NHS
East London
NHS Foundation Trust

# Promoting Digital Access

## Amongst people using mental health services

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We want to thank the ELFT People Participation Digital Community (PPDC), a forum of service users who have supported this study from concept to review. They provided valuable contributions to the design of the survey, support in data entry, interpretation of the data, and input in preparing this report.

# Foreword

**Digital technologies will empower our service users and staff to improve health and meet rising demand, but we need to ensure that our services are accessible and inclusive and that no one is left behind.**

This report explores the digital access needs of people using our mental health services at East London NHS Foundation Trust (ELFT). It highlights how challenges and barriers can affect access to care and overall health outcomes. The report provides a valuable blueprint of options for organisations to consider adopting. It will help to shape ELFT's approach to digital inclusion, tailoring support to meet the diverse needs of our service users and will support collaborative working with system partners to deliver better services for all our citizens.

A huge thank you to everyone involved in this important work, especially to our service users who have shared their experiences and to our ELFT People Participation Digital Community for their invaluable contributions which are helping us build a more inclusive and accessible digital future for mental health care.

**Edwin Ndlovu MBE**
**Chief Operating Officer and Deputy CEO**

# Contents

# Executive Summary

## Introduction

East London NHS Foundation Trust (ELFT) conducted a comprehensive survey to understand digital engagement patterns among mental health service users. This study was prompted by the increasing reliance on digital health services and the need to ensure equitable access across all user groups.

## Key Findings

1. Secondary care (SC) service users experienced significantly higher rates of total digital exclusion (19%) than primary care (PC) service users (0.8%).
2. SC users are more likely to be older, male, and living alone. They also have lower household incomes and educational attainments than PC users.
3. Digital exclusion is strongly associated with increasing age, lower household income, sensory impairments, and certain mental health conditions such as psychosis and bipolar disorder.
4. Financial constraints, lack of support, and low motivation are the primary factors contributing to digital exclusion.
5. SC users report higher rates of long-term physical health conditions and are more likely to have visual or hearing impairments.

## Recommended Solutions

This study highlights key issues of digital exclusion among mental health service users. To address these challenges, healthcare organisations could explore a range of potential solutions tailored to their specific context and resources.

1. **Improving Access to Digital Devices and the Internet:** One approach to addressing financial barriers could involve promoting awareness of social tariffs for Internet services. Organisations might explore providing financial assistance to subsidise broadband and mobile data costs for individuals facing digital exclusion due to economic circumstances. Another option could be the establishment of a device loan or donation scheme. This could potentially involve repurposing devices from organisations and businesses to create opportunities for lending or donating digital devices such as tablets, smartphones, and laptops to those in need.
2. **Enhancing Digital Literacy through Peer Support:** Given that survey respondents expressed a preference for peer support, organisations might consider developing a program that utilises peer support workers, either voluntary or paid, to enhance digital literacy. These workers could potentially focus on teaching simple solutions with immediate benefits, device configuration to address sensory impairments, strategies for managing digital triggers, online safety practices, and basic technical troubleshooting skills. This approach could help address the lack of support and knowledge barriers identified in the study.

3. **Refocusing Digital Promotion:** Organisations could consider refocusing their promotional efforts to enhance engagement in digital health. This would involve emphasising specific, immediate benefits of digital health services that are most relevant to individuals rather than promoting general digital engagement. Additionally, organisations could explore ways to educate users on using digital health tools safely and address concerns about confidentiality and data security, which the study identified as significant barriers.
4. **Providing Access to Local Digital Spaces:** For healthcare systems where virtual consultations are integral, organisations might explore the provision of secure, private, and reliable local clinical digital spaces. This could potentially involve offering private spaces within community centres or recovery colleges, equipping public spaces with the necessary technology, or installing virtual consultation booths in GP surgeries and other community health spaces. Such an approach could help support the most digitally excluded individuals who lack private space, devices, or connectivity.
5. **Developing Strategies to Manage Digital Impact on Mental Health:** Given the concerns raised about digital triggers, organisations might consider investing in further research to deepen understanding of how digital engagement influences the well-being of individuals with mental ill-health. This could potentially guide the development of strategies to mitigate negative effects and support the growth of clinical expertise in this relatively under-researched area.

## Implications

The findings highlight the need for targeted interventions to address digital exclusion among mental health service users, particularly in secondary care. Addressing these disparities is crucial for ensuring equitable access to digital health services and potentially improving health outcomes for all service users.

## Summary of Methodology

The study employed a mixed-methods approach, using online and postal surveys to gather data from 29,056 of ELFT's mental health service users with a 5.5% response rate. The survey included questions on demographics, digital access, health conditions, and preferences for digital health services.

## Conclusion

This report underscores the complex nature of digital exclusion among mental health service users and its potential impact on health service delivery. The recommended solutions offer a range of options that organisations might consider adopting based on their specific priorities and resources. By addressing these challenges, healthcare providers can work towards creating more inclusive digital health services, potentially leading to improved health outcomes for all service users.

# Introduction

East London NHS Foundation Trust (ELFT) plays a crucial role in providing both primary care mental health services, known as NHS Talking Therapies (formerly IAPT), and secondary (specialist) mental health services across various London boroughs and in Bedfordshire.

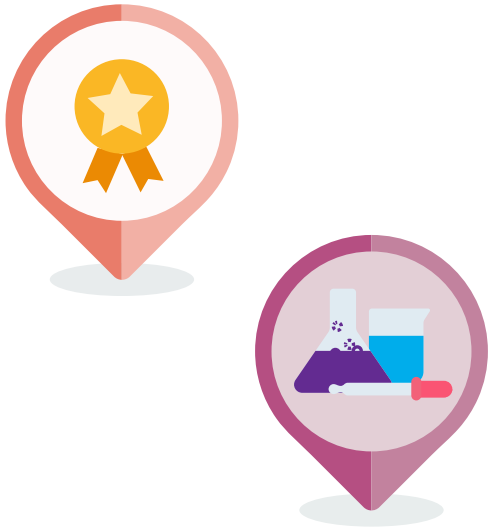
Given the increasing reliance on digital health services, ELFT has a robust programme to enhance its digital maturity and ensure equitable access to digital health services. The funding for this research came from the NHS Digital Aspirant programme, which supported implementing core digital capabilities and aimed to reduce the gap in digital service provision across the NHS.

The primary objective of this survey is to explore the factors associated with digital engagement and exclusion among adults using mental health services. The survey also seeks to identify patterns of digital exclusion specific to people with mental health conditions (PMH) and to understand their preferences for digital health care delivery. By examining these factors, ELFT aims to develop targeted strategies to support digital inclusion and ensure that digital health services are accessible and beneficial to all service users, particularly those at risk of digital exclusion.

This report presents the methodology, findings, and recommendations from the survey. It provides a comprehensive overview of digital health engagement among ELFT service users and outlines potential approaches to enhance digital inclusion and support for people using mental health services.

# Background and Context

**During the COVID-19 pandemic, there was a substantial and rapid move toward virtual and digital services, amongst statutory and commercial services. This has significantly impacted access to care and services (Good Things Project, 2021; The Health Foundation, 2020).**



Understanding the patterns and causes of digital exclusion is essential for service planning and delivery. It increases the match between service provision and citizens' preferences and enables acceptable and effective approaches to reduce digital exclusion.

East London NHS Foundation Trust (ELFT) delivers NHS Talking Therapies (NTT), formerly known as IAPT. These provide evidence-based psychological treatments for depression and anxiety disorders in Luton and Bedfordshire, the London Boroughs of Newham and Tower Hamlets, and, at the time of the survey, Richmond. ELFT also provides Secondary (specialist) mental health services in Newham, Tower Hamlets, City and Hackney, Luton, and Bedfordshire. ELFT has a mature People Participation Programme that helps direct service development and delivery in the organisation.

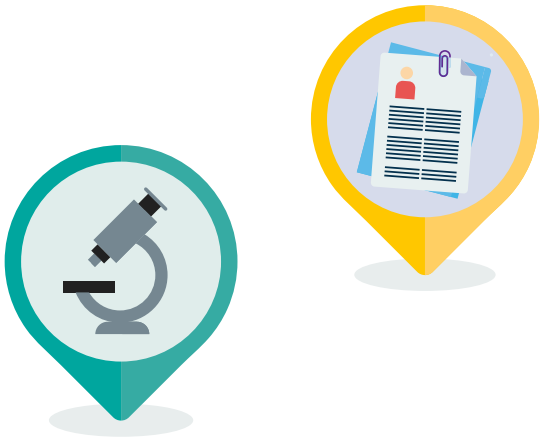
In the context of increasing digitisation, it became essential to have an evidence base to inform decision-making around the digitisation of services and develop approaches to enable people using mental health services (PMH) to become more digitally active citizens. ELFT has an active Digital People Participation Programme. To ensure the strategic plans were well grounded, the team surveyed all PMHs in the trust to establish patterns of digital use, the factors affecting these patterns, and preferences around future digital adoption and support.

# Methodology

- » Ethics & Compliance
- » Inclusion, Exclusion & Cohorts
- » Data Collection
- » Data Processing
- » Response Rate

# Methodology

The survey aimed to explore patterns of digital use, facilitators, barriers, and preferences for digital adoption. The research and digital people participation teams co-created a survey with ELFT's People Participation Digital Community (PPDC) members, who represent PMH. Following two cycles of iterative co-creation and consultation with broader PHM representation, 20 members of the PPDC tested the survey for acceptability. The final survey consisted of anonymous, non-identifiable demographic questions (e.g., gender, age range, area of residence): questions about the current use of digital technology, barriers and facilitators to using digital technology for health, and preferences for using digital technology. The questionnaire was designed to take approximately 15 minutes to complete.



## Ethics and Compliance

An ELFT Data Protection Impact Assessment of the study identified recommended changes to ensure full GDPR compliance, particularly around maintaining confidentiality. An Independent ethics review by the ELFT Governance and Ethics Committee for Studies and Evaluation (GECSE) approved the study. An essential step in the study protocol was screening the paper documents to ensure appropriate clinical actions were taken if issues related to clinical need or risk were disclosed, and then the redaction of identifiable material before proceeding to data entry by paid PMH.

## Inclusion, Exclusion and Cohorts

All adults (18+) PMH who had accessed any mental health service in the previous three months were eligible. However, to avoid potential complications to care and issues around capacity and consent, the study team excluded people currently receiving inpatient care. The team was confident that the sample group included sufficient people with experience in inpatient care.

## Table of 14 Study Cohorts

| Service | Geographical Location |
|---|---|
| **Participants under 65** | |
| NHS Talking Therapies (Improving Access to Psychological Therapies) | Bedfordshire, Richmond, Newham, Tower Hamlets |
| Community Mental Health Team | Luton and Bedfordshire Newham, Tower Hamlets & City and Hackney |
| Secondary Care Mental Health Services | Luton and Bedfordshire Newham, Tower Hamlets & City and Hackney |
| **Participants Over 65** | |
| NHS Talking Therapies (Improving Access to Psychological Therapies) | Bedfordshire, Richmond, Newham, Tower Hamlets |
| Community Mental Health Team | Luton and Bedfordshire Newham, Tower Hamlets & City and Hackney |
| Secondary Care Mental Health Service | Luton and Bedfordshire |

## Data Collection

All PMH with an email address on either of ELFT's electronic health record systems (RiO and IAPTUS) were emailed and invited to complete a survey in a web link to the survey on Qualtrics (an established research and survey digital platform).
All people over 65 and anyone without an email were sent a paper survey with a pre-paid reply envelope. In addition, 20% of people under 65 attending outpatient services were sent a postal survey.

## Data processing

PMHs were trained and paid to enter data into Qualtrics; 20% of the data was independently checked to ensure accuracy. The research team extracted and cleaned the resulting dataset before analysing it in SPSS.

## Response Rate

A total of 29,056 invitations were sent by post and email. Of the two-thirds sent by email, 1,075 of 18,522 (5.80%) responded, and of the one-third sent by post, 533 of 10,534 (5.05%) responded, giving an overall response rate of 5.5% (n=1608). Not all respondents answered all questions, and responses were excluded pairwise when a relevant response was absent. People aged over 65 contributed to 15.2% of the responses.

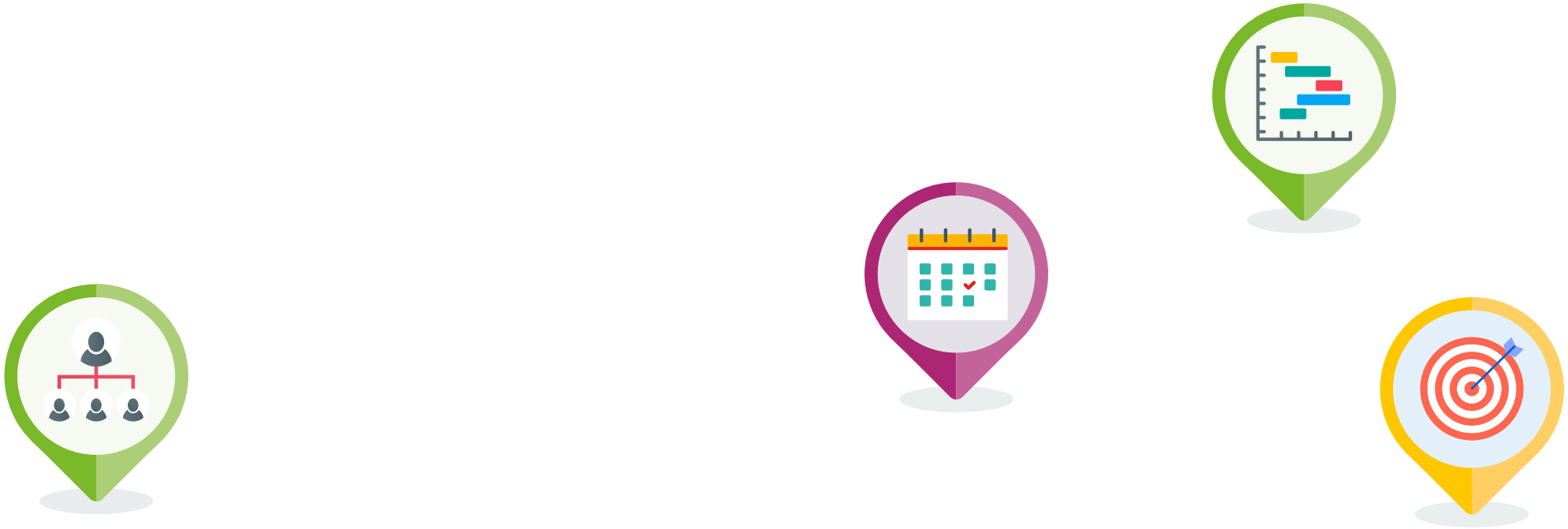
# Results

# Results

## Introduction

**The data shows a considerable overlap and distinct differences between people accessing IAPT services in primary care (PC) and those accessing specialist services in secondary care (SC).**

These contrasting results for demographics and digital access are presented. There was no defining feature that separated the two cohorts. The PC persona is more likely to be younger (<35Y), female, living with family or partner, with a household income over £30k, with graduate qualification, experiencing depression or an anxiety disorder. The SC persona is more likely to be older (>45), male, living alone, with a household income under £15k with no or GCSE/O Level qualifications, experiencing depression, an anxiety disorder, psychosis or bipolar disorder and a long-term physical health condition.



## Demographics

While there is considerable overlap between NTT in Primary Care (PC) and Secondary Care (SC), there are also distinct differences. The age of respondents was younger (median 25-34 years) for PC and older (median 45-55 years) for SC (Person Chi-Square $X^2$=49.017, 6 d.f., p<0.001). While the overall sample had more females, this was greater in PC 65% (n=409) than in SC 51% (n=496). 1% in both groups reported their gender as other or non-binary.

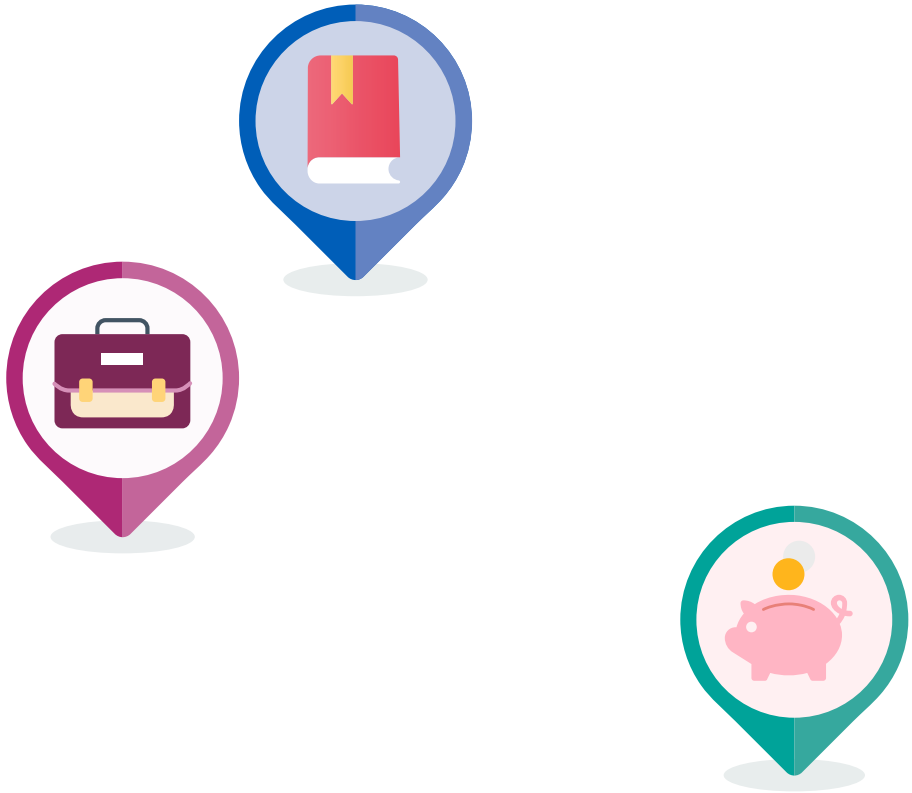
The majority of both groups identified as White British, with a good range of diversity in the remainder. This enables a critical finding of a link between diversity and digital exclusion. The table below shows the self-reported ethnicity of respondents

## Table of the self-reported ethnicity of respondents

| Ethnicity | Primary Care (NHS Talking Therapies) | | Secondary Care (Specialist Services) | |
|---|---|---|---|---|
| Arab | 2 | 0.3% | 4 | 0.4% |
| Asian Indian | 16 | 2.5% | 25 | 2.6% |
| Asian Pakistani | 9 | 1.4% | 26 | 2.7% |
| Asian Bangladeshi | 34 | 5.4% | 47 | 4.8% |
| Asian Chinese | 2 | 0.3% | 5 | 0.5% |
| Asian Other | 11 | 1.7% | 18 | 1.8% |
| Black African | 6 | 0.9% | 40 | 4.1% |
| Black Caribbean | 13 | 2.1% | 56 | 5.7% |
| Black Other | 9 | 1.4% | 29 | 3.0% |
| Mixed White Black Caribbean | 13 | 2.1% | 16 | 1.6% |
| Mixed White Black African | 6 | 0.9% | 8 | 0.8% |
| Mixed White Asian | 13 | 2.1% | 18 | 1.8% |
| Mixed Other | 15 | 2.4% | 16 | 1.6% |
| White British | 338 | 53.5% | 516 | 52.9% |
| White Irish | 10 | 1.6% | 22 | 2.3% |
| White Gypsy Traveller | 3 | 0.5% | 2 | 0.2% |
| White Roma | 4 | 0.6% | 2 | 0.2% |
| White Other | 68 | 10.8% | 67 | 6.9% |
| Other | 10 | 1.6% | 9 | 0.9% |
| Prefer not to say | 50 | 7.9% | 50 | 5.1% |

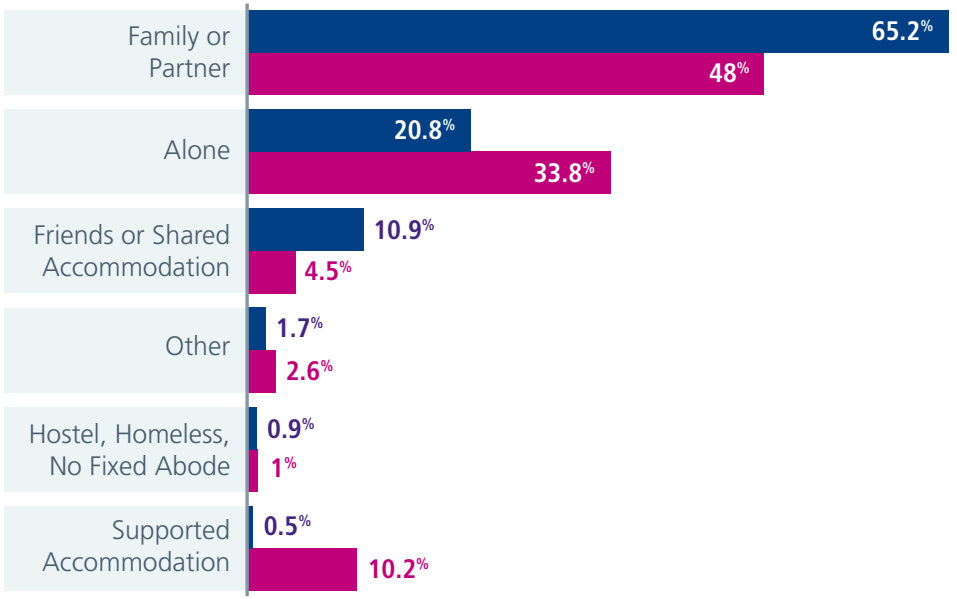
## Socioeconomic, Social Support and Educational Profile

PCs were more likely to live with family, partners, or friends than SCs, who were more likely to live alone or in supported accommodation. This has important implications for shared costs and access to support ($X^2$=113.88 d.f.=5 p<0.001).



## Graph of current living status PC and SC

**Accommodation PC vs SC (n=578 and 933 respectively)**

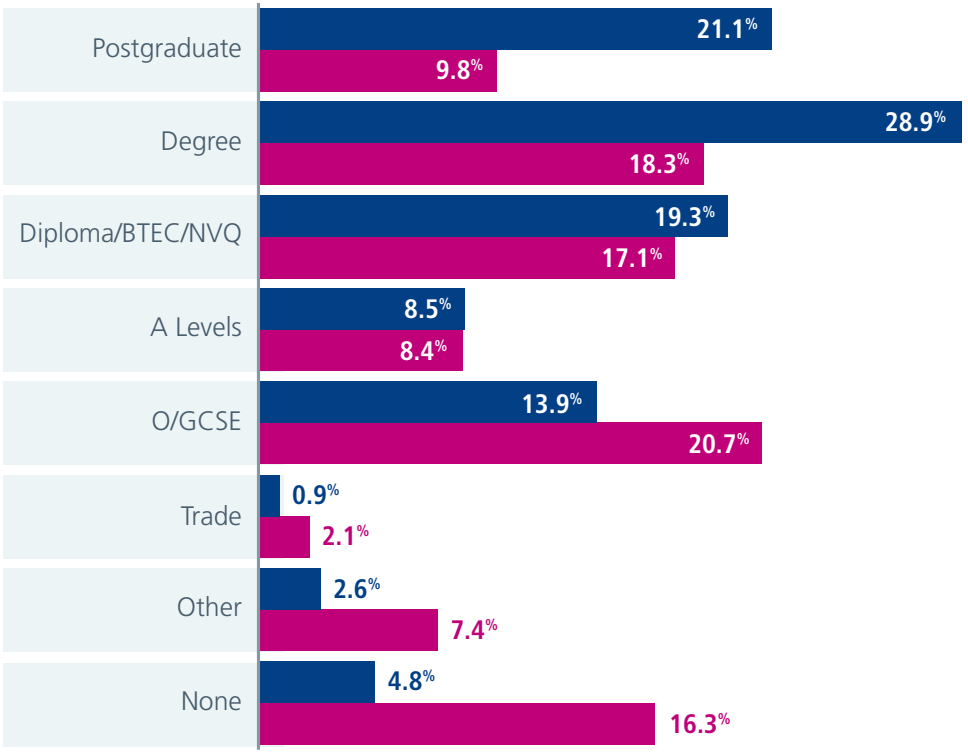



Despite the differences in living arrangements, there were no significant differences in the frequency of contact with family or partner, with around 80% having daily or weekly contact. However, compared with PC, SC are more likely to have had both no contact with friends or members of their community in the last three months (11.0% vs 15.7% $X^2$=5.58 d.f.=1 p=0.018) and to have daily contact with friends or community (28.6% vs 34.3% $X^2$=4.76 d.f.=1 p=0.03). SC are also more likely to have daily or weekly contact with paid carers (5.4% vs 27.2%, $X^2$=79.15 d.f.=1 p<0.001).

SC were less likely to attain high levels of education ($X^2$=109.862 d.f.=7 p<0.001), with 50% of PC having a graduate or post-graduate qualification, compared with 28% of SC, shown in the graph below.

## Graph of highest educational attainment

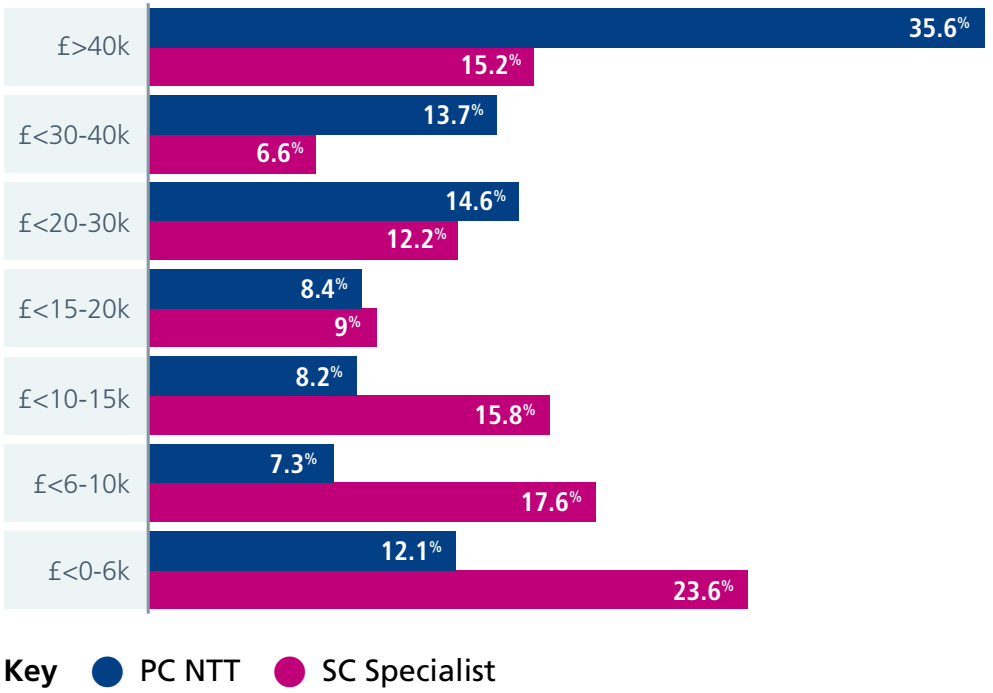
**Level of education attainment (PC n=540 vs SC n=860)**




This corresponded to lower household income. SC reported a lower median household income of £10-15,000 compared to PC, who reported a median income of £30-40,000 ($X^2$=113.531 d.f.=6 p<0.001), shown below.

## Graph of household income

**Declared household income (PC n=438 vs SC n=665)**



## Health conditions and patterns of health resource use

Respondents gave a self-report of their mental health condition and could report multiple conditions. As expected, PC were more likely to report more anxiety-based conditions, reflecting the primary role of NTT in treating depression and anxiety disorder. SC were more likely to report psychosis, schizophrenia, bipolar disorder and PTSD. It was notable that 17.3% of SC reported body dysmorphic disorder. There was considerable overlap in self-reported mental health conditions; in particular, a significant proportion of PC reported psychosis bipolar disorder, and both PC and SC reported similar levels of depression, OCD, substance and alcohol misuse and eating disorder, as shown below.

## Table of self-reported mental health difficulties

| Mental Health Conditions reported by respondents | Primary vs Secondary Care | | | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| | PC - NTT | | SC - Specialist | | | | Pearson $X^2$ (1 d.f) | Asymptotic significance (2 sided) |
| | N | % | N | % | N | % | | |
| Psychosis / Schizophrenia | 46 | 7.3% | 317 | 32.5% | 363 | 22.6% | 139.384 | <0.001 |
| Bipolar disorder | 38 | 6.0% | 153 | 15.7% | 191 | 11.9% | 34.224 | <0.001 |
| Depression | 355 | 56.2% | 525 | 53.8% | 880 | 54.7% | 0.877 | 0.349 |
| Anxiety | 433 | 68.5% | 524 | 53.7% | 957 | 59.5% | 34.986 | <.001 |
| Obsessive Compulsive Disorder | 58 | 9.2% | 109 | 11.2% | 167 | 10.4% | 1.634 | 0.201 |
| Alcohol or substance misuse | 15 | 2.4% | 33 | 3.4% | 48 | 3.0% | 1.345 | 0.246 |
| Body Dysmorphic disorder | 20 | 3.2% | 169 | 17.3% | 189 | 11.8% | 74.060 | <.001 |
| Personality disorder | 4 | 0.6% | 8 | 0.8% | 12 | 0.7% | 0.181 | 0.671 |
| Post-Traumatic Stress Disorder | 29 | 4.6% | 76 | 7.8% | 105 | 6.5% | 6.429 | 0.011 |
| Eating Disorder | 23 | 3.6% | 49 | 5.0% | 72 | 4.5% | 1.711 | 0.191 |
| Not disclosed | 23 | 3.6% | 41 | 4.2% | 64 | 4.0% | .317 | 0.574 |

## Physical Health Condition

SC were significantly more likely to report long-term physical health conditions except for autoimmune inflammatory conditions (e.g. RA) and Cancer, as shown in the table below.

## Table of self-reported long-term physical health conditions

| Physical Health Condition | Primary vs Secondary Care | | | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| | PC - NTT | | SC | | | | Pearson $X^2$ (1 d.f) | Asymptotic significance (2 sided) |
| | N | % | N | % | N | % | | |
| Body Distress Disorder (chronic fatigue, ME & Polymyalgia) | 164 | 25.9% | 303 | 31.0% | 467 | 29.0% | 4.833 | 0.028 |
| Diabetes | 32 | 5.1% | 138 | 14.1% | 170 | 10.6% | 33.423 | <0.001 |
| Cardiac conditions | 31 | 4.9% | 87 | 8.9% | 118 | 7.3% | 9.066 | 0.003 |
| Respiratory conditions (asthma & COPD) | 78 | 12.3% | 220 | 22.5% | 298 | 18.5% | 26.430 | <0.001 |
| Mobility difficulties (Musculo-skeletal) | 69 | 10.9% | 176 | 18.0% | 245 | 15.2% | 15.037 | <.001 |
| Neurological (e.g. stroke, epilepsy) | 19 | 3.0% | 81 | 8.3% | 100 | 6.2% | 18.426 | <.001 |
| Autoimmune inflammatory | 20 | 3.2% | 28 | 2.9% | 48 | 3.0% | 0.116 | 0.734 |
| Cancer | 11 | 1.7% | 17 | 1.7% | 28 | 1.7% | 0.000 | 0.998 |
| Not disclosed | 43 | 6.8% | 83 | 8.5% | 126 | 7.8% | 1.536 | 0.215 |

## Impairment

SC were much more likely to report having visual or hearing impairment and more likely to report neurodiversity, as shown in the table below.

## Table of sensory impairment and neurodiversity

| Communication and Neurodiversity | Primary vs Secondary Care | | | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| | PC - NTT | | SC | | | | Pearson $X^2$ (1 d.f) | Asymptotic significance (2 sided) |
| | N | % | N | % | N | % | | |
| Hearing impairment | 35 | 5.5% | 119 | 12.2% | 154 | 9.6% | 19.616 | <.001 |
| Visual impairment | 27 | 4.3% | 105 | 10.8% | 132 | 8.2% | 21.417 | <.001 |
| Autism Spectrum | 25 | 4.0% | 86 | 8.8% | 111 | 6.9% | 14.074 | <.001 |
| Dyslexia | 51 | 8.1% | 93 | 9.5% | 144 | 9.0% | 1.002 | .317 |
| Learning Disability | 26 | 4.1% | 122 | 12.5% | 148 | 9.2% | 32.282 | <.001 |
| Not disclosed | 31 | 4.9% | 105 | 10.8% | 136 | 8.5% | 16.974 | <.001 |

## Health Provision

While the patterns of health use overlapped, with both groups using all types of health provision, as expected, PC used more outpatient psychotherapy, and SC used more inpatient, community, and crisis mental health care. As shown below, SC also used more community, outpatient, and in-patient physical health resources, reflecting greater physical comorbidity.

## Table of Health Utilisation

| Type of health care used in the previous three months | Primary vs Secondary Care | | | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| | PC - NTT | | SC | | | | Pearson $X^2$ (1 d.f) | Asymptotic significance (2 sided) |
| | N | % | N | % | N | % | | |
| In-patient mental health | 30 | 4.7% | 115 | 11.8% | 145 | 9.0% | 23.147 | <0.001 |
| Community mental health (CMHT) | 59 | 9.3% | 406 | 41.6% | 465 | 28.9% | 194.250 | <0.001 |
| Mental health crisis team | 20 | 3.2% | 115 | 11.8% | 135 | 8.4% | 37.047 | <0.001 |
| Outpatient mental health (including psychotherapy) | 345 | 54.6% | 375 | 38.4% | 720 | 44.8% | 40.545 | <0.001 |
| Emergency Department | 19 | 3.0% | 54 | 5.5% | 73 | 4.5% | 5.650 | 0.017 |
| In-patient physical health | 14 | 2.2% | 41 | 4.2% | 55 | 3.4% | 4.578 | 0.032 |
| Community physical health | 11 | 1.7% | 70 | 7.2% | 81 | 5.0% | 23.659 | <0.001 |
| Outpatient physical health | 157 | 24.8% | 305 | 31.3% | 462 | 28.7% | 7.693 | 0.006 |
| GP | 332 | 52.5% | 530 | 54.3% | 862 | 53.6% | 0.484 | 0.487 |

## Patterns of Digital Access

The Office for National Statistics (ONS) categorises individuals who have not used the internet in the past three months as digital non-users, referred to in this report as digital exclusion. For this study, individuals accessing the internet daily or almost daily are classified as "digitally included," while those using it less frequently - weekly but not daily or less than weekly - are partially included/ excluded. Our survey uses internet usage frequency to assess digital access, revealing significantly higher rates of both partial and total digital exclusion among the secondary care (SC) group compared to the primary care (PC) group (PC 0.8% vs SC 19.0%,$X^2$=101.46, d.f.=1, p<0.001), as shown in the table.

## Table of the frequency of Internet access

| Frequency of internet access | Primary vs Secondary Care | | | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| | PC - NTT | | SC | | | | Pearson $X^2$ (3 d.f) | (2 sided) p= |
| | N | % | N | % | N | % | | |
| Daily or almost daily | 484 | 92.7% | 571 | 64.9% | 1055 | 75.2% | 147.308 | <.001 |
| Weekly but not daily | 23 | 4.4% | 87 | 9.9% | 110 | 7.8% | | |
| Less than weekly | 11 | 2.1% | 55 | 6.3% | 66 | 4.7% | | |
| Not in last 3 months | 4 | 0.8% | 167 | 19.0% | 171 | 12.2% | | |
| | 522 | 100.0% | 880 | 100.0% | 1402 | 100.0% | | |

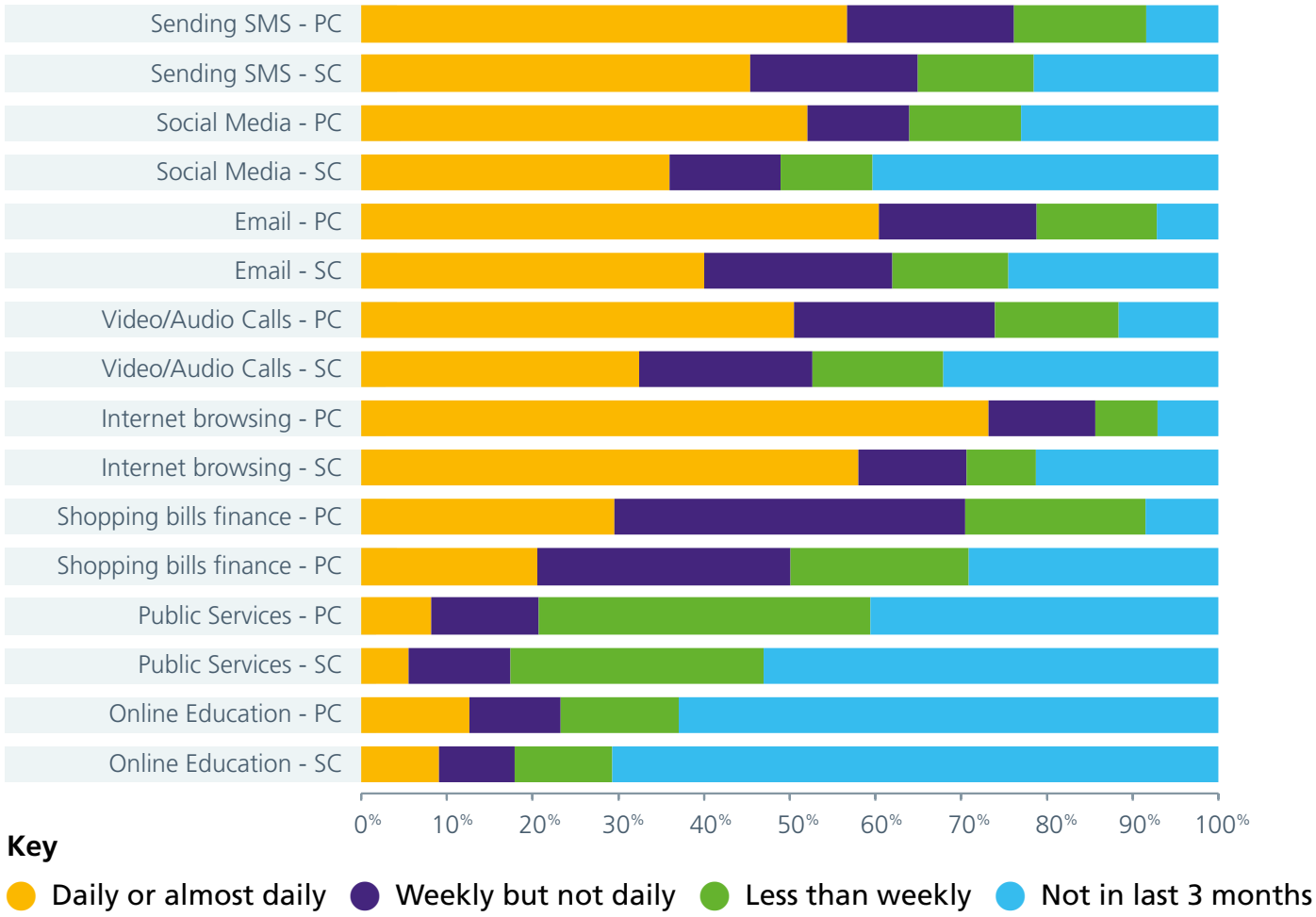
For daily or near-daily access, 74.4% used fixed home broadband, 62.8% used personal smartphones, 17% used Wi-Fi at a friend's, 16.4% in the workplace, 6.6% in a free venue, and 5.4% in a paid venue. PC used all methods significantly more than SC. Over half of PC and SC have not used Wi-Fi in a free, paid, or work venue in the last three months, demonstrating that these have contributed much less to digital access than home broadband or a personal smartphone.

## Patterns of Digital Activity

All types of digital activity were more common among PC, with email and web browsing being the most popular activities for all groups. However, as shown in the table below, the frequency of use was 10-20% less for SC.

## Graph of frequency of the non-specific digital activities

**Pattern of Digital Activity**

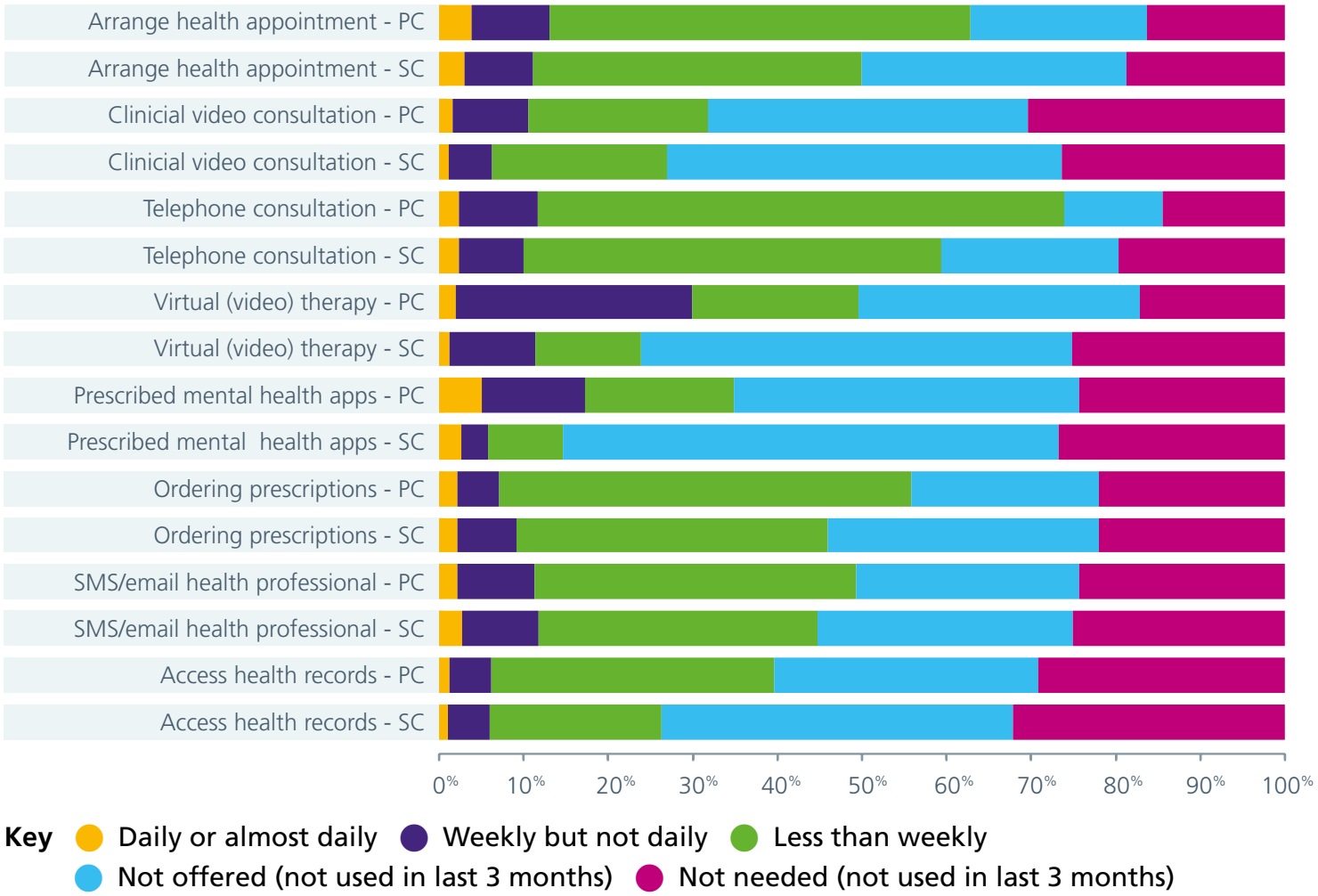


## Digital Use in Health

The main factor that appeared to reduce digital health activities was that health providers did not offer the intervention. This was greater for SC than PC; for example, nearly 50% reported not being offered a video consultation or therapy despite the organisation actively promoting this. This is shown in the graph below.

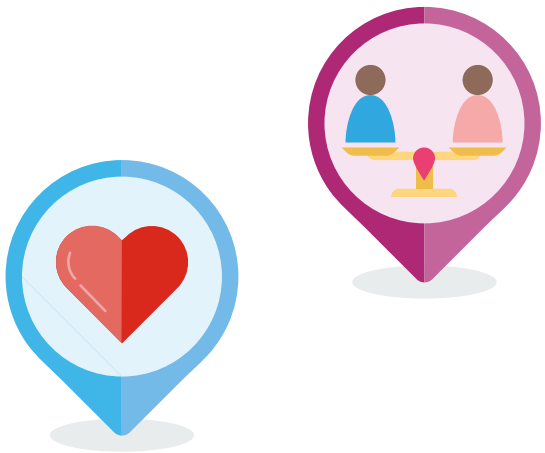
## Graph of the frequency of health-related digital activities

**Health Specific Digital Activity**

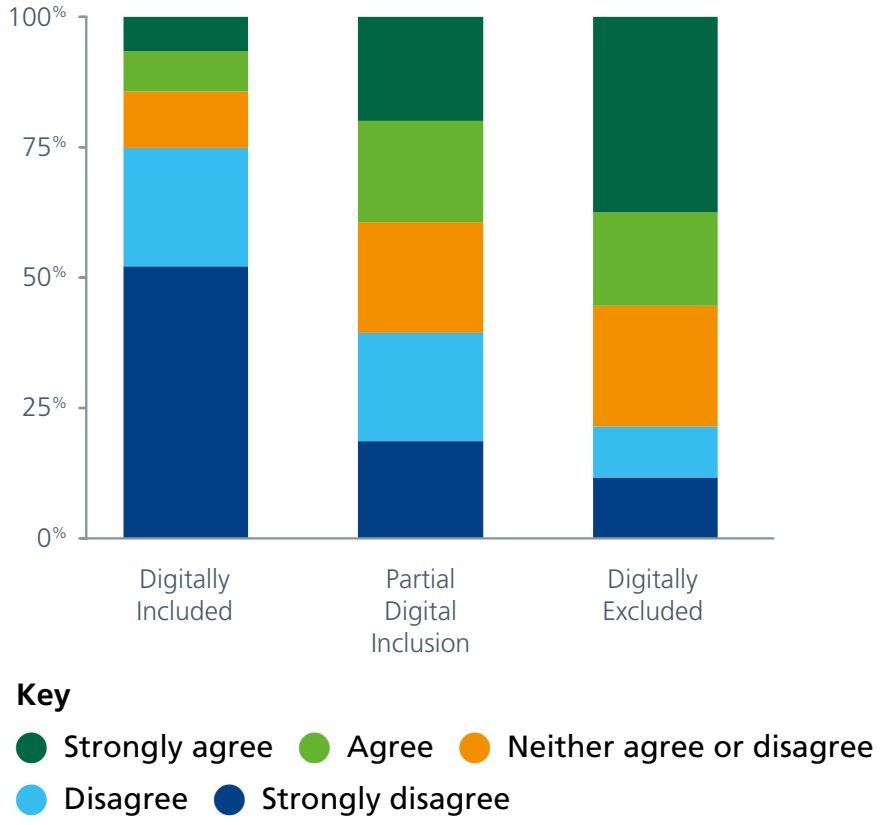


## Video consultations

Successful video consultation requires the most resources: a private space, specific hardware, a reliable internet connection and digital confidence. 21.6% of respondents agreed they did not have privacy at home to engage in online treatment, and 34% agreed that providing private space in a community centre or recovery college would help digital engagement. The lack of a web camera also varied by digital exclusion. While 14.3% of the digitally included said they did not have access to a web camera, this was even higher amongst digitally excluded ($X^2$=152.901, d.f.=10 p=<0.001).



## Agreement with "I don't have a web camera on my computer to engage in video calls " by digital exclusion



# Factors Affecting Digital Access

- Age
- Ethnicity
- Finance
- Sensory Impairment & Neurodiversity
- Mental Health
- Physical Health
- Understanding Digital Exclusion

# Factors Affecting Digital Access

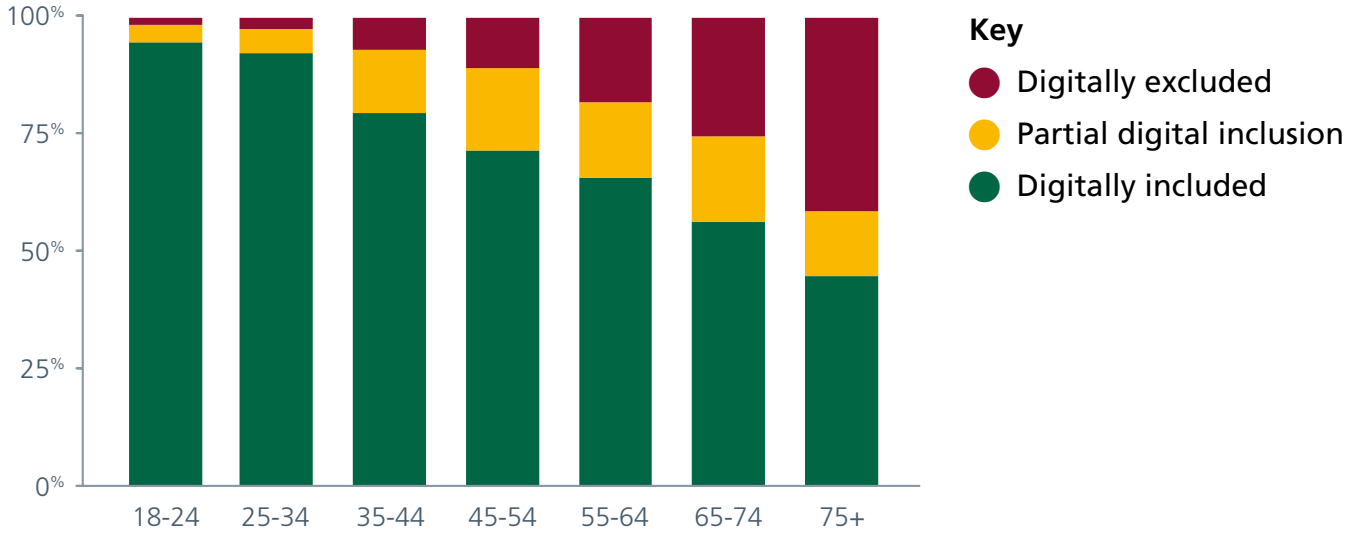
## Demographic Analysis

Respondents identifying as male were more likely to report partial (14.0% vs 10.2%) and total (17,2% vs 8.0%) digital exclusion ($X^2$=33.5 d.f.=2 p<.0005) compared with those identifying as female. To aid analysis, digital exclusion was recategorised into included (daily use), partial (inclusion/ exclusion) where use was not daily but within the last three months and excluded (no use for more than three months).

## Age

Increasing age was significantly associated with digital exclusion, as shown below.

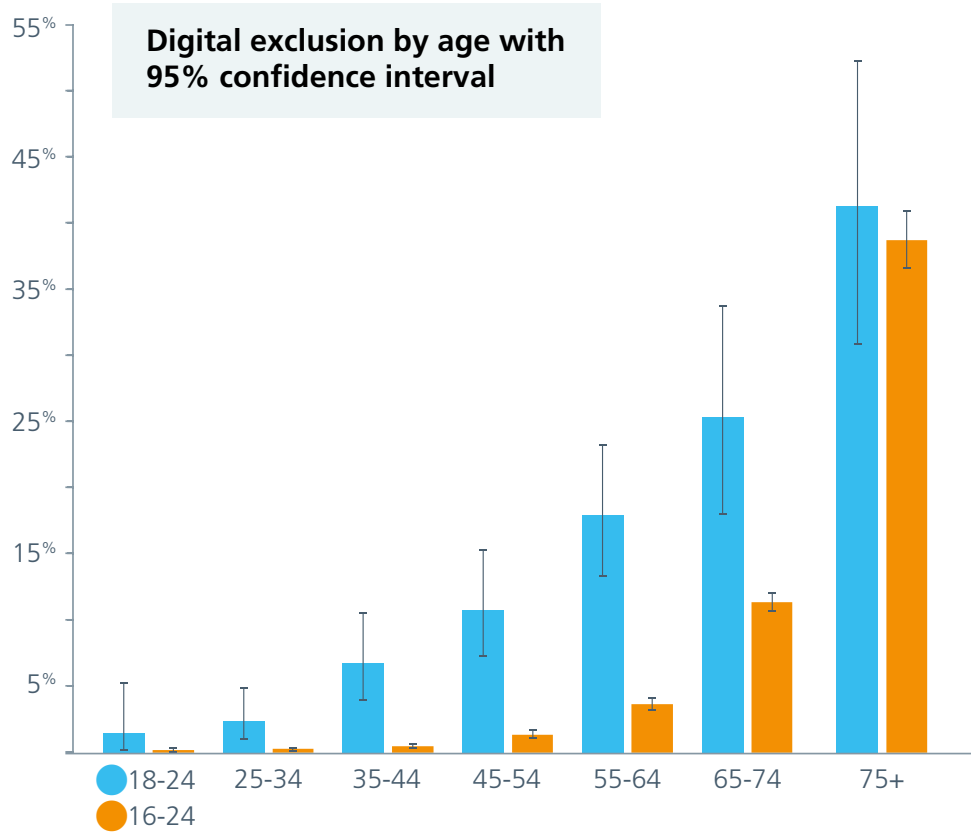
## Graph of Digital Exclusion and Age



## Comparing digital exclusion with UK data

Comparison with ONS data shows a more pronounced association than the general population except in the over 75's, as shown below.

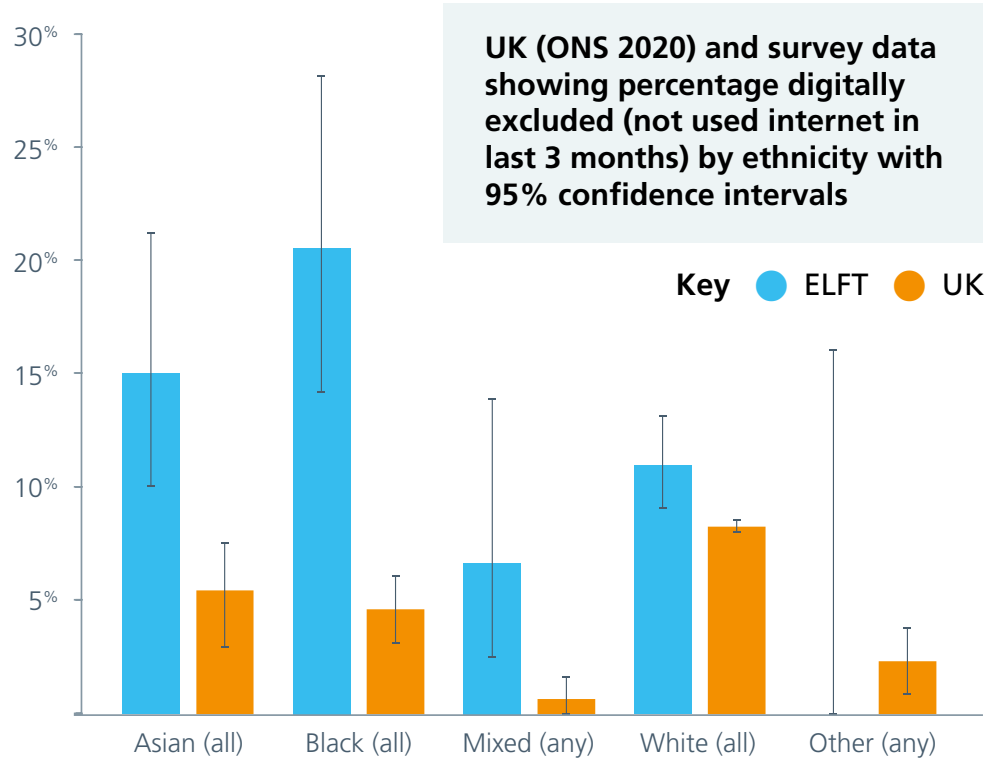
## Graph of digital exclusion by age compared with national data




## Ethnicity

In the general population, 2020[1] data from the Office of National Statistics (ONS) showed self-reported BAME citizens report lower digital exclusion than white citizens; this was not observed in the clinical sample, as shown below.

## Digital exclusion by ethnicity compared with national data




[1] https://www.ons.gov.uk/businessindustryandtrade/itandinternetindustry/datasets/internetusers

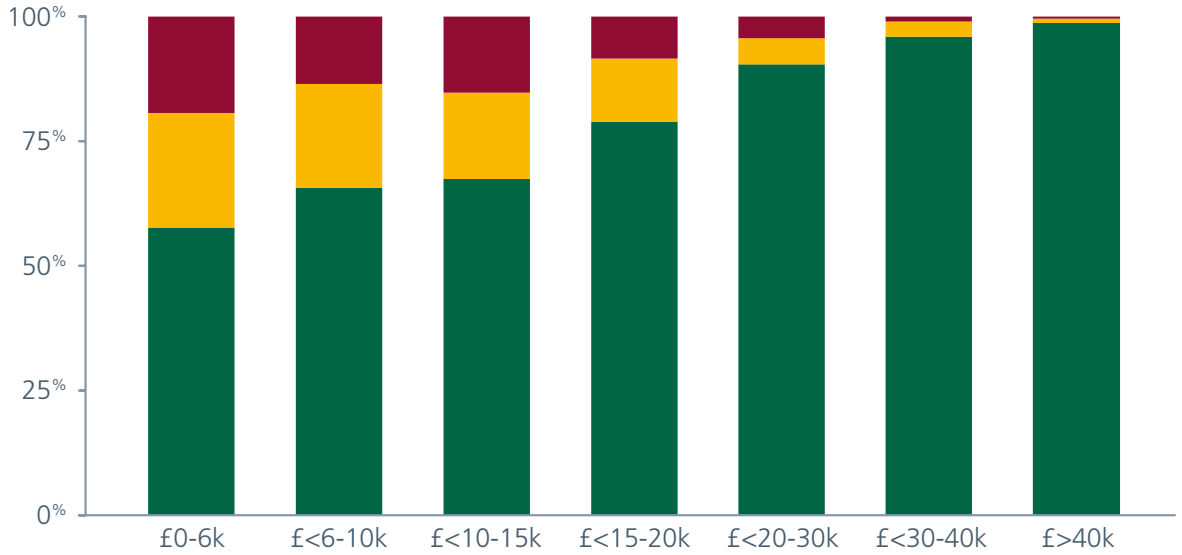
Digitally excluded respondents were more likely to agree or strongly agree that English not being their first language was holding them back from both digital health care and digital engagement ($X^2$= 89.258, 8 d.f. 2-sided significance p=<0.001).

## Finance

Declining annual household income was significantly associated with increasing digital exclusion, as shown in the graph below ($X^2$= 167.974, 12 d.f. 2-sided significance p=<.001).

## Graph of digital exclusion and household income

**Digital exclusion and annual household income**

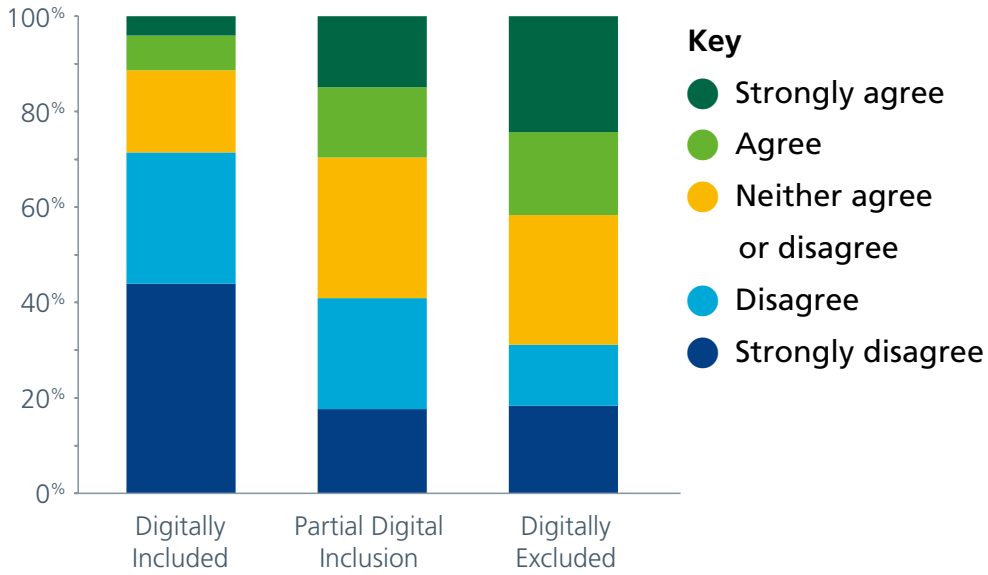



## Sensory Impairment and Neurodiversity

People who reported hearing impairment (9.65% of the sample) were more likely to be digitally partially excluded (12% vs 16.9%) and digitally excluded (19.5% vs 27%) than those without ($X^2$= 41.8 d.f.=3 p<0.001). People with visual impairment (8.2%) were nearly twice as likely to report partial digital exclusion (11.7% vs 21.3%) or total digital exclusion (11.4% vs 21.1%) than those without ($X^2$= 26.6 d.f.=3 p<0.001). In terms of neurodiversity, both ASD and Dyslexia had no association with digital exclusion, but self-reported Learning Disability (9.2%) more than tripled the proportion who were digitally excluded (9.7% Vs 34.5%, $X^2$= 72.8 d.f.=1 p<0.001). There was a significant association between agreeing that "having sensory issues with technology" held them back from using digital health care and digital exclusion ($X^2$=139.150 d.f.=8, p<0.001), as shown in the graph below, and similar proportions agreed that they had "digital accessibility needs" that required device adjustments.


## Graph of the impact of sensory issues and digital exclusion

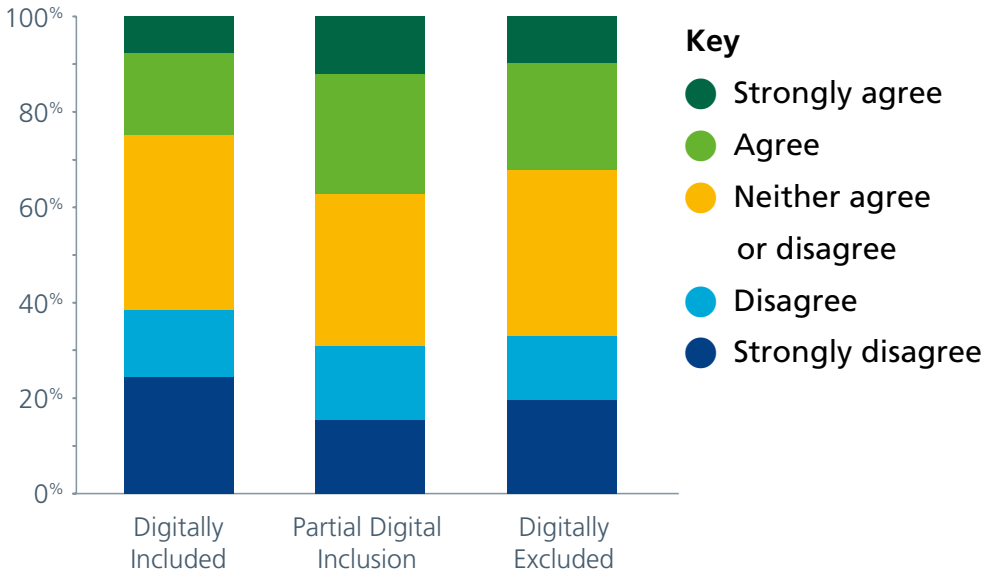
**Responses to 'I have sensory issus with technology' holds me back from using digital healthcare by digital exclusion**




As shown below, over a quarter of respondents agreed they needed support to ensure technology was adjusted for their sensory needs.

## Graph of support needed adjusting technology to meet sensory needs

**Responses to needing 'Support with ensuring devices/technology is adjusted for my hearing or visual needs' by digital exclusion**

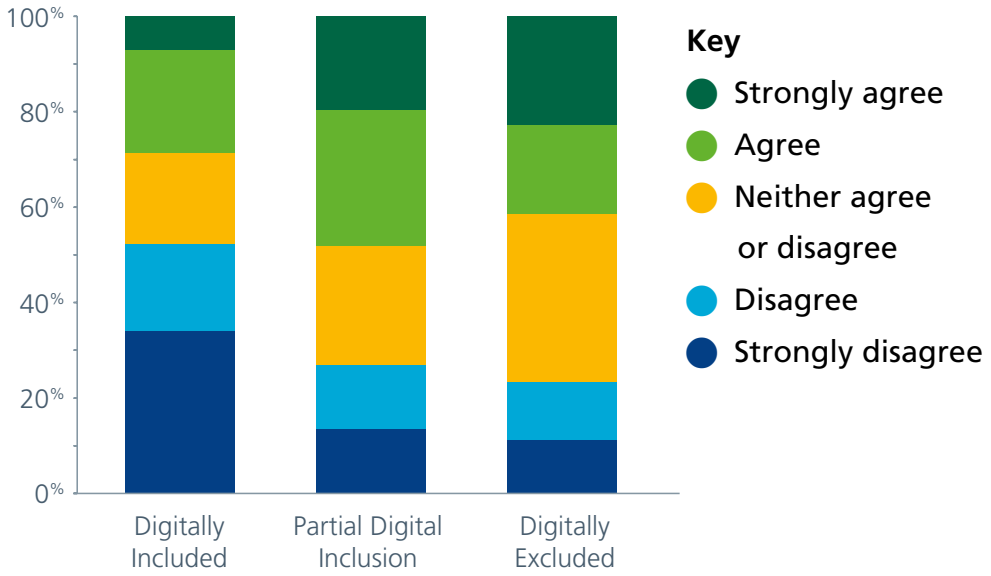



## Mental Health

All respondents reported at least one mental health condition; of these, only self-reported psychosis (22.6% of the sample) and bipolar disorder (11.9%) were significantly associated with greater digital exclusion. Psychosis had the greatest effect on digital exclusion (25.1% excluded Vs 8.0% without psychosis, $X^2$=90.96, d.f.=2, p<0.001), and Bipolar had the next greatest association (16.9% Vs 11.6%, $X^2$=9.84, d.f.=2, p<0.001). Overall, about one-third of respondents agreed that "I find some aspects of technology trigger my mental health issues" and that this held them back from using digital health care, and this varied significantly by levels of digital exclusion ($X^2$=89.228, d.f.=8, p=<0.001) shown below.

## Graph of the association between the triggering effect of technology and digital exclusion

**Responses to how much 'aspects of technology trigger my mental health issues' holds them back from using digital healthcare by digital exclusion**



## Physical health

There was a greater association between self-reported physical health conditions and digital exclusion, in particular Diabetes, Heart conditions (including cardiac, e.g., congestive cardiac disease, or circulatory problems, e.g., Hypertension), Mobility (including musculoskeletal conditions), Neurological (e.g., stroke or MS), and breathing (respiratory conditions, including Asthma and COPD). There was no significant association with Bodily Distress (which includes conditions historically referred to as somatisation and chronic fatigue), Auto-immune, and inflammatory conditions.

## Frequency of digital inclusion and exclusion by self reported physical health status

| Digital Inclusion and self-reported physical health | Digital Inclusion | | | | | | Statistic | |
|---|---|---|---|---|---|---|---|---|
| | Included | | Partial | | Excluded | | $X^2$ (2 d.f) | p |
| | Present | Absent | Present | Absent | Present | Absent | | |
| Bodily distress | 73.3% | 76.1% | 15.5% | 11.2% | 11.2% | 12.7% | 5.382 | 0.068 |
| Diabetes | 52.5% | 78.2% | 21.0% | 11.4% | 26.5% | 10.4% | 53.568 | <.001 |
| Heart | 50.9% | 77.4% | 24.6% | 11.5% | 24.6% | 11.2% | 39.433 | <.001 |
| Breathing | 70.0% | 76.6% | 17.9% | 11.1% | 12.1% | 12.3% | 9.818 | 0.007 |
| Mobility | 63.1% | 77.6% | 18.5% | 11.4% | 18.5% | 11.0% | 22.045 | <.001 |
| Neurological | 54.3% | 76.7% | 20.2% | 12.0% | 25.5% | 11.3% | 25.126 | <.001 |
| Cancer | 48.1% | 75.7% | 33.3% | 12.1% | 18.5% | 12.1% | 13.063 | 0.001 |
| Auto-immune Inflammatory | 82.6% | 75.0% | 13.0% | 12.5% | 4.3% | 12.5% | 2.780 | 0.249 |

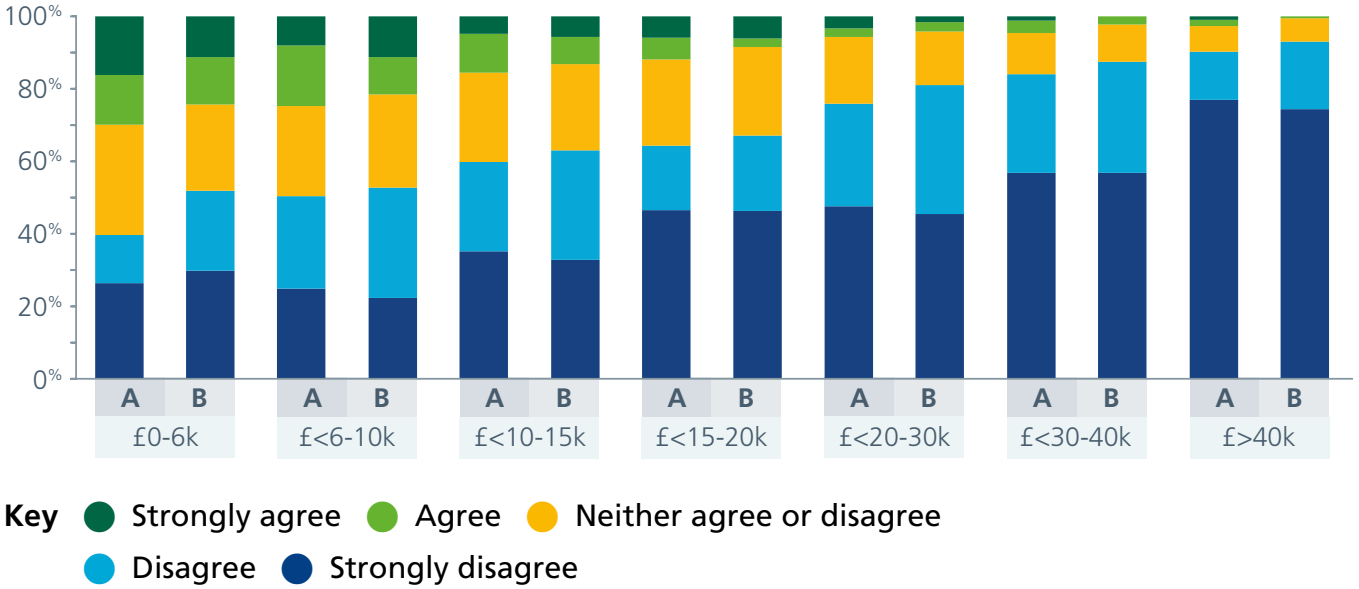
## Understanding Digital Exclusion

The analysis of factors linked to digital exclusion revealed significant overlap and correlation. To clarify, we sought a framework that could direct an enabling strategy. We prioritised finance as the first factor because it creates a formidable barrier to digital access, irrespective of a person's level of knowledge, motivation, or ability.

The chart below shows that as household income falls, there was increasing agreement with the statements that "I can't afford or don't have access to digital devices" ($X^2$=214.7 d.f.=24, p<0.001) and "I can't afford internet access on my broadband at home or mobile phone" ($X^2$=192.5, d.f.=24, p<0.001) contributed to their digital exclusion. The agreement increased sharply as household income fell beneath £20k, with the majority agreeing where the household income was under £6k per annum. The response to the income question was missing in 508 of 1612 respondents, and household income estimates could not be made from other variables with confidence. 90.2 % (111/123) of the partially excluded and 91.6% (87/95) of the digitally excluded reported an annual household income of under £20k. Of the 741 digitally included, 335/741 (45.2%) reported a household income under £20K, and of these 15% (50/335) reported they could not afford a device or connection (3.6% of the digitally included with household income over £20k).

For the partially excluded (missing data excluded by case), 42.8% (39/91) with income under £20k reported they could not afford a device or access. However, in the digitally excluded group, only 8.3% had a household income over £20k. Of the remaining, 71% (39/55) reported that they either did not have or could not afford a device or internet access. Thus, material support should be provided to facilitate digital engagement.

### Agreement with A "I can't afford or don't have access to digital devices" and B "I can't afford internet access on my broadband at home or mobile phone" by household income.



The second factor was motivation to utilise digital health care. There was a high correlation between the responses to "I don't think I will benefit from using technology for healthcare" and "I'm not interested in using more technology for healthcare" (Spearman's rho 0.831, p<0.001 95% CI 0.812 to 0.849). In the digitally included group, 22.1% (206/934) agreed or strongly agreed that they were not interested in using more technology for healthcare; in the partially included group, this increased to 39.2% (58/148) and further increased to 61.9% (68/110) of the digitally excluded group. Motivating digital uptake may be increased by emphasising the benefits.

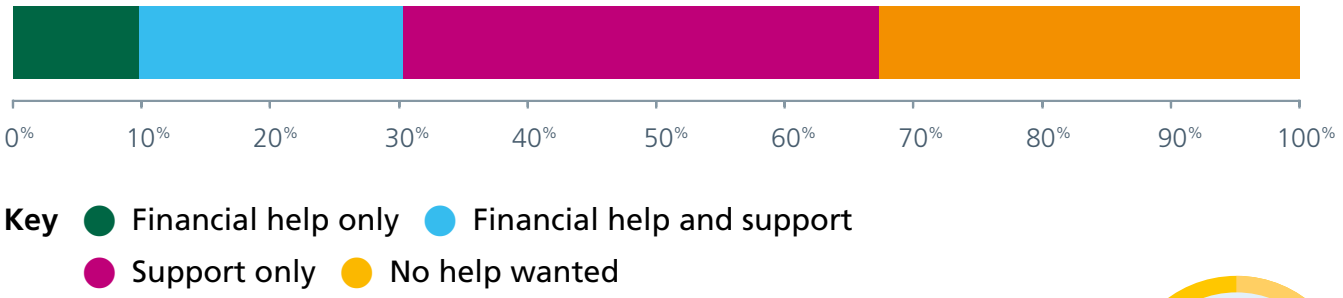
The third group were those who agreed with the statement, "I don't have the right help, including training, to know where to start", which was strongly associated with digital exclusion ($X^2$=164.410, d.f.=8, p<0.001).

42% of the partially and 56% of the excluded agreed or strongly agreed that "I don't have the right help, including training, to know where to start ($X^2$=164.41, 8 d.f. P<0.001) compared with the digitally included.

While 45.8% of those without formal qualifications agreed or strongly agreed, all other educational levels (except "trade") also had a sizable proportion who agreed or strongly agreed, so this question alone was used as an indicator of needing help. This factor had no significant association with the presence of a learning disability ($X^2$=2.528, 4 d.f. p=0.640) or whether the person was partially or completely excluded. A total of 49% (100/204) of the digitally excluded or partially excluded agreed or strongly agreed that they needed help.

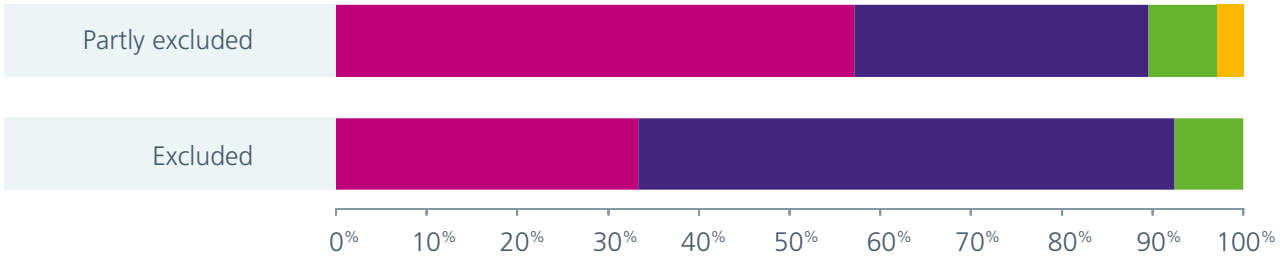
The result was that of the partly or completely digitally excluded, 10.3% (21/204) reported needing both financial help and support in using devices, 16.7% (34/204) needed only financial help, 38.9% (79/204) only needed support, and 34.3% (70/204) wanted neither.

## Type of support wanted by digitally excluded and partly excluded people




The intersection of the financial circumstance and aspiration to adopt digital technology for the partially and fully digitally excluded is shown in the graph below.

## Graph of financial circumstance and digital aspirations of the digitally partly excluded and excluded groups




**Key**

- Income <£20k and motivated to adopt
- Income <£20k and not motivated
- Income >£20k and not motivated to adopt
- Income >£20k and motivated

Compared with the digitally included, 42% of the partially and 56% of the excluded agreed or strongly agreed that "I don't have the right help, including training, to know where to start ($X^2$=164.41, 8 d.f. p<0.001).

Increasing support from family/partner was associated with digital inclusion (Spearman's Rho=0.106 p <0.001) and agreement that they had the right help (Spearman's Rho=0.117 p < 0.001). However, while 80% had weekly or daily contact with family members, 20% (180/902) agreed they did not have the right help. The frequency of contact with friends and community members was not associated with digital exclusion (Spearman's Rho=0.046 p=0.102). Increasing levels of support from paid carers or healthcare workers was associated with increasing digital exclusion and was likely also associated with reducing physical health.

# Enabling Access

# Enabling Access

**Both full and partial digital exclusion appear to be associated with three factors: financial, access to support, and motivation.**

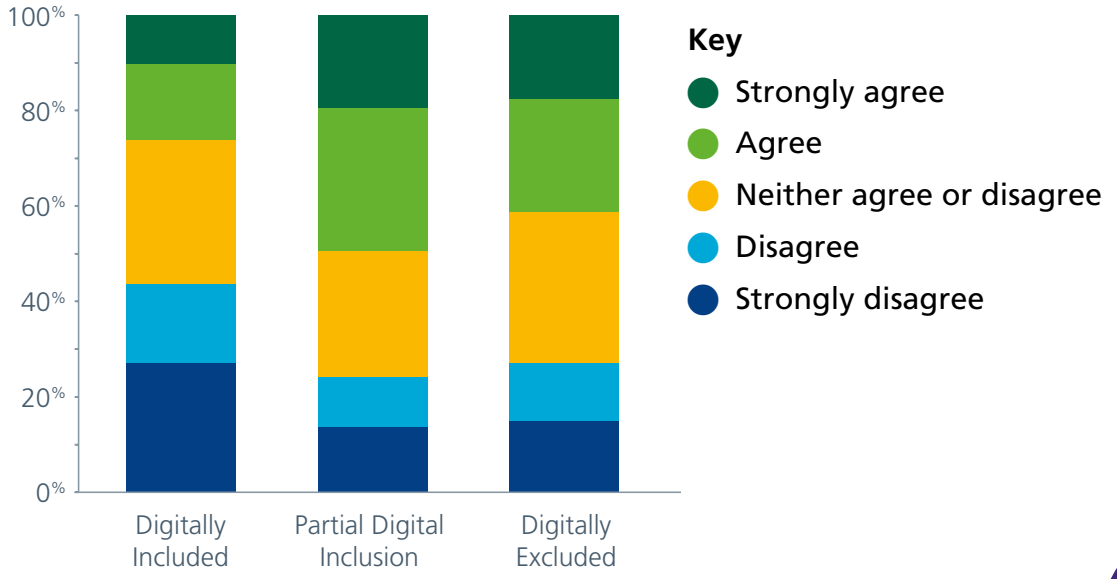
## Overcoming Financial Barriers

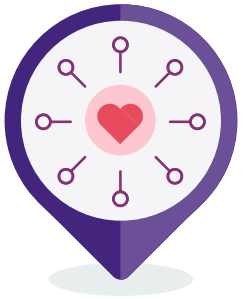
Findings show a strong association between digital exclusion and (1) reducing income, (2) inability to afford broadband/mobile phone credit, (3) lack of access to digital devices and equipment, (4) agreement that help with data credits or mobile phone costs and (5) provision of equipment would enable digital access. This barrier could be addressed by repurposing and providing individual digital assets (e.g. devices from statutory services and business) and enhancing digital connectivity (e.g. encouragement to use social tariffs[2]).

See the graph below, which shows responses to the provision of devices.

## Graph of agreement that equipment provision would aid digital access

**Responses to 'Loan or given a device or equipment I need' by digital exclusion**



[2] https://www.ofcom.org.uk/phones-telecoms-and-internet/advice-for-consumers/costs-and-billing/social-tariffs

## Effective Support

### Managing Triggers

People using mental health services identified "triggering" as a factor that inhibits their digital engagement. There is a range of potential mechanisms by which digital use negatively impacts mental health. Commonly recognised mechanisms include:

1. Being exposed to material that reminds the person of their own traumatic and adverse experiences reactivates memories of these events, resulting in distress and difficulty functioning.
2. Cyberbullying and Online Harassment: this can be a direct personal attack[3] or an indirect attack, for example, negative statements about people with mental ill health; again, these cause distress, damage to esteem and reduced feelings of safety.
3. Negative comparisons with digital portrayals of "curated" lives[4], including idealised body images, can foster feelings of inadequacy, anxiety, and reduced self-esteem, particularly around body image.
4. Addictive engagement, associated with doom-scrolling and information overload: dark patterns, including infinite scrolling, preference for emotional triggers, sensationalism, negativity bias and threat focus, results in unhealthy digital engagement[5].

While the relative contribution of these processes requires further investigation, we suggest that we have a sufficient understanding to advise individuals with existing mental health issues on how to safeguard themselves against the harmful effects of digital engagement, particularly social media. Clinicians should inquire about, educate, and, if necessary, refer for psychological interventions when there is significant harm to mental well-being. General advice includes:

1. Limiting screen time
2. Detecting, disengaging and blocking cyberbullies
3. Minimising triggers and using self-soothing strategies if necessary
4. Balancing real-world and digital interactions
5. Using inbuilt tools to promote healthy digital usage
6. Deliberate consumption of material that educates and uplifts

In addition trigger management support is more likely to be effective if it:

1. Emphasise simple solutions that have direct and immediate benefits because digitally excluded and partially excluded were more likely to agree that they "find accessing new apps or new types of video calls too complicated" ($X^2$=185.367 d.f. 8 p<0.001).
2. Teach device and system configuration to enable access to address visual and other impairments because digitally excluded people were much more likely to agree that they needed adjustments to use devices ($X^2$=188.684 d.f. 8 p<0.001).
3. Teach strategies to minimise exposure to material that triggers mental ill health, increase resilience, and accelerate recovery because digitally excluded were more likely to agree that they were held back from using digital health care when technology triggered mental health issues ($X^2$=89.228 d.f. 8 p<0.001).

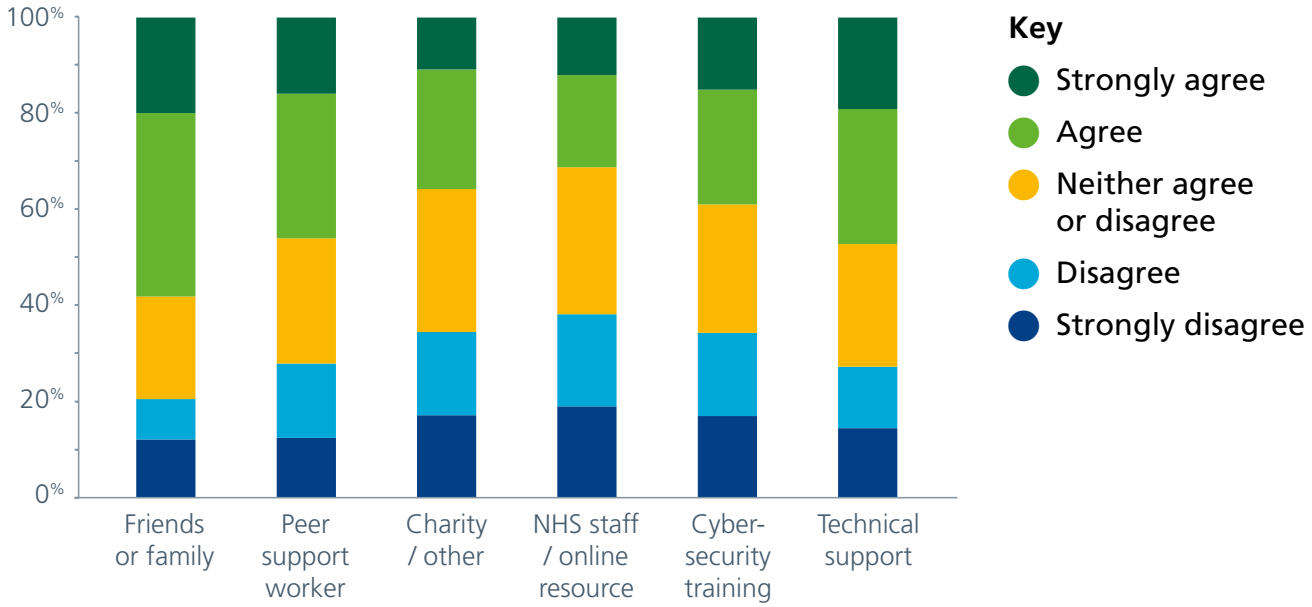
[3] Kowalski (2014) DOI: 10.1037/a0035618
[4] Vogel et al (2014) DOI:10.1037/PPM0000047
[5] Andreassen (2015) DOI:10.1007/s40429-015-0056-9

4. Teach how to stay safe online (basic cybersecurity) to increase a reliable sense of online safety because digitally excluded were more likely to agree that they were held back from using digital healthcare by concerns about "digital security and confidentiality" ($X^2$=93.675 d.f. 8 p<0.001).
5. Basic technical skills when things don't work because digitally excluded were more likely to agree that they were held back from using digital health care when they experienced "Internet access issues" ($X^2$=92.482 d.f. 8 p<0.001).

There was no clear preference for who would provide this support. The graph below shows agreement and disagreement for a wide range of individuals, so anyone in a position to support may find acceptance. There was the strongest agreement for friends and family and the strongest disagreement for NHS staff providing digital support. However, 9% of those who were digitally excluded and partly excluded had no contact with family or partners in the previous three months, and many with frequent contact reported they did not have the necessary support. The next broadest acceptance was for a "digital peer support worker" this is someone with experience of mental ill health trained to provide digital support.

## Support preferences from partial or fully digitally excluded groups

**Summary of support preferences from partial and fully digitally excluded groups**




## Motivation

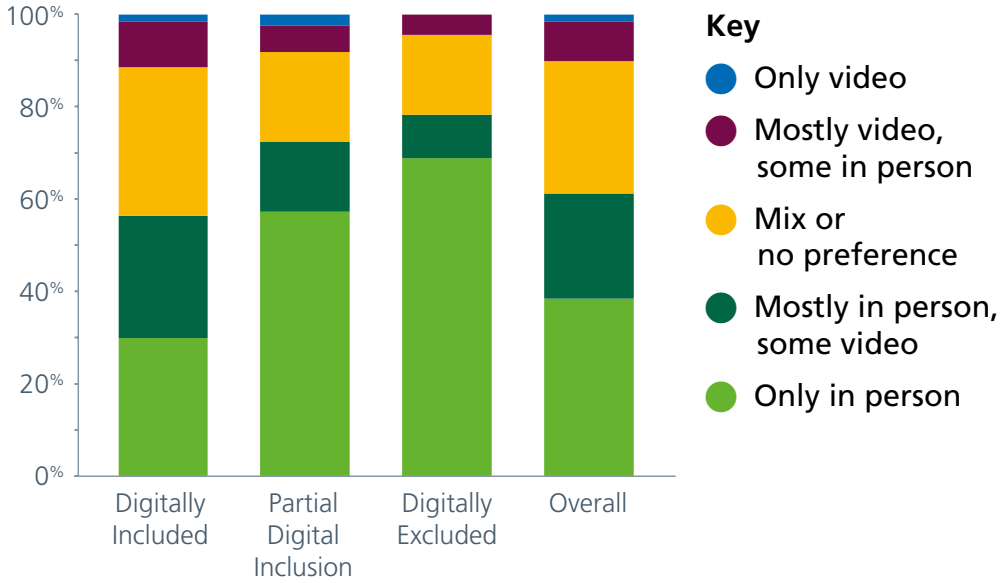
People digitally partly and fully excluded were more likely to perceive harm and less likely to value the benefits of digital engagement. Perceived potential harms that inhibited digital engagement included triggering mental health issues (discussed above), digital security, and confidentiality ($X^2$=93.675 d.f.=8 p<0.001).

In discussing the results with people using services, they identified the fear that if they engaged digitally, they would lose subsequent choice about which digital services they could accept. Remaining digitally excluded would ensure continued direct contact with service providers as they could not be forced into total digital adoption.

Over half of all respondents felt they did not receive the same level of support in digital appointments compared with face-to-face appointments. However, this may not have referred specifically to virtual video consultations as there was a high use of telephone calls, which clinicians incorrectly described as "virtual consultations". The digitally excluded had an much greater preference for in-person appointments, as shown in the graph below ($X^2$=152.901 d.f.=10 p<0.001):

## Preferences for virtual compared with face-to-face clinical appointments by level of digital exclusion

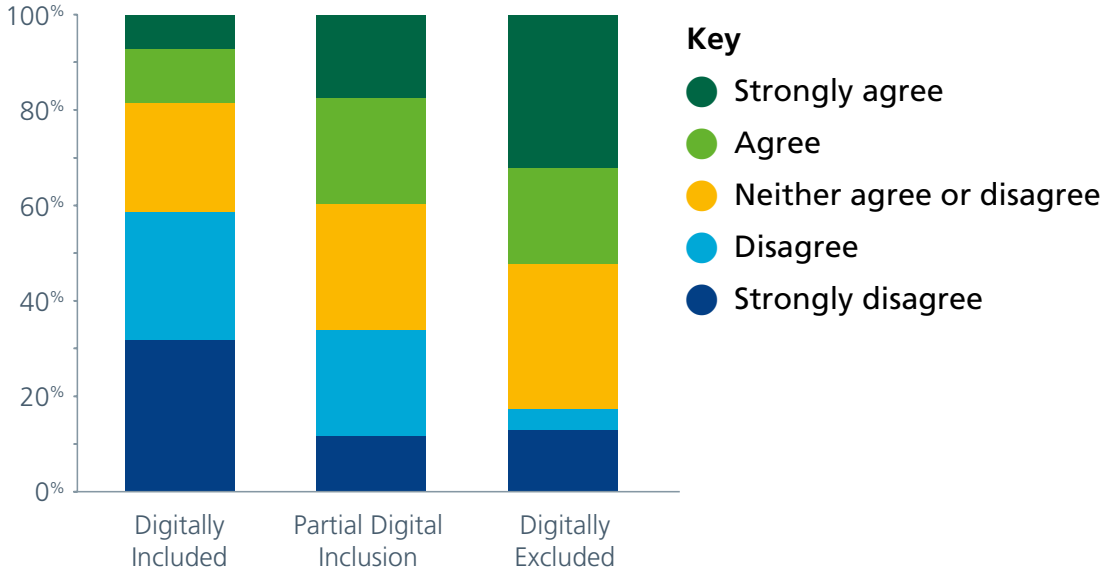
**How would you like your appointments with clinicians?**



The digitally excluded were less interested in using more technology for healthcare ($X^2$=129.982 d.f.=8 p<0.001). This closely matched the agreement that they would not benefit from using technology for healthcare ($X^2$=129.796 d.f. 8 p<0.001), as shown below.

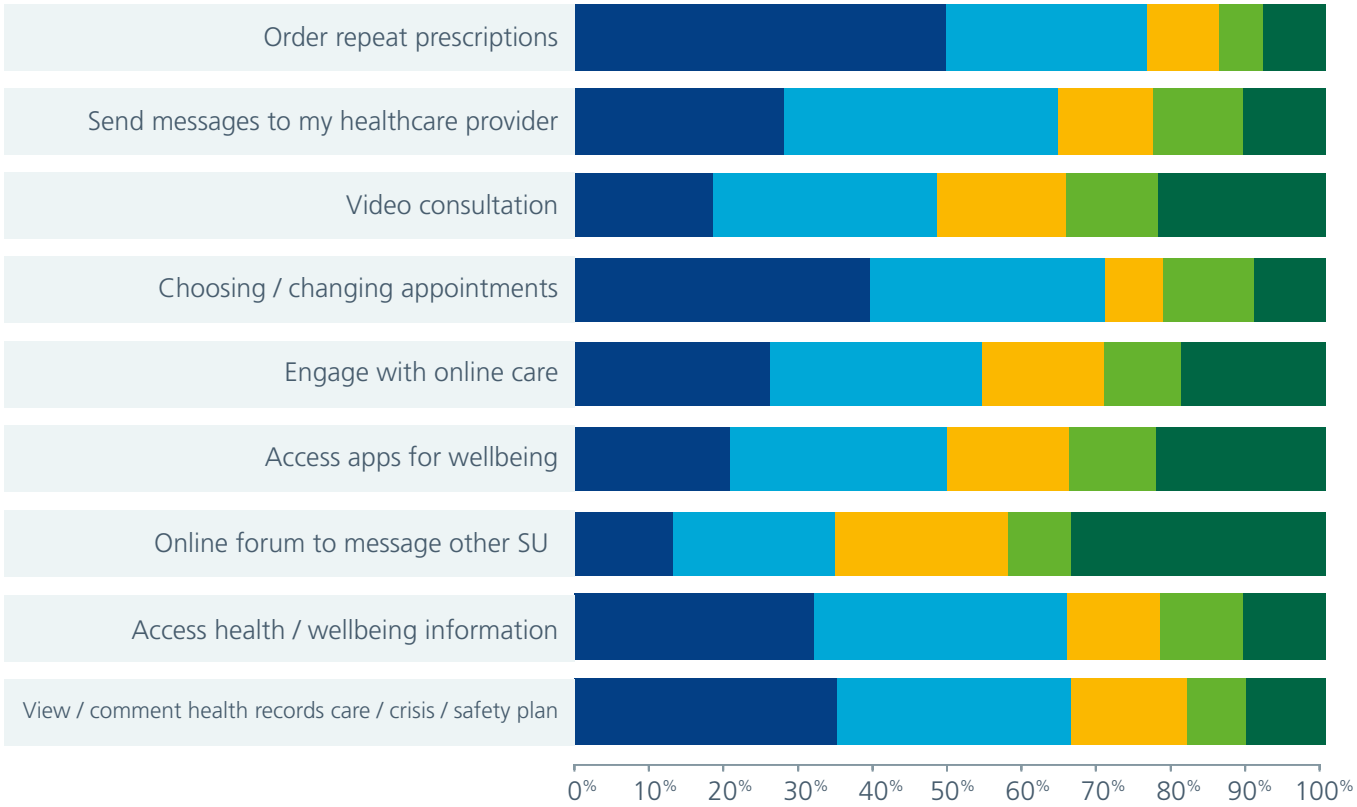
## Graph of response to benefit from using technology for healthcare

**Responses to 'I don't think I will benefit from using technology for healthcare' by digital exclusion group**




However, when asked to evaluate the importance of specific digital offerings, the majority rated most as important or very important, as shown below.

## How important are the following digital healthcare services to you?



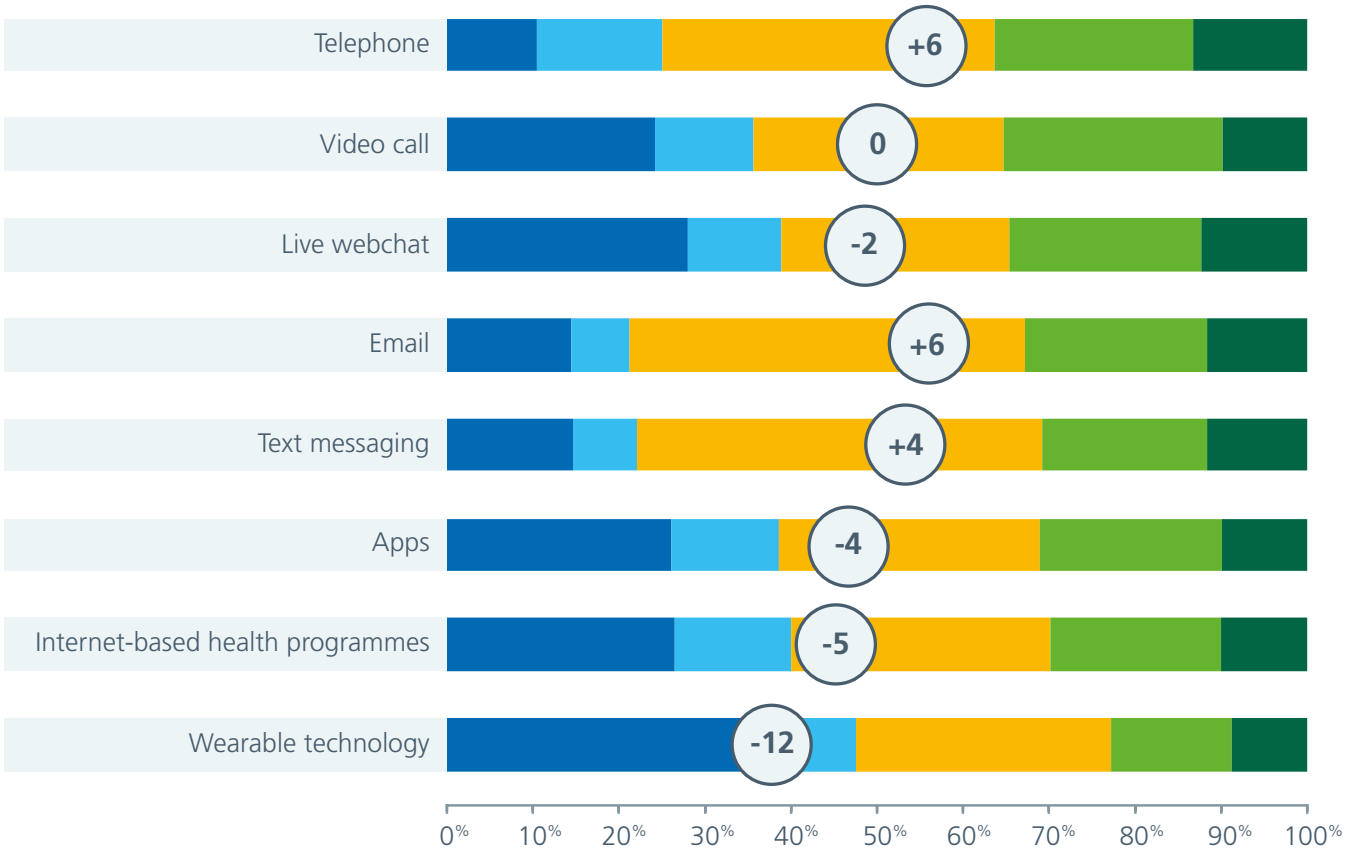

This suggests that digital health is a less tangible concept than specific offerings like "check my crisis plan" or "reorder my medication." Consequently, health educators should not promote generic digital services or discuss digital adoption in general terms but instead lead with specific offerings relevant to the person and, as outlined above, address perceived harms and risks.

## The future of digital

We asked about the preferences for using digital technology for different types of healthcare provision in the future, as shown in the graph below.

## Graph for preferences for using digital for healthcare in the future

**Responses to 'Going forward how much do you want to use the following for your healthcare with <> net promoter score'**




The net promotor score was a sum of those wanting more minus those wanting less or not at all. While the net promotor score was near the middle, overall, there appeared to be a triphasic pattern: those wanting more (25-35%); the same, ranging between 30 and 50%, and less or not at all, ranging from 20-40%. Given the considerable cost savings and improvements in quality of care resulting from digital deployment, health systems will find it challenging to maintain the status quo if they do not increase digital provision because limited resources mean that excess expense in one area can only result in people being denied care in another. To achieve this, substantial work is needed to support digital adoption, beginning with promoting the benefits and enabling people to experience high-quality digital care. For example, walking into a nearby private digital pod in your GP surgery and being given a high-quality consultation on a large high-definition screen is an entirely different experience from using your last data credit to have a blotchy and strained conversation on a small smartphone screen in a nearby crowded café.

## Recommendations for effective support

The survey results suggest that organisations consider adopting the following approaches when planning how best to support people using mental health services through digital engagement.

1. **To improve access to digital devices and the Internet**
    - Promote Social Tariffs: Increase awareness of social tariffs for internet services. Consider providing financial assistance to subsidise broadband and mobile data costs for individuals facing digital exclusion due to financial circumstances.
    - Device Loan and Donation Scheme: Repurposing devices from organisations and businesses could create opportunities to establish a programme for lending or donating digital devices (such as tablets, smartphones, and laptops) to those in need.
2. **Consider methods to enhance digital literacy through peer support workers**

    Survey respondents preferred peer support workers, whether voluntary or paid. Alongside general digital support, their work should prioritise the following.
    - Simple Solutions: Emphasize solutions that offer direct and immediate benefits.
    - Device Configuration: Teach how to configure devices and systems to address visual and other sensory impairments, including screen readers, voice commands, and subtitles.
    - Trigger Management: As outlined above, educate on strategies to minimise exposure to material that could trigger mental ill health and to build resilience and accelerate recovery.
    - Online Safety: Provide training on essential cybersecurity to ensure users feel safe online.
    - Technical Skills: Teach basic technical skills to handle common issues when things don't work.
3. **Refocus digital promotion to enhance engagement in digital health**

    We recommend that communication directly address the main concerns hindering digital engagement. To achieve this, we recommend employing communication strategies that:
    - Emphasise Specific Benefits: Promotes and emphasises an immediate, specific benefit of digital health services most relevant to the individual, e.g., checking crisis plans, ordering prescriptions online) rather than general digital engagement.
    - Security Education: Educate users on using digital health tools safely and address concerns about confidentiality and data security.
4. **Where virtual consultations are integral to the health economy, consider providing access to locally accessible digital spaces.**

    If virtual consultations are key to the local health economy, ICS should focus on providing secure, private, and reliable local clinical digital spaces to enable engagement in digital health. This approach will help support the most digitally excluded (those without private space, devices or connectivity). Three approaches can be considered:
    - Community-Based Facilities: Offer private spaces within community centres or recovery colleges where individuals can engage in digital consultations and treatments.

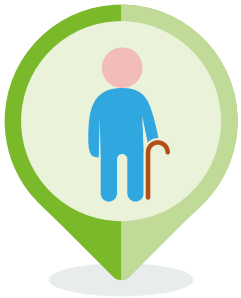
- **Equip Public Spaces:** Ensure these spaces are equipped with the necessary technology (e.g., web cameras, high-speed internet) and support their use.
- **Virtual Consultation Booths in GP Surgeries and other community health spaces:** Geographically disbursed digital access points would facilitate digital access to virtual consultations for the most excluded, who often have a high concentration of health needs.

5. **Consider developing further methods to prevent and manage the impact of digital engagement on mental health**
    - **Trigger Management Strategies:** further research, including practice-based studies, could help deepen our understanding of how digital engagement influences the well-being of individuals with mental ill-health. This exploration could guide the development of strategies to mitigate any negative effects and support the growth of clinical expertise in this relatively under-researched area.

We recommend using standard project management approaches for these proposals, particularly pilot programs, to assess feasibility and refine the approach. Progress should be benchmarked against objective measures to ensure alignment with goals. Additionally, involving service users is essential for effective stakeholder engagement and to ensure the initiative remains user-centred and meets their needs.

# Summary

This report provides insights into digital engagement among mental health service users at East London NHS Foundation Trust (ELFT). The study reveals significant disparities in digital access between primary care (PC) and secondary care (SC) users, with SC users experiencing higher rates of digital exclusion.

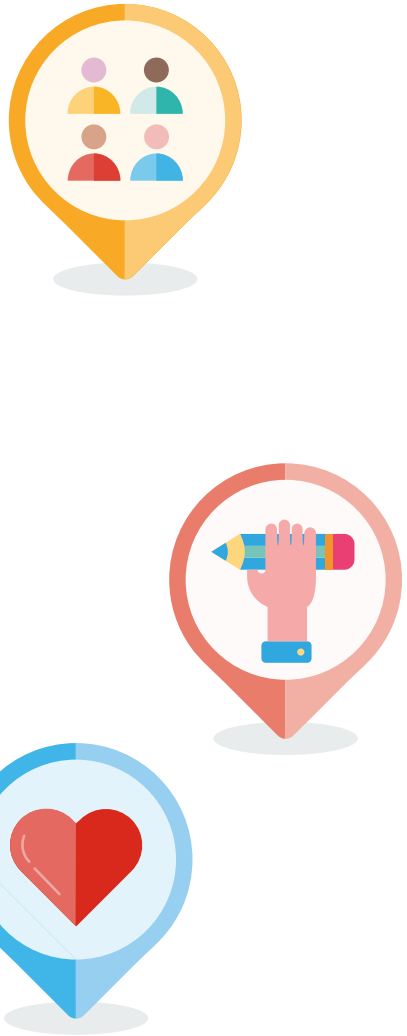


**Key findings include:**

- SC users are more likely to be older, male, and living alone. They also have lower household incomes and educational attainments than PC users.
- Digital exclusion is strongly associated with factors such as increasing age, lower household income, sensory impairments, and certain mental health conditions like psychosis and bipolar disorder.
- Financial barriers, lack of support, and low motivation are the primary factors contributing to digital exclusion.
- The report highlights that digital exclusion is a complex issue influenced by various socio-economic, demographic, and health-related factors. This disparity presents a significant challenge to equitable health service delivery and calls for targeted interventions.

**To address these challenges, the report suggests several strategies that organisations might consider:**

1. Improving access to digital devices and the Internet:
    - Promoting social tariffs for Internet services
    - Establishing device loan and donation schemes
2. Enhancing digital literacy through peer support workers:
    - Focusing on simple solutions with immediate benefits
    - Teaching device configuration for accessibility
    - Educating on trigger management and online safety
3. Refocusing digital promotion to enhance engagement:
    - Emphasising specific benefits of digital health services
    - Addressing concerns about confidentiality and data security



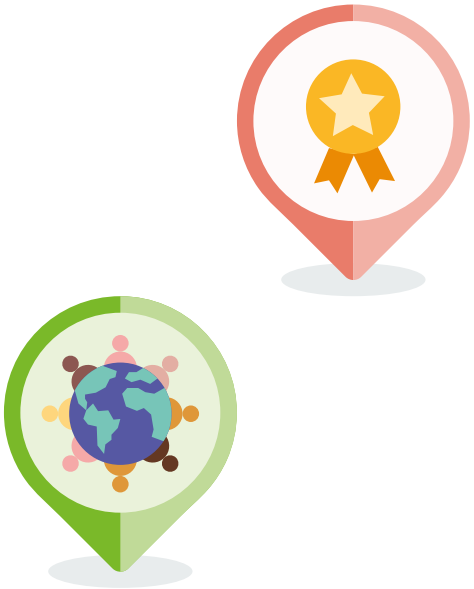
4. **Providing access to locally accessible digital spaces:**
    - Offering private spaces in community centres or recovery colleges
    - Equipping public spaces with the necessary technology
    - Installing virtual consultation booths in GP surgeries and community health spaces
5. **Developing methods to prevent and manage the impact of digital engagement on mental health:**
    - Conducting further research on trigger management strategies
    - Developing clinical expertise in this area

These recommendations offer a range of possible solutions that can be considered to enhance digital inclusion. By implementing some or all of these strategies, organisations could work towards ensuring that all service users, especially the most vulnerable, can benefit from digital health innovations. The implementation of these suggestions would benefit from standard project management approaches, including pilot programs to assess feasibility and refine approaches. Progress should be measured against objective benchmarks, and involving service users in the process is crucial for effective stakeholder engagement and ensuring initiatives remain user-centred.

In conclusion, while digital health services offer numerous benefits, this report underscores the importance of addressing digital exclusion to ensure equitable access to mental health services. By considering the findings and recommendations presented in this report, healthcare providers and policymakers can work towards creating more inclusive digital health strategies, ultimately leading to improved health outcomes for all service users.

# Conclusion

This report analyses digital engagement among mental health service users at the East London NHS Foundation Trust (ELFT).



It reveals significant disparities in digital access, with secondary care users experiencing higher rates of digital exclusion due to various socio-economic, demographic, and health-related factors. This disparity presents a barrier to equitable health service delivery and calls for targeted interventions.

Organisations can consider several strategies to tackle these challenges. These include; improved access to digital devices and the internet, enhancing digital literacy, providing tailored support, and promoting specific digital health benefits to promote engagement.

Implementing these recommendations could enhance digital inclusion, ensuring that all service users, especially the most vulnerable, can benefit from digital health innovations, ultimately leading to more equitable health outcomes.

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