 'never' events, such as wrong-site surgery or preventable infection. Within the Health Partners culture, this 'risk transfer' approach was accepted but within Kaiser Permanente, all the regions decided that their model, where risk is internalised, to use service improvement and performance management approaches to improve patient safety.

BOX 5: USING ‘P4P’ TO INCENTIVISE IMPROVED COORDINATION OF CARE

P4P has been used to incentivise physicians to implement specific models of integrated care, especially “medical homes” in primary care (Beal *et al* 2007). For example, the Bridges to Excellence programme (2008) has a bonus of \$125 per patient registered with a primary care practice which meets the criteria for designation as a medical home; these focus on care coordination and care management. The Geisinger Health Plan pump-primed the creation of ‘advanced medical homes’ among primary care physicians employed by the Geisinger system by paying for support staff and also funding a performance-related payment to physicians for focusing on the coordination of care (Pierdon 2008; Paulus *et al* 2008). In the first year of the pilot there was a marked fall in hospital admissions and a rise in admissions to nursing home facilities, though lengths of stay have fallen. However, the changes may be as much a result of the Geisinger system’s strong delivery culture as the impact of payment incentives.

3. Not only do ICOs need to decide their approach to risk, they also need to ensure that they can manage income from different sources and payment systems to properly fund and incentivise the delivery of integrated care.

In the US most providers receive income from a number of different sources that both use different funding principles and have different remuneration rates for the same activities, based on contractual agreements with specific customers. In the NHS the tariff and other national payment systems create essentially national prices with minimal price competition. However, there are a range of different funding streams using different models of remuneration

that feed into the delivery of integrated care. The interactions between: funding for PCT and ‘below PCT’ commissioning (through some model of person-based allocation); GP remuneration (including the P4P element of the Quality and Outcomes Framework which has a strong focus on long-term conditions management); any proposals being developed as part of the Commissioning for Quality and Innovation Scheme (DH 2008); the funding streams for social care; all these need to be managed locally.

The need to align incentives and funding models has led several American commentators to actively consider ‘gainsharing’: sharing of the financial benefits from improved performance. Burns and Muller (2008) point out that current gainsharing projects tend to focus on narrow financial goals such as sharing the benefits from improved productivity. However, there is no reason why rewards could not be based on a wider set of improvements, such as those resulting from delivering an integrated model of care.

Many commentators propose new payment systems for different types of health care to fairly remunerate high-quality integrated care delivery. For example, a regional project in Pennsylvania proposed different payment systems for major acute, chronic, minor acute and preventative care (Miller 2007). The systems have been designed to minimise the perverse effects of boundaries between each model and the proposed approach for chronic illness is that a “single, periodic Comprehensive Care Payment should be paid to a group of health care providers”, which would cover all care except for acute hospital and long-term nursing care. The payment would be adjusted for patient characteristics and would also vary depending on performance on quality, utilisation and satisfaction metrics. Patients would also have a tiered co-payment system to encourage them to use high-quality/low-cost providers and to adhere to care plans.

Few specific schemes have been implemented and are in use, though two examples are provided in Box 6.

BOX 6: INNOVATIVE PAYMENT SCHEMES IN INTEGRATED SYSTEMS

The Diamond project in Minnesota combines service improvement with payment reform (Sakowski 2008; Oftedahl 2008). It is a collaboration between all the health plans and key providers in Minnesota which has created a redesigned care model that all providers will use for treating depression. The model is funded through two new payments which replace the old fee-for-service charges. There is a periodic (or capitated) payment to medical groups for the number of patients with depression on their panel and an episodic payment based on single billing code that bundles together all professional contacts irrespective of the health professional who sees the patient. This has been created at no additional cost and an evaluation of the impact on the quality of care is in progress.

The bundled payment model adopted by Geisinger System is a further example. It is called Proven Care (Bloom 2008; Paulus *et al* 2008; Casale 2008) and though the only completed bundle is for cardiac artery bypass graft surgery (CABGs), the service redesign work has been completed for diabetes and cardiac disease. An interim payment model is in place, whereby PCPs who deliver all the components of the redesigned service bundle can receive a ten per cent bonus. For CABGs a radical 'pay for outcome' model has been developed which has one payment for all hospital and physician services that also covers treating any complications within 90 days. Work is in hand to develop a similar 'bundled pay for outcome' for the community-based programmes.

4. ICOs will need to develop robust internal financial systems to track actual costs against planned levels of expenditure, so the internal financial planning and control mechanisms within ICOs are going to be as important as they have become within foundation trusts (Monitor 2007).

Service line management has been developed by hospital-physician integrated systems to manage risks and incentivise a focus on productivity.

Charns *et al* (2000) conclude that the service line structure that integrates bundles of service across sites is frequently used in integrated delivery networks, while Burns and Muller (2008) conclude that there is good evidence that service line structure promotes physician-hospital economic integration, not least because it can lead to service line joint ventures. Even in integrated payer systems, such as Geisinger and Health Partners, the service line accountabilities are focused on aligning hospital and specialist physician incentives and rarely extend into primary care settings. ICOs have an opportunity to develop internal systems that go further than the US approaches. For example, they could develop the 'programme budgeting' methodology to produce 'real-time' reporting of the expenditure against plan in the whole range of care settings, creating a focus on the productivity and value of different parts of the care pathway.

Overall the operation of the health care insurance and delivery markets in the US mean that risk assessment and management is highly sophisticated, and a wide range of different incentives are used to influence the behaviour of providers and patients. In addition to the lessons from integrated payer systems where incentives are aligned, ICOs can learn about financial risk adjustment and financial payment and control systems.

IT AND INTEGRATION

In the US, investment in health IT is a central component of clinical integration. This is partly because investment in clinical information systems outside hospitals has historically been very low. Jha *et al* (2006) concluded that, in 2005, only 24 per cent of physicians used electronic health records in an ambulatory outpatient setting.

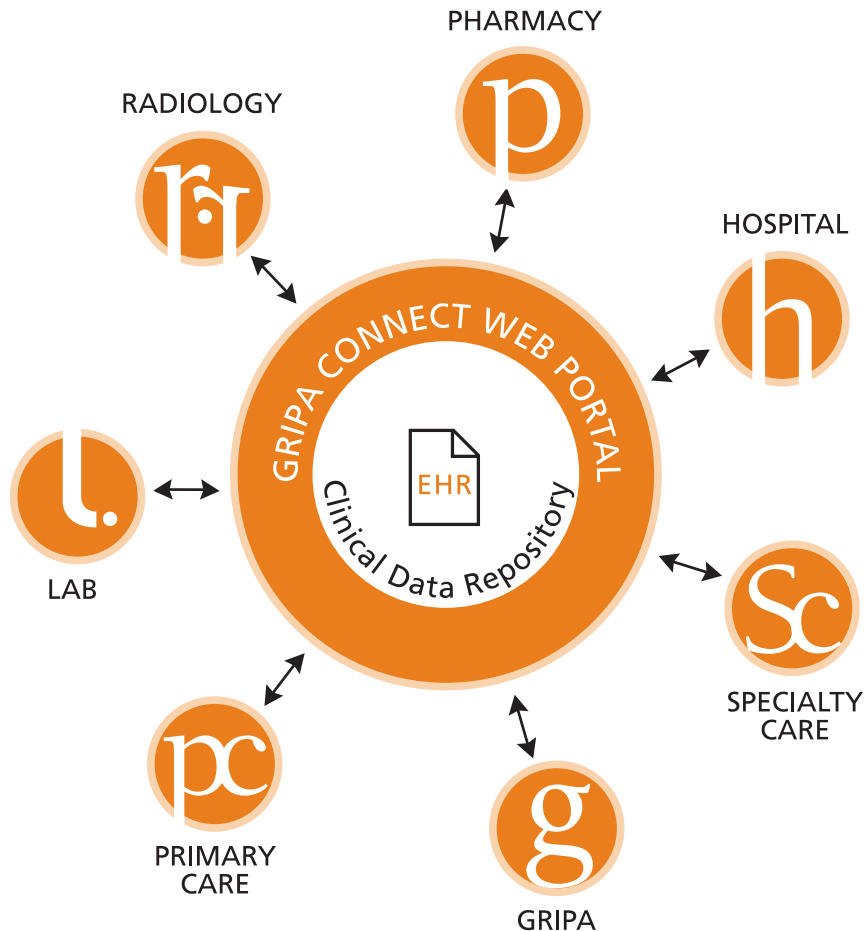
Although within the large integrated payer systems, staff have developed local IT systems to support their integrated pathways and disease registries in the past decade, the systems themselves have decided to make significant capital and revenue investments in large comprehensive IT systems. The four case studies had selected the same provider (Epic Systems), which offers a suite of products that support both integrated delivery between ambulatory and hospital settings and link across to the insurance products. The sites all saw the IT investment as facilitating a greater degree of integration across the delivery system and frequently described IT as a “transformational tool” (Liang and Weissberg 2006; Walker 2008).

In the US, integrated IT systems are essential in enabling the integration of care, integration of services and integration of structures. Although there are pockets of excellent practice in the fragmented FFS medicine system, these systems tend to be hospital- or health plan-focused and rarely link out-of-hospital and hospital records, with little adoption of the IT tools that support the management of population health, such as disease registries.

The US experience of integration in both systems and networks has four lessons that may be relevant to the NHS.

1. There are alternatives to large comprehensive IT systems that work well in network models of integration. The level of investment by the integrated systems is enormous but integrated pilots in the NHS that wish to push ahead could explore other approaches to bringing together the information from different systems. This approach has been successfully implemented in some of the physician networks. Greater Rochester IPA decided that a full electronic health record (EHR) was not required to develop their network model of clinical integration. It has developed a web portal called GRIPA Connect (see Figure 1), which provides patient information from across the network, provides prompts based on the IPA’s clinical guidelines and feeds back information on physician performance, which ultimately links into the P4P scheme (Nielsen and Lange 2008). Although the Stark laws (see p.12) mean that it can be difficult for IPAs and hospital systems to fund IT equipment for non-employed physicians, GRIPA has managed to establish a network with a tablet PC for every provider in offices of both private and hospital-employed physicians.

2. The prime IT focus must be on systems to improve the coordination of care. In both systems and networks the focus was initially on tools that improved the coordination of patient care and this engaged clinical staff so they led the IT implementation and innovation programmes.

Figure 1: Greater Rochester IPA Clinical Connect IT Programme

Source: GRIPA

During consultations, doctors could interact with a comprehensive set of hospital and ambulatory records of a patient's history, which was rarely possible outside the integrated systems and networks. There was an acknowledged problem about records for patients who went outside the system or immediate network but different solutions were being developed to address this – for example Geisinger is leading a Regional Information Exchange project covering 53 hospitals.

3. Integrated delivery systems are in the 'consumer information' business: all the health

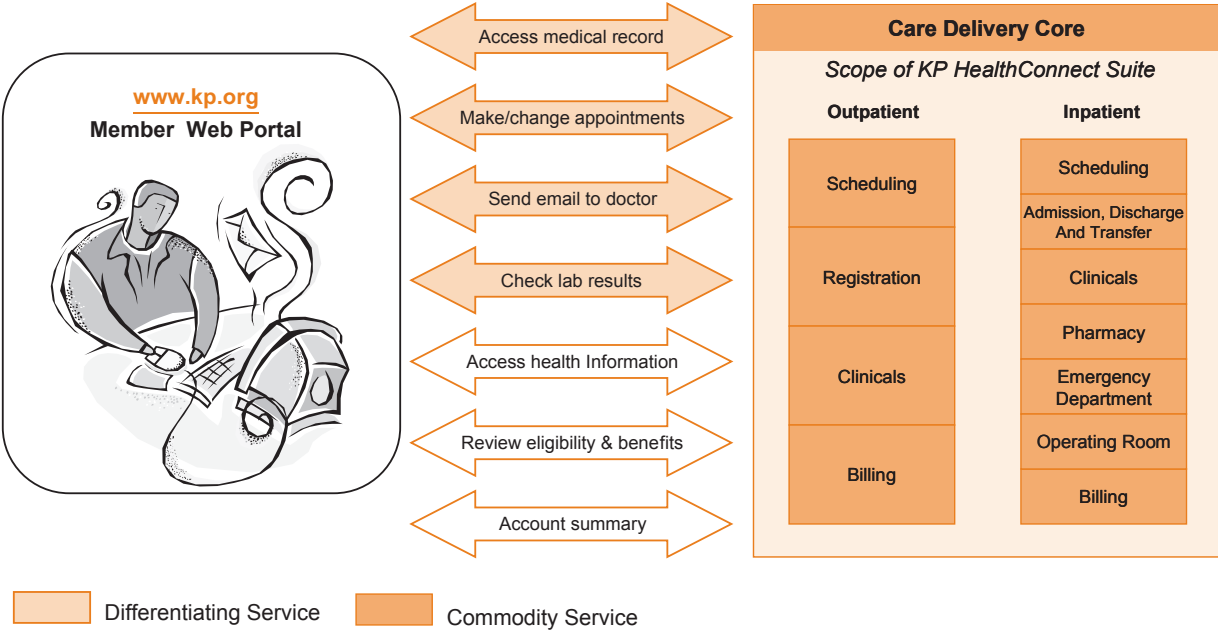
systems and networks had invested significant resources into providing health consumer information systems, most obviously through the creation of a 'MySpace' web portal for members of the integrated system (see Figure 2 for an example of the Kaiser Permanente model). Traditional health data was seen as being largely for health professionals to use in the management of care. However, in the large integrated payer systems patients had full access to their medical records and test results through the internet, could make or change appointments and were encouraged to communicate by email with their physicians

if this was more appropriate than booking a face-to-face consultation. Even in the network models, a web portal was an essential part of the offer to members and it was used to differentiate the integrated systems from the non-integrated models, where patients were offered either a health plan or a hospital-focused portal and associated record. Thus integrated systems have moved into a new business area – providing and managing information for their members and patients. Their competitors in this business are Google and other search engines just as much as the other insurers and providers of health care.

4. The systems also supported information for performance management: integrated systems had started to link the electronic health record directly into reporting management information. Fowles *et al* (2008) reported on five provider organisations which used their EHRs to directly produce quality-of-care indicators, some of which were complex composite measures.

The case studies included Health Partners, KP North West and Geisinger; indicators focused on measuring performance in community and integrated services. They concluded that not only does the speed and accuracy of reporting improve but more sensitive performance measures can be produced by linking EHRs to performance reporting. This happens both by converting free-text information in the patient record into a metric and by producing composite measures combining different domains. Again the integrated systems and networks are not the only locations that use this information, but they tend to be the pioneers in using technology and information across care settings to give a comprehensive picture.

Figure 2: Kaiser Permanente web portal for members



POLICY IMPLICATIONS FOR THE NHS

The US experience has been important in framing the debate on integration in the UK and so there are both instructive and cautionary lessons for the wider policy framework around integrated care in the NHS.

There is limited insight into the links between integration and commissioning – not least because few American health care organisations would use the term ‘commissioning’ to describe any aspect of their work. The ICO pilots will bring together in-house professionals with other contracted providers to deliver integrated care; thus in the NHS there will be a close alignment between integrated working and the development of PCT and practice-based commissioning. Although health plans and providers in the US have developed sophisticated tools to support activities associated with commissioning, such as needs assessment and procurement, they seldom have a comprehensive approach to matching health care and wellbeing services to the needs of the population. Halvorson (2007) describes the deficiency in purchasing skills in the US and proposes a new role within the American health care system called the Infrastructure Vendor (IV), which he describes as “the wholesalers setting up the megastore-equivalent environment that will be the context for individual consumers purchasing care and providers”. This would professionalise the purchasing of health care by “transforming the infrastructure and performance of care” and they would create “virtual integrated networks” to improve the operation of the delivery system. When compared with the ambition of the World

Class Commissioning programme, even this vision of a wider purchasing function is focused on transactional exchanges of money and services.

However, there are some further important lessons from the US at a policy level. Developing the capacity and capability of all the integrated care pilots to successfully deliver new care and business models is a major challenge, especially given the changes in funding levels for the NHS and social care over the next few years. American integrated systems and networks spend significantly more on administration than any part of the NHS and, though much of this is focused on finance and billing, the clinical teams are supported by substantial teams focused on quality improvement and organisational development.

There is no strong federal or state policy about promoting integrated care in the US and the American integrated systems and networks often feel that they face an uneven playing field when competing in the health insurance market and with other health care providers. Both legislation and regulation rarely consider the different organisational arrangements that underpin integrated care in the US. The new regulatory regime in the English NHS needs to consider how to assess the performance of integrated care pilots that cut across the traditional organisational forms and ensure that the innovative and diverse structures are not disadvantaged simply for being different. One solution might be to regard the delivery of integrated care as such an important feature of high-quality care that it should be a specific element within any assessment process.

However, the literature is not definitive either on precisely which aspects of integration should be highlighted, or on the causal links between integration and wider care. There are similar issues with the relationship between ICO pilots and the new Competition Panels as there may be situations where specific ICO pilots need to be exempted by the panel to avoid the issues raised in the US by the Federal Trade Commission and the Stark laws.

The backlash against ‘managed care’ in the US is often equated with a failure of integrated care systems and networks to offer choice to patients and members. Because choice policy in the England initially focused on ‘choice of provider’ at the point of referral for specialist opinion, the ICO pilots in the NHS might be seen as limiting choice. However, with choice becoming a right within the new NHS Constitution, there are two potential lessons from the US that highlight a wider role of choice alongside integrated care. Firstly, it is often argued, for example by Enthoven (2002), that the choice of whether to become part of an integrated system or network is the crucial choice in the US. Kaiser Permanente believe that the option for their members to move to another plan that offers a more conventional package, with greater choice of providers but less integration between the care settings, is crucial in stimulating them to innovate and offer competitive prices. It could be argued that the UK parallel would be to enable choice of integrated care organisation, through patients choosing which GP they register with. Patients may wish to travel for their primary care services in order to be part of an integrated organisation, but this would impact on the current framework for out-of-hours care and the responsibilities of PCTs.

Secondly, American integrated systems and networks have adapted their HMO products to enable wider choice by using consumer information techniques to understand what

their members really wanted. Integrated systems and networks in the US have pioneered the development of care management and self-care models as vehicles for this. Thus the integrated care pilots in England will want to engage with their patients, especially those with long-term conditions, to offer choices about care protocols and choices within the agreed pathways over treatment and providers that patients might want to make. They may need to challenge the conventional picture of purchasing and provision through the development of multi-disciplinary integrated care teams that bring together the skills of micro-commissioning such as of assessing individual need and risk, with the provision of preventative and intermediate care services to specific patients and service users.

CONCLUSION

The American experience of providing integrated care offers a fascinating ‘learning laboratory’ for the NHS and the ability of integrated organisations to innovate and quickly develop new radical solutions is striking. Although the drivers and the organisational context for integration are often different in the US, this spirit of innovation needs to be part of the development of the integrated care pilots in the English NHS. American integrated care systems have developed the vital building blocks of organisational success – excellent physician and administrative leaders who are passionate about delivering integrated care, supported by sound management. There are specific lessons on governance, risks and incentives, and health IT that build on these basics; these should help the NHS and the Department of Health to ensure there is a wide range of pilots exploring different aspects of integration. If the pilots are to be more than an interesting footnote in the history of the NHS, then they need to be radical and push at the existing organisational and statutory framework.

GLOSSARY

Providers

Independent practice association (IPA)

– a network of self-employed doctors (both single-handed and small group practices) who agree to collaborate in certain areas, usually contracting with health plans.

Primary care physician (PCP) – although definitions vary, in the American context this tends to include family physicians (who often have an internal medicine qualification), paediatricians, and obstetricians and gynecologists.

Physician hospital organisation (PHO) – a form of hospital ownership where a group of physicians own and administer hospital facilities.

Managed care organisations (MCOs) – a general term covering integrated systems and provider organisations that use capitated payment to accept and manage risk.

Medical home or advanced medical home – a system of organising primary care that has primary care physicians responsible for a panel/registered list of patients and ensures they are able to access a range of clinical and non-clinical support services to improve the management of the panel of patients.

Insurers

Health plan – a company providing health insurance to subscribers. Health Plans are often seen as the providers of managed care products.

Health maintenance organisation (HMO) – a type of ‘managed care’ insurance product that provides cover through a capitated payment to a provider. At their strictest, HMOs only allow access to specialists with the prior approval of the provider or plan, usually through a PCP (see opposite).

Preferred provider organisation (PPO) – a type of ‘managed care’ insurance product that is similar to an HMO but allows the patient/subscriber open access to a defined network of providers and specialists.

Funders

Medicare – the near-universal programme that provides wide coverage for people over 65. It is funded and administered by federal government across the US. Patient can choose to subscribe to an HMO version called Medicare Advantage, which is delivered through health plans.

Medicaid – the programme that provides ‘safety net’ health care coverage to the poor and other disadvantaged groups. It is usually funded half by federal and half by state government and administered at state level. It is often delivered through a contract with an insurance company or health plan.

Centers for Medicare and Medicaid Services (CMS) – the federal body that oversees Medicare and works with states to oversee Medicaid.

Payment methods

Fee-for-service (FFS) – the doctor is paid for each item of service delivered, usually at a rate agreed in advance.

Salary – physicians are employed and are paid for working a fixed period of time.

Capitation – the physician is paid a fixed amount per person to deliver a specific set of services to the patient.

APPENDIX: ATTRIBUTES AND MODELS OF INTEGRATION FROM RECENT AMERICAN PUBLICATIONS

Shortell and Casalino (2007) identify the following seven capabilities for accountable care systems. The first six are drawn from the Institute of Medicine's report *Crossing the Quality Chasm* (IoM 2001).

1. Redesign care processes
2. Make effective use of information technologies
3. Manage clinical knowledge and skills
4. Develop effective teams
5. Coordinate care across patient conditions, services and settings over time
6. Incorporate performance and outcome measurements for improvement and accountability
7. Adapt to change.

They identify five models:

1. **Multi-specialty group practice** – both groups which accept patients from multiple health plans (Geisinger, Intermountain Health, Mayo Clinic) and those that are exclusive to one plan (Kaiser Permanente).
2. **Hospital medical staff organisation** – fee-for-service physicians with admitting rights to a specific hospital. Fischer *et al* (2006) have analysed Medicare FFS and shown that doctors can be grouped around 4,800 primary admitting hospitals.
3. **Physician hospital organisation (PHO)** – a group of physicians own a hospital or group of hospitals and so may have an interest in developing clinical integration. There are 1,000 PHOs, but many have focused on financial and economic integration.

4. **Interdependent practice organisation (IPO)** – solo and small-group physicians work together with strong leadership and governance. Thirty-eight per cent of physicians are members of an independent practice association (IPA); these could form the basis for creating IPOs.
5. **Health plan–provider organisation/network** – IPOs would form partnerships with health plans, combining the plan's disease management and information base with the IPOs delivery system.

Berwick *et al* (2008) identify five functions for an 'integrator' organisation:

1. Partnership with individuals and families
2. Redesign of primary care
3. Population health management
4. Financial management
5. Macro-system integration.

Shih *et al* (2008) identify six characteristics of a high-performing delivery system:

1. Clinically relevant patient information is available to all providers at the point of care, and to patients through electronic health record systems.
2. Patient care is coordinated among multiple providers, and transitions across care settings are actively managed.
3. Providers (including nurses and other members of care teams) both within and across settings have accountability to each other, review each other's work, and collaborate to reliably deliver high-quality, high-value care.

4. Patients have easy access to appropriate care and information, including after hours; there are multiple points of entry to the system; and providers are culturally competent and responsive to patients' needs.
5. There is clear accountability for the total care of patients.
6. The system is continuously innovating and learning in order to improve the quality, value, and patients' experiences of health care delivery.

They reviewed four different models of delivery:

Model 1: Integrated delivery system or large multi-specialty group practice, with a health plan (examples Kaiser Permanente, Geisinger Group)

Model 2: Integrated delivery system or large multi-specialty group practice, without a health plan (examples Mayo Clinic, PartnersHealthCare)

Model 3: Private networks of independent providers, such as an independent practice association (IPA) or virtual network (examples include Hill Physicians and North Dakota network)

Model 4: Government-facilitated networks of independent providers (such as Community Care Network of California).

Tollen (2008) worked with the leaders of high-performing integrated delivery systems who suggest several characteristics that are key to their performance:

- Strong physician leadership. Many of the best-known integrated delivery systems and large multi-specialty medical groups were founded by strong and charismatic physician leaders.
- Organisational culture. Shared vision, values, and sense of mission around stewardship for both individual patients and populations is critical to performance.
- Clear, shared aims. Clarity of aims allows for meaningful performance measurement and encourages internal, transparent sharing of performance data. Shared aims also ensure that different parts of the organisation are not hampering

one another's attempts to improve quality and efficiency.

- Governance. As used here, governance refers to an organisation's ability to set goals purposefully and implement a plan to achieve them. Someone or something (for example a board of directors) can cause the organisation to act collectively and intentionally to improve quality or efficiency.
- Accountability and transparency. Accountability to employers and patients, coupled with transparency of information, can help improve quality of care. Research shows that groups with external incentives – financial or otherwise – for improving quality tend to score better on quality indices.
- Selection and workforce planning. In organised delivery systems, leaders can select providers for participation, excluding those who do not meet standards. Organised systems also can be more intentional about the mix of providers they include (for example primary vs. specialty care, physicians vs. ancillary providers), targeting them towards the population's health needs.
- Patient-centred teams. Multidisciplinary teams of providers may provide higher quality care than individual providers. As physicians organise and affiliate with other parts of the delivery system, their one-on-one relationships with patients can be leveraged to connect the patient to a team of providers and to the delivery system as a whole. Alternately, rather than being a key to the success of systems, teams may detract from patient-centredness (or the human scale of care), as the relationship with a single provider becomes less important.

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ACROSS THE POND – LESSONS FROM THE US ON INTEGRATED HEALTHCARE

Richard Gleave

Despite its single-payer structure, the UK's NHS has often struggled to deliver integrated care to patients. The recent Government announcement of a pilot scheme for integrated care provides an opportunity to experiment with new, radical approaches.

This report examines some of the specific lessons from the United States. It explains how integrated care operates 'across the pond', describing the four main types of integrated care organisation. These descriptions are complemented by suggested lessons for the UK's health system in areas such as governance, incentivisation and risk management, and the use of information technology.

Across the Pond – Lessons from the US on integrated care will be of interest to policy-makers, managers and researchers working in the field of health and social care.

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