

# DIGITAL LITERACY Research Report

A scoping study to explore the digital skills of NHSScotland Estates and Facilities staff



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A scoping study to explore the digital skills of NHSScotland Estates and Facilities staff

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# EXECUTIVE SUMMARY

## Background

All staff within the Health and Social Care sector need to become more digitally skilled to be better able to deliver technology enabled care in the future. The potential of digital technology to improve the efficiency and co-ordination of health and social care might act as a driver for transformational change at all levels and across all roles in the Health and Social Care workforce.

During 2017, we collaborated with a number of NHSScotland health boards to explore the digital literacy of staff working in Estates and Facilities roles and to ascertain what might be needed for them to become digitally capable and digitally enabled in the future.

Estates and Facilities staff work in a range of healthcare settings and, with approximately 19,000 staff working across Scotland, this is one of the largest workforce segments in the health service.

We collected information in relation to staff access to, and use of, digital technology in the workplace and at home, current skill levels, digital work requirements and learning needs regarding new and existing technologies.



**“I help my colleagues and friends with any IT tasks or issues.”**

**Arjun - Catering Assistant (Band 2)\***

\*These illustrative case studies are representative of the research and its key themes.

## Method

A mixed-method design resulted in 38 questionnaire responses, 15 interviews and 4 focus groups across 5 different job families.

## Findings

Access to the internet was commonly via a shared computer so it was challenging for staff to become digitally skilled at work or to access information about learning, development or new roles which were often posted on their local intranets. It was noted that without access to technology and the underpinning digital skills, much time was spent undertaking paper-based administration.

Organisations did not have a shared understanding of role requirements in terms of digital skills and use of technology within the workplace. The need for digital skills and usage of technology was not commonly found in job descriptions or person specifications.

Many of the Estates and Facilities staff we spoke to were digitally connected at home and owned a range of devices including smartphones, tablets, and laptops. The majority, however, including supervisors, were underconfident about their digital capabilities in the workplace and were unable to engage with digital technology in that environment.

Despite being disconnected from digital technology at work to varying degrees, this group of staff were willing to enhance their digital capabilities if they were given sufficient support and encouragement.

## Recommendations

The following recommendations relate to the key findings from the report and will help to build a sustainable inclusive learning culture which harnesses the power of digital technology.

### Leaders and Managers should:

- > provide all staff with ready access to technology within the workplace.
- > foster staff commitment to the process of digital transformation by explaining the need for change in terms of the benefits of technology and how this will help staff in their everyday work.
- > embrace and promote new ways of working which harness the power and efficiency of technology. These new ways of working have the potential to engage and empower Estates and Facilities staff to embrace innovation and associated technology.
- > consider role requirements and usage of technology throughout the employee life-cycle. This may include considering role entry requirements, updating job descriptions and discussing individual learning needs in relation to digital skills, for example, during Personal Development Review and Planning conversations.
- > involve Estates and Facilities staff in the design and use of technology in the workplace so that systems are geared to the needs of the worker and the needs of the work.
- > consider prioritising time for learning for staff across all job families, particularly those who are digitally excluded.
- > work in partnership to design and deliver differentiated digital skills programmes to take account of wider learning issues and to build confidence in staff in accessing and using technology.

## Next steps

- The report, its findings and recommendations will be shared with stakeholders for comment.
- NES will continue to work in partnership to co-create a development programme entitled “Digital Matters” which helps staff gain and build upon their core digital skills.
- NES will provide leadership for, and work in partnership to, co-create development solutions which address digital skills at all levels from entry to senior leadership level.
- NES will work collaboratively with other public-sector agencies to support and champion the delivery of the Digital Health and Social Care Strategy.
- NES will conduct further research in to digital skills and capability of the health and social care workforce where evidence gaps exist regarding digital usage.

**“I want to help staff with their IT skills. However, I am not confident myself.”**

**Michelle - Domestic Supervisor (Band 3)\***



\*These illustrative case studies are representative of the research and its key themes.

## INTRODUCTION

The purpose of this study was to explore digital skills in Estates and Facilities staff working in NHSScotland. This group was identified by NHSScotland Learning and Development Leads in a questionnaire issued to them in November 2016 as being in greatest need of digital literacy improvement and access to digital technology at work.

Estates and Facilities Services make up one of the largest staff groups in the health service with approximately 19,000 employees across NHSScotland. These services cover a wide range of different occupations and professions, from those focused on delivering services directly to or for patients (catering, domestic, portering and laundry staff) to those needed to maintain the equipment, facilities and estates of territorial and non-territorial health Boards (electricians, engineers, gardeners, joiners, plumbers, drivers and security staff)

These staff are also those whose contributions to the NHS have often been overlooked (NES, 2008) and where learning, educational development and career pathways are rarely prioritised.

Research evidence relating to staff capability in using technology to support service improvement in health care in the UK is relatively scarce. Some evidence suggests that those in lower paid jobs may have less digital capability and less opportunity for digital learning than more affluent peers. For example, UK studies have found that nurses and staff in administrative and support services lack confidence in, or have limited, information technology (IT) skills (NES, 2008 & Moule et al, 2011). Education to support the implementation of digital applications in healthcare such as telecare has also been typically slower to develop than the technologies themselves. (NES, 2015)

We undertook to engage with different job families working within the Estates and Facilities services to examine the issues in relation to digital technology and to determine:

- > to what extent staff have access to and use technology within their place of work and at home
- > the gap between current skills levels and work requirements
- > staff digital learning needs



## METHODOLOGY

NES worked with existing contacts in territorial health Boards in Scotland to identify groups of staff working within Estates and Facilities Services who were willing to discuss their digital use. This consultation was critically important as it helped build trust and support for the study and enabled us to engage with staff from lower pay bands which was a key focus.

Ethical review was undertaken by NES as no formal requirement from a NHS research ethics committee was required. Data collection took place between November 2016 and early February 2017. We conducted individual and focus group interviews with staff from five job families in four different health Board sites. We also collected information via questionnaires (in hard copy) to complement the interviews from existing participants and from those who did not take part in discussions. Support was available for individuals to complete questionnaires or to ask further questions. The use of mixed methods helped us gain a greater diversity and depth of responses than could have been obtained from the use of either a survey or interview alone.

There were slightly different emphases in the questions depending on our data collection method although there was intentional overlap and duplication. We used the term 'IT' or 'computers' in the questionnaire but were guided by how participants themselves referred to digital technologies and skills in the interviews.

Questionnaire results were imported into Microsoft Excel and analysed using descriptive statistics. Qualitative work used the Framework Method as reported by Ritchie and Spencer (1994) to produce a matrix of summarised data and themes from interview responses developed inductively from the participants and deductively from the aims of the project. Interpretation was validated through discussion between those who collected and analysed the data and with a wider group of stakeholders.

# FINDINGS – QUANTITATIVE DATA

## Questionnaire Data

The questionnaire sought to determine respondent access to and use of digital technologies within the workplace and at home, digital confidence and competence and perceived IT learning needs. In total, 38 responses were received across 4 different health Boards with 10 having line management (supervisory) responsibilities. There were 22 responses from one rural health Board giving a detailed picture of remote and rural issues but meaning that the findings cannot be assumed to reflect the views of all staff working in Estates and Facilities services across NHSScotland.

## Access and use of digital technologies at work

Access to a digital device at work varied slightly by Board. Supervisors were much more likely to have access to a computer than other staff but did not necessarily have their own device. Desktop computers and, to a lesser extent, laptops were those most commonly used. Few had access to a tablet, smartphone or ordinary mobile device at work.

Email communication was routinely used by supervisors. Most staff (those without managerial responsibilities) reported that they had not logged on to their account in the last 3 months. This meant that these individuals had no access to email as unchecked addresses automatically become deleted as part of NHSScotland email policy guidelines. Only 13 respondents (34%) said they accessed eKSF (the national online recording and monitoring system for the Performance Review and Planning process). It is not clear whether others simply did not undertake eKSF tasks or used some other system such as paper-based records to set objectives and review their learning needs.

About three-quarters of this sample (n = 28) reported having access to Learnpro (a learning management system) or a similar learning management programme. This number was somewhat higher than expected given that one health Board site did not use online learning to complete mandatory training. Those with management responsibility typically had a higher rate of access at 80%. Most reported good internet connectivity at work.

## Digital competence and confidence

Respondents were also asked to record their confidence in carrying out a range of digital tasks using a three-point visual rating scale. They were most confident about understanding the principles of online confidentiality, logging onto a PC or laptop and using the internet. They were least confident about taking part in webinars, video-conferencing, using the eKSF system and accessing the intranet to find information. Managers were only marginally more confident (at 60%) compared with non-managers (at 55%) in being able to use the intranet for work. Just over half felt comfortable about completing mandatory training online but only 15 reported using Microsoft software (Word, Excel, Powerpoint) on a regular basis.

## Access and use of digital technologies at home

Most respondents were digitally connected, using one or more devices outwith their workplace. Thirty-two (out of 38) had a smartphone, 30 had access to a tablet or iPad and just over half had a laptop or computer at home. Only 3 reported no digital access although 7 respondents said that they did not regularly use the internet. A variety of digital tasks were reportedly undertaken at home including personal email (n = 29), use of social media (n= 29) and managing utility bills (25).



**“These computers are just not for me. I want to get on with my day job.”**

**James - Porter (Band 2)\***

\*These illustrative case studies are representative of the research and its key themes.

## Addressing digital learning needs

There appeared to be some appetite for digital training to increase digital capability and confidence at work. An unexpected finding was how many respondents rated 'using the internet safely and securely' (n = 21) and 'understanding issues of confidentiality and data protection' (n = 20) as their most important learning need. This may reflect the emphasis placed on the confidential processing of information relating to patients and clients by health care organisations. Twenty respondents also requested support in accessing online learning opportunities and 14 wanted 'computer basic' training covering word processing, emails and creating spreadsheets.

Ten respondents felt that they needed help with logging on and keyboard and mouse skills. A few thought that the real barrier was access and others reported a lack of time within their day-to-day job roles to complete any digital tasks.

# FINDINGS – QUALITATIVE DATA

## Methods

Interviews and focus groups were held with Estates and Facilities staff in their workplace across 4 different territorial health Board sites in both urban and rural settings. Participants were predominantly from NHS pay bands 2-4 (pay bands range from 2 to 9) representing staff members who are rarely consulted for the purpose of research (Skills for Health, undated). Individual and joint interviews findings are presented first, followed by the focus group discussions. Quotations from the qualitative data illustrate and typify the comments from the participants under each theme.

## 1. Interviews

Nine single interviews and 3 joint interviews were conducted comprising 15 individual informants in total. Of these, 10 were female and 5 were male. Six worked in laundry and linen services, 4 in servery/catering, 3 in domestic services, 1 in portering and 1 was a driver.

At interview, staff members were asked about their job role, whether they had access to, and used, technology within their workplace, their IT learning needs and digital skills, how they accessed policies and completed training, and their IT use at home.

**JOB ROLE >** Interviewees had different levels of seniority and working contracts comprising both full-time and part-time roles and, in two cases, had second or multiple jobs. Some also worked extra shifts through the NHS Staff Bank. Whilst some job titles were similar across the health Boards, local service needs and infrastructure meant that roles even within the same job family could be quite diverse. Staff felt under considerable pressure to complete their work on a day-to-day basis and generally did not see digital technology as a solution to a better or more efficient delivery of their service. Those in both managerial and non-managerial roles emphasised the high ratio of supervisors to members of staff, in one case 1: 100 and in another 7:170, and this factor had a significant impact on IT access, digital capabilities and completion of training and other forms of educational development.

**ACCESS TO >  
DIGITAL  
TECHNOLOGY**

In this sample, the majority (10) ostensibly had access to a personal computer (PC) at work. However, in all but one instance this was shared with many other staff, hence few individuals logged onto their NHS site on a regular basis and, where they did, this was only to undertake specific work tasks. There was no difference in the pattern of access according to gender, geographical location of the workplace or job family:

**There's 70 staff in the morning shift - most don't have access at all.**

**Senior domestic - rural site**

**I have an email address and I use the PC here to check the email.**

**Catering assistant - rural site**

One consequence of limited PC availability was that there was a hierarchy of IT access according to authority or seniority and, as a consequence, limited availability for non-managerial staff. Supervisors or managers 'took charge' of individual staff passwords (particularly for training) and controlled the permissions over PC use. This practice was acknowledged and, for the most part, accepted by other members of staff as the tasks requiring digital capability were deemed to be supervisory in nature:

**My supervisor will check and see if any learning is due to be completed.**

**Catering Assistant - rural site**

**Mostly supervisors use the computers for payroll etc.**

**Porter - rural site**

As a consequence, staff who perceived their digital skills to be poor were not able to acquire sufficient regular exposure to a PC to gain competence or confidence in using it. Their email accounts expired because of this lack of access and staff had to resort to IT staff or informal IT champions for help if they needed to undertake specific online work:

**When I applied for the bank job I needed to use a computer. I had to apply via the website. The IT guys helped me with that.**

**Domestic assistant – rural site**

**I don't know about using computers – I don't use them often enough to retain information.**

**Linen Assistant – urban site**

### **USE OF DIGITAL TECHNOLOGY AT WORK AND FOR WORK**

For this sample of staff, use of digital technology at work and for work was limited. Those who had regular or periodic access to a PC (supervisors or managers for the most part) appeared to undertake only those tasks they were obliged to complete online such as ordering and recording supplies, creating and replying to emails, producing rotas and checking payroll data, accessing Learnpro for mandatory training and accident logging. No-one felt that digital technology had improved the services they delivered or had the potential to change the ways in which they might conduct their work in the future. Instead, several interviewees reported that they did not require digital capabilities to do their job as their work was manual rather than technical in design:

**We don't need computer skills for our jobs, only ordering and Datix.**

**Assistant laundry manager - urban site**

**I hardly use it. It's because I don't need to use it - I don't do it often so I get confused.**

**Food service assistant - rural site**

**I mainly clean on a day to basis.**

**Domestic assistant - rural site**

Interestingly, there does not appear to be any explicit requirement for these groups of staff to possess digital capabilities. On reviewing national NHSScotland job profiles for the Estates and Facilities job families, the requirement to use digital skills such as generating and processing electronic records is only mentioned in higher band posts i.e. usually 5 and above. It is worth bearing in mind, however, that many of these profiles were developed between 2003-2005 and job roles and responsibilities may have changed since that time.

Most interviewees had not accessed their NHS site intranet and relied on noticeboards or their supervisor to obtain information about policies, training, patient safety alerts or job opportunities. Again, this was the same for staff across both the urban and more rural health Board sites:

**I started 11 years ago and I forgot my password. I've not accessed it (work PC) in about 8 years. There are a few notice boards around in the kitchen, supervisor's office and there's job adverts there.**

**Food service assistant - rural site**

**The computer was installed 3 weeks ago. We ask our supervisor what vacancies there are and she gives over the piece of paper with information. It's the same with management policies and stuff.**

**Linen assistant - urban site**



The lack of access to digital technology at work engendered a distrust of, and under-confidence in, staff's digital capabilities. Even some of those with supervisory responsibilities, who had more exposure than most to a PC, seemed to display a low level of digital literacy.

**Sometimes when I'm acting up, I have to order supplies using the computer. The manager has to approve that. I've got basic skills but I need to know more.**

**Senior domestic – rural site**

**Sometimes I use the computer first thing and if there is any ordering - but I am not that great on it.**

**Linen supervisor – urban site**

Limited IT access and poor digital capability meant that supervisors invariably had to publicise worksite information verbally or via noticeboards generating extra work for themselves and the prospect of incomplete dissemination to staff:

**Everything that is online I take offline and give to the staff manually.**

**Assistant laundry manager – urban site**

**Everyone has an email address when they start but they disappear when they're not used. It would be great if they could check their emails although lots of the emails are not relevant. I let the staff know the policies.**

**Domestic supervisor – rural site**

**USE OF >  
DIGITAL  
TECHNOLOGY  
AT HOME**

At interview, a distinction was made between the use and purpose of digital technology at work and home with some staff categorically stating that they did not take work home with them. This was unsolicited comment about being asked to conduct some work tasks, possibly online mandatory training, in their own time:

**I don't take work home.  
Linen assistant - rural site**

**I just come to work and do my job  
and then go home.  
Catering assistant - rural site**

Two individuals, however, explicitly stated that they chose, or would choose, to undertake their essential training at home:

**Learnpro stuff - I do that with the supervisor  
or you can do it at home but I choose to do it  
at home.**

**Linen assistant - rural site**

**I do my learning at home. I'm not sure what  
other staff do. I like doing it at home because  
I get peace. I feel flustered when people are  
about - I like the quiet at home.**

**Catering assistant - rural site**

All those interviewed reported having access to and using at least one type of digital device at home. Only one interviewee did not have a smart phone although did own a PC and tablet. Individuals typically used their devices for social media, shopping, booking holidays and watching TV. In spite of being digitally connected, some staff (at least 5) reported feeling underconfident in their digital skills and use of home devices:

**I'll research travel but I won't book online.  
Linen assistant - rural site**

**I don't use it to shop. I would ask someone to help me look up the information. I'm bothered about internet fraud.**

**Catering assistant - rural site**

**My daughter set up banking online for me but I don't use it. It's not that I'm not interested. I would need someone to sit with me.**

**Linen supervisor - urban site**

**DIGITAL TRAINING** > Seven of the interviewees reported that they had completed online mandatory training although in all cases this was either facilitated by the supervisor or undertaken directly with them. Supervisors also confirmed that individuals were rarely left to complete essential training on their own:

**Access to online training is in the supervisor's office on Learnpro, fire training, health and safety, manual handling.**

**Porter – rural site**

**Training online - I do it with the supervisor.**

**Catering assistant – rural site**

**Child protection - all staff must undertake this. I've taken it offline and I sit with them at my computer so that I can answer their questions. I've taken these from the module.**

**Assistant laundry manager – urban site**

**Would like to do the ECDL.**

**Group of domestic staff – rural site**

Within the linen service area in the urban site, mandatory training had been ad hoc and delivered face-to-face but online training was being brought in. Staff reported that supervisors completed their objective planning annually on their behalf but development reviews were not undertaken.

When asked about IT learning needs and whether they would benefit from digital skills courses, 7 interviewees felt that training should be in place for staff as well as a local 'go-to' champion to build confidence and provide ongoing digital support. Two felt that about a third of staff in their area would want to develop their digital capabilities at work. For some, the prospect of IT skills development was deemed attractive as this might increase their own or others' career pathway but for others enhancing digital capability was felt to serve little purpose as it was unnecessary for their work. One supervisor commented on the need for wider literacy support for staff rather than digital education and provided some local help to individuals with specific learning difficulties:

**Literacy, numeracy, dyslexia and IT literacy is an issue. We have some people who cannot read and write. I help them with their forms. We don't include computers in that. We don't need computers as lots of people do manual work.**

**Assistant laundry manager – urban site**

**(Digital) training could be ad hoc but with warning we could organise things for people at different levels. It's about getting time to find out about people's current level.**

**Domestic supervisor - rural site**

**I don't want to learn anything more on the computer - I'm feeling too old.**

**Catering assistant – rural site**

## 2. Focus group discussions

Four focus group discussions were conducted in 2 different territorial health Boards and in contrasting geographical locations: a rural site where 3 group discussions were held (staff working in domestic services, portering/caretaking roles and catering) and an urban site where 1 group comprised staff from domestic services. The group discussions differed slightly in number ranging from 7 in the largest group to 4 in the smallest. Two groups were single sex - one female and one male and 2 were mixed staff groups.

Groups were asked similar questions to those interviewed on their own and included seeking information about access to, and use of, technology within the workplace, IT learning needs and digital skills, how they accessed policies and completed training, and their IT use at home. There was more emphasis in these interviews about staff perception of digital capability and how this might be manifested at work and at home.

### ACCESS TO > DIGITAL TECHNOLOGY

Access to computers at work was variable and responses revealed a similar pattern to those of individual staff at interview. Whilst use of a shared PC at work was feasible in most cases, the barriers to access were profound and precluded staff at work from using digital technology on a regular basis. In group discussions, staff talked about lacking confidence in digital capability, not knowing their log-in details or letting them expire, the location of IT zones in different areas to places of work, job roles not needing digital skills, and, in some instances, permissions being required to access IT rooms:

**I need to go downstairs to use the IT zone and I'd have to find my log-in - don't know when I last used it.**

**Group of domestic staff - rural site**

**It's difficult to get emails. We've had a member of staff who had to wait for a year to get a password. There's one computer in the training room but it's locked and we need to get permission. There's a computer on the wards but you need proximity cards. You have to ask for permission to get one - the charge nurses sort that out.**

**Group of domestic staff - urban site**

Night staff were regarded as being able to access computers more readily at work and, crucially, having the luxury of time to acquire and develop digital capability:

**The night staff - it's easier to get (IT) access and time to learn.**

**Group of portering and caretaking staff - rural site**

There were also accounts of wi-fi access issues or poor mobile signals in NHS buildings hence some staff were willing but unable to use their own device at work. Staff in the urban site were just as likely as staff in the rural locality to experience problems with access and there was no apparent gender difference with regard to perceived digital capability.

#### **USE OF DIGITAL TECHNOLOGY AT WORK AND FOR WORK**

Similar to the individual interviews, supervisors and managers were more likely to access and use a PC for work than staff in lower pay bands. Typically, digital technology was used to order supplies, record annual leave and rotas, printing menus and labels and, in some instances, to access Learnpro to complete digital training:

**Supervisors need to use Excel for rotas.**

**Group of domestic staff - rural site**

**Staff don't use computers daily. There's lots of junk in the emails. We can see vacancies on the intranet but we mostly get told by managers what we need.**

**Group of domestic staff - urban site**

**Porters and support staff don't have experience to be able to use computers.**

**Group of portering and caretaking staff - rural site**

Staff often accessed informal support to help them with specific IT tasks or learnt through trial and error:

**I learned how to use the “App Store” on my phone by playing around with it. It was just a matter of trial and error.**

**Group of portering and caretaking staff – rural site**

**A colleague helps all of us with PC issues and fixing things.**

**Group of domestic staff – urban site**

Within group interviews, staff were asked what being digitally literate meant for them. For the most part, this was equated with being able to complete specific tasks such as using software programmes such as excel or eKSF rather than ideas about service improvements. Some staff also mentioned the value of completing an ECDL (European Computer Driving Licence) which was developed in 1995 to be a globally recognised digital literacy qualification and is still currently used in some NHS Boards:

**Word processing, online reporting for incidents.**

**Group of portering and caretaking staff – rural site**

**Emails, log on and switch off, creating documents, menu planning, spreadsheets.**

**Group of server/catering staff – rural site**



Most reported disseminating and receiving information from paper-based resources or through managers. Noticeboards were predominantly used in both the urban and rural sites for communicating policies, vacancies and other site information.

**We use the sign-in wall for important stuff - there are two noticeboards.**

**Group of domestic staff - urban site**

**We find out about learning opportunities via word of mouth or the notice.**

**Group of domestic staff - urban site**

### **USE OF > DIGITAL TECHNOLOGY AT HOME**

There was less discussion about IT use at home in the focus group discussions. The portering and caretaking staff talked about trying out apps and playing games on home devices and checking and updating their Facebook notifications. Others mentioned uploading photographs and shopping online and discussed the merits of laptops versus tablets. Within the domestic staff group in the rural site, concerns were expressed about internet 'scams' and online banking. Only one participant reported having no access to a laptop or tablet at home. There was mention of using home computers for learning by two participants in the urban site group but this topic was not extensively discussed.

**I worry about scams and security around banks giving over my details.**

**Group of domestic staff - rural site**

**Sometimes I use computers (for work) at home because you don't need to log in..**

**Group of domestic staff - urban site**

**DIGITAL TRAINING** > Most staff welcomed the prospect of digital skills training but did not always articulate a link between why they wanted IT and what they would use it for in the workplace. One supervisor commented on an initiative that had been put in place to provide digital training for staff for an hour a week over a period of 6 weeks. Whilst this had helped to upskill staff initially, it had failed in the longer term as staff had no access to PCs at work so were unable to apply and practise their learning. Consistent messages were expressed across the groups for digital training to be practically-based, be provided individually or with small groups of staff, be delivered in understandable terminology and in 'bite size pieces' recognising the differing learning pace of individuals:

**Wouldn't want any wise acts - he would need to go at low speed.**

**Group of server/catering staff - rural site**

**Offer different elements in levels so people can sign up for what they want. No one size fits all.**

**Group of server/catering staff - rural site**

**Need to make sure people know how to switch it on and take them through the basics - different people take different amounts of time to learn."**

**Group of portering and caretaking staff - rural site**

The need for protected time to help them undertake training was mentioned within three of the groups:

**We've Learnpro but there's no time for learning other than that and managers aren't always supportive.**

**Group of domestic staff - urban site**

**Finding the time - we're short staffed.**

**Group of domestic staff - urban site**

As with the individual interviews, some staff reported using DVDs/videos for learning rather than accessing it online although a few did complete mandatory training at home:

**Training should be done at work but in reality it sometimes gets done at home.**

**Group of server/catering staff - rural site**

**Don't need to use Learnpro for training- we use DVDs instead.**

**Group of portering and caretaking staff - rural site**

## DISCUSSION

This scoping study engaged a wide range of individuals and groups of staff in different health Boards across NHSScotland to explore digital capability in the Estates and Facilities workforce.

The findings suggest that significant barriers exist for these groups in relation to access to and use of digital technology at work, and digital learning needs.

### Access to and use of digital technology at work

Most staff were not able to access a digital device regularly due to a lack of available computers in their workplace. This resulted in issues over expired email accounts and control over the use of shared digital devices by supervisors and managers.

Notwithstanding the requirement for permission to use personal devices at work, an added challenge for these staff is accessing a good mobile data signal as evidenced in our findings. It is common practice within health Boards to use a 'firewall' and a secure web gateway to ensure corporate and regulatory compliance. Whilst these measures help to mitigate potential malware threats and inappropriate content, they can also block digital access at work and personal learning (NES, 2015).

**“I don't really use much technology within the workplace but I'd like to learn.”**

**Jessica - Linen Assistant (Band 2)\***



\*These illustrative case studies are representative of the research and its key themes.

Supervisors (and some staff) used email at work and undertook specific online tasks such as ordering supplies, producing staff rotas, logging accidents and maintaining eKSF records. However, there was indication of under-confidence in this staff group in relation to using digital skills to create spreadsheets, using word and powerpoint packages and accessing the intranet. Staff were digitally disengaged and did not feel that technology had improved the services they delivered or had the potential to transform the way their work could be conducted in the future.

### **Current skills levels and work requirements**

The gap between current skills levels and work requirements is, to some extent, unknown as supervisors and staff alike conceived of their roles as manual rather than technical in nature. There was no requirement from national job profiles for staff to possess digital capabilities at least for those in lower pay bands. Some also appeared resistant to using personal devices for work such as accessing emails and completing online mandatory training. Notably, many participants in this study accessed information via word of mouth or from noticeboards. KSF processes were predominantly managed at scale by supervisors who had little time to conduct personal development reviews reducing the effectiveness of this framework as a lever for change. The aspiration of a digital NHS, where benefits can be made through aligning existing technologies with financial incentives and new ways of working (The King's Fund, 2016), seems a far cry from the reality of service pressures and digital exclusion facing these groups of staff.

### **Digital learning needs**

There was evidence of low levels of digital literacy in the interviews and whilst most had access to a digital device at home, we know that the transfer of digital capabilities from one environment to another may be more problematic than previously acknowledged (NES, 2015). Simply making computers more available in the workplace is not sufficient on its own to ensure the regular use of digital technology at work. Skills training and the support of senior managers dedicated to widening digital access will be necessary to ensure that all staff become digitally included and capable in the workplace.

## Enablers

Whilst the barriers to engaging with digital technology for these staff groups were wide and various, there were also indications from the study of potential ways in which digital skills could be promoted.

Nearly all the staff we spoke to had at least one device at home which enabled them to access the internet and become familiar with the use of digital technologies. Some individuals also seemed willing to develop their digital competence, particularly if there was ready access and ongoing IT support and it increased their promotional chances.

## Recommendations

The following recommendations relate to the key findings from the report and will help to build a sustainable inclusive learning culture which harnesses the power of digital technology.

### Leaders and Managers should:

- provide all staff with ready access to technology within the workplace.
- foster staff commitment to the process of digital transformation by explaining the need for change in terms of the benefits of technology and how this will help staff in their everyday work.
- embrace and promote new ways of working which harness the power and efficiency of technology. These new ways of working have the potential to engage and empower Estates and Facilities staff to embrace innovation and associated technology.
- consider role requirements and usage of technology throughout the employee life-cycle. This may include considering role entry requirements, updating job descriptions and discussing individual learning needs in relation to digital skills, for example, during Personal Development Review and Planning conversations.
- involve Estates and Facilities staff in the design and use of technology in the workplace so that systems are geared to the needs of the worker and the needs of the work.
- consider prioritising time for learning for staff across all job families, particularly those who are digitally excluded.
- work in partnership to design and deliver differentiated digital skills programmes to take account of wider learning issues and to build confidence in staff in accessing and using technology.

## Next steps

- The report, its findings and recommendations will be shared with stakeholders for comment.
- NES will continue to work in partnership to co-create a development programme entitled “Digital Matters” which helps staff gain and build upon their core digital skills.
- NES will provide leadership for, and work in partnership to, co-create development solutions which address digital skills at all levels from entry to senior leadership level.
- NES will work collaboratively with other public-sector agencies to support and champion the delivery of the Digital Health and Social Care Strategy.
- NES will conduct further research in to digital skills and capability of the health and social care workforce where evidence gaps exist regarding digital usage.

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- > **e-KSF Leads**, NHSScotland



**“Most of our staff don’t have access or IT skills to be able to complete computer based tasks within the workplace.”**

**John - Support Services Supervisor (Band 3)\***

\*These illustrative case studies are representative of the research and its key themes.

## APPENDIX: IT SKILLS SURVEY

### NHS Education for Scotland

#### Healthcare Support Workers in Estates and Facilities - IT Skills Survey

Thank you very much indeed for agreeing to undertake this survey.

All responses will be treated in confidence and will help build an action plan to support IT skills development.

This questionnaire is designed to help us understand

- What IT you use at work
- What IT you have access to and use at home
- Your current IT skills
- Your IT learning needs

*'IT' means Information Technology. This is equipment (such as computers) that you can use at work and at home to find and handle information e.g. on the internet.*

#### Access to IT in the workplace

Which of the following does your Board provide for you at work? Please tick all that apply.

	Yes	No	Not Applicable
PC			
Laptop			
Mobile phone with internet access (smartphone)			
Mobile phone with no internet access			
Tablet or iPad			
Other specific IT equipment (e.g. hand held menu device)			

Do you have access to IT to allow you to undertake the following tasks?

	Yes	No	Not Applicable
A work email address so you can send and receive work communications			
Access to online employee management systems (for example systems to record annual leave, absence, payroll etc.)			
Access to E-KSF to record PDPR discussions			
Access to LearnPro or other learning management system			
Internet connectivity			
Access IT for learning at work (e.g. online learning modules, tutorials, webcasts, videos) etc.			

## APPENDIX: IT SKILLS SURVEY

Have you used your work email address within the last 3 months?

- Yes
- No
- Not Applicable

Have you any comments that will help us understand your access to IT?




### Access to IT at Home

Do you use the following at home?

	Yes	No
PC		
Laptop		
Mobile phone with internet access (smartphone)		
Mobile phone with no internet access		
Tablet or iPad		
Internet		

### Your work based IT skills

Please tell us about your skills in using IT. Tick one box to show how much you agree with the following statements

I am confident that I can . . .	Agree 	Neutral 	Disagree 	Not Applicable
Use technology within the workplace				
Log into PC or laptop at work				
Send and receive work emails				
Use software to help me in my role – excel, word, PowerPoint etc				
Share documents online with colleagues e.g. sending documents as attachments				
Download and save documents from the intranet.				
Find the information I need on the intranet at work.				
Complete my mandatory training online				
Use the E-KSF system				
Use social media for work				
Find relevant information using the internet to help with work.				
Understand internet safety and security				
Understand the principles of online confidentiality and data protection				
Participate in video conferences				
Participate in webinars				
Easily find online learning resources to help me in my role.				

## APPENDIX: IT SKILLS SURVEY

Please tell us how you feel your IT skills and or confidence could be improved?




### IT skills outside of the workplace

Please tick which devices you use to do the following tasks (tick as many as apply).

	PC / Laptop	Mobile phone	Tablet / iPad	Not applicable
Send and receive emails.				
Use the internet for shopping (clothes, groceries etc.).				
Manage utility bills online.				
Use internet banking.				
Browse the internet.				
Book travel e.g. flights				
Use social media (Facebook, Twitter, Instagram etc.)				
Watch TV / films (iPlayer, Netflix etc).				

### Your IT training needs




Please tell us what IT training you would welcome

Topic	Most Important 	Quite Important 	Not Important 	Not Applicable I can do this already.
Getting started with computers (Logging onto computer, keyboard and mouse skills).				
Computing basics (word processing, emails, spreadsheets)				
Using the internet (searching, researching etc.)				
Using online collaboration tools (e.g. social networking, online communities, online chat)				
Using technology to support service users/clients/patients to access and use health and social care resources				
Creating and publishing online content (e.g. blogs, podcasts)				
Participating in videoconferences and webinars				
Using the internet safely and securely				
Understanding issues of confidentiality and data protection				
Accessing online learning opportunities				

## APPENDIX: IT SKILLS SURVEY

Please use this box to suggest any other IT topics that you would like training on.

What methods of learning would be most effective for you when learning IT skills?

Method	Most Effective 	Quite Effective 	Not Effective 
Buddy system (being assigned a specific colleague you work with to improve your IT skills)			
Being shown how to do something by a colleague or manager			
Classroom based learning			
Watch an online tutorial (YouTube etc.)			
IT champion (having a specific person in your team with an interest in IT skills)			
Using the help function or button when you are using IT			
Work through an E-learning package			
Learn through trial and error			
Read a book about the skill you want to learn			
Participate in a pop up learning Café or similar learning session			

Please add any comments or suggestions about other ways you'd like to learn IT skills

Finally – please could you provide your name and contact details in the box below if you are willing to be contacted again?

Would you be interested in helping / promoting IT skills within the workplace? \*

- Yes
- No

*\*For example, taking part in pilot training initiatives, being a IT skills champion or helping promote IT skills by featuring in a case study.*

## APPENDIX: IT SKILLS SURVEY

### About You

To help us analyse our results we would appreciate if you could answer the following questions.

Job Title

Where do you normally work? Please tick all that apply

- Community setting
- Care Home
- School
- Hospital
- General practice
- Office based
- Home care

Other (please specify)

How long have you worked in your present job?

- Under 1 year
- 1 – 3 years
- 4 – 5 years
- 6 – 10 years
- 11 – 20 years
- 21 – 30 years
- More than 30 years

Are you responsible for line managing or supervising staff?

- Yes
- No

If 'yes' how many staff are you responsible for line managing or supervising?

Do you have any difficulties or barriers in accessing or using IT?

Please tick the option applicable;

- Yes
- No
- prefer not to say

What do you think could or should be done to overcome these barriers or difficulties?

*Thank you very much indeed for taking the time to complete this survey. Your help is very much appreciated.*



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