Future Hospital Journal 2015 Vol 2, No 2: 132–6

Integrated care: demonstrating value and valuing patients

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ABSTRACT

Integrated care could be seen as an overarching strategy to encourage service change and redesign, rather than solely as a means of cost reduction. Indeed, evidence for the economic benefits of integrated care is equivocal, although many of its components have clear benefits for the quality of services received by patients. Given the financial challenge facing the NHS, integrated care may represent a useful methodology to encourage fundamental service redesign. This level of change is required if the health service is to adapt and survive in the face of significant fiscal challenges.

KEYWORDS: Healthcare, delivery, integrated

Introduction

Moves to increase the delivery of integrated care have gained increasing prominence at a policy and local level within the UK healthcare system over recent years.[1,2] Integrated care is seen increasingly as a panacea for many of the challenges currently facing organisations that are responsible for the provision of health and social care, which are primarily financially driven. The NHS has seen a freeze in real-terms funding, with a predicted financial shortfall of £30 billion by 2020.[3] For the 2014/15 financial year, it is predicted that the NHS will be in deficit for the first time in 8 years, to the tune of £550 million. However, this seems relatively minor when compared with the challenge facing social care, which has seen budget cuts of 12% over the past 4 years.[4]

The relationship between funding levels and quality of care has been debated at length. A recent systematic review concluded that around a third of 61 studies found higher cost to be associated with higher quality, a third found that higher cost was associated with lower quality or that the relationship was unclear, and a third found no significant association.[5] In many studies, the association between funding level and patient outcomes and experience showed only low to moderate clinical significance, and the designs of the studies reviewed were generally too simple to capture the complexity of the cost–quality relationship. However, recent events in the NHS suggest that, ultimately, funding does have a relationship with quality, as evidenced by the adverse outcomes at Mid Staffordshire Hospital that were attributed in part to cost cutting.[6] Moreover, as the cost bases of many provider organisations have now increased quite significantly in response to the Keogh review and safer staffing guidance from NHS England, the relationship between funding and quality of care may be tacitly recognised by UK policy makers.[7]

At the same time as it faces increasing budgetary constraints, the demands upon the NHS have increased. Over the past ten years, emergency admissions have risen by more than a third and bed days occupied by those over 75 years of age rose by two thirds,[8,9] but over the same time period, acute and general bed numbers have declined by 30%. One million of the 5.2 million emergency admissions a year in England are considered avoidable, yet the number of attendances at emergency departments is rising year on year.[10]

In the face of these challenges, healthcare organisations, commissioners and policy makers are looking at strategies to improve outcomes and the quality of care while reducing costs; integrated care has been proposed as one such approach.

What is integrated care?

Integrated care can be defined variably. National Voices, an organisation that represents patients, service users, carers, and families defines integrated care from a patient's point of view: 'my care is planned with people who work together to understand me and my carer(s), put me in control, co-ordinate and deliver services to achieve my best outcomes'.[11] At its most reductionist level, integrated care represents care that is coordinated between all those involved in the delivery of an individual patient's care, thereby reducing duplication, fragmentation and lack of ownership. However, true integrated care usually comprises a much wider range of components, including systematic and financial factors (Box 1; Fig 1).[12]

Different stages of the care pathway, for example primary and secondary care (vertical integration), can be integrated. Examples of this include polyclinics in Berlin for migraine treatment, where patients can consult the full spectrum of clinical and allied health professionals in one physical setting. Alternatively, integration may be between different providers or services delivering care at the same level; for example, there may be horizontal integration between community health and social care services, where there is the co-ordination of effort around a particular patient population. An example is the Esther project in Sweden, in which health and social care professionals within Jönköping County Council work to co-ordinate care around elderly patients.[13] There can also be both

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Box 1. What are the components of integrated care?[12]

- A defined population group
- Co-ordination of care delivery
- Shared outcomes framework that spans the entire care pathway
- Remuneration system that recognises a provider's contributions along the care pathway; risks and benefits are shared
- Common IT platform that allows data to be shared among all stakeholders
- Ability for patients to feel involved and take ownership of their care

horizontal integration and vertical integration when secondary providers work with one another and with primary and community care to treat particular disease conditions. In the UK, Stroke Networks assume this form, having been established to implement a National Stroke Strategy. These networks bring together patients, GPs, commissioners and providers to improve patient outcomes along the entire pathway.[14] Finally, there may be payer–provider integration, which has the potential to ensure that system incentives are aligned to maximise the health of patients. Examples of this include organisations such as Kaiser Permanente, a health maintenance organisation in the USA.

Delivery of integrated care may be structural or virtual. Structural integration involves the merger of organisations or the development of formal partnerships or joint venture arrangements. Virtual integration requires that organisations work closely together; an example is the prime contractor model used in Bedfordshire by Circle Clinical Services Ltd to deliver musculoskeletal services.[15] Virtual integration requires that organisations work closely together, which can include the delivery of complex services, as exemplified by paediatric cardio-thoracic surgery in the West Midlands.

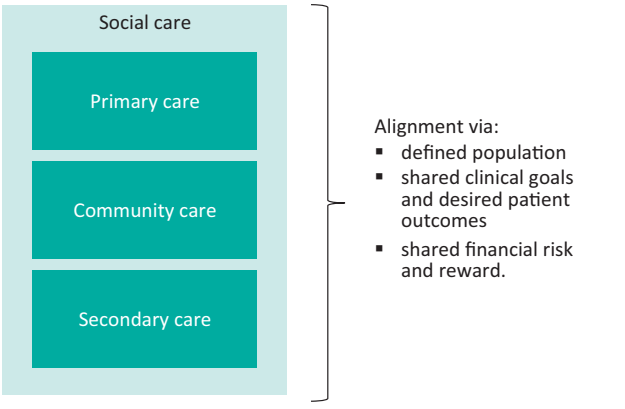

Fig 1. Idealised integrated care system depicting a patient value stream where all actors are aligned in shared strategy for patient care. The local health economy income and expenditure considered as a whole rather than by each provider in the patient pathway.

It can be helpful to think of different levels of integration. These include full integration, where there is formal pooling of resources, allowing a new organisation to be created alongside the development of comprehensive services that are attuned to the needs of specific patient groups; and coordinated care in which existing organisational units operate so as to coordinate different health services, share clinical information and manage the transition of patients between different units. The last can comprise chains or care networks in which linkage between existing organisational units aims to refer patients to the right unit at the right time, and facilitates communication between the professionals involved to promote continuity. In this situation, responsibilities are clearly aligned to different groups with no cost shifting between organisations. For example, if one party responsible for care early in the pathway decides not to intervene in a patient's management and this leads to further costs for a provider higher up in the care pathway, no financial recompense is made to compensate the second provider for the additional care that they delivered. Other commentators make a distinction between 'integration', which is what happens on organisational and managerial levels, and 'coordination' which happens on clinical and service delivery levels.[16]

What are the benefits of integrated care?

Advocates of integrated care cite a number of potential benefits (Box 2), among which National Voices cite coordination as a key component. Although co-ordinated care is a gold standard that patients wish to receive and professionals want to deliver, the current health system in many parts of the UK is fragmented. Continuity is defined through relationships (a continuous caring relationship with clinicians) and management (all aspects of integration, coordination and sharing of information).[17] Benefits of relational continuity have been demonstrated; for example, a relationship with a single general practitioner has been shown to be associated with reduced secondary care use, including emergency department attendance and decreased hospital admissions.[18] However, the relationship between the coordination of care by case managers and secondary care use is mixed. Delivery and coordination of care for patients with heart failure by a specialist multidisciplinary team is associated with fewer emergency admissions;[19] but case management for people over 65 years of age is not associated with a reduction in emergency hospital care.[20]

The benefits of integrated care in the NHS have also been hard to evidence from an economic perspective. An evaluation of 16 integrated care pilots in UK (mainly involving horizontal integration of health and social care) found mixed results concerning changes in secondary care utilisation. In general, the integrated care sites had lower than expected rates of

Box 2. Why deliver integrated care?

- Reduced duplication of work within the healthcare economy
- Shared ownership of patient care among all contributors
- Potential to reduce costs and increase the quality of care received by patients
- More patient-centred view of healthcare delivery, a model that is biographical rather than biomedical

outpatient care and elective admission, but there was no evidence that these sites were reducing the level of emergency hospital attendances.[21] At a time when policy decisions are increasingly evidence-based, detractors can reasonably argue that integrated care has not been shown to generate any economic benefits, and a summary of published reviews has concluded that the evidence base for this remains weak.[22] Why this should be is unclear. In part, many studies of integrated care fail to evaluate cost effectiveness. Further, methodological challenges in evaluating new models of service delivery, in particular the difficulties of being able to identify and control for confounders, have emerged. In the context of a case-control or other observational study, it is challenging to identify suitable comparators and to adjust for confounders, such as the impact of secular trends and/or regression to the mean.

Does integrated care improve patient outcomes?

Although economic outcomes are relevant to policy makers and commissioners, they may not be aligned to patient views. Satisfaction is an important outcome measure that is key to defining the value that integrated healthcare brings to patients.[23] The goals of any health system should include being responsive to the needs of its users,[24] and a number of studies have shown that integrated care improves patient experience and is aligned to the factors that they consider to be important.[25] However, the evaluation of 16 integrated care pilots in UK found that, in general, patient experience did not improve when integrated systems are used, and the authors suggest that this could have been because the process changes reflected the priorities and values of staff rather than user-driven change.[21]

In terms of clinical outcomes, the North London Stroke Network is a good example of the benefits of integration. In the past, London had the worst outcomes for stroke treatment in England. Following the development of the network and the designation of acute and hyper-acute centres within London, all following common care pathways, outcomes are now among the best in the country.[14] Additional examples of integrated care are included in Box 3.

Box 3. Where does integrated care work well?

Esther project, Jönköping, Sweden

Esther is not a real person but the description of the persona of an elderly Swedish woman with a chronic condition and occasional acute health and social care needs, around whom the health and social care system provides care. Health and social care professionals within Jönköping County Council work to co-ordinate care around elderly patients. The Esther Project has six overall objectives: security for Esther; better working relations in the entire care chain; higher competence throughout the care chain; shared medical documentation; quality through the entire care chain; and documentation and communication of improvements.[13]

Torbay Care Trust

Health and social care teams work together using pooled budgets to serve a locality of 30,000 people, alongside GPs. Upon discharge from hospital, older people are supported to live independently in the community. Such co-ordination has led to a reduction in the use of hospital beds, lower rates of emergency admissions for over 65 year olds and minimised delayed transfers of care.

Kaiser Permanente

Kaiser serves 8.7 million people in the United States, across eight regions. It is the largest non-profit-making health maintenance organisation in the country. Operating as a virtually integrated system, where contracts link hospitals and medical groups. Kaiser is recognised as one of the highest performing systems in the United States, with high levels of satisfaction and quality and with low costs.[26]

Is integrated care a suitable vehicle for change and clinical redesign?

The NHS is an organisation that will need to change to deal with the challenges of funding pressures, the increasing preponderance of chronic diseases, and an ageing population. Given the multiplicity and complexity of organisations involved in delivering NHS care, many factors that make change difficult if not impossible can result in inertia. Could integrated care represent a methodology or philosophy for change within this context? The NHS has a clearly articulated policy focus on financial incentives to improve the quality of care.[27] The use of financial levers and a market approach to the improvement of quality has to some extent prevented consideration of other approaches, which could also result in improvements.[28] Integrated care could be seen as a comprehensive strategy to encourage innovation and long-lasting change in the delivery of health services at multiple levels.[21,24]

The provision of healthcare is an altruistic service; the motivation of many of those involved extends beyond financial remuneration. This is evident in high-performing integrated organisations in other health systems spanning low-to-middle- and high-income countries.[29] Within these organisations, the mission is clearly articulated, transparent and built from the ground up to develop a high-performing culture. Going beyond individual organisations, the delivery of integrated care could be the glue that brings together clinicians from all stages of the patient pathway or from different stages of the value chain, overcoming structural incentives that fragment care. From such collaboration, there comes potential for an alignment of professional and organisational mission.

The drive towards more integrated care is also starting to influence commissioning and how organisations are remunerated.[30] The current paradigm of provider remuneration does not directly reward innovation, which might better be achieved through the use of capitated budgets that involve playering share risk and reward, building further alignment for the delivery of patient-centred care. At a policy level, this also provides a significant lever for cost containment in a fair and transparent manner. Such initiatives have the potential to deliver net benefits (cost and quality) rather than fragmented and disjointed incentives and rewards.

Can integrated care improve quality?

Important components for improving healthcare delivery include delivering best practice and minimising variation. The introduction of multidisciplinary integrated care

pathways has been shown to lead to better interprofessional working.[31] Given the relationship between resource utilisation and quality, an integrated approach has forced systems like the US Veterans Health Administration to focus on costs and to understand the value of the interventions they are providing. This facilitates service redesign by helping all the component organisations acknowledge the consequences of their actions on upstream and downstream activities. If they are unable to work with capitated budgets, the use of prime contractor and subcontractor models forces organisations to learn about their costs. Coupled with capitation, the use of outcomes-based commissioning represents a potential lever for innovation, as well as quality improvement or cost reduction. Outcomes-based commissioning also provides an opportunity for patients to define what is important for them and to have this taken into account in the delivery of their care.

Commissioning by outcomes encourages organisations to look at labour division and the reallocation of tasks. Low- to middle-income countries are ruthless in this regard, as they do not have the luxury of having large numbers of medical professionals; tasks that can be delivered by someone other than a doctor are reallocated; for example, the Mexican Medical Home, is a telephone hotline service that provides tiered levels of medical advice for extremely low costs.[32] The reporting of outcomes in an integrated healthcare system further drives improvement by removing information asymmetries and enabling patients to have truly informed choice. The publication of outcomes also acts as a powerful incentive for clinicians to change practice and allows regulators to have a clearer idea when providers maybe edging into failure.

What is the potential impact of integrated care on the wider population?

Health is made up of a number of determinants, of which direct healthcare comprises only some 10% of the overall impact.[32] Integrated care organisations can be incentivised to focus upon the wider determinants of health, such as behavioural changes, and look towards a long-term strategy for improving wellbeing rather than treating illness. Integrated care across populations can represent an opportunity to align health, social welfare and education in improving the wellbeing of the population. Patients can be encouraged to take ownership of their own care and health and there can be system alignment in nudging people to maintain their wellbeing.[33]

Integrated care: looking to the future

Given the unprecedented financial challenges facing the NHS, integrated care is increasingly being seen as a powerful lever to improve outcomes and reduce costs. There is equivocal evidence to support its economic benefits, but this does not mean it is not a worthwhile endeavour and may represent a philosophy of change that binds all care providers across the value chain. It can facilitate care pathways and align players to be centred upon the patient rather than themselves. There is potential for it to influence outcomes at patient, organisational and population levels. ■

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