Digital capabilities in social care

Final report

July 2014

Written by Sara Dunn with Alexander Braddell and John Sunderland
Published by Skills for Care

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Executive summary

Background and aims of the research

Skills for Care, the sector skills council for adult social care in England, commissioned this research in order to gain a better understanding of the status of digital technologies and digital capabilities in the social care context. The research informs the development of workforce strategy for 'Digital Working, Learning and Information Sharing', which aims to support commissioners and employers to develop the digital capacity of their workforces and ensure that digital approaches to care and support are open to everyone.

Approach

The research consisted of three strands: desk research, online surveys and site visits. The desk research was a rapid evidence review to identify existing evidence on digital technology and digital capability in social care. Thirty-three relevant studies and reports were included in the review.

Two online surveys were conducted, one for managers and one for frontline staff. The surveys covered the uses of and attitudes towards digital technologies, as well as perceptions of digital confidence and skills. In total, 236 managers and 303 staff responded. The survey respondents represented the wide range of social care organisations, services and workforce roles, though with some bias towards respondents from larger organisations and more highly qualified staff, compared to the sector as a whole. Convenience sampling meant respondents were also likely to have a pre-existing interest in digital technologies; we mitigated this as much as possible by asking managers to help recruit staff to the research, and providing a paper version of the staff survey.

Eight sites were selected from volunteers recruited via the managers' survey. The site visit organisations had between 25 and 150 staff, were a mix of statutory, private and voluntary/not-for-profit, and represented a broad range of service types. They were also at varying stages of engagement with digital technologies. We conducted interviews with 20 managers and 17 frontline staff to gain in-depth insights into their uses of the technologies and their approach to digital skills support.

Research findings

Current uses of digital technologies in adult social care

- The evidence review revealed little existing evidence on the use of digital technologies in social care. The most robust research was a series of three bi-

annual surveys showing a steady increase in the use of digital technologies for workforce learning.

- The use of digital technologies was pervasive in the organisational activities of the social care organisations we surveyed – over 95% of survey respondents report its use in at least one aspect of their activities.

- The surveys suggested digital technologies are most pervasive in generic organisational activities, particularly internal and external communication, workforce learning and development, and people management. All the organisations we visited used digital technologies in these areas.

- Amongst survey respondents, digital technologies were slightly less pervasive in care-specific administration activities such as recording care plans or managing the delivery of care, though even here three-quarters of organisations report its use.

- We found widely varying degrees of digital management of care activities in the organisations we visited; some had digitised almost every aspect of the management and recording of their care activities, while others still used mainly paper-based records.

- Digital technologies are having an impact on the direct interactions between care staff and the people they support, for example to support leisure activities for people using their services, and to support communication with family and friends. We found numerous examples of this during our site visits, and spoke with managers and staff who felt that digital technologies played a significant role in making services more person-centred.

- Lack of consistent internet access for mobile workers providing services in people's homes, however, still inhibits the use of digital technologies directly with people who receive care and support services at home.

- The two most significant determinants for whether organisations were embracing digital technologies appeared to be management priorities and the overall attitude to change in the organisation.

- The rapid adoption of digital technologies in society generally was also driving adoption within the care organisations we visited. There was a general sense of a potential danger of being left behind, summed up by a staff member: "The whole world is going digital. You can't run away from it. You have to acquire the knowledge and fit in."

Staff access to digital devices

- The digital device most commonly used for work purposes by staff we surveyed was the desktop computer provided by the employer – two-thirds of staff reported using one.

- Just under a third of staff reported using laptops provided by their employer for work, and 15% reported using their own personal laptop for work purposes.

- The use of tablets for work is still relatively low, with less than a fifth of staff using one; about half of these staff are using their own device, and half are using one provided by their employer.
- Personal use of smartphones (i.e. phones with access to the internet) is high, with almost three-quarters of staff saying they have their own smartphone (very close to the figure for the UK population). One fifth of staff report using their personal smartphone for work purposes.
- Personal use of mobile digital devices – smartphones, laptops and tablets – is considerably higher than workplace use, suggesting that in terms of digital mobile at least, individual staff are more digitally engaged than their employers are.

Attitudes to digital technologies
- Most managers in our survey were convinced of the potential benefits of digital technology and its capacity to improve both the efficiency and the quality of care services. All the managers we interviewed on site also had very positive attitudes towards the introduction and continued expansion of the use of digital technologies; they too cited efficiency and quality improvements as the principal strategic drivers for adoption of new technologies.
- Other drivers for the introduction of digital systems included increasing requirements from commissioners for detailed and immediate reporting on the status of services, the increasing integration of health and social care information systems, and the need to gain and maintain competitive advantage in an increasingly competitive provider market.
- Most staff in our survey also had a strongly positive attitude towards digital technologies, seeing their potential to improve the quality of services and the quality of life of the people they support, as well as the potential to support their own career development.
- The staff we interviewed also felt that digital technologies were beneficial to the organisation as a whole and to their own role, helping them to do their jobs better. Caveats included a sense of pressure to do administrative tasks more quickly, and – in organisations using shared folders and email extensively – the pressure to take administrative work home.

Digital capabilities
- Social care managers in our survey reported a significant shortage of digital skills across all levels of the workforce; over a third said their workforce does not have sufficient basic online skills.
- A number of managers and staff in the organisations we visited felt digital skills correlated with age, and that younger staff were often well equipped to support older staff who needed it.

- While the managers and staff at the sites we visited were content with their knowledge and procedures regarding online safety and security, nearly half of the managers in our survey said their workforce lacked a basic understanding of these issues.
- The most frequently cited digital capability shortage concerned insufficient basic understanding of digital assisted living technologies; managers and staff in both the surveys and a number of the sites visited felt they needed to understand more about these technologies.
- We found evidence of a range of effective peer support approaches for digital skills at the majority of sites we visited; however, two-thirds of managers we surveyed feel that more 'digital champion' skills – the ability to enable others to engage with digital technologies – are needed at all levels in their organisations.
- The surveys revealed a significant 'perception mismatch' between how managers assessed staff skills and how staff assessed their own skills; managers reported significant skills shortages while staff were very confident in their own skill levels.

Digital skills assessment and support
- The majority of social care organisations do not as yet consider digital skills to be essential for all recruits; however some organisations are making basic online skills a requirement, and assessing them at interview, and this trend is likely to continue.
- Peer support and peer-to-peer learning are essential for the development and maintenance of digital skills in the social care workplace; these forms of support are highly valued by both managers and staff, including staff who may lack confidence in using digital technologies.
- Opportunities for more formal training in digital technologies would also be welcomed, although costs are a barrier to uptake; there are gaps in generic digital skills for example using mainstream office software and social media, as well as in specialist areas such as assisted living technologies.
- Managers and some staff would also like access to regular, independent updates about digital developments, presented for a social care audience.

Future uses of digital technologies
Participants expected a range of imminent developments including:
- greater use of digital technologies for managing and monitoring service activity including real-time reporting to commissioners
- greater use of mainstream digital technologies directly with people who receive care and support services
- greater use of assisted living technologies.

Looking a little further ahead, interviewees predicted:
- mobile digital technologies becoming ubiquitous for care staff

- more and more people who receive care and support services using mainstream digital technologies independently to manage their own care.

Conclusions

Digital technologies are deeply embedded in adult social care organisations; they are pervasive in business processes, and they are increasingly commonly used for the management and actual delivery of care. Drivers for the uptake of digital technologies include efficiency improvements, quality improvements, compliance with commissioners, and competitive advantage. Organisations making best use of digital technologies tended to have an appetite for innovation, and open learning cultures, recognising and encouraging peer support in the use of digital technologies. They were also very keen to keep abreast with advances in the use of technologies in social care.

Lack of resources currently inhibits many organisations rolling out digital access to all staff. Some organisations support staff to use their own personal devices – particularly smartphones – during the course of their work. Some of the organisations we surveyed had concerns about digital data security and the reliability of their digital systems. Further guidance on workplace use of personal devices and on digital security issues is likely to be welcomed by employers. A wider programme of support for strategic digital skills would also help managers to understand and to maximise the quality and efficiency improvements digital technologies can deliver.

Managers in social care consider their workforces to be significantly lacking in the whole range of digital skills, from basic online skills through to specialist skills in digital assisted living technologies. Staff, however, are very confident in their own digital skills. An authoritative skills and competency framework for the sector could go some way to addressing this current perception mismatch, as well as supporting any digital skills programmes put in place.

By far the most frequent form of digital skills support evidenced in this research was on-the-job learning, ranging from informal peer support through shadowing and supervisory support to structured in-house training. The organisations we visited had key members of the workforce who were the 'go-to' people for digital skills support. These digital enablers, or 'digital champions', help to make the application of technology possible for other staff, and in many cases also for people using their care and support services. This effective form of support offers an existing foundation on which to develop a comprehensive skills support programme for the sector.

The core skills of literacy, language and numeracy are essential to the effective use of digital technology. And in turn the ability to use digital information and communication technologies (ICTs) will become an increasingly essential element of information-

processing and communication skills for all members of the workforce. In effect, ICT skills are becoming core skills in social care.

Recommendations

Recommendations arising from the research included:

- exploring the feasibility of an information service about digital technologies in social care
- providing guidance on 'bring your own device' approaches, and on data and system security issues, tailored for social care organisations
- reviewing digital skills and competency frameworks with a view to their potential use across the adult social care workforce
- considering the development of a national 'digital champions' support programme, and a programme of support for strategic digital skills
- reviewing whether the functional skill of ICT should be a mandatory part of all learning and development and qualifications frameworks in the sector.

Part A: Background

1. Purpose of the research

Skills for Care wish to gain a better understanding of how digital technologies are used in and by the adult social care workforce in England. In particular, to investigate the skills required to use digital technologies efficiently and effectively in the adult social care context. To this end, in late 2013 Sara Dunn Associates were commissioned to undertake initial scoping research.

As well as providing Skills for Care with an evidence base about digital capabilities, the research was intended to inform the development of a workforce strategy for 'Digital Working, Learning and Information Sharing', with which Skills for Care and partners have been tasked by the Department of Health. The aim of the strategy is to support commissioners and employers to develop the digital capacity of their workforces and ensure that digital approaches to care and support are open to everyone.[1]

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[1] Skills for Care (2014) *Digital working, learning and information sharing: A workforce development strategy for adult social care.* http://www.skillsforcare.org.uk/Document-library/Skills/Digital-literacy/Digital-Working-Learning-and-information-Sharing-Strategy-WEB.pdf

2. Research approach

The research consisted of three strands:

- desk research to identify existing evidence on digital technology and digital capability in adult social care
- online surveys: one aimed at managers and one aimed at staff, and
- site visits and interviews to gain further insights into the challenges and opportunities digital technologies present to social care, and the skills issues raised.

Interim reports on the findings from the desk research and the online surveys were produced, and summaries are available. This final report presents the synthesised findings from all three strands of the research.

2.1   Approach to desk research

A rapid evidence review was undertaken to establish the existing evidence base for work in this area, addressing the following questions:

- To what extent are digital technologies embedded in the daily working lives of the social care workforce?
- What are the main uses of digital technologies in the delivery of social care?
- What are the main barriers to the further use of digital technologies?
- What facilitates or inhibits digital capability in the social care workforce?

Searches were undertaken on eight of the most relevant databases and search engines including ISI Web of Knowledge, Google Scholar and Social Care Online. Manual searches of a further eight websites of relevant organisations – including the BBC, Ofcom and the Tinder Foundation – were also undertaken. A range of primary search terms, related terms and search strings were used including digital, 'information technolog*', IT, ICT, computer*, internet, literacy, skills, capability, inclusion. In total 69 studies, articles, reports and guides were assessed for relevance and quality, and 33 items were then selected for detailed review and inclusion in the review.

2.2   Approach to survey research

The purpose of the two surveys was to gain insight from as broad a range of organisations as possible into the uses of, and attitudes towards, digital technologies in the social care workplace, as well as the skills issues raised.

Skills for Care were keen to capture the views of individual staff working directly with people who receive care and support services, as well as the views of people managing services and organisations. To this end, a single common entry point to the surveys was

devised, and respondents directed to either the manager or staff survey according to whether they had line management responsibility or not. The surveys addressed four main topic areas:

- activities for which digital technologies are currently used
- attitudes towards digital technologies
- perceptions of levels of digital confidence and skills
- types of skills support.

Both surveys were principally quantitative, with a series of rating/ranking type questions, and also allowed respondents to add their own comments on the main topic areas if they chose. The proposed questions for the surveys were reviewed by an Employer Engagement Group convened by Skills for Care. Members of the group checked both the relevance and face validity of the questions. We are very grateful to the people who helped us develop and disseminate the surveys (see Acknowledgements).

The managers' survey also functioned as a research recruitment tool by asking managers to:

- volunteer to facilitate the completion of the staff survey either online or on paper, and
- express their interest in hosting a site visit.

The survey was disseminated by electronic means to a range of relevant networks. 539 surveys were returned, 236 from managers and 303 from staff. Analysis of the surveys was through standard statistical formulae for the quantitative data and thematic analysis for the qualitative data.

(See the survey report[2] for full details of design and dissemination approaches. See Appendices 1 and 2 for the full texts of both surveys.).

2.3   Approach to site visits

Volunteers for the site visits were recruited via the managers' survey. A total of 63 managers registered an interest in their organisations being one of the sites visited for the research. A further expression of interest form, which detailed the requirements for the site visit interviews and outlined the data protection and confidentiality arrangements, resulted in 23 confirmed volunteers. From this sample, we selected eight organisations representing a range of sectors, types of service, client groups, size of organisation, location and extent of use of digital technology (a rough approximation based on aggregated scores from the online survey). Of these eight organisations, three subsequently dropped out and were replaced with reserve organisations.

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[2] Dunn, S. (2014) 'Digital Capabilities in Social Care: Report of Survey Research' (Leeds: Skills for Care)

See Section 4.2 below for anonymised profiles of the organisations visited.

During the site visits, we conducted interviews with a minimum of two managers and two frontline staff working directly with people who receive care and support services. The frontline staff were selected by managers at the sites. We interviewed managers and staff one-to-one or in small groups, using a semi-structured interview schedule tailored to each role. A total of 20 managers and 17 frontline staff were interviewed. See Appendices 3 and 4 for the interview schedules.

The interviews were audio recorded, with permission, to ensure accuracy of reporting. Each site visit interview was written up in a standard template by the researcher, together with any observations about the use of digital technologies. We are very grateful to the organisations, managers and staff who gave us their time to facilitate and participate in the site visits (see Acknowledgements).

3. Limitations of the methodology

The desk research was a time-limited rapid evidence review and may not have uncovered all research relevant to the topic. It is possible that research about other aspects of workforce development in social care may contain some reference to digital technologies and/or digital skills, in particular research that focuses on specific contexts of use for technology such as assisted living or telecare.

The method of blanket dissemination of the surveys using digital media is pragmatic and effective. The total response of 539 survey returns compares very well with previous surveys done using this method of dissemination. However, this approach means response rates cannot be measured and confidence intervals cannot be calculated.

There are additional specific limitations when using this method to research a topic directly related to digital media. It is highly likely that there will be an over-estimation of the levels of engagement with digital technologies because participants have been recruited through digital channels. Attempts were made to mitigate this by involving managers in promoting the staff survey, including through the dissemination of paper copies if preferred. A good percentage of managers volunteered to undertake this (30%), and 55 paper surveys were returned, representing approximately 20% of the total number of staff surveys returned. We should still however assume that the sample is biased towards organisations and individuals at the more digitally engaged end of the adult social care sector.

The organisations we visited were drawn from respondents to the surveys, so the selection bias in the surveys also applies to the sampling for the site visits. The fact that these organisations were willing to host a visit suggests they are already very engaged with the concept of digital technologies. While we developed a set of criteria to ensure as wide a range of site visit participants as possible in terms of organisational profile, ultimately the selection was a pragmatic one relying on self-selected volunteers who were able to engage with the research and see through their involvement. The staff interviewees were selected by managers. While managers made significant efforts to select staff they felt were typical in their approach to digital technologies, we were not in a position to confirm this.

4. Profile of participants

4.1 Survey respondents

In total 539 managers and staff responded to the two surveys. Of these responses, 55 were on paper, the rest online.

4.1.1 Respondents to managers' survey

A total of 236 respondents with line management responsibilities took part in the managerial survey.

- Over half (57%) described themselves as managers, a fifth as employers/owners, 10% as workforce leads and 10% as team leaders.
- Forty two percent of managerial respondents were from private or commercial organisations providing adult social care services. Voluntary and not-for-profit organisations made up 29% of the sample, as did local authorities.
- Over half (55%) of respondents to the managers' survey were from organisations with more than 100 employees. Just under a quarter (23%) employed 11-50 staff.
- Residential care was the most common single service, provided by over a third of respondents (36%). The next most common single service was nursing care (19%), followed by home care (10%) and day care (5%). Just under a third of organisations (30%) provide a mix of services.

4.1.2 Respondents to staff survey

A total of 303 staff (i.e. members of the workforce without line management responsibility) took part in the survey. Of these, 55 used the paper version of the survey facilitated by managers within their organisations. The remainder responded using the online version.

- Just under one-third (31%) of the staff respondents were care workers or support workers. The next most commonly reported role was administrative worker (21%), followed by social worker (16%).
- Almost half the staff are employed by local authorities (compared to under a third of the respondents to the managers' survey), a third are from the voluntary sector and under a fifth work in the private sector.
- Nearly three-quarters of staff are working in organisations with more than 100 employees. Twenty percent of staff are in organisations with fewer than 50 staff.

4.1.3 Characteristics of survey samples compared to national workforce

Both samples adequately reflect the diverse range of social care employer organisations and the range of staff roles within the adult social care workforce in England. However:

- both samples are skewed towards respondents from local authorities, and from larger organisations;
- respondents from home care organisations are under-represented in the manager sample; and
- professional and qualified staff at level 4 and above are over-represented in the staff sample.

4.2   Site visit organisations

Anonymised profiles of the site visit organisations are shown in Table 1 below.

Table 1: Profile of organisations visited (visits conducted during March and April 2014)

id	sector	services	principal groups services are provided for	no staff	region	geog	founded
Site 1	priv	home care	learning disabilities, autism, mental health problems	70	SW	semi-urban & rural	2011
Site 2	vol	residential care	learning disabilities, autism	105	SW	semi-urban & rural	2009
Site 3	vol	residential, supported housing, community services	learning disabilities, physical disabilities, acquired brain injury	120	Midlands	urban	1986
Site 4	LA	day care	learning disabilities, autism	35	London	urban	1993
Site 5	priv	residential	older people	28	Midlands	urban	1984
Site 6	vol	residential, sheltered housing	older people	100	SE	urban	1865
Site 7	vol	support planning & brokerage	older people, disabled people	25	NW	semi-urban	2010
Site 8	vol	day care, community services	older people, disabled people, mental health problems	150	London	urban	1993

Overall, the sites represent a good range of service and client types, and of geographical location. They were also at different stages in their adoption of digital technologies. However, due to some sites on the original selection having to be replaced with reserves:

- all the organisations are SMEs; there are no micro-enterprises (i.e. fewer than 10 staff) and there are no organisations with more than 150 staff (defining the local authority site by the number of staff in that service, not the authority as a whole), and
- there are proportionately more voluntary organisations than originally planned.

There are brief 'pen portraits' of the eight organisations who hosted site visits, and an outline of how they describe their use of digital technologies, at Appendix 5.

A note on language

The organisations we visited used a range of terms to describe the people who used their services, including, client, customer and service user. Skills for Care's preferred term is 'people who receive care and support services'. We have used this term in the body of this report, but kept each organisation's own terms in direct quotes.

Part B: Findings

5. Current uses of digital technologies in adult social care

We asked research participants a range of questions designed to shed light on the nature and extent of the use of digital technologies in adult social care. The term 'digital technologies' means different things to different people, and its definition and scope were the subjects of considerable discussion when designing the research. In the end we opted for a practical and straightforward definition, based on the types of devices and mainstream terminology with which most people are familiar:

- desktop computers
- laptop computers
- tablets
- smartphones
- mobile phones
- the internet.

In the survey, we asked managers which activities their organisation uses digital technologies for the most. Figure 1 below shows the reported use of digital technologies in the respondents' organisations, across five broad categories of workplace activity:

- people management including recruitment
- workforce learning and development
- external marketing and communication
- internal communication with staff
- planning, management or assessment of care services or outcomes.

Figure 1: Extent of use of digital technologies in organisational activities, as reported by managers
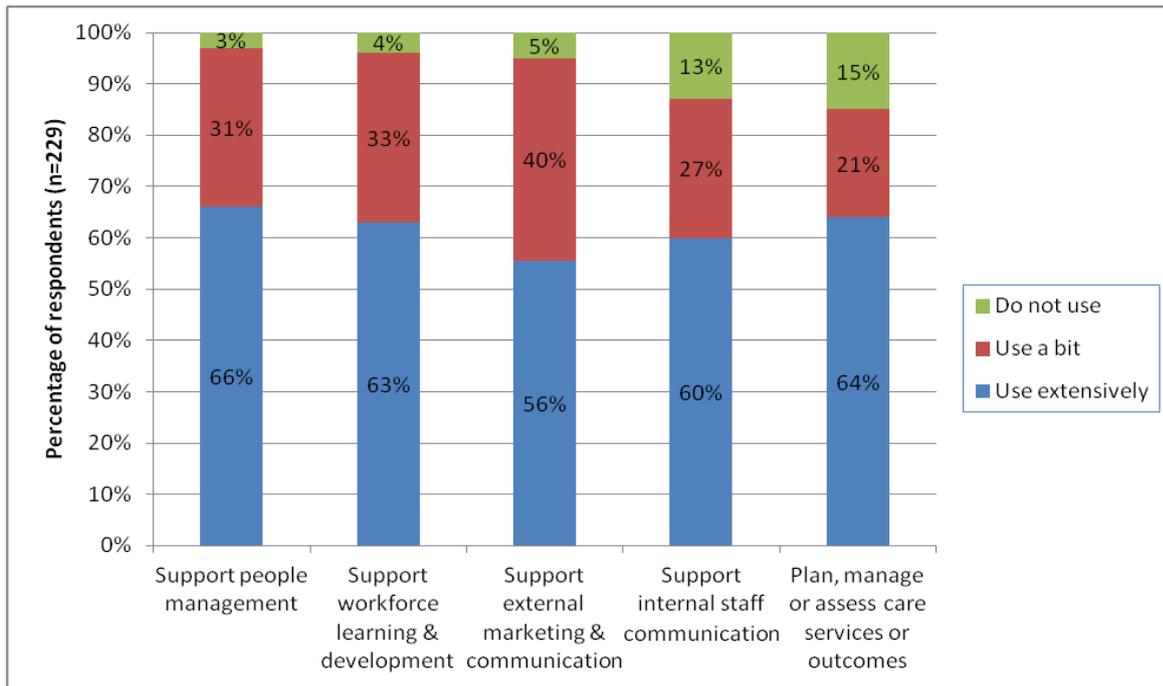
We can see that the 229 respondents to the managers' survey report the most pervasive use of digital technologies for supporting people management (which we defined in the survey as including recruitment), closely followed by workforce learning and development. External and internal communication purposes are the next most frequently digitally enabled activities. The least digitally enabled activities amongst the respondents' organisations are the care-specific ones of planning, managing or assessing services or outcomes. However, even here, over two-thirds (64%) of survey respondents reported the extensive use of digital technologies.

The findings from the site visits were broadly consistent with the survey results, and are discussed further below.

5.1   Supporting people management

5.1.1   Recruitment
Some of the sites we visited took an almost wholly digital approach to recruitment:

"We have over 12,000 'likes' on our Facebook page and it is the way we get the message about ourselves and our work out into the world. It's a very important channel of communication for us. We may be getting a slightly younger profile of recruits as a result – I am not absolutely sure – but in any event it is our main recruitment tool. It accounts for over half our recruits. Another quarter of them come from word of mouth

referrals which in turn we think are encouraged and amplified by our social media presence." (Manager Site 2)

Several sites used a mix of digital channels and more 'traditional' recruitment routes, for example placing vacancy notices on their own website and also on popular community websites such as Gumtree[3], in addition to still using the local printed press and notices in local libraries and similar community spaces. Most organisations encourage the use of email for correspondence with potential recruits:

"We prefer it if people email, mainly because it is so much easier to communicate with people that way. You don't have to read their handwriting. We don't really send out printed recruitment packs any more. The online advertising is important to us because it covers a wider geographical range. Anyone can access it." (Manager Site 8)

One site, a local authority day care centre, makes use of the commercial recruitment software package their authority uses. Candidates apply online, and the whole recruitment process is in digital form. This can mean managers have to scan in some paper documents, which can be time-consuming, but is still seen as more efficient:

"The advantage of the online system is that nothing gets lost, and we can keep everything more securely. And it's also quicker. In the old days I had to get all the application documents together in a bundle, get someone to take them to head office [i.e. the local authority] wait for someone to process them, scan them and upload them. Now it's all done here at the service site, it's much quicker and all under our control." (Manager Site 4)

One site we visited did not see any added value in either social media or other forms of online recruitment, finding that they get sufficient recruits through the 'traditional' channels of newspaper advertisements and the local job centre.

5.1.2 Monitoring of workforce

We found extensive use of digital technologies to manage rotas and monitor staff working. One domiciliary care organisation we visited has developed its own bespoke rostering software, which sends a text message alert to all staff on their personal mobile phones the evening before their shift:

"We are pretty confident that the SMS reminders have reduced the number of missed shifts. Missed shifts were only an occasional occurrence before, but they sometimes caused us significant reputational issues. Introducing the system has definitely almost eliminated the problem. When the alert system has 'gone down' for any reason we have

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[3] Gumtree is an online classified ads and community website

tended to have the odd missed shift again. We also get staff contacting us when they have received a text but haven't been expecting the shift, which enables us to resolve these rostering issues." (Manager Site 1)

Another site, a support planning and brokerage provider whose staff are mostly lone workers visiting people's homes, has a digital monitoring system for home visits, operated by mobile phone. The member of staff logs the start of their visit, and if the visit lasts for longer than expected then an automated alert is raised at head office. The organisation sees this as an important element of their lone worker policy, and staff reported finding it reassuring.

Two of the residential care providers we visited use biometric technologies to record attendance, whereby staff use a hand scanner to sign on and off shifts. One site already links the data collected to the staff rota, and in turn to the payroll system.

Two of the sites we visited manage all their personnel records digitally using databases created in Google Docs to hold all aspects of staff records online, including training records and personal development plans. These are used to support and record the supervision and appraisal process, as well as for performance management.

5.2 Supporting workforce learning and development

The survey showed over 95% of respondents using digital technologies to support workforce learning, and we found evidence of a wide variety of uses of digital technologies to support staff development during the site visits.

In terms of the delivery of learning, we saw several examples of innovative home-grown use of digital technologies, for example extensive use of in-house video:

"If someone is very profoundly disabled we might video how you give them a drink, or how you help them take their coat off. Then you show that to new staff. It is so much easier than trying to read a description of how to do it." (Manager Site 4)

One site was investigating how to use online media to bring alive its workplace policies for learners:

"We have ambitious plans to make all our workplace policies interactive multimedia resources which will be used at induction for staff training, as refreshers, and also to make the policies more accessible for families and other partners. We are interested in the concept of gamification, and maybe using a virtual world like Second Life. We are working with a university in Greece on this as a research project." (Manager Site 2)

There was a consensus that while online learning modules – i.e. individual staff working through online learning content – did have their uses, they were limited. Some organisations were required by their commissioning local authority to put staff through online courses on subjects such as COSHH, infection control or food hygiene:

"Instead of having to spend the whole day training on things like first aid, fire training, health and safety, staff can do these online, either in the office with headphones, or do them in the house. We just send them the log-in details. It takes an hour instead of a day." (Manager Site 8)

The organisations were happy to use e-learning courses for this kind of factual content, but:

"[E-learning courses] are only as effective as you make them. If staff just do them and they are not discussed, some people will not learn that way. The e-learning is most effective when we discuss it afterwards and see what people have learned and how they are going to apply it in their job." (Manager Site 4)

Most of the sites visited felt that face-to-face and group learning was required for care-specific and values-based learning:

"We deliberately do not use e-learning for care-related training. It might be useful for generic admin tasks but we feel any training directly related to care work has to be done face-to-face and in a group. We tend to recruit in tranches so we can organise face-to-face induction for groups of staff at a time. This is the best way to check staff understanding and also to enable staff to learn from each other." (Manager Site 1)

"We have found social care e-learning to be of very variable quality – often very flat and uninspiring and when we asked staff what they thought of it they said if felt like a tick-box exercise. So while the local authority and regulators require some e-learning to be done, we end up repeating it in face-to-face training anyway." (Manager Site 2)

"Some of our staff want to sit and discuss in a classroom, particularly staff who do not have English as their first language. Also for talking about things like dignity and respect, I would not use e-learning for that, you need to discuss that round the table." (Manager Site 6)

All but one of the organisations visited kept training records in some digital format, ranging from a simple spreadsheet held locally on a manager's desktop through a Google Docs spreadsheet to bespoke learning management software.

Several staff talked of how their access to the internet and other digital media had greatly improved their learning and development opportunities, principally through access to a wide range of research and guidance. We also heard from two organisations where members of staff were directly benefiting from the additional accessibility of digital media compared to print:

"I like the fact that for some of the e-learning you are able to listen, because I can't sit at the screen for too long because I am visually impaired. It has to be sound for me, so I can hear it and take it in as well as see it." (Staff Site 4)

"I encouraged one support worker who was clearly capable to go for a supervisory role. He turned it down on the grounds he was not good with computers. So I sent him on a basic IT course but he had trouble with it. When we talked more it became clear that he was dyslexic. He did not want to talk about it, he had been made to feel inferior and stupid at school. But I said to him: 'It's not a problem, I can get you technology to help.' We went to Access to Work,[4] got him all the equipment he needed, got him training. And he is going from strength to strength, becoming a really excellent team leader. At 55 years old he has got a new lease of life and he's so confident." (Manager Site 4)

5.3 External marketing and communication

The survey showed 95% of respondent organisations using digital technologies for external marketing and communication, with over half saying they use it extensively.

5.3.1 Organisational websites

All the organisations we visited had an organisational website, ranging from the simple to the sophisticated in terms of both design and functionality. The support planning organisation we visited considered its website to be an increasingly central part of its offer and one of the main ways in which people wanting to use its services would interact with them in the near future. The website has embedded video explaining what person-centred support planning involves, and has just introduced live chat, so that people can interact directly with the organisation online. It also offers an online care 'marketplace' where people buying and providing care services can find each other.

5.3.2 Social media

While a number of the organisations we visited planned to upgrade or improve their websites, for several the main focus of external communication was social media. One organisation uses Facebook (including for recruitment as described above) and a regular blog to engage with staff, family and the wider community. They also use Twitter to organise live chats with colleagues within and beyond the organisation to share

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[4] A government funded scheme that provides grants for practical support at work if you have a disability or health condition.

experiences about autism support and other issues relevant to their work. Other sites also had staff who are active tweeters:

"We do a lot of tweeting, it's a massive thing. Trying to get your message into 140 characters is something you have to get used to. Also you have to be careful what you say, or you might end up in the newspapers. So we started a Twitter group to go through the kinds of things you can and can't say, setting some ground rules." (Manager Site 8)

However, one organisation did not see a need for a great deal of external marketing or communication because:

"We get the vast majority of our work through the local authority social services. Our communication with the social services department is what is important, making sure social workers know of our work. I am redoing our organisational website myself. We don't use much social media; there's no obvious business need." (Manager Site 1)

5.4   Organisational communication

Our survey showed that the use of digital technologies for organisational communication, while still very widespread, was not as pervasive as for other activities. The site visits generally confirmed this finding, because while all the organisations we visited reported using email amongst managers and/or team leaders, two of the sites did not use email as a general communication method with all staff:

"Communication in the home is manual – using the Comms Book. Email is used to communicate with head office. We would not use email to communicate with relatives unless they asked." (Manager Site 3)

Managers in the sites who did not use email for all staff indicated that the main reason was that frontline staff spent all their working time on practical tasks and have neither the time not the internet access to enable them to check emails.

Two of the sites reported a very recent move towards using email for all staff:

"[Within the last 18 months] we have been really pushing email. At induction I set people up with an email address and show them how to use it from the workplace or from home. We started to do the payslips online, and that has made a massive difference in people checking their email. We declared last year 'The year of the email' and we told staff: 'Stop using laborious communication and use the email.' We set a benchmark of 48 hours to respond to emails." (Managers Site 8)

"[Since we introduced email across the organisation] the number of memos going out has reduced. The internal messaging board has improved communications considerably. Access to key documents is a benefit, the intranet means that staff can have access to policies and procedures so there is no excuse for not knowing what the policy is." (Manager Site 6)

Other reported benefits of email amongst the sites were the more comprehensive and accurate nature of written records and the 'equal opportunities' function of giving everyone across the organisation equal access to information.

Two of the sites we visited conduct all their communication and administration with all staff using email and other digital tools including shared calendars and shared documents drives. At both these sites all staff have smartphones, some supplied by the employer and some belonging to staff personally (see Section 6 below for more on staff access to devices).

5.5   Planning, managing and assessing care services and outcomes

The survey data on use of digital technologies for care-specific activities suggest divergences within the sector. While one-fifth of respondents said that digital technologies were not used at all for these purposes – therefore making it the least *commonly* digitally enabled activity, over two-thirds of respondents said that their organisation used it extensively. We might infer from this that the use of digital technologies for supporting care specific activity tends to be more 'all or nothing' than other organisational uses of digital, which might be more incremental. This inference was supported to some extent by the site visits; several organisations had a 'digital by default' approach, where the planning, management and assessment of services and outcomes was done digitally wherever possible, and by contrast several did not really use digital to support this side of their work at all.

Those organisations that could be described as 'digital by default' have one obvious trait in common, which was a senior manager or managers with an enthusiasm for digital technologies, and belief in the importance of getting the most out of digital technology for both their business and the people using their services. Two of the very digitally enabled organisations were quite recently formed, and recognised that the lack of legacy issues gave them an advantage over other organisations with older infrastructure and software:

"As a new start-up we had no issues with legacy – either in terms of systems or of records. Our vision is all about positive behavioural support. And we have used digital technologies to help us run an efficient business as well as to help us in the day-to-day provision of care and support." (Manager Site 2)

One organisation we visited, a recently established support planning provider, took advantage of the free and low cost web-based database systems now available to digitise as much of the care planning process as possible. In effect their main 'product' is information in the form of support plans, so they had a focus on digital information management from the outset:

"Our advisors are mobile workers who do as much of their administration and record-keeping as possible online. They visit people in their own homes to develop a care plan with them. That first part of the process is still usually done using pen and paper – we have plans to use tablets for this but we know we need to do this very carefully so the device does not become a barrier getting in the way of the interaction between the advisor and the person. Once the plan has been agreed at the initial meeting, the advisor will input it into the shared document system using their laptop, and everything about the process will be digital wherever possible thereafter. We email the finished plan to clients whenever we can. If the person themselves does not have an email we will ask for a friend or relative who has – we really want to encourage digital engagement because it is beneficial for people, we believe that it will give them more control over managing their care. In terms of the internal record-keeping, all the information we hold about all our clients is held on a spreadsheet which is constantly updated as we work through the planning process with them." (Manager Site 7)

The other two sites extensively engaged in digital technologies for the management of care activities had taken a different approach to embracing digital, having both opted to buy into commercial software packages designed for the care sector. One residential care home uses an all-encompassing care planning and care recording system enabling entirely paper-free records. The managers control the system from a small office with two computers. Staff record their daily care activities onto the system through three wall-mounted tablet computers in various parts of the home, as well as five handheld tablets. As well as enabling paper-free recording of data, the system also makes care-related information available to staff on a need-to-know basis. Visitors to the home sign in using the wall mounted tablets and are also able to enter comments. This care home also uses a remote telehealth monitoring system, which allows care staff to enter regular details of vital signs of residents whose GPs have indicated they are at high risk. These logs are then monitored by medical personnel who will in turn alert the local GP of any concerns.

One local authority day care centre also uses a bespoke commercial software package, specifically for person-centred planning:

"In 2010 we became the first organisation nationally to use a web-based tool that tracks outcomes and puts the 'action' into 'planning'. Each person we support has a user-

friendly account on computer where outcomes and actions agreed in person-centred planning are logged. It helps make sure that the outcomes most important to the person are kept in view all the time." (Manager Site 8)

Other sites have adopted a more incremental approach to the digital enabling of their care activities, for example by starting off with digitising their care plan records allowing staff to update plans as they go, using either desk-based or handheld computers.

5.5.1 Impact of commissioner attitudes

Commissioners – in these cases local authorities – appeared to influence the use of digital technologies in recording care services and outcomes. In some cases the commissioner was acting as a driver, and in other instances as a significant brake on the use of digital technologies.

For example, a manager at one site commented that while they did not use digital technologies extensively for the recording of care plans or for monitoring services internally, she was required to make online returns to the local authority, and was aware that digital reporting requirements would increase. Another manager said that the use of digital technologies by the local authority head office required them, as a community service, to take up digital approaches to learning and development, and recruitment. One interviewee, the director of a domiciliary care business we visited currently using digital principally for rostering and internal business functions, was clear that the demands of their local authority would be the principal driver for more use of digital monitoring of service provision, for example real-time recording of home visits:

"The area of growth in use of digital technologies for domiciliary care is likely to be in staff timekeeping systems. Some local authorities already demand digital records of domiciliary visits, time, duration and so on. Ours does not as yet, but it may come very soon. If commissioners start to require that kind of data, and require that it is provided to them in a digital format, then we will have to comply. There will also be complete digitisation of client records, other than just the care plans which we do at the moment." (Manager Site 1)

By contrast, managers at other sites felt their local authority was to some extent an inhibitor rather than an enabler when it came to digital approaches to managing and recording services and outcomes:

"The biggest problem is the local authority information systems. All our records are done on Google Docs spreadsheets and they work really well internally and for the people we support, but getting our information systems to speak to the local authority social services systems is really challenging. Their systems are quite old technically and also

their processes are inflexible, so it takes up a huge amount of our time delivering information about our service outcomes to them in the way they need. I think they are beginning to change though, in part because of how they have seen us approach our information management." (Manager Site 7)

These managers also noted a good deal of resistance to mainstream social media and cloud-based systems from local authorities – or more precisely from local authority IT:

"The biggest problem is the interface with commissioners – the local authority. Their IT policies mean they block Facebook, YouTube, Google Docs, so the staff in the social services department cannot access all the information we provide to our customers and families. We have to send all the information to them as email attachments." (Manager Site 2)

While the open and transparent use of digital media may challenge the local authority, families respond very positively to the organisation's approach:

"Families can, if they wish, log in to the online records of their loved one and view daily activity logs. The families really love it because it gives them the reassurance that people are being well supported and are active and engaged with meaningful activities. Digital technologies are also used in more informal ways for recording services. For example we encourage staff to take photos using smartphones or tablets of their activities with customers. These photos are shared with family, and used on Facebook [with all appropriate permissions in place]. They give an immediate and more intimate record of the customer's day and are a good way of keeping families in touch." (Staff Site 2)

Our interviewees also reported widely divergent responses from Care Quality Commission inspectors to their use of technology:

"We wondered what the regulators CQC would make of this digital approach. But in fact the inspectors have really embraced it." (Manager Site 2)

"When we had our visit by the CQC inspector, she couldn't get her head around the system. She wasn't computer-literate, we had to print everything off for her. Even though I sat for hours with her that day, she just couldn't get it. But when I printed it all off for her, the reams of paper, and she took it away and came back, everything in the final inspection report was fine." (Manager site 5)

5.6 Supporting direct care activities

We wanted to get a detailed understanding of whether and how digital devices were used by and with people who receive care and support services. In the survey, we asked managers about their use of digital across a range of types of direct care activity:

- planning leisure activities or finding entertainment
- keeping in touch with friends and family
- communicating with welfare agencies or other services (e.g. GP, housing support)
- finding information about the person's care and support
- supporting education or employment related tasks
- helping with daily living - assisted living technologies such as falls monitors etc.
- doing shopping or banking-related tasks.

Figure 2 below shows the results. The use of digital technologies in the direct provision of care was more limited than for generic organisational administration and business activities described in the previous section. However, even here the penetration of digital technologies is quite marked. We can see that over three-quarters of respondents reported that their organisation uses digital technologies for planning leisure activities with people who receive care and support services, for helping them keep in touch with family and friends, and for communication with other agencies such as GPs or housing services. Through additional comments made by survey respondents, we also identified communication aids as a significant area of use of digital technologies.

Figure 2: Use of digital technologies in direct care activities, managers' reports
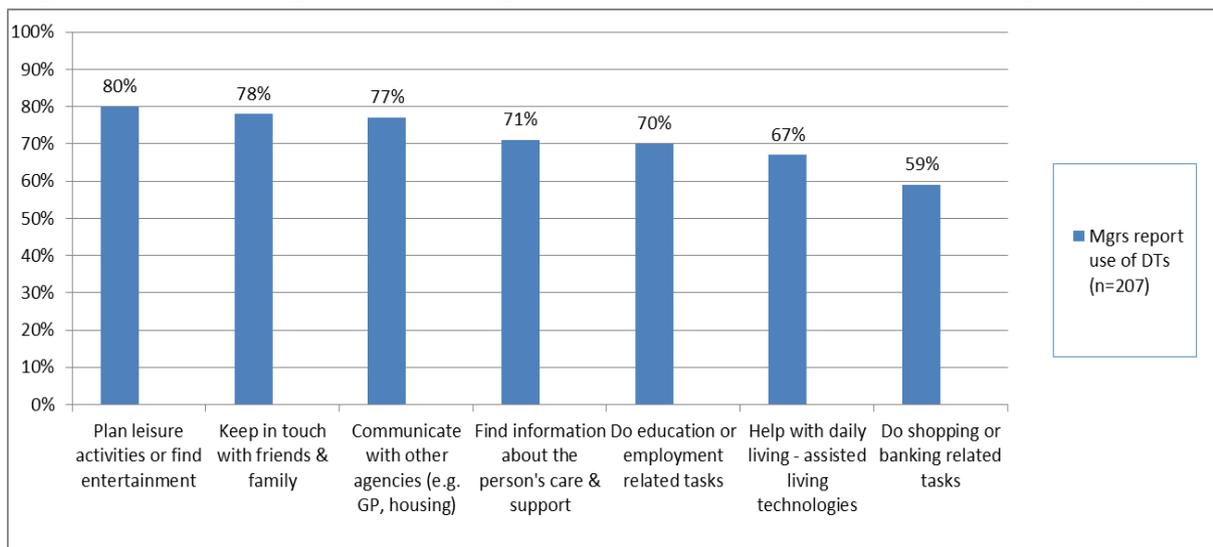
(n=207)

5.6.1 Entertainment and leisure activities

One of the sites we visited, a residential care service for people with autism, sees the use of digital technologies as one of the most important tools in their approach to positive behavioural support:

"Many of our customers have tablet computers, and almost all of them have iPods for music. The staff help them to listen to music, to use YouTube[5] and Facebook, to find and access films, pictures and so on. We use our own phones to take pictures of activities we are doing with customers in the day – lunch in the café, going shopping, whatever it might be. We upload these to Facebook and onto the customer's care record. And we help people make video diaries. All this goes onto the customer's care record and their family members can access these at any time. It makes a real-time record of how the person is spending their time." (Manager Site 2)

A day care centre for people with autism we visited has an emphasis on group activities, with a large touch-screen smart TV for games involving cognitive skills and to provide music and videos for clients – access to the internet via the large screen provides a vast source of these kinds of resources for entertainment. This site also has a sensory room:

"We have had a sensory projector put in there. It's interactive – it produces sound and light and colour, creates an audio visual environment. It can be controlled by the individual, and we have put photos of people on it, so that it is very personalised. We also have eye-tracking software, so that the programmes on the projector can be controlled by movement of the eyes, for people who do not have motor control. We are just starting to use this with some of our clients." (Manager Site 4)

This organisation also has tablets to use with clients, with apps for cognitive skills (for example matching colours or pictures) as well as apps to aid communication (for example flash cards with pictures of common daily tasks and activities). One of the managers we spoke to had undertaken a course in multimedia advocacy.[6] He learned how to create multimedia profiles for some of the clients, using common office presentation software, producing a slideshow with audio and video clips, images and text. The aim is to build up a picture of the individual's life, their likes and dislikes, how they communicate:

"It's for the individual to take with them on DVD wherever they go. So for example if they go to respite care, particularly if they can't communicate verbally, then the respite staff can use the profile to learn all about the person, who they are and how best to support them." (Manager Site 4)

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[5] YouTube is a video-sharing website
[6] These courses are run by the Rix Centre at the University of East London; http://www.rixcentre.org/portfolio/multimedia-advocacy-2/

Another service we visited, also supporting people with learning disabilities, makes extensive use of digital communication aids. They do not provide people with their own computers but do support them to access PCs in libraries, for example. Some people have digital devices of their own which the staff support them to use. This organisation also has an interactive console game, using a large screen, which can be used for physically interactive games – bowls, archery etc. – as well as for cognitive stimulation such as matching games, quizzes and so on. This was originally planned as a rehabilitation support for people in need of care and support with acquired brain injury, and has worked well for this group, but its appeal has turned out to be wider, with other people also enjoying the games. In addition, the staff have realised that an internet-enabled large screen opens up a whole world of entertainment and leisure possibilities for both individuals and groups, well beyond the console game it was originally purchased for.

5.6.2 Communication activities

Two other sites we visited, both offering residential care to older people, reported more limited use of technology directly with people using their services. One site that has a very extensive online care management system, tends currently only to use digital technologies directly with residents for Skype[7] or other forms of online communication, and this is generally when families come to visit bringing their own laptops or tablets. The managers at this site expect to use technology much more with residents in the near future. Similarly, one of the other sites providing residential care also sees interaction with family as the main focus for current technology use for residents:

"We have internet stations in the home – we call it our internet café. Families and visitors will use them to show people pictures and so on. And we use email to communicate with some of our families – but this does not suit everyone, so it is determined by whether families are online or not." (Manager Site 6)

Staff at several sites noted that the people they were offering care and support were themselves asking for digital technologies:

"One of the people I support wants an i-Pad so I'm going to get him one. But for the i-Pad to be useful to him he needs some apps, so I'm going to download some apps for him - music apps that he can easily touch." (Staff Site 8)

"You can do things the old-fashioned way. But our service users seem to prefer the digital approach and it is helping them to live normally." (Manager Site 3)

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[7] Skype is an internet-based voice and video calling service.

One site, a support planning brokerage, while it does not actually engage in service delivery per se, has a pro-active approach to digital communication with the people using its support planning services. Their aim is to encourage everyone to make use of digital services to help them research, plan and access their support packages. They encourage email communication with as many people as possible, and also encourage family and friends to be email points of contact for people who are not yet online.

5.6.3 Bespoke developments

One site we visited is developing an app in-house, to help clients find local services and also as a learning aid for using the computers available on the premises. One of the members of staff identified a need for this app and presented a case for its development to the managers. They found the worker an online course in app development and provided the worker with a tablet for developing and testing the app:

"The app is going to help raise our profile with commissioners of mental health services." (Manager Site 8)

5.7 Key messages about digital technology use

- The use of digital technologies was pervasive in the organisational activities of the social care organisations surveyed – over 95% of survey respondents report its use in at least one aspect of their activities.
- The surveys suggested digital technologies are most pervasive in generic organisational activities, particularly internal and external communication, workforce learning and development, and people management.
- Each organisation we visited described at least one significant use of digital technology – almost always involving the internet – to support activities in these areas, though the focus varied according to the priorities and circumstances of the organisation.
- Amongst survey respondents, digital technologies were slightly less pervasive in care-specific administration activities such as recording care plans or managing the delivery of care, though even here the great majority of managers and staff report its use.
- We found widely varying degrees of digital management of care activities in the organisations we visited; some had digitised almost every aspect of the management and recording of their care activities, while others still used mainly paper-based records.
- Digital technologies are having an impact on the direct interactions between care staff and the people they support. Three-quarters of respondents to our manager survey said their staff use digital technologies to support leisure activities for people using their services, and to support communication with family and friends. We found numerous examples of this during our site visits, and spoke

with managers and staff who felt that digital technologies played a significant role in making services more person-centred. They also reported an increasing expectation/demand from people using services to be able to engage with digital technologies.

- We found extensive use of digital technologies in both the new and long established organisations we visited, and across all forms of service.
- Lack of consistent internet access for mobile workers providing services in people's homes, however, still inhibits the use of digital technologies directly with people who receive care and support services at home.
- The two most significant determinants for whether organisations were embracing digital technologies appeared to be management priorities and the overall attitude to change in the organisation.
- The age, sector or type of service provided by organisations did not seem to influence their approach to technology overall, although in the eight sites we visited there was generally more use of digital technologies in direct care activities with people with autism and learning disabilities than there was with older people.
- The rapid adoption of digital technologies in society generally was driving adoption within the care organisations we visited. There was a general sense of a potential danger of being left behind if digital was not embraced, best summed up by one comment by a staff member at site 8: "The whole world is going digital. You can't run away from it. You have to acquire the knowledge and fit in."

6. Staff access to digital devices

We wanted to gain a quantitative snapshot of the extent and type of workforce access to digital devices. We used the staff survey to ask respondents what devices they used, whether the devices belonged to them personally or were provided by employers, and whether they used them for work or personal purposes. Figure 3 below shows the results.

Figure 3: Staff access to digital devices
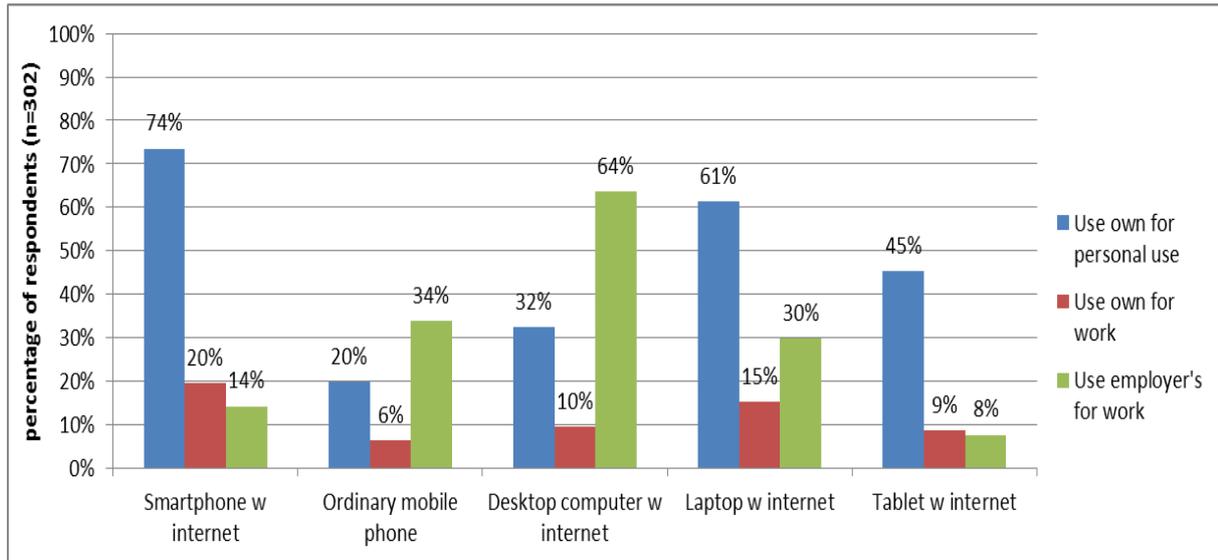
We can see that personal use of smartphones (i.e. phones with access to the internet) is high, with almost three quarters (74%) of the 302 staff who responded to our survey saying they have their own smartphone (very close to the October 2013 national figure of 72%).[8] One fifth of staff (20%) report using their personal smartphone for work purposes.

The device most commonly used for work purposes by staff survey respondents was the desktop computer provided by the employer – 64% of respondents reported using one. The next most commonly used device for work purposes was an ordinary mobile phone (i.e. one that does not access the internet) provided by the employer; just over a third (34%) of staff report using this.

Just under a third of staff (30%) reported using laptops provided by their employer for work, and 15% reported using their own personal laptop for work purposes.

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[8] Deloitte (October 2013) *Deloitte Consumer Review: Reinventing the Role of the High Street* London: Deloitte

The use of tablets for work is still relatively low, with only 17% using one; about half of these staff are using their own device, and half are using one provided by their employer.

Personal use of mobile digital devices – smartphones, laptops and tablets – is considerably higher than workplace use amongst staff survey respondents, suggesting that in terms of digital mobile at least, individual staff are more digitally engaged than their employers are.

Device access for staff at the organisations we visited reflected the diversity of levels and types of access suggested by the survey. Frontline staff at one site have no access to digital devices at work apart from their own mobile phones:

"The technology we use for work is our personal mobile phones, just ordinary mobiles, whatever we have ourselves. We get SMS reminders about our shifts on them. I also use it myself at work for example if I need to call someone's GP while I am looking after them, that kind of thing. I do use a computer at home, my husband has one. I am quite keen on using it for research and I have also used it in the past to make lists of useful contacts for work, that kind of thing. But that is done at home, not in work time." (Staff Site 1)

By contrast, frontline staff at several other sites reported using a range of tablets, laptops, smartphones and digital cameras provided by the employer on a daily basis, both for the recording of care activities and directly with people who receive care and support services.

7. Attitudes to digital technologies

7.1   Using digital technologies: drivers and benefits

The great majority of respondents to both the manager and staff surveys had strongly positive attitudes towards digital technologies. Around 70% of the managers we surveyed felt that digital technologies can make their organisation more efficient, and have clear benefits for the people using their services (see Figure 4 below). (When reviewing these attitudinal results we do need to bear in mind the issues with selection bias discussed at the start of this report – we will inevitably have recruited respondents who are generally positively disposed. We would caution against any extrapolation to the sector as a whole).

Figure 4: Managers' views on effect of digital technologies on efficiency and on quality of service
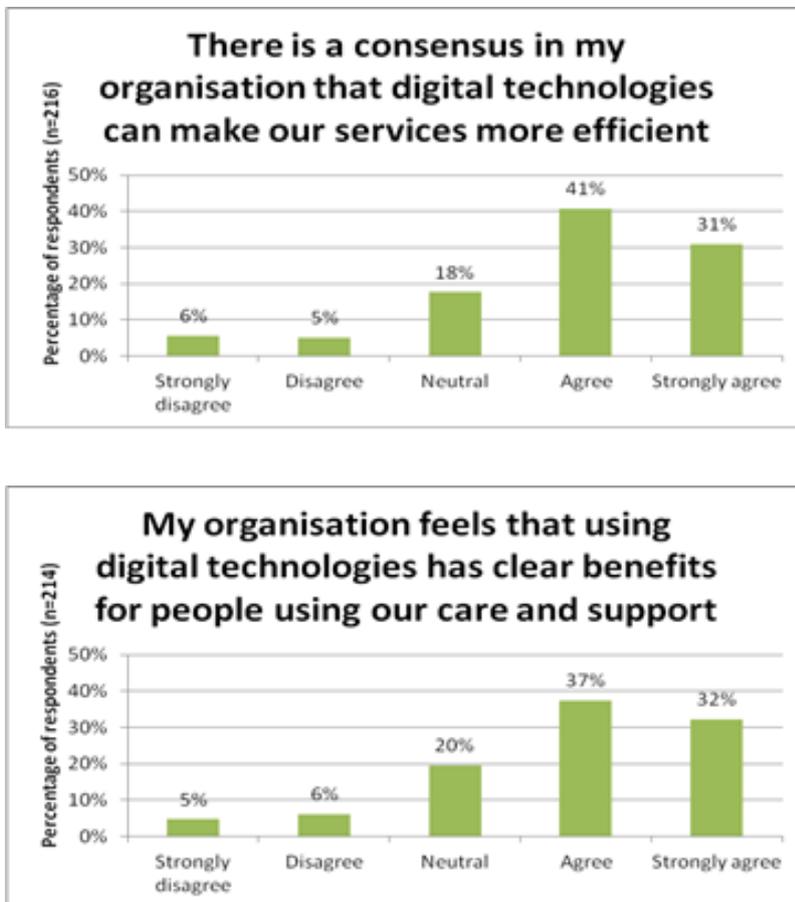
In the staff survey, over 70% of respondents agreed that digital technologies help to improve the quality of services, and to give people more choice and control over the care they receive (see Figure 5 below).

Figure 5: Staff views on effects of digital technologies on quality of service and on people who receive care and support services

Digital technologies: are good for care organisations because they help us to provide a high quality of service to the people we support

Percentage of respondents (n=277)

Strongly disagree	3%
Disagree	2%
Neutral	17%
Agree	46%
Strongly agree	32%

Digital technologies: can give people using care and support more choice and control

Percentage of respondents (n=274)

Strongly disagree	3%
Disagree	5%
Neutral	19%
Agree	52%
Strongly agree	21%

7.1.1 Drivers for introducing digital technologies

Like the managers in our survey, the managers we interviewed during our site visits identified improved organisational efficiency and service quality as the principal strategic drivers for introducing digital technologies in their organisation. They also identified three other strategic drivers specific to the care sector:

A. Compliance with commissioning requirements

As discussed in Section 5.5 above, some of the organisations we visited felt that the digitisation agenda was being driven in part by their commissioners – in this instance their local authorities. These organisations recognised that commissioners were likely to demand more detail and transparency about the activities of provider organisations, and also more 'real-time' reporting, which would need to be done using digital systems. For these organisations, using digital technologies in the management and administration of their services was therefore fast becoming a compliance issue.

B. Integration of health and social care

Some interviewees felt that the increasing integration of health and social care would require them to use digital systems that enabled organisations to exchange data in common formats and enabled a person's records to be viewed by a range of healthcare and social care providers. There was no clear sense of the detail of what this might be entail, just a general awareness of profound changes to the management of information being a likely consequence of integration.

C. Competitive advantage

Managers at several of the sites we visited were clear that the use of digital technologies was a key way in which they hoped to gain competitive advantage. They recognise that there is an increasingly competitive market of care providers:

"We need to be out there saying: 'This is who we are, this is where we're at, these are the services we offer.' We want a fair share of the business in the market, so we need systems that are easy to use. And of course we keep an eye on what our competitors are doing with technology. That's why we have an innovation group, so we are able to give that 'extra' factor – these are the things that give us an edge over our competitors."
(Manager Site 8)

Some managers also saw digital technologies as a valuable tool for getting feedback, which in turn can then be harnessed as a marketing tool:

"We put comments on the NHS Choice website. We carry cards for residents or relatives to make comments. We now have three comments up there, all positive."
(Manager Site 6)

7.1.2   Benefits of using digital technologies

Both the managers and staff we spoke to during the site visits were able to identify a wide and varied range of benefits accruing from their use of digital technologies.

Efficiency improvements

Interviewees felt that efficiency improvements operated at a number of levels:

- Improved **consistency of communication**: many interviewees had more confidence that everyone was getting the same information at the same time, and that information was more up to date
- Greater **flexibility of communication**: for example staff using tablets or smartphones could update records held in shared folders on the internet without having to return to the office or to their desk
- Increased **speed of communication**: email, intranet and shared document drives reduced delays in time sensitive communication

- Improved **accuracy of records**: "There is a common format for recording work which has made it so much easier, you don't have to struggle with reading people's handwriting, and staff who don't have English as their first language find it easier too – there are dropdown menus, and auto-complete prompts when you are typing" (Manager Site 6); "On the old paper records you'd be writing sentences, going round the mulberry bush trying to get your point across; on the computer you have a list of points, you select them, there is space for extra information or comment if you need it" (Staff Site 5). Some interviewees also commented on the more intuitive nature of touchscreen technology, meaning that staff who did not have keyboard skills did not feel disadvantaged.
- **Space saving**: "We don't have reams and reams of records of people's support plans" (Manager Site 7); "The care plans at my last job, they were in these little cardboard files, and they were so thick, and then you would pick one up and a piece of paper would fall out or the file would break in the cupboard because they were so heavy" (Staff Site 5).
- **Time saving**: interviewees identified time savings in both record creation and information retrieval: "This new system for recording our care work has probably saved me half my working week" (Manager Site 6).
- Improved **management of information**: "You have a clear audit trail with electronic records, and you can interrogate them to pull off reports on all aspects of your service. The records are more secure from loss because they are backed up, and they are also very hard to tamper with" (Manager Site 2); "Keeping everything in central databases means you don't have to ask people to give you the same information over and over again – collect it once, use it many times" (Manager Site 7).
- Improved **monitoring of people using services**: "We have a real-time information system which means we can monitor individual customer experience; we know what people are doing at any given time, and their families can access that information in real time too" (Manager Site 2); "The electronic care monitoring system has alarms, so for example it can tell us 'X has not had a bowel movement' – it comes up as an alert and we need to address it to clear the alert on the system. With the old paper-based system it was possible things could get overlooked" (Manager Site 5).
- Improved **monitoring of staff activity**: shift alerts via SMS and biometric clocking on and off had reduced missed shifts and improved time-keeping; integrated systems, for example linking shifts worked to rotas and to electronic payroll, significantly reduced administration for managers
- Better **evidence for workforce planning**: "The real time recording of care activities helps me to audit how many staff I need to achieve the best possible outcome for the clients" (Manager Site 5).

- More **efficient external marketing**: the use of social media in particular was seen by several of the sites we visited as indispensable in raising their organisation's profile with commissioners, customers, families, staff and potential new recruits.

Quality improvements

The types of quality improvements identified by interviewees were equally wide-ranging and varied, and applied both to working practices and to learning and development:

- Positive impacts on **choice and control** for people using services: this took different forms in the various organisations we visited (see Section 5.6 above) including using digital technologies for accessing music, video and other forms of entertainment, for sensory stimulation, for information seeking about care services, for communication aids, and for alert and reminder systems

- Positive impacts on **teamwork**: "The younger staff were really keen on the online system we introduced – they were whizzing about it in seconds. It had a really positive effect on teamwork – the younger staff could really help out the older ones who felt less confident with the technology" (Manager Site 6).

- **Better feedback** on approaches to care: the use of video feedback in one site had direct impacts on quality of care: "We started to use intensive interaction with one of our service users, but we were not seeing much improvement. As soon as we looked at the video footage we could see what a member of staff was doing wrong. They could see it themselves, they changed their practice. There was an immediate improvement. That would not have happened without the video technology" (Manager Site 4).

- More reliable **evidencing of learning and good practice**: digital video was seen as a very effective means of evidencing learning for formal qualifications, and for sharing good practice between staff.

- Improved **access to learning and development** for staff: "I am the dementia link person for the organisation; you can get so much information on the internet about good practice and research" (Staff Site 5).

- Improved **transparency** about working practices and opportunities: staff at one site commented on how the hand scanner for logging on shifts stopped a colleague persistently turning up late, and how using e-mail gave everyone a fair chance to take up any opportunities for learning and development.

7.2   Using digital technologies: barriers and disadvantages

While all the participants in this research, both survey respondents and interviewees, were able to identify wide-ranging drivers for and benefits of the use of digital technologies, they were equally able to describe barriers to their implementation, and some potential disadvantages of their use.

7.2.1 Barriers to introducing digital technologies

Cost

By far the most common barrier to the introduction of digital technologies cited by both survey respondents and our interviewees was cost. These costs included:

- **costs of purchase of hardware and software**: though as noted above, some of the organisations we visited had a strong appetite for open source and other low/no cost software solutions
- **costs of internet connections**: not just office broadband; staff using internet enabled devices on the move also need 3G or 4G connections
- **costs of training staff** to use new devices or applications: "Courses cost money, and so does coaching, because you are freeing up two people, the learner and the person showing them what to do. Then if they don't use that device or have to use that particular function on the device for another three weeks or something, they have often forgotten how to do it." (Manager Site 4)

Lack of reliable internet connection

This was clearly more of an issue for organisations with mobile workers, and most particularly for those in rural or semi-rural locations; both the sites with mobile workers felt that lack of reliable mobile connectivity was a major barrier – and for one of them it was one of the principal reasons for not considering the use of internet-enabled devices for staff.

Problems with local authority IT policies and information systems

As discussed in Section 5.5 above, two of the organisations we visited found digital interaction with their local authority commissioners very problematic. In both cases this concerned using cloud-based services, of which – together with social media – many local authority IT departments are still wary. While neither of the organisations we spoke to have been put off pursuing their own use of cloud-based systems and social media, they did feel it put a brake on them being able to use them to their full potential in their reporting to commissioners.

Lack of digital confidence and skills amongst staff

Most, though not all, of the managers at the organisations we visited felt that at least some of their staff lacked confidence and skills in using digital technologies:

"The main barrier for us is fear of technology, a lack of confidence, particularly the older staff can be very sensitive to their perceived lack of skills" (Manager Site 3); *"The younger staff, they've grown up with their i-Phones and i-Pads, it's second nature to them; it's harder for older staff"* (Manager Site 4).

Some, though by no means all, of the staff we spoke to expressed misgivings about using technologies when they were first introduced: *"I was worried about the computer system to start with. Before the computer came in we used the report book, we used to write up a daily report. So it did worry me to start with, because I did not know much about computers"* (Staff Site 5). None of the organisations we visited had seen lack of staff skills as an insurmountable obstacle however. A mix of peer support, training, and a well-managed change process had been used to address the issue. We discuss digital capabilities and skills support in more detail in Sections 8 and 9 below.

7.2.2 Disadvantages of using digital technologies

Potential risks

In all the sites we visited we found managers and staff were aware of possible downsides to using digital technologies in the social care context, but considered these potential risks, rather than problems actually encountered. These potential risks included:

- the perception that staff may be seen as interacting with computers rather than the person they are looking after
- the potential for an increased information processing load on frontline staff, which in turn might mean they have less time to spend with people they are supporting
- the possibility that some people receiving care or support may spend more time using digital devices than interacting with other people – i.e. that this may be an easier way of keeping people occupied, at the expense of social interaction
- or, on the opposite side, a risk of alienating or excluding current or potential clients who did not want to engage with digital technologies.

Negative impacts

Staff at some of the sites did cite the following as actual negative impacts of the use of digital technologies:

- In some situations the requirement to enter information into a digital system was seen as a 'hammer to crack a nut', when a quick note jotted down would do the job just as well; this may be a symptom of either poor device usability or procedural overkill rather than an actual disadvantage of digital per se, however.
- Several staff at different sites said they had some anxiety about how a mistake in a digital document could be more costly as it could be propagated so instantly and widely; for example an email sent to the wrong people: "You just press the wrong button and it's too late". One staff interviewee also found the shared document system in their organisation somewhat intimidating, as they worried that they might introduce an error that would be visible to all their colleagues immediately.

- Several staff felt that a negative impact of digital communication generally was the pressure to do things quickly; e-mails requiring immediate responses, and a sense of 'information overload' which added to the pressure of their role.
- Several staff also commented that the 'always on' nature of internet-based record systems and email communications meant that they and some of their colleagues were more often tempted to take work home – for example by putting off doing administrative work in order to do more pressing things during their shift, because they know they can catch up on the (digital) administrative work at home.

Security issues

We had hypothesised that data and device security might be major issues for managers in social care. Our survey revealed some concerns – a quarter of survey respondents said that they had difficulty in ensuring their digital systems were reliable and secure. However, security risk was not seen as a major issue by most of our interviewees. For the most part, when the issue of data or device security was raised, both managers and staff seemed confident that existing safeguards – for example password protection – were sufficient. Two managers commented that they felt data security was easier to ensure with digital records than it had been with paper records. We discuss these issues in the conclusions and recommendations at the end of the report.

Interviewees at two of the sites commented that their complete reliance on internet connectivity and on digital systems did mean that they were vulnerable to either power cuts or broadband outages, or to equipment running slowly or failing.

There was not the scope within this research to find out what contingencies had been put in place to deal with data breaches or equipment failure – disaster recovery plans, data backup and security measures and so on. There is scope for more investigation and/or guidance in this area, and we discuss it further in the conclusions and recommendations at the end of this report.

7.3   Key messages about attitudes to digital technologies

- Most managers in our survey (around 70%) were convinced of the potential benefits of digital technology and its capacity to improve both the efficiency and the quality of care services. All the managers we interviewed on site also had very positive attitudes towards the introduction and continued expansion of the use of digital technologies; they too cited efficiency and quality improvements as the principal strategic drivers for adoption of new technologies.
- Other drivers for the introduction of digital systems included increasing requirements from commissioners for detailed and immediate reporting on the status of services, the increasing integration of health and social care information systems, and the

- need to gain and maintain competitive advantage in an increasingly competitive provider market.

- Most staff in our survey also had a strongly positive attitude towards digital technologies, seeing their potential to improve the quality of services and the quality of life of the people they support, as well as the potential to support their own career development.

- The staff we interviewed also felt that digital technologies were beneficial to the organisation as a whole and to their own role, helping them to do their jobs better. Caveats included a sense of pressure to do administrative tasks more quickly, and – in organisations using shared folders and email extensively – the pressure to take administrative work home.

- The majority of managers in our survey had reasonable confidence in their ability to maintain safety and security. Similarly, the managers and staff we interviewed were by and large happy with the data protection and security arrangements in place.

- Nearly 80% of staff in the survey felt that digital technologies should be made available to all workers, and all the staff we interviewed – including those whose employers did not provide access to digital technologies – felt that more use of digital technologies would help them do their job better.

8. Digital capabilities in the adult social care workforce

We investigated the issue of digital capabilities – skills and confidence – in both the surveys and the interviews on site. We wanted to understand how managers perceive the capabilities of their workforce, and how staff feel about their own capabilities.

8.1 Managers' perceptions of workforce digital capabilities

Based on our desk research we identified five broad categories of digital knowledge and skills relevant for the social care workforce:

- basic online skills (use email, use a search engine, fill in an online form)[9]
- basic awareness of online safety and security
- ability to help other people use common digital technologies (i.e. being a 'digital champion')
- use online sources to find, evaluate and share authoritative information about care related issues or problems (i.e. information literacy)
- an understanding of how specialist digital assisted living technologies can help people live independently.

Figure 6 below shows the percentage of managers reporting a shortage of each of these knowledge/skill types across their workforce as a whole (i.e. across managers and frontline staff).

Figure 6: Percentage of managers reporting skills shortage across workforce as a whole

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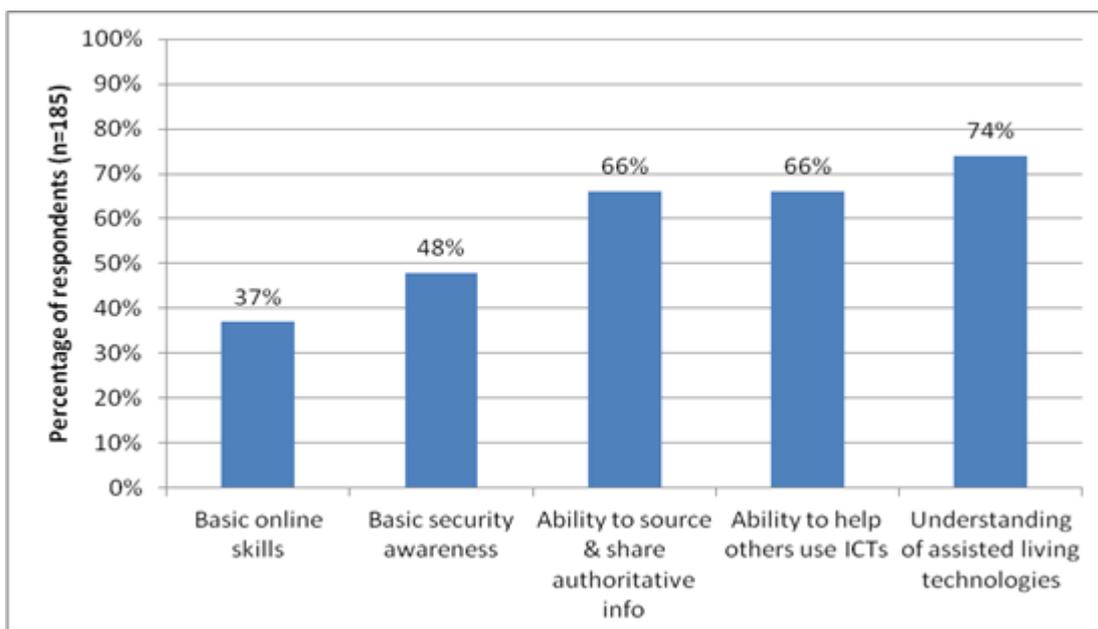
[9] Based on the 'industry standard' definition of basic online skills devised for Go ON U, see http://www.go-on.co.uk/opportunity/basic-online-skills/

8.1.1 Basic online skills

Over a third (37%) of managers in the survey report a shortage of basic online skills. For two of sites we visited, managers did not see basic online skills as an issue for frontline staff, either because they had no call to use them in their work or because the skills they needed involved only the use of a single bespoke application for which all staff received intensive training. For the other sites, by and large, managers felt that staff had sufficient basic online skills, but they did report an issue with older members of their workforce. Typical comments included:

"Staff over 40 are certainly less confident using some of the digital devices." (Manager Site 2)

"The older staff are very good at their jobs, they have a hands-on way of working, and I think it is a matter of then giving them confidence with the new technologies." (Manager Site 3)

"Some staff have struggled a bit when they arrived, particularly older women with a background in the care sector, it has taken them longer to get to grips with things like Google Docs." (Manager Site 7)

"The staff who were lacking in basic digital skills were the staff we have had for quite a while. In the past this work did not involve IT. So it's been about raising their level, and there are some who still have quite a way to go." (Manager Site 8)

A counterpoint to this was provided by a comment in the managers' survey about a lack of basic communication skills amongst younger staff:

"The young staff seem to be able to tweet but not write a decent letter on a computer!" (Survey respondent)

Distinctions between basic communication (i.e. language and literacy) skills and digital skills are increasingly difficult to make as digital media become ubiquitous in everyday life. We discuss this issue further in the conclusions and recommendations at the end of this report.

8.1.2 Online safety and security awareness

None of the managers or staff we spoke to made any mention of a lack of understanding of online safety and security issues amongst staff, despite almost half the managers in the survey feeling that this an issue for their workforce. Managers and staff at several of the sites commented in passing about the confidential nature of many of

their records, but they did not indicate that they felt they lacked the knowledge or skills to deal with digital data appropriately.

8.1.3 Information literacy skills

Information literacy skills are reported as being in short supply across the workforce by two thirds of managers, but none of the managers or staff we interviewed identified a lack of these skills. This may be an artefact of the types of sites visited however, as we did not interview any staff who had a specific or specialist role in research or information gathering. Several staff interviewees made mention of using the internet to find information – for example for personal learning and development – and all felt they had the knowledge and skills to do this effectively.

8.1.4 Digital champion skills

Two thirds of managers in our survey felt that their workforce lacked the enabling skills needed to help others to use digital technologies. The site visits revealed clearly the high degree of importance attached to peer support and peer-to-peer learning for the introduction of digital technologies, both by managers and staff. There may be potential for more formal encouragement of and support for digital champion skills, and this issue is discussed further in the conclusions and recommendations at the end of this report.

8.1.5 Understanding of assisted living technologies

Almost three quarters of managers surveyed reported a lack of understanding of assisted living technologies across the workforce as a whole. This was identified as a major skills gap in the site visits as well, a typical comment being:

"We need to know more about telecare and assistive technologies. We know this is a growing area and in fact we are going to a regional information event about this topic next week." (Manager Site 7)

A number of the staff we spoke to also expressed a wish to gain more skills in digital assisted living technologies:

"I am aware that some of the parents of the people with autism we look after are using quite complex kit at home especially specialist communication stuff. We need to get more knowledge about this kind of technology I think." (Staff Site 2)

8.1.6 Additional skills gaps

Several managers felt that most of their staff, younger and older, lacked expert **keyboard** skills, and would benefit from learning keyboard shortcuts for more efficient working and more effective use of mainstream office software packages. A typical comment was:

"If anything, actual keyboard skills are needed; most administrative staff are two-finger typing and that is very slow." (Manager Site 1)

8.2 Staff perceptions of their own digital capabilities

We asked staff survey respondents about their levels of confidence in the same five areas of digital knowledge and skills we had addressed in the managers' survey. Staff reported considerably higher levels of confidence in their digital capabilities than we might originally have expected, and their perceptions diverged markedly from those of the managers we surveyed, as Figure 7 below shows.

Figure 7: Contrast between managers' and staff perceptions of digital confidence and skills
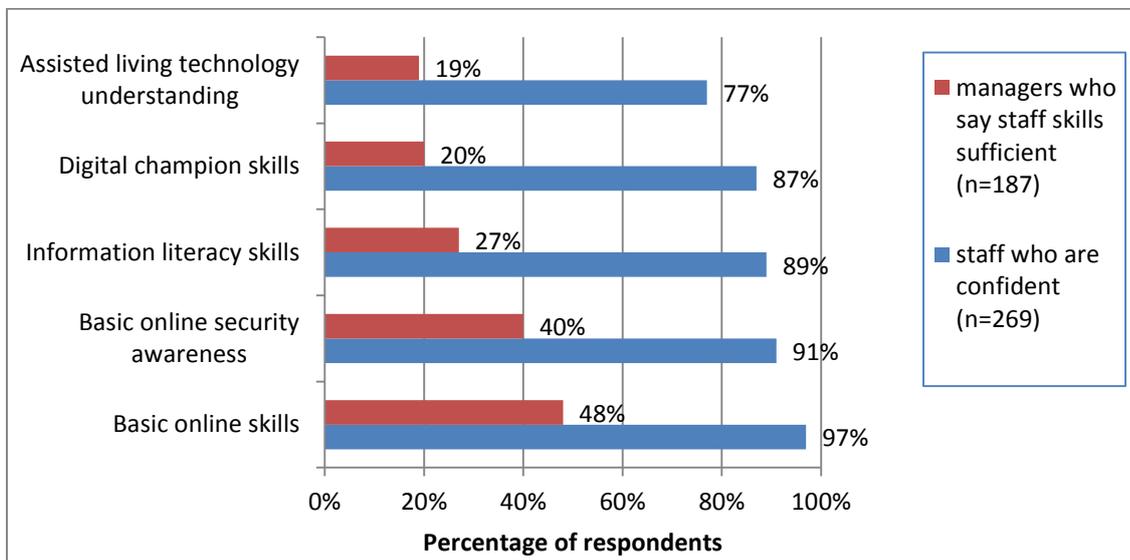
Over 95% of frontline staff surveyed said they are confident or very confident about their basic online skills, whereas fewer than half of managers feel these skills are present in sufficient quantity in their frontline workforce. Similar figures apply to staff and managerial views of awareness of online security issues.

The 'perception gulf' between managers and staff is at its greatest for information literacy skills and digital champion skills; more than four-fifths of staff say they feel confident about these skills, whereas less than a quarter of managers report having enough of these skills amongst frontline staff.

The staff we interviewed on site were, by and large, confident in their digital capabilities in a similar way to the survey respondents. The younger staff in particular expressed confidence about using digital devices and were generally happy with the skills they had. Older staff were more likely to say that they had had initial reservations when digital technologies were introduced in the workplace. However, without exception these

staff said that once they had been trained and/or given help when first being introduced to the technology, they had grown in confidence.

8.2.1 Peer support

There was a strong theme of peer support throughout all the sites we visited. At some sites there was an explicit culture of mutual help and continuous learning inculcated by management, and at other sites it was more informal, but typical comments included:

"There is always someone you can ask," "Once we teach each other it makes all the difference," "I try to communicate everything I discover to my colleagues," "I've actually helped some newcomers that have come recently, showing them what to do, because the seniors aren't always here," "If anything's come up that I don't really understand, I can definitely go to someone and they will show me what to do."

At some sites the introduction of digital had had an added positive effect on team bonding, as the more confident staff (generally younger) helped the others. However, several interviewees, both managers and staff, also commented on the demands on the time of the more digitally capable staff in helping others:

"Lots of the support workers have their own smartphones. For those that don't, it's because they are not IT literate. It's a matter of personal interest. One of the support workers I know, he cannot send pictures from his phone to use as evidence in his work – but we've taken the time to give him the necessary support." (Staff Site 8)

"It can take a lot of time helping people who don't know how to use the office computers properly." (Manager Site 1)

"With the staff who are less confident with technologies, there is a cost to the time it takes other people to help them." (Manager Site 7)

8.2.2 Necessity of digital skills

Many of the staff we spoke to felt that digital capability was becoming a necessity for their work, when it had not been in the past:

"Most of us [frontline staff] could not even access the internet before, but because of the way our work is now we must find a way to do that because messages come and information comes through our browsers [sic]. When I joined we were not IT literate, but now we have to be." (Staff Site 8)

Most of the staff we spoke to were clear that digital technologies were simply tools to do their job, they did not regard digital as an end in itself. A typical comment was:

"I think I know enough for what I need in my role, and if anything new comes along then I will be given training in-house to understand it. I don't want to learn more about digital over and above that." (Staff Site 7)

8.3   Key messages about workforce digital capabilities

- Social care managers in our survey reported a significant shortage of digital skills across all levels of the workforce; over a third said their workforce does not have sufficient basic online skills.

- Managers at our site visits had systems in place to help those staff who were not already competent to become so with whatever digital devices and applications were relevant.

- A number of managers and staff in the organisations we visited felt digital skills correlated with age, and that younger staff were often well equipped to support older staff who needed it.

- While the managers and staff at the sites we visited were content with their knowledge and procedures regarding online safety and security, nearly half of the managers in our survey said their workforce lacked a basic understanding of these issues.

- The most frequently cited digital capability shortage concerned insufficient basic understanding of digital assisted living technologies; managers and staff in both the surveys and a number of the sites visited felt they needed to understand more about these technologies.

- Information literacy was not a skill shortage identified during the site visits, but two-thirds of managers in our survey felt that the workforce as a whole lacks sufficient skills in finding, appraising and sharing online information.

- We found evidence of effective peer support for digital skills at the majority of sites we visited (see Section 9 below for more on this); however, two-thirds of managers we surveyed feel that 'digital champion' skills are insufficient at all levels in their organisations.

- The surveys revealed a significant 'perception mismatch' between how managers assessed staff skills and how staff assessed their own skills. We found some evidence of divergent perceptions at the sites we visited, but the majority were organisations where active steps had been taken by the employer to assess the skills staff required and to provide digital skills support. We discuss these skills support approaches further in Section 9 below.

9. Digital skills assessment and support

9.1   Current approaches

9.1.1   Skills assessments

We asked managers in our survey whether they assessed potential recruits on their digital skills. The majority (nearly 80%) said that they did not. Most of the managers we spoke to on-site said that digital skills were of secondary importance to them, so they recruited people for their interpersonal, communication or care skills first and foremost. They were confident that any digital skills gaps could easily be addressed with training and support:

"We always recruit on interpersonal skills, not the digital ones; our frontline staff spend so much time talking directly to people, this is what matters. We have had some staff who struggle to use the IT systems we have, but not to the point where they can't do their job. We give them extra support, and of course that is time-consuming for other members of staff who have to buddy them or mentor them. But quite often these staff are delivering a really brilliant front-end service with the client and are getting great feedback. We don't want to lose that because of the digital side of things, so it is worth the time and resource to support them with that." (Manager Site 7)

Some of the organisations we visited however, do assess potential recruits on their IT skills at interview; they have decided that basic online skills – which they have defined as using email and using a web browser to find information – are required for all the roles in their organisation:

"With the interview process we have started to do a 30-minute IT assessment, just to get minimum standards. It's literally nothing more than emailing and finding something on the internet. If they have a certain level of IT, then they get through." (Manager Site 8)

9.1.2   Skills support in the workplace

We asked survey respondents what kinds of digital skills support they currently use in the workplace. Both managers and staff reported coaching/peer support to be the most common form of support for digital skills, as Figure 8 below shows. This was followed by formal IT training. Self-guided learning was less frequent, and accredited qualifications the least common form of support.

Figure 8: Percentage of managers and staff reporting different types of digital skills support
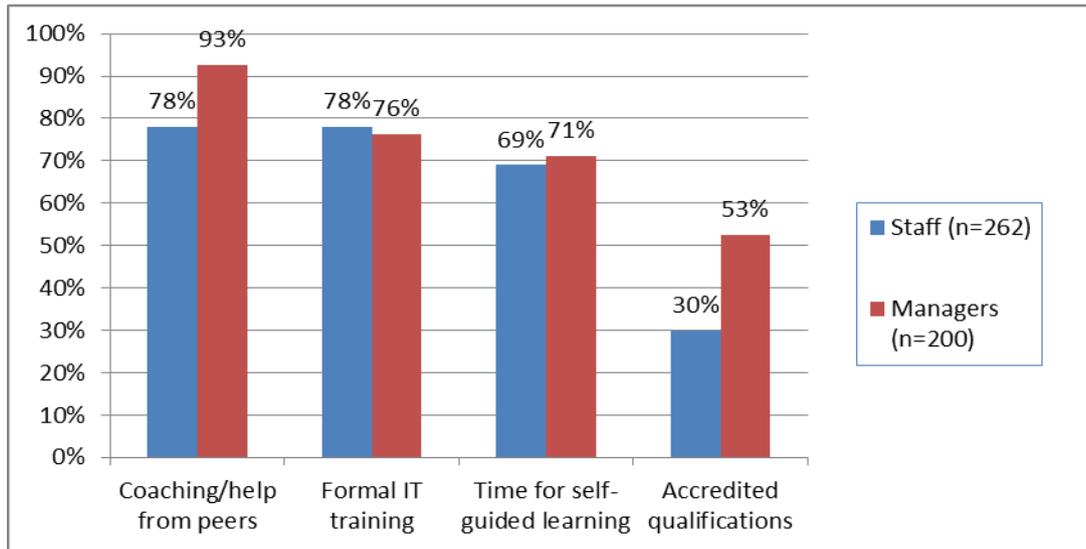
The survey results were born out by the comments from interviewees. All the organisations we visited spoke of the central importance of peer support for digital skills. This was equally valued by both managers and staff, because it was informal, available when needed, tailored to the specifics of the workplace, practical and supportive: "We have one whizz kid that everyone goes to for support. We need role models, we need to recognise skills in our existing staff and give them the chance to support others." (Manager Site 3)

"As long as I have someone to ask, that's all the support I need." (Staff Site 4)
"I need the person-to-person contact, I need to be shown [how to use the technology]." (Staff Site 4)

"We use a lot of peer learning at the moment and it has worked really well. I've been doing some IT training myself recently with the staff and I was quite surprised going into the houses at how much more confident they were than first time round. They said they had all been working together, all showing each other how to do things. That's great. It's really good." (Manager Site 8)

More formal coaching, mentoring and cascade models of training were also highly valued:

"Classroom training suits some but it puts many off. Coaching and support from colleagues at the time you need it is better. You need to practice what you have learned, otherwise you forget it, especially if you do not do the particular task all that often." (Manager Site 3)

"The only realistic way to train new staff to use digital technologies is to train a small core of staff to feel confident with whatever the technology is and then to cascade that knowledge on a need-to-know basis to other staff." (Manager Site 4)

"Every time I was on shift for a week or so I would have some training. I'm full time, but I had to get used to the night-time [digital recording] system as well as the day-time system. So each time I came in there was someone to help me go through it. After that I was OK, I wasn't scared, as the management all said 'Any problems, come and see us.' There weren't any problems, I got used to it fine." (Staff Site 5)

"It was really important when they introduced the new online system that there was a manager on hand you could contact for help. At my old place we had telephone support, but here we can speak directly to someone." (Staff Site 6)

"The way we work is very flexible, it changes quickly. By the time we had created some sort of formal in-house training programme for the IT things would probably have changed anyway. So we believe more in on-the-job just-in-time training, on the spot. To sit with people, shadow them, support them to learn for themselves. We are a young organisation with a strong learning culture that we have worked hard to develop. We have all been learning new things, staff and managers together." (Manager Site 7)

Several of the organisations we visited discussed how they include training in the use of essential digital systems in their induction. This was delivered by a mix of in-house training and mentoring or shadowing:

"An introduction to using Google Docs is part of the two and a half week induction we give all our staff. After that they rely on peer support or support from their line manager." (Manager Site 2)

"It takes about a week to get someone up to speed using the digital care recording system. We use shadowing and peer support to achieve this, and we have 'dummy' profiles on the system that people can practice with. We like people to be quite conversant with the digital system before they start actually using it live. That training needs to be really hands-on." (Manager Site 5)

Some organisations spoke of an iterative process of developing digital systems and building up staff knowledge and skills in tandem, so that the one informed the other:
"Staff went through a process of learning as the system was implemented. It took a year to build it up, bit by bit, and the staff gained confidence in parallel. They also contributed to the development process, getting the system to function effectively for our particular work patterns." (Manager Site 5)

"One of the things that really helped when we introduced the new software was involving staff at an early stage in actually selecting the system, and also having lots of practice before we went live." (Manager Site 6)

"We have ongoing learning on the job around the digital systems. We develop all our databases using Google Docs and they are changing all the time. The staff use them, and feedback about their use of them. That way we surface if there is any training needed, and we also find out if we need to make changes to the system to make it work better or to be more user-friendly." (Manager Site 7)

One organisation had considered a slightly more formalised 'digital champions' approach to peer learning for digital skills:

"Coaching and support from colleagues is better than formal classroom training, and we did explore a digital champions approach. There are people in the organisation who can support and advise on the way to do things. But we did not have the time and the resources to really set it up." (Manager Site 3)

9.2 Suggestions for additional forms of support

Three quarters of the respondents to our staff survey said that additional forms of digital skills support would help them to do their job better. Staff we surveyed and in the organisations we visited wanted a combination of:

- continued support from peers including potential for a more structured 'digital champions' approach to help learning directly relevant to individual workplaces to be shared, and the contribution of colleagues with expert digital knowledge to be recognised
- opportunities for formal training (this might be in-house or from external trainers), with several mentioning in particular that they would appreciate training in mainstream office software to improve productivity and efficiency; there was also an awareness that training in mainstream software can be done effectively online
- opportunities for self-guided learning, including access to some form of regular update about digital developments specifically tailored to social care.

One manager we spoke to felt that a specific programme of skills support for the use of social media was needed in social care:

"I would like to see Skills for Care develop social media training to get people engaged, conversing and following sector leaders, so that people start to share what works and doesn't work for the people we support. So many people in care work in silos – without knowing what others are doing and without realising that others have probably solved the very same problem they may be working on. I would like to see digital technology

used to make care more open, so that the 'pulse' of the caring organisation is there for all to see. If people could be supported to take pride in what they are doing, then I'm sure this will have a positive impact on carers and people who are being cared for."
(Manager Site 2)

9.3   Key messages about digital skills support

- The majority of social care organisations do not as yet consider digital skills to be essential for all recruits; however some organisations are making basic online skills a requirement, and this trend is likely to continue.
- Peer support and peer-to-peer learning are essential for the development and maintenance of digital skills in the social care workplace; these forms of support are highly valued by both managers and staff, including staff who may lack confidence in using digital technologies.
- Opportunities for more formal training in digital technologies would also be welcomed, although costs are a barrier to uptake; there are skills gaps in mainstream technologies such as office systems and social media, as well as social care specific technologies such as assisted living technologies.
- Managers and some staff would also like access to some form of regular update about digital developments, from an independent source and designed for a social care audience.

10. Future uses of digital technologies

We asked managers in the organisations we visited what the future applications of digital technology for social care might look like. A number of themes emerged, some regarded as very imminent, others further off in the future. Imminent developments predicted were:

- Digital technologies will lead to increasingly streamlined and more efficient administration of services; in the very near future commissioners will require the use of digital staff timekeeping systems and real-time reporting.
- There will be increasing use of the internet to support people using services with their interests and activities, and help them stay in touch with people.
- There will be more use of digital technologies in medication administration.
- Assisted living technologies will be used more and more.
- Records, including individual care plans, will all be digital and will be shared between agencies including much more sharing between health and social care.

Looking a little further ahead, interviewees predicted that:

- Mobile digital technologies will become ubiquitous for all care staff.
- Multimedia records including life histories will become the norm.
- Digital communication aids will become mainstream.
- More and more people who receive care and support services will be using mainstream digital technologies independently to manage their own care.
- More and more elderly people in need of care and support (including people with dementia) will be accustomed to using mainstream digital technologies.
- One interviewee could envisage a time when the capability of assisted living technologies would make residential care obsolete.

Part C: Conclusions and recommendations

The findings presented in this report give insights into the uses of digital technologies in adult social care in England, the attitudes of both managers and staff to the benefits and challenges these technologies present, and some of the workforce skills issues involved.

We need to bear in mind the limitations of the methodology, in particular the predominantly digital mode of dissemination of the surveys, which will tend to introduce selection bias, the over-representation among survey respondents of larger organisations and more highly qualified staff, and the small number of site visits conducted. These factors are likely to lead to an over-estimation of levels of engagement with digital technology compared to the sector as a whole. The data are also self-reported.

Nevertheless, the data give a good overview of some of the main issues as well as specific insights into how some social care employers are engaging with digital technologies. Below we discuss the findings and their implications, with a view to providing a set of recommendations for further actions. There is scope for a great deal of support work associated with the development of digital capabilities in social care, which can only be achieved by a number of national organisations and representative bodies working in partnership with social care employers. A foundation for this partnership working has already been established during development of the adult social care workforce strategy 'Digital working, learning and information sharing'.[10]

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[10] http://www.skillsforcare.org.uk/Document-library/Skills/Digital-literacy/Digital-Working-Learning-and-information-Sharing-Strategy-WEB.pdf

11. Uses of digital technologies

The research overall suggests that digital technologies are now deeply embedded in social care organisations. They are most pervasively used to support business and administrative processes – almost every organisation surveyed, and all the sites we visited, was using digital technologies in some way to help them 'work smarter'.
The managers and staff we spoke to identified a number of drivers for the uptake of digital technologies, including:

- **efficiency improvements**: benefits realised included more consistent, flexible and quicker communication; more accurate and easily auditable records; more efficient monitoring and management of workforce activity
- **quality improvements**: benefits realised included better management of workforce learning and development, more choice and control for people using care and support
- **compliance**: some organisations needed to institute digital systems in order to comply with service reporting, workforce development or information governance requirements of commissioners
- **competitive advantage**: an increasingly diverse care market, with customers ranging from local authorities to individual self-funders and people in receipt of direct payments, means service providers need to be innovative, and digital technologies offer one route to innovation; there was also a sense that if you did not 'get on board' with digital technologies, you risked being left behind.

The organisations we spoke to who felt they were making the best use of digital technologies had a number of traits in common:

- an appetite for innovation
- an awareness that digital technologies can contribute to innovations across the whole range of organisational processes and working practices
- an open learning culture
- an ability to manage change and to bring staff along in the transition, including those staff with lower levels of awareness or confidence in their digital abilities.

The survey respondents and the people we spoke to on the ground were aware of potential downsides to the use of technologies. It is clear that, like any organisational change, the introduction of digital technologies is not a 'silver bullet'. The organisations we visited who reported most positive benefit from using digital technologies had aligned the use of technologies with both their business priorities and their vision for their services.

The surveys showed the use of digital technologies to be slightly less pervasive for care-specific activities – the management and the actual delivery of care – than for

generic business activities. But the people we spoke to on our site visits, while they were at varying stages in their implementation of digital technologies, were convinced that digital technologies were becoming essential for delivering good quality care, not just for running an efficient business.

The knowledge, skills and attitudes of managers appear to be determining factors when it comes to the introduction of digital technologies. Managers at the sites we visited displayed enthusiasm for digital technology and confidence in their organisation's ability to make use of it. A few of the organisations we spoke to had dedicated business development roles, and this can be the route through which potential for digital technologies is recognised. Otherwise it comes through managers and occasionally staff. In any event, the capacity for the organisation to capitalise on the initial identification of a business opportunity needs to be in place.

Managers and some staff at sites we visited were keen to learn what others were doing with digital technology and to keep abreast of technological developments – to know what technology is 'out there'. There is at present no focal point or single information source concerning the use of digital technologies in social care – none of the people we spoke to reported having accessed any guidance or received any help from sectoral organisations when developing their systems or approaches. This suggests a potential need for an information service about digital technologies in social care.

Recommendation 1

Explore the feasibility of creating a single online information resource about digital technologies in social care, focused on the strategic planning and management of ICTs in the social care context. The individual resources suggested in other recommendations below could be contained within this overarching service.

The aim would be to improve the confidence of those managers who are reluctant to engage with technology, as well as to equip existing digital enthusiasts with resources and insights all tailored to a social care audience.

At the start of our research we had speculated that system and data security, including digital information governance, might be areas of concern for managers and staff in the sector. The findings on this were mixed: the majority of managers we surveyed felt that a large proportion of their workforce lacked sufficient awareness of online safety and security issues, but only a quarter of them reported any problems with ensuring their digital systems were secure. Very few of the interviewees on site raised safety and security issues, and none of them had allowed these issues to inhibit their uptake of digital approaches – in fact some interviewees said they felt data security was improved through the use of digital systems.

Our findings are all based on self-reported data, and there was not scope within this research project to establish detail about what back-up, disaster recovery, data security and digital information governance measures are being put in place by organisations as they expand their use of digital technologies. However, we are aware for example of ongoing Department of Health funded support work with social care SMEs that suggests system and data security may be an area of greater vulnerability than many organisations realise.[11]

Recommendation 2

Consider providing guidance for employers in the sector on digital data and system security issues of relevance to them.

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[11] The Connecting Care project, run by technology charity Lasa and funded by DH, is working with voluntary sector social care SMEs on strategic approaches to ICTs. Their experience to date suggests that few SMEs have adequate provision for data back-up, disaster recovery or protection from malicious attack. http://www.ictknowledgebase.org.uk/connectingcare

12. Access to digital technologies

The majority of managers in our survey said they found it difficult to offer digital access to all staff, and several of the interviewees at the sites we visited said that they would roll out more devices to staff if it were affordable. At the same time, the survey data suggest that individual care staff have much greater personal access to some digital devices – specifically mobile devices including smartphones, laptops and tablets – than they do via their employer.

There has been much debate amongst employers from all sectors in recent years over the pros and cons of 'bring your own device' (BYOD), whereby staff are encouraged to use their own devices for work purposes. Several of the sites we visited were already encouraging this and viewed it as a successful strategy both in terms of efficiency and the quality of service provided to individuals and their families.

The particular issues that pertain to the use of personal digital devices by social care staff may well warrant further investigation, with a view to providing specific guidance for employers in the sector. The guidance could cover the range of ways of approaching BYOD, the pros and cons of the strategy, data security and information governance issues, templates for acceptable use policies and so on.

Recommendation 3
Consider providing a framework for discussion on 'bring your own device' (BYOD) approaches, to enable social care employers to take informed strategic decisions about their policy on personal digital devices.

13. Digital capabilities

13.1 Current capabilities

Over a third of managers in our survey reported a shortage of basic online skills – which we defined as the ability to send and receive email, use a browser to find information, and fill in an online form – at all levels of the workforce, from care workers to managers. This is consistent with previous survey research, for example the 2012 UKCES Sector Skills Insights report on health and social care found 26% of social care employers reporting basic IT skills were hard to obtain.[12]

However, 97% of the staff we surveyed said they were confident in their basic online skills. The mismatch of perceptions between managers and staff about levels of digital skills could have a number of causes:
- managers may underestimate staff digital skills generally
- managers may be more aware of staff who lack skills than staff who have skills
- staff may overestimate their own skills
- managerial and staff understandings of what digital skills are required for social care work may be very divergent.

We need to bear in mind that the staff survey sample over-represented the more qualified end of the social care workforce, and is also likely to be biased towards respondents who are happy to engage with digital media. However, the finding about divergent perceptions of digital skills is not without precedent in the sector. The 2009 'E-readiness survey' conducted by Ipsos Mori for SCIE also suggested that staff rated their ability to engage in online learning more highly than their managers did.[13]

The organisations we visited did not report shortages of basic online skills, either because they did not regard them as relevant – this was a small minority – or more commonly because they had identified any skills issues at the time digital technologies were introduced, and had taken steps to address them with existing staff and with new recruits (see Section 13.2 below).

Our research participants had widely differing understandings of what is meant by the term digital skills. It was noticeable for example that many staff, and some managers, interpreted it to mean 'device skill' – in other words the ability to operate a particular device or to use a particular digital application. This definition tends to occlude skills not related to the actual interface, for example understanding online safety and security, or the ability to appraise the quality or reliability of digital information sources.

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[12] UKCES (2012) *Sector Skills Insights: Health and Social Care* Evidence Report 52
[13] Ipsos Mori (2009) 'E-readiness in the social care sector for SCIE'
http://www.scie.org.uk/workforce/getconnected/Research.asp

This definition also focuses only on the end-user of any digital systems, and so excludes higher level skills such as commissioning, purchasing or managing systems. Many of the managers we spoke to were 'digital enthusiasts' with a personal interest and/or aptitude for digital technologies who had taught themselves these strategic skills.

To better understand and map the current capabilities of the workforce, a robust framework identifying different types of digital skills relevant to social care is needed. We are aware of an EU project addressing this issue – for a limited number of care roles – which may be a useful starting point. The Carer+ framework[14] recognises three overarching domains of digital competence in care work:

- 'General digital competence': competences relevant for the development of general ICT literacy. This would include the areas we identified in this research as basic online skills, basic awareness of online security, and information literacy.
- 'Enabling digital competence in care work': competences to make the application of digital technology possible, sustainable and accepted by both care workers and care recipients. We identified these as 'digital champion' skills in our research.
- 'Advanced digital competence' in care work: competences focused on care sector-specific digital technologies, and on enhancing the employability of carers through occupation-specific digital competence. This would include the understanding of assisted living technologies we identified in this research.

Recommendation 4
Review relevant digital skills and competency frameworks with a view to their potential use across the adult social care workforce in England.

13.2 Skills support

13.2.1 Strategic digital skills support
A number of the people we spoke to identified a need for a central source of information about digital technologies in social care (see Section 11 above). Closely allied to this is an evident and growing need for care-oriented development programmes for strategic digital skills. Employers, owners, managers and supervisors all need to understand how to make effective business use of digital technology in social care. At the moment there is nowhere for them to go to access any training or support in this area.

Recommendation 5
Consider the need to develop a learning and support programme for strategic digital skills in social care.

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[14] http://carerplus.eu/content/carer-digital-competence-framework-full-publication

13.2.2 Support for general digital skills and digital champions

The main (interrelated) barriers to general digital skills identified in this research are lack of familiarity (due to infrequent use of devices or applications) and lack of confidence. While to some extent the spread of digital technology in daily life is addressing both these barriers, by far the most frequent digital skills support in the social care workplace evidenced in this research was informal peer support. This works most effectively in organisations with a learning culture, where blame-free, reassuring, just-in-time, friendly support is built into the day-to-day working practice of the organisation.

In our research we identified a range of on-the-job learning for general digital skills: shadowing, peer learning, supervisory support and occasional supervisor-led formative assessment. The organisations we visited had key members of the workforce who were 'go-to' people for digital skills support. These individuals are digital enablers, often called digital champions[15], helping to make the application of digital technology possible for other staff – and in many cases also for people needing care and support.

Our research suggests this form of support is effective, and offers an existing foundation on which to develop a more structured and comprehensive skills support programme for the sector. Recognising, supporting and improving the skills of the digital champions – who are already *in situ*, on hand and motivated – not only develops their skills and knowledge but helps them help their colleagues get to grips with the everyday digital skills they all need to do their jobs.

A digital champions support model comprises a centrally supported programme that facilitates peer-to-peer learning, buddying and mentoring schemes. There is already some evidence of the success of this approach, particularly in the housing sector where several current initiatives are aimed at recruiting and supporting digital champions to improve the digital skills of both the workforce and residents.[16]

Recommendation 6
Consider developing a national social care 'digital champions' support programme; review approaches currently being used in the housing sector with a view to their possible re-purposing for the social care sector.

13.2.3 Digital skills support and core skills

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[15] In health and social care the term champion can often mean a senior manager with strategic responsibility for a particular area of policy or practice. In the context of this research however, the term champion is synonymous with enabler. A digital champion is a person who helps other people access and use digital technologies.

[16] See for example: Digital Unite Digital Champions Network for Housing http://digitalunite.com/help-others-get-online/digital-inclusion-housing-and-communities/digital-champions-network-housing; Tinder Foundation Digital Housing Hub http://www.tinderfoundation.org/what-we-do/digital-housing-hub

Consideration should also be given to the overlap between digital skills and the core skills of literacy, language and numeracy. Core skills are clearly essential not only to the effective use of digital technology but also to the ability to learn how to use it – and individuals who lack core skills characteristically lack confidence in their ability to learn. On the other side, digital technology is clearly transforming the practice of literacy, language and numeracy. According to the OECD: "Accessing, analysing and communicating information takes now place largely through the use of digital devices and applications, such as personal computers, smart phones and the Internet. The capacity to use these devices intelligently to manage information is thus becoming essential."[17]

We found significant evidence of this at the sites we visited, where the extensive adoption of digitalised reporting has transformed – and vastly improved – routine reporting and record-keeping. While there may be problematic issues attached to this approach, it is likely to become more and more widely adopted.

The value of digital skills and confidence is clear. It is also clear that skills and confidence in using digital information and communication technologies (ICTs) will form an increasingly important element of competence in information-processing and communication. However, the current learning and development and qualifications frameworks in social care do not all reflect the 'core' nature of digital skills.

We are aware that Skills for Care has recently published a Core Skills Strategy[18] and that this strategy notes the linkage between core skills and digital skills. The research reported here suggests there is considerable potential for synergy in these areas.

Recommendation 7
Consider making the functional skill of ICT a mandatory part of all learning and development and qualifications frameworks.

13.2.4 Digital skills assessment
The majority of the organisations who participated in this research have recognised that digital skills are now a necessity for all their staff, and some of the sites we visited have incorporated this recognition into their recruitment and selection practice. Procedures reported to us ranged from asking questions at interview (e.g. whether the applicant used a computer at home, or had an email address) to giving applicants a digital task required by the role (e.g. using the internet to plan a journey for a client). These assessment procedures were always accompanied by reassurance to the applicants

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[17] OECD (2013) *Skilled for life? Key Findings from the Survey of Adult Skills* p.7.
http://www.oecd.org/site/piaac/publications.htm

[18] http://www.skillsforcare.org.uk/Document-library/Standards/Skills-for-Life/Core-skills-strategy.pdf

that support would be available to help them develop any digital skills needed for the role. In this way, assessment helped to communicate the digital requirements of the role; make the skills required visible to the applicant (and also to employer-organisation); surface at an early stage any digital skills issues the applicant might have – and also reinforce a culture supportive of learning within the organisation. As such they seemed to contribute to good recruitment and retention practice.

Recommendation 8

Make explicit mention of digital skills and skills assessments in the revision of the recruitment and retention strategy for adult social care currently under way from Skills for Care.

13.2.5 Assisted living technologies

This research focused on mainstream digital technologies rather than assisted living technologies. However, we identified a strong consensus from managers and staff in the surveys and on site that a much greater understanding of and engagement with digital assisted living technologies is needed across the whole adult social care workforce. The affordances of assisted living technology are currently greatly outstripping the workforce's capacity to make use of them. A programme of skills support for these specialist technologies is already under way from Skills for Care.[19] It is hard to draw a clear boundary between adaptations of digital mainstream technologies and specialist assisted living technologies – there are many areas of overlap. Linkages need to be fully articulated, as for example has already been done in the UK-wide information resource Technology to Care.[20]

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[19] http://www.skillsforcare.org.uk/Skills/Assisted-Living-Technologies/Assisted-living-technology.aspx
[20] http://www.technologytocare.org.uk

Appendix 1: Manager interview script

A short preamble by the interviewer:
- *introduce themselves*
- *briefly reprise the purpose of the research overall*
- *set out the aims of the interview, data protection and confidentiality terms*
- *seek permission for use of recording device*
- *give estimated length of time interview will take*
- *ask if interviewee has any Qs*
- *ask interviewee for:*
  - *name*
  - *job title and one sentence about what their main duties are*
  - *length of time in this job and in social care overall*

Discussion topic 1: Use of digital technologies in social care

Q1.1. Would you describe your organisation as 'expert', 'developing' or 'novice' in its use of digital technologies (DTs) overall? Why?

Q1.2. We asked you in the online survey about your use of DTs in a range of activities. Could you give some brief illustrations or examples for each one you use, and of the benefits you think digital technologies offer?

Activity	Survey answer *[interviewer to note this before start of visit]*
Record or manage delivery of care	*[e.g. extensive use, use a bit, don't use]*
Record or manage care plans/assessments	
Deliver, record or manage staff learning and training	
Support external marketing and comms	
Enable staff to access L&D networks	
Enable staff to better communicate within the organisation	
Support HR/People mgt and recruitment	

Q1.3. Looking ahead, do you think the use of DTs will change more in some areas of your organisation's activity than others? If so, which, and why?

Q1.4 What do you think are the main barriers and enablers to the use of digital technology in your organisation? *[NB refer to any answers offered in survey and probe – ask people why they answered as they did]*

Prompts if needed

Poss enablers and benefits
Buy-in from managers, from staff, from people using the organisation's services
Improved efficiency and effectiveness using digital technologies
Improved support for/access to learning and development using DTs

Poss barriers and challenges
Conflict between technology and human aspects of social care
Costs of set up and maintenance of DTs
Lack of access to impartial expert technical advice
Difficulty *r*ecruiting people with basic online skills
Difficulty keeping digital skills up to date
Difficulty maintaining data security and confidentiality
Difficulty ensuring appropriate use
Problems with system maintenance and reliability

Discussion topic 2: Digital skills in the workforce

Q2.1 Do you think all your staff have the digital skills they need to do their jobs – now and in the foreseeable future?

Q2.2 Do you currently offer any training or support for digital skills for your staff? *refer to survey answer*] If so please describe it

Q2.3 Would you like to provide more support for staff in developing digital skills?
If so,
 a/ what kind of support do you think might be most effective, and
b/ what do you think are the biggest barriers to digital skills support?

Prompts for types of support:

Formal training including IT training
Accredited qualifications
Coaching and help from colleagues and managers – either very informally or more formally through a digital champions system
Time for individuals to explore/learn about technologies themselves
Guidance from outside organisations such as Skills for Care, British Computer Society, e-Skills etc

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Q2.4 Would you like to make any other comments about digital technologies in social care?

Appendix 2: Staff interview script

A short preamble by the interviewer:
- *introduce themselves*
- *briefly reprise the purpose of the research overall*
- *set out the aims of the interview, data protection and confidentiality terms*
- *seek permission for use of recording device*
- *give estimated length of time interview will take*
- *ask if interviewee has any Qs*
- *ask interviewee for:*
    - *name*
    - *job title*
    - *length of time in the job*

Discussion topic 1: Use of digital technologies in your work

1.1 Do you use digital technologies in your current role? If so, can you give me some examples of typical uses?

Prompts for areas of activity that may involve use of digital technologies:

The direct delivery of care services to people in need of care and support
Personal learning and development
Organisational administration (e.g. care plans, assessments, budgets, rotas etc.)

If not, do you think you might use digital technologies in the foreseeable future in your current role? Why do you think this?

1.2 Do you think the use of digital technologies in your work enhances or could enhance the service you provide? If so why, if not why not

1.3 Do you have any concerns about using digital technologies in your work?

Discussion topic 2: Support for digital skills

2.1 Do you feel you have the digital skills and knowledge you need in your current role? If not, what skills or knowledge do you think you need?

2.2 Do you think you are likely to need more digital skills or knowledge in the foreseeable future? If so, which?

2.3 Would you like to improve your digital skills? If so, why and which skills would you like to improve?

Prompts for reasons for improving

Provide a better service for people in need of care and support
For my own satisfaction
To make organisational/business processes more efficient
To improve my CV

2.5 What kinds of skills support do you think might be most effective for you? Are there are any challenges or barriers in getting this kind of support in your organisation?

Prompts

Formal training including IT training
Accredited qualifications
Coaching and help from colleagues and managers – either very informally or more formally through a digital champions system
Time to explore/learn about technologies themselves
Guidance from outside organisations such as Skills for Care, British Computer Society, e-Skills etc

2.6 From your perspective, are there other ways in which your organisation could improve the digital skills of its staff?

Prompts

Colleagues from similar organisations talking about digital technologies
Peer to peer learning network focused on digital technologies
Better technical support for existing digital technologies
More time to integrate existing digital technologies into current role
More time to experiment with new digital technologies
More buy-in from management about the potential of digital technologies

2.7 Do you have anything else you would like to add about either the use of digital technologies or the support of digital skills?

Appendix 3: Pen portraits of site visit organisations

Site 1: A private homecare business, recently founded (2011) operating in a medium-sized town in the south west. Provides support for people with learning disabilities, autism and mental health problems. 70 staff.

"Our main focus for implementing digital technologies is for business administration and record-keeping. Digital technologies are not used in direct care work, in part because the lack of internet access in people's homes presents too much of a barrier, and in part because we do not see much call for it amongst the people who use our services. From the start we decided that all our office information systems would use open source software, not commercial products. We have developed our own rostering alert system, which sends an SMS reminder to staff the evening before their shift. This has really helped with the efficiency and reliability of our rota. Team leaders and other senior managers all use laptops and a smartphone provided by work for administrative tasks. Support workers do not have any devices provided by us, but they all have personal mobile phones."

Site 2: A voluntary residential care organisation, recently founded (2009), operating in a medium-sized town in the south west. Provides support for people with autism and learning disabilities. 105 staff.

"We decided to embrace digital technology from the start. We focused on low cost and open source systems that we could develop ourselves. We want to use technology to market ourselves, to build a local and regional community around autism issues, and to run our business efficiently. We also use digital devices a lot with our customers, to support activities and entertainment, and we use social media to communicate with families and be open and transparent about our services. It's fundamental to our values and how we support people, as well as the way we do business. All managers and deputy managers have laptops and smartphones provided by work. All other staff are encouraged to bring their own smartphones to access the workplace systems, which are all shared online."

Site 3: A voluntary organisation founded in 1986 providing residential care, supported housing and community services to people with learning disabilities and physical and sensory impairments, operating in an urban setting in the Midlands. 120 staff.

"We very much want to move forward with our digital technology. Up until four years ago we did not have desktop computers in the office. But now we use computers and the internet regularly for all our office-based administration work, and we are discussing how we might use tablet computers in the future for our community-based services.

Support Workers now use digital technology regularly in their work with service users. You can do things the old-fashioned way. But service users seem to prefer the digital approach and it's helping them live normally."

Site 4: A local authority day care service in London set up in 1997 to provide support for people with profound and complex learning disabilities and autism. 35 staff.

"The local authority is making more and more use of digital technology and online systems for things like recruitment and e-learning, so of course we use all those systems. In the centre here we use a lot of digital photography, including video. We attach photographs to care plans and assessments for example, to make things clearer. We use them as evidence of clients' achievements and progress. We also make our own videos for training staff to work with clients. We find this is very effective, much more effective than describing things. We also support clients who are able to use technology directly themselves, i-Pads and apps for example. We have a sensory room where we recently installed a sensory projector that you can control by the movement of your eye. This creates a whole audio-visual environment the person can control themselves. "

Site 5: A private residential care home for older people specialising in dementia care, set up in 1984, in a medium sized town in the south west. 28 staff.

"I think we're developing towards expert in our use of digital systems - that's what we want to achieve. Throughout the home we've got 10-inch tablet computers mounted on the wall and any and all information gets put on the tablets and entered into our record system. There's very little in terms of paperwork and our staff are pretty confident on the use of technology. The system is now very big. We use it for care plans, for risk assessments, health assessments, safeguarding, medication, general information, everything really. From the moment a resident gets up in the morning to when they go to bed, it's documented on the system - we hope in real time. So, for example, at meal times staff enter all the details of what each resident has eaten and if they enjoyed it. That goes into our system and makes it easy to see if all of a sudden someone is only eating half or quarter of their meal. It comes up as an alert on the system."

Site 6: A voluntary organisation providing residential care and sheltered housing for older people, established in 1865 in a semi-urban area of the home counties. 100 staff.

"We are developing our use of digital technologies quite rapidly. We have recently introduced a staff intranet for the sharing of documents, electronic care planning and digital care records which the staff update using tablets. We also have biometric signing in and out of shifts. We will continue to innovate as we can and as the need arises. We

have just set up a job page on the website. We are not experts but I would not describe us as novices. We are definitely learning as we go along."

Site 7: A voluntary organisation recently founded in 2010 to provide support planning and brokerage services, operating in an urban setting in the north west. 25 staff.

"Technology is ubiquitous in this organisation, we want to work digitally as much as we can. We use it for all our business and administration activities. We use shared folders held securely online, and because a lot of our staff are remote working, visiting people in their homes, we hot desk in the office. We think digital technology not only makes us more efficient and effective, but it can also offer people the chance to be more in control of their care and support. We provide a lot of information and advice services through our website, and plan to do more. Because most of the people we support at the moment are older people, we communicate using paper where necessary, but wherever we can we promote the use of digital communication and services."

Site 8: A voluntary organisation offering day care and community services to older people, disabled people and people with mental health problems in London, founded in 1993. 150 staff.

"We have been developing our use of digital technologies rapidly in the last two years. We had quite haphazard systems, with people in different parts of the organisation having different approaches. We have introduced electronic care planning, digital rotas and payroll, and made email the standard form of communication with all staff. We are now looking at cloud-based storage for all our business administration and communication, and we are very conscious of making sure all our systems are secure. The IT skills of support staff were quite low until relatively recently, but it's more and more important to be IT literate, and staff skills have been improving as we have developed our systems."

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