UK Parliament POST

Evaluating the integration of health and social care

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POSTbrief 35, February 2020

OVERVIEW

Demand for health and social care continues to rise in the UK as people are living longer and a greater proportion have multiple health conditions requiring long-term treatment or care (such as diabetes, heart disease or dementia).[1] Integrating health and social care has been considered as a possible response to these demographic changes, with the potential benefits including improved patient experience, and better quality of care through increased coordination and efficiency.[2,3] It has been argued that effective integration could result in reduced use of hospital beds, lower hospital admissions rates, shorter hospital stays, shorter recovery periods and lower readmission rates.[4,5] However, evidence on the impact of integration is mixed, with evaluations variously showing positive, negative and no effects.[6,7] Cost savings have also been cited as a potential benefit, although reviews have noted that the economic evidence is limited and contradictory.[4,5,8,9,10]

A number of integration models are being piloted ([POSTnote 532](#)), which aim to reduce duplication of services, minimise delays for services, decrease demand for costly hospital care, and improve user experience (including better access to services, improvements in health and well-being and better self-management of conditions).[11,12]

Evaluating how well different models are meeting the aims outlined above is difficult for several reasons, including:
- **Efforts to integrate or coordinate** health and social care services have a long history, with successive governments over many decades trying to bridge the divide.[13] As a result, the vast majority of services are undertaking some form of integration and there are no easily available comparisons with services where there has never been any attempt at integration.
- **Integrated care** has many different definitions and, although there are emerging overarching models in which integration interventions are being trialled, these models encompass a wide variety of different initiatives that are not clearly defined. This lack of clear definitions makes comparison and creation of an evidence-base difficult.[14]
- **Integration** is an ongoing and developing process, which contributes to the difficulty of measurement. Effects from integration interventions also may not occur immediately and can require time to appear in a measurable way.
- **There are no specifically designed measures** to look at people's experiences of integrated care, quality of integrated services and their outcomes, or the efficiency of integrated services and systems.

This means that they are difficult to measure reliably, making development of a national evidence base problematic.
- **Methods** that are traditionally used to assess effectiveness of the health or social care system are difficult to apply to integrated models. It is possible to assess effectiveness for one simple intervention. However, integrated models combine multiple interrelated interventions, which are much more complicated to assess.[15]

This POSTbrief provides a background on the history of integrating heath and social care in the UK and the current pressures faced by these two sectors. As healthcare and social care are devolved matters, the focus is predominantly on England and Wales. It then presents examples of some of the different models of integration currently being piloted. Next it outlines the measures frequently used to assess integration, before describing the challenges of large-scale evaluation.

BACKGROUND

Successive governments over many decades have tried to increase the integration or coordination of health and social care services.[13] In 2013–2014, the four UK nations announced policies to integrate health and social care (Box 1). These policies were a response to, among other drivers, a rising demand for both health and social care services and to patient pressure groups reporting negative experiences of people who use both services.[16,17] Increased demand has largely been caused by an overall rise in life expectancy over the past 50 years combined with a slower rise in healthy life expectancy (the number of years a person can expect to live with self-assessed 'good health').[1] For example, 23% of English females living to 83 years are likely to spend 19 years in 'not good' health and 20% of English males who live to around 80 years are likely to spend 16 years in 'not good' health.[1] 'Not good' health for older people often means living with multiple conditions that require long-term treatment or care (such as diabetes, heart disease or dementia).[18]

Over the past decade there has been an increase in demand for social care from both younger and older adults.[19] The number of people in England aged 65 years and over in need of social care increased by more than 14% between 2010–2011 and 2016–2017.[20] The number of adults aged under 65 years requiring social care (such as those with severe learning disabilities, mental health conditions or physical disabilities) also increased by more than 9% between these dates.[19] While not all affected adults will access social care, the percentage of individuals requiring care is projected to rise further.[21,22] It is estimated that the need for social care will have increased by a further 23% between 2015 to 2026.[21] A 2018 report by England's health and social care regulator, the Care Quality Commission (CQC), described the social care system as "straining at the seams" as the system attempted to use limited resources to deliver good access, improve quality of care, and maintain a skilled workforce in the face of increased demand.[23] The health and social care systems in the UK are interdependent and face multiple financial and performance pressures, some of which are described below.[24]

Financial pressures

Increasing demand for social care has coincided with significant reductions in local authority budgets.[25] Concerns have been expressed by the National Audit Office regarding the financial sustainability of local authorities, which typically spend a large proportion of their budgets on social care.[20] The real-term reduction in spending power of nearly 29% over the past 8 years has resulted in a decrease in the amount local authorities have spent on social

care.[26] For example, between 2010–2011 and 2016–2017 (the latest available data), local authority net spending on adult social care fell by around 3% in real terms, despite the increase in demand.[21]

The Local Government Association (LGA) Green Paper on adult social care and well-being suggests that this translates into a funding gap for publicly-funded social care of £1.3 billion in 2018.[19] The LGA predicts further shortfalls of £2.3 billion by 2019–2020 and £3.6 billion by 2024–2025. The LGA has also expressed serious concerns about how these spending reductions may affect the stability and quality of social care.[27] The Institute for Fiscal Studies suggests that to meet the increasing demand for services over the next 15 years would require annual funding increases of over 3% for the NHS and 4% for social care services.[28]

Performance pressures

The increased pressure on services is reflected in national performance measures for both the health and social care sectors, which include:

- **Emergency admissions.** These are occasions where a patient has an unplanned (and usually urgent) admittance to hospital. Emergency admissions increased by 14% between 2013 and 2018.[29]
- **Delayed transfers of care (DToCs).** These are occasions when a patient is ready to leave hospital but has not been discharged (sometimes because there is no appropriate place to discharge them to). DToCs peaked in England in February 2017, with an average of 6,660 patients per day experiencing a delay in being discharged.[30] By December 2018, the number of DToCs had decreased by approximately a third but still continues to be 15% higher than in 2011.[31] There are also ongoing fluctuations in DToCs due to external factors, such as the season and weather (both of which influence the number of hospital admissions).
- **Quality of Care.** The CQC monitors, inspects and regulates all health and social care services in England. The CQC publishes ratings of all care providers on a scale from 'inadequate' to 'outstanding'. The LGA reports that spending reductions are causing serious concerns about the stability and quality of social care.[27] Initial inspections made between 2014 and 2017 rated over 77% of adult social care services as 'good'. However, in later re-inspections, 26% of those previously rated as 'good' received a lower rating, indicating a potential widespread decline in standards.[32] A 2018 report found that many people with multiple or complex needs experienced disjointed care and were only able to access providers with services rated as 'poor'.[32] In 2018, 40% of NHS acute hospitals and 37% of NHS mental health services were rated as 'requiring improvement'.[33,33]

The health and social care sectors are reliant upon each other to achieve high performance in these measures, with issues in one sector affecting the other. For example, the social care sector is responsible for approximately 30% of DToCs, which are often caused by patients waiting for a social care package to be set up before they can return home.[31] Poor coordination between services may have further ramifications. For example, DToCs can result in hospital beds being occupied by individuals who no longer need them, which may lead to a deterioration of health for those waiting to be discharged and can mean people needing acute care (one-off treatment, such as urgent surgery) have to wait longer to be admitted for treatment. Waiting longer for acute care is associated with an increase in mortality. [34,35] Performance measures also interrelate. For example, although discharging patients in a timely manner would reduce pressure on the system and lower DToCs, discharging patients too early could result in increased readmission rates.[36]

The NHS Five Year Forward View suggested that better integration of health and social care could improve user experience, reduce duplication of services, minimise delays for services and decrease demand for costly hospital care.[2]

Box 1. Policies to enable integration in four UK nations

Wales: NHS Wales is responsible for healthcare in Wales, and Local Authorities are responsible for means-tested social care. In 2013, the Welsh Government established the Intermediate Care Fund (which could be used by Local Authorities, health organisations, housing organisations and the voluntary sector) to support people to maintain their independence and remain in their own home. The Social Services and Well-being (Wales) Act 2014 subsequently required Local Authorities, Health Boards and NHS Trusts in Wales to work together to look after the health and well-being of their local areas. The Welsh Government established the Integrated Care Fund in 2016 to encourage and enable integrated working between social services, health and housing organisations, the voluntary sector and others.[37] The fund initially supported the linking of IT systems and pooled budgets; however, it now provides dedicated funding to support integrated care for priority groups (children with complex needs, carers, people with learning disabilities, and older people with complex needs and/or long-term conditions).[38]

Scotland: NHS Scotland is responsible for healthcare in Scotland, and Local Authorities are responsible for social care. Most social care is means-tested; however, personal care costs are free for all people aged over 65 years who are assessed as requiring it. The Public Bodies (Joint Working) (Scotland) Act 2014 came into force in April 2016 and 31 local partnerships (Integration Authorities) were established. These Integration Authorities have a statutory responsibility for implementing a framework for integrating adult health and social care services. The 2016 Health and Social Care Delivery Plan proposed reducing inappropriate use of hospital services through working across sectors, including shifting resources to the community.[39] In 2018, a review by Audit Scotland reported that the NHS in Scotland is not financially sustainable and suggested that better collaboration is needed between health and social care, particularly in the areas of integrated financial planning and stable and effective leadership.[40]

> **Box 1. Continued**
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> **Northern Ireland:** Northern Ireland has one organisation responsible for healthcare and social care. However, services have frequently operated separately, and exhibit similar issues of coordination found in other UK nations. In 2013, Northern Ireland established 17 Integrated Care Partnerships (ICPs); which bring together healthcare professionals, local council representatives, service users and members from the voluntary sector; to design and coordinate the delivery of local health and social care services. It also formed five Health and Social Care Trusts responsible for coordination of healthcare and community care in their local region. A 2016 report into the impact of ICPs noted local successes across certain priority areas of diabetes, respiratory diseases, stroke, and services for frail older people.[41]
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> **England:** NHS England is responsible for healthcare in England, and Local Authorities are responsible for means-tested social care. Various pilots for integrating health and social care have been run in England since 2009 (POSTnote 532). Funding for innovation and development of new integrated models of health and social care was announced in the UK Government Spending Round 2013. Since 2013, policies in England have focused on developing integration through new care models (POSTnote 532) with the aim to lower demand for primary care services, hospital care and social care services; lower waiting times for hospital discharges; and reduce hospital readmission.

DEFINING INTEGRATION

Integration brings together services to improve the way care is delivered. It can encompass a wide variety of interventions (POSTnote 532). However, integration generally has two key features. First, it focuses on coordinating the delivery of services. Second, it is person-centred, meaning that care is delivered in a logical way to an individual (as opposed to an individual being moved between multiple disjointed services).[13,42] Integration as a term can cover a wide variety of initiatives and can vary in several aspects:[43]

Levels of integration

Integration can be within one sector (such as healthcare) or across different sectors (such as healthcare and social care). In healthcare there are multiple categories of care depending upon the severity and/or complexity of a patient's condition. For example, the first point of contact is usually primary care (such as GPs) but patients may also require secondary care (care for a

specific condition, such as treatment for a fracture) and tertiary care (highly specialised care, such as neurosurgery for a stroke).[44] Integration can happen between these categories of healthcare. It can also happen between one of these categories (such as primary care) and another service (such as social care or housing). Integration programmes may also work within a particular sector and across different sectors concurrently. Furthermore, the integration may target different organisational levels (Figure 1), such as working across a whole system (macro level), working within organisations (meso level) or working with a user in their journey through the service (micro level).

Target group

Integration programmes can be targeted to improve the experience of individuals in different groups (including better access to services, improvements in health and well-being, and better self-management of conditions). For example, it could be targeted at those with a health condition (such as diabetes), or at those at risk of developing a health condition (such as groups at increased risk of developing diabetes), or at those with a health condition in a particular demographic group (such as older individuals with diabetes or frail older people with multiple conditions).[45,46,47, 48] Interventions can also be aimed at those living in a particular area (such as urban areas).[49,50] In reality, there can be overlap between demographic groups, health conditions, environmental conditions, and social and economic conditions.[51] For example, individuals from less privileged economic backgrounds may be at higher risk for certain health conditions.[52] When commissioning integrated services, the NHS states that interactions between these dimensions need to be taken into account.[45]

Approach

There are many different approaches to integration. Approaches can include co-location (where services are in the same geographical location), cross-organisational sharing (of data or staff, for example), working with service-users to plan their care (such as involving them in decisions or planning how to use integrated personal budgets or personal health budgets), and cross-sector linkages.[53] See Figure 2 for simplified models of integration for a single health condition. Many integration projects involve care for multiple conditions using a variety of initiatives, creating a much more complex system.

Figure 1. Integration of health and social care at the macro, meso and micro levels.
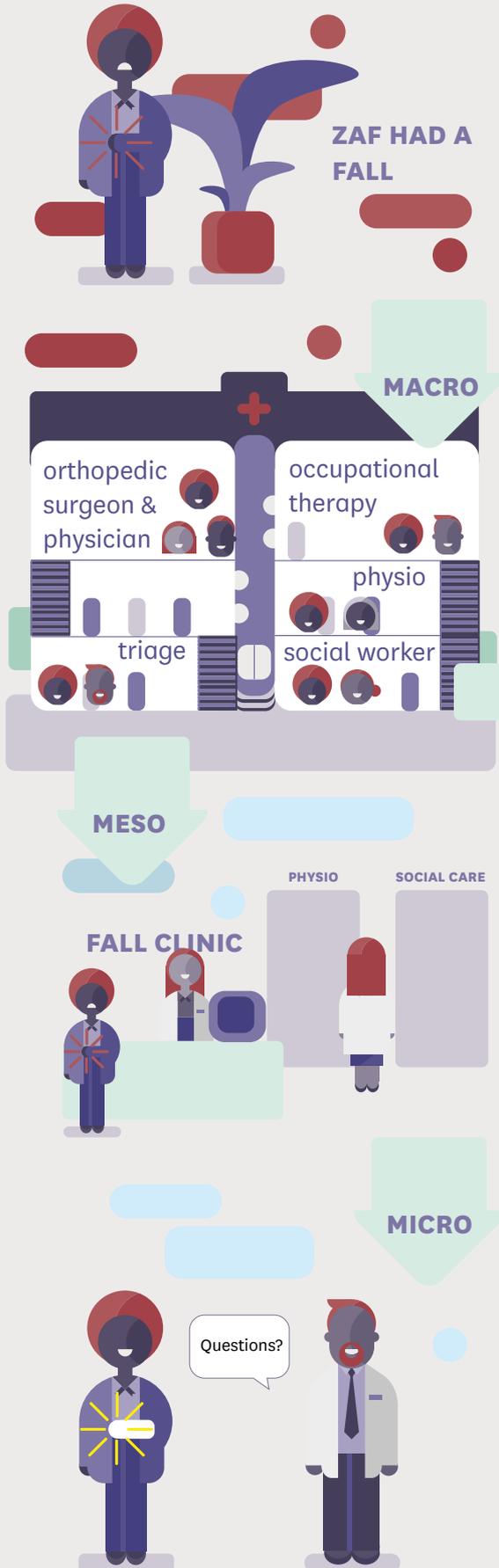
ZAF HAD A FALL

Zaf has just had a fall. Their arm hurts. They're afraid they might have a fracture. They're on their way to their local hospital to seek advice and maybe even treatment.

MACRO

orthopedic surgeon & physician

occupational therapy

physio

triage

social worker

As Zaf goes through the hospital system, we can see an example of integration of healthcare and social care at a macro level. At every stop, staff input data on Zaf's case in an integrated system. This allows staff down the line to get the information and make the decisions they need. This data will be accessible for any future incidents.

MESO

FALL CLINIC

PHYSIO   SOCIAL CARE

At the meso level, integration might look like a Falls clinic. Good integration of health and social care might mean that Zaf can stay here if they need to, that there's an adjacent physio ward, or that there's a resident social worker who helps patients with care down the line.

MICRO

Questions?

At the micro level, a care navigator might be present at any point at Zaf's patient journey. The navigator might explain what just happened and what's next. He might present social care services (even if these services are not integrated).

Figure 2. Levels of integration to promote management of a health condition (stroke)

Level of integration	Target group	Approach	Aim
Within a category of care (secondary care).	People in hospital who are experiencing (or have recently experienced) a stroke.	Co-locating stroke services and major trauma units in hospitals to enable rapid transfer from Emergency Departments to onsite specialised patient care.[54]	Patients receive clinical treatment, early mobilisation, and stroke rehabilitation while they are in hospital.[57]
Between categories of care (primary and secondary care).	Stroke patients requiring rehabilitation.	Hospitals in the acute care sector coordinate transfer of care to GPs in the primary care sector to ensure patients are discharged into an appropriate environment for rehabilitation.	Patients have their needs assessed prior to hospital discharge to ensure access to equipment and home care.
Across sectors (healthcare, social care, housing and the voluntary sector)	Stroke patients requiring support to return home from hospital.	Stroke patients about to be discharged from hospital have ongoing support put in place by healthcare staff working in conjunction with other sectors (such as social care, housing or the voluntary sector). For example, patients may be assigned a 'care navigator' who identifies social care and/or housing needs and ensures that necessary housing adjustments are made.[55] Short-term support to readjust to being at home may be provided by organisations such as the British Red Cross.[56]	Patients receive modifications to their home or are rehoused to ensure a safe home environment during rehabilitation.

MODELS OF INTEGRATION IN ENGLAND

Policies to facilitate integration have been implemented across the four UK nations (Box 1).[58] In England, the 2015 guidance on integrated care from the then Department of Health noted that there was no 'one size fits all' approach to integration, emphasising that local needs and circumstances may require different models.[59] Between 2014 and 2015, the Department of Health selected 25 local areas to act as exemplars of integration under the Integrated Care Pioneer programme (POSTnote 532). Their aim was to deliver integration, share learning and contribute to better evidence for integration, with a long-term independent evaluation running from 2015 to 2020.[60] Findings from the first stage, which focused on the process of implementation and the challenges, were published in 2017.[61] The evaluation team is publishing a series of interim and focused analyses of the process and impacts over time, and the final evaluation is due for completion at the end of 2020.[62]

In 2014, NHS England launched a 'New Care Models' programme, which proposed integration models between healthcare services and across health and social care.[63] The new care models represent five different ways of delivering integrated care, which were trialled across 50 local areas (some of which had been part of the Integrated Care Pioneer programme). These sites are known as 'vanguards' (POSTnote 532). The five new care models are:

- **Primary and acute care (PACs):** vanguards using this model aim to integrate GPs, hospitals, community health services and mental health services.
- **Multispecialty community providers (MCPs):** vanguards using this model aim to move specialist care out of hospitals and into the community.
- **Enhanced health in care homes (EHCHs):** vanguards using this model aim to offer older people in residential care joined-up health, care and rehabilitation services.
- **Urgent and emergency care (UECs):** vanguards using this model aim to improve the coordination of services and reduce pressure on emergency departments.
- **Acute care collaboration (ACC):** vanguards using this model aim to link services across different hospitals.

The first three models (PACs, MCPs and EHCHs) involve integration across health and social care. From 2015, NHS England also funded pilots of 15 'primary care home' models (Figure 1), which bring together health and social care services in a similar way to MCPs but serving a smaller local

community. Since then, primary care homes have expanded to over 200 sites across England.[64] Some are stand-alone initiatives while others are included in MCPs to help strengthen local primary care.[65]

Although multiple vanguards are using the same overall model, the specific approach each site has taken varies because approaches have been devolved to local levels, allowing strategies to be developed that reflect local need.[2] For example, there were 14 initial MCPs that all aimed to move specialist care out of hospitals and into the community. Most MCPs include collaborative working and organisational changes. However, the exact form these take varies. For example, organisational changes could include creating a federation with a shared management structure, pooling budgets or having coordinating roles across different organisations. Additionally, the organisations included in each MCP vary. Across the 14 initial MCPs, 11 included a hospital trust, nine included a mental health trust, nine included a local authority, eight included a community health services trust, eight included a Clinical Commissioning Group (CCG), seven included a local voluntary organisation, four included social services, and three included urgent care services.[5]

ONGOING EVALUATION

There are two national initiatives currently being independently evaluated: the Integrated Care Pioneers and the NHS England vanguard sites (full descriptions above in 'Models of integration in England'). These evaluations compare areas testing integration models to areas that did not receive targeted funding (like the new care model vanguard sites) or support to promote integrated care (like the Integrated Care Pioneers). However, other areas have also been incentivised to increase integration while these initiatives have been running, notably through the Better Care Fund, a pooled fund for CCGs and local authorities to commission health and social care services jointly that is in place across all regions England (POSTnote 532).[66] Therefore, it is not straightforward to compare areas with integration to areas without any integration (Figure 3).[62]

Integrated Care Pioneers Programme

The Integrated Care Pioneers Programme began in 2013 with 14 local areas (Pioneers) chosen through competition as exemplars of integrated approaches. In 2015, 11 more sites were added. Two projects were carried

out by the Policy Innovation and Evaluation Research Unit (PIRU) to support the Pioneers between 2013 and 2015.[11] The first project provided advice to the Pioneers on a set of potential indicators of integration performance based on routinely-collected data. The second project was an early evaluation focusing on progress of the original 14 Pioneers during their first 15–18 months. In 2015, the then Department of Health commissioned PIRU to carry out an evaluation of all the Pioneers. This longer term, 5-year evaluation is due for completion at the end of 2020 and focuses on three key areas:

1. **Exploring** progress of the Pioneer sites and examining how key indicators changed in Pioneer sites compared to the rest of the country.
2. **Determining** the cost-effectiveness of integration initiatives within Pioneer sites.
3. **Synthesising** and promoting learning across sites.[67]

In 2014, an indicator set was developed by PIRU that drew upon data already being consistently collected by services, including those on population health, user outcomes, and system measures (such as DToCs or emergency admissions).[68] PIRU encouraged Pioneers to use the indicator set to allow for comparison and learning; however, Pioneers were not obligated to collect or report any particular indicators in the set as it was noted that different sites could select indicators that were relevant and appropriate to the type of integration they were trialling.

In an evaluation of the first 18 months of the Pioneers programme, published in 2016, site leaders reported that some progress had been made, with service users experiencing better quality, more accessible and more joined-up services. However, it was not possible to identify measurable progress in terms of costs, personal experiences or other outcomes. It was also found that there were no existing indicators to evaluate progress with self-funded social care, services provided in community settings, or the experience of various stakeholders (such as staff, users and carers).[61] The evaluation reported on the challenges to integration raised by the Pioneer sites, including financial constraints, increased demand for existing services, difficulties in data-sharing, staff shortages, and differences in work cultures between organisations.[61] Suggestions were also provided by Pioneer sites on how to enable better integration, including additional funding, pooling resources, sharing patient data, and developing a shared culture between services with protected time to work together as multidisciplinary teams.[59] Although the Pioneers programme officially ended in March 2018, an independent evaluation by PIRU (see above) is currently being undertaken, with plans to produce a national impact evaluation in 2020.

Figure 3. Evolution of local areas carrying out integration initiatives.

An indicative representation of change between 2009 and 2015, of 191 local areas, 50 Vanguards, 20 Pioneers, and 16 Pilots.

Pre-2009: Some local areas were trying out different means of integration but there were no set models or official evaluation.

2009: The Department of Health launched a two-year integration pilot programme. 16 local areas who had already been attempting integration were chosen as Integrated Care Pilots.

2013: The Department of Health chose 14 local areas already attempting integration to become Integrated Care Pioneers. From 2013, government policies (such as the Better Care Fund) also encouraged all local areas to increase integration.

2014: NHS England chose 50 local areas as Vanguards to trial 'new care models' (different models of integration).

2015: The Department of Health selected 11 more sites to be Integrated Care Pioneers.

From left to right: Local area carrying out integration initiative; Local area not yet carrying out integration initiative; Integrated Care Pilot; Integrated Care Pioneer; Vanguards (yellow cross).

NHS England Vanguard Programme

Following on from the Integrated Care Pioneers, NHS England established a 'vanguard' programme that identified 50 sites (some of which had previously been part of the Integrated Care Pioneers programme) to lead on the development and implementation of new care models (see 'Models of Integration in England' above). Each site was funded to develop local pilots, with the aim of producing learning that could be used to prototype successful models. Successful models could then be replicated across England.

NHS England funded a support package for the vanguards, which included assistance in producing local evaluations. The 2016 evaluation guidance for the vanguards asked sites to develop and evaluate new models of care to determine whether they could improve the health and well-being of patients, provide better quality of care and increase efficiency across the health and social care system.[69] The guidance proposed that evaluation of the vanguards could help answer several key questions, including:

- **What** is the resource use and cost for the specific intervention being trialled?
- **What** are the impacts on patient outcomes/experience, the health of the local population and the way in which resources are used in the local health system?
- **What** are the 'active ingredients' (the aspects that could be replicated elsewhere to give similar results) for success?
- **What** are the unintended costs and consequences (positive or negative) of the new care models?
- **How** can the new care models be improved?

The metrics for evaluating progress were co-produced with vanguards and core metrics were developed for each model type. All vanguard sites reported on the impact their models had on emergency admissions and total patient bed-days (as these data are collected as standard by all NHS organisations).[63] NHS England also assisted with the development of two further sets of metrics. First, they worked with sites to develop metrics to capture the factors that enabled integration. Second, they worked with each site to develop metrics to reflect progress in the aims and priorities specific to that site. NHS England also assisted in development of local logic models, which aimed to show what the vanguard intended to accomplish and how it would be done.[69] Vanguards were also given funding to commission external independent evaluations of their progress and outcomes. This led to the production of over 100 different evaluations carried out by a vast range of providers using a variety of evaluation methods, approaches and reporting styles.[70] The variety in methods and reporting makes comparing and synthesising the outcomes for different vanguards difficult.[70]

A 2018 National Audit Office (NAO) review identified several factors that were likely to affect evaluations of the vanguards. The most critical of these factors was that each local area developed their own approach to implementing and evaluating their model.[65] This approach, alongside concerns about future funding, meant that NHS England did not create a national business case, set national objectives or propose desirable outcomes.[69] The NAO noted that the lack of a national plan makes it difficult to evaluate progress.[71] Results from a set of local evaluations have been synthesised, but comparison and synthesis has been challenging because different vanguards adopted different metrics.[70] Conclusive evidence of what works has not yet been produced, although a report has been drafted on the management of the national evaluation and support programme.[70] There is also ongoing evaluation (due to be completed in 2021), commissioned by the National Institute for Health Research.[72] This evaluation includes research into the extent to which new care models are being successfully implemented, the enablers/inhibitors to implementation and the cost-effectiveness of interventions.[73] An interim evaluation raises questions over whether vanguards are seen as early adopters of integration (in which case, subsequent waves of integration should follow on quickly) or if they are seen as pilots (in which case there should be a longer timescale for evaluation to allow the evidence base to develop).[73]

MEASURING THE EFFECTS

As has been discussed previously, there are numerous metrics and frameworks used for measuring integration, and health and social care outcomes.[74] In April 2017, the then Department of Health commissioned the Social Care Institute for Excellence (SCIE) to undertake research to:

1. **Identify** an overarching framework for what good health and social care integration looks like.
2. **Propose** a set of metrics for measuring progress towards the government's ambition of full integration.

The review found that there was a growing consensus on what should be measured but not on the definitive metrics to use. From this research, SCIE proposed a set of integration metrics that could be used by the Secretary of State to understand which places were progressing with integration and ready to move on from the Better Care Fund. These were developed after

consultation with an expert stakeholder group, which included healthcare staff, social care staff, housing staff, service users and carers. The SCIE review concluded that there was a gap in measuring people's experience of integrated care.[75] Furthermore, it noted that most indicators focussed on acute care and that measures for primary and community care required development. Subsequent research by SCIE suggested that it can be difficult to measure clinical processes and behaviours (such as the coordination of care).[76]

Integration programmes aim to improve user experience, improve quality of life, increase quality of care, reduce duplication of services across health and social care, and improve efficiency by delivering care in the most effective setting. The expert stakeholder group concluded that available metrics had several weaknesses in relation to evaluating integrated care.[75] The main issues are that the metrics focus on health and NHS services (particularly hospital services) and that measures usually focus on a single service or an aspect of the services rather than assessing how integration works as a whole. Further issues include that data are often collected at the end of a user's journey through the service (rather than throughout the journey to track changes) and that data for different measures are collected at different points meaning that the measures do not work together to create an overall picture of the service.

User experience

If integration is successful, then users should have a better experience of care because it will be more patient-centred and less fragmented. The measures currently used are often part of larger surveys that were not designed to assess integration (such as the national GP Patient Survey or the Adult Social Care User Survey). The questions ask whether patients have care plans in place, whether they feel supported to manage their long-term conditions, what their experience is of out-of-hours GP services, and what is their (and, if applicable, their carer's) quality of life. The recipients and the timing of these surveys makes it difficult to draw conclusions about the successes of integration. This is because the recipients can include both those receiving the particular integrated care intervention being evaluated and those who are not, and it is not possible to separate them. Additionally, the surveys are sent out at set times and, therefore, capture data from people at different points in their care journey, making the data less comparable. As experiences are not collected, analysed or reported in a timely fashion, it is also difficult for providers to take actions toward improving experiences for specific groups of patients.

Other issues in using large national surveys include that the GP Patient Survey reflects experiences in healthcare settings rather than social care settings or joint services. There are also limitations in data generated from postal surveys. The National Institute for Health and Care Excellence (NICE)

notes that standardised patient reported outcome measures (PROMs) and surveys of public perceptions may not be representative of general user experiences, as self-completed postal questionnaires will only be returned by people who are willing and able to complete them.[77] However, as many integrated care programmes are aimed at older people, online surveys are also challenging because this group is the least likely to have access to, and knowledge of, internet services. For example, the Office for National Statistics report that although 99% of those aged 16 to 44 years in the UK were recent internet users, only 47% of those aged 75 years or over were.[78]

SCIE suggests that services can directly assess user experiences by collecting data periodically, as part of the initial and subsequent care planning processes. This information could be included in the person's care record, allowing people's experiences to be tracked over time and indicating to care teams where there are opportunities for improvement.[75]

Quality of life

There are many different definitions of quality of life, which include how able a person is to carry out daily activities and a person's overall sense of well-being.[79] If services are integrated, then some stakeholders argue that quality of life should improve because users have the information and support needed to help them live the life they want, to make decisions about their own care, and to remain a contributing member of their community.[75] SCIE has suggested that social care-related quality of life, health-related quality of life and carer-reported quality can be assessed using three questions that have been used reliably for the Adult Social Care User, GP Patient and Carer Surveys, respectively. However, to be useful, these questions would have to be asked of people receiving integrated services. [75] These questions ask whether care and support help patients to live the life they want to the best of their ability and also ask carers if they feel supported.[75] However, research indicates that measuring quality of life can be difficult and changes are rarely observed during integrated care interventions. Therefore, some researchers recommend measuring associated factors, such as patients' sense of control and well-being.[80]

Integration of services metrics

SCIE reviewed the national indicators that are currently used across health and social care to assess increased efficiency and reported that they tended to focus on access to services rather than the quality of the services or outcomes of care.[75] The Department of Health mandate to NHS England in 2017–2018 stated that increased service efficiency for new models of care would be assessed by measuring the reduction in DToCs.[81] Other indicators that are used include: improved access to primary care, reduction in emergency admission rates, and better out-of-hours access to primary care services.[81] However, these are only valid measures for interventions

Box 2. Integration of services: commonly used metrics

There are a number of different metrics that are frequently used to measure different aspects of integration. They include:

Delayed Transfers of Care (DToCs) overall and those due to social care, the NHS or both. This can indicate how well parts of the system work together to coordinate transitions across acute, community and social care.

Emergency admissions of people (aged 65 and over) per 100,000 of the population. This can indicate whether primary and community care coordinate management of long-term conditions in the community.

Proportion of people (aged 65 and over) offered reablement services (short-term care delivered at home aimed at restoring an individual's independence) following discharge from hospital. This can indicate that people have been supported in transitioning from one setting to another, enabling them to manage independently.

Proportion of people (aged 65 and over) who were still at home 91 days after discharge from hospital into reablement/rehabilitation services. This can indicate the quality of the reablement support, in terms of helping people to remain in their homes.

Emergency readmissions of people (aged 65 and over) per 100,000 emergency admissions. This can indicate whether management is adequate in terms of post-discharge care and support, and whether people are only discharged when medically stable.

Proportion of discharges (following emergency admissions) that occur at the weekend or before midday. This can indicate whether the interface between health and social care is working.

Patient experience of GP out-of-hours services. This can indicate whether people are able to access urgent care and community-based services. However, it only measures primary care rather than the interface between primary care and social care.

seeking to prevent hospital admissions or speed up hospital discharges, which may not be the aims of all integration initiatives. Additionally, the SCIE consultation recognised that the proposed metrics for service integration (Box 2) continue to focus on access to services rather than quality of services. Stakeholders have suggested that indicators need to focus on continuity by recording measures frequently and seeing what the general trends are. Additionally, SCIE suggests that the focus needs to be broadened beyond just transfers from hospital to home (for example, to include transfers across other services).[75]

Measuring cost-effectiveness and cost savings

In order to measure cost-effectiveness and/or cost savings, certain data must be agreed upon and collected: cost needs to be defined for the previous service and the new service, costs of each service in the system need to be accurate, the difference between actual cash savings and theoretical savings needs to be clarified, and the information needs to be consistently collected across the new care models.[8] Complications in measuring cost-effectiveness and cost savings include that they can include both financial and non-financial costs (such as human resource and time), that effects can be financial savings or other outcomes (including the value of improving a user's health), and that an intervention can be cost-effective even if the overall costs increase, as long as the positive effects are greater than those that would have been generated if the costs had been spent elsewhere.

The NAO's evaluation of the savings forecast by the vanguards noted possible inconsistencies in the types of costs and savings submitted by different vanguards.[58] The report suggested that, although there were savings forecast overall across the vanguards, looking at all the sites together could mask variations across individual sites. It was initially proposed that metrics for cost-effectiveness could include expenditure on adult social care per 10,000 of the population or expenditure on adult social care per local authority.[82] However, these measures look across a wider population than just the individuals receiving integrated care. Therefore, cost savings may not be apparent in these measures.

Cost-effectiveness of integration is difficult to measure nationally because integrated care is designed in different ways across different settings and is not a discrete intervention (as it always forms part of a wider system) meaning that it is difficult to bring together activity data and costs.[69] For example, while disease management programmes for people experiencing heart failure appear to be cost-effective, the services provided by multidisciplinary teams contain multiple different initiatives in different combinations in different settings.[83] In some settings, patients had access to a specialised nurse-led clinic, in other places they only received home visits, and there was also variation in the number of visits. The costs could

be interpreted as cost to primary care of coordinating enhanced access to a specialist clinic, but the actual money spent on seeing additional patients may be incurred by the organisation that is hosting the clinic. The different ways of defining cost therefore present challenges for economic evaluation.[84] Furthermore, successful integration can increase costs in some cases because it can identify previously unmet need.[85,86,87] However, increased costs to meet this need may actually be the most cost-effective way of delivering care (as, for example, it could reduce the use of costly hospital care in the future).

EVALUATION CHALLENGES

The NHS England vanguard programme sought to ascertain which models of integration were effective, for which populations, and in which local circumstances. The primary challenge for measuring the overall effectiveness of integration is trying to carry out an evaluation when the local integration models are so diverse, are not discrete from the larger system they operate in, and lack a comparator with no integrated care. To establish effectiveness, similar models need to be identified and compared, but even areas implementing the same model, such as the Multispecialty Community Providers (MCPs), have taken different approaches to integration and may have collected different local metrics. A second challenge is distinguishing how much of the improvement can be attributed to new care models, and how much is due to other initiatives. For example, in 2017, NHS England indicated that early findings suggested vanguard areas were seeing slower growth in emergency hospitalisations and less time spent in hospital compared with the rest of the country. Per capita emergency admissions growth rates were 1.9% in MCP vanguard areas compared with an average of 3.2% in all other areas.[88] However, attributing the reduction in admissions to integrated care is difficult as there are a number of initiatives and events occurring in the same time periods that could be contributing to the effect.[65] It may be that a number of initiatives, with a sustained focus, over time and across whole systems cumulatively promote successful integration.

Other challenges include a lack of standardised shared indicators across different local areas, models and UK nations, and a lack of comparison sites that have not begun to create new care models.[15,62] Evaluations have not yet produced conclusive evidence identifying the elements that work to enable integration, what the impacts of integration are, and how to replicate successful programmes in other areas. The 2017 NAO review concluded that national bodies are still developing their understanding of how to measure progress on integrating care.[89] Over the past 5 years, three sets of national indicators have been developed for the pioneer

programme, for the vanguard programme and by SCIE.[5,68] While there is
some overlap, there is no definitive set of indicators that can be used at a
national level. Furthermore, local level evaluations selected some of their
own indicators, making comparison difficult. There are also issues around
the validity of indicators. Effectiveness in integration continues to be
defined by national policymakers as reductions in unplanned admissions,
reductions in DToCs, and cost savings and efficiencies. While metrics for
these are important markers, they focus on delays and unplanned outcomes
rather than explaining what promotes integration, how it works, and why it
works in different circumstances and at different levels. Routinely collected
data can create an indication of what is effective, but primary research
and evaluation programmes are key to understanding the circumstances
in which initiatives are effective, what the enablers of integration are, and
other information that allow lessons to be learned from integration efforts.[90]

Producing a robust national evidence-base, constructed from numerous
locally-produced evaluations, has proven difficult.[70] Evaluators are
experiencing multiple complications in pulling the evidence together in
a way that will produce learning about replicable models of integrated
care. Some stakeholders have questioned whether, given the fact that
successful integration requires tailoring to local needs, replicable models
are useful.[15] The Health Foundation's Improvement Analytics Unit's current
approach suggests a greater future focus on rapid impact evaluation that
looks at improvement at a local level targeted at specific parts of wider
programmes. These evaluations will focus on measuring improvements in a
local area over time and identifying the key drivers for change, rather than
attempting to compare multiple local areas. The unit is currently developing
evaluation methods that address the complexity of integrated care.[91]

A final overarching challenge that has been raised repeatedly by
stakeholders during the development of integrated care is where the
accountability ultimately lies for delivering integration, commissioning
services, evaluating performance and defining what 'success' looks like for
integration.[92,93,94,95]

A report from the Nuffield Trust details the challenges to evaluation and
makes recommendations for how evaluations should preoceed in the future
(Box 3).

Box 3. Recommendations from evaluators and commissioners

The Nuffield Trust and the Health Foundation held a seminar in May 2019 bringing together evaluators and commissioners of evaluations.[15] The Nuffield Trust published a report detailing recommendations drawn research literature on integrated care and from the discussions in the seminar. [96] These recommendations are aimed at professionals who design models of care, commissioners of evaluations, and evaluators. The recommendations included the following:

- **Sort out** the known barriers to information sharing, in order to enable the process of collecting and analysing information.
- **Develop** local understanding of what is preventing integration and identify the areas where problems might be addressed by integration.
- **Consider** whether avoidance of hospital admissions is the right outcome for some local initiatives.
- **Be realistic** about timelines for evaluations and expectations.
- **Consider** shorter packages of work with feedback loops, building up to longer evaluations of change two years post-implementation.
- **Be transparent** about the reasons for commissioning an evaluation – is it to see if an initiative works or is it to prove that it does work?
- **Commit** to publishing both positive and negative results.
- **Commission** mixed methods work, that allows evaluators to assess how integration works, explore local enablers, and explain what is working at both the formative and summative stages.
- **Invest** in co-design, where patients and providers are included in defining the aims of integrated care, framing the evaluation questions and interpreting the findings.
- **Define** outcomes that are based on the co-design process and choose metrics that reflect the theory for why integration should work.
- **Disseminate** the learning from projects, including describing the work undertaken by teams, the 'active ingredients' that made the integration initiative effective, the major challenges, and the quantitative measures used.
- **Be** aware that the 'active ingredients' in one local setting may not be generalisable to other settings – adoption in different contexts will not guarantee that the same outcomes will be delivered.

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