



Research summary September 2021

Developing the digital skills of the social care workforce

Evidence from the Care City test bed

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Key messages

- Despite the vital work undertaken by the social care workforce, care staff are often undervalued and underpaid, with limited opportunities for career progression. This stands in stark contrast to the opportunities available in the health sector. The unattractive working conditions in social care have fuelled low recruitment and retention, and there is a risk this will drive instability in the sector, with consequences for people who rely on social care. Clear action is needed at both national and local levels to create a more attractive offer for care staff, embedded in a national workforce plan for social care.
- Providing opportunities for care workers to develop new skills and use new technologies can improve job satisfaction and help staff progress towards their career goals or inspire new career pathways. Digital skills have positive consequences on broader skills development and creating a fertile context for greater health and social care integration.
- Digital skills development must sit within a wider career pathway for social care, with a clear pay and progression framework that rewards staff for the new responsibilities they acquire. Without recognition or reward of the new skills acquired by care staff, there is a risk that staff will move onto more attractive roles in other sectors, further increasing staff turnover.
- Harnessing the potential of care staff to provide more joined up care highlights the need for buy-in from stakeholders across health and social care. Introducing digital technologies into the system requires careful planning, adequate supportive structures with clear roles for care staff and management, and a collaborative culture with clinical professionals.

Introduction

The adult social care sector in England has been in urgent need of reform for many years. Stark funding pressures have driven instability and a dysfunctional system that is not enabling people to lead the independent and fulfilling lives they want (Curry and Oung, 2021). Poor recruitment and retention trends are driven in large part by low wages and unclear pathways for promotion and pay raises – with an impact on quality of care.

There is a clear need to improve the attractiveness of care roles by developing a clear career pathway, supported by opportunities for skills development through training and qualifications. The government has recognised this need in their recent announcement of a health and social care levy, through which £500 million will be allocated to the wellbeing and development of the care workforce and professional development of the regulated social care workforce. Health and social care settings are using digital technologies increasingly, and they hold significant potential to enable skills development by enabling care staff to take on new responsibilities or to undertake tasks more efficiently.

The purpose of this summary

In this research summary we explore how domiciliary care agencies trained staff to use digital technology to remotely monitor the vital signs of their service users. Our findings draw on our mixed-methods evaluation of the Care City test bed, which piloted a number of innovations in three distinct care pathways in East London. We conducted 30 interviews of innovators, clinical leads, agency managers, and staff across three varied domiciliary care agencies (including managers and frontline enhanced carers) about their experiences of setting up and delivering the test bed. The full evaluation and methodology are available in Crellin and others, 2021.

This report presents findings relating to the experience and skills development of care staff using digital technologies in domiciliary care. It describes the key benefits and challenges of upskilling staff through digital innovations, and offers ideas on how to maximise the potential for digital tools to aid skill

development in the domiciliary care workforce. It also makes the case for more investment and joint working to ensure that the use of digital health technologies in social care settings is seen as a joint responsibility and priority between health and social care services.

This report sits alongside another research summary in a two-part series on technology implementation in domiciliary care. Our other report highlights six lessons for commissioners and implementers to support the successful introduction of digital technologies into domiciliary care settings (Rolewicz and others, 2021). These include the importance of recognising the challenges specific to domiciliary care, and collecting good quality data to best evaluate the impact of introducing digital technologies.

Who is this report for?

This report has been developed for local and national health and social care audiences, including social care stakeholders, commissioners, care providers, and digital innovators who are considering opportunities for using digital technologies to develop new skills, roles, and responsibilities in their local social care workforce. At the national level, we highlight the need for a workforce plan for social care – aligned with the NHS People Plan – that builds these opportunities for skill development into a wider career pathway for the social care workforce.

Background

The realities of working in social care

The social care sector struggles to attract staff – there are at least 112,000 vacancies in social care on any given day of the year (Skills for Care, 2020a). The key reasons for this are low pay rates, low recognition of care staff and the work that they do, and limited progression opportunities within the sector (Skills for Care, 2021b). With a pay differential of only 12p per hour between entry- and senior-level roles on average (Skills for Care, 2020), staying in social care is often neither attractive nor viable. A 2018 UNISON survey found that almost half (49%) of staff had previously thought about leaving their job – which is further likely to have been compounded by the pandemic (UNISON in IPPR, 2018; IPPR, 2020). As a result, social care providers are often in competition with other similarly paid sectors, such as retail, and there are high levels of turnover among staff.

Conditions for social care staff in East London, where this study took place, are particularly difficult. Most earn below the London Living Wage of £10.85/hour (2021), and 41% of the workforce are on zero-hours contracts – contributing to an annual turnover in the London region of 29%. These working conditions lead to poor health and wellbeing for staff (Skills for Care, 2020b; Care City, 2021). At 9.5% in 2019/20, the vacancy rate in London is considerably higher than the England average, which was 7.3% in 2019/20 (Skills for Care, 2020a).

The low pay and working conditions experienced by staff have a number of consequences on the delivery of care. Providers with higher turnovers of staff tend to have lower quality ratings, and the cost of hiring and retraining staff is often a driver of instability for providers of care (Curry and Oung, 2021). For those who use care, it can prove difficult to build up relationships with constantly changing care staff – and the lack of available staff make it difficult for providers to deliver the care people need, leaving many with under/unmet needs (Curry and others, 2019).

The challenges that plague the social care workforce are felt especially strongly in domiciliary care (otherwise referred to as ‘home care’), which describes the care people receive in their own home. Additional pressures such as travel times between home visits and the need to be mobile further compound issues around recruitment and retention (Jefferson and others, 2018). The staff shortages in domiciliary care mean service users often lose out on continuity of care and on the chance to build strong relationships with their caregiver. The responsibilities for care therefore often fall into the laps of unpaid carers (Paddison, 2021).

There is a clear need for a workforce plan which can improve the conditions for staff and make social care an attractive career option. This starts with increasing opportunities for skill development and progression into new roles, linked to a clear pay structure – which can both improve retention and increase staff satisfaction. In the context of policy ambitions to better integrate the delivery of social care and NHS services at the frontline, there will need to be more opportunities in social care roles that are aligned with the skills development currently offered in some areas of the NHS, to build some of these bridges between the two services.

The Covid-19 pandemic has highlighted the value of digital technologies in improving the delivery of high-quality social care that is also joined up with health – and there is a growing appetite for more investment and research into this area. The recent draft Data Saves Lives digital strategy, and the NHSX evidence review into digital skills for social care staff are some examples of these initiatives which could make strides towards the rapid expansion of a digital workforce that is anticipated in the NHS (DHSC, 2021; Chandler 2021; Castle-Clarke and Hutchings, 2019). And conversely, digital technologies have the potential to play a key role in supporting skills development for social care staff. The challenge is that limited information is available to inform policy making and commissioning in this area.

A recent evidence review (Skills for Care, 2021b) has assessed the existing literature on digital skills development in the social care workforce. It has highlighted the value of technology as an ‘enabler’ in more informal skills development among care staff. There are convincing benefits to increased technology use among the social care workforce, including for example more joined up care and more efficient care delivery and planning (Nicholas and Miller, 2019). Current challenges include a lack of investment into workforce development and limited opportunities to train and embed newly developed

skills. The evidence review has also stressed the importance of leadership in championing (digital) skills development among frontline staff.

The Care City test bed

Care City, a Community Interest Company in East London, developed the domiciliary care pathway that formed part of the NHS Test Bed. The test bed piloted digital technologies with the aim to improve health outcomes for service users and develop skills of health and social care staff.

Within three domiciliary care settings, staff were trained to become 'Expert Carers', using two innovations in combination to undertake regular monitoring of the vital signs of those in their care. The two innovations were intended to spot early deterioration of clinical signs in service users, through use of the National Early Warning Score 2 (NEWS2) and urinalysis (urine sample tests), both of which have established evidence bases in other settings (Unsworth and Bell, 2017; NENC AHSN 2019; Leddy and others, 2019; Thornley and others, 2020; USFDA 2018).

Providing care agencies with tools to undertake regular monitoring of their service users' health was intended to avoid their unnecessary admission to hospital, and to empower care staff to contact the most appropriate health care service where there was cause for concern.

It was hoped that through training and use of the digital technologies, staff working in these domiciliary care settings would develop skills ('upskilling') and experience increased job satisfaction.

Training frontline care staff to use digital technologies for remote monitoring

Agencies involved with the Care City test bed spent a significant amount of time and resource at the set-up of the pilot to ensure that staff were trained and felt confident to use the monitoring technologies.

Staff received training delivered directly from the innovators, followed by more 'practical' sessions organised by agencies to enable staff to become familiar

with the innovations and practise on each other. Several agency managers were keen to recognise staff for the new skills they had developed: staff were awarded the title of ‘expert carers’ or ‘care champions’, and some agencies awarded certificates of achievement after staff had completed the training. Pay for staff, however, did not change.

Box 1: Training to use digital technologies for remote monitoring

Two innovations were piloted in domiciliary care as part of the test bed:

- Care staff were given remote monitoring kits which included a Bluetooth connected tablet, a pulseoximeter, a blood pressure monitor and a thermometer, used to calculate a NEWS2 score to assess clinical deterioration. NEWS2 scores were numbered and graded green (normal), amber (concerning – contact primary or community based service), or red (urgently concerning – contact or attend emergency services), to help with interpretation.
- The second innovation was a urinalysis dip test linked to a smartphone, to be used when the remote monitoring kit returned an amber NEWS2 score.

Each agency received an initial training session organised by Care City and delivered by the innovators, and was targeted at agency managers responsible for implementation and senior care staff. The sessions lasted approximately two hours and involved a practical demonstration of the features of the innovations and the rationale behind their use.

Staff were shown how the innovations could support them to take clinical observations of the vital signs of their service users and assess whether there was a need for escalation to an appropriate health service.

The agencies were provided with access to online videos and contact details of the innovators in case they encountered difficulties with the innovations. Agencies were also provided with a supportive document outlining the escalation pathway to health services.

The benefits of digital technologies in supporting social care workforce roles

There were a number of benefits for social care staff evident within the Care City test bed related to the introduction of digital technologies around staff satisfaction and the development of multiple skills.

The ambition of the Care City test bed was to introduce innovations to frontline care staff in order to increase their digital proficiency. It was hoped that care staff would grow in confidence to use digital technologies, thereby increasing their productivity and improving the quality of care delivered to their service users (Care City, 2020). But the skills development of frontline care staff, through regular training and use of the remote monitoring technologies, was in fact broader than the ability to use digital technologies that was originally anticipated.

Increased status and professional credibility

Care staff reported an overwhelmingly positive experience of their involvement with the test bed, feeling “proud to be one of the first”, and were empowered by the training and new responsibilities they had received. They felt their involvement with the project gave them the recognition they deserved for their work and for domiciliary care more generally.

“Carers were really excited, they saw it as a wonderful opportunity to upskill them... sometimes they can feel the undervalued part of health and care so this was a great kudos I think as well for people working in homecare.”

(Agency Manager, Site 1)

“They feel more appreciated for their work, they feel a bit of a nurse when they go out with the kit, they feel more important ..., to get an opportunity to try out this new kit, they are very happy and satisfied when they leave the client.”

(Office Staff, Site 2)

An associated benefit of the growth in skills and confidence experienced by care staff was an elevated status among service users and their families. Staff felt that the quality of their care had improved, and believed that those they supported felt this too.

“I believe it might give the clients a little bit more confidence in us [...] it gives them a little bit more confidence that we actually know what we are doing.”

(Care Staff, Site 1)

Empowerment to pursue career goals, ambitions, or to progress

Many staff we spoke to found that their role had changed compared to the work they usually did, and felt strongly that they had developed new skills linked to their use of the remote monitoring kits, which was important to them. Staff also reported that the skills they had developed could apply to other areas of their work, and would be useful to progress in a career in health or social care. As a result, staff who had long-term ambitions to progress onto other roles and opportunities in health and care felt they now had new skills to help them to do so.

“This is another level for someone like [the trained ‘expert carer’], to take up a career. She is part-time, but for her now she is definitely open to or has a lot of options available to her if she so chooses to continue a career with [the care agency].”

(Agency Manager, Site 3)

Others found themselves with knowledge and skills they never thought they would have, and with this growth in confidence came a strengthened desire to further their career. New ambitions included moving to more senior social care and social work positions, nursing, and undertaking qualifications

such as National Vocational Qualifications (NVQs). Care staff hoped that future employers would value their ability to use health care equipment and digital technologies.

“[I want] to work my way up, really. I want to do nursing and things like that. I want to put myself up and do my NVQs.”

(Care Staff, Site 3)

Appeal to staff values and ambitions

It is worth noting that the agency managers actively chose staff that had previously demonstrated their commitment to caring values to take on the ‘expert carer’ role. As such, the training opportunities are likely to have resonated especially well with these staff. Many staff, for example, had shown their care agency “that they wanted to progress” and were “looking to learn more and more” (Agency Manager, Site 2).

But agency managers also stressed that these types of training opportunities did not appeal to everyone, and they suggested that some staff were “happy doing the absolute minimum and just sticking at that level”. Stakeholders have also pointed to the variability in career aspirations among care staff, and have highlighted the need to ensure career development pathways are sufficiently flexible to be appealing to a wide range of skills and career goals (Skills for Care, 2021c).

“We looked at the carers that we felt would be more appropriate and able to take on board the requirements and the upskilling that would be needed.”

(Agency Manager, Site 2)

“I was really pleased when I [was] asked about this health check because [working in health] is something in the family, so I feel like oh I'm coming into this direction now as well.”

(Care Staff, Site 2)

Box 2: Features of the care staff chosen to use the digital technologies (as interpreted from interviews with managers)

Features of the care staff chosen by agency staff to use the digital technologies:

- Long-term experience of working in health or social care roles – ranging from 3 years to some with over 20 years' experience
 - Valued the “hands-on” nature of social care work and of the technologies that were introduced
 - Dedication to service users and their families
 - Ability to manage responsibilities appropriately and navigate stressful situations with calm and composure
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Ability to use health care tools

Due to the nature of the innovations which linked health monitoring tools to a tablet or smartphone, care staff grew in their ability not just to use digital technologies, but also health care equipment. They generally felt confident to know when and how to use the equipment, such as blood pressure monitors, pulse oximeters, and thermometers – using them on their service users as was necessary, but also on themselves, to measure blood pressure as an indicator of stress, for example. Their increased understanding of the equipment also helped them to find work-arounds when technology issues arose.

“I must admit I never thought I’d be able to use a blood pressure machine [...] I never got it, but now it’s built my confidence just a little bit more.”

(Care Staff, Site 1)

“The thing that goes on the finger to check the blood oxygen barely ever works. I think it’s only because the elderly’s hands are a lot colder than ours, so when you’re putting it on it can’t read it because they’re hands are so cold. I’ve got them clapping, and rubbing their hands together.”

(Care Staff, Site 3)

Using health care tools also led to staff being more able to interpret the health information recorded by the technologies. They developed an understanding of the underlying conditions of their service users as a result. Staff reported that the technologies gave them the reassurance to know whether their service users needed medical treatment, taking them beyond the “personal care” skills that they felt able to do previously.

“I think it's given them all a very good [...] understanding on some of these tests and readings and even some underlying conditions.”
(Agency Manager, Site 1)

“I’m now more on the medical side, [but] the technology is quite important, just for back-up, just to know more about the client. Before, I had very little knowledge about them but doing medicals has given me a bit more insight.”
(Office Staff, Site 2)

Common language and confidence to communicate (and collaborate) with health services

The technology providing an ‘objective’ measure gave staff the confidence to make assertions about the health of their service users to other health and care professionals. They felt that health care professionals – GPs especially – now took them more seriously as a key player in the care of their service users. Being able to direct a health care query to the most appropriate health care professional gave staff a feeling of control and the knowledge that they were providing more efficient care.

“GPs do feel like I don’t know anything, I shouldn’t be contacting them, but when I actually show them the readings I’ve got and the previous knowledge I’ve got with the client they do feel like I’m actually calling for a reason.”
(Office Staff, Site 2)

“You’re looking for reaffirmation all the time..., because [without the kits] you’ll have to phone the office up and ask what the community care person said, [so] you’re a little bit more under control with it all.”
(Care Staff, Site 2)

One expert carer also reported feeling as if their newly acquired skills were in the spirit of local collaboration and multidisciplinary working.

“I like to learn something new. I think in this job you need to keep up to date with anything that's going on. And with more equipment in the Care Agencies also helps...it takes the pressure off of GPs and things like that. As long as we are qualified and we know what we are doing. We take the pressure off hospitals, GPs and the District Nurses a little bit.”
(Care Staff, Site 1)

There is potential for greater integration between health and social care where care agencies and their staff feel on a more equal footing with health partners, and are collaborating across disciplines to enable better care for service users (SCIE 2018; CPA 2021). Fostering a collaborative approach grounded in a shared vision and culture, and facilitated by clear communication between stakeholders in health and social care, will be essential to driving success in the current integration agenda with a meaningful inclusion of social care.

Maximising the potential of digital technologies in supporting skills development in social care staff

Our evaluation of the Care City test bed highlighted a number of facilitators and barriers which impacted on staff outcomes following the introduction of digital technologies. Here we highlight these barriers and suggest ways to overcome them.

Facilitating the introduction of digital technologies by harnessing the role of managers and office staff

Agency managers and office staff also benefitted from skills development. We discuss how these pivotal roles can be harnessed to ensure success when introducing digital technologies.

Effective managerial and office support

Agency managers made use of strong project management and creative skills to ensure the implementation was adapted to the specificity of their own setting, including their staff and service user groups (Rolewicz and others, 2021). For example, they carried out the bulk of the initial communications work with clients and their families to create clear messaging around the

purpose of the kits to increase uptake, as well as supported frontline care staff and service users to feel confident in the process. See Box 3 for a description of their key activities.

Box 3: Creative ways of ensuring successful implementation as introduced by agency managers

- Packaging the digital technologies as health and wellbeing checks to create clear messaging when introducing the kits to service users and to increase uptake.
- The majority of agency managers accompanied frontline care staff on their first visits to show buy-in from management, and ensured family members were present to help build their confidence in the service.
- To reduce stress on care staff in the event of technology-related issues, and to help with communicating results, agency managers used a number of creative solutions to ensure checks were undertaken. These included WhatsApp groups, notebooks to note observations if the tablet malfunctioned, and email alerts within the agency.
- Agency managers proposed a number of innovative ways to give frontline care staff a sense of pride in their new skills and enhance feelings of empowerment. These included “Care Champion badges”, training certificates, sign off processes.
- Office staff in some agencies were tasked with managing the escalation process and contacting the relevant health services, which aimed to reduce the time spent by frontline care staff to reach health professionals.

A key adaptation was the extension of training in some agencies of office staff to manage the communication with health care services, for example calling ambulances or GPs to convey NEWS2 scores on behalf of care staff. Office staff were initially not offered training around the use of the innovation and the escalation process to different health services. This led to situations of confusion where office staff were unsure which health service to contact, ultimately getting in touch with emergency services for non-urgent cases. This initial challenge demonstrates the importance of considering the training needs of all those involved with the technology – without which, the potential benefits are undermined.

Once these difficulties were overcome, however, office staff taking part in the project also benefited from skills development. One agency manager described the “amazing skill set” developed by participating office administrators, who grew in confidence and became “much more assertive” in speaking to GPs as the project progressed. However, for some the reality of implementation exceeded their expectations.

“A bit more of a hands-on management approach was needed over and above what [was] thought initially.”
(Agency Manager, Site 1)

Continuing professional development for managers

Introducing digital technologies into social care settings has the potential to develop the skills of agency managers and office staff. Policy makers wishing to roll out digital technologies more widely in social care should consider the training and support needed to facilitate this. Careful consideration of the training and development needs of these roles (e.g. project management CPD), and protected time, to ensure they feel confident to drive change in practice, is needed.

“You're always on the backfoot if you haven't got a management team backing this which then conveys onto the senior team and senior carers and then that commitment is equally not going to be as strong or as clear as perhaps it could be to make it a success.”
(Agency Manager, Site 1)

Similarly to frontline roles in social care, there are limited career development opportunities for agency managers which fuels high turnover in these roles (Skills for Care, 2021b). Building up the capabilities of agency managers in particular has the potential to not only drive success in embedding digital technologies into social care; it can perhaps support the retention of these roles and build them up to become leaders in the sector.

Embedding digital technologies into social care roles – barriers to overcome

We identified some areas where additional infrastructure – such as clear escalation processes, protected time, and support to manage data collection

and technology failures – would have avoided care staff being exposed to stressful situations and taking on tasks beyond their remit. These in turn impede upskilling for staff. Addressing these barriers, and ensuring that adequate reward is in place to recognise the new skills achieved by frontline staff, is essential to successfully embedding digital technologies into social care roles.

Ensure clinical buy-in to avoid staff taking on responsibilities outside their remit

Care staff often struggled to get through to GPs and other health services – and were sometimes left waiting on the phone for two to three hours – or on weekends, where the GP services were closed and would occasionally result in a service user being admitted to hospital by care staff. Prolonged underfunding of social care means that regular visits in domiciliary care are often limited to 30 minutes and on task and time (Curry and Oung, 2021; NAO 2021), and staff are on a tight schedule to visit 10 to 20 service users per day. The difficulties in engaging and communicating with GPs and other health care professionals resulted in care staff sometimes having to make difficult decisions: stick to this tight schedule, or stay with a service user presenting signs of clinical deterioration at the detriment of others' care. The emotional burden of managing the responsibility for service users in situations of deterioration can wear staff down, and impact on their ability to deliver safe and quality care.

“You had huge blocks on getting hold of primary care, particularly the GPs and ... if you've got an abnormal result you worry if nothing is done and you need an action and you need an outcome, and we couldn't sleep easy thinking oh well her blood pressure is always high every time we check it, we still had to make sure that that was communicated to the primary care or via 111.”

(Agency Manager, Site 2)

Addressing these challenges by ensuring adequate infrastructure, and clinical support for frontline staff using digital innovations are available in the round, is essential to embedding digital tools into staff roles more widely. It is crucial to engage with all roles involved in introducing digital technologies into new settings. Health and social care in particular must work together to deliver successful change, but the challenges of this when social care faces delayed reforms are clear. There is strong potential for digital technologies such as

telecare to deliver a more consistent quality of care for service users – but clinical input will need to be secured to provide that back-up and reassurance to care staff taking on new responsibilities.

“Whatever you do, whatever innovations that people come up with, ... you have to involve those GPs, you have to keep on pestering them way before because they take a long time so just to let them know that this is coming.”

(Clinical Lead, GP)

Protect staff time to undertake new responsibilities

Several agencies used the financial support from the test bed to give protected time to the ‘expert carers’, which meant they could focus on their health monitoring responsibilities during dedicated visits without neglecting their other care activities. Care staff were also expected to undertake monitoring checks as part of their routine care where they suspected deterioration in their service user.

Despite this, the staff we surveyed and interviewed felt very strongly that they did not have enough time to complete their routine care activities on top of using the equipment: “carers are overrun and I know they just haven’t got the time to even fit that in”. Pressures around the infrastructure supporting the technology use were further compounded by the Covid-19 pandemic, with care agencies needing to stall their operations completely in the first months of the lockdown. These pressures limited the extent to which care staff could have truly protected time to use the remote monitoring technologies.

“If we tried to package this test into an existing commissioned visit it would not be viable given the time constraint and the tasks that are required on our visits. The only way it was ever going to be possible was to be a standalone visit to do a test ... [Care staff] would dedicate a time outside of their normal hours to conduct this testing. It gives the client and the carer that time together to do it in a constructive, less stressed, and structured way. It also allows them time should anything be a very high reading to then take further action, i.e. take that time to speak to the GP, take that time to call 111, speak to the office ... all of which if you were trying to fit within a normal visit it physically wouldn't be possible.”

(Agency Manager, Site 1)

At the time of completing our evaluation, it was unclear whether the care agencies would be able to continue embedding the ‘expert carer’ role, even though there was an appetite to do so. This was due to the uncertainties of the pandemic and the financial cost involved in protecting time for staff to use the remote monitoring technologies. But agency managers hoped that the ‘expert carer’ role could become more commonplace in the future.

Embed clear processes and guidance for staff

Some staff were not always confident or clear about the appropriate actions to take when there was a cause for concern detected by the technologies. This was especially the case as they were not frequently exposed to very high risk situations of clinical deterioration: only 9.7% of readings recorded a NEWS2 score, indicative of severe clinical deterioration.

Issues with the technologies and conflicts with service user preferences also undermined their confidence and highlights the need to have adequate technological support in place to resolve issues quickly (more detail in Sherlaw-Johnson and others, 2021). Staff felt embarrassed, for example, when the technologies reported high readings triggering clinical escalation – only for emergency staff to record differing observations that suggested that the service user did not, in fact, require any clinical assistance. Agency staff were keen to ensure that care staff were not faced with making any clinical decisions.

“Carers are not clinicians and we cannot impose a great responsibility on them because I think it was something that I think was out of their remit as well, they can do the test... but they can’t tell the clients or make decisions.”

(GP, Clinical Lead)

Recognise and reward staff for their new responsibilities to avoid staff moving on to other roles

Agency managers in the Care City test bed spent significantly more time than expected training new staff to replace others that had left the organisation. Some described the unexpected “shock” of losing senior care staff who played a pivotal role in using the remote monitoring technologies. Managers suggested that this turnover was due to staff moving on to new opportunities – possibly encouraged and facilitated by the skills they had acquired through the test bed.

“Initially we had a team trained and ready to deliver this but such is life, people move on and develop into other roles and careers and we've had to re-train our senior carers again and again.”

(Agency Manager, Site 1)

While care staff felt empowered from their ‘expert carer’ roles, for many this was not the end goal. Many described the status and appeal of roles in the NHS – especially in nursing – and some hoped that one day they would be able to achieve them. This suggests that the improved job satisfaction and new skills alone, especially in the absence of pay increases to reflect their new responsibilities, were not sufficiently rewarding to keep care staff in their roles.

“At the moment I am just a carer. I’ve trained to use the kit, so I would like to get more skills in doing health checks and things like that.”

(Care Staff, Site 3)

“I’d love to be a nurse. I think if I got more skills [...], there are things I've got to learn [first] if I go to nursing school. [...] I’m so happy that I have [these skills] and I’m using them, then it’s with me, it’s taking me to another level.”

(Care Staff, Site 2)

Managers saw a role for local authorities and local health commissioners to invest in advanced frontline roles in social care, supported by remote monitoring technologies to create a bridge between social care and health services. These ‘expert carer’ roles would benefit from protected time to undertake their new responsibilities, provide training and support to enhance care delivery, and be accompanied with suitable reward that would recognise their development. Agency managers also saw the potential to take this further and develop ‘specialist’ social care roles that are enabled by digital technologies, focusing on specific activities or needs (e.g. dementia care). These roles could create progression opportunities for care staff motivated to further their career in social care.

“I see a place for this in specialist roles with your hybrid carer where they’ve got that physical health care knowledge, they’ve got supervision in place to support that, and this kit as a tool with them could be I think excellent.”

(Agency Manager, Site 2)

What action needs to be taken now?

There has been a growing interest in the potential of digital technologies to support the workforce in social care – illustrated by the recent evidence review commissioned by NHSX and its feature in DHSC’s data strategy (DHSC 2021). The Care City test bed has demonstrated how much value digital technologies can have in enabling the skills development of the social care workforce, with clear benefits for staff and opportunities to improve service user care.

There is a growing evidence base around the positive benefits of training and development opportunities for social care staff on their job satisfaction and morale. In particular, the acquisition of new hands-on responsibilities and training has the potential to improve working conditions and increase the attractiveness of working in social care (Bennett and others 2018 in Skills for Care 2021a; Stacey 2005). For example, an evaluation of a Workforce Development Fund to support social care staff to acquire qualifications and new skills found that 85% of employers found the increased access to training had improved staff morale, and 92% found it had improved quality of care (Skills for Care, 2021b).

A recent vision for a workforce framework strategy, called for by a cross-sector collaboration of local authority representatives, workforce representatives, providers and service users, has further highlighted the need to invest in training to adapt staff to new, preventive and changing models of care that include the use of “monitoring and assistive technology” (Skills for Care, 2021c). In particular, a majority of social care staff are committed to developing digital skills to keep pace with the changing nature of domiciliary care – recognising however the variability in career aspirations among care staff (Synnott and others, 2020 in Skills for Care, 2021b; Skills for Care, 2021c).

Digital technologies that can appeal to caring values, such as remote monitoring technologies, can go some way to fulfilling the personal and professional ambitions of staff with aspirations to progress: “This is what I’ve wanted to do for a long time”. This supports previous findings that

values-based approaches to recruiting people into social care who share “stronger care values” can have a positive impact on staff satisfaction and performance for staff with an appetite to learn new skills (Skills for Care, 2016). Beyond personal benefits for staff, there are system benefits too: increased job satisfaction and staff wellbeing can improve quality of care for service users (DHSC Covid-Taskforce 2020 in Skills for Care, 2021b).

There is a real opportunity to develop the skills of frontline staff as more digital technologies are piloted to support and enhance the quality of domiciliary care – for example through making greater use of remote monitoring technologies that link up with health to provide more consistent and confident care. The digital skills developed by care staff aren’t just limited to knowledge of digital technologies, but rather also include “a much broader skills base around creative application of technology and data” (Skills for Care 2021b:7). The Care City test bed shows that training staff to use digital innovations can improve their knowledge and understanding of their service users’ health conditions, and equip them with the skills to communicate this with professionals across the health and care pathway. It can help build recognition for care work too, with service users and their families having more confidence in care staff and their abilities.

The skills developed by frontline care staff in the Care City test bed have not been just limited to digital proficiency. Rather, the skills developed by staff extend to an increased ability to understand the health conditions of their service users and make use of health care equipment. Alongside their growth in knowledge, the support given by the digital technologies has also given staff the confidence to communicate to health care professionals and feel more assertive that the care they are giving is high quality. This growth in confidence and skills has contributed to a greater recognition of the social care workforce too, with an elevated status among health care professionals, but also among service users and their families.

In addition, there is a clear need to develop management and leadership skills in adult social care, although these have traditionally not received much attention (Skills for Care, 2021b). Managerial roles, such as registered managers, are a key determinant of quality in social care. Yet high levels of responsibilities coupled with poor career development options means the rate of turnover among managers is high and increasing (Curry and Oung, 2021). More important still, implementation literature has pointed to the pivotal role of management in supporting the uptake of new innovations (Crellin

and others, 2021; Beech and others, 2019; Birken and others, 2012; Bunn and others, 2011). Implementation is best achieved when middle management roles are well supported to ‘diffus[e] information, synthesis[e] information, mediat[e] between strategy and day-to-day activities, and sell innovation implementation’ (Birken and others, 2012).

Yet, without clear progression pathways, and improved working conditions for care staff, there is a potential for digital technologies to exacerbate rather than help solve the retention problem in social care. Staff at all levels can become over-, rather than up-skilled for their roles, choosing instead to move into other sectors with higher pay reward and lower stress. Staff need to be valued for the new skills they have developed, and recognised for the additional workload and responsibility an enhanced role supported by digital technologies entails.

Successfully introducing new technologies into any health or social care setting will require adequate infrastructure and buy-in to support those who use them (Hutchings 2020; Crellin and others, 2021). Insufficient financial resource, protected time, and organisational engagement have all been identified as barriers to successful implementation of digital technologies and skills development of the workforce (Castle-Clarke and Hutchings, 2019; Skills for Care evidence review, 2021).

Across the social care sector, there have been calls to develop a ‘People Plan’ for the social care workforce along the lines of the NHS workforce strategy (e.g. Public Accounts Committee, 2021; Health and Social Care Select Committee, 2020). With the announcement of funds to develop the social care workforce through the new, health and social care levy, stakeholders will now expect to see this ‘People plan’ materialise. There is certainly a role for digital technologies to play in the development of a national workforce plan – the development of multiple skills among frontline care staff, office staff, and agency managers in the Care City test bed demonstrates this. But introducing digital technologies alone will not be a quick win – they are a tool rather than an end in themselves. Comprehensive pay and progression frameworks, adequate supervision and support, and opportunities for training and development will all be essential to establishing career pathways at all levels of social care. Table 1 offers some non-costed recommendations to maximise the potential of digital technologies in supporting skills development for staff.

Table 1: Recommendations to maximise the potential of digital technologies in supporting skills development for staff

Who	Recommendation
<p>DHSC, with support from social care stakeholders and bodies involved with the NHS People Plan (e.g. Skills for Care etc.)</p>	<p>Produce a workforce strategy for social care which:</p> <ul style="list-style-type: none"> • Sets out skills development frameworks for social care staff, and how digital technologies can sit within these • Outline ‘enhanced’ social care roles which can build career progression and facilitate joining up services with the NHS within safe limits for care staff and development opportunities for managers • Provide workforce development funding to pilot and roll out enhanced roles for care staff (met with adequate reward) supported by digital technologies
<p>Local authorities, integrated care structures (e.g. ICSs/ CCGs/PCNs)</p>	<ul style="list-style-type: none"> • Invest in greater use of digital technologies where they have been shown to add value in supporting care staff and enhancing quality of care • Ensure training is delivered during working hours, and protected time and pay reward is provided for care staff with an appetite to develop new (digital) skills • Invest in training for frontline staff and CPD for office and agency staff, through commissioning, to drive new innovative models of care delivery • Pilot and evaluate ‘enhanced’ roles in social care settings to understand impacts on staff outcomes • Coordinate engagement from all stakeholders across a local area to foster clinical buy-in and set out clear processes to ensure all stakeholders have clarity
<p>Care agencies</p>	<ul style="list-style-type: none"> • Provide support and clarity to staff taking on new roles and responsibilities with digital technologies • Commit to engaging with pilots for new digital technologies and collect data against which impact can be evaluated • Ensure that all care staff wanting to progress have equal opportunities to do so

Conclusion

The development of skills across multiple roles, including frontline and agency managers, shows the potential of technology use across a variety of roles in the social care career pathway. This complex skills development stresses the need for training and development opportunities at all levels of the pay scale.

But importantly, technology on its own isn't the answer. Introducing new innovations requires adequate organisational, clinical, and technological infrastructure to support those who use them. Crucially, this means taking a joined-up approach between health and social care partners to provide adequate support as care staff navigate new responsibilities, and ensure that they are not exposed to responsibilities beyond their remit.

It is also important to consider the potential unintended consequences of introducing digital technologies without associated rewards for the development of new skills. Staff need to be recognised and valued for the new responsibilities they hold – and see this as part of a wider progression pathway through which they can fulfil their career aspirations.

The Care City test bed is but one example of a growing evidence base around the role technologies can hold in supporting the creation of more attractive workforce roles in social care (see also Care City's wider work on the [Future of Care](#)). There is a clear interest in addressing workforce issues in social care, with a need for a comprehensive workforce strategy that can build social care into an attractive career, and there is an opportunity for policy makers to embed digital into this strategy. Any strategy will need to consider how digital can be used to create enhanced roles that recognise the valuable contribution care staff make to their service users, and offers them rewarding opportunities to perceive social care as a long-term career.

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