

Digital and data steps to integrated care

Perspectives from the UKAuthority Integrating Digital Health and Care 2023 conference



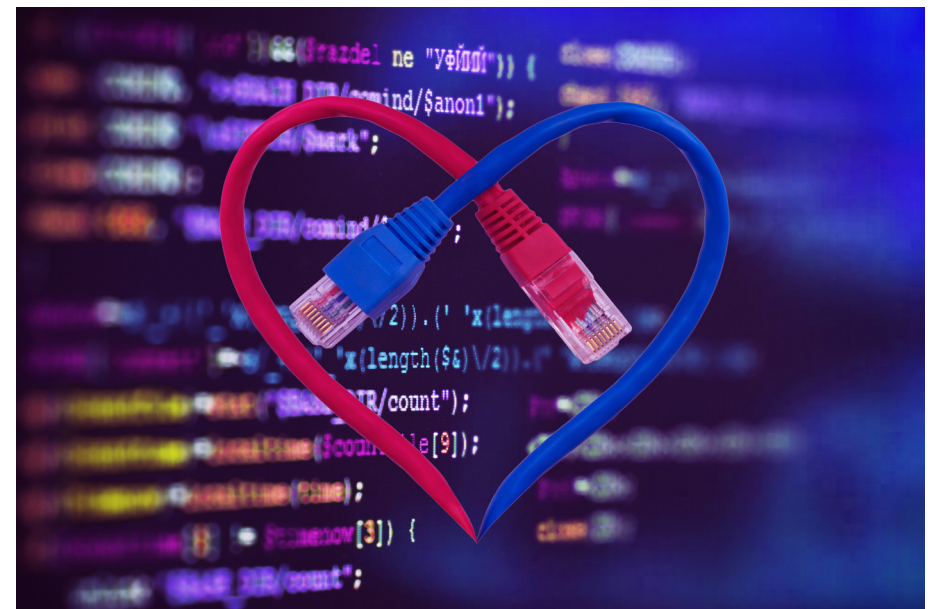
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1. Overcoming the DRIP

An observation was made in the early 1990s that the NHS suffered from being DRIP – data rich, information poor – and that it was hindering efforts to raise the quality of care for many patients. Thirty years later the problem remains in many areas, according to Dr Alec Price-Forbes, chief information officer for the Coventry and Warwickshire Health and Care Partnership, with an over-reliance on pen and paper and the protracted adoption of innovations that could make a positive difference to the sector. It needs a more positive attitude to change and a reimagining of many tasks, especially with the setting up of integrated care systems (ICSs) for the closer co-ordination of health and social care.

Price-Forbes was speaking at the recent UKAuthority Integrating Digital Health and Care conference, which delved into some of the big issues and looked at local initiatives that are providing lessons on how to break free of the DRIP effect and achieve a system wide transformation for care.



2. Care architecture and hub

A number of priorities were identified for high level change. Declan Hadley, healthcare development lead for network and solutions provider Cisco, said that integration of activities across an ICS – taking in all the NHS and social care organisations under its umbrella – needs a data architecture that brings them together. This has to be based on three priorities: flow – making care accessible in the most appropriate setting; footprint – releasing more time for care rather than administrative tasks; and fabric – ensuring the availability of technology that works easily. This takes in a number of features such as asset tracking, identity management, sustainability, and spaces used in community care and cyber security and becomes more complex the more systems are involved. But once a robust architecture is in place it lays the ground for picking up innovations with technologies such as remote patient monitoring and the creation of care coordination hubs.

The latter is an infrastructure, utilising hybrid cloud, that provides secure connectivity between organisations in an ICS, extends the reach and detail of an electronic patient record, and provides for simple, unified communications. It can support reactive care in hospitals and the proactive, anticipatory care in communities. Hadley said that most ICSs have some form of coordination hub already in place, but that they need to use them as a basis for increasing their use of new tech solutions.

3. Integrated care records

Inevitably, efforts to develop integrated care records (ICRs) provided a major talking point. Discussions reflected the consensus that these have to be used more widely and provide more information on the people receiving care, but that it needs the right approach to information governance – ensuring that data is managed and shared appropriately – and controlling access to records.

There is a question around the nature of ICRs – whether they should provide a big single source of data or give organisations access to each other's databases

through application programme interfaces (APIs). Price-Forbes said it would be determined partly by the need to provide information instantaneously to healthcare clinicians, and by public perceptions that they are dealing with one system where all the parts should have access to the information about them. There is a need to be sensible and proportionate, with the right enterprise architecture, in developing the approach, but it could open the door to using the ICR with a wide range of care applications.

It also needs the widespread adoption of consistent data standards. There have been plenty of moves to achieve this in healthcare but the discussions raised the point about how well this works for social care and whether its representatives have sufficient influence within ICSs to make any solutions workable for their sector.

Alice Ainsworth, deputy director for adult social care technology in the Department for Health and Social Care (DHSC), commented: "Social care needs to be equal partners with health bodies and there has been increase in understanding of interconnections and dependencies between the NHS and social care that will help with building that equity." She said there are variations between ICSs in how far this has gone, with a strong social care influence in some but barriers to progress in others.

The need for data sharing agreements to underpin ICRs is also a challenge. Gary McAllister, chief technology officer for NHS London, said it can be difficult, with political and organisational factors at play, and it could be a long process to get all the agreements in place. However, Leonardo Tantari, chief digital information officer for both NHS (Leeds) West Yorkshire Integrated Care Board (ICB) and Leeds City Council, said it helps when there is a joint leadership team for the work as in the city.

A number of local initiatives to deliver ICRs were outlined at the conference. Price-Forbes, along with Eddie Olla, chief digital officer for NHS Warwickshire and Coventry ICB, described how it has defined its ICR as an integration of records from primary, secondary, mental health, community and social care, along with the ambulance service and NHS 111, into a structured, read-only view. This is currently in development, with plans to extend visibility to additional partners over 2024-25, then phase it out and enable integrated pathway management through a new electronic health and care record. Among the lessons learned are the need to: set clear

expectations and prioritise workloads; be clear on use cases; do a lot of work on information governance; ensure that everyone feels they have a stake in the project; make sure patients feel safe with how their data is used; and as it extends from local to regional level ensure it remains person focused.

Gary McAllister described the London Care Record as working on three levels. First is the Health Information Exchange from Cerner for the sharing unstructured information through a portal or integration. Second is a repository, based on the London Health Data Strategy, for more structured data for sharing between care settings and for analytics. Third is for patient access to information through channels such as the NHS App and Patient Knows Best, which allows them to contribute to their records. This is supported by a federated architecture and could be extended beyond London.

The care record has been taken forward with the development of the Urgent Care Plan for the city, providing a read and write platform for accessing and contributing information and providing capabilities to develop other solutions. It helps to communicate personal information on patients, including their preferences for care, along with clinical recommendations and further care plans. At the time of the conference more than 54,000 Londoners had a care plan on the system.

One of the longest established shared care records in the country is for Leeds, and it is notable that the city council and local health organisations have taken the coordination of NHS and council services further with the development of the Integrated Digital Service. Leonardo Tantari said this was unique in sitting across the local authority and health and care system, and that this enables him and his team to see it as a whole. The care record is being further developed to track the journey of individuals through the healthcare system and there are ambitions to expand on it to ensure that any decision is data driven.

4. National programmes

National governments are making significant contributions to the drive for integrated care. Alice Ainsworth of DHSC outlined the thrust of its Digitising Social Care programme, highlighting three main workstreams: to drive the adoption of digital social care records; to test, evaluate and scale technologies, building the evidence base for future investment; and supporting care providers in putting their digital foundations in place.

She acknowledged that the social care sector has some catching up to do, and that it needs a strong evidence base to ensure specific solutions can be used widely, along with removing barriers to scale up best practice. The department has provided backing for each of England's ICSs to work with care providers on this, and while there is a mixed picture on progress it is being made. It has also been working on the assurance of technology suppliers against a set of common standards and best practice, and aims to expand these over time.

A picture of progress in Scotland was provided by Margaret Whoriskey, head of technology enabled care and digital healthcare innovation for the Scottish Government, who outlined the three key aims of its Digital Health and Care Strategy. One is to give citizens access and greater control over their own health and care data; two is that health and care services should involve staff being able to record, access and share relevant information across the system and feel confident in their use of technology; three that health and care planners have secure access to the data they need.

It has included a strong emphasis on the use of remote technology for care outside of the traditional settings. Scotland's Near Me system for video consultations really took off in 2020 during the Covid-19 pandemic, but its usage has since declined. This has created a challenge of establishing what should be 'business as usual' for the level of its use. The Connect Me remote monitoring service has shown steadier growth, being used in almost 70,000 pathways for blood pressure monitoring by March 2023. And there is an effort to expand the Digital Mental Health programme with more video enabled therapy and an increase in the number of cognitive behavioural treatments on offer.

The Data Strategy for Scotland was explained by Jonathan Cameron, deputy director for digital health and care in the Scottish Government. This is moving toward the deployment of a National Digital Platform for sharing relevant data, which should support the delivery of new tech solutions for improving care.

A Welsh perspective came from Sam Hall, director of primary, community care and mental health digital services at Digital Health and Care Wales, describing its goal of “automagicing” the flow of data so that it seems to happen without effort. DHCW is leading the development of the digital design and data standards for information sharing, and for the information to populate a national database and provide insights into various services. This will cover social care, mental health services, community nursing and the activities of allied health professionals.

She said the programme involves six steps, beginning with bringing together practitioners, service leads and support staff to explore where there is scope for standardisation and set out ambitions. This is followed by asking the participants to review the conclusions with their regional teams to ensure they are achievable, then staging a series of workshops to further refine the process.

This should lead to a provisional sign-off for the design and standards with scope for minor changes, then building them into the Welsh Community Care Information System to be tested internally then used in a pilot project. Finally, it will be signed off with a governance structure to mandate national implementation, something Hall described as “no mean feat even in a relatively small country”.

5. Local initiatives

With local authorities having responsibility for social care it is inevitable that some are taking bold steps to transform its delivery and the processes that support it.

Norfolk County Council has been running an assistive technology programme since 2018, with a centralised team providing training, piloting work, information and advice for the public, and ensuring the technology is included in the referral

process and developing a performance and monitoring framework. Sarah Rank assistant director of business and technology in adult social services, outlined the achievements, including the provision of ‘going home kits’ for people discharged from some hospitals and Alcove devices to support people with learning disabilities who could not attend day services during the pandemic. The council has also run the NATALI pilot, using internet of things technology on the local LoRaWAN network to support people living independently.

This has all delivered savings for the council amounting to £5.4 million since the programme began, and prompted the setting of a further target of £1.5 million for the current financial year.

Neighbouring Suffolk County Council entered the Cassius partnership with Alcove Technology to provide a digital care tech service that provides wearables and IoT sensors to support people in their homes. Digital care and innovation lead Sam Bassett said since its launch in mid-2021 the partnership has actively supported around 2,600 people with digital care packages and provided savings of £10.8 million.

Importantly, the council has been using data and evidence to inform interventions and improve the service. It is aiming to continually learn from the experience, increase its knowledge of the how the technology performs and review the offer.

Stockport Council has begun work on the prototype of a hospital discharge tool aimed at ensuring a smoother transfer of patients who need social care. Its head of data, Craig Hughes, said the early design reflects the current transfer of a hospital’s planned discharge data to a care hub; but it involves replacing the manual transfer of data for one of four care pathways – for home support, care packages, care and nursing homes – with a digital system in which the data is in a standardised format. This would be supported by providing care and nursing homes with a digital tool to capture the required data and support operational decision making. The council is planning to get the prototype out for people to see at the earliest opportunity.

An even more ambitious local project is taking place Liverpool, where the city’s Liverpool 5G Create team has developed a street level 5G network– consisting of 57 small cells and claimed to be in the largest in Europe – in the Kensington area of

Liverpool, providing free connectivity and the distribution of wearable technology and devices to residents in need of support.

Project director Rosemary Kay said it has proved the technology can be used successfully for the purposes, with substantial cost savings per user for functions such as remote medication management, falls monitoring and measures to deal with loneliness. Cost modelling has projected that, working across Liverpool, a network could save £44 million over eight years in connectivity costs to support telehealth, telecare and mobile working.

The network has also been connected to local GP surgeries and used to support education, and the team has begun to talk with other public service organisations about other potential uses. This could make a big contribution to future business cases for investment in similar networks.

6. Virtual wards

The conference also highlighted developments in virtual wards, through which hospitals monitor the progress of patients in their homes by using technology such as wearables and tablets. The trend has accelerated to the point where the Crown Commercial Service (CCS) has collaborated with NHS England in setting up the Spark procurement framework to support their deployment.

Connie Hutchins, senior category lead at CCS, said the technology has matured to the point where it can provide accurate health data, is creating the opportunity to take some pressure off of hospital capacity, and that the evidence is that increasingly more patients are confident in it enabling them to manage their conditions at home. There are also efforts to explore how technologies such as 3D printing and quantum computing could be used. But she also cautioned that it has to be easy for the patient to use, and that it is not suitable in all cases, notably when close monitoring and critical care is involved.

7. A need for digital inclusion

It all conveyed a positive outlook on the how digital and data can be used to support the integration of care, but there is also a widespread recognition that the full benefits will not be achieved without a significant improvement in the digital skills of many of the workforce, especially in care homes, and the ability of care recipients to use the tools. Shortcomings in digital inclusion is a major issue that has a big impact in the field.

It became clear in one of the discussions that most believe an effort is required to spread the skills more widely, but also that there is a willingness in the workforce to learn. Alice Ainsworth referred to a report commissioned by DHSC in 2021 that found almost half of care providers thought a lack of digital skills was a barrier to the adoption of technology, but also that around three-quarters of people working in the sector thought it was important to their own careers.

“There’s an appetite among the workforce, but making sure the training, support and qualifications should be really tailored to practical use to help people do their jobs,” she said. This has prompted DHSC to focus on registered managers as an important cohort as they often drive forward change in their organisations.

Sarah Rank referred to Norfolk’s digital inclusion board and Craig Hughes said that most local authorities will now have a digital inclusion strategy in place but there is a need to join them up. And Sam Bassett highlighted the fact that some people will need considerably more support than others, even if they are familiar with digital tools in their personal lives. Overall, it needs some focus on people who find it harder to acquire the skills.

This is going to take a serious effort and will draw on resource, but it is an intrinsic element of progress: if local authorities want people to join the move to digital they will have to help some become competent in using the tools.

As with the broad outlook for integrating care, there is plenty of scope for progress but it will need an often painstaking approach.

8. Integrating Digital Health & Care



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More than 200 delegates took part in this three day online event on how digital technologies and data can enable the integration of health and care, at which public sector leaders shared examples of what can be achieved and took part in lively discussions and Q&A sessions with delegate participation too. Discussions were hosted by Helen Olsen Bedford, publisher at UKAuthority, and all sessions can be viewed in full at www.ukauthority.com.

Session One - Wednesday 10th May 2023



Alice Ainsworth,
Deputy Director for
Adult Social Care
Technology Policy,
DHSC



Dr Margaret Whoriskey,
Head of Technology
Enabled Care & Digital
Healthcare Innovation,
Scottish Government



Craig Hughes
Head of Data,
Stockport Council



Sarah Rank, Assistant
Director, Business &
Technology (Adult
Social Services),
Norfolk Council



Sam Bassett,
Digital Care and
Innovation Lead,
Suffolk Council



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Session Two - Thursday 11th May 2023



Sam Hall, Director of
Primary, Community
Care & Mental Health
Digital Services, Digital
Health & Care Wales



Dr Alec Price-Forbes, Consultant
Rheumatologist and
Chief CIO Coventry &
Warwickshire NHS



Eddie Olla,
Chief Digital Officer,
NHS Warkwickshire &
Coventry ICB



Declan Hadley, Business
Development Manager,
Cisco



Connie Hutchins,
Senior Category Lead,
Tech Pillar, Crown
Commercial Service



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Session Three - Friday 12th May 2023



Jonathan Cameron,
Deputy Director Digital
Health & Care, The
Scottish Government



Gary McAllister,
Chief Technology
Officer, One London
- NHS London



Leonardo Tantari,
Chief Digital &
Information Officer,
Leeds Council and
NHS (Leeds)



Rosemary Kay,
Project Director,
Liverpool 5G Create



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This briefing note has been researched, written and published by [Mark Say](#) & [Helen Olsen](#), Bedford, UKAuthority. UKAuthority champions the use of digital, data and technology (DDaT) by central and local government, police, fire, health and housing, to improve services for the citizens they serve.

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