Centre for Care and the Information School, University of Sheffield—written evidence (DCL0048)

House of Lords Communications and Digital Select Committee inquiry 'Digital exclusion and the cost of living'

Summary

This response is provided by members of the ESRC-funded Centre for Care[1] and The Information School at the University of Sheffield. It also draws on recent work in the Sustainable Care programme[2].

- **Centre for Care, University of Sheffield**: Dr Rachael Black, Becky Driscoll, Dr Kate Hamblin, Dr Grace Whitfield, Professor Sue Yeandle
- **Information School, University of Sheffield**: Dr Sara Vannini, Dr Sharon Wagg, Dr Efpraxia D. Zamani

The causes of digital exclusion are wide-ranging and intersectional; any solutions to reduce it need to be considered within the broader societal context of marginalization and discrimination.

This evidence submission explores digital exclusion for marginalised groups and for those in need or receipt of adult social care (ASC). ASC is becoming an area of increased digitalisation and yet those areas of highest need are also areas with the highest levels of digital exclusion. Therefore understanding the reasons for digital exclusion and how to support digital inclusion, along with providing information and support in other ways, is vital for ensuring people get the support they need.

Need for adult social care is growing increasingly complex, driven by an aging population, extended periods of later-life ill health and increased solo living. Weaknesses in the supply of care workers are also affecting the sustainability of ASC in England, with the vacancy rate in ASC higher than in any other employment sector. In response to these challenges, technology is often presented as a potential solution that could increase capacity and save local authority resources. However this increasing reliance on digital technology, within ASC and more generally, can risk further marginalisting already excluded groups.

Too often digital exclusion has been conceptualized as an infrastructural issue (e.g., due to lack of connectivity or devices) or an individual deficit issue in which individuals lack the skills needed to go online and merely require training[3]. Although

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1 The Centre for Care is funded by the Economic and Social Research Council (ESRC), award ES/W002302/1, with contribution from the National Institute for Health Research (NIHR) (Department of Health and Social Care, PI S Yeandle). The views expressed are those of the author(s) and not necessarily those of the ESRC, UKRI, NHS, the NIHR or the Department of Health and Social Care.

2 Economic & Social Research Council (award ES/P009255/1, Sustainable Care: connecting people and systems, 2017-21, Principal Investigator Sue Yeandle, University of Sheffield).

these two deficits do play a role in digital exclusion, they are far from the only factors at play.

Our evidence shows that any solution to digital exclusion needs to be developed collaboratively between government, industry and civil society. We recommend:

- Place-based initiatives based on local need
- A defined communication strategy to increase awareness of government initiatives, including social tariffs.
- Resourcing trusted individuals/organisations who play a key role in supporting digital inclusion - long-term funding for third sector and community organisations is essential to enable them to support local communities to become more digitally included.
- Recognition that tackling digital exclusion is not just about building infrastructure or the skills of individuals. Some people choose not to be online (for reasons of preference, trust etc) and therefore a one size fits all approach is not appropriate.
- Support to afford devices and broadband is important but, in addition local councils should make electric charging points available by councils to enable device batteries to be charged. This is critical in light of digital poverty and the cost of living crisis.
- Government and third sector digital inclusion policy is focussed on 'non-users' or those who are offline. Policy approaches must address the full range of users - for example, those who are limited users or who have attempted to get online but been unable to keep up with technological changes. For long term digital inclusion, access alone is not enough.

Full response

[3] Zamani, E. and Vannini, S. (2022) Understanding Digital Poverty in South Yorkshire. Project Research Note.

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The **Centre for Care** is a research-focused collaboration between the Universities of Sheffield, Birmingham, Kent and Oxford, the London School of Hygiene & Tropical Medicine, the Office for National Statistics, Carers UK, the National Children's Bureau, and the Social Care Institute for Excellence. Funded by the ESRC (Economic & Social Research Council) as one of its flagship research centres, it works with care sector partners and leading international teams to provide accessible and up-to-date evidence on care – the support needed by people of all ages who need assistance to manage everyday life. Led at the University of Sheffield by Centre Director Professor Sue Yeandle and Deputy Director Professor Matt Bennett, our work aims to make a positive difference in how care is experienced and provided in the UK and internationally by producing new evidence and thinking for policymakers, care sector organisations and people who need or provide care. In studying care, we focus on ways of improving wellbeing outcomes and on the networks, communities and systems that support and affect people's daily lives, working closely with external partners.

The **Information School** has been at the forefront of developments in the information field for more than fifty years with a strong focus on supporting multidisciplinary and interdisciplinary research. Researcher interests in the School combine influences from computing, health, chemistry and different arts and humanities and social sciences disciplines, as well as experience from professional practice in information roles. The School has particular expertise in information and knowledge management, information systems, libraries and the information society, information retrieval, health informatics, data science and chemoinformatics.

This evidence submission explores digital exclusion for marginalised groups and for those in need or receipt of adult social care (ASC). ASC is becoming an area of increased digitalisation and yet those areas of highest need are also areas with the highest levels of digital exclusion. Therefore understanding the reasons for digital exclusion and how to support digital inclusion, along with providing information and support in other ways, is vital for ensuring people get the support they need.

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Need for adult social care is growing increasingly complex, driven by an aging population, extended periods of later-life ill health and increased solo living. Weaknesses in the supply of care workers are also affecting the sustainability of ASC in England, with the vacancy rate in ASC higher than in any other employment sector. In response to these challenges, technology is often presented as a potential solution that could increase capacity and save local authority resources. However this increasing reliance on digital technology, within ASC and more generally, can risk further marginalising already excluded groups.

1. What are the main causes of digital exclusion in the UK? What is the economic and social impact?

The causes of digital exclusion are wide-ranging and intersectional; any solutions to reduce it need to be considered within the broader societal context of marginalization and discrimination. However, the risk is that digital exclusion is conceptualised as predominantly either an issue with infrastructure (e.g., due to a lack of connectivity or devices) or a skills deficit issue in which individuals lack the skills needed to go online and merely require training[6]. Although these two deficits do play a role in digital exclusion, they are far from the only factors at play.

As well as those who lack basic digital skills, digitally excluded individuals are:

1) non-users who choose not to engage with digital technologies because they are worried about data privacy and security;

2) non-users who are not interested in using digital technologies ("it isn't for me");

3) households without internet access or struggling to afford the costs of consistent internet access;

4) people who don't own the right equipment for the tasks they'd like to perform;

5) people who have essential digital skills for life, but not for work;

6) older people over 75 years old (42% in the UK do not use the internet)[7].

Some groups are more likely to be digitally excluded, based on age, disability and ethnicity/race. 'Limited users' of online technology are around 4 times more likely to be from low income households; 8 times more likely to be over 65 years old and 1.5 times more likely to be from Black, Asian and minority ethnic groups[8]. People with disabilities may also be digitally excluded, as digital inclusion policies for them are often missing[9]. 92% of non-disabled adults use the internet compared with

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6 Zamani, E. and Vannini, S. (2022) Understanding Digital Poverty in South Yorkshire. Project Research Note.

7 Good Things Foundation (2021) Digital Nation 2021.

8 Lloyds Banking Group (2021) Consumer Digital Index report.

9 Zamani, E. and Vannini, S. (2022) Understanding Digital Poverty in South Yorkshire. Project

67% of disabled people, and smartphone usage also varies - 53% of disabled people own a smartphone compared with 81% of non-disabled people (Ofcom, 2019)[10].

Digital exclusion should not be considered in relation to a single trait (e.g. ethnicity/race, gender, age) but as a result of multiple inequalities shaped by a combination of personal characteristics and societal power dynamics. Considering them together rather than separately, through an intersectional line of enquiry, can support a) better understanding of the digital divisions that currently exist (Zheng and Walsham, 2021) and b) progress through tangible recommendations and improved policies for addressing inequalities[11]. Together, factors such as age, ethnicity/race, sexuality, gender, disability, socioeconomic status and status in relationship to immigration and citizenship can impact on how confident individuals feel about using online services, the affordability (purchasing and maintaining devices and connectivity), and how much trust they have in sharing their data.

Rural communities face particular challenges in relation to digital poverty. They face unreliable internet connectivity, reduced local resources and additional costs, often referred to as 'the rural premium'[12]. This is explored further in response to Question 2.

2. How has the rising cost of living affected digital exclusion?

a) To what extent does digital exclusion exacerbate cost of living pressures?

Consumer awareness is when a consumer knows about items, products, administrations, and buyers' privileges. It enables a purchaser to settle on the best choice for them. However, without this people can end up overpaying for products, signing up to contracts that are expensive or not realizing they are paying for multiple products they do not need. In terms of digital exclusion, this can mean that:

1) People do not have the skills or access to technology to be able to search for the best deals or cheaper options, and may not know if they are eligible for lower prices and/or support;

2) People are less aware of what items should cost (e.g. devices, broadband packages etc) and pay more than the service or product is worth.

Research Note.

10 Hamblin, K. (2020) Care System Sustainability: what role for technology? An evidence review. Sustainable Care Paper 3, CIRCLE, Sheffield: University of Sheffield.

11 Zamani, E. and Vannini, S. (2022) Understanding Digital Poverty in South Yorkshire. Project Research Note.

12 Walker, T. (2022) Digital Poverty Transformation: Accessing Digital Services in Rural North West Communities, Regional Policy Briefing. Work Foundation, Lancaster University.

Both factors impact on people's financial wellbeing. During the cost of living crisis when prices of utilities, products and food are increasing and much advice and information is online, digitally excluded people are likely to be paying more than others and to lack access to advice and support to lower their outgoings. Equally as the cost of food, childcare and utilities has also increased, their ability to get online and become digitally included is reduced by being unable to afford new devices or broadband.

In rural areas these issues are particularly pronounced; only 80% of rural residents have standard broadband compared to 98% in urban homes[13]. Rural areas face particularly poor connectivity compared to urban areas and this impacts employment opportunities. Businesses may not be able to operate or grow in rural areas thus limiting employment opportunities and affecting earning potential.

Dr Wagg's research on digital poverty transformation found that people faced cost barriers to getting online, in relation to broadband access, mobile data and access to devices. Cost is a key driver of digital poverty and unsurprisingly, households on low incomes are more adversely affected, which will compound inequality with limited connectivity (more likely to be experienced in low income households), limiting earning potential. 19% of people interviewed found one of their PC, home broadband, a smartphone headset or mobile data unaffordable, rising to 36% among households with an income of £20,000 or less[14]. Recent statistics indicate that during the pandemic as many as one million households in the UK struggled with broadband bills[14], raising concerns about the increase in "data poverty" in terms of the affordability of "sufficient, private and secure mobile or broadband data to meet everyday needs"[15].

Digital inclusion is supported by social tariffs which are cheaper broadband and phone packages for people claiming Universal Credit, Pension Credit and some other benefits. However only 3.2.% of households receiving Universal Credit are on social tariffs[16]. Dr Hamblin's research with unpaid carers found knowledge of tariffs was low amongst those who both were and were not digitally excluded. Although broadband and digital devices were regarded as essential by unpaid carers for delivering care, they did not have the information they needed to ensure they had the most cost effective options[17].

Those classified as 'most financially vulnerable' are less likely to have a landline, mobile or fixed broadband and more likely (28%) than average (21%) to live in a mobile-only household. People who are financially vulnerable without access to broadband are less likely to have access to a superfast connection (28%, compared

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13 Walker, T. (2022) Digital Poverty Transformation: Accessing Digital Services in Rural North West Communities, Regional Policy Briefing. Work Foundation, Lancaster University.

14 Ofcom (2022) Affordability of Communications Services.

15 Nesta (2021) Data Dialogues Summary Report.

16 Consumer Insight (2022) Broadband social tariffs: awareness and concerns about the speeds offered are hampering take up.

17 Hamblin, K. and Black, R (forthcoming). Digital exclusion and unpaid carers in South Yorkshire.

to the average, 40%)[18]. Ofcom also found that one in ten adults found paying for communications services difficult, especially among young people and those with long-term mental illnesses[19]. This feeds into a cycle of digital exclusion - those that are financially vulnerable are more likely to be digitally excluded, and being digitally excluded can make people more financially vulnerable. This is all exacerbated in a cost of living crisis where essentials such as food and utilities are rising in price and people have to choose between heating and eating[20].

b) What are the long-term implications of this relationship?

The long-term implications of digital exclusion are multiple. Firstly there are the financial implications to both individuals and the state. According to analysis by Cebr (Centre for Economics and Business Research), commissioned by Good Things Foundation in partnership with Capita[21], individuals benefit from time saved by using online government and banking services (valued at £3.9 billion) and money saved through online shopping (£3.5 billion).

Savings to the public purse were estimated at:

- £1.4 billion in government efficiency savings
- £899 million in savings to the NHS from reduced GP appointments.

In addition, digital inclusion supports economic growth. Supporting digital skills development is:

> *estimated to generate £2.7 billion for companies through filling basic digital skills vacancies, £483 million for the public purse in increased tax revenue, £179 million in earnings from finding work, £586 million in increased earnings from those already in employment, and £76 million in environmental benefits over the ten year period[22].*

The long term implications of digital inclusion are not solely financial however, and can impact physical and mental wellbeing by increasing social interaction, enabling people to find the information they need about their health and wellbeing and reducing visits to GP surgeries and A&E[23]. That said, positive outcomes from increasing digital inclusion may not be felt equally. Although a reduction in face to face appointments may increase efficiency and reduce cost for some it could also increase social isolation. In their research with older Indian immigrants, Choudrie et al[24] found that older adults do not always like moving to online provision (in this

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18 Hamblin, K. (2020) Care System Sustainability: what role for technology? An evidence review. Sustainable Care Paper 3, CIRCLE, Sheffield: University of Sheffield.

19 Ofcom (2020) Affordability of communications services A summary of initial findings.

20 Viner, K,(2022) Millions in Britain are choosing between heating and eating. It's not too late to help them.The Guardian.

21 Good Things Foundation (2016) Health and Digital: Reducing Inequalities, Improving Society An evaluation of the Widening Digital Participation programme.

22 Good Things Foundation (2016) Health and Digital: Reducing Inequalities, Improving Society An evaluation of the Widening Digital Participation programme.

23 Good Things Foundation (2016) Health and Digital: Reducing Inequalities, Improving Society An evaluation of the Widening Digital Participation programme.

case online banking) as physically attending an appointment is a way of being social.

Digital exclusion can embed and deepen structural inequalities. Those who are active online share their data. Data-driven governance entails using collected data to make decisions about spending, policy and practice. The risk is that this data is based on majority groups and not on those who are digitally excluded. As such, data-driven governance reproduces structural "coded inequality" to the detriment of the marginalised[25]. Those already marginalised, due to race and ethnicity, disability and/or sexuality, are at risk of being further marginalised by decisions based on collected data which does not reflect their experiences and needs.

3. What are the obstacles to greater digital inclusion? Where is policy intervention likely to have the greatest impact over the next 12 months and 5 years?

Place-based factors

Although infrastructure and skills are not the only causes of digital exclusion, they play a significant role in it. Due to the market-led approach adopted by UK governments[26] to modernising internet infrastructures there are disparities in 'next generation access' (NGA) networks across the UK[27]. Further the initial roll-out of fibre-optic broadband has been concentrated in areas of affluence and population density to enable private companies to secure a return on investment[28]. This results in parts of the UK having low internet speed and unreliable 4G signal. This lack of connectivity affects people's ability to go online and forces them to use more costly SIM-enabled devices[29].

An estimated 8% of the population (4.3m adults) had none of the five basic digital skills, and a further 12% (6.4m adults) had limited abilities online (defined as missing at least one of the basic digital skills)[30]. Skills, or the perceived skills, necessary to use ICT were the second most-cited reason for non-internet usage, after finding the internet not useful or interesting. There is also regional variation in digital skills; the East Midlands had the lowest proportion of people with five basic

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24 Choudrie, J., Zamani, E., and Obuekwe, C. (2022) Bridging the digital divide in ethnic minority older adults: an organisational qualitative study. *Information Systems Frontiers*, 24(4): 1355-75.

25 Benjamin, R. (2019) Race After Technology: Abolitionist Tools for the New Jim Code, Polity.

26 Department for Business, Skills and innovation (2009) Digital Britain Final Report.

27 Damant, J. & Knapp, M. (2015) What are the likely changes in society and technology which will impact upon the ability of older adults to maintain social (extra-familial) networks of support now, in 2025 and in 2040? Foresight Future of Ageing Evidence Review, Government Office for Science.

28 See Ferro, E., Helbig, N. C. and Gil-Garcia, J. R. (2011) The role of IT literacy in defining digital divide policy needs. *Government Information Quarterly* 28(1): 3–10; Ragoobar, T., Whalley, J. and Harle, D. (2011) Public and private intervention for next- generation access deployment: Possibilities for three European countries. *Telecommunications Policy*, 35(9-10): 827–41; Communications Consumer Panel, 2012.

29 Hamblin, K. (2020) Care System Sustainability: what role for technology? An evidence review. Sustainable Care Paper 3, CIRCLE, Sheffield: University of Sheffield.

30 Lloyds Banking Group (2018) Consumer Digital Index report.

digital skills and the North East the highest proportion of people with no digital skills[31].

Demographic variations can also impact digital exclusion. hose needing social care are frequently characterised by multiple deprivations meaning that digital poverty becomes relevant[32]. This means that digitalisation of care is likely to have negative unintended consequences. The move to offering and delivering social care services and support via online platforms risks those that need it most being unable to access the support they need for themselves or their families.

In rural areas, high speed internet access is lower than the urban areas. Ofcom data shows that 98% of urban areas in the UK enjoy a superfast broadband connection; this drops to 83% in rural places[33]. Local policy interventions aiming to support place-based connectivity issues include the creation of 5G mesh networks or long range wide area networks (LoRaWAN). Liverpool City Council established a 5G Testbed to facilitate the use of digital technologies in social care. The testbed, funded initially by DCMS, created a 'mesh' 5G network using nodes on lamp-posts in the Kensington and Fairfield wards and local healthcare buildings. This Wi-Fi network is available free to users (the council owns the infrastructure) and can be used with any Wi-Fi enabled device. In addition, the Liverpool 5G testbed comprised 11 testbeds and trials in areas of Liverpool where reliable access to broadband is limited, so that the effectiveness of digitally-enable health and care technologies could be evaluated (LCRCA, 2018b)[34]. One example of this is the use of a 4K video device (Paman), connected to the 5G mesh network, co-designed with pharmacists as a medication prompt (linked to pharmacists) to watch the service user take their medications. The aim was to reduce the need for homecare visits focused solely on medication reminders, and to reduce medication wastage. The system also allows the user to ask the pharmacist questions.

Norfolk County Council faced issues with broadband coverage from the main telecommunications providers and developed a strategy focused on creating and enhancing opportunities for digital connectivity. Several projects have focused on broadband connectivity, increasing coverage of superfast coverage from 42% to 96% in ten years. The Norfolk and Suffolk Innovation Network, the largest free-to-use public sector long range wide area network (LoRaWAN) in the UK for Internet of Things (IoT) devices, enabled the innovation and delivery of digital technology enabled care (TECs). These networks and their focus on promoting connectivity underpins Norfolk's technology strategy. It has three strands, centred on **citizens** (including digital TECS that use these networks), **providers** (including how these networks facilitate remote visits and electronic care records) and their own

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31 Hamblin, K. (2020) Care System Sustainability: what role for technology? An evidence review. Sustainable Care Paper 3, CIRCLE, Sheffield: University of Sheffield.

32 Zamani, E. and Vannini, S. (2022) Understanding Digital Poverty in South Yorkshire. Project Research Note.

33 Ofcom (2021) Connected Nations 2021.

34 Hamblin, K. and Lariviere, M. (eds.) (in press). Care Technologies for Ageing Societies: An International Comparison of Care Systems, Bristol: Policy Press.

workforce (who are enabled to work in agile ways through the use of digital technologies and connectivity)[35].

The mobile Access North Yorkshire (MANY) 5G rural connectivity testbed and trial initiative demonstrated the importance of considering community engagement when putting 5G connectivity infrastructure in place[36]. A nuanced understanding of community engagement, study and enrolment is essential in understanding why communities sometimes resist some forms of infrastructure change and welcome others. To deliver effective community engagement and enrolment, complex digital infrastructure projects must seek to capture a range of voices within a community and explore the underlying concerns and aspirations of individuals. This is essential in enabling digital infrastructure projects to repair institutional voids and make the socio-technical market system work for a very rural place.

The last decade has seen a bolstering of the UK national digital inclusion agenda, through the UK 2014 Government Digital Strategy, resulting in the development and implementation of digital inclusion initiatives to help individuals overcome digital exclusion. Despite this activity, rurality continues to play a role in digital exclusion, limiting digital participation and access to online services and threatening the social and economic health of rural areas[37]. While it is important to acknowledge digital exclusion as an issue in urban and rural locations, there is a growing body of UK literature on the rural digital divide and rural broadband initiatives. This shows that rural areas continue to suffer from the uneven distribution of digital and technological infrastructure through market-driven approaches, leaving rural communities unable to exploit the full potential of the Internet and digital technology.

The issue is further exacerbated by policy programmes and digital inclusion initiatives that ignore rural socioeconomic and geographical contexts, resulting in generic initiatives that have limited effects on the adoption and use of ICTs by the most vulnerable groups in rural and remote areas. Wagg[38] showed the essential role played by third sector organisations and intermediaries in reaching out and engaging with marginalised communities in rural areas based on their 'trusted relationships' and 'knowledge' of the local community, and ability to deliver digital inclusion provision in a 'trusted, supportive environment'. The research also revealed how intermediary organisations struggle financially, due to funding mechanisms not considering the rural context, or providing funding that could build sustainable digital inclusion initiatives. Thus there is therefore an argument for increasing support for third-sector organisations and intermediaries. They provide digital skills training, digital access and social support, and face increased demand

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35 Hamblin, K. and Lariviere, M. (eds.) (in press). Care Technologies for Ageing Societies: An International Comparison of Care Systems, Bristol: Policy Press.

36 Mason, K. and Wagg, S. (2021) The importance of social engagement in putting in 5G connectivity infrastructures in place.

37 Wagg, S. (2021) An investigation of digital inclusion in UK rural communities. PhD Thesis. Loughborough University.

38 Wagg, S. (2021) An investigation of digital inclusion in UK rural communities. PhD Thesis. Loughborough University.

for their digital inclusion services by individuals and communities who need support to cope with digitalisation and the move to online.

Trust

Digital exclusion and digital poverty can be caused by socio-economic factors – such as income, education levels, living conditions, socio-cultural background. Age, religion, gender, education, ethnicity are inherent to structural inequalities that not only minoritise and underserve people, but can also cause communities such as BAME, migrants, LGBTQIA+, not to trust certain organisations and initiatives[39]. The 2021 UK Digital Strategy[40] indirectly acknowledges digital disengagement as a key concern but it still frames such disengagement as an issue that can be solved through regulation and digital skills programmes. This fails to interact with the wider structural inequalities that caused this distrust.

Unpaid carers can feel an additional burden of not only protecting themselves online but needing to protect and support the person they care for. Our recent research has highlighted this issue[41]. Some had been the victims of online scams, hacking or viruses, where money had been stolen. Regardless of direct experience, most carers we spoke to were concerned about the risks. A related concern was privacy; some of the carers were concerned about smart speakers as they felt they were "a bit spyish"; even those who had them in their homes were wary of discussing certain things in rooms where the smart speakers were[42].

In the NESTA Data Dialogues Summary Report[43] LGBTQIA+ people, young people, and people with a named health condition expressed their distrust, saying

> *We worry that our data will be inaccurate, used out of context or misunderstood. We want authorship over our own healthcare information. We want our data to be used by specialists - whether in a sensitive topic or simply in avoiding bias.*

This distrust can impact people in their employment, where they feel under surveillance[44]. The increased digitalisation of social care, with care workers

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39 See Flick, C., Zamani, E. D., Stahl, B. C. and Brem, A. (2020) The future of ICT for health and ageing: Unveiling ethical and social issues through horizon scanning foresight. *Technological Forecasting and Social Change*, *155*, 119995; Pheeraphuttharangkoon, S., Choudrie, J., Zamani, E. and Giaglis, G. (2014) Investigation the adoption and use of smartphones in the UK: A silver surfers perspective, Proceedings of the European Conference on Information Systems (ECIS) 2014, Tel Aviv, Israel, June 9-11;; Vannini, S., Gomez, R. and Newell, B. C. (2019). Mind the Five: Guidelines for Data Privacy and Security in Humanitarian Work with Irregular Migrants and Vulnerable Populations. *Journal of the Association for Information Science and Technology (JASIST)* 71: 927-38

40 Department for Digital, Culture, Media and Sports (2022) UK Digital Strategy.

41 Hamblin, K. and Black, R (forthcoming). Digital exclusion and unpaid carers in South Yorkshire.

42 Hamblin, K. and Black, R (forthcoming). Digital exclusion and unpaid carers in South Yorkshire.

43 Nesta (2021) Data Dialogues Summary Report.

44 Digital, Culture, Media and Sport Committee (2022) HC157 Oral evidence: Connected Tech: Smart or Sinister?

sometimes required to track and log their hours and visits online can lead to care workers feeling watched. This extends to other sectors too; a survey carried out by the union Prospect and the pollster Opinium[45] found that (in April 2021) 24% of workers described being monitored while working. By November 2021 this number had increased to 32%. Forms of intrusive monitoring are widely disliked; 80% of survey respondents felt that screen monitoring should be banned or heavily regulated.

Findings from the Trade Union Congress (TUC)[46] suggest that workers in higher paid positions unhappy with workplace monitoring were more likely to challenge practices (42%) than workers in lower paid groups (33%). The TUC findings highlight voice mechanisms – such as collective representation, which are lacking in the care sector – as important to enable workers to challenge monitoring and data collection.

Confidence

Confidence plays a large role in digital inclusion and is linked to a lack of trust[47], particularly for older citizens and those in rural communities. Rural residents reported they lacked confidence in engaging with online banking, engaging in social groups and looking for jobs. Lacking confidence in digital skills was strongly correlated with low incomes[48]. For social care workers, needing to become familiar with digital technology and software can result in taking time away from the person they support:

> *'"We started [using a new digital system] in February and we've not quite got the hang of it all, as of yet…it's now taking up so much time that you're missing out on the care aspect of how we work[49]."*

Perceived benefits of being online

Another major obstacle to digital inclusion is that what is available online either does not meet people's needs, or individuals cannot identify benefits of being online for their own situation. This is particularly the case for older adults. Evidence shows that if they identify a benefit, they will devote their time to attaining the necessary skills. This is because the notion of 'time left' is particularly important for this demographic[50]; as people get older, they become more and more aware of time passing and their 'time left', which steers them away from investing time in activities that have no added value for their own personal circumstances[51]. In her

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45 Prospect (2021) New protections needed to stop employer surveillance of remote workers.

46 TUC (2018) I'll be watching you: a report on workplace monitoring.

47 Walker, T. (2022) Digital Poverty Transformation: Accessing Digital Services in Rural North West Communities, Regional Policy Briefing. Work Foundation, Lancaster University.

48 Walker, T. (2022) Digital Poverty Transformation: Accessing Digital Services in Rural North West Communities, Regional Policy Briefing. Work Foundation, Lancaster University.

49 Ipsos MORI, Institute of Public Care and Skills for Care (2021) NHSX Adult Social Care Technology and Digital Skills Review.

50 Kaufman, S. R. (2010) Time, clinic technologies, and the making of reflexive longevity: The cultural work of time left in an ageing society.*Sociology of Health & Illness*, 32(2): 225–37.

51 Choudrie, J., Zamani, E. and Obuekwe, C. (2022) Bridging the digital divide in ethnic minority older adults: an organisational qualitative study. *Information Systems Frontiers*, 24(4): 1355-

review of several marginalised social groups, Zamani found that such added value differs across demographics: women for example find added value in being able to access the labour market and feel autonomous, whereas people from minority ethnic groups might be more interested in finding ways to maintain connections with their homeland[52].

4. How effective are Government initiatives at addressing digital exclusion? What further action is needed, and what should be done to provide offline access to services?

5. How well are existing industry initiatives (for example cheaper internet tariffs) addressing digital exclusion? How could they be enhanced?

6. How effective is civil society at supporting digital inclusion? How could this work be enhanced, and what is the appropriate balance between civil society and Government intervention?

We address Questions 4, 5 and 6 in one response, as our evidence shows that collaboration between government, industry and civil society is absolutely key to reducing digital exclusion. Without joined-up working and a long-term, well funded strategy, initiatives will remain small scale, fragmented, with minimum or short-lived impact.

Funding and short-termism

Under the Care Act 2014 local authorities have a market shaping responsibility to collaborate with relevant partners to understand supply and demand in the region, and understand the types of services needed now and in the future. The aim of this is to influence commissioning practices to stimulate a range of high quality services appropriate to needs and to empower those purchasing their own support to become 'effective consumers'[53]. Additionally, under the Act, local authorities have a duty to provide advice and information to residents. This information is often provided digitally and requires local authorities to work in collaboration with third sector organisations to increase online engagement and ensure residents have the digital skills to access it. There are many positive examples of public and third sector organisatons working together to increase digital skills, support social inclusion and give advice and guidance to those not currently online[54]. Initiatives between the public and third sector are often short term and small scale however. Small scale pilots often are not scaled up and it remains unclear, especially in Health and Social Care, how technology and digital initiatives can be delivered at scale and to diverse populations[55].

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52 Zamani, E.D. (2018) An Investigation into the requirements of various subgroups at the verge of social exclusion. Eds. Choudrie, J., Kurnia, S., Tsatsou, P., In Innovative ICT enabled Services and Social Inclusion, Routledge, UK, pp. 11-30.

53 Department of Health and Social Care (2017) Adult social care market shaping.

54 Nesta (2021) Data Dialogues Summary Report.

55 Hamblin, K. (2020). Technology and social care in a digital world: challenges and opportunities

Small scale projects also put voluntary and third sector organisations under particular strain. One explained:

> *There is a culture of reticence in sharing what doesn't work. I think people are always worried about where their next grant, next donation is coming from, so they worry that might hinder their funding, but any funder worth their salt would much prefer to know ahead of time that the intervention won't work and how can we change the model to reflect a more effective approach'*[56].

Local intermediary and grassroots organisations delivering digital initiative provision are frequently under-resourced and financially constrained, yet, policymakers depend on them to deliver digital inclusion training and support[57]. Such organisations are well placed to support local residents, but without sufficient long term funding, cannot maintain the support or embed it at scale.

Awareness

Although digital inclusion is driven through national digital inclusion policies and strategies, the role of intermediaries in digital inclusion initiatives is vital. Libraries are a key actor in digital inclusion, especially in rural communities[58], and unpaid carers report the vital role played by a local carers centre in providing information and support[59]. A single point of inquiry was favoured::

> *"For me, the carers centre are great for information, but if you could have a single point of contact that was really up to date with the council, with everything feeding in. We're all really busy- every minute is important. If you've got half an hour, you want to get on the internet and find it because your dad will be shouting for something else. You haven't got time to ring up and be told 'oh we don't do that anymore- try this number'. We need clear signposting to a single point of contact with all the information that's up to date[60]"*

This difficulty in accessing the right information, combined with being poorly advertised initiatives (such as social tariffs), results in people not getting the information and support they need to become digitally included. Government or local authority initiatives often rely on grassroots or community groups to ensure they reach the right people, but these organisations lack sufficient funding.

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in the UK. *Journal of Enabling Technologies*, *14*(2), 115-125.

56 Wagg, S. (2021) An investigation of digital inclusion in UK rural communities. PhD Thesis. Loughborough University

57 Wagg, S. (2021) An investigation of digital inclusion in UK rural communities. PhD Thesis. Loughborough University

58 Wagg, S. and Simeonova, B. (2022) A policy-level perspective to tackle rural digital inclusion, *Information Technology and People*, 35(7): 1884-1911.

59 Hamblin, K. and Black, R (forthcoming). Digital exclusion and unpaid carers in South Yorkshire.

60 Hamblin, K. and Black, R (forthcoming). Digital exclusion and unpaid carers in South Yorkshire.

Government needs to publish a clear communication strategy about how to inform Universal Credit claimants about the availability, eligibility criteria and process for exiting the social tariff. Digital champions within local initiatives, overseen by third sector bodies, should also have a role to play in this. Even on a social tariff, broadband expenditure can make up a relatively significant proportion of disposable income for people eligible for Universal Credit, and providers need to offer genuinely affordable rates for at risk customers[61].

Not a 'one-size-fits-all' approach

Stereotypes and the notion that digital exclusion is only related to a lack of skills means some initiatives do not address the multitude of reasons for digital exclusion. For example, assumptions are made that older people are not online due to ill health or frailty. In fact, many older adults are actively using smart devices, but encounter difficulties in keeping up with the pace of technological advances[62]. Assuming a binary divide (between off and online) does not account for lighter users of digital technology or those who attempt to use it but struggle to keep pace with technological updates and changes to software. It also disregards those who wish to remain offline as they do not trust how their data are being handled or find no benefit in available online services and products. Policy approaches to digital inclusion need to address these nuances to avoid missing some out, yet government and third sector digital inclusion policies remain focussed on 'non-users' or those who are offline[63]. Supporting 'limited users' of technology and digital services to gain confidence may help them remain online and make better use of the online services on offer. Flexible approaches to digital inclusion are needed to meet the needs and demands of local communities; access alone is not enough to ensure someone is digitally included - further support is needed to upskill individuals' digital capabilities.'[64]

7. What lessons can the UK learn from abroad?

There are many policy examples from abroad which the UK can learn from. However, it is also important to note that the four nations of the UK are taking different approaches to digital inclusion, with some of the related policy areas being devolved - e.g. health and social care, education and training, and local government.

Learning from policy interventions across the UK

Whitfield and Hamblin have examined policy and governance related to care and digital technologies across the four nations of the UK. They found that digital

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61 Walker, T. (2022) Digital Poverty Transformation: Accessing Digital Services in Rural North West Communities, Regional Policy Briefing. Work Foundation, Lancaster University.

62 Choudrie, J., Zamani, E., and Obuekwe, C. (2022) Bridging the digital divide in ethnic minority older adults: an organisational qualitative study. *Information Systems Frontiers*, 24(4): 1355-75

63 Wagg, S. (2021) An investigation of digital inclusion in UK rural communities. PhD Thesis. Loughborough University.

64 Wagg, S. (2021) An investigation of digital inclusion in UK rural communities. PhD Thesis. Loughborough University.

inclusion and mitigating exclusion has been a key priority in both the Scottish and Welsh government strategies.[65]

In Scotland, various government initiatives emphasise digital inclusion and participation:

- *TEC programme* - focuses on enabling people to benefit from a range of digital public health and care services, including support to live at home.
  - ☐ One of the four strategic priorities listed in its 'Digital Citizen Delivery Plan 2021/22' is to address inequalities and promote inclusion.[66] This includes a particular focus on residents in care homes, people at risk of drug-related deaths, people with learning disabilities and suicide prevention.
  - ☐ The plan also commits to engaging citizens and staff through participation and co-design, using the Scottish Approach to Service Design, as well as redesigning public services to improve public access and wellbeing.

- *Discover Digital project* - a collaboration between the TEC Programme and the Digital Health and Care Directorate, which aims to raise awareness of digital tools which promote health and wellbeing. This included a series of free roadshows for communities; tailored training for community and voluntary sector organisations; Participation and Inclusion Grants for organisations to engage with seldom heard communities; and the Discover Digital Guide.

- *'Connecting People Connecting Services'* - a programme for care home residents, which focuses on inclusion through improved connectivity and access to digital services, social connections and activities for residents, wellbeing support for staff, and digital skills and confidence of residents and staff.[67]

- *Data Dialogues* - the Scottish Government collaborated with Nesta, using participatory methods to explore people's views on the use and sharing of health and care data.[68]

The Welsh Government has also been working in partnership to address issues related to digital inequalities and care:

- *Digital Communities Wales (DCW) programme* - supports organisations to develop and deliver digital inclusion, in partnership with Swansea University, Cwmpas, and the Good Things Foundation.

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65 Whitfield, G., Hamblin, K. (forthcoming) Technology and social care: key areas of policy focus in Wales, Scotland and Northern Ireland (2019-2022). Centre for Care Working Paper 2, CIRCLE, Sheffield: University of Sheffield.

66 Digital Health & Care Scotland Digital Citizen Delivery Plan 2021/2022.

67 Digital Health and Care Scotland, TEC, & COSLA (2020) Connecting People Connecting Services Digital Approaches in Care Homes Action Plan.

68 Nesta (2021) Data Dialogues Summary Report.

- *Digital Inclusion Alliance for Wales (DIAW)* - part of the DCW programme, DIAW is a network of 85 organisations with a 'firm commitment to social justice and equality.' Its priorities for promoting digital inclusion include embedding digital inclusion across all sectors, including social care; mainstreaming digital inclusion; addressing data poverty; prioritising digital skills; and setting digital living standards and co-production approaches (Digital Inclusion Alliance for Wales, 2021: 2).[69]

- *Digital Inclusion Charter* - launched in October 2022 by DHCW, the Chair of DHCW commented that *"what we want to do in Wales is make inclusion an intended consequence, not exclusion an unintended consequence of digital innovation in health care"*.[70] The Charter asks organisations in the public, private or third sector to commit to six pledges to show their commitment to helping digitally excluded people enjoy the benefits of being online.

International learning

Some policies that have worked to facilitate digital inclusion are:

- *Providing public, universal access to technology for communities* - rather than focusing on increasing private access for individuals. This could include public Wi-Fi, as although increasingly people own devices such as smartphones, they may lack consistent connectivity or not always be able to afford to pay for sufficient data. Canada's Connectivity Strategy aims to connect every Canadian to affordable, high-speed internet no matter where they live.[71] This was introduced in response to rural and remote communities identifying challenges with accessing affordable, high-speed internet as the single most important issue impeding their economic growth.

- *Support to develop a range of digital skills* - Vannini's research in Brazil, Chile, and Colombia found that people may need to learn a range of digital skills, beyond simply how to use the tools - this includes the ability to think critically about the information they consume (evaluating its quality and credibility) and how to share data safely and securely online.[72]

- *Provision of social/peer learning spaces* - Vannini's research also found that people from more marginalised communities valued the provision of community spaces in which to learn digital skills.[73] Similarly, her research in

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69 Digital Inclusion Alliance Wales (2021) From Inclusion to Resilience An agenda for digital inclusion.

70 Health Tech Newspaper. (2022) Digital Health and Care Wales commits to digital inclusion.

71 Government of Canada (2019) High-Speed Access for All: Canada's Connectivity Strategy

72 Vannini, S., Nemer, D. and Rega, I. (2017) Integrating mobile technologies to achieve community development goals: the case of telecenters in Brazil. 8th International Conference on Community and Technologies (C&T) 2017, Troyes, France, 26-30 June 2017, and Vannini, S. and Rega, I. (2020). Mobile Information Literacy and Public Access in the era of Post-Truth: Reflections from community curricular experiences in Latin America. In Traxler, J. & Crompton, H. (Ed.). Critical Mobile Pedagogy: Cases of Digital Technologies and Learners at the Margins. New York: Routledge.

South Africa shows that fostering community support networks is the basis of effective uptake of digital tools, both for personal and for professional use.[74]

- *Introduce specific measures to ensure that people with disabilities are included* - for example, Germany's 'Shaping Digitalization' implementation strategy commits to a societal shift towards digitisation, with 'no groups left behind', and specifically utilising digital to create opportunities for people with disabilities to participate in societal life.

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[73] Evidence from Mozambique in Rega, I., Vannini, S., Fino, E. and Cantoni, L. (2013) Exploring the Meanings of Community Multimedia Centers in Mozambique: A Social Representations Perspective. Information Technology and International Development, (ITID), 9,4, pp 35-54, and evidence from research in Brazil in Vannini, S., Nemer, D. and Rega, I. (2017) Integrating mobile technologies to achieve community development goals: the case of telecenters in Brazil. 8th International Conference on Community and Technologies (C&T) 2017, Troyes, France, 26-30 June 2017.

[74] Marais, M., Vannini, S. (2021) Network Weaving to foster Resilience and Sustainability in ICTD. At IFIP WG 9.4 Virtual Conference "Resilient ICT4D". 26-28 May 2021.