Older Adult Psychiatric Wards - Increasing patient engagement through use of digital devices

Project Learning Report - February 2021

Contents

Executive Summary

During the 'first wave' of the Covid-19 pandemic between March & July 2020, older adult psychiatric in-patient activities were significantly negatively impacted. Patient isolation was a challenge, in terms of physical isolation due to Covid-19, and a lack of meaningful engagement as family and carer visits were suspended while staff capacity to run patient activity sessions was reduced.

Following the first peak of the pandemic, the Health Innovation Network (HIN), Getech Enterprise and South London and Maudsley NHS Foundation Trust (SLaM) worked together to increase patient engagement on older adult psychiatric wards using Google Chrome patient devices (tablets and Chromebooks) which had been pre-populated by the HIN with dementia-friendly activity and content.

The pilot's patient cohort had a diverse range of abilities, reflected in varied psychiatric diagnosis and severity of dementia. For some patients, positive engagement was recorded as a smile, and others a conversation or enthusiasm to repeat an activity.

Main Findings

➢ Many of the patients, participating in the pilot, engaged well with the devices and enjoyed the entertainment they provided.

➢ Patients that engaged with the devices did so for approximately 15 – 30 minutes at a time, mostly with the support of a member of staff.

➢ Devices enabled therapeutic engagement and could support the management of behaviours that challenge.

➢ In the most part, tablets were preferred due to their touchscreen capability. Some patients had challenges with holding the Chromebook (laptop) and handling a mouse.

➢ Improved communication with staff on the wards could further support implementation by increasing uptake.

➢ Technical issues were identified during the pilot that would require improvement for future use.

Overall, the devices and activities were shown to add value to patient care and could be a helpful longer-term intervention to maximise activities and reduce isolation. The devices would add even more value with adjustments based on this report's recommendations.

> *"It was amazing seeing [the patient] come alive with the music [using the device] I had not seen them smile that widely before"* – Patient response recorded by Clinical Trainee, SLaM

Background

The Covid-19 pandemic significantly impacted on the provision of NHS services across the UK during 2020. During the initial wave of Covid-19, the Health Innovation Network and the pan-London Dementia Clinical Network were concerned about the challenges faced in older adult psychiatric wards. These wards were especially impacted in terms of patient isolation due to their high Covid-19 risk factors, causing significant disruption to in-patient care settings. This included reduced staff capacity and patient isolation due to:

- Sickness and self-isolation.
- Redeployment of staff to support the Trust to meet Covid-19 pressures, this particularly impacted on Activity Co-ordinators.
- Containment of outbreaks on the wards and patient isolation.
- In-patient visits by family and friends being suspended.

The HIN had an existing industry connection with **Getech Enterprise (Getech)**, a commercial provider of Google Chrome devices and licenses and saw the opportunity to work in partnership with Getech and **South London and Maudsley NHS Foundation Trust (SLaM)** to address these challenges on older adult wards.

The **Older Adult Psychiatric Wards - Increasing patient engagement through use of digital devices pilot** was scoped and implemented at pace between June and December 2020 in response to the pandemic.

Aims and Objectives

Aim

A small-scale pilot aimed to test whether Google Chrome Devices (tablets and Chromebooks/laptops) can be used on older adult psychiatric wards by staff to provide engagement and interest for patients during the Covid-19 pandemic, and whether these devices may be a helpful support or an activity tool for future use.

Objectives

- To determine and test dementia friendly engagement activities and content for the devices through staff and patient feedback.
- To supply and test the customised tablets and Chromebook/laptop devices through the partnership with Getech.
- To design and implement a survey for patient and staff feedback. *
- To utilise SLaM Trainee Clinical Psychologists from each pilot ward to support implementation.
- Evaluate impact and pilot learnings.
- Produce project learning report.

*The patient feedback survey was designed by the HIN based on the existing HIN 'Measuring Dementia Outcomes' report. The survey and web link to the report can be found in Appendix 3.

Timeline

The pilot was initially intended to run for an eight-week period. An extension was then agreed amongst partners to maximise learning opportunities. This resulted in a Phase 1 (July – September 2020) and a Phase 2 (October – December 2020).

Partners and Finance

Due to clinical rotations, two separate groups of Trainee Clinical Psychologists supported implementation across the two phases. See Acknowledgments (p. 15) for full details of partners.

Getech provided all Google Chrome devices for the pilot at no cost. The HIN provided project management resources and all clinical roles involved in the pilot were provided within existing SLaM allocated clinical hours.

Findings

The pilot aim was to provide patient engagement and interest using Google Chrome Devices uploaded with appropriate content. The data collated during the pilot to evidence this aim included:

- Patient and staff surveys (paper and online versions – Appendix 3)
- Focus groups with Trainee Clinical Psychologists and Getech (MS Teams Meeting – Appendix 4)
- Four patient case studies (completed by Trainee Clinical Psychologists in Phase 2 - Appendix 2)

Patient case study 1, below provides an example of the patient cohort.

Health Care Professional Trialling Pilot: About
Second year trainee clinical psychologist working on older adult psychiatric unit.

Relevant Patient Information
Patient is an older adult between 70 and 80 years old. Patient is presenting with symptoms associated with schizophrenia. The symptoms include experiencing grandiose delusions, auditory hallucination and bizarre behaviours. Patient lives with a family member. Patient has limited social interactions.

Description of how Google Chrome Devices were used

Patient Experience
The patient was introduced to the Google Chromebook and was supported with navigating different applications on the device. The patient listened to Spanish and Jazz music on YouTube, watched a few clips of Laurel and Hardy, and participated in a group exercise by playing the video of "Chair Yoga with Sherry" Pros: Patient enjoyed watching the videos and listening to music, which kept them busy, improved their mood and distracted them from their auditory hallucinations Cons: Patient struggled with using the device. It was difficult for patient to type and use the mouse

keypad. Patient kept touching the screen as they thought it was a touchscreen, which would have been more feasible and accessible for this patient.
Staff Experience
I strongly believe in using technology as an adjunct to psychological interventions or using it alone can help in improving mood. I struggled with implementing this pilot project on the ward as it was busy during the Covid-19 and this pilot project was not a priority for many staff members as they had to attend to patient care. The patient struggled with using the mouse keypad and the keyboard. It would have been helpful if we had tablets or touch screen laptops. There were too many options on the device, it would have been helpful if the presentation of multiple apps was a bit more simplified
Conclusion
Overall, it was a good initiative to support older adults during the Covid-19.

More case studies are available in Appendix 2 providing examples of the type of patients involved in the pilot and the varied cognitive and physical abilities across the cohort. The feedback collated is a subjective view provided by clinicians and other staff on behalf of patients as well as their own experience of assisting patients to engage with the devices.

Findings are grouped into six categories, with key points summarised accompanied by quantitative and/or qualitative data.

1. Patient cohort and uptake

All devices were actively used across the four older adult psychiatric wards at SLaM, with some wards using two devices depending on need (i.e., ward size/number of patients).

Ward	Devices – type & quantity
Ward 1	1 Chromebook
Ward 2	1 Tablet & 1 Chromebook
Ward 3	1 Tablet & 1 Chromebook
Ward 4	1 Chromebook

Surveys were completed by the Trainee Clinical Psychologists and other ward staff supporting the patients. The surveys are indicative of the number of patients that engaged with the devices, although some surveys completed may have been with the same patients on different occasions. The pilot involved a small sample size, as shown below by the number of completed surveys.

- Phase 1 completed surveys: 24
- Phase 2 completed surveys: 27

Most patients that engaged with the devices across both phases were between the age ranges of 70 and 80+. The highest percentage was for the ages of 70 to 79 (38% and 59% for phase 1 and phase 2). The graph in Fig. 1 shows a breakdown of the age ranges.

Not all the patients using the devices had a dementia diagnosis, or a diagnosis was not confirmed in some of the surveys ('no response' answers). Findings show that more patients with a dementia diagnosis engaged with the devices in phase 1 (41.7%) compared to phase 2 (22%). A breakdown of the data is shown in the graph in Fig. 2. This demonstrates the varied cognitive ability of patients involved in the pilot.
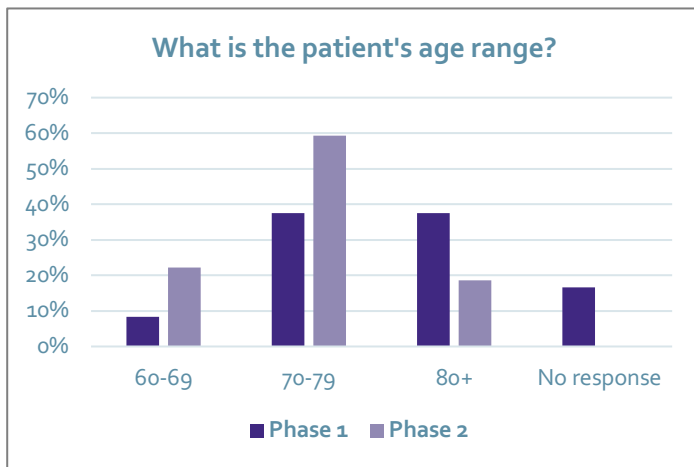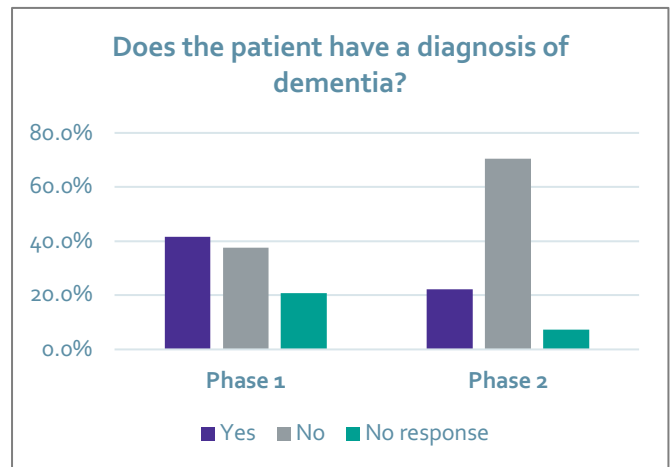

Fig. 1

Fig. 2

2. Set-up of devices and implementation on wards

The devices were set-up by Getech with a customised navigation page that included pre-populated website links and Apps from a selection of dementia friendly content (listed in Appendix 1). Each device had two separate log-on options once switched on. It should be noted due to Covid-19 restrictions the Getech team provided all support remotely as there was no opportunity to meet staff or visit the wards.

The only local set-up required from the Trainee Clinical Psychologists was to connect the devices to the ward Wi-Fi and support implementation through championing usage of the devices.

Log-on options:

- **User log-on** – required a password and provided <u>access to websites and Apps</u>.
  - o Apps required user/account details and therefore needed to be attributed to an individual user and password.

- **Guest log-on** – no password required and provided <u>access only to websites</u>.

At the start of phase 1, the Trainee Clinical Psychologists (Trainees) and their supervisors at SLaM met remotely with Getech to be shown the navigation page and how the devices worked. Learnings showed that a more in-depth project induction would have been helpful for the Trainees. For this reason, a project guidance document was shared ahead of phase 2 (see Appendix 5) along with an induction meeting run by the HIN for the second round of Trainees to further support uptake.

Feedback from phase 1 and 2 focus groups highlighted the below key points.

Learnings

- Guidance was too limited – particularly for phase 1

> *"There was nothing really to hand over to staff. And I don't know if that was necessarily needed but I know I had to sit down with staff myself and [...] say, this is how you turn them on this is how they work. This is what they're for."* – P1 Trainee, SLaM

> *"[Getech were] really helpful, and had some really great knowledge, but I don't think [the meeting] was quite specific enough like, so this is how to go onto the devices."* - P1 Trainee, SLaM

- It would have been beneficial to have more set-up or induction time for staff pre-implementation period, particularly as shift patterns made it difficult to communicate quickly with all staff about changes.

> *"almost need like an initial sort of period of, just not part of the actual pilot, actually setting it up and kind of getting used to the idea and having the chance to ask questions"* – P2 Trainee, SLaM

> *"Getting other staff to buy into the project and supporting them with how to set up the device and things like that was really really challenging [...] even outside of Covid times it's really difficult on a ward to get all staff together in one room, to be able to talk about what the project is what the device is for how to use it, how to set it up"* – P2 Trainee, SLaM

- Log-on access and difference in set-up expectations

> *"There was some confusion with the technology [...] about the guest access into the devices"* – P2 Trainee, SLaM

> *"[the password log-on] did add an additional barrier to staff engagement because [...] having to remember an additional password on top of things, means that they are less likely to want to use the devices in the first place"* – P2 Trainee, SLaM

> *"They weren't quite set up as we'd expected"* – P1 Trainee, SLaM

It was agreed in the second focus group with Getech and phase 2 Trainees that a face-to-face induction or drop-in clinic with the devices run by Getech prior to implementation would have likely mitigated many of these challenges. This process would be usual procedure for Getech but was not possible during Covid-19.

- Some of the Trainees felt the tech set-up was straightforward but acknowledged this was likely due to their familiarity with using similar devices.

> *"The devices are quite intuitive, and [...] if you ever used a tablet device or an Android device any time before I think that was really straightforward"* – P1 Trainee, SLaM

> *"I thought it was very simple to log on and access all the apps and everything so from, from my perspective as somebody who is [...] more used to tech, and that was absolutely fine."* – P2 Trainee, SLaM

- Content guide was helpful

> *"[the] booklet about engaging older people on the ward with certain activities [...] was quite comprehensive, and I thought that was really nice. I think in terms of the documents that [were] sent to us. We had enough guidance to be able to set up the devices on our own"* – P2 Trainee, SLaM

3. Usability and Staff Support Required

Survey results show that many of the patients that engaged with the devices found them easy to use (58% of phase 1 responders and 48% of phase 2 responders), as shown in the graph in Fig. 3. The majority refer to the ease of use with the tablet device over the Chromebook as shown in the table in Fig. 4.
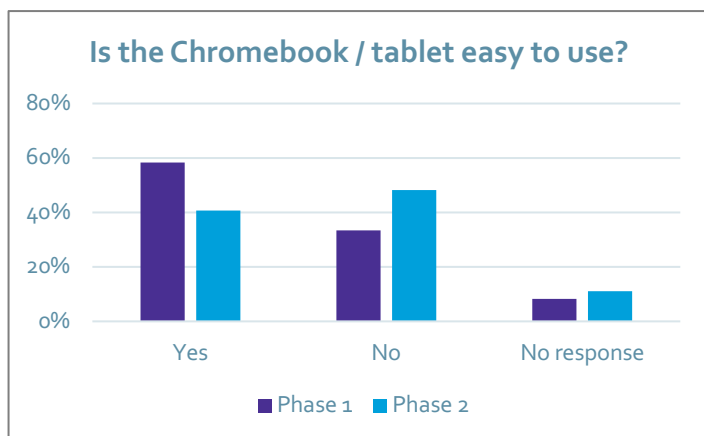

Fig. 3

Device Type – ease of use

	Tablet		Laptop	
	Yes	No	Yes	No
Phase 1	93%	7%	13%	88%
Phase 2	67%	33%	39%	61%

Fig. 4

Qualitative feedback on usability supports these results to some degree, dependent on the patients' cognitive and physical ability as well as their capability or familiarity with using technical devices.

Some examples include:

"It was difficult to use by myself" - P1 patient, survey response

"There were definitely quite a lot of patients that we could kind of just leave the laptop with and perhaps they were using it to use YouTube or watch something that they wanted to" - P1 Trainee, SLaM

"Having Google Chrome tablet maybe with touch screen will be more beneficial than having a laptop [...] based on my experience with patients I think that the laptops are not user friendly for this population." – P2 Trainee, SLaM

"We had a patient with Parkinson's, and because of the tremor It was really hard for [them] to use the mouse." – P2 Trainee, SLaM

Discussion in focus group 2 also referred to some patients associating the Chromebooks with work related tasks rather than entertainment and that swiping the screen was often an easier task than handling a mouse.

Getech has suggested that by using a version of Chromebook that has a foldable keypad and touch screen capability these challenges could be mitigated.

In terms of staff support required, survey findings from both phases of the pilot clearly showed that most patients required support to engage with the devices as shown in Figs. 5 and 6. However, staff felt in the most part that supporting this need was manageable (96% and 93% for both phases).
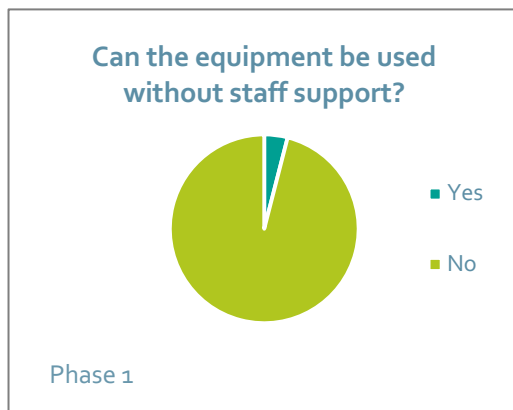
Can the equipment be used without staff support?

- Yes
- No

Phase 1

Fig. 5

Can the equipment be used without staff support?
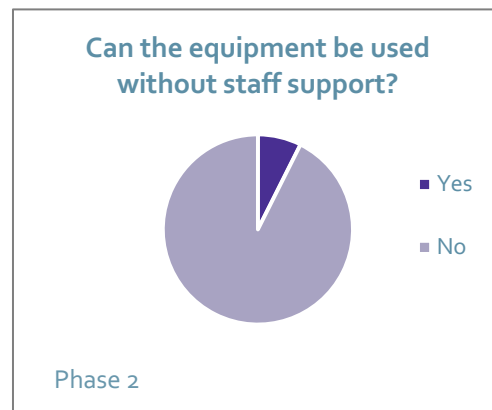
- Yes
- No

Phase 2

Fig. 6

Key themes on staff support that emerged from the qualitative data included both pros and cons:

- Mixed support needs - with patients either very capable of independent engagement or requiring significant support.

- Navigation of the content page was a challenge that required more staff support (for example being 'locked in' Apps and unsure how to return to the home dashboard, or expired website links).

- Staff support required with patients was cited as 15-30 minutes, which was generally acceptable, unless pressures of Covid-19 reduced staffing making this time commitment more challenging.

- Staff support with patient usage enabled time for one-to-one therapeutic engagement that was

enjoyable for both patients and staff as well as supportive of reducing behaviours that challenge.

➢ An example of this is described in patient case study 3, where a patient's use of disinhibited language and behaviour such as shouting is reduced when they engage with the device. In this example the patient enjoyed listening to music and playing the 'Retro Fish Game' App.

4. Device content

Content issues were a challenge throughout the pilot as various websites and Apps listed in the content guide proved to be inaccessible for patients. The reasons for this were:

Subscription fees
➢ Not within scope of pilot budget and cost was not identified before implementation.

Single account ownership/user required for set-up and access
➢ Not possible with multiple users for the devices.

Compatibility issues of some Apps with Google Chrome devices
➢ Especially Android Apps.

Information Governance risks
➢ Some Apps/websites for memory games required personal photographs and stories to be uploaded, which was not appropriate for multiple user access.

Outdated static weblinks
➢ Some of the websites that were included featured free content available at the time of the first Covid-19 wave but removed after the summer and not accessible for phase 2 of the pilot (including National Theatre free streaming of live shows).

"What was on the tablet [...] and the laptop when they arrived was not corresponding to what was in the booklet and what we were expecting" – P1 Trainee, SLaM

"[the] list of resources, although they were very helpful, some of the links can be outdated in terms of free resources, and I think a lot of the staff as well became less enthusiastic [...] and instead would just end up [...] going onto YouTube to play music instead of actually engaging with any of those resource" – P2 Trainee, SLaM

Where possible, Getech provided remote support with the content issues identified in the first phase. Partners acknowledged that the issues had been quite disruptive to uptake and an extension to the pilot was agreed. Between phases 1 and 2, the devices were returned to Getech to be re-configured including adding missing content that was compatible and uploading an electronic version of the feedback survey.

Qualitative feedback on device content (other than missing content) was mixed. Some themes included that the content was mostly appropriate but that there may have been too much choice. A lack of some of the anticipated content and perhaps overwhelming choice led many staff and patients to accessing content they were familiar with directly from general websites such as YouTube.

5. Patient satisfaction – staff perception

Findings from the surveys show that when patients did engage with the devices they benefitted from the interactions, enjoying the activities and entertainment available (whether independently, with a staff member or, on occasion, several patients together). Results are shown in the graph in Fig. 7.

Activities that were particularly enjoyed by patients included:

- Reminiscence activities (including watching old film footage of the royal family, familiar TV shows or films)
- Listening to music (different languages and cultural as well as religious music – via YouTube)
- Engaging in religious activity through audio bible verses or worship music (via YouTube)
- Leisure activities (including 'Retro Fish Game' and colouring Apps)

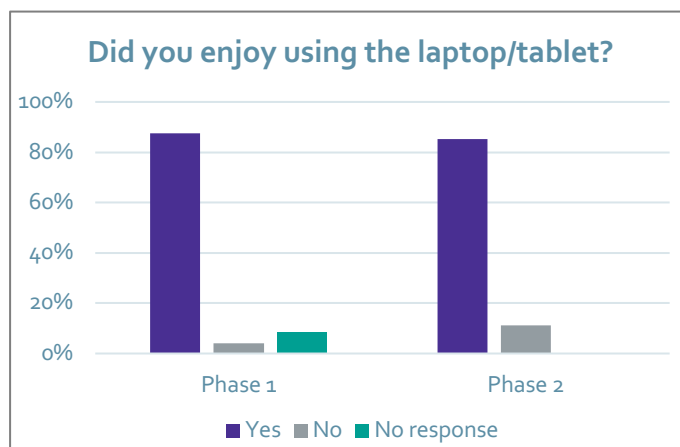**Did you enjoy using the laptop/tablet?**

Fig. 7

The Trainees supported these findings in the focus groups with feedback on high levels of enjoyment and that using the devices enabled personalised care, such as:

"[reminiscence activities] were really helpful and patients loved to watch them and talk about their own experiences and they really related to what they were watching." – P2 Trainee, SLaM

" Patient valued being able to [immerse] herself in a wildlife documentary and so enjoyed it that she invited one of the other patients to come and watch it with her" – P1 staff response to survey, SLaM

"The use of the Google devices […] was successful in drawing out positive emotions and increasing activities." – Patient case study, P2 Trainee, SLaM

There were these glimmers of just bringing back their memories" – P1 Trainee, SLaM

> *"Patients definitely did enjoy engaging with it. I think one of the things that's really key is it enabled us to do some kind of really person-centred work with them [it was] patient specific and we could find a particular niche thing that was very valuable and meaningful for them, which was really good."* – P1 Trainee, SLaM

Survey results showed that 96% of staff found activities that patients were interested in, although findings on patient choice were more mixed. When asked if they chose what to do on the devices, most survey responses were 'yes' as seen in the graph in Fig. 8.

Did you choose what to do on the laptop/tablet?

Fig. 8
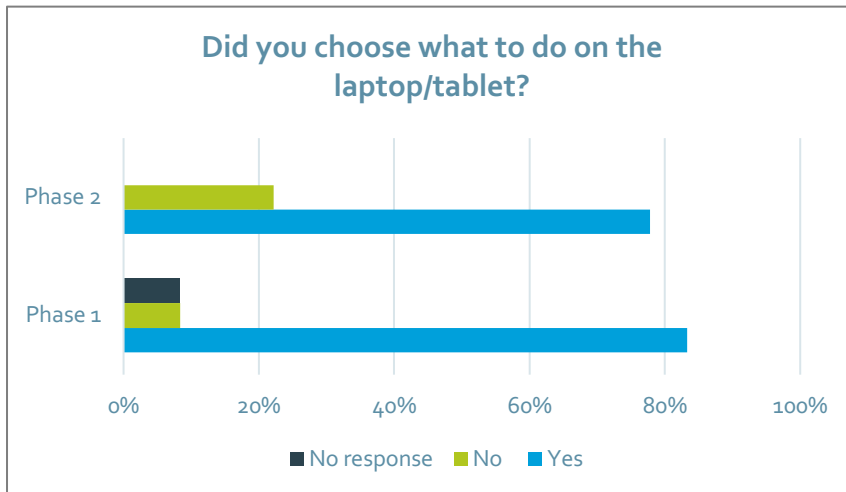
Qualitative feedback from the focus groups and patient case studies show that on the most part, staff were choosing on behalf of the patient due to the complexity of the patients' needs or giving the patient a smaller selection of options to then choose from.

This shows a learning that this survey question may not have been explicit enough, with some staff answering with their experience and perhaps not on behalf of the patient.

Some example comments on patient choice:

> *"I would usually give them a choice between two different activities. So, and then they were choosing between those two activities so I think there was a bit of patient choice"*- P2 Trainee, SLaM

> *"Due to complexity of the individual's needs [...] The resident wasn't able to choose what they wanted to use on the device but the student [nurse] was able to make an informed decision of this based on their knowledge of the resident."* - Patient case study, P2 Trainee, SLaM

6. Future use beyond Covid-19

Responses from the survey question of whether the equipment should be made available on a permanent basis, were overwhelmingly positive, with 98% of responders selecting 'yes'. Qualitative feedback on future use included positive attitudes as well as some apprehension about challenges and the improvements that would need to be made if the devices were to be successfully embedded on wards in the future. For example:

- The devices add real value in terms of supporting patient-centred/personalised care and engaging patients in enjoyable activities.
- There could be an opportunity to use the devices to support visitation activity.
- Devices enable therapeutic engagement and could support managing behaviours that challenge.

Recommended Improvements

- Communication – implementation would need more consideration to ensure all relevant staff are involved to maximise clinical uptake on the wards.
- Agreement on type of devices used – this report's findings recommend tablets over laptops.
- Active management of the content to mitigate issues outlined above.

"it would be a positive thing for this Ward, but it would take a lot of time and a lot clearer a strategy of implementations, to really get it going, and to have more apps readily available, [...] I think the implementation process would have to be different if it was to be reintroduced, but I think the value would be very evident once that was done properly."- P1 Trainee, SLaM

"I think they're a really valuable tool" – P1 Trainee, SLaM

"I think you might find the uptake and things is better if it was a [...] slightly more stable period in time" – P1 Trainee, SLaM

"To fully implement an initiative like this on the ward would require more input/championing from the wider clinical team" – Patient case study, P2 Trainee, SLaM

Key Learnings and Recommendations

Category	Learnings	Future Recommendations
Set-up of devices	• Clear communication strategy needs to be in place • Tech capability amongst users (staff and patients) was varied	• Ensure clear expectations of available content and how to navigate it on devices • Build in buffer time to ensure all set-up and any tech issues are resolved prior to pilot start
Implementation on wards	• More time was required for induction aims and objectives of project • Remote inductions did not effectively support implementation and uptake	• Provide clear guidance on purpose usage and set-up for ward staff and communicate effectively so all staff are informed • Provide opportunity for a face-to-face site visit with Getech and the HIN to support effective implementation
Usability and staff support required	• Touchscreen (tablet) was generally preferred amongst most patients • Staff support with patients is mostly required, this is manageable and has benefits if sufficient staffing is available	• Use tablets in the future or Chromebooks with a touchscreen • Ensure sufficient staffing is available to support device usage and that staff are familiar with the technology • Promote the person-centred care benefits for staff and patients
Device content	• Static content can quickly become outdated/inaccessible • Too much choice can be off-putting for patients • App compatibility and subscription fees weren't considered	• Ensure content is frequently reviewed and is still accessible • Consider reducing volume of content and improving navigation • Ensure only content suitable for multiple user access is available • Ensure all Apps are compatible and free
Patient satisfaction	• Devices and content provided enjoyment to patients • Patient choice was limited due to cognitive abilities	• Staff support is often required to enable patient choice
Future use beyond Covid-19	• Benefit to patients was evidenced and there can be value in future use • Implementation and uptake issues would need to be resolved	• Consider recommendations from this report for any future use

Conclusion

This project has provided evidence that Google Chrome devices provided meaningful patient engagement and interest during the Covid-19 pandemic between July and December 2020. The devices also provided the opportunity for more personalised and patient-centred care. The requirement for staff support meant that the devices were generally unable to be used by patients independently and this was at times a challenge with reduced staff capacity during Covid-19.

Acknowledgments

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- Phase 2: Natasha Ramzen, Tanisha De Souza, Emily Seager and Natalie Lim

Getech Enterprise

Thank you to Getech for providing the devices for the pilot

- Richard Maclean
- Martin Whitehead

Appendix

Appendix 1: Google Chrome device content list

Maintaining-Activities-for-Older-Adults-du

Appendix 2: Patient case studies

Google Pilot_Case Study 1.pdf

Google Pilot_Case Study 2.pdf

Google Pilot_Case Study 3.pdf

Google Pilot_Case Study 4.pdf

Appendix 3: Patient and staff experience survey

[W] Evaluation Questions Google OA Ward Pilot

Measuring Dementia Outcomes Report: https://healthinnovationnetwork.com/measuringdementiaoutcomes/

Appendix 4: Focus Group questions

[PDF] Google Device Pilot Focus Group Qs.pdf

Appendix 5: Phase 2 Introduction/guidance document for Trainees

[W] Google Pilot_Introduction&Tir