

Technology Enabled Care People's Views on Awareness and Use of Technology for Health

September, 2017

This work was carried out by the Engagement Alliance

Purpose of the engagement work

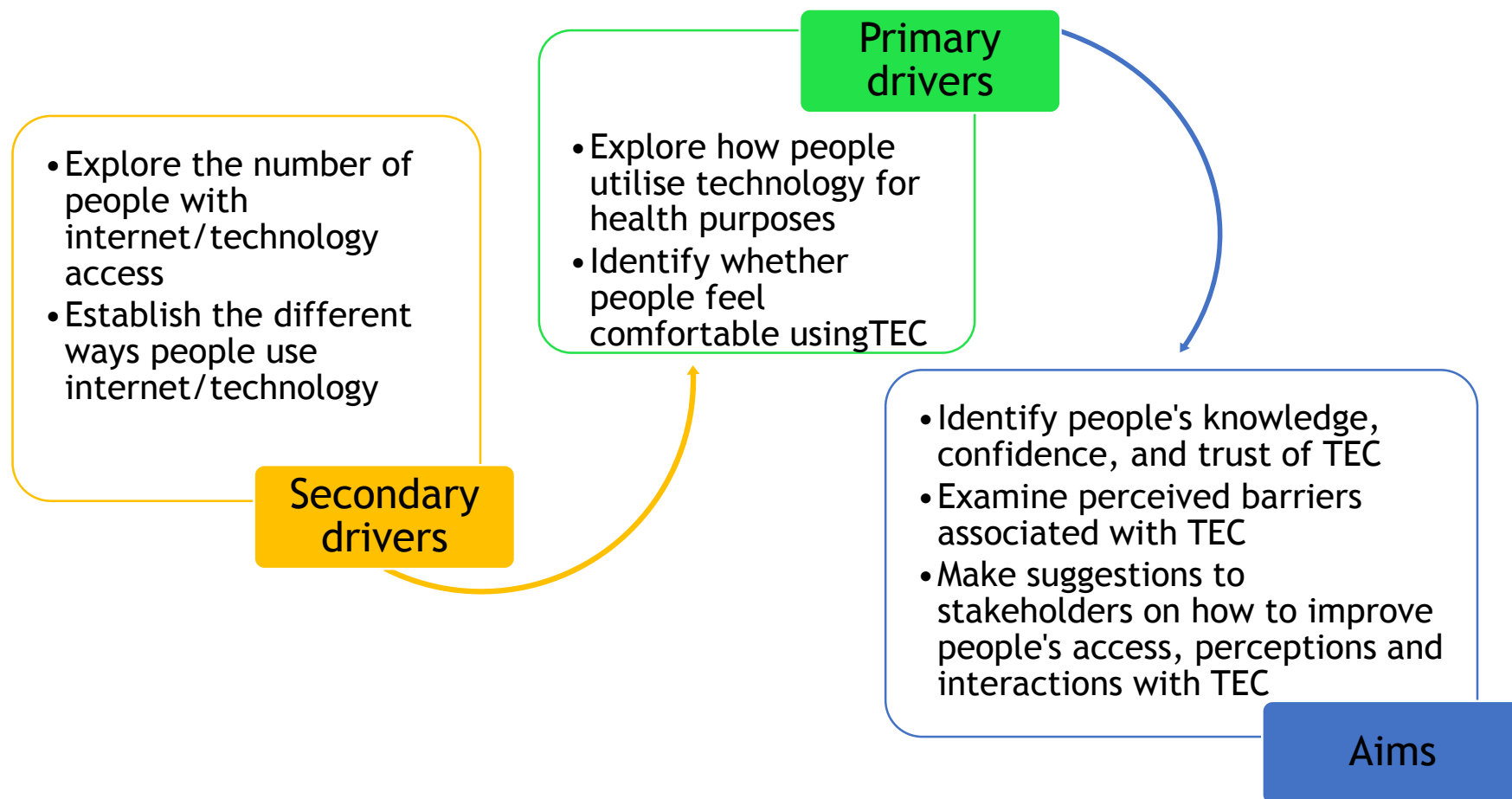
- ❑ To improve knowledge and understanding of health and care related technologies at the neighbourhood level.

The work is part of the wider engagement on the Locality Plan by the Engagement Alliance. It is intended primarily to inform work on TEC and care related technologies more generally.

Several lines of enquiry were used in this work to refine the research aims and methodology.

Lines of Enquiry

We utilised the following set of primary and secondary drivers to add further context to the aims of this engagement work and to guide our research methodology.



Field researchers used a mixed research approach. The views and experiences of people relating to TEC were gathered as follows:

1. A short questionnaire was utilised at a technology ‘Engagement Event’¹ in Bolton town centre facilitated by Healthwatch Bolton. The questionnaire consisted of two parts (before and after), and was administered at two separate intervals (at the start of the tent tour) to test people’s current understanding of TEC, and (at the end of the tent tour) to explore the effect simple TEC demonstrations can have on people’s perceptions of TEC. Overall, 55 questionnaires were completed this way.
2. An extended discussion was held with 8 people opting to stay longer after the tent tour. Two simple prompts were utilised to further explore emergent views and experiences and to generate qualitative data (i.e. longer comments).
3. A paper based survey on Apps designed for young people was issued as a part of the technology engagement event in Bolton. This questionnaire explored young people’s dispositions towards Apps more generally including their current interactions, future use, and perceived barriers. A total of 32 young people took part in this survey.
4. An online Apps survey was distributed to diverse groups of people via social media. The idea was to explore the different ways people utilise Apps, their future dispositions towards Apps as well as perceived barriers. The response rate of this survey was good with 116 respondents successfully completing the survey during a period of just over two weeks.
5. A synthesis of past Engagement Alliance telehealth engagement work was utilised to provide further insights into people’s views and experiences relating to health and care technologies more generally.

¹ On the 3rd of August 2017, the Engagement Alliance brought together a collection of telehealth gadgets and sample health related Apps along with providers and professionals in a TEC event in Bolton town centre. The purpose was to demonstrate to people the value of TEC, and to explore their views and experiences of interacting with it.

Key findings

1. Current access and use of technology

- More than three-quarters of respondents said they had never heard the term TEC. Nearly all young people said they had never heard the term TEC.
- Consistent with Ofcom figures, a high percentage of respondents said they had access to the internet. Access to the internet was fairly distributed across all age groups. Most respondents accessed the internet at home.
- Responses relating to technology use suggested people use the technology for lots of activities but **NOT** for health and social care related purposes.

2. Current Habits - how people access health and wellbeing information

- GPs, friends and family were identified as the main sources of health and wellbeing information suggesting strong disposition towards face-to-face contacts.
- People saw health related technologies (e.g. Apps) as health enablers rather than sources of health and wellbeing information

Key findings

3. Experiences and perceptions of health and care related technologies

- Although people said they made conscious efforts to look after their health and wellbeing, nearly **60%** said they ‘rarely’ or ‘never’ engaged with health related technologies.
- Fewer respondents (**17%**) rated their knowledge, confidence, and trust of engaging with TEC as ‘very good’, ‘high’ or ‘excellent’.
- People were generally hesitant to engage with TEC partly due to limited exposure to health and care related technologies.
- Nearly **80%** of respondents said they felt positive about TEC following simple TEC demonstrations in Bolton town centre. A further **82%** said they could see the benefits of monitoring health remotely as presented following a brief demonstration.
- Nearly half of the respondents said they found TEC to be too complex to use.

Who we spoke to

Research tools	Delivery methods	Cohorts	Respondents
1 –General short questionnaire	Paper	Diverse group	55
2 - General comments	Paper	Diverse group	8
3 – Generic Apps questionnaire	Paper	Young people	32
4 – Generic Apps survey	Online	Diverse group	116
Total			211

*The research tools also generated **1,277** comments which were thematically analysed to add further context to the quantitative findings. Furthermore, extracts from past telehealth related engagement work were utilised to provide broader perspectives relating to the use of technology for health and social care.

A clarification of the term Technology Enabled Care (TEC)

There are several overviews of the term TEC. The NHS Commissioning Assembly defines TEC as:

“...use of technology to enhance care by capturing and sharing information in new ways.”

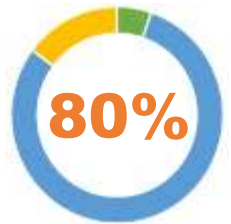
In this report, we use the term TEC to refer to technology devices for health care but also health and care related technologies more generally.

Part 1 - Current Access and use of technology

- Knowledge and understanding of TEC
- Basic access to the internet
- Usage of internet/technology for non-health related activity
- Usage of internet / technology for health related activity

Knowledge and/or understanding of TEC

Of the **115** diverse people who completed the online Apps survey:

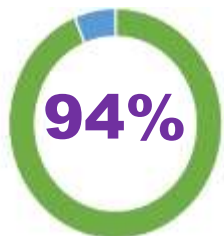


said they never heard the term TEC

- *No, not all. I see these things but I don't really think too much of it.*
- *No never heard of it.*
- *I really never thought too much of technology because I do not understand it.*
- *Yes and I know what it refers to.*
- *Yes but I don't really know what it refers to.*

- Only **6** (5%) said they heard and understood the term TEC
- A further **17** (15%) said they heard of TEC but did not really understand what it represented.

Of the **32** young people who completed the paper-based Apps questionnaire:

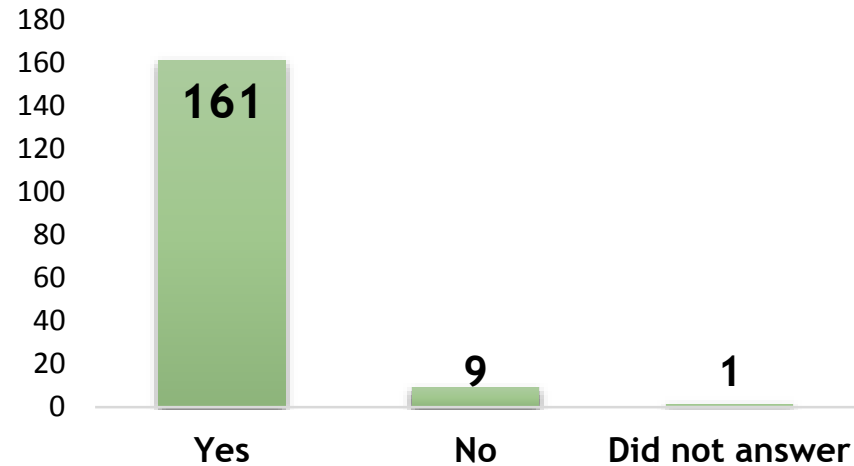


said they never heard the term TEC

- Only **2** (6%) young people who completed the paper-based Apps questionnaire said they heard of TEC

Basic Access to the Internet

Access to the internet N=171



Of the 171 people who completed the short questionnaire and the online Apps survey:

- A whopping **161** (94%) said they had access to the internet. Access to the internet was fairly distributed across all age groups (Appendix 1)
- Only **9** (5%) said they had no access to the internet
- **1** (1%) person did not respond.

Consistently, the findings of this engagement exercise showed:

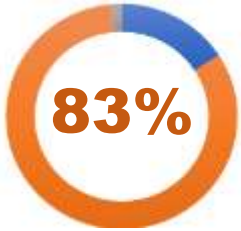
- Most people had access to the internet in their homes although some mentioned accessing the internet in libraries, UCAN centres and workplaces.
- Nearly all the young people who completed the Apps questionnaire said they owned their own technology device to access the internet (Appendix 2).

Figures from Ofcom (Ofcom, 2010)¹ suggest 73% of the UK population had access to the internet at home in 2010, this figure rises to over 80% for households with 15-24 year olds living in them.

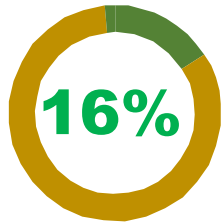
¹ <http://stakeholders.ofcom.org.uk/binaries/research/media-literacy/digiparticipation/2010-metrics/metrics-bulletin-2010.pdf>.

Use of internet/technology

888 responses relating to internet/technology use were identified. Of those,



Were non-health and social care related

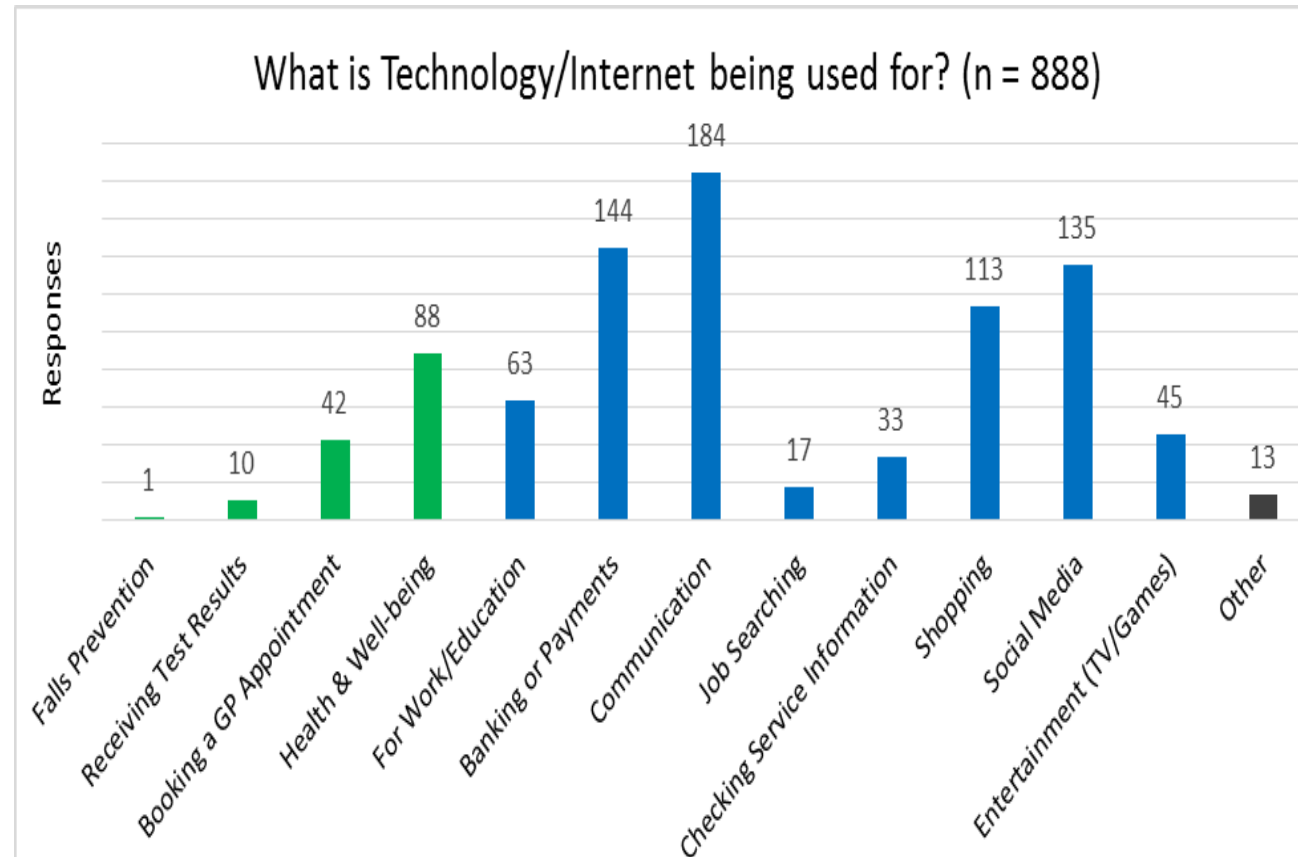


Were health and social care related

Communication (i.e. phone calls, texting, & emails); banking/payments, and social media were the most popular use of the internet and technology. A breakdown of what people said they use the internet/technology for is provided below.

☐ 13 were shared as 'other' but were not specified

- *I use tele health but with the professional/clinician not the receptionist. It saves me time going to the doctor.*
- *I do everything on-line and have access to a summary of my records.*
- *I Google a lot to see what is going on local (local services. e.tc.).*
- *I do not like technology but it is everywhere. I use computers [internet] for job searches, studying, paying bills, and sometimes banking, almost everything.*
- *Elefriends - app offering peer support.*



Part 2 - Current Habits - how people access health and wellbeing information

- ❑ Sources of health and Wellbeing information
- ❑ Health related Technologies (Apps) as enablers of health care

Sources of health and wellbeing information

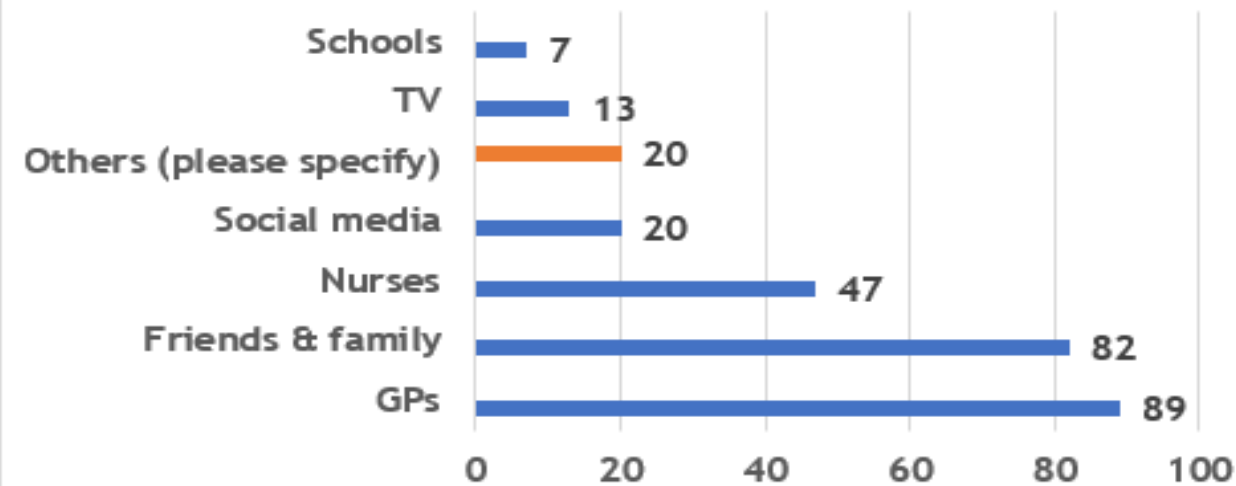
278 responses relating to sources of health and wellbeing information emerged.

- GPs were the most popular source of health and wellbeing information attracting nearly a third (89) of all the responses.
- Friends and family were the second most popular sources of health and wellbeing information accounting for 82 (29%) of all responses.

□ A further 7% (20) of these responses were identified as 'other'. A closer examination revealed some diverse and interesting sources of health and wellbeing information. The word cloud below captures these 'other' responses.

A break down of each of the overall responses is provided below.

Who do you prefer to take your health and wellbeing advice from? N=278



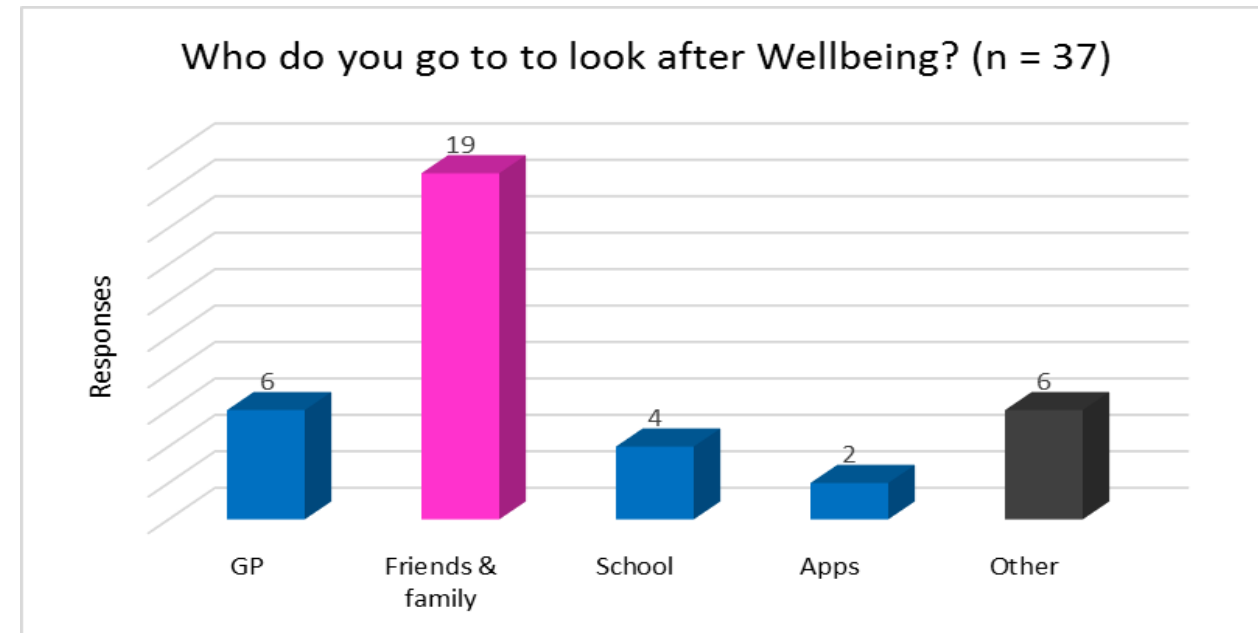
This finding clearly demonstrates that face-to-face contacts remain the most popular source of health related information.

Sources of health and wellbeing information- young people

37 responses relating to sources of health and wellbeing information emerged from young population.

Support for this finding exists in the literature. Studies looking into the importance of social determinants in health information and advice seeking behaviours among young people highlight how ‘existing’ social networks such as friends or family act as informal sources of information and advice².

Unlike adults who cited GPs as the most popular source of health related information and advice, responses by young people suggest friends and family as the preferred source of health related information and advice as shown below.



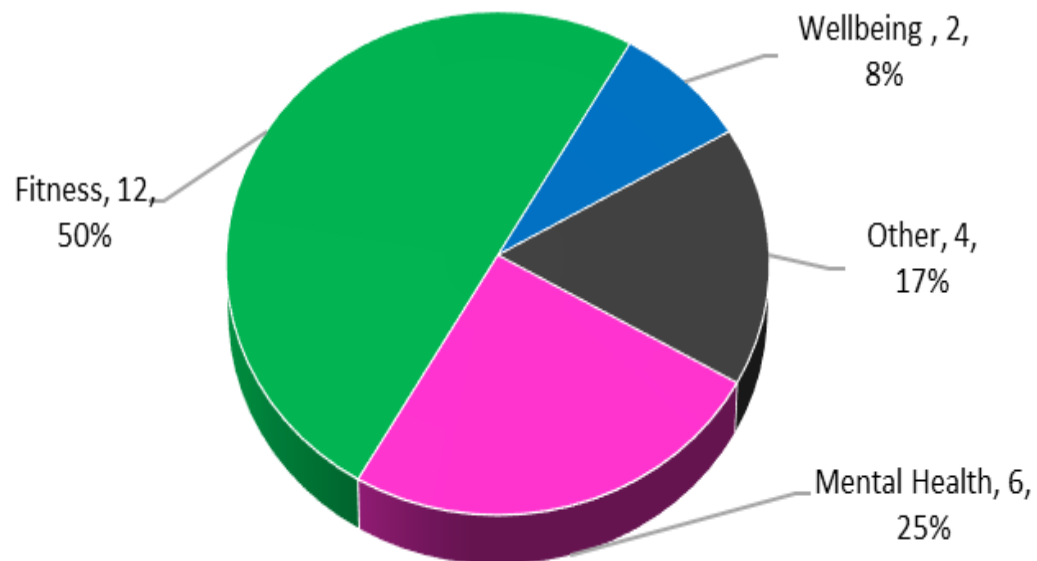
² <http://www.innovationlabs.org.uk/wp-content/uploads/2014/08/YPMH-ICT-FINAL-REPORT-Definitive-Version-Oct-Nov-2010-PDF.pdf>.

Health related technologies - Apps

Although Apps were not identified as sources of health and wellbeing information, they were discussed as health enablers. Of the 24 responses received,

- ❑ A half (12) were fitness related
- ❑ A quarter (6) were mental health related
- ❑ 2 (8%) were general wellbeing related
- ❑ 4 (17%) were identified as unspecified 'other'

Health Related Apps Mentioned (n=24)



- *Sometimes use Elefriends - app offering peer support.*
- *The tech [App] we use helps with carb counting to monitor insulin levels. Before we had it we had to work it all out and it was hard to do.*
- *My son uses Acci-check [Apps] to monitor his diabetes...[this] technology has made it much easier to manage his condition and deduced the number of appointments and visits we've made. It supports independence for him as his becoming a teenager.*



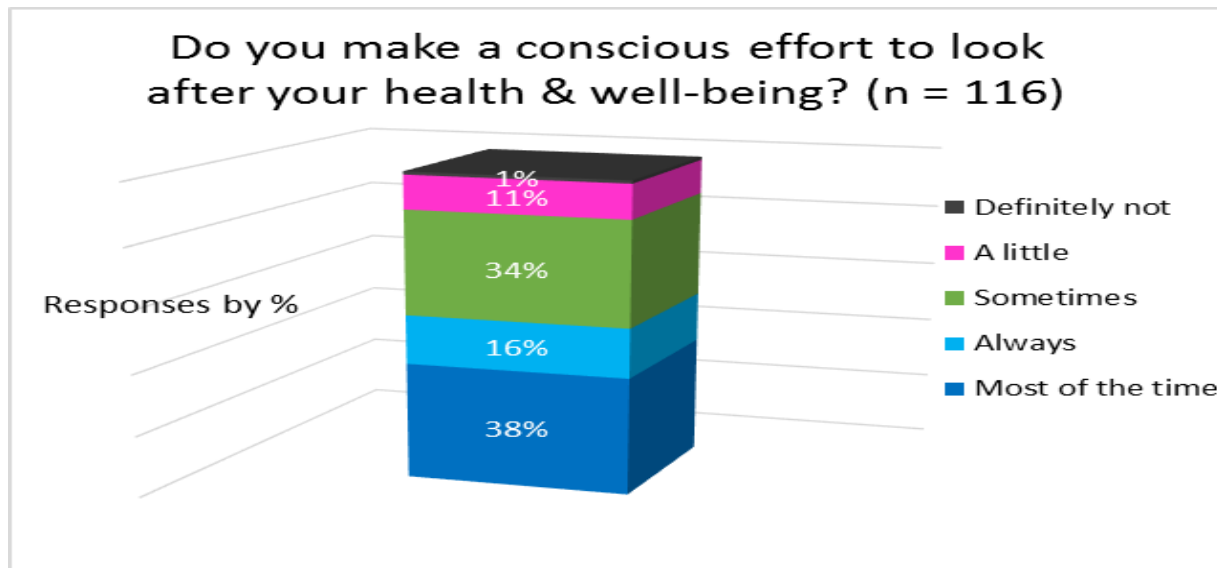
Strava, Nike+ and 7 Minute Workout are the most popular health related Apps identified as illustrated in the word cloud above.

Part 3 - Experiences and perceptions of health and care related technologies

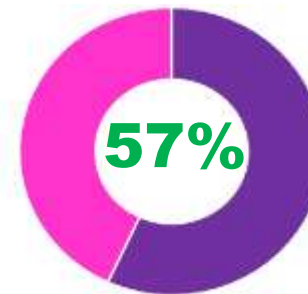
- Relationships between health awareness and technology engagement
- Knowledge, confidence and trust of technology
- Changing perceptions of TEC through demonstrations
- Uses and barriers to using health and care technologies

Relationships between health awareness and TEC engagement

- Evidence suggest that people who make conscious efforts to look after their health and wellbeing are more likely to consider and/or engage with health related technologies more readily than those who do not pay much attention to their health and wellbeing³. While we agree that such a claim is broadly speaking valid, there are nonetheless extraneous variables that determine whether, and how, people conscious about their health and wellbeing, consider health related technologies.
- Our public engagement exercise suggest while nearly all respondents (to varying degrees) said they made conscious efforts to looking after their health and wellbeing as shown in the graph below, the same trajectory was not replicated in their likelihood of using and/or engaging with health and care related technologies.



In fact, while 43% (50) respondents said they either ‘regularly’ or ‘sometimes’ considered using health related technologies,



said they ‘rarely’ or ‘never’ engaged with health and care related technologies.

³ http://www.newscenter.philips.com/main/shared/assets/gb/PR/2015/Philips_HCReport_FINAL_rev.pdf.¹⁷

Peoples' Knowledge, confidence, and trust of TEC

- Slightly over a half (51%) of respondents rated their knowledge, confidence, and trust of engaging with TEC as either 'fair' or 'good'
- Nearly a third (32%) rated their knowledge, confidence, and trust of engaging with TEC as either 'poor' or 'low'.
- Fewer respondents (17%) rated their knowledge, confidence, and trust of engaging with TEC as 'very good', 'high' or 'excellent'. The breakdown count of each of these scores is provided in the graph below.

Current Levels

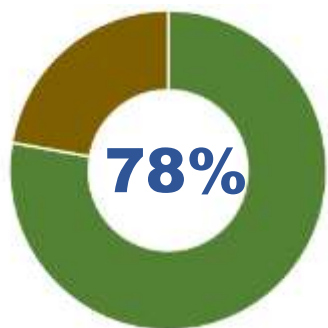


- *I like the idea of a skype GP appointment - I have autism so seeing people in person especially when noisy and busy is difficult. I would however need someone with me when I do this i.e. my carer.*
- *I can see some benefits and some problems. The benefits for carers and young people are obvious.*
- *I'd want some proof. If it was something personal and private I'd want to see someone in person. I wouldn't show them my bits or anything on a screen.*
- *Elderly people find it more difficult to use technology, we need to make sure there is training and individual support as technology develops.*
- *People can't tell if it's useful until they need it. I would want training to use the technology.*

Improving TEC acceptability through simple demonstrations

Extracts from past Healthwatch Bolton TEC related engagement exercises pointed to a range of 'fears' and 'concerns' people identified with TEC, many of which were borne out of 'limited' exposure to health and care related technologies. Part of the rationale for the current TEC engagement work this report embodies was to dispel some of these fears and concerns through simple demonstrations of health and care related technologies and with research approach described under the 'methodology' section of this report. The result of this engagement exercise was very positive.

Of the 45 people who interacted with health related technologies including remote monitoring devices and online Apps during the TEC event in Bolton town centre,

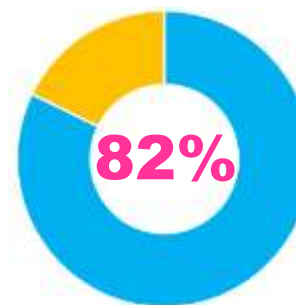


said they felt 'a lot', 'more', and 'somewhat' positive about TEC after participating in the TEC demonstrations in Bolton town centre.

❑ Only 3 (7%) people said the TEC demonstration has not made them feel positive about TEC at all.

- *I can see how it is useful for the carer but technology can be confusing for the patient.*
- *I know now what Tech enable care is but only because of our discussion today.*
- *I would be interested in having a remote blood pressure monitor.*
- *Easier than speaking to someone.*
- *I would be happy to use tele health.*
- *I work in the Integrated Neighbourhood Teams in Mental Health. Some of my clients would benefit from using the equipment. It's getting my hands on some of that as GPs don't prescribe it.*

Further to this,



Of respondents said they could see the benefits of monitoring health remotely following brief demonstrations of health and care related technologies.

This finding points to the importance that simple TEC demonstrations can have, not only in dispelling TEC related concerns, but also in promoting its usefulness for diverse populations with minimal time and cost.

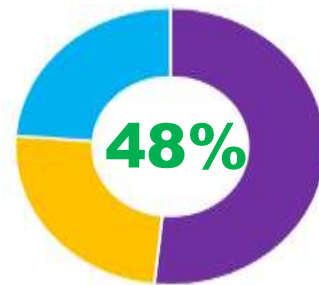
TEC uses and associated barriers

Although only 16 respondents (including young people) shared what they would use TEC for, their responses were rather interesting.

□ Half (8) of the respondents said they would use TEC for 'private' or 'personal' health and care related issues that they would not share with others.

○ This way of viewing TEC has come up several times throughout this engagement work, and is a focus of future TEC related work for the Engagement Alliance.

In addition to the limited knowledge, confidence and trust associated with TEC more generally, respondents identified several factors that may prevent them from engaging with health and care related technologies. Of the 392 respondents,



Said TEC is too complex

- Roughly equal number of respondents cited lack of awareness and/or information and costs involved (23% & 22% respectively).
- Fewer respondents (7%) showed strong human contact preferences.

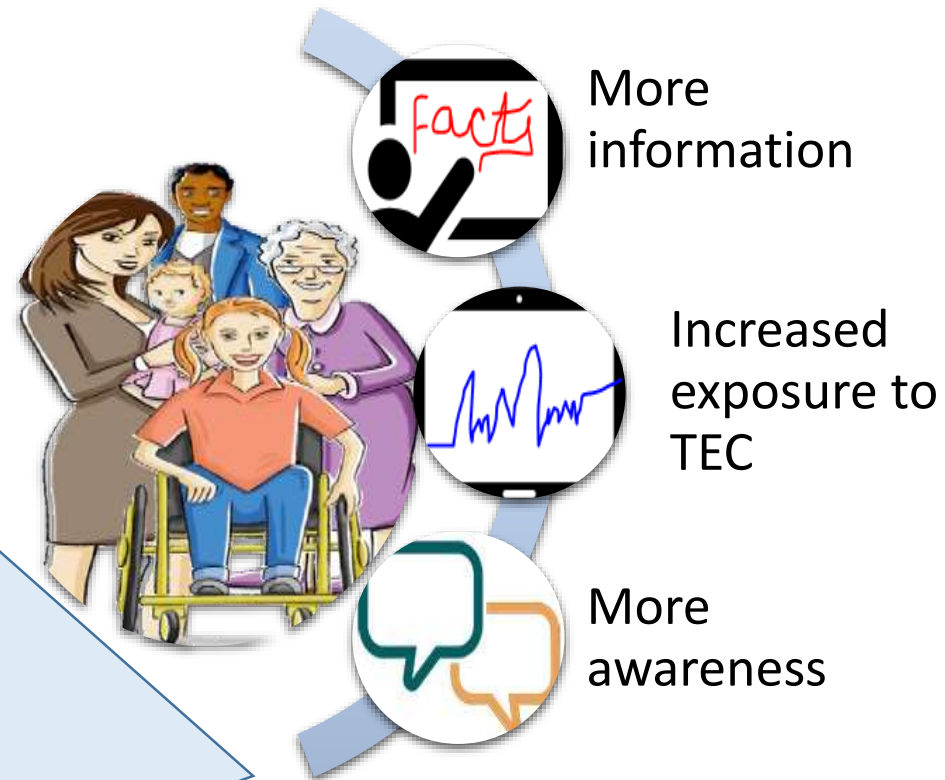
- *Maybe but there's sometimes when things go wrong. It needs to be reliable for people to use it.*
- *Older people don't know how to use modern technology - I could do it.*
- *I think technology is another avenue to make health a business - it suits the practice. The only thing it (technology) might benefit is a minor illness. I would worry that using this type of remote contact would miss something.*
- *I believe there to be a lack of knowledge often in using computer equipment. When you are ill with a long term problem often you wouldn't be able to afford resources to provide technology.*
- *I'd rather stay with a person in the practice as they know my history.*

Part 4 - Suggestions for next steps

- More TEC information
- Increased exposure to TEC
- More awareness of the benefits of TEC

Suggestions for next steps

- *Different languages can be offered and other offers, could be more inclusive and overcoming barriers to access.*
- *To advertise more and make it more public that people should manage their mental health and how they can do it.*
- *Increase availability and trust.*
- *Get GP or health care professionals to promote more Leaflets about apps.*
- *Celebs to endorse them*
- *Use of social media, forums, speak to children in schools because that's where it seems to begin to manifest itself.*
- *More information, as a patient, would give clinicians a more accurate picture of long term conditions like blood pressure and diabetes. Instead of isolated, taken at the time when you are in the surgery and dashing to get there and anxious. The other side to that is the reliability of the equipment and whether patients would be compliant with the equipment and honest about the results. I know a young diabetic who would get other 'normal' friends to give their blood for the test so she could look better than she was. Patients can often feel judged by the readings of their monitored signs.*



Conclusions

- ❑ Nearly all respondents had access to the internet but few used technology for health related purposes and very few have heard or understood TEC.
- ❑ People identified lack of information about health and care related technologies and access to them as major barriers to exploring TEC.
- ❑ Many people saw TEC too complex to use. Some expressed willingness to 'explore' for 'private' health and care related issues

Recommendations

To commissioners

- ❑ A redoubling of effort by all parts of the system to promote and utilise local champions (citizens and professionals) to inspire others to test and embrace health and care related technologies including TEC.
- ❑ Many people showed reservations, consideration should be given to mainstreaming and demonstrating health and care related technologies in the community - exploring people's perceptions at the implementation and delivery phases.
- ❑ To make reference to existing popular Apps when commissioning health and care related Apps to improve exposure and acceptability.
- ❑ To consider people's current knowledge and usage patterns of health and care related technologies and embed this in technology design processes for easier use.

To providers

- ❑ There is a need to address people's perceptions of technology as "remote" or "impersonal", and make it more engaging, interactive, and adaptable.
- ❑ A particular emphasis should be given to simplicity, usability and responsiveness of TEC devices as a means to countering perceived 'difficulties' associated with using health and care related technologies.