Projects and Developments

Special issue: Infrastructures to support integrated care: connecting across institutional and professional boundaries -

'Trying to do a jigsaw without the picture on the box': understanding the challenges of care integration in the context of single assessment for older people in England

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Abstract

Introduction: Demographic ageing is one of the major challenges for governments in developed countries because older people are the main users of health and social care services. More joined-up, partnership approaches supported by information and communications technologies (ICTs) have become key to managing these demands. This article discusses recent developments towards integrated care in the context of one of the arenas in which integration is being attempted, the Single Assessment Process (SAP) to support the care for older people in England. It draws upon accounts of local SAP implementations in order to assess and reflect upon some of the successes and limitations of service integration enabled by ICTs.

Description of care practice: At the Department of Health in England, policy and strategy are directed at the integration of services through a 'whole systems' approach, with services that are interdependent upon one another and organised around the person that uses them. The Single Assessment Processes (SAP) is an instance of inter-organisational and cross-sectoral sharing of information intended to improve communication and coordination amongst professions and agencies and so support more integrated care. The aim of SAP is to ensure that older people receive appropriate, effective and timely responses to their health and social care needs and that professionals do not duplicate each others efforts. This article examines examples from two programmes of work within the context of SAP in England: one with the direction coming from local government social services, the other where the momentum is coming from the National Health Service (NHS).

Conclusion and discussion: Both examples show that the policy and practice of ICT-supported integration continues to represent a significant challenge. Although the notion of integrated care underpinned by ICT-enabled information sharing is persuasive, it has limitations in practice. The notion of an 'open systems' approach is proposed as an alternative way of improving communication and coordination across the domains of health and social care.

Introduction: integration in public services

- "And the whole earth was of one language, and of one speech." (Book of Genesis 11:1–2).
- "Go […] confound their language, that they may not understand one another's speech" (Book of Genesis 11:7).

The problems of communicating and co-ordinating action as a result of people speaking different 'languages' is a very old idea. In the last ten years, governments across parts of Europe and America have tried to achieve more 'seamless care' through the integration of public services that is facilitated by improved communication between organisations and by the staff that work in them [1,2]. Information and communication technologies (ICTs) are increasingly seen as the main enabler for enhancing connectivity across the domains of health and social care [3,4].

In the UK, the Government has responded to a series of high profile public sector service failures, and a

perceived widespread dissatisfaction, by demanding integrated activities across organisational boundaries [5]. For example, one of the conclusions of an inquiry into a tragedy that attracted widespread public concern was the case of an eight-year-old girl who was 'abused and killed' by her carers despite being known to three housing authorities, four social services departments, two hospitals, the police, and a national charity [6]. The inquiry concluded that poor co-operation between agencies and services was to blame—especially the need for a 'common language':

The Department of Health must establish a common language for use across all agencies to help those agencies to identify, who they are concerned about, why they are concerned, who is best placed to respond to those concerns, and what outcome is being sought from any planned response [6].

The White Paper *Our Health, Our Care, Our Say* [7] published by the Department of Health in January 2006 presents a vision for care for adults that that is people-focused, seamless and will make better use of technology. *Our Health, Our Care, Our Say* is the Government's seventh White Paper on health since coming to office in 1997 and represents what Patricia Hewitt, the Secretary of State for Health, has described as a fundamental shift towards integrated services [8]. The notion of 'silo working' has come into widespread use as shorthand to denote all that is bad about service delivery and professional practice where a common language is lacking. Silos are perpetuated by services with different mindsets, goals, ways of working, and attitudes to service users' information [9,10]. Information and communications technology (ICT) applications developed in the private sector promise to support improved services through the sharing and consolidation of data across the silos [11,12].

Setting the scene: integrating health and social care for older people in England

The population is growing older in most developed countries because people are living longer. Demographic ageing has become a formidable challenge for governments because older people are, by a long way, the most significant users of health and social care services. Caring for frail older people in England is core business in the National Health Service (NHS) and local authorities. There are 150 local authorities in the country with social services responsibilities. Responsibility to provide social care for older people in need rests principally with these authorities but may

be delivered by a combination of public, private, voluntary and charitable organisations. People aged 65 and over make up around 16 per cent of the population but this group accounts for more than two fifths (43 per cent) of the total budget of the National Health Service and nearly three fifths (58 per cent) of local authority social services' budgets [13]. Social care covers a wide range of services including care at home, in day centres and residential or nursing homes. Modernising social services, in conjunction with the modernisation of the National Health Service, is now a national priority.

Responsibility for older adults has been divided between the National Health Service (NHS) and local authorities in England since the inception of the welfare state. The NHS was established in 1946 and two years later the National Assistance Act gave local authorities responsibilities to provide residential care and other service. Since then relationships between the National Health Service and Local Government service providers have been characterised by arguments and conflict through numerous reforms and reorganisations. The creation of social services departments in England and Wales in 1971, in particular, left a legacy of fragmented responsibilities and tense relationships between the two sectors [14]. A recurring theme is the imbalance between the health and social care sectors, with the NHS commanding most of the resources and taking actions where the consequences impact upon local authority social care services (for instance discharge from hospital to the community) [15,16]. Reforms of the 1980s and 1990s included the introduction of contracting and quasi-markets, which contributed to the further sharpening of organisational and service boundaries [14,17].

Rapidly increasing demand by older people for services is one of the apparently intractable social problems (sometimes called 'wicked' problems) that are said to require co-ordination, collaboration and networking between agencies and individuals, especially health and social care professionals [18,19]. Recent initiatives mandated by central government to ensure that health and social care organisations overcome difficulties of service co-ordination must be understood in the context of an uneasy history of institutions that have been separate for more than half a century [14,15,17].

Evidence suggests that one the keystones of the improvements in the care of older people is the use of a 'structured assessment' approach. In the UK, this is often referred to as the Single Assessment Process (SAP). SAP aims to coordinate the assessment of the health and social care needs of an individual, and make that information potentially available to a range

of professionals working in health and social care agencies. This paper provides more detail about SAP and contextualises it within the wider policy environment before turning to an account of two contrasting English SAP programmes. The paper considers why these two programmes (one led by local government social services and one led by National Health Service organisations) had diverse outcomes in four individual sites. The paper then discusses them in the context of more recent policy developments, and draws upon the evidence of their limited achievements to ask questions about the goal of integration.

Promoting older people's health and independence

In England, the Single Assessment Process for Older People (SAP) was originally set as a policy objective in the National Health Service Plan in 2000 [20]. This was introduced in full through the National Service Framework (NSF) for Older People [21] published by the Department of Health in 2001. Standards for care were at the core of the NSF for Older People. It was one of the first instances, in the UK, of a policy movement to person-centred approaches and ways of commissioning [18]. In common with other service frameworks, the overall aim of the National Service Framework for Older People was to raise standards in the way that services are provided for people as individuals, and to begin to enable them to make choices about their own care. It set out national standards and service models of care across health and social services for all older people whether at home, in residential care, or being cared for in hospital. The standards were intended to establish a baseline of care provision to be met in local contexts. They covered a range of service issues at the turn of the century:

- Standard one: rooting out age discrimination
- Standard two: person-centred care
- Standard three: intermediate care
- Standard four: general hospital care
- Standard five: stroke
- Standard six: falls
- Standard seven: mental health in older people
- Standard eight: the promotion of health and active life in older age (NSF 2001)

The basis of the justification for single assessment (SAP) at the time of the NSF (as part of Standard 2 Person Centred Care) was strong clinical research evidence for the efficacy of structured assessment approaches (also known as comprehensive geriatric assessment). The key paper was the widely referenced meta-analysis published in 1993 by Stuck

et al. Collating evidence from 28 random controlled trials, these authors concluded that comprehensive geriatric assessment (CGA) programmes linking geriatric evaluation with strong long-term management are effective for improving survival and function in older persons [22].

After the publication of the National Service Framework for Older People, significant resources were put in place to deliver the change programme to piece together "[…] *the jigsaw of 'whole systems' working* [*in order*] *to develop a person-centred service that bridges the gap between all parts of the system"* [23]. The implementation of SAP began in earnest in this period as a process tool for delivering to this 'whole systems' agenda. SAPs were usually implemented as a set of paper-based or computer-based forms which structure the practitioner assessment processes. They used a range of formal structured assessment process tools, based on forms including combinations of tick boxes, validated assessment scores, and some free text. The forms could be locally derived but in the main off-the-shelf products, developed and validated in a variety of contexts, were adopted. They were intended to provide a common approach to sharing information, thereby improving co-ordination, referral and discharge between the different parts of the statutory care network. Successful cases of SAP implementation have been reported from up and down the UK [24]. However, attempts to improve the integration of care have not been uniformly successful in improving practice and a number of reasons have been identified in the literature. These include: a focus on the organisational aspects of integration at the expense of practice elements [2,25–27]; contested claims about the efficiency, effectiveness and overall success of integrating [28–31]; and the challenges of changing organisational, partnership and professional cultures [2,32–36]. In order to examine the uneven success of SAP implementation, the paper now turns to two English SAP programmes with different sources of leadership, the first from local government and the second from the NHS.

Methodological approach

The evidence cited in the following sections is based upon the authors' close engagement with public sector modernisation as members of the Centre for Social and Business Informatics (SBI), an inter-disciplinary research centre at Newcastle University. In 2003, SBI became a partner in one of 22 national projects established by central government to promote 'local electronic government' in England. This project—known as Framework for Multi-agency Environments

(FAME)—aimed to improve joint working and information sharing between local authorities and their partners. One of the SBI team's roles within FAME was the evaluation of six local pilots led by local authorities. In the section on experiences of SAP from local government, the evidence is drawn from some of the data collected for the evaluation report from one pilot tasked with implementing electronic SAP solutions in two separate sites. We do not provide a repetition or summary of the evaluation itself, which covered all the FAME local pilots in much more breadth in order to signal what worked well and what did not in what contexts [37]. Rather, empirical evidence from the two SAP sites is taken to illustrate some of the successes and limitations of ICT-enabled information sharing intended to provide more integrated care for older people.

The FAME Learning & Evaluation team of which three of the authors (Wilson, Baines and Cornford) were part undertook field work from July 2003 to October 2004. They consulted project managers, project board chairs and a wide range of stakeholders including service managers, service user representatives, and front-line practitioners. They used specially designed research instruments including questionnaires and interviews with participants and made extensive use of naturally occurring data from observation meetings and other events. Data from the FAME evaluation drawn upon in this article comprise:

- Transcripts of meetings with project managers, project officers, and other key individuals e.g. project 'champions' (based on four visits over the life of the project to each of two local SAP sites);
- Field notes on observations of national project board meetings, local project board meetings, workshops, launch events, awareness raising events, and a local project review;
- Project documents i.e. board minutes, local reports to the national project, and publicity material.

The section on SAP experiences from the NHS draws upon the involvement by two of the authors (Wilson and Martin) in the Connecting for Health (CfH) National Programme for IT project (NPfIT), which has the remit to bring modern computer systems into the National Health Service. They participated actively as members of SBI in the re-development of the national policy on SAP in various forums. The e-SAP team, whose responsibility was to take forward the concept of the electronic single assessment process (eSAP) as a national service, consulted them on the strength of SBI's work on the FAME project. The observations and data on local issues cited in this section are based on documents and relationships within one region (the North East of England) and on knowledge

from practitioner/manager conferences where the authors were participants. Data from the NHS CfH work drawn upon in this article comprise:

- Participant observation of meetings with project managers, project officers, and other key individuals e.g. project 'champions' (based on various interactions with the e-SAP team the implementations of the project in each of two local SAP sites);
- Participation in CfH workshops, launch events, awareness raising events, and a lessons learned review document.
- Policy documents; reports and plans and strategies and publicity material.

Experiences from local government

The responsibility for the delivery of SAP was given initially by central government to local authority Directors of Social Services, who were required to meet targets for the implementation of a single assessment system (either paper or computer-based) by April 2004. During this time frame the central government department responsible for local government (then the Office of the Deputy Prime Minister—ODPM; now the Department for Communities and Local Government—DCLG) began a programme of national projects for supporting the delivery of local e-government. Framework for Multi-agency Environments (FAME) the largest and most ambitious of these projects. FAME was tasked with producing approaches to meet the requirements of the 'joining-up' agenda across the waterfront of social care and welfare contexts. The overall aim, in common with the rest of the local e-government National Project programme, was to demonstrate the ability of ICT to support improvements in effectiveness and efficiency in specific service instances. The first phase of FAME (April 2003–October 2004) developed and implemented information systems at a local level. Six local pilots (known within the project as 'strands') were each led by an English local authority in partnership with other service providers. Each pilot was required to produce a technical system for the exchange and management of client/patient information across agency and professional boundaries in a specific service (for example for children with disabilities or vulnerable older people) within the local area. In other words FAME was a multi-agency, single service, single locality implementation [38]. It was expected that FAME would provide a 'shrink-wrapping' of the products and lessons learned in order to make 'best practice' transferable to other similar service contexts [39].

The project timescale of FAME Phase 1, given the scope and complexity of the work being undertaken,

was over optimistic and only two of the six pilots achieved the promised implementation of live ICT systems on schedule (i.e. by May 2004) [37]. One of these more successful pilots was known as PIVOP (Promoting Independence for Vulnerable Older People), which implemented a Single Assessment Process (SAP) for older adults. This strand involved two separate (but co-operating) sites, one in the north of England and one in the south. It was the first of the FAME pilots to go live and involved 80 practitioners in the southern site and 130 in the northern one. These two sites are the subject of the remainder of this section.

The objective of the FAME SAP projects was to deliver working electronic single assessment tools designed to improve the way older people are jointly assessed for their health, social care and housing needs. Embedded within the electronic tool was a Department of Health accredited assessment instrument which could also be used in paper form. The SAP applications allowed practitioners across all participating agencies to assess the needs of older people by the use of the electronic version of the assessment instrument. Practitioners could then refer cases on for further, more in depth assessment electronically. Assessments were viewed via an internet browser. The information collated as a result of these assessments was fed into an 'overview assessment summary' intended to give a full picture of that older person's needs and their involvement with other agencies.

Each of the two local SAP projects were governed by a board of representatives from partner agencies in health and social care and managed by a full-time project manager. In each site partners included the Strategic Health Authority (responsible for developing strategies for the local health services) and more than one Primary Care Trust (the local NHS organisation responsible for the commissioning, administration and performance management of healthcare within a defined locality). In the Southern site a district council (with responsibility for housing) participated as well as the county council with social services responsibilities. In the north, but not the south, there was also a voluntary sector partner. A different technology supplier worked with each project. These two suppliers were known as the 'technology partners'.

One of the project managers explained to the evaluation team, "As project manager I am employed by the *partners*—not pursuing the agenda of any one partner." Making a partnership work, managing diversity, resolving conflict and promoting collaboration are skilled and complex tasks as many studies of partnership attest [40–43]. FAME was no exception and there were formidable challenges for the project

managers in securing and maintaining the commitment of all the partners [38,44]. The project documentation explicitly logged as a risk that the pilot required *"joint working across a wide range of professional business areas where perhaps this has not been done to such an extent before"* (Source: Project Initiation Document, April 2003). At the first meeting with the evaluation team the manager of the southern SAP project commented: "The Strategic Health Authority—and health in general—are not the easiest people to 'play' with …. the council is different because it is keen to be part of the party".

Relationships with the health partners remained somewhat uneasy and project teams in both the SAP pilot sites saw lack of strategic engagement with SAP and FAME at a senior level on the part of health agencies as a major threat to the project. Some individuals—notably the leader of the district nurse team on the northern SAP and a local General Practitioner in the south—were described as unofficial 'project champions' who enthused others. As one of the project managers commented, "*You would never do it if you did not have project champions*".

The SAP pilots were successful in maintaining the partnerships although they were always somewhat precarious and contingent upon the energy and commitment of a few individuals. They were rather less successful in securing the engagement of front line workers. Some practitioners who had been trained to use the IT systems were extremely enthusiastic about the new capacity to reveal the 'whole picture' of a patient/client by viewing assessments from other professionals. However, only a third of the practitioners who had been trained to use the system had done so in any way at all three months after implementation. Health workers claimed that uncertainty over NHS IT strategy discouraged buy-in. The most intractable barrier to usage of the IT developed in FAME was the perception on the part of many front-line practitioners that putting information into the systems represented a cost in time and resources for which there was no obvious payback. Costs (in terms of time and effort) and benefits (in terms of improved access to timely and accurate information) were unevenly distributed among practitioners [37,38].

The experience of the FAME SAP projects confirms that partnerships are precarious and contingent and that strategic plans for multi-agency working do not necessarily produce the intended results on the front line. These are familiar challenges in multi-agency working which were anticipated as risks by the project teams and addressed, at least in part, by mitigating actions during the life of the project. The development process of the SAP pilots also highlighted a number

of unforeseen tensions that raised more difficult questions about the nature and limits of ICT enabled integration in a multi-agency environment.

Referrals to the central duty team (Social Services) were usually from third parties—such as neighbours or family—who cannot give consent to sharing personal information about individuals with others. This problem was overcome within the project by referring the case within the local authority to the Social Services or Occupational Therapy service—which later would need to seek consent from the user to share information with other agencies. This problem goes to the heart of the boundaries around agencies in England and how they can be defined and managed in complex multi-agency environments.

One of the partners in the northern SAP site was a service provider from the voluntary sector. The project manager explained at the start that they had no computer system, therefore, 'nothing to integrate'. However, it was still necessary to ensure they could sign up to an agreement for confidentiality and care of personal data about service users. All the local FAME pilots were required to produce Information Sharing Protocols (ISPs), which describe in legal terms the information to be shared by all the participating organisations. In most cases the pilots started with an existing, overarching document or worked with one developed for another local information sharing initiative. In the northern SAP site there was already a local ISP, which the project initially adopted. However, it did not cover the voluntary sector and had to be revised to do so. An expanded role of the voluntary sector in service delivery is a government target in the UK to which multi agency environments must be able to respond [45]. This demands awareness of the diversity of the voluntary sector and of voluntary sector organisations' relationships with clients, and with their clients' information.

In the most dramatic setback in the SAP pilots General Practitioners (GPs) in the northern site had to be disconnected from the system soon after it went live. These GPs—all located in the same building—were angry when they discovered that they could see the names of each others' patients. The IT suppliers pointed out that this was never raised at sessions in which they worked with practitioners to map requirements. (GPs did not attend but some of the practice staff did.) GPs thought it was obvious that this integration of patient information would be unacceptable (they believed that it contradicted their terms of service) but nobody else in the project was aware of the issue. This was an instance of 'over integration' when de-contextualised information about service users could be viewed by other practitioners in ways that ran counter to their working practices.

The FAME SAP projects met their objectives to support the collection, sharing and exchange of relevant and timely information, and to provide shared learning from this experience. Forming and maintaining partnerships with agencies across health and social care is known to be a difficult task but there was evidence that trust between partner organisations improved during the life of the project [37]. Yet the ideal of 'integration' across the multi-agency partnerships proved to be much more intractable than expected along several dimensions including the management of boundaries around the participating agencies, and the incorporation of the voluntary sector. Perhaps most challenging, and most unprepared for, was the threat of 'over integration' when information was made available through the IT system in ways that were inappropriate for the custom and practice of participating groups.

Experiences from the National Health Service (NHS)

During 2003, the Connecting for Health (CfH) National Programme for IT (NPfIT) was initiated and the first phase culminated in the issuing of an 'Output Based Specification' (OBS) document, which included an outline specification for SAP functionality. This subsequently led to a number of contracts being let to supplier consortia tendering for core parts of the National Programme NPfIT functionality (e.g. the national summary record or 'spine') or for one of five regional Local Services Providers (LSPs). These LSPs were arranged in geographical clusters delivering local organisational (e.g. hospitals) or local care community based-systems (e.g. SAP for the local care community delivering service to older people). Two of the five regional clusters were contracted to deliver SAP systems to local care communities in their initial implementation phase. The examples reported here are two locality implementations from one of these regional clusters.

The aims of the CfH-led SAP implementations were similar to the local government initiated versions, namely to deliver a working electronic Single Assessment Process tool to improve the way older people were assessed and referred. Based on a similar technical approach and assessment tools the SAP application in the regional clusters aimed to support practitioners across participating agencies to improve the care of older people. However, the structure of the implementations was quite different in terms of the technical governance of the activity. This governance

was located on the healthcare structures at the CfH regional cluster level and sub-regional level (in Strategic Health Authorities—SHAs), rather than at local authority/primary care trust (locality) level. The locality level remained the site of individual SAP implementations.

The first locality was one of the earliest of the Connecting for Health (CfH) led SAP implementations. It was carried out in 2004 and was dogged with a number of difficulties before the implementation process started including a high level of confidence on the part of health service leaders, some existing poor relationships with and between technology system suppliers (both within and outside the NPfIT cluster Local Service Provider contract), and a lack of engagement and communication between the parties about existing implementations and future arrangement for SAP. This last point led to animated discussions between local government, health service managers, cluster representatives and local service providers about the planning, local delivery and benefits realisation activity. The governance structure in place for the SAP project used the existing Strategic Health authority created sub-regional NPfIT programme board.

Once initiated the implementation process immediately ran into technical delays (including the technical interoperatability of NPfIT applications). There was lack of data integration between the new SAP application and the existing record systems in social services, which meant the implementation process became disjointed. Delays led to patchy results within the early implementation sites with, for example, the training on the system being conducted several weeks before the technical system went live. A number of further contextual issues also confounded the implementation process in the locality including: a lack of coherent leadership due to a number of ongoing organisational changes; mixed success in historical local attempts to integrate between health and social care organisations; high priority for innovations in the children's services domain which stretched scarce resources in the local government organisation involved. As in the case of FAME, usage of the system proved to be lower than expected. Some months later observations made by local managers and practitioners included: '*we've only had 17 cases on the system*'; '*everyone's forgotten their pin number (password)*' and '*no-one is using it*'. Recent attempts to re-invigorate the use of SAP system with a technical upgrade have not been wholly successful. Existing plans are to subsume the SAP activity into an application, which delivers functionality to the whole primary care community not just those dealing with older people.

The second Connecting for Health (CfH) SAP locality we will discuss is currently seen as one of the more successful initial implementations of SAP in the regional CfH cluster. The locality has a history of partnership working between social services and health. In the case of older people the organisations involved had, as an initial priority, established joint momentum at the director, management and practitioner level. Agreements were reached early on about the governance structure of the local SAP project (the emphasis being on health improvement for older people), which appears to have laid the foundation for work towards the development with the initial DH target of April 2004. The partnership had put considerable effort and resources (including engagement of practitioners and local facilitation work) into producing a locality specific draft paper-based system. With a number of elements in place including the locally produced SAP paper system and information sharing protocol (ISP), the management team were asked to scope the business case for a technical application. The team identified the NPfIT application described in the Connecting for Health Output Based Specification (OBS) as the potential technical solution and made an application to the Strategic Health Authority to be on the timetable to implement the IT system.

Meanwhile during period 2004–2005 the paper-based system was being designed and implemented in hospital wards with responsibility for the care of the elderly across the area (10 hospital wards in total including Accident and Emergency), and across adult social services and local community nursing teams. To support the implementation, there were specific developments of localised training materials so users were provided with dedicated training leads ('super-users') supported by a joined up approach to the practice and technical implementation across the local organisations (Primary Care Trust, local hospital and social service department).

Complete implementation was due at the end of 2006, with approximately 750 staff. The implementation team identified the following lessons learned: the need for consistent project support; commitment from chief executives; dedicated clinical leads; support and time to change culture; confidence in the IT and staff skills to use IT. Another significant factor that ensured relative success in this locality was the fact that the director of social services had a national profile in older people's issues and was consequently engaged in the national direction of SAP in the CfH programme, thereby making this work a local priority. Moreover, this implementation was significantly later in the implementation cycle. The local context of relations with ICT suppliers was complicated (due to wider range of

systems in place than in the other sites we studied). However, it was less constrained by existing systems in social services. Work had already begun on technical integration and application adaptors for systems, which reduced the 'double-keying' problem (i.e. having to employ clerical staff to re-key data from one information system to a second information system). Overall, evidence from the two contrasting health led SAP implementations demonstrates that the challenges of successful integration of care require an approach that takes in diverse characteristics including, technical integration, established trust between partners, enthusiasm and energy of committed individuals, staff training, and sustained commitment at a strategic level.

Bringing it together: towards a multi-faceted integrated approach

During the time of these developments a 'best practice' or orthodoxy has emerged in England on the process of information sharing. Currently this 'best practice' tends to be based on information on clients from two or more agencies to be brought together in one place—literally 'joined together' or integrated into a single information system (be it paper or computer-based). This requires the production and/or adoption of a shared assessment process, an 'information sharing protocol' and joint service commissioning. Integration in this mode is often supported by the pooling of financial resources (e.g. using legislative flexibilities which were made available under the Health and Social Care Act, 2001) and setting up of integrated care teams which are sometime co-located. This 'joined-up' or 'whole systems' approach to integration, supported by a significant change management and project management resources, appears to offer the best chance of improving service integration [23]. The challenge of addressing the means by which integration is achieved then moves to the problem of 'joining-up' the procurement and design of an information system to support actual service delivery. During the time of the four pilots this has moved from being led either by Local Authorities or the local NHS (and the IT sometimes provided by the Connecting for Health programme) to the auspices being clearly in the governance of local government through the requirement to appoint a Director of Adult Services, but with the technical aspects being driven by the health service's Connecting for Health programme.

A review of e-SAPs was commissioned as a result of the range of work being undertaken and widespread evidence that achievement in meeting the requirements of the Government policy paper *Our Health,*

Our Care, Our Say was highly varied. This review was carried out under the auspices of the CfH Care Record Development Board with a remit *"to develop an implementation plan and business case for electronic SAP for England."* [46]. The results of this review, which included a series of consultations and a survey of SAP implementation sites, have been the production of an architectural framework and information sharing model. The proposed solution requires a mixture between national information sharing standards, national technical service provision (including directory and secure mailing services available as shared infrastructure) and local governance activity within a national work programme [47]. This development represents a significant move from the almost random collisions of 'bottom-up' and 'top-down' integration approaches (clearly identifiable in three of the four pilot sites discussed above) to a more co-ordinated approach where both national and local spheres have roles to play. The most recent NHS policy report on older people's care reiterates the need for change in services to older people as *"critical to* [providing a] *mixture of ingredients … between the individual and agencies involved in the older person's care"* [13].

Conclusions

Across the 'developed' world, there is an increasing emphasis on the provision of integrated care for the elderly to meet the needs of an aging population [48,49]. It is important that practitioners in other countries are able to learn from the UK's increasingly extensive experience in this respect. In this section we attempt to draw out some key questions which, we believe, could be fruitfully asked by those engaged in service integration or joining up in the health and social care domain.

This paper has used the example of the ICT-supported Single Assessment Process (SAP) to highlight some challenging issues that arise for integration. In the UK, thinking about and doing integration or joining-up in this context began at the level of a multi-agency; single service; single locality models, but it is beginning to move, at least in part, to a model where the strategic direction is towards the provision of re-usable tools for the service assessment of children and adults with supporting technical infrastructure [39,47]. The lessons learned have been hard ones and the response has been to attempt to broaden the scope of the integration to include greater policy and procurement integration—what we have called 'whole systems integration' which can mitigate the problems of seeking to share information between services.

There remains in this whole-systems approach a deep rooted assumption (not least in the policy discourse) that more 'integration' is the answer to these problems. In an inter-organisational domain such as health and social care, however, our work has shown evidence, which identify a set of problems with viewing integration in this way. We can begin to see then from these experiences that integration may not be the panacea to the problem of sharing information and knowledge in the health or public sector domains. This leads to questions such as: what else do health or social care organisation's need to share in order to share information? What else might need to be 'integrated' besides information? What are the real costs of such whole systems integration and how are they distributed between services and between different roles within services? Can integration ever really adopt a "whole systems" approach in the wider ecology of welfare [11]? Does integrating around a specific client group, such as older people or children, as is being promoted in the UK, hamper attempts to integrate, share information or joint up agencies around other, partially overlapping client groups (e.g. the mentally ill, families, and young carers).

Our own work has led us to stress a tension between the demands of a "whole systems" approach, which tends to lead to the expansion of the scope of integration, and demands of an "open systems" approach to integration, which accepts that the boundary of the "whole" system is always fluid and ambiguous. From this perspective we can ask the following kinds of questions: what sort of alternative policy and technical approaches may be available which support multi-agency; multi-service; multi-locality infrastructure for the delivery of sustainable care? Are there for instance, other technical approaches to sharing information which allow various practices and ways of working to be co-produced and co-exist rather than attempting to integrate them from a single point or perspective? This set of questions enables those charged with the delivery of integrated care, at the outset, to note that integration and implementation have situational components, *"which require fitting around the individual not the service"* [7] and that may be in conflict with each other (e.g. personal privacy or institutional autonomy).

Integration can be seen in terms of the metaphor of the jigsaw, which we have used as the title for this paper. From this point of view it is bounded a 'technical' puzzle, with a determinate solution, in which the aim is to fit the pre-shaped component together with no gaps between them. Drawing on the evidence presented here, we might suggest, integration work is less like doing a jigsaw and more a matter of bricolage [50] in which individual elements may need to be reshaped, and can fit together in a number of different ways, depending on need and in which there are no clear boundaries. In this context it is the ability to continuously *make sense of* the various elements of the care systems and how they can and should fit together, rather than attempting to complete the care jigsaw that will improve the experience of individual older people.

Reviewers

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