# FEROS CARE'S LET'S GET TECHNICAL

## A digital literacy building program for Australian seniors

## **EVALUATION REPORT**

Evaluation by Southern Cross University | January 2021





# ACKNOWLEDGMENTS

This evaluation was commissioned by Feros Care and funded by the Australian Government's Department of Health and Ageing under the Commonwealth Home Support Programme Innovatons Grant.

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WE WISH TO ACKNOWLEDGE THE 100 SENIORS AND THEIR FAMILIES WHO ENTHUSIASTICALLY PARTICIPATED IN THIS PILOT.

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## THE LET'S GET TECHNICAL WORKBOOK SUITE



## LET'S BROWSE



**LET'S CUSTOMISE** 

MACBOOK

#### LET'S CUSTOMISE IPHONE AND IPAD



COMMUNICATE

SMARTPHONE

**LET'S CONNECT** 

ONLINE

ANDROID SMARTPHONE

LET'S

ANDROID



LET'S CONNECT ONLINE WINDOWS



LET'S CONNECT ONLINE MACBOOK



LET'S USE APPS IPHONE / IPAD



# **EXECUTIVE SUMMARY**

## INTRODUCTION

This report details the findings of the evaluation of the Feros Care Let's Get Technical program (LGT). The program was funded by the Australian Government Department of Health and Ageing Commonwealth Home Support Program (CHSP) Innovations Grant. LGT is a digital literacy building program that aimed to support technology confidence, independence and the health and wellbeing of senior Australians, aged 65 years and over, or over 55 if Aboriginal or Torres Strait Islander. Seniors generally have lower levels of digital literacy and are less likely to use online technologies in their daily lives than their younger counterparts (Australian Government, 2018). The Australian Government has a strong digital strategy, with all services being transitioned online by 2025 and a plan to be at the forefront of digital adoption globally by 2030 (Digital Transformation Agency, 2020). With this digital future in mind, Feros Care developed the LGT pilot program to support seniors to successfully and confidently navigate the online world, including essential government and other online services, and social and community services.

The initial target population for the pilot program included senior clients of Feros Care funded by the Commonwealth Home Supported Program (CHSP) in the community from the Gold Coast QLD, Far North Coast, and Mid North Coast, NSW. These seniors were identified as lacking the digital skills and confidence to independently use their current digital technology.



LET'S CUSTOMISE ANDROID SMARTPHONE AND TABLET







6



LET'S EMAIL GMAIL APP & GMAIL ONLINE







7

The LGT program was developed with the aim of enabling seniors to become more independent in managing their daily affairs; staying connected and secure in their homes by increasing digital skills and confidence using technology to manage their daily affairs. The program was conducted during the COVID-19 pandemic which affected the lives of our most vulnerable communities. This presented a unique opportunity to address the health challenges of COVID-19 restrictions. By building the skills of seniors for online social engagement, it was anticipated that this would minimise feelings of loneliness and isolation that many people would potentially experience during the pandemic. The program enabled seniors to connect to their grocer, social services, health care practitioners and bank via their smart device, as well as communicate online with friends and family.

An additional aim of the project was to explore any benefits to a person's health and wellbeing which may result from being connected online. Access to essential services and health advice was monitored and the program provided additional support to clients virtually whilst being isolated in their homes.

The LGT program involved six to ten senior friendly and personalised digital skills sessions that were provided face to face in the client's home, giving them control over what skills they learnt, and how they were learning them. Sessions were guided by the client's individual goals that were identified during the first visit and continued to be adapted to the client's needs as they progressed through the program. There was no limit on device and/or internet connectivity and use. Clients were encouraged to keep notes in provided workbooks, designed specifically by Feros Care, that supported their chosen goals and subsequent learnings.



## **EVALUATION METHODOLOGY**

The evaluation framework involved testing a series of propositions that were developed from the evaluation objectives. The overall purpose of the program objectives was to explore the extent to which the LGT program supported senior's perceived:

- 1. Independence;
- 2. Confidence using technology;
- **3.** Social connectedness:
- 4. Health and wellbeing.

Multiple sources of data were used to address the objectives, specifically:

- a) Detailed activity-based audit data, including: participation data, IT service request data, number of home visits, referral statistics, timeframes recorded for new installations, client specific data i.e. digital literacy and technology use prior to and after participating in the program.
- b) Quantitative data, including: the LGT Questionnaire (measures of independence, social connectedness, digital literacy, digital technology use and confidence, eHealth Literacy Questionnaire and the Personal Wellbeing Index (PWI)), Client Experience Questionnaire (CEQ; developed from interviews with clients).
- c) Qualitative Data, including: group interviews with clients representing all stakeholder groups, case studies of exemplar examples of client experience of the LGT program drawing on the data collected above.
- d) Literature review to underpin each of the propositions.

## **AIMS AND OBJECTIVES**

The aim of the LGT program was to provide a scalable digital literacy building program that would support the capacity and confidence of Australian seniors to use technology to support their independence and quality of life.

The project objects aligned to supporting:

- independence
- confidence using technology
- social connectedness
- health and wellbeing

![](_page_4_Picture_22.jpeg)

## **REFERRAL SOURCES**

In order to determine if there was a demand for this service, Feros Care sent out direct marketing to existing clients in the Far North Coast, Mid North Coast, NSW, Gold Coast, Brisbane North and Brisbane South, QLD, advising them of the technology training program that was being offered. Clients were given the opportunity to express their interest in the program by either phoning the Feros Care team or returning their expression of interest via a reply-paid envelope.

![](_page_5_Figure_2.jpeg)

## RESULTS

#### Clients

One hundred clients were enrolled in the LGT program between 17th January and 20th June 2020. Clients were aged between 65 and 96 years old (M = 80.86, SD = 5.79).

Most clients were female (74%), born in Australia (70%), lived in NSW (61%), had a current spouse/partner (43%), were non-indigenous (98%) and were of Australian ethnicity (78%). The majority of clients reported English as their first language (94%). Most clients lived alone (56%), followed by those who lived with a partner (39%). The largest proportion of clients reported that their highest level of education was some years of high school (36%), followed by a Bachelor Degree (20%). The majority of clients were receiving the Age Pension as their current source of income (80%).

![](_page_5_Picture_7.jpeg)

#### **Outcomes of Participating in the LGT Program**

The LGT CEQ indicated that the most common reason clients gave to participate in LGT was to be able to use new technology (16.1%). In particular, clients participated in the pilot to:

![](_page_5_Picture_10.jpeg)

These goals were largely achieved – case studies and interviews highlighted the results of participating in the LGT pilot program.

Other benefits of participating in the trial included the client's perception that:

93%	TECHNOLOGY HAD HELPED WITH COMMUNICATION
37%	THEY WERE MORE SOCIALLY SUPPORTED
100%	THE PROGRAM HAD INCREASED THEIR CONFIDENCE WHEN USING TECHNOLOGY
96%	THE PROGRAM HAD INCREASED THE QUALITY OF THEIR LIFE
92%	THEY HAD ACHIEVED ALL OF THEIR SET LEARNING GOALS
80%	THE PROGRAM HAD CHANGED THEIR LIFE

The outcomes of participating in the LGT program are discussed briefly below. For a comprehensive review of the results please refer to Section 5 of this report.

![](_page_5_Picture_16.jpeg)

#### Independence

Client's feelings of control over their daily affairs increased significantly after participation in the LGT program (p < .001) and this improvement was sustained at the 6-week follow-up. Additionally, client's feelings of independence when performing activities of daily living was significantly greater after participation in the program (p = .001) and this was also sustained at follow-up. Almost all clients (97%) reported that the program improved their independence.

#### Confidence using technology

Clients' confidence using technology increased significantly after participation in the LGT program (p < .001). The majority of clients (88.9%) reported that the program improved their confidence to use their device(s) and technology.

#### Social connectedness

Clients' satisfaction with family/social support increased significantly after participation in the LGT program (p = .005) and this was sustained at follow-up. Clients used technology to communicate significantly more often after participating in the program (p < .001) and this increase in communication behavior was sustained at follow-up. Engagement with community significantly increased after the program (p = .014) and this was sustained at follow-up. Client engagement in volunteer/social activities was maintained across the program period.

#### Health and wellbeing

Clients' personal wellbeing significantly increased after participation in the LGT program (p = .001) and was sustained at follow-up. Client's sense of "Achieving in Life" (p = .009) and "Future Security" (p < .001), domains of personal wellbeing, were also significantly greater after participation in the LGT program. In addition, most clients (96%) reported that the program increased their quality of life.

#### Digital health literacy

Clients reported significant improvements on all domains of digital health literacy; ability to process information, ability to actively engage with digital services, feel safe and in control, motivated to engage with digital services, access to digital services that work, and digital services that suit individual needs (all p values < .001).

![](_page_6_Picture_10.jpeg)

## **PRICING AND SUSTAINABILITY**

100% of the clients said that they would like to continue with the program and that they would be happy to pay approximately \$50 for each support session.

At the time of writing this report the true cost of delivery of LGT, including overheads, was \$117 for a session lasting 1.25 hours per week per client. In total, a digital literacy support package consisting of one assessment visit and 9 support visits amounted to \$1250.

The pilot also identified the potential to increase service efficiency, through the use of virtual services, if a client had the digital capacity and confidence. A case management model that combines virtual sessions and home face to face visits has the potential to improve efficiency by increasing the number of clients managed by each provider or Technical Support Officer (TSO). Reduced travel time and costs will allow for a further reduction in costs.

### CONCLUSIONS

The findings of this study indicate that the LGT program was well-received by clients and effective in promoting their engagement with technology. The program was successful in building clients' digital health literacy. Additionally, clients' communication and social support, feelings of control and independence in their daily lives, technology confidence and their overall health and quality of life improved through increased technology use.

Further robust research is required, including a longer follow-up period to determine the sustainability of the program effect. Nevertheless, the LGT program was successful as a pilot, highlighting the potential for a digital literacy building program to make a significant and positive impact on the lives of seniors.

The large response rate and qualitative feedback indicated that seniors were interested in the program. The program was at capacity within a week of the program marketing campaign and had a waitlist of over 100 seniors within two weeks, highlighting a large demand for this type of service in the community. Due to the positive response from clients and their families, Feros Care is proud to commit to the scaling of the program and aims to achieve service sustainability with a reasonable operating cost model.

## RECOMMENDATIONS

#### **RECOMMENDATION ONE:**

That the technology training program LGT becomes embedded into a mainstream component of service delivery for all seniors. This would involve changes to current health care and aged funding guidelines and models to ensure that this program and its use of emerging technologies are considered a standard service option. Our intention is for this program to be seen as an enablement or individual capacity building to improve independence and connection. An approved intervention that is considered as important as more traditional supports such as personal care or domestic services.

#### **RECOMMENDATION TWO:**

The second recommendation is for the provision of funding from the government to support clients to access the technology training program "LGT". And/or to embed LGT as a standard service option within the service specifications of current aged care funded programs (that is, within Home Care Packages and Commonwealth Home Support Programs). The potential cost savings for the health services and government human services departments suggest that it is cost effective to invest in digital literacy building programs for seniors.

#### **RECOMMENDATION THREE:**

New strategies for widespread change management should be sought, to support the uptake of the program by other service providers. Information about the program could also be provided to care givers, encouraging participation in the program to further promote the uptake of technology, and its continued use.

#### **RECOMMENDATION FOUR:**

The introduction and continuous inclusion of a national policy agenda is important to drive

a more strategic and coordinated approach to the funding, research and deployment of digital literacy building programs for Australian seniors.

#### **RECOMMENDATION FIVE:**

Technical Support Officers providing the LGT service requires specific skills, knowledge, and attributes for successful delivery of the program. Ideally knowledge and skills in aged care, adult learning principles, empathy and the general understanding of the risk factors in relation to the potential client cohort. Although Technology based skills are an essential capability for the role, additional target aged care related competencies should be included with orientation and ongoing staff development.

#### **RECOMMENDATION SIX:**

Following the positive response from clients regarding the use of the workbooks and homework activities, it is recommended that these 'physical' resources continue to be developed and utilized to support the learning outcomes.

#### **RECOMMENDATION SEVEN:**

Given the need for more support highlighted by client feedback it is recommended that clients are provided access to additional 'online' resources. Training videos or visual step by step help guides should be developed and easy access made available to clients online. The client would benefit with timely support to build the feelings of independence and confidence in technology.

#### **RECOMMENDATION EIGHT:**

Further robust research using a control group that examines the long-term impact of digital literacy programs for vulnerable groups, and the cost benefit to the consumers and the health service providers.

## LIST OF ABBREVIATIONS

LGT	Let's Get Technical	TS0	Technical Support Officer
VC	Video Conferencing	CEQ	Client Experience Questionnaire
VSC	Virtual Social Centre	PWI	Personal Wellbeing Index
SHM	Smart Home Modifications	eHLQ	eHealth Literacy Questionnaire
CHSP	Commonwealth Home Support Programme	IBM SPSS	Statistical Package for Social Sciences

## **PROJECT COSMO SERVICE INNOVATION & TRANSFORMATION**

![](_page_7_Picture_21.jpeg)

![](_page_7_Picture_22.jpeg)

LAYLA BUCKLEY Project Lead Service and Product Design

**DAWN VALLE** Project Lead Service Deployment

![](_page_7_Picture_25.jpeg)

AGRIM NANDU Technical Support Coordinator

![](_page_7_Picture_28.jpeg)

**ANASTASIA WARD** Project Officer Quality and Evaluation

JULIA WICKER Communication Specialist

![](_page_8_Picture_0.jpeg)

## **1. INTRODUCTION**

According to the Australian Bureau of Statistics and recent empirical research conducted by the Centre for Social Impact, at least 86% of the population is digitally connected (Australian Bureau of Statistics, 2018 Borg & Smith, 2018). In today's ever evolving and technologically advancing world digital technology plays a central role in our lives, whereby being connected is not a choice anymore but an increasingly integral part of daily life in the 21st century. Digital inclusion has become increasingly fundamental to be able to fully participate in social and economic life (Marshall & Dezuanni, 2020).

Currently, there exists a digital divide whereby seniors engage with digital technology significantly

![](_page_8_Picture_4.jpeg)

less than younger generations (Friemel, 2014; Quan-Haase et al., 2016). A major contributor to the digital divide is poor digital literacy (Tirado-Morueta et al., 2018). Digital literacy is defined as the skills and ability to confidently use technology to meet the demands of a digital environment (Coldwell-Neilson, 2018). Poor digital literacy among seniors often means that they miss out on the benefits and opportunities afforded by online technology, with an increased risk of exclusion from an increasingly digital society (Hill et al., 2015). Australian seniors' access to technology has slowly increased over the past decade or more (Australian Bureau of Statistics, 2016). However, recent reports indicate that this group continues to have low levels of technology use and suggests that this is largely due to poor digital literacy (Thomas et al., 2019). Therefore, there is a critical need for a scalable digital literacy programs to be implemented for seniors, which can improve their confidence, engagement and understanding of online activities as a part of everyday life.

Feros Care is a not for profit, community owned people care organisation which has been providing quality support and care since 1990. Feros Care's mission is to support people live bold lives, partnering with clients to achieve their individual goals for independence, wellbeing, and social connectedness. To support this mission and holistic approach to care, Feros Care aims to develop modern co-designed services and products that meet their client's needs and aspirations. Technology at Feros is a key enabler in developing solutions to improve the lives of their clients. Not only used in operations and services, they feel that technology plays a vital role in the health, well-being, and safety of their clients.

In 2019, Feros Care tendered for the Department of Health's CHSP Innovation funding, specifically focused on new innovative approaches to meeting client's needs and challenges through technologies and new business models. The Department received 599 applications; Feros Care's LGT Program was one of 59 successfully funded programs.

![](_page_8_Picture_9.jpeg)

## **1.1 LIVING LAB APPROACH**

Continuously working in collaboration with their clients and at the forefront of evidence-based research, Feros Care develops and deploys programs based on the Living Lab approach to codesign. The Living Lab is an ecosystem based on open innovation that is developed in a co-creation approach, placing clients at the centre of innovation. Utilising the quadruple helix model, as described by the leading research body the European Network of Living Labs (European Network of Living Labs 2020), various stakeholders were engaged to co create, test and evaluate innovations in a collaborative, open and real-world setting.

![](_page_9_Figure_2.jpeg)

**FIGURE 1:** Feros Care's application of the ENoLL Living Lab Pyramid

![](_page_9_Figure_4.jpeg)

FIGURE 2: Feros Care's Living Lab Framework

Utilising this approach and methodologies, Feros Care endeavour to pave the way in transitional research and innovative ageing. Previously, Feros Care have implemented a number of research projects including the Virtual Social Centre (VSC), My Health Clinic at Home Telehealth Program and the Smart Home Modification (SHM) program. These programs reported a measurable success at equipping seniors with the tools to independently manage their own chronic illness and decrease strain on the health care system. The pilot programs demonstrated a strong relationship between the use of technology to support online social activities and client self-reported holistic well-being and quality of life (Nancarrow et al., 2014). The key to the success of these programs was the client centred codesign and engagement of a variety of stakeholders, and their enthusiasm and willingness to participate and embrace technology.

Considering previous findings, literature review and current research in their client cohort using the Living Lab methodology, Feros Care identified a gap in technology support and digital capacity building services in aged care providers. It is intended that the innovative LGT training program which aligns with the Feros Care mission, will address this gap. The program is essentially aimed to empower clients and provide a basis for future technology adoption.

Feros Care identified that for many of their clients, the adoption of technology was not restricted by limited access to technology or the internet, but the lack of knowledge and skills to use technology to meet their needs.

![](_page_9_Picture_9.jpeg)

![](_page_9_Picture_11.jpeg)

The vision and mission of the LGT training program was to showcase how personalised technology training can influence the willingness to learn, adopt and utilise the internet and technology. The program provides a platform for basic training that could potentially increase the use of technology by seniors in everyday life and impact not only the digital capacity of clients but their health and quality of life. To support this vision the aim was to create a service model to enable mainstream delivery. To build an understanding of the systems, processes, structures, and pricing for scaling and mainstream of services to enable products to be a standard offering to all clients across the aged care industry.

![](_page_10_Picture_0.jpeg)

### **1.2 PROGRAM OBJECTIVES**

The aim of the LGT program was to provide a scalable digital literacy building program that would support the capacity and confidence of Australian seniors to use technology to support their independence, social connection and quality of life.

The primary objectives were to:

- Support independence Provide a personalised service to support client confidence and independence to navigate their device to conduct activities of daily living. Foundational knowledge of technology, including how to navigate the internet, troubleshoot and cybersafety will empower the client to confidently conduct online activities.
- Support confidence in using technology Provide extensive training that is personalised and in the client's home. Individualised face to face digital literacy support will engage and enable the client to feel comfortable to ask questions and obtain relevant feedback specific to their learning needs.
- Support social connectedness Provide digital literacy training to support seniors to engage online and maintain regular contact with family and friends whilst providing socialisation opportunities within Feros Care with like-minded individuals who are also participating in the technology training program. It was envisaged that seniors would develop a sense of camaraderie with other program clients.
- **Support health and wellbeing** Provide digital literacy training to support seniors to navigate their device, the internet and access reputable sources of relevant health information such as government health portals.

## **1.3 RESEARCH AND CONTEXT**

Since the start of the early 1990's, the availability and scope of the internet has brought forth the beginning of a revolutionary and challenging time in human history with respect to interaction, engagement and communication (Seton & Mason, 2016, Dentzel, 2013). Governmental services, social interactions, and business transactions were increasingly being delivered via digital means. In 2020, this reliance on digital technology increased dramatically due to the restrictions during the COVID-19 pandemic. The sudden and necessary shift to online activities further highlighted the severity of the digital divide that currently exists in Australia (Olphert & Damodaran, 2013).

The Australian Digital Inclusion Index (ADII; Thomas et al., 2019) is an industry generated report about technology use in Australia reporting on digital literacy as part of a broader definition of technology uptake, referred to as 'digital inclusion'. The ADII states that "digital inclusion is whether a person can access, afford and have the digital ability to connect and use online technologies effectively" (Thomas et al., 2019, p. 8). The ADII reports that senior Australians as a group have the lowest levels of digital inclusion. While the ADII reported an increase in the number of seniors who have access to the internet, providing some evidence that reduced costs in technology and access to the National Broadband Network (NBN) has contributed to this. While access and affordability are essential, it is a lack of digital ability – the inability to use technology effectively – that remains the key inhibitor for many senior Australians (Thomas et al., 2019).

![](_page_10_Picture_11.jpeg)

![](_page_10_Picture_13.jpeg)

Regardless of their digital abilities, most senior Australians report that they want to understand more about how digital technology could improve their lives, despite having additional fears and concerns such as the safety of online activities (Australian Government, 2018). Facilitating easy access to digital technology combined with this interest in understanding technology presents a prime opportunity for digital literacy interventions to support the digital inclusion of senior Australians.

## 1.4 STRUCTURE OF THIS REPORT

This report will present practical information and insights into the implementation and evaluation of the LGT program. Sharing with industry stakeholders the achievements, insights, lessons learned and program outcomes. This includes details of the implementation approach, the experiences of service users and service providers, and an analysis of the costs.

The report is structured as follows:

- Section 2 Let's Get Technical Program Overview
- Section 3 Evaluation Methodology and Approach
- Section 4 Literature Review
- Section 5 Results of the Evaluation
- Section 6 Discussion
- Section 7 Conclusions
- Section 8 Recommendations

![](_page_11_Picture_10.jpeg)

![](_page_11_Picture_11.jpeg)

![](_page_11_Picture_12.jpeg)

# **2. LGT PROGRAM OVERVIEW**

The LGT program was designed to revolutionise and enhance the interactions between community supported clients and new and emerging technologies. Feros Care collaborated with clients and various stakeholders to produce a strategy of digital learning that would motivate and engage seniors to build confidence using technology in their home, personal life and daily activities. The LGT program has been designed to support senior's capacity and confidence to use technology to support their independence, social connection and quality of life. The program involves a series of individualised face to face digital literacy support sensions delivered in the client's own home.

## **2.1 INSIGHTS – MAKING THE CLIENT THE HERO**

Back in 2016, Feros Care engaged a human centred design organisation to gather insights from their clients, on their current and future needs. One of the most profound findings among the client portfolio was a growing need and interest in learning and adopting new technology. Specifically, there was an interest in receiving support from Feros Care to achieve this.

To further understand, research, develop and deploy a successful and innovative program for seniors, in accordance with Living Lab methodologies, a series of further insights were explored. These included:

 Community Support Workers were asked to participate in an online survey to describe their first-hand experience and interactions with clients, particularly in regards to level of digital capability, capacity and learning needs, and physiological environments to support new technologies.

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- Client insights were explored to understand anxieties and perceptions surrounding technology, including motivators and current level of engagement with technology.
  - In addition to a client experience questionnaire, a series of phone interviews explored client's feelings and anxieties surrounding technology, including, their first experience with technology, current devices used, how the technology was acquired, internet connection, and interest in any specific technology. Understanding socioeconomics and financial constraints were also explored.
  - o A series of focus groups and face to face interviews, further explored client's perception of smart technology.
- Research and engagement with other key providers / stakeholders including Google Sydney, Be-Connected, Office of E-Safety Commissioner, Telstra's Tech Savvy Seniors and Australia Post's Go Digi.

Utilising Living Lab methodologies and the iteration process, customer journey maps (see Appendix IX) were also developed. Customer journey maps being a visual representation of the client's journey with the Let's Get Technical program across all touch points. This exercise was critical to ensure the success of the program and a strategic approach to better understanding the customer expectations and the optimisation of the customer experience.

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A client centred focus underpinned the LGT program. Client insights including functional limitations, intentions, motivations, anxieties, and goals were at the forefront of the program design, implementation, and evaluation.

## 2.2 CLIENT ACQUISITION AND GAUGING DEMAND

To develop and gauge the level of interest in the LGT program, a marketing campaign was conducted in the Mid North Coast and Far North Coast of New South Wales, and Gold Coast. The mailout consisted of 700 direct marketing brochures to Feros Care clients who were funded under the CHSP. Within seven business days, the 100 LGT pilot placements were filled, and a waitlist of 100 clients were placed onto a customer relationship manager platform. The respondent rate of reply within such a short time frame depicted the need and perceived usefulness of the LGT program.

## 2.3 BRING YOUR OWN DEVICE (BYOD)

Primary research into digital inclusion and client insights suggest that the majority of clients owned technology (an average of 2 devices per household). Therefore, the aim of this pilot was to support clients to use their own personal devices and increase confidence and independence to engage in technology to support their needs.

## 2.4 INTERNET CONNECTIVITY

The majority of clients (94%) were connected to the internet. The few clients without an internet connection were offered a time limited data dongle that would support Wi-Fi connectivity and access to any internet-based application. Clients who indicated that they wanted to continue access to the internet at the completion of the program were provided with support to obtain their own internet connection.

## 2.5 TECHNICAL SUPPORT OFFICERS – PEOPLE SUPPORTING PEOPLE

The personalised aspect of the LGT program is believed to be a key feature to the success of this program. Feros Care ran a recruitment drive to hire Technical Support Officers (TSOs) who were skilled in the use and troubleshooting of consumer technology, and highly empathetic, respectful, compassionate, with strong interpersonal and emotional support skills, and with a high level of communication skills that included body language, various social, emotional and cultural cues.

![](_page_12_Picture_17.jpeg)

![](_page_12_Picture_18.jpeg)

A small cohort of two female and three male TSOs ranging in age were hired; compassionate companions to accompany the client on their technical journey of learning and discovery. The client's preference as to who would be their technical coach and support was acknowledged. Before being deployed in the field the TSOs were engaged not only in corporate training; adopting Feros Cares core values and standards but also were orientated in the new client centered role. This meant not only completing technical training in various areas of the forecasted learnings based on the insights, but they also undertook developmental units such as coaching and goal setting, client interactions and communication development training.

![](_page_13_Picture_1.jpeg)

The TSOs were regularly offered guidance and support from a dedicated Technical Support Coordinator. Proving instrumental in the success of the program, the Technical Support Coordinator would further liaise with clients, managing problem solving and providing a support network in between technology training sessions ensuring sustainable learning and motivation. Having the support relayed back through multiple sources, the client was ensured success through people supporting people, a core value in the Feros Care community.

## **2.6 SMART GOAL SETTING FOR SMART GOAL ACHIEVING**

All clients that participated in the program were provided with an opportunity at the first stage of contact to express their interest and motivators for engaging with technology and, from this, determine a list of goals. Working in partnership with the client, through a client centered approach, the client had full control in describing and demonstrating their capabilities, learning needs and associated goals. To capture and document the learning goals, clients were encouraged, in collaboration with their TSO to ideate SMART goals. Specific, Measurable, Achievable, Realistic and Timely goal setting is a validated method (Doran, 1981) consistently used in Feros Care and in clinical and care settings with professional health care providers. By using this method of acknowledging and setting achievable goals, the client was provided with a platform for success and continuity. Goals were then marked as "not met", "partially met" and "met" as the client progressed, allowing more goals to be added as required.

## 2.7 SENIOR FRIENDLY SERVICE DESIGN

### 2.7.1 SESSIONS

To maximise engagement and retention, clients were offered up to ten, 1.25-hour sessions of learning in the home at a frequency set by the client. The TSOs delivered these services using a friendly, supportive, and nonjudgmental approach. The TSOs also limited the use of technical jargon, simplifying terms to familiar everyday occurrences, such comparing sending an email to posting a physical letter. Relating back to familiar terms and systematically building on known concepts is a proven learning strategy that enhances, encourages, and enables learning especially in seniors (Mitzner at al., 2008).

At Feros Care there is an emphasis on an enablement style of support where services adopt a 'doing with' rather than 'doing for' approach. For the LGT program, this method of delivery was employed so that clients were actively engaged with the learning, whilst ensuring clients had enough time for reflection during the session. The TSOs went through the lessons slowly, and at the pace determined by the client, their capability and confidence level. This senior friendly service design was developed as a point of difference compared to other community based group or online IT training services offered in the community, being an individual and personalized one on one service. Client insights had described feelings of being left behind, overwhelmed, and no personalisation when attending community classes. The individualised format of the LGT sessions aimed to remedy this. Research has reported positive correlations between this style of service and increased independence and confidence in technology (Kim et al., 2017).

![](_page_13_Picture_9.jpeg)

The individualised and face to face support is intended to engage and enable the client to feel comfortable to ask questions and obtain relevant feedback specific to their learning needs. Furthermore, acknowledging COVID social distancing restrictions where seniors and vulnerable communities were asked to socially isolate in their home, the service could continue in an environment in which the clients could feel safe whilst adhering to restrictions

The LGT service design was created for seniors to promote positive aging in the community and to challenge preconceived stereotypes. The senior friendly service design session was client driven and based on their goals, learning styles and preferences.

![](_page_13_Figure_13.jpeg)

#### 2.7.2 WORKBOOKS AND MODULES OF LEARNING

Information derived from the client insights supported the development of 19 workbooks to supplement the digital literacy training. Each workbook covered a module of learning, with topics ranging from basic functionality of certain devices to advanced learnings such as using governmental services online or connecting to friends and family via Facebook. The modules were designed to be interactive and engage the client. Consistent in appearance they were designed in house at Feros Care with plenty of whitespace and large font. Sections were easy

to read with simple instructions that were integrated with pictures indicating how to navigate each step. The modules were made available as electronic copies on the Feros Care website. Modules could be worked through independently, without assistance, if the client wished to work ahead of their session. The modules catered for different operating systems such as Android or Apple.

Modules of learning consisted of:

- Let's Get Safe Online This was a compulsory unit of learning, that highlighted the importance of being cyber safe. This module ensured that the client was confident and able to recognise signs of criminal activity that could potentially cause financial loss.
- Let's Customise This module consisted of modifying the client's device so that it was more accessible to their individual needs. Clients were given simple step by step instructions that were personalised to their device to make them easier to use.
- Let's Browse Identifying key terms and providing no nonsense definitions, the module allowed for a simple step by step approach that walked a client through browsing the internet and conducting information requests.
- Let's Communicate This module included how to navigate different devices to communicate. The module covered how to text, make and receive phone calls and make facetime phone calls with family and friends.
- Let's Use Apps This module included advice and guidance around applications, how to download them and in app purchases. Consistent with the previous modules it included cyber safety tips.
- Let's Connect Online This module incorporated every aspect of social media and connections across different social media.
- Let's Email This module was a dedicated module describing and depicting in simple terms how to email and navigate the different mailing platforms such as Gmail and Apple mail.
- Let's Stay In The Loop Specifically developed in response to the COVID-19 pandemic, Feros Care deployed a specific workbook to allow clients to remain connected, up to date and informed on the latest updates surrounding the pandemic. It highlighted multiple applications and social platforms so that the most vulnerable communities could stay connected in physical isolation.

consistently providing feedback surrounding the workbooks and therefore the workbooks were co designed by the clients, for the clients. This ensured a client centered approach that directly related to the needs and wants of the clients.

Modules were consistently checked, and version control was administered so that workbooks stayed up to date with the latest technology changes and trends.

#### **2.7.3 HOMEWORK**

After each session with the client, the TSO would offer some "homework" to complete in between sessions that related back to the client's set goals. This homework was viewed as an opportunity to review and consolidate the learning from the session. It also promoted a sense of independence and autonomy when using the device. The homework built upon the foundation of knowledge laid by the TSO with the aim of promoting independence and confidence. The homework was often linked to communicating with family and friends to promote social inclusion and to also provide positive reinforcement from a meaningful source.

## **2.8 GRADUATION**

At the completion of the 10 session program clients were presented with a graduation certificate acknowledging their efforts and progression through the program. The certificates were presented with pride by their TSO, clients were photographed with their certificate, and the pictures uploaded to their profile. With the client's consent, the photographs were also posted to Feros Cares Yammer page, again highlighting and acknowledging their

achievements. The sense of pride and positive reinforcement provided by the graduation certificate was well received by the clients, who reported that getting the certificate was a tangible piece of evidence to show off to family and friends.

![](_page_14_Picture_22.jpeg)

LET'S BROWSE

![](_page_14_Picture_23.jpeg)

![](_page_14_Picture_24.jpeg)

![](_page_14_Picture_25.jpeg)

- The initial workbooks developed were Beta tested with a small sample of clients before deployment. This allowed for a co design approach and guaranteed client usability and friendliness to maximise the success of the client resources and therefore success of the client.
- The modules were consistently reviewed and updated based on TSO's feedback. Clients were

![](_page_14_Picture_29.jpeg)

## 2.9 PRACTICE GUIDES

A key deliverable, based on the Feros Care values of knowledge sharing and reforming Aged Care, was the creation of the practice guides. The guides were developed not only for use by Feros Care employees supporting the program but will also be made available to broader industry stakeholders. The practice guides were co-designed with various stake holders to inform and promote the benefits of the program and integration of technology in the aged care sector. It is intended that the practice guides will promote knowledge sharing between Assessment Agencies, Service providers and other community stakeholders to support the promotion, referral, and scaling of the LGT program.

![](_page_15_Figure_2.jpeg)

FIGURE 3: Feros Care's Eight Domains of Wellbeing

The practice guide is designed to provide information about the LGT program. Valuable for CHSP providers, the Regional Assessment Service, the Aged Care Assessment Team and Case Managers. It provides key information about program delivery, benefits, limitations, the referral pathway, outcomes and direct examples of how to identify seniors that would achieve positive outcomes from participation in the program.

![](_page_15_Figure_5.jpeg)

2.10 COVID-19 RESPONSE

The COVID-19 pandemic forced people of all ages into isolation and became a catalyst for a change in the use of technology. Forced into social isolation, with reduced physical therapies, treatments and interaction, it was a critical time in history that triggered the need for many people to learn to use technology.

Unfortunately, during the pandemic, many clients who originally chose to participate in the program were forced to put their sessions on hold, or were discharged early, due statewide border closures or issues of anxiety. For other clients it was a pivotal turning point that saw many clients, who had lacked basic digital skills in the initial stages of their learning, engage in virtual sessions with their TSO. This not only built confidence and increased contact with their TSO, but also enhanced the acceptance of technology in their lives to perform other essential activities of daily living such as online banking. With the rollout of the governments COVID safe application Feros Care was able to support clients to download the app, as well as instruct them how to use the information. Unfortunately, this assistance had not been offered by the government.

ill provide you with current and credible
e latest official information and advice from the Coronavirus by navigating to the Department ing the Coronavirus Australia application on u/news/health-alerts/novel-coronavirus-2019-

FIGURE 4: LGT Client Personas

![](_page_15_Picture_14.jpeg)

# **3. EVALUATION METHODOLOGY**

In 2019, Feros Care engaged Southern Cross University to evaluate the innovative LGT program. The overall purpose of the evaluation was to explore the extent to which the LGT program supported seniors' independence, social connectedness, confidence, and health and wellbeing.

![](_page_16_Picture_2.jpeg)

**DR CHRISTINA AGGAR** Associate Professor Nursing Research Academic

![](_page_16_Picture_4.jpeg)

**DR GOLAM SORWAR** Lecturer in Business & Tourism

![](_page_16_Picture_6.jpeg)

**Southern Cross** 

University

**DR CAROLYN SETON** MIT Course Coordinator Lecturer in Information Technology

![](_page_16_Picture_8.jpeg)

**OLIVIA PENMAN Research Assistant** 

## **3.1 OBJECTIVES**

The evaluation objectives have been restated as propositions as outlined in column 2 (Table 1).

**TABLE 1:** Evaluation objectives and propositions.

OBJECTIVES	PROPOSITIONS
<b>1.</b> To support independence	P1. Digital literacy bui technology to comple Being able to indepen feelings of control in r
2. To support confidence in using technology	P2. Digital literacy pro- technology by provid personalised and in the of comfort and familia
3. To support social connectedness	P3. Digital literacy pro assisting seniors to en with family and friend opportunities within F are also participating
<b>4.</b> To support health and wellbeing	P4. Digital literacy pro by enabling seniors to information and supp to be more informed management of their
5. The overall effectiveness of the LGT program	Formative question –
6. Any barriers to the uptake of the service and ways in which this could be or were overcome	Formative question –
<b>7.</b> Any other lessons learnt or recommendations for future implementation	Formative question –

Iding programs facilitate the use of digital ete daily tasks (e.g. banking, shopping). ndently complete tasks online will increase managing daily affairs.

ograms support confidence in using ing extensive face to face training that is he client's home, thereby adopting a sense arity.

ograms support social connectedness by ngage online and maintain regular contact Is whilst providing additional socialization eros Care with like-minded individuals who in the technology training program.

ograms support health and wellbeing to navigate access to reputable health ort services. This supports the senior about their own health enabling better health and wellbeing.

- no proposition

no proposition

no proposition

## **3.2 METHODS**

For the purpose of evaluating the effectiveness of the LGT program, a series of testable propositions were developed based on the literature underpinning the introduction and the objectives of the program.

The stages of the evaluation were as follows:

### **1.** Developing testable propositions that addressed the research objectives

![](_page_17_Figure_4.jpeg)

FIGURE 5: Let's Get Technical – Initial Assessment in Passport

For example, the first objective was that the LGT program would "support independence". The matched proposition was "Digital literacy building programs facilitate the use of digital technology to complete daily tasks (e.g. banking, shopping). Being able to independently complete tasks online will increase feelings of control in managing daily affairs."

### 2. Mapping of data sources to the propositions

Each proposition was tested using appropriate quantitative and/or qualitative data sources that provided evidence to either support or refute the proposition. The data sources are outlined fully in the appendices and included:

- a. Detailed activity-based audit data, specifically:
  - Participation data
  - IT service request data
  - Number of home visits
  - Referral statistics
  - Timeframes recorded for new installations
  - Digital literacy and technology use prior to and after participating in the program.
- **b.** Quantitative Data
  - Let's Get Technical Questionnaire (including independence, social connectedness, digital literacy, digital technology use and confidence, eHealth Literacy Questionnaire and the Personal Wellbeing Index)
  - Client Experience Questionnaire (developed from interviews with clients)
- **c.** Qualitative Data
  - Group interviews with clients representing all stakeholder groups
  - Case studies of exemplar examples of client experience of the LGT program drawing on the data collected above.

Detailed data were collected by Feros Care on an ongoing basis for the duration of the project. At the conclusion of the project the retrospective deidentified data was provided to Southern Cross University to be analysed descriptively to address the project objectives and research questions. The LGT questionnaire was administered to all clients at three separate time points: 1) prior to commencing the program "Pre-Program", 2) at the end of the program sessions "Post-Program" in Week 12, and 3) 6-weeks after completing the program "Follow-up". This was done to measure changes in client outcomes immediately following the program, and at 6-weeks follow-up, to determine whether these changes were sustained over time.

Interviews and case studies were used to supplement the LGT questionnaire data to further explore clients' perspectives and experience of the program and provide insight into program barriers and enablers.

The LGT Questionnaire incorporated a number of reliable and validated tools (see Table 2).

The Client Experience Questionnaire (CEQ) was developed by Feros Care to supplement the LGT questionnaire data and to identify the motivations to participate in the program, any barriers and previous experience with technology. The CEQ Questionnaire was administered to all clients at three separate time points, 1) prior to commencing the program "pre-program" 2) in the middle of their journey typically at week six and 3) after completion of the program "post-program" This was done to gather gualitative information and to guality check the TSOs.

#### 3. Analysis, collation and synthesis of data

All questionnaire data was manually entered into an Excel spreadsheet and then transferred into IBM SPSS Statistics 26 for analysis. The data was analysed descriptively to produce client demographic data that included age, gender, ethnicity, past/current education, support and health characteristics. Measures of independence, social connectedness, confidence, digital literacy via the eHLQ and personal wellbeing were analysed pre and post intervention and at 6-weeks follow-up using a within subject design. Differences across time between paired continuous data were compared using repeated measures one-way ANOVA or Friedman's and Wilcoxon signed rank tests for non-parametric data. Categorical data was paired across time points and analysed using McNemar's chi square test.

### 4. Presentation of case studies

A series of case studies were selected to highlight specific aspects of the use of the LGT program, and to provide an illustration of the client's personal experience of the program and their perceived benefit.

## **3.3 ETHICS APPROVAL AND RESEARCH GOVERNANCE**

Low risk ethics approval was obtained from Southern Cross University Human Research Ethics Committee Approval Number 2020/101. The evaluation data was collected by Feros and the analysis was conducted by Southern Cross and discussed internally through regular team meetings with the Feros Care implementation teams.

![](_page_17_Picture_33.jpeg)

![](_page_17_Picture_34.jpeg)

## **3.4 SUMMARY OF DATA SOURCES**

**TABLE 2:** Evaluation objectives and propositions

FABLE 2:   Evaluation	objectives and propositio	ons	Clien	nt Experience Questionnaire	The Client	t Experience Questionnaires explored the		
DATA SOURCE Let's Get Technical Questionnaire	MEASUREMENT TOOL Demographic data	DETAILS Age, gender, ethnicity, past/current education, and health characteristics. IT service requests, number of homes visits, and referral statistics.	Interviews, Case Studies		clients' pro- motivation On conclu was perfo with the te	<ul> <li>clients' previous experiences of technology and motivation to participate in the program.</li> <li>On conclusion of the LGT program the questionnaire was performed to explore the clients' experiences with the technology and their TSO.</li> <li>Opportunities to participate in an interview were offered to clients at the completion of the program. Interviews and case studies were used to further explore clients' perspectives and experience of the program, and provide insight into program barriers and enablers.</li> </ul>		
	Technology Information Personal Wellbeing Index (PWI)	<ul><li>Frequency data and indicators of satisfaction in regard to independence, social connectedness, and digital technology use and confidence.</li><li>A 7-item measure of satisfaction across 7 life domains (standard of living, health, personal achievements,</li></ul>			Opportun offered to Interviews explore cl program, and enabl			
	<ul> <li>relationships, safety, community connectedness, and future security) providing a validated measure of subjective wellbeing (International Wellbeing Group, 2013). The PWI is measured using a 10-level Likert scale ranging from 0 "no satisfaction at all" to 10 "completely satisfied". The PWI has previously been used with samples of seniors in Australia (Bennett et al., 2015; De San Miguel et al., 2017) including in the context of technology use (De San Miguel et al., 2017). The PWI has been psychometrically tested with community dwelling seniors and found to be of sound reliability (Cronbach's a = .88; Rodriguez-Blazquez et al., 2011).</li> <li>eHealth Literacy Questionnaire (eHLQ)</li> <li>Measures digital and health literacy and technology use across 7 domains; 1) Ability to Process Information, 2) Engagement in Own Health, 3) Ability to Actively Engage with Digital Services, 4) Feel Safe and in Control, 5) Motivated to Engage with Digital Services, 6) Access to Digital Services that Work and 7) Access to Digital Services that Work and 7) Access to Digital Services that Suit Individual Needs (Kayser et al., 2018). The eHLQ is a 35 item, 4-level Likert scale ranging from 1 "strong disagree" to 4 "strongly agree". The eHLQ novides data regarding the online functionality and literacy and technology use the client made over the program period and how this benefitted them. Initial validation of the tool found each measure to be psychometrically sound (Cronbach's a &gt; .77 for all domains). The eHLQ has been used in Danish studies with medical outpatients (Eysenbach et al., 2019) and nursing students (Holt et all provides data et all and provides data et all and the studies with medical outpatients (Eysenbach et al., 2019) and nursing students (Holt et all provides data et all and head head head head head head head hea</li></ul>	relationships, safety, community connectedness, and future security) providing a validated measure of subjective wellbeing (International Wellbeing Group, 2013). The PWI is measured using a 10-level Likert scale ranging from 0 "no satisfaction at all" to 10 "completely satisfied". The PWI has previously been used with samples of seniors in Australia (Bennett et al., 2015; De San Miguel et al., 2017) including in the context of technology use (De San Miguel et al., 2017). The PWI has been psychometrically tested with community dwelling seniors and found to be of sound reliability (Cronbach's $\alpha$ = .88; Rodriguez-Blazquez et al., 2011). Measures digital and health literacy and technology use across 7 domains; 1) Ability to Process Information, 2) Engagement in Own Health, 3) Ability to Actively Engage with Digital Services, 4) Feel Safe and in Control, 5) Motivated to Engage with Digital Services, 6) Access to Digital Services that Work and 7) Access to Digital Services that Suit Individual Needs (Kayser et al., 2018). The eHLQ is a 35 item, 4-level Likert	The el- intends TABLE 3	HLQ has been elaborated in T Is to measure. <b>3:</b> Summary of eHealth literacy fi	able 3 to provide	e an understanding of what each domain acts, scales and items (Kayser et al., 2018).		
			eHEA	ALTH LITERACY CONSTRUCTS	SCALE	ITEMS		
			Ability to process information "Able to read, write and remember, apply basic numerical concepts, and understand	Using technology to process health information	I use technology to find information about health I often use technology to understand			
			context-specific language (eg., health, IT or English) as well as critically appraise information. Know when, how and what information to use."		health problems Technology helps me decide what health care is best for me I use technology to share information about my health I use technology to organise my health information			
		Enga "Know funct status how t their well a syste	agement in own health ow about basic physiological tions and own current health us. Aware of risk factors and to avoid them or reduce rinfluence on own health as as navigating the health care em."	Understanding of health concepts and language	The knowledge I have helps me to have good conversations about health I have enough information to take part in conversations about my health I understand medical results about me Overall, I understand how my body works I use measurements about my body to help me to understand my health			
		with seniors in Australia.						

**DATA SOURCE** 

**MEASUREMENT TOOL** 

DETAILS

eHEALTH LITERACY CONSTRUCTS	SCALE	ITEMS		eHEALTH LITERACY CONSTRUCTS	SCALE
Ability to actively engage with digital services	Ability to actively	I know how to use technology to get the health information that I need		Access to digital services that work "Have access to digital services that the users trust to be working when they need it and as they expect it to work."	Access to digital services that work
"Being comfortable using digital services for handling information."	engage with digital services	I know how to make technology work for me I can enter data into health technology systems			
		I quickly learn how to find my way around new technology			
		I easily learn to use new health technologies			
Feel safe and in control "Feel that you have ownership	Feel safe and in control	I am sure that my health data are being used by only those who are supposed to			
of personal data stored in the systems and that the data are safe and can be accessed only by people to whom they are		My electronic health care data is being stored safely	Digital services that suit individual needs "Have access to digital services	Digital services that suit individual	
relevant (own doctor, own nurse, etc)."		I have a clear understanding of how healthcare providers use my data		that suit the specific needs and preferences of the users. This includes responsive features of both IT and the health care system (including careers) as well as adaptation of devices and interfaces to be used by people with physical and mental disabilities."	needs.
		access my health data			
		I am confident that healthcare providers use my data appropriately			
Motivated to engage with digital services	Motivated to engage with	Technology makes me feel actively involved with my health			
<i>"Feel that engaging in the use of digital services will be useful for</i>	digital services	I find technology helps me to take care of my health			
them in managing their health."		I find I get better services from my health professionals when I use technology			
		Technology improves my communication with health professionals			
		I find technology useful for monitoring my health			

#### ITEMS

Information about my health is always available to those who need it

My healthcare providers deliver services that I can access through technology

My health data is available to me wherever I am

All the health technology I use works together

Most of my healthcare providers can be accessed through technology

I have access to health technology that works

I find that eHealth systems adapt to my skills

I find eHealth systems seem to adapt to my individual needs

I find eHealth systems are provided to me in a way that suits me

Health systems provide me with easy ways to get what I need

# 4. LITERATURE REVIEW

A literature review was undertaken to examine the published evidence in relation to each of the propositions. Only the key points are presented here.

## 4.1 PROPOSITION 1:

Digital literacy building programs facilitate the use of digital technology to complete daily tasks (e.g. banking, shopping). Being able to independently complete tasks online will increase feelings of control in managing daily affairs.

- The use of digital technology is becoming essential in performing activities of daily living, with most people using technology online to arrange appointments, pay bills, shop, socialise and manage their health (Charleson, 2012; Hill et al., 2015; Vilhemson et al., 2017).
- Digital literacy can foster feelings of independence by increasing an individual's capacity to complete these daily living activities themselves - using technology online (Hill et al., 2015).
- Digital training programs have the potential to improve their capacity to navigate digital devices and conduct online activities and access online services (Hill et al., 2015; Vilhemson et al., 2017).
- Independent digital activity has been found to result in improvements in a senior's ability to manage their own health (Arthanat et al., 2016; Burmeister et al., 2019; Hill et al., 2015).
- Research examining the effect of digital training programs for seniors has found an increase in seniors' participation in digital activities, particularly leisure activities and social interactions (Arthanat et al., 2016; Beckenhauer & Armstrong, 2009).

![](_page_20_Picture_9.jpeg)

## 4.2 PROPOSITION 2:

Digital literacy programs support confidence in using technology by providing extensive face to face training that is personalised and in the senior's home, thereby adopting a sense of comfort and familiarity.

- · Seniors generally show a lack of readiness in using new technology, and therefore tend to use new technologies less frequency, and often their preference for new technology use differs from younger people (van Houwelingen et al., 2018).
- Research indicates that seniors with lower levels of digital literacy often experience greater anxiety and lower levels of self-efficacy in using technology (Chung et al., 2010; Schreurs et al., 2017).
- The negative impact of poor digital literacy on a senior's confidence is a major barrier to their uptake of technology (Choi & DiNitto, 2013; Schreurs et al., 2017; Woodward et al., 2013). Research suggests that seniors with low technology confidence are less interested in developing their digital literacy skills (Choi & DiNitto, 2013; Schreurs et al., 2017).
- · Low technology confidence can reduce the perceived benefits, satisfaction with, and continued use of technology (Lee & Coughlin, 2015). Therefore, in order to promote digital inclusion among seniors, confidence in using technology should be promoted.
- The literature suggests that support from peers and family, and the opportunity to practice using technology in a safe and familiar environment can promote a senior's confidence to engage with technology (Schreurs et al., 2017, Tsai et al., 2017).
- Seniors have indicated that face to face learning is preferred for developing technology skills and confidence, particularly for those with limited or no experience of using technology (Australian Government, 2018).
- Research has reported that digital literacy programs can be beneficial in improving confidence in using new technologies (Gatti et al., 2017; Woodward et al., 2013). However, studies evaluating the capacity of digital literacy programs to support this confidence remains limited.

![](_page_20_Picture_20.jpeg)

## 4.3 PROPOSITION 3:

Digital literacy programs support social connectedness by assisting seniors to engage online and maintain regular contact with family and friends whilst providing additional socialisation opportunities within Feros Care with like-minded individuals who are also participating in the technology training program.

 Social interaction is of particular importance for seniors as they are more likely to be socially isolated. Reasons for this can include a reduction in social and family support, geographical distance, and limited mobility (Vroman et al., 2015; Hill et al., 2015).

![](_page_21_Picture_3.jpeg)

- Digital technologies have the potential to facilitate social inclusion among seniors (Charleson, 2012; Hill et al., 2015) by providing opportunities for seniors to build and maintain social connections remotely from their homes, via online tools such as video calling (Vroman et al., 2015).
- · Research supports the use of digital technology to increase feelings of social connection for seniors (Chen & Schulz, 2016; Seelye et al., 2012; Waycott et al., 2012) with reported benefits in building and maintaining social connections, as well as increased feelings of inclusion within their community (Vroman et al., 2015).
- · A review of interventions to address loneliness in seniors found internet based digital technology was particularly effective in decreasing feelings of loneliness (Bessaha et al, 2020). Similarly, research has found that seniors who frequently use the internet have increased feelings of social connectedness (Cotton et al., 2013; Hill et al., 2015; Khalaila & Vitman-Schorr, 2018).
- A recent meta-analysis reported that digital devices and technologies with communication capabilities such as phones, computers or social networking sites are an effective tool for seniors to build and maintain social connections with others (Chen & Schulz, 2016).
- A recent systematic review found that technology has been successful in reducing feelings of isolation among seniors and promoting social connections (Khosravi & Ghapanchi, 2016). However, these researchers found that these results were inconsistent, with some studies suggesting no relationship between technology and isolation, and others finding that digital technology had a negative impact on social health.
- Research supports the use of social networking sites by seniors to promote new friendships and broaden their social networks (Kraut & Burke, 2015). However, social networking was not found to impact on feelings of connectedness and social support received from family members.
- Research suggests that communication with strangers over social media can be superficial, failing to meet seniors' social needs resulting in increased feelings of depression, isolation and reduced feelings of social support (Burke & Kraut, 2016; Kraut & Burke, 2015). Comparatively, interactions with friends and family are often on a deeper level and are linked with beneficial social outcomes (Burke & Kraut, 2016; Kraut & Burke, 2015).

• Seniors cannot access the potential social benefits of technology if they lack the skills to use these technologies, or require assistance with their use (Guner & Acarturk, 2020). Therefore, digital literacy has the potential to support social connectedness by equipping seniors with the skills to effectively use digital technology to communicate with others.

## 4.4 PROPOSITION 4:

Digital literacy programs support health and wellbeing by enabling seniors to navigate access to reputable health information and support services. This supports the senior to be more informed about their own health, enabling better management of their health and wellbeing.

- Health information and resources, and access to health practitioners, is becoming increasing available online (Hill et al., 2015).
- Digital literacy supports a person's overall health and wellbeing by enabling individuals to access health information and resources to support management of their own health (Burmeister et al., 2019; Hill et al., 2015).
- Good health literacy is both a predictor and a consequence of good health; it positively influences people's decision-making and engagement in health-related behaviour and with health service providers (Australian Commission on Safety and Quality in Health Care, 2014).
- Online health tools have the potential to improve access to health care providers. communication between the health practitioner and the individual, and treatment compliance (Hall et al., 2012; Hill et al., 2015).
- Digital technologies are increasingly being utilized to support access, share, and store health data and information (Australian Digital Health Agency, 2018).
- Strategies to improve senior's digital literacy are needed to support and increase their capacity to access these resources and promote engagement with technology that support health (e.g. eHealth; ADHA, 2018).
- Advances in technology support increased access to online tools and resources that can support independence (Arthanat et al., 2016; Beckenhauer & Armstrong, 2009), social connectedness (Bessaha et al, 2020; Vroman et al., 2015) and overall health and wellbeing (ACSQHC, 2014; Burmeister et al., 2019; Hall et al., 2012; Hill et al., 2015).

![](_page_21_Picture_29.jpeg)

![](_page_22_Picture_0.jpeg)

## **5.1 CLIENTS AND RATES OF RECRUITMENT**

A total of 100 clients were recruited to trial the LGT program between 17th of January and 20th of June, 2020. The data for the program analysis included clients who had provided data that could be matched across all three time points (pre, post and follow-up). Pre, post and follow up data were provided by approximately 80% of clients, depending on the outcome measure.

Clients were aged between 65 and 96 years old (M = 80.86, SD = 5.79) (Figure 1). Demographics for LGT clients can be found in Table 4.

Most clients were Female (74%), born in Australia (70%), lived in NSW (61%), had a current spouse/partner (43%), were non-indigenous (98%) and were of Australian ethnicity (78%). The majority of clients reported English as their first language (94%). Most clients lived alone (56%), followed by those who lived with a partner (39%). The largest proportion of clients reported that their highest level of education was some years of high school (36%), followed by a Bachelor Degree (20%). The majority of clients were receiving the Age Pension as their current source of income (80%).

#### FIGURE 6: Age distribution of LGT program clients

![](_page_22_Figure_6.jpeg)

**TABLE 4:** LGT client demographics (N= 100).

	CHARACTERISTIC	N
Gender	Female	74
	Male	26
State	NSW	61
	QLD	39
Country of birth	Australia	70
	Other	30
Language	English	94
	Other	6
Aboriginal Torres Strait	Non-Aboriginal	98
Islander status	Aboriginal	2
Ethnicity	Australian	78
	Other	22
Highest level of education	Primary School	6
	Some High School	36
	Year 10	14
	Year 12	7
	Trade Certificate	8
	Diploma	4
	Bachelor Degree	20
	Postgraduate Degree	3
	Missing	2
Current income details	Employed	1
	Self-funded	12
	Age Pension	80
	Other	7
Relationship status	Current spouse/partner	43
	Widow	38
	Divorced	12
	Single	5
	Other	1
	Missing data	1
Current living arrangements	Lives alone	56
	Living with partner	39
	Living with children	2
	Other	3

Most clients had an internet connection with the majority connected via Wi-Fi/NBN (74%) (Table 5). Only three clients had no internet connection. To allow these clients to participate in the program Feros Care provided an internet connection free of charge. Clients owned between one and four devices with an average of two technology devices per client. The most common device owned was a smart phone (82%) with an even distribution between apple and android devices. Frequency of technology devices owned by clients are provided in Table 6. Clients used a variety of operating systems with most clients using a mixture of Apple and Android systems (39.3%).

#### **TABLE 5:** Client technology information (N = 100).

TECHNOLOGY INFORMATION	Ν	
Internet connection	Not connected	3
	Wi-Fi/NBN	74
	Dongle/device	9
	Hotspot	4
	ADSL	3
	Other	6
	Missing data	1

#### **TABLE 6:** Client technology device information (N = 100).

TECHNOLOGY DEVICE INFORMATION		Ν	%
Smart phone	Apple	40	48.8
	Android	41	50.0
	Missing	1	1.2
	Total	82	82.0
Tablet	Apple	43	70.5
	Android	17	27.9
	Missing	1	1.6
	Total	61	61.0
Computer	Apple	3	8.1
	Android	33	89.2
	Missing	1	2.7
	Total	37	37
Laptop	Apple	4	14.8
	Android	23	85.2
	Total	27	27.0

## **5.2 SERVICE DATA**

Working under Living Lab methodologies and consistently gathering feedback, a total of 340 phone calls were placed for the client guestionnaires and client experience feedback oppurtunities.

Between January 2020 and September 2020, a total of 1,196 face to face sessions in the home with a TSO were conducted to co create and deliver a technology training plan driven by the individual clients. In addition, Feros Care implemented a range of strategies which included virtual sessions to increase client engagement whilst in isolation or under social distancing restrictions.

## 5.3 PROCESSES: CLIENT RECRUITMENT INTO LGT

Due to previous research surrounding the Digital Divide conducted by the Royal Melbourne Institute of Technology and the ADII, Feros wanted to identify the need, interest and motivation of seniors to engage with technology. The program was marketed to clients using, brochures and information sheets.

## **5.3.1 SOURCES OF RECRUITMENT OF CLIENTS INTO THE LGT PROGRAM**

The majority of clients in the LGT program said that they had been sent direct marketing mail which included a brochure for two programs; LGT and the Smart Home Modifications (SHM) program.

The marketing campaign plan initially consisted of:

- 700 brochures distributed to CHSP clients in the targeted regions,
- Outbound calls to clients whose interest to learn more about technology was identified in a previous client survey.
- Emails to existing clients in the regions
- Advertisements on Feros Care's MyFeros Portal; a self service online tool that allows the user to access, control and manage their services in addition to being able to communicate with Feros at the touch of a button.
- An on hold message played in the call queue when phoning Feros Care.

Due to the overwhelming reponse to the initial brochures distributed, Feros Care was unable to deploy the entire marketing plan consisting of the advertisements on the MyFeros Portal, the on hold message and outbound calls to clients who identified from the client survey they were interested in technology.

There was a smaller cohort who heard about the program through their TSO when receiving the SHM program. One client reported that she had heard about the program through her sister and used the brochure to make further enquiries about the program.

#### **5.3.2 CLIENT REASONS FOR PARTICIPATING IN THE LGT PROGRAM**

The CEQ (Table 7) reported most clients were interested in the program to learn how to use and keep up with technology (87.7%).

**TABLE 7:** CEQ, what made you become interested in the program? (N = 57)

ANSWER	<b>RESPONSE COUNT</b>	%
To learn to use and keep up with technology	50	87.7
Previously used technology in work and want to get back into it	2	3.5
To be in control of technology	1	1.8
Trouble paying bills	1	1.8
Just knew I wanted to do this	1	1.8

Clients were asked to identify goals they wished to achieve from participating in the LGT program. Ninety-seven clients set between 1 and 8 goals, with an average of 4 goals set per client. The most common goal was communication (23%) followed by basic skills (22%) (Figure 2).

**FIGURE 7:** LGT program goals

![](_page_24_Figure_6.jpeg)

Learn to use email. Learn how to reply to text messages. Learn how to use WhatsApp. Learn how to use Zoom. Learn how to use VOIP calls. Be able to contact family overseas. Examples of basic skill goals included: To learn how to navigate the iPad. Learn iPhone basics. Wants to learn what the buttons on the phone do. Installing and navigating new phone features. Introduction to iPhone and apps and Samsung tablet. Learn how to use device correctly.

Examples of communication goals included:

#### **5.3.3 BARRIERS TO RECRUITMENT**

Clients reported some barriers to recruitment. In initial client insight groups, there was a high level of technology anxiety that proved to be a barrier to participating in the program. Twentyone percent of clients reported concerns. The most common concern was that clients felt "stupid" that they needed digital literacy support, and that they wouldn't be able to understand the technology (50%). Other common concerns included privacy issues, such as whether or not cameras would be watching clients. Using these findings, an information sheet was developed to address the concerns identified.

**Reported concerns included:** 

Felt a little uncomfortable with TSO.

That I can't understand it at all.

I don't want anyone knowing it's me doing this (embarrassed that she can't do certain things)

Privacy and security concerns

I feel stupid doing it at my age.

I have hackers in the computer for 3 years and they are sending me threatening emails.

The main barrier to recruitment was the COVID-19 social distancing rules and anxieties surrounding quarantine measures and limits of number of people in the home. Other barriers to recruitment involved not being in the targeted region, and not being CHSP eligible.

![](_page_24_Picture_19.jpeg)

## **5.4 PROGRAM OUTCOMES**

Evaluation of the impact and outcomes associated with participating in the LGT program were based on a range of descriptive data measuring change over time (see Section 3 for details). Findings were supported by qualitative data from the CEQ.

#### 5.4.1 INDEPENDENCE

To capture clients' level of independence, clients were asked to rate the level of control they felt they had in their life from 1 "no control" to 5 "high control". There was a statistically significant change in feelings of control over time,  $x^2(2) = 28.02$ , p < .001. This finding was followed up with Wilcoxon signed rank tests. Feelings of control were significantly greater at post-program (Mdn = 5.00, Z = 3.69, p < .001, r = .26) and at follow-up (Mdn = 5.00, Z = 3.71, p < .001, r = .30) than pre-program (Mdn = 4.00). There was no significant difference in feelings of control at follow-up and post-program (Z = .90, p = .368, r = .07).

Feelings of control increased, and was sustained over time.

**FIGURE 8:** Change in feelings of control across time points (N = 78).

![](_page_25_Figure_6.jpeg)

Clients were also asked to rate their ability to independently perform activities of daily living (ADL) from 1 "no ability" to 5 "high ability". There was a significant change in independence when performing ADL across time points,  $x^2(2) = 33.98$ , p < .001. This finding was followed up with Wilcoxon signed rank tests. Independence when performing ADL was significantly greater at post-program (Mdn = 5.00, Z = 4.08, p < .001, r = .29) and at follow-up (Mdn = 5.00, Z = 4.52, p < .001, r = .36) than pre-program (Mdn = 4.00). There was no significant difference between ability to independently perform ADL at follow-up and post-program (Z = .22, p = .826, r = .02).

#### Ability to independently perform ADL improved, and was sustained over time.

![](_page_25_Figure_9.jpeg)

FIGURE 9: Change in feelings of independence performing ADL across time points

At the conclusion of the program, 97% of clients reported that the program had improved their independence and management of daily tasks (Figure 5).

**FIGURE 10:** Percentage of clients who reported improved independence (N = 100)

![](_page_25_Figure_13.jpeg)

![](_page_25_Figure_16.jpeg)

IMPROVED INDEPENDENCE

#### **5.4.2 CONFIDENCE USING TECHNOLOGY**

Clients were asked if participating in the LGT program had increased their confidence in using technology.

**FIGURE 11:** Do you feel that this program has increased your confidence when using technology? (N = 100)

![](_page_26_Figure_3.jpeg)

Clients rated their confidence on a scale from 1 "not confident" to 5 "very confident". There was a significant main effect of time on confidence in using technology across time points, F(2, 154) = 64.31, p < .001,  $\eta p^2$  = .46. Post-hoc analysis revealed that confidence in using technology was significantly greater post-program (M = 3.81, SD = .91, p < .001, d = 1.38) and at follow-up (M = 3.59, SD = 1.04, p < .001, d = 1.09) than pre-program (M = 2.42, SD = 1.10). Confidence in using technology was significantly greater at post-program than at follow-up (p = .012, d = .23).

Confidence to use technology improved, and was partially sustained over time.

#### **CASE STUDY**

Caroline is an 81-year-old who saw the Let's Get Technical program as an opportunity to quench her thirst for knowledge. She also wanted to set herself up for the future so she could remain independent in the home. She lives with Parkinson's disease and is passionate about being able to add value to the Parkinson's community through her knowledge and experience.

Both Caroline and her partner, who is the main carer for her as she lives with a disability, undertook the program together to learn more about online security, uploading and creating YouTube videos, taking and sharing photographs with family, using exercise applications, learning more about technology in general and also engaging in online therapy for her Parkinson's. Another goal was learning how to navigate Facebook to keep in touch and stay connected with family and friends during the COVID-19 pandemic whilst remaining in isolation. Caroline was motivated by gaining independence for herself and her husband as she felt she was being "left behind in the tech world". Caroline's husband's only goals were to further support his wife in her new learnings.

After 10 sessions Caroline's confidence levels skyrocketed. Caroline mentioned that having control over how she was learning, and at her own pace, made her feel supported and eased any anxieties that she may have had. She felt she was stepping into the *"tech world"*! By the end of the program, Caroline said she had peace of mind knowing how independent she was becoming when using the technology. She said she'd be the first to put her hand

![](_page_26_Picture_12.jpeg)

up to be included in further programs or a continuation of LGT.

"Well it makes life a lot easier and our intention is not to become couch potatoes but to make our lives more independent because as we're getting older, we can't do as much as what we used to."

Due to COVID-19 and supported by her newfound technology confidence, Caroline was able to transition to virtual sessions with her TSO. She was successful in getting online shopping delivered, received telehealth appointments with her health care practitioners and remained connected to friends and family. In addition, Caroline also engaged with, created and shared numerous YouTube videos to stay connected to her Parkinson's community.

"This program has definitely increased the quality of our lives. We feel as though we're not dinosaurs anymore and we know we can stay in our home a lot longer now without worrying".

![](_page_27_Figure_0.jpeg)

#### **FIGURE 12:** Change in confidence using technology across time points (N = 78).

Note. Error bars indicate ± 1 Std. Error.

Results suggesting improved technology confidence were supported by the CEQ. At week 6 of the program clients were asked if they thought that their confidence to use their device and technology had improved because of the program. Most clients (88%) reported improved confidence at week 6 and 4 clients reported a neutral response. No client said that the program had not improved their confidence (Figure 8).

**FIGURE 13:** CEQ (week 6), Do you think your confidence to use your device(s) and technology has improved because of the program? (N = 36)

![](_page_27_Figure_5.jpeg)

#### **CASE STUDY**

## LET'S GET TECHNICAL FOR CYBERSAFETY

Frank is an 85-year-old Grandfather, the patriarch of a large family spread over the various states of Australia. Previously, throughout his working life, he had been introduced to computers, yet never felt totally confident using them. Now living in an independent living village and family busy with everyday life, he had no one to consult when he received suspicious looking emails from a communications company. After being scammed over ten thousand dollars, his confidence and trust in technology was crushed.

After receiving marketing from Feros Care, Frank decided to participate in the program to help him identify scams or cybercrime and once again have a better relationship with technology. His other goals also included basic device training to build confidence, connecting on social media, paying bills online. During the COVID-19 pandemic, Frank found the program to be a lifeline where he was able to apply his new technology skills to engage with an online social platform.

### "I love the Virtual Social Centre! It has really helped with this whole lockdown."

After the program, Frank felt that his confidence and quality of life had improved exponentially! He felt confident to navigate the web and make informed decisions and that he had regained the control and dignity that was taken away when he was scammed.

![](_page_27_Picture_14.jpeg)

He also couldn't believe how proud his children were of him and loved being able to interact with his grandchildren using technology.

"At first I was embarrassed to tell my kids what had happened with the scammers but they're so happy for me now and I feel so much more confident whereas I'd been so embarrassed before."

In addition, he found that his curiosity continued to soar and he engaged with other technology programs by Feros Care that saw him turn his home into a smart home and also engage with a virtual nurse and telehealth program to manage his chronic disease.

"I just liked it all! The guy [TSO] was really patient and was good. I like listening to music and getting on to all the good singers and that kind of thing. With all this lock down stuff I'm on the computer all day now!" The week 6 CEQ also asked clients to rate their confidence in using technology from 1 "not confident at all" to 5 "very confident" (Figure 9). Most clients reported their confidence to be at level 3 (41.7%) followed by 4 (36.1%). At week 6 only 5.6% of clients reported that they were "very confident".

![](_page_28_Figure_1.jpeg)

![](_page_28_Figure_2.jpeg)

#### **5.4.3 SOCIAL CONNECTEDNESS**

In the post-program responses, most clients (93%) reported that technology had supported them with communication and 37% reported social support (Figure 10).

FIGURE 15: Percentage of clients reporting that technology has helped with communication and social support (N = 100).

![](_page_28_Figure_6.jpeg)

#### **CASE STUDY**

Brenda is an 82-year-old grandmother of a large connected family in QLD. Brenda felt that even though the family was connected, she was technologically disconnected from the youngest of the family. She deeply felt impacted by the digital divide and when reaching out for help with technology, her family didn't have the time to properly guide her through the necessary steps. She felt that by undertaking personalised one on one sessions that she would be able to get the help and support that she needed to keep up in todays "technological world".

Brenda reported that she used technology rarely or around once a week. She had little confidence in her abilities and therefore had been quite anxious to start the technology training program. Her goals surrounded basic phone use as she had been gifted a new smart phone device from her granddaughter and hadn't felt confident enough to use it. Additionally, she wanted to be able to exchange photographs with her grandchildren and connect with them via their preferred method of communication.

After the program Brenda was more confident using her new phone. She is now using her devices every day and was feeling much more confident in her ability to use technology. She stated that technology and learning how to use it properly had improved her life immensely and it had made her feel much more confident in

![](_page_28_Picture_13.jpeg)

managing her affairs such as online banking and dealing with any government services that she was too anxious to use previously. She also stated that this program had improved the quality of her life and her independence. Most important to Brenda, this program had connected her to her family in such a way that she was now more socially connected than ever. She felt she had "left digital isolation and gosh her grandchildren were proud of her". Brenda also used technology during COVID-19 to hold a virtual birthday party with all of her family. Technology now plays a huge role for this matriarch in ensuring her ties and connections with her family remain stronger than ever.

"Technology is just so exciting!! I love to see how and what it will do next!"

Clients were asked to rate their satisfaction with family/social support from 1 "very dissatisfied" to 5 "very satisfied". There was a statistically significant difference in satisfaction with family and social support across time,  $x^2(2) = 10.25$ , p = .006. This finding was followed up with Wilcoxon signed rank tests. Satisfaction with social and family support was greater at post-program (Mdn = 5.00, Z= 2.82, p= .005, r = .20) and at follow-up (Mdn = 5.00, Z = 2.46, p = .014, r = .20 than pre-program (Mdn = 5.00). There were no significant differences between satisfaction with social and family support at follow-up and post-program (Z = .88, p = .379, r = .07).

#### Satisfaction with family and social support increased, and was sustained over time.

![](_page_29_Figure_2.jpeg)

**FIGURE 16:** Change in satisfaction with social and family support across time points (N = 78).

Clients were asked how often they engage in in social/volunteer activities per week from 0 "never" to 5 "5 or more times". There were no statistically significant changes in client engagement in social/volunteer activities across time, F (2, 152) = 1.17, p = .308,  $\eta$ p2 = .02. With the program coinciding with the COVID-19 pandemic and restrictions imposed for in person gatherings and social activities, many people were unable to participate in their regular social or volunteer activities. Therefore, it would be expected that engagement in these activities would drop.

#### **Reported engagement included:**

"Attending church services online which means everything to me especially during Corona Virus, it opened my mind to look at different things in different ways."

".. being able to search up people that I've met in the past and that sort of thing has been amazing and so nostalgic; it brings me back to my childhood!"

#### **CASE STUDY**

# LGT FOR SOCIAL CONNECTION

Delia is a 74-year-old grandmother who lives at home with her husband of 40 years. She has a large social group of friends. She lives with depression, hearing difficulties, multiple mobility issues due to advancing arthritis in her joints and has frequent surgeries to cater for this. Her husband is guite tech savvy and curious about technology, enjoying the gamification around learning and research. The couple were excited to participate in the LGT program and could instantly forecast the benefits even though a little apprehensive. Delia understood that it would help to connect her with friend's interstate and her husband was excited saying "learning about different technology was a dream ever since I was a young boy".

The main goals of the couple were associated with staying independent in the home, feeling engaged and a part of their community, and wanting to increase their sense of future security and safety in the home. They also wanted to play games and connect with their grandchildren through their online games. The program allowed the couple to connect to an online platform that connects seniors in the home, using the VSC and other social media platforms. Delia was not only able to connect to her friends and grandchildren, she was also able to perform

![](_page_29_Picture_14.jpeg)

exercises in the home, connecting her to online yoga classes. Her husband installed Zoom on their devices and even developing his own quick 'how to guide' for their friends in Canberra. The husband and wife duo were combatting social isolation with full technology immersion! Learning how to connect in new and different ways, from podcasts to Ted and even learning more about health. Delia also downloaded various apps that connected to her hearing aids.

Delia and her husband felt that learning how to use technology was "**the way of the future for Aged Care**". They felt much more connected to their friends and family and even to each other through their newfound mutual interest in technology. The couple felt as though their whole quality of life had been positively impacted by the program.

![](_page_30_Figure_0.jpeg)

Clients were asked how often they use their device to connect or communicate socially from 0 "never" to 7 "More than once a day". There was a statistically significant change in the use of devices to communicate socially across time points  $x^2(2) = 6.06$ , p = .048. This finding was followed up with Wilcoxon signed rank tests. Clients used their device to communicate socially more frequently at post-program (Mdn = 7.00, Z = 3.73, p < .001, r = .26) and at follow-up (Mdn = 7.00, Z = 3.32, p = .001, r = .26) than pre-program (Mdn = 7.00). There were no significant differences in the frequency that clients used their device to communicate socially between post-program and follow-up (Z = .26, p = .807).

#### Clients used their devices to communicate with others more often, which was sustained over time.

![](_page_30_Figure_3.jpeg)

![](_page_30_Figure_4.jpeg)

**FIGURE 17:** Change in weekly engagement in social/volunteer activities across time (N = 77)

"... its really inspired me!... talking to my grandkids online! I want to be part of their lives and Gosh they're so proud of me. I just need to be a part of what they're doing, I want to be included with my whole family and not sat in the corner like look at that old granny. Now I'm connecting with them in all sorts of way even face timing my 8-year-old granddaughter to talk about butterflies!"

"Using skype was an absolute celebration. Just amazing to see people from the UK in real time. Not just seeing faces in pictures but seeing and speaking to family that I haven't spoken to in years."

"With all this lock down stuff I'm on the computer all day now."

Data for the personal relationships and community engagement domains of the PWI were also analysed to evaluate the programs impact on social connectedness There was no statistically significant change in clients' Personal Relationships across time points,  $x^2(2) = .768$ , p = .681.

FIGURE 19: Change in Personal Relationships across time points (N = 80).

![](_page_30_Figure_11.jpeg)

There was a statistically significant change in Engaged with Community across time  $x^2(2) =$ 6.75, p = .034. This finding was followed up with Wilcoxon signed rank tests. Engaged with Community was greater in post-program (Mdn = 90.00) than pre-program (Mdn = 85.00, Z = 2.47, p = .014, r = .17). There was no significant difference between Engaged with Community at follow-up (Mdn = 90.00) and pre-program (Z = 1.80, p = .073, r = .14). There was also no significant difference between Engaged with Community at post-program and follow-up (Z = 1.01, p = .315, r = .08).

#### Engagement with community improved, and was partially sustained over time.

![](_page_31_Figure_1.jpeg)

**FIGURE 20:** Change in Engaged with Community across time points (N = 80).

![](_page_31_Picture_3.jpeg)

#### **CASE STUDY**

## LGT FOR MAINTAINING WORLDWIDE SOCIAL CONNECTIONS

Ann, an 87-year-old grandmother to a large family in NSW, lives alone with vision difficulties. Initial goals were based around connection with friends, family and social opportunities as she did not feel satisfied with her current social and family support. She wanted to focus on learning Skype, Gmail and to take and share photographs with her family overseas. Initially, she was very anxious about undertaking the program and reported that she felt embarrassed that she was doing this sort of program at her age. She felt that doing one on one personalised sessions at her own pace was absolutely perfect for her and felt that she was in total control of the program and what she wanted to achieve. She felt that working in collaboration to achieve her goals was fundamental to her success. She had previously attempted to take part in group learning sessions but had felt that they had rushed through the sessions.

Within the first three lessons Ann had become proficient with emailing, taking and sharing photos, Skype, zoom and "Googling" for information requests. She was able to stay connected with friends and family online during lockdown, regularly visited YouTube, and was able to track COVID-19 cases and keep up to date on the news surrounding the pandemic. She also became proficient in searching and applying new techniques, exercises and developments in her health conditions. This was demonstrated by her interest in macular degeneration; where she felt that learning new eye exercises and being empowered to search for evidence

![](_page_31_Picture_10.jpeg)

based, and up to date research had dramatically improved her eye health.

Ann felt that the LGT program had improved the quality of her life in several unexpected areas. She reported that undertaking the program increased her independence, confidence and had eased any anxieties she'd previously felt surrounding using new technology. Another important area that saw dramatic improvements; was how Ann felt about what she was achieving in life. She reported that since undertaking this program her motivation to participate in other programs had grown and she was excited to hear about future technology-based programs she could participate in.

Ann continues to use her devices more than once a day, is supported by her family overseas and is constantly researching new therapies in line with her health issues.

"I've learned so much more than I'd ever expected! Even with my macular degeneration! I've been able to Google things that even the doctors have never mentioned before... And they work! I couldn't have done this without Feros!"

### **5.4.4 HEALTH AND WELLBEING**

Changes in clients' health and wellbeing were captured using the PWI. Total Personal Wellbeing scores and scores on each of the PWI domains (Standard of Living, Health, Achieving in Life, Personal Relationships, Safety, Engaged with Community, and Future Security) were compared across three time points (pre-program, post-program and follow-up) (Table 8).

#### **TABLE 8:** Scores on the PWI across time points (N = 80).

<b>PWI DOMAIN</b>	STAGE	MEDIAN	90TH Percentile	MINIMUM	MAXIMUM	<b>P VALUE</b>
Standard of living	Pre	90.00	100.00	0.00	100.00	.582
	Post	90.00	100.00	40.00	100.00	
	Follow-up	90.00	100.00	0.00	100.00	
Health	Pre	80.00	100.00	30.00	100.00	.582
	Post	80.00	100.00	30.00	100.00	
	Follow-up	80.00	100.00	30.00	100.00	
Achieving in life	Pre	80.00	100.00	0.00	100.00	.022*
	Post	80.00	100.00	20.00	100.00	
	Follow-up	80.00	100.00	20.00	100.00	
Personal	Pre	90.00	100.00	0.00	100.00	.681
relationships	Post	90.00	100.00	40.00	100.00	
	Follow-up	90.00	100.00	30.00	100.00	
Safety	Pre	90.00	100.00	50.00	100.00	.779
	Post	90.00	100.00	30.00	100.00	
	Follow-up	90.00	100.00	30.00	100.00	
Engaged with	Pre	85.00	100.00	0.00	100.00	.034*
community	Post	90.00	100.00	30.00	100.00	
	Follow-up	90.00	100.00	10.00	100.00	
Future security	Pre	80.00	100.00	0.00	100.00	.001**
	Post	90.00	100.00	40.00	100.00	
	Follow-up	90.00	100.00	0.00	100.00	
Personal wellbeing	Pre	82.86	97.00	14.29	100.00	.018*
	Post	85.71	100.00	42.86	100.00	
	Follow-up	85.71	100.00	28.57	100.00	

**Standard of Living** 

There was no significant change in clients' Standard of Living across time points (p = .582). FIGURE 21: Change in Standard of Living across time points

![](_page_32_Figure_6.jpeg)

### Health

There was no significant change in clients' Health across time points (p = .582). FIGURE 22: Change in Health across time points

![](_page_32_Figure_9.jpeg)

Note. \*<.05 \*\* <.10

#### Achieving in Life

There was a statistically significant change in clients' Achieving in Life across time points,  $x^{2}(2)$ = 7.62, p = .022. This finding was followed up with Wilcoxon signed rank tests. Achieving in Life was significantly greater post-program (Mdn = 80.00) than at pre-program (Mdn = 80.00, Z = 2.63, p = .009, r = .19). There was no significant difference between Achieving in Life at follow-up (Mdn = 80.00) and pre-program (Z = 1.94, p = .053, r = .17). However, there is a trend at the p =.05 level that indicates participation in the LGT program was associated with increased Achieving in Life at follow-up that may represent a real effect. There was no difference between Achieving in Life at post-program and follow-up (Z = .49, p = .622, r = .04).

#### Feelings of Achieving in Life improved, and was partially sustained over time.

![](_page_33_Figure_3.jpeg)

![](_page_33_Figure_4.jpeg)

#### **Personal Relationships**

These results are reported in Section 5.4.3 Social Connectedness.

#### Safety

There was no statistically significant change in clients' Safety across time (p = .779).

FIGURE 24: Change in Safety across time points

![](_page_33_Figure_10.jpeg)

#### **Engaged with Community**

These results are reported in Section 5.4.3 Social Connectedness.

#### **Future Security**

There was a significant change in Future Security across time,  $x^2(2) = 13.47$ , p = .001. This finding was followed up with Wilcoxon signed rank tests. Future Security was significantly greater post-program (Mdn = 90, Z = 3.95, p < .001, r = .28) and at follow-up (Mdn = 90, Z = 3.03, p = .002, r = .24) than pre-program (Mdn = 80). There was no significant difference between Future Security post-program and at follow-up (Z = 1.50, p = .133, r = .12).

Feelings of Achieving in Life improved, and was partially sustained over time.

#### **FIGURE 25:** Change in Future Security across time points

![](_page_34_Figure_1.jpeg)

#### **Personal Wellbeing**

There was a significant change in clients' overall Personal Wellbeing across time points,  $x^2(2) = 8.01$ , p = .018. This finding was followed up with Wilcoxon signed rank tests. Personal Wellbeing was significantly greater post-program (Mdn = 85.71, Z = 3.28, p = .001, r = .23) and at follow-up (Mdn = 85.71, Z = 2.92, p = .004, r = .23) than pre-program (Mdn = 82.86). There was no significant difference between Personal Wellbeing at follow-up and post-program (Z = 1.21, p = .262, r = .09).

#### Overall Personal Wellbeing improved, and was sustained over time.

![](_page_34_Figure_5.jpeg)

FIGURE 26: Change in Personal Wellbeing across time points

#### **Quality of Life**

## Upon completion of the program most clients reported improved quality of life (96%) (Figure 22).

**FIGURE 27:** Do you feel that undertaking this program has increased the quality of your life? (N = 100)

![](_page_34_Figure_10.jpeg)

#### **5.4.5 DIGITAL HEALTH LITERACY**

Changes in clients' digital health literacy were captured using the eHLQ. Scores on each of the eHLQ domains (Ability to Process Information, Engagement in Own Health, Ability to Actively Engage with Digital Services, Feel Safe and in Control, Motivated to Engage with Digital Services, Access to Digital Services that Work, and Digital Services that Suit Individual Needs) were compared across three time points (pre-program, post-program and follow-up) (Table 9).

**TABLE 9:** Scores on the eHLQ across time points (N = 76).

				95% CI		
EHLQ DOMAIN	STAGE	м	SD	LOWER	UPPER	<b>P VALUE</b>
Ability to process information	Pre-program	2.08	.86	1.88	2.28	< .001
	Post-program	3.02	.63	2.87	3.16	
	Follow-up	2.96	.60	2.82	3.10	
Engagement in own health	Pre-program	2.94	.48	2.83	3.05	< .001
	Post-program	3.32	.47	3.21	3.43	
	Follow-up	3.32	.44	3.22	3.42	

				95% CI		
EHLQ DOMAIN	STAGE	М	SD	LOWER	UPPER	P VALUE
Ability to actively engage with digital services	Pre-program	2.10	.75	1.93	2.27	< .001
	Post-program	3.12	.60	2.99	3.26	
•	Follow-up	3.00	.61	2.86	3.14	
Feel safe and in control	Pre-program	2.82	.69	2.67	2.98	< .001
	Post-program	3.27	.52	3.15	3.38	
	Follow-up	3.26	.61	3.12	3.40	
Motivated to	Pre-program	2.35	.77	2.18	2.53	< .001
engage with digital services	Post-program	3.17	.51	3.05	3.28	
	Follow-up	3.11	.56	2.99	3.24	
Access to digital services that work	Pre-program	2.59	.59	2.46	2.73	< .001
	Post-program	3.31	.49	3.20	3.43	
	Follow-up	3.22	.50	3.11	3.33	
Digital services that suit individual needs	Pre-program	1.97	.83	1.78	2.16	< .001
	Post-program	2.87	.65	2.72	3.02	
	Follow-up	2.89	.57	2.76	3.02	

### **Ability to Process Information**

There was a significant main effect of time on Ability to Process Information, F(2, 150) = 75.76 p < .001,  $\eta p 2 = .50$ . Post-hoc analysis revealed that Ability to Process Information was greater at post-program (M = 3.02, p < .001, d = 1.25) and at follow-up (M = 2.96, p < .001, d = 1.19) than pre-program (M = 2.08). The difference between Ability to Process Information at follow-up and post-program was not statistically significant (p = .395, d = .10).

Ability to Process Information improved, and was sustained over time.

![](_page_35_Figure_4.jpeg)

![](_page_35_Figure_5.jpeg)

Note. Error bars indicate ± Std. Error.

### **Engagement in Own Health**

There was a significant main effect of time on Engagement in Own Health, F(2, 150) = 30.93, p < .001,  $\eta p 2 = .29$ . Post-hoc analysis revealed that Engagement in Own Health was greater at post-program (M = 3.32, p < .001, d = .80) and at follow-up (M = 3.32, p < .001, d = .82) than pre-program (M = 2.94). The difference between Engagement in Own Health at follow-up and post-program was not statistically significant (p = .950, d = .00).

### Engagement in Own Health improved and was sustained over time.

FIGURE 29: Change in Engagement in Own Health across time points.

![](_page_35_Figure_11.jpeg)

Note. Error bars indicate ± Std. Error.
#### Ability to Actively Engage with Digital Services

There was a significant main effect of time on Ability to Actively Engage with Digital Services, F(2, 150) = 112.64, p < .001,  $\eta$ p2 = .60. Post-hoc analysis revealed that Ability to Engage with Digital Services was greater at post-program (M = 3.12, p < .001, d = 1.94) and at follow-up (M = 3.00, p < .001, d = 1.69) than pre-program (M = 2.10). The difference between Ability to Engage with Digital Services at follow-up and post-program was not statistically significant (p = .057, d = .20).

#### Ability to Actively Engage with Digital Services improved, and was sustained over time.



FIGURE 30: Change in Ability to Actively Engage with Digital Services across time points

Note. Error bars indicate ± Std. Error.

#### **Feel Safe and in Control**

There was a significant main effect of time on Feelings of Safety and Control, F(2, 150) = 20.88, p < .001,  $\eta p 2 = .22$ . Post-hoc analysis revealed that Feelings of Safety and Control were greater at post-program (M = 3.27, p < .001, d = .74) and at follow-up (M = 3.26, p < .001, d = .68) than pre-program (M = 2.82). There was no significant difference between Feelings of Safety and Control at follow-up and post-program (p = .963, d = .02).

#### Feelings of Safety and Control improved, and were sustained over time.

FIGURE 31: Change in Feelings of Safety and Control across time points.



Note. Error bars indicate ± Std. Error.

#### Motivated to Engage with Digital Services

There was a significant main effect of time on Motivation to Engage with Digital Services, F(2, 150) = 72.10, p < .001,  $\eta p 2 = .49$ . Post-hoc analysis revealed that Motivation to Engage with Digital Services was greater at post-program (M = 3.17, p < .001, d = 1.26) and at follow-up (M = 3.11, p < .001, d = 1.13) than pre-program (M = 2.35). There was no significant difference between Motivation to Engage with Digital Services at follow-up and post-program (p = .330, d = .11).





#### Access to Digital Services that Work

There was a significant main effect of time on Access to Digital Services that Work, F(2, 150) = 75.29, p < .001,  $\eta p 2 = .50$ . Post-hoc analysis revealed that Access to Digital Services was greater at post-program (M = 3.31, p < .001, d = 1.33) and at follow-up (M = 3.22, p < .001, d = 1.15) than pre-program (M = 2.59). There was no significant difference between Access to Digital Services at follow-up and post-program (p = .127, d = .18).

#### Access to Digital Services improved, and was sustained over time.

WORK 3.5 THAT 3 SERVICES 2.5 2 DIGITAL 1.5 2 ACCESS 0.5 0 FOLLOW-UP PRE-PROGRAM POST-PROGRAM

FIGURE 33: Change in Access to Digital Services that Work across time points.

Note. Error bars indicate ± Std. Error.

#### **Digital Services that Suit Individual Needs**

There was a significant main effect of time on Digital Services that Suit Individual Needs, F(2, 150) = 87.92, p < .001, np2 = .54. Post-hoc analysis revealed that Digital Services that Suit Individual Needs was greater at post-program (M = 2.87, p < .001, d = 1.21) and at follow-up (M = 2.90, p < .001, d = 1.29) than pre-program (M = 1.97). There was no significant difference between Digital Services that Suit Individual Needs at follow-up and post-program (p = .672, d = .03).

> Access to Digital Services that Suit Individual Needs improved, and was sustained over time.





Note. Error bars indicate ± Std. Error.

# 5.5 ADDITIONAL FINDINGS OF THE LGT PROGRAM

#### "It has brought me back to life! I really feel like this program has changed my life!"

#### **5.5.1 AREAS OF LIFE LGT HAS HELPED WITH**

In pre-program, clients were asked if they think technology could help with a range of areas of life such as shopping, errands/bills, communication, etc. Comparatively, in post-program clients were asked if technology has helped with each of these areas. Changes in client perceptions of daily activities they thought technology could help with, and has helped with can be found in Figure 30.

FIGURE 35: Change in client's perceptions of how technology could help them (pre-program) and has helped (post-program) across a range of daily activities (N = 100).



Most clients reported that they thought technology could support them with communication (61%), followed by errands/bills (27%) and social support (23%). Clients reported technology could help them least with cultural/spiritual (2%) and food prep/delivery/recipes (6%). Following the implementation of the LGT program, clients reported that technology had actually supported them in all these areas of life, however, there were very few clients who reported that they were also helped with cultural/spiritual needs (7%). The majority of clients reported that technology supported them with communication (93%), and many with social support (37%) and errands/bills (35%).

A McNemar's Chi-Square test was performed for each area of daily life to test the null hypothesis that there was no difference between clients' perception of and actual help received from technology in pre- and post-program.

There was a significant difference in pre and post LGT program perceptions of perceived and actual technology support with food preparation/deliver/recipes (p = .012), communication (p < .001), social support (p = .035) and other (p = .027) areas of life. More clients reported that technology had actually helped them in these areas of life than they initially reported.

#### **5.5.2 HOW CLIENTS ARE USING THEIR DEVICES**

Clients were asked what they are using their devices for pre- and post-program (Figure 31). More clients were using their devices at post-program than pre-program for every activity, except communication.

**FIGURE 36:** How clients are using their devices pre- and post-program (N = 99).



Prior to the LGT program most clients reported that they were using their devices for communicating with friends/family (86.9%), google searches (62.6%) and news/entertainment (54.5%). Clients reported that they were using their devices least for online shopping (16.2%) and My Gov services (18.2%). Following implementation of the LGT program, most clients continued to report using their devices for communicating with friends/family (83.8%), google searches (75.8%) and news/entertainment (70.7%). The majority of clients reported using their devices for communicating with friends/family at both pre- and post-program.

A McNemar's Chi-Square test was performed for each device activity to test the null hypothesis that there was no difference between clients' use of digital technology in pre- and post-program.

There was a statistically significant difference in pre and post technology device use for news/ entertainment (p = .015), online shopping (p < .001) and google searches (p = .043). More clients reported using their devices for these activities at post-program than pre-program.

**TABLE 10:** Number of ways clients are using their devices (N = 99).

	PRE-PROGRAM
Number of ways using devices	M (SD), range
	3.25 (1.83), 0-7

A paired samples t-test revealed that clients were significantly using their devices in more ways during post-program than pre-program, t(98) = 3.82, p < .001, d = .42.

#### **5.5.3 OVERALL SATISFACTION WITH THE PROGRAM**

At week 6 of the program, clients were asked if they felt that they were accomplishing their set goals. Most clients (83.8%) reported that they were accomplishing their goals (Figure 32).

FIGURE 37: CEQ (week 6), Do you feel like you are accomplishing the goals you set with your TSO? (N = 37)



POST-PROGRAM
M (SD), range
3.99 (1.73), 1-8

#### FIGURE 38: Do you feel that you have achieved your goals? (N = 100)



Upon completion of the program most clients had achieved their goals (92%) (Figure 33).

Clients were asked to rate the LGT program on a 10-point Likert scale, with 1 being very poor and 10 being excellent. Responses ranged from 6 to 10 with the most frequent response a rating of 10 "excellent" (Figure 34).

**FIGURE 39:** CEQ (week 12), on a scale of 1 to 10 what did you think of the program? (N = 65)



The CEQ asked clients whether the program had met their expectations (Figure 35). Most clients (97%) reported that the program had met their expectations.

**FIGURE 40:** CEQ (week 12), Did the program meet your expectations? (N = 65)



#### "I'm not technically inclined so I didn't expect much so it was interesting seeing what technology can do."

When asked if the program had changed their life most clients (80%) reported that the program had "definitely" changed their life (Figure 36). Only two clients (3.1%) were unsure if the program had changed their life. No clients reported that the program had not changed their life.

**FIGURE 41:** CEQ (week 12), Do you think doing this program has changed your life? (N = 65)



pectation	5. (14	00)		
		NO		
EXPECTATIO	NS			

HT OR	PROBABLY NOT	DEFINITELY NOT

PROGRAM HAS CHANGED LIFE

At week 6 of the program, clients were asked how likely they were to recommend the LGT program to others on a 11-point Likert scale form 0 "not at all" to 10 "extremely likely" (Figure 37). Responses ranged from 6-10 with the most frequent response 10 "extremely likely" to recommend (72.2%).





This is consistent with the CEQ at week 12, where almost all clients (98.5%) reported that they were "extremely likely" to recommend the LGT program to a friend (Figure 38). Only one client reported that they were "somewhat likely" to recommend the program.

**FIGURE 43:** CEQ (week 12), How likely are you to recommend this program to a friend? (N = 65)



#### **5.6 DISCHARGE RATES**

Twenty-one clients were discharged from the LGT program (discharge rate = 21%). These places were filled by clients who were on the program waiting list. The average age of discharged clients was 80.71 (SD = 5.77, 68-89). Discharged clients were predominantly female (71.4%) and living in QLD (61.9%) (Table 11).

**TABLE 11:** Demographics of discharged clients (N = 21).

	CHARACTERISTIC	Ν	%
Gender	Female	15	71.4
	Male	6	28.6
State	QLD	13	61.9
	NSW	8	38.1

Most clients indicated that the reason for discharge was they were "overwhelmed" (Table 12).

**TABLE 12:** Reason for client discharge (N = 21).

DISCHARGE THEME	N	%
Overwhelmed	4	19.0
Confident with tech	3	14.3
No longer interested	3	14.3
Changed providers	2	9.5
COVID-19	2	9.5
Partner on program	2	9.5
Did not meet minimum	1	4.8
Hospitalised	1	4.8
Incident	1	4.8
Other program	1	4.8
Other	1	4.8

Reasons given for discharge included:

Client participates in senior technology classes down the road as part of a group on a weekly basis. She would like to continue the group she is already attending and informed she does not want to continue with the LGT program.

Client did not have minimum requirements to participate in this service.

Permanent care from hospital.

Client will be participating in SHM instead.

**Recommendation from WM.** 

Not wishing to proceed due to family issues.

### **5.7 SCALING AND SUSTAINABILITY**

#### 5.7.1 CLIENT PREFERENCES FOR ONGOING PARTICIPATION IN LGT

In terms of ongoing participation, 100% of clients wanted to keep progressing in their digital literacy learning journey. Furthermore, 100% of clients who had received internet data from Feros Care were transitioned to their own personal internet connection at the completion of the program and were happy to pay for a private service navigated by their TSO.

One client reported to Feros Care the following feedback when asked what monetary value would she place on these sessions;

"I would pay for this service until I was bankrupt or dead!"

Another client reported;

"I just couldn't put a price on this service! It was never about the money. It's been invaluable"

#### 5.7.2 COSTING AND ONGOING USE

The LGT program consists of one cost component which includes;

Support from a Technical Support Officer at \$93 per hour

It is important to note that the costs outlined as above do not take into consideration the cost of establishing the LGT service and assumes that the service has:

- Recruited all team members adept in technology and experienced in customer relations.
- Virtual platforms or third-party applications on which the extra features run such as Netflix have not been costed in this model.
- Established systems in place including but not limited to the policies and procedures involved with operating a service, client management database, video conferencing infrastructure and support and contracts with third parties.

#### **5.7.3 FUTURE PROOFING FOR SCALABILITY**

The Australian Government initiative has committed to provide all government services online by 2025, (Digital Transformation Agency, 2020). As these services transition to online, the scalability for this program is timely and imperative to the psychological and physiological wellbeing of seniors.

The exponential growth of technology and transition to more online services means there will be a demand for technology training sessions for seniors throughout Australia.

#### **5.7.4 SERVICE INTEGRATION**

Feros Care has already commenced integration of the LGT program in all community service programs as follows;

 The LGT program has been integrated into the service offerings to Home Care Package and Short-Term Restorative Care clients to assist them in their daily lives. The client's wellbeing managers have been identifying clients who have set goals or could benefit from connecting online for shopping, banking, billpaying, social connection or may be feeling as though they are being left behind or simply want to improve their technology skills. Feros Care is proud to commit to upskilling their care support workers in a hybrid role to provide care and technology support to clients. In accordance with this Feros Care will research the benefits and effects of Care Support Workers delivering services and any impacts that may be observed.

- Feros Care have committed to providing a hybrid of face to face and virtual services to allow remote or housebound clients the same opportunities.
- All 100 clients from the pilot program will continue to give feedback or opportunities for the future co design in the program improvements / extension if they choose.
- Feros Care has received funding through the Commonwealth Home Support Scheme another 2 years of research and deployment of the program, providing another 500 clients with the opportunity to participate in the LGT service.
- Feros Care, in conjunction with the point above, have committed to increasing the footprint of services to foster digital inclusion in rural or remote areas.
- Feros Care have engaged with Google to explore the benefits and impacts of providing clients who live with a disability, smart home devices and building digital capacity using Artificial Intelligence.
- Feros Care have commenced the Healthy Life program focused on using remote technology to monitor health. The goal is to integrate smart technology and health monitoring technology to holistically manage health and wellbeing using the SHM program learnings, digital capacity building and technology.

#### 5.7.5 EVIDENCE OF GOVERNANCE ARRANGEMENTS

Feros Care's LGT program post pilot will continue to be under the ongoing management of the organisation's Product Innovation Team. These services fall within Feros Care's operational and corporate governance structures that include Care and Clinical Governance, Senior Management Team, Audit Risk and Compliance committees. Feros Care's telehealth services and systems has ISO9001:2008 Quality Management certification that is externally verified annually. Any new service including project rollouts are managed and governed by Feros Care's project management framework.

#### 5.7.6 EVIDENCE OF ONGOING SUPPORT

Feros Care have been awarded further funding from the Australian Government's Department of Health CHSP Program under mainstream funding. Continuous development, iteration and co design with clients ensures the success and sustainability of the program and continued support for current clients.

In addition to the Australian Governments support and funding, continued support and connection to the Living Lab accredited bodies both international and national has been established to continuously support and help Feros Care's research in a sustainable client centred approach with the client always at the centre of design. Utilising this support, we hope to continue to be at the forefront of translational research and pioneering the celebration of aging and longevity.

### **5.8 LEARNINGS: WHAT WAS DONE WELL, WHAT CAN BE IMPROVED?**

Learning about the processes of implementation was captured from the perspectives of clients enrolled in the LGT program. This section summarises the feedback from clients and their perspectives on what was done well and what could have been improved from the CEQ. Feros Care have also reflected on the implementation of the program and have provided a detailed analysis of the program implementation.

#### **5.8.1 CLIENT PERSPECTIVE: WHAT WAS DONE WELL?**

Data from the CEQ suggests that the service provided by the Technical Support Officers (TSO) was a particular strength of the program. Clients were asked to rate their TSO out of 5 stars (Figure 39), with the most clients giving a rating of 5 stars (90.8%). No client gave their TSO a rating of less than 4 stars.

100 90 80 70 (%) 60 ONSE 50 40 30 20 10 0 3 5 1 2 4 TSO RATING

Clients also felt that the resources provided (workbook modules, welcome pack and stylus) were valuable learning tools.

"the books are great..they help me think of guestions to ask the TSO the next visit".

"the booklets were great-a big source of information".

"the brochures after great as I love to read. They are very easy to read and understand." "Stylus is helpful".

Compliments provided by clients at the program conclusion:

The client reported that doing the program was so good for her and had given her a new lease on life! She also reported that her TSO was so lovely and if we were to continue the program she would like to keep going!

The client reported that he loved the program and had really enjoyed learning more things. He said he learned more than he thought he would and it exceeded his expectations!

The client reported that she absolutely loved the program and she loved having her TSO. She felt like her TSO made the difference in her service and she would love to continue her sessions if that was possible.

"The more I learn the more confidence I have. I know I don't know everything yet, nowhere near but its really inspired me! Also talking to my grandkids online! I want to be part of their lives and Gosh they're so proud of me. I just need to be a part of what they're doing, I want to be included with my whole family and not sat in the corner like look at that old granny. Now I'm connecting with them in all sorts of way even face timing my 8-year-old granddaughter to talk about butterflies!"

[TSO] has removed her confusion with computers and she is not afraid of them anymore. She is feeling so much more confident with using her tablet now.

The client reported that she had used Skype for the first time in years and it was just such a celebration for her seeing and speaking to family she hadn't seen in years. She said that technology had improved any loneliness that she may have felt. She also said that the program had definitely changed her life.

When conducting the final evaluation with the client he reported that his confidence went from a minus 3 to a 4! He really enjoyed the program and would definitely recommend it to friends.

#### **5.8.2 CLIENT PERSPECTIVE: WHAT COULD BE IMPROVED?**

Clients were asked if there was anything that Feros Care could do to improve their experience of the LGT program. Approximately one third (36%) of clients felt that 1 hour was "not enough time" for a support visit, with many clients suggesting that they could have benefitted from longer sessions. Clients reported that more sessions, delivered at a slower pace would be beneficial.

#### Client recommendations for improvement included:

"Some reminders of the upcoming sessions and more homework practice exercises. Slower the pace a little."

- "I need more things written down to make notes"
- "I think the most important thing is to pick the right people to teach. Teaching technical things you need to have great patience."
- "Get the modules out a bit quicker and maybe do some group lessons start the basics."
- "If we were provided homework that involved repetition."
- "Sometimes the hour wasn't the whole hour due to making a tea and settling in."
- "Maybe some notes, you mentioned there were some booklets, brochure on Facetime and more difficult activities"



FIGURE 44: CEQ (week 12), How would you rate your TSO out of 5 stars? (N = 65)

#### **5.8.3 FEROS CARE PERSPECTIVE: WHAT WORKED WELL AND WHAT COULD BE IMPROVED?**

The following tables outline the learnings from each of the phases of LGT as captured from the perspective of Feros Care

#### TABLE 13: Planning

ISSUE/REQUIREMENT	WHAT WE DID	WHAT WE COULD DO NEXT TIME
Tracking project tasks, goals and responsibilities	Creation of a Project Management	N/A
	Schedule to identify tasks, goals and responsible team members.	
	These tasks were broken down into a weekly milestone chart which captured the project team meeting minutes.	
Risk management	A risk table was created and risk management plan was used to address risks	N/A
Deployment of materials or internet dongles	Established courier TNT for overnight delivery to various regions.	N/A
Beta testing	Conducted Beta testing and round table review processes with the project team to ensure the ease of use and accessibility of the client resources	Ideally conduct Beta testing for a longer duration of time with a more varied cohort of people such as the end users themselves.

#### **TABLE 14:** Project Team Resourcing

ISSUE/REQUIREMENT	POSITION	WHAT WE COULD DO NEXT TIME
Project sponsor, engaging with stakeholders, organistational commitment and provision of high level plans to government departments	Chief Exectuve Officer	N/A
Project management encompassing human resources, day to day operations of the program and design of the service	Project Lead, Service Deployment	N/A

ISSUE/REQUIREMENT	POSITION	WHAT WE COULD DO NEXT TIME
Product design encompassing co creation and development of the product itself being the LGT Program and modules of learning. Coordination and development of marketing collateral including brochures, information guides and mail outs	Project Lead, Service and Product Design	N/A
Day to day support of the Technical Support Officers and troubleshooting, and intake, dispatch inventory management, and documentation	Full Time Technical Support Coordinator	N/A
Training of the LGT modules/sessions	Casual Technical Support Officers	N/A
Quality data collection and evaluation	Part Time Quality Officer	N/A

#### TABLE 15: Marketing

ISSUE/REQUIREMENT	WHAT WE DID	WHAT WE COULD DO NEXT TIME
Communication with clients/ waitlist	Or clients still on the waitlist, phone calls were placed to keep them informed as to what was going on.	Develop newsletters to engage potential clients and keep existing clients up to date

#### TABLE 16: Client Install and Training

ISSUE/REQUIREMENT	WHAT WE DID	WHAT WE COULD DO NEXT TIME
<b>Post installation support</b> – Clients forgot how to use the devices after the technician left	Technical Suppport Officers slowed down the training when revisiting the client on a support visit. Technical Support Officier spoke slow and steady and at a pace that the senior felt comfortable with.	Training videos or visual step by step help
Privacy for clients	Client consent forms, client information sheets, privacy and confidentiality documents were developed to empower the clients. The clients rights were explained clearly. No privacy issues were reported during the length of the pilot.	N/A

#### TABLE 17: Internet Connectivity

INTERNET CONNECTIVITY	PERFORMANCE NOTES	SUGGESTED IMPROVEMENTS
NBN coverage/accessibility	Due to the continuous rollout of the NBN, some clients experienced difficulties with their internet coverage and/or connection strengths. Some clients were also in the middle of being set up and therefore had to have extra support sessions to transfer the internet and password codes.	N/A
4G Dongles supplied by Feros Care	Due to some clients not having the internet, we supplied internet dongles. Some clients due to going over their data limit using Netflix, were limited to the dongle and thus the internet speed reduced.	N/A

#### **TABLE 18:** Client Resources and Equipment

CLIENT RESOURCE	WHAT WE DID	WHAT WE COULD DO NEXT TIME
Client Welcome Kit	A client Welcome Kit was developed and deployed to provide the client with the resources and support necessary to begin training in an accesible and comprehensive manner.	N/A
Let's Get Technical modules	Devloped 19 workbooks dedicated to the top four most commonly used devices	N/A
Device disconnects from Wifi	Provided support via the phone initially. Where not posible we scheduled face to face visits with the client to support them.	N/A

TABLE 19: Reporting and Data Collection

	WHAT WE DID	WHAT WE COULD DO NEXT TIME
Clients had hearing difficulties or trouble answering the telephone	Clients who advised they wished to complete the questionnaire with their TSO were able to do so. The qualitative data was not captured at this stage but retrieved by a different TSO as to get unbiased feedback	N/A
Client demographics	A client management system, Passport, was adapted to allow for the storage of the LGT Program which allowed for easy reported and export of baseline data.	N/A
Baseline surveys and data collection	Manually completed over the phone and uploaded into the clients file in Passport. Questionnaires then manually entered in quantitative data spreadsheet and qualitative data was managed in Qualtrics	N/A
Mid way insights and data collection	Manually completed over the phone and uploaded into the clients file in Passport. Questionnaires then manually entered in quantitative data spreadsheet and qualitative data was managed in Qualtrics	N/A
Discharge Surveys and data collection	Manually completed over the phone and uploaded into the clients file in Passport. Questionnaires then manually entered in quantitative data spreadsheet and qualitative data was managed in Qualtrics	N/A
18 week surveys	Manually completed over the phone and uploaded into the clients file in Passport. Questionnaires then manually entered in quantitative data spreadsheet and qualitative data was managed in Qualtrics	N/A

# 6. DISCUSSION

#### **6.1 PROPOSITION 1:**

Digital literacy building programs facilitate the use of digital technology to complete daily tasks. Being able to independently complete tasks online will increase feelings of control in managing daily affairs.

The study reported evidence in support of this proposition, as evidenced by the following data:

- 97% of clients reported a significant increase in the level of independence, and an increase in the level of control they felt they had in their life. Furthermore, these levels were maintained, with no significant decrease over time, meaning that clients sustained this increased level of independence.
- Clients reported that learning to use technology helped them to do their daily tasks such as communication, social support and errands/bills.
  - o 93% reported technology helped them to communicate with friends and family.
  - o 35% reported that technology has supported them to do errands and pay bills
  - o 22% reported shopping for food or clothes using technology

o Others reported using technology for food preparation, deliveries or recipes (18%) or to improve their safety and security (17%).

 Clients reported an increase in their use of their devices for daily tasks and online activities. This was significant for 1) news/entertainment, 2) online shopping, and 3) google searches.

## 6.2 PROPOSITION 2:

#### Digital literacy programs support confidence in using technology by providing face to face training that is personalised and in the senior's home, thereby adopting a sense of comfort and familiarity.

The study reported evidence in support of this proposition, as evidenced by the following data:

- By the end of the program, all clients (100%) reported that they felt more confident using technology. This is supported by a statistically significant change in the clients' level of confidence at the end of the program.
- At both post-program and the follow-up time point, the clients' level of confidence using technology was significantly higher than at the start of the program. However, this was only partially sustained at the follow-up time point. This suggests that the face to face training in their own homes during the program gave the client confidence. Some clients reported that their confidence had been reduced after the face to face interactions had finished. This is supported by the literature (Schreurs et al., 2017, Tsai et al., 2017, Australian Government, 2018) and suggests that ongoing support may be required.

# 6.3 PROPOSITION 3:

Digital literacy programs support social connectedness by assisting seniors to engage online and maintain regular contact with family and friends whilst providing additional socialisation opportunities within feros care with like-minded individuals who are also participating in the technology training program.

The study reported evidence in support of this proposition, as evidenced by the following data:

- The program offered training using different communication options, such as FaceTime and Skype, giving clients the opportunity to connect with friends and family using technology.
- 93% of clients reported that technology helped them to communicate with friends and family.
- 37% of clients reported that technology helped them feel more supported socially.
- At the end of the program, there was a significant increase in how often clients used technology to communicate socially. These levels were maintained, with no significant decrease at the follow-up time point.
- At the end of the program, there was also a significant increase in their level of satisfaction with family and social support. These levels were also maintained, with no significant decrease at the follow-up time point, meaning that clients continued using technology to communicate and continued to feel more in social connected using technology.
- While there were no significant changes reported in client engagement with social/ volunteer activities through the program, this can be viewed as a positive result. Given that the COVID-19 pandemic began in the first weeks of the program, we would have expected engagement in social/volunteer activities would have reduced during the lockdown period. However, the level of social engagement showed no significant decrease, and this could be due to a reduction in social activities outside of the home, and an increase in social engagement using technology online, in their homes. For example, one client reported attending church online.
- Client case studies highlighted the benefit of the VSC for building social connections with other program clients and the maintenance of existing social relationships. This appeared to be particularly beneficial during the height of the COVID-19 pandemic in which clients were forced into isolation.



## 6.4 PROPOSITION 4:

Digital literacy programs support health and wellbeing by enabling seniors to navigate access to reputable health information and support services. This supports the senior to be more informed about their own health enabling better management of their health and wellbeing.

The study reported evidence in support of this proposition, as evidenced by the following data:

- · Changes in clients' digital health literacy were captured using the eHLQ, with scores on each of seven domains (Ability to Process Information, Engagement in Own Health, Ability to Actively Engage with Digital Services, Feel Safe and in Control, Motivated to Engage with Digital Services, Access to Digital Services that Work, and Digital Services that Suit Individual Needs)
  - o At the end of the program, clients reported statistically significant increases all seven domains.
  - o Furthermore, at the follow-up time point, these increases were all sustained, meaning that the clients had retained the digital health literacy.
- Changes in clients' health and wellbeing were captured using the Personal Wellbeing Index (PWI) which covers eight domains (Standard of Living, Health, Achieving in Life, Personal Relationships, Safety, Engaged with Community, and Future Security).
  - o At the end of the program, clients reported statistically significant increases in four of the PWI domains:
  - 1) Achieving in life,
  - 2) Engaged with community
  - 3) Future security and
  - 4) Personal wellbeing.
  - o Furthermore, at the follow-up time point, these increased four PWI domain levels were either sustained (3 and 4) or partially sustained (1 and 2) but with no significant decrease from preprogram levels.
- 96% of clients also reported that undertaking this program had increased the quality of their life at the end of the program.



# 6.5 THE OVERALL EFFECTIVENESS OF THE LGT PROGRAM

Questions from the Client Experience Questionnaire (CEQ) were used to determine the effectiveness of LGT training. The following responses were given at the end of the program:



## **6.6 ANY BARRIER REAL OR PERCEIVED, TO THE UPTAKE OF THE** SERVICE, INCLUDING WAYS IN WHICH THESE WERE OVERCOME **OR COULD BE OVERCOME**

Specific barriers to recruitment in the project are summarised below:

- 50% of the barriers to recruitment reported were based on clients feeling like they would not be able to learn, that they wouldn't be able to understand the technology.
- Some clients had concerns about privacy, such as whether a camera was watching them, and others concerns about banking and investment accounts and hacking.
- Other barriers to recuitment included social distancing measures, guarantine measures and limits of number of people in the home, as well as anxieties surrounding the pandemic.

Other issues raised during the program included the following:

- TSOs reported that nearly all of the clients indicated feeling overwhelmed by learning technology. This was handled by TSOs in various ways - making them feel safe to ask questions, breaking the learning down into small parts, pacing the content according to the client capacity, or simply giving them a break and resuming later.
- To address issues identified by the client insights workshop, an information sheet was developed and provided to clients.
- · Some clients forgot how to use the devices after the technician had left and needed the TSO to revisit the client for further support. The TSO reviewed the training, speaking slowly and at a pace the client felt comfortable with.

## **6.7 ANY OTHER LESSONS LEARNT OR RECOMMENDATIONS FOR FUTURE IMPLEMENTATION**

Key lessons identified and recommendations for the future include the following:

- The TSOs were fundamental to the success of the LGT program, providing both the training and support to the clients. The empathy, understanding and patience that the TSOs showed during this project should be applauded, and it is recommended that this quality of support is nurtured, and continues to be provided in future implementations of this program.
- The workbooks and homework activities provided to clients were well received, and it is recommended that these 'physical' resources continue to be developed and utilised.
  - o Clients suggested more notes be added, such as a workbook for Facebook.
  - o Clients requested more homework practice exercises for practice
  - o Other clients requested homework with increased difficulty.
- Providing access to additional 'online' resources is also recommended. By creating training videos or visual step by step help guides, the need for a TSO to revisit the client for support could be reduced, for example if a client forgets how to do something. The client would benefit by having instant support and help to build the client's feelings of independence and confidence in technology.

## **6.8 STUDY LIMITATIONS**

The LGT program was a pilot study, and not a controlled experiment. Further robust research to include a control group and a longer-term follow-up period will increase the capacity to conclude the efficacy of a digital literacy building program for seniors.

While the training and support provided in this program were extensive, it was customised for individual clients, meaning that the content delivered to each client was not identical. Therefore, it is difficult to pinpoint any additional areas of success based on the content, or report on specific contributing factors. However, this document reports on many insights, as well as the overall success of the pilot program, and most importantly, on the positive impact that it has had on clients.

# 7. CONCLUSIONS

This pilot program was successful in providing 100 seniors with the confidence and skills to use technology to communicate and manage their daily affairs. The findings from the evaluation of the pilot program has provided a great deal of insight regarding training and support to improve digital literacy in seniors. Significant findings were reported across all outcome measures; independence, confidence using technology, social connectedness and health, with evidence of the very real difference that the program has made in the client's use of technology. On the human level, clients have shared many comments that indicate what a positive difference this program has made to their lives, with increased feelings of independence and pride in their achievements.

The major benefits to clients were:

- · Increased confidence in managing their day-to-day affairs, and their own health - increased feelings of independence and control over their life.
- An ability to use new methods to communicate and connect with friends and family - with the potential to reduce feelings of loneliness and social isolation.

Future goals of Feros Care involve utilising telehealth and smart devices to remotely monitor client's vital signs and provide a hospital in the home scenario capable of being cost effective to not only the aged care industry but also the whole health industry. The learning, digital capacity and levels of confidence and independence achieved by the LGT program provide the building blocks of for future technology campaigns.

Further robust research is required, including a longer follow-up period to determine the sustainability of the program effect. Nevertheless, the LGT program was successful as a pilot, highlighting the potential for a digital literacy building program to make a significant and positive impact on the lives of seniors.



# **8. RECOMMENDATIONS**

### **RECOMMENDATION ONE:**

That the technology training program LGT becomes embedded into a mainstream component of service delivery for all seniors. This would involve changes to current health care and aged funding guidelines and models to ensure that this program and its use of emerging technologies are considered a standard service option. Feros Care's intention is for this program to be seen as an enablement or individual capacity building to improve independence and connection. An approved intervention that is considered as important as more traditional supports such as personal care or domestic services.

#### **RECOMMENDATION TWO:**

The second recommendation is for the provision of funding from the government to support clients to access the technology training program LGT. And/ or to embed LGT as a standard service option within the service specifications of current aged care funded programs (that is, within Home Care Packages and Commonwealth Home Support Programs). The potential cost savings for the health services and human services departments of the government suggest that it is cost effective to invest in digital literacy building programs for seniors.

#### **RECOMMENDATION THREE:**

New strategies for widespread change management should be sought, to support the uptake of the program by other service providers. Information about the program could also be provided to care givers, encouraging participation in the program to further promote the uptake of technology, and its continuous use.

### **RECOMMENDATION FOUR:**

The introduction and continuous inclusion of a national policy agenda is important to drive a more strategic and coordinated approach to the funding, research and deployment of digital literacy building programs for Australian seniors.

#### **RECOMMENDATION FIVE:**

For future programs, it is essential that only support and training staff who have specific attributes are selected for delivery of the program. These staff members (TSOs in this program), should display or be provided with professional development on aged care, adult learning principles, empathy and understanding of the potential clients cohort. These are recommended qualities, skills and knowledge in the staff which are essential to ensure the success of future implementations of this program.

#### **RECOMMENDATION SIX:**

Following the positive response from clients regarding the use of the workbooks and homework activities, it is recommended that these 'physical' resources continue to be developed and utilized to support the learning outcomes.

### **RECOMMENDATION SEVEN:**

Given the need for more support highlighted by client feedback it is recommended that clients are provided access to additional 'online' resources. Training videos or visual step by step help guides should be developed and easy access made available to clients online. The client would benefit by having instant support and help to build the client's feelings of independence and confidence in technology.

#### **RECOMMENDATION EIGHT:**

Further robust research using a control group that examines the long-term impact of digital literacy programs for vulnerable groups, and the cost benefit to the consumers and the health service providers.

# REFERENCES

- Australian Bureau of Statistics (2018). 8146.0—Household use of information technology, Australia, 2014-15. Retrieved from https://www.abs.gov.au/statistics/industry/technology-and-innovation/ household-use-information-technology/latest-release
- Australian Commission on Safety and Quality in Health Care. (2014). Health literacy: taking action to improve safety and quality. Sydney: ACSQHC. Retrieved from https://www.safetyandguality.gov.au/ sites/default/files/migrated/Health-Literacy-Taking-action-to-improve-safety-and-quality.pdf
- Australian Digital Health Agency. (2018). Australia's national digital health strategy safe, seamless and secure: evolving health and care to meet the needs of modern Australia. Retrieved from https:// conversation.digitalhealth.gov.au/sites/default/files/adha-strategy-doc-2ndaug\_0\_1.pdf
- Australian Government. (2018). Understanding the digital behaviours of older Australians: summary of national survey and qualitative research. Retrieved from https://www.esafety.gov.au/sites/default/ files/2019-08/Understanding-digital-behaviours-older-Australians-summary-report-2018.pdf
- Arthanat, S., Vroman, K., & Lysack, C. (2016). A home-based individualized information communication technology training program for older adults: a demonstration of effectiveness and value. Disability and Rehabilitation: Assistive Technology, 11(4), 316-324. doi:10.3109/17483107.2014.974219
- Beckenhauer, J., & Armstrong, J. (2009). Exploring relationships between normative aging, technology, and communication. Marriage & Family Review, 45(6-8), 825-844. doi:10.1080/01494920903224418
- Bennett, P., Trigg, J., Godber, T., & Brown, C. (2015). An experience sampling approach to investigating associations between pet presence and indicators of psychological wellbeing and mood in older australians. Anthrozoös, 28(3), 403-420. doi:10.1080/08927936.2015.1052266
- Bessaha, M., Sabbath, E., & Morris, Z. (2020). A systematic review of loneliness interventions among non-elderly adults. Clinical Social Work Journal, 48(1), 110–125. doi:10.1007/s10615-019-00724-0
- Borg, K., & Smith, L. (2018). Digital inclusion and online behaviour: five typologies of Australian internet users. Behaviour & Information Technology, 37(4), 367-380. doi:10.1080/0144929X.2018.1436593
- Burke, M., & Kraut, R. (2016). The relationship between facebook use and well-being depends on communication type and tie strength. Journal of Computer-Mediated Communication, 21(4), 265-281. doi:10.1111/jcc4.12162
- Burmeister, O. K., Ritchie, D., Devitt, A., Chia, E., Dresser, G., & Roberts. (2019). The impact of telehealth technology on user perception of wellbeing and social functioning, and the implications for service providers. Australasian Journal of Information System, 23. doi:10.3127/ajis.v23i0.1501
- Charleson, D. (2012). Bridging the digital divide: enhancing empowerment and social capital. Journal of Social Inclusion, 3(2), 6-19. doi:10.36251/josi.52
- Chen, Y., & Schulz, P. (2016). The effect of information communication technology interventions on reducing social isolation in the elderly: a systematic review. Journal of Medical Internet Research, 18(1), e18. Doi:10.2196/jmir.4596
- Choi, N., & DiNitto, D. (2013). The digital divide among low-income homebound older adults: internet use patterns, eHealth literacy and attitudes toward computer/internet use. Journal of Medical Internet Research, 15(5), e.93. doi:10.2196/jmir.264

- Chung, J., Park, N., Wang, H., Fulk, J., & Mclaughlin, M. (2010). Age differences in perceptions of online community participation among non-users: an extension of the technology acceptance model. Computers in Human Behavior, 26(6), 1674–1684. doi:10.1016/j.chb.2010.06.016
- Coldwell-Neilson, J. (2018). What is digital literacy? Developing Employability Educator Site. Canberra: Australian Government Department of Education and Training. Retrieved from https://developingemployability.edu.au/what-is-digital-literacy
- Cotton, S., Anderson, W., & Mccullough, B. (2013). Impact of internet use on loneliness and contact with others among older adults: cross-sectional analysis. Journal of Medical Interent Research, 15(2), e39. doi:10.2196/jmir.2306
- De San Miguel, K., Lewin, G., Burton, E., Howat, P., Boldy, D., & Toye, C. (2017). Personal emergency alarms: do health outcomes differ for purchasers and nonpurchasers? Home Health Care Services Quarterly, 36(3-4), 164–177. doi:10.1080/01621424.2017.1373718
- Dentzel, Z. (2013). How the internet has changed everyday life. Ch@ nge, 19. Retrieved from http://aasa.ut.ee/augsburg/literature/DENTZEL\_BBVA-OpenMind-book-Change-19-key-essays-onhow-internet-is-changing-our-lives-Technology-Internet-Innovation.pdf
- Doran, G. T. (1981). There's a S.M.A.R.T. way to write management's goals and objectives. Management Review, 70(11), 35-36. Retrieved from https://community.mis.temple.edu/mis0855002fall2015/ files/2015/10/S.M.A.R.T-Way-Management-Review.pdf
- Digital Transformation Agency. (2020). Digital Transformation Strategy (Australia). Retrieved from https://www.dta.gov.au/digital-transformation-strategy
- Eysenbach, G., Neter, E., Xie, B., Holt, K., Karnoe, A., Overgaard, D., Nielsen, S., Kayser, L., Røder, M., & From, G. (2019). Differences in the level of electronic health literacy between users and nonusers of digital health services: an exploratory survey of a group of medical outpatients. Interactive Journal of Medical Research, 8(2), e8423. doi:10.2196/ijmr.8423
- Friemel, T. (2014). The digital divide has grown old: determinants of a digital divide among seniors. New Media & Society, 18, 313-331. doi:10.1177/1461444814538648
- Gatti, F. M., Brivio, E., & Galimberti, C. (2017). "The future is ours too": a training process to enable the learning perception and increase self-efficacy in the use of tablets in the elderly. Educational Gerontology, 43(4), 209-224. doi:10.1080/03601277.2017.1279952
- Guner, H., & Acarturk, C. (2020). The use and acceptance of ICT by senior citizens: a comparison of technology acceptance model (TAM) for elderly and young adults. Universal Access in the Information Society, 19(2), 311-330. doi:10.1007/s10209-018-0624-4
- Hall, A., Stellefson, M., & Bernhardt, J. (2012). Healthy aging 2.0: the potential of new media and technology. Preventing Chronic Disease, 9, E67. Retrieved from https://www-ncbi-nlm-nih-gov. ezproxy.scu.edu.au/pmc/articles/PMC3368698/
- Hill, R., Betts, L. R., & Gardner, S. E. (2015). Older adults' experiences and perceptions of digital technology: (dis)empowerment, wellbeing, and inclusion. Computers in Human Behaviour, 48, 415-423. doi:10.1016/j.chb.2015.01.062

- Holt, K., Overgaard, D., & Kaysey, L. (2020). Health literacy, digital literacy and eHealth literacy in Danish nursing students at entry and graduate level: a cross sectional study. BMC Nursing, 19(1), 1-12. Doi:10.1186/s12912-020-00418-w
- International Wellbeing Group (2013). Personal Wellbeing Index: 5th Edition. Melbourne: Australian Centre on Quality of Life, Deakin University. Retrieved from http://www.acqol.com.au/ instruments#measures
- Kayser, L., Karnoe, A., Furstrand, D., Batterham, R., Christensen, K., Elsworth, G., & Osborne, R. (2018). A multidimensional tool based on the eHealth literacy framework: development and initial validity testing of the eHealth literacy questionnaire (eHLQ). Journal of Medical Internet Research, 20(2), e36. doi:10.2196/jmir.8371
- Khalaila, R., & Vitman-Schorr, A. (2018). Internet use, social networks, loneliness, and quality of life among adults aged 50 and older: mediating and moderating effects. Quality of Life Research, 27(2), 479-489. doi:10.1007/s11136-017-1749-4
- Khosravi, P., & Ghapanchi, A. (2016). Investigating the effectiveness of technologies applied to assist seniors: A systematic literature review. International Journal of Medical Informatics, 85(1), 17–26. doi:10.1016/j.ijmedinf.2015.05.014
- Kraut, R., & Burke, M. (2015). Internet use and psychological well-being: effects of activity and audience. Communications of the ACM, 58(12), 94-100. doi:10.1145/2739043
- Lee, C., & Coughlin, J. (2015). PERSPECTIVE: Older adults' adoption of technology: an integrated approach to identifying determinants and barriers. Journal of Product Innovation Management, 32(5), 747–759. doi:10.1111/jpim.12176
- Marshall, A., & Dezuanni, M. (2020). Consultation on Australian Digital Inclusion Index (ADII): Submission to Centre for Social Impact, Swinburne University.
- Mitzner, T. L., Fausset, C. B., Boron, J. B., Adams, A. E., Dijkstra, K., Lee, C. C., ... & Fisk, A. D. (2008, September). Older adults' training preferences for learning to use technology. In Proceedings of the Human Factors and Ergonomics Society Annual Meeting (Vol. 52, No. 26, pp. 2047-2051). Sage CA: Los Angeles, CA: SAGE Publications
- Olphert, W., & Damodaran, L. (2013). Older people and digital disengagement: a fourth digital divide?. Gerontology, 59(6), 564-570.
- Quan-Haase, A., Martin, K., & Schreurs, K. (2016). Interviews with digital seniors: ICT use in the context of everyday life. Information, Communication & Society, 19, 691-707. doi: 10.1080/1369118X.2016.1140217
- Rodriguez-Blazquez, C., Frades-Payo, B., Forjaz, M., Ayala, A., Martinez-Martin, P., Fernandez-Mayoralas, G., & Rojo-Perez, F. (2011). Psychometric properties of the international wellbeing index in community-dwelling older adults. International Psychogeriatrics, 23(1), 161–169. doi:10.1017/ S104161021000092X
- Schreurs, K., Quan-Haase, A., & Martin, K. (2017). Problematizing the digital literacy paradox in the context of older adults' ICT use: aging, media discourse, and self-determination. Canadian Journal of Communication, 42(2), 359-377. doi:10.22230/cjc.2017v42n2a3130

- Seelye, A. M., Wild, K. V., Larimer, N., Maxwell, S., Kearns, P., & Kaye, J. A. (2012). Reactions to a remotecontrolled video-communication robot in seniors' homes: a pilot study of feasibility and acceptance. Telemedicine and E-Health, 18(10), 755-759. doi:10.1089/tmj.2012.0026
- Seton, C., & Mason, R. (2016). Decreasing the digital divide: analysing the UI requirements of older Australians. 53–62. https://doi.org/10.1145/2843043.2843366
- Thomas, J., Barraket, J., Wilson, C., Rennie, E., Ewing, S., & MacDonald, T. (2019). Measuring Australia's digital divide: The Australian digital inclusion index 2019. RMIT University and Swinburne University of Technology, Melbourne, for Telstra. doi:10.25916/5D6478F373869
- Tirado-Morueta, R., Aquaded-Gómez, J., & Hernando-Gómez, Á. (2018). The socio-demographic divide in the internet usage moderated by digital literacy support. Technology in Society, 55, 47-55. doi:10.1016/j.techsoc.2018.06.001
- Tsai, H., Shillair, R., & Cotten, S. (2017). Social support and "playing around": an examination of how older adults acquire digital literacy with tablet computers. Journal of Applied Gerontology, 36(1), 29-55. doi:10.1177/073346815609440
- van Houwelingen, C. T., Ettema, R. G., Antonietti, M. G., & Kort, H. S. (2018). Understanding older people's readiness for receiving telehealth: Mixed-method study. Journal of medical Internet research, 20(4), e123. Retrieved from https://www.jmir.org/2018/4/e123/
- Vilhelmson, B., Thulin, E., & Elldér, E. (2017). Where does time spent on the internet come from? Tracing the influence of information and communications technology use on daily activities. Information, Communication & Society, 20, 250-263. doi:10.1080/1369118X.2016.1164741
- Vroman, K., Arthanat, S., & Lysack, C. (2015). "Who over 65 is online?" older adults' dispositions toward information communication technology. Computers in Human Behavior, 43, 156–166. doi:10.1016/j. chb.2014.10.018
- Waycott, J., Pedell, S., Vetere, F., Kulik, L., Ozanne, E., Gruner, A., & Downs, J. (2012, November). Actively engaging older adults in the development and evaluation of tablet technology. OzCHI '12: Proceedings of the 24th Australian Computer-Human Interaction Conference, Melbourne, Australia. doi:10.1145/2414536.2414633
- Woodward, A., Freddolino, P., Wishart, D., Bakk, L., Kobayashi, R., Tupper, C., Panci, J., & Blaschke-Thompson, C. (2013). Outcomes from a peer tutor model for teaching technology to older adults. Ageing and Society, 33(8), 1315–1338. doi:10.1017/S0144686X12000530

# **LET'S GET TECHNICAL PARTICIPANT INFORMATION SHEET**

#### WHAT IS LET'S GET TECHNICAL?

The Let's Get Technical program is a new, FREE training program that is developed to help and encourage you to use the internet and technology. Feros Care's aim is to build your confidence and independence when using your own device. We'll guide you with one-onone and face-to-face personalized training that is delivered at your own pace.

The program will include:

- 6 10 visits dependent on your skill level
- You can set the frequency of your learning, but cannot exceed 16 weeks
- One-on-one training sessions with a dedicated technical support officer, in the comfort of your own home
- Training focused around a device of your choosing phone, tablet, laptop or computer (the device must be your own)
- Instructional resources to provide support
- Recommendations to other local services and groups to keep you connected

#### **WHO IS FEROS CARE?**

Feros Care is a community owned non-profit organization which has been operating aged and community care services since 1990. Devoted to the research, design and implementation of technology for our clients, Feros Care is always looking to innovate through cutting-edge technology. Feros Care takes pride in leading the way when it comes to the future of care.

Our services include Telehealth care, residential aged care, in-home care, respite and allied health & wellness services. Our website is www.feroscare.com.au

### WHO IS ELIGIBLE TO PARTICIPATE IN THE PILOT?

- People 65 years and over or 50 years and over for Aboriginal and Torres Strait Islander people
- Clients to reside in the Far North & Mid North Coast NSW regions
- Clients to reside in Gold Coast and Brisbane Queensland regions

#### WHAT IS INVOLVED?

- If you would like to participate, there will be a consent form, information material and surveys to complete
- Dedicated Technical Support Officer will visit you the first time to the program and your objectives, develop a personalized plan of learning, introduce you to cyber safety and assess your capabilities and any area you'd like to address. The technical support officer will also give you an overview of what you will be learning in this program based on your needs.
- During the program, you will work with your Technical Support Officer to develop and maintain a personal training plan during your one-onone training sessions
- You will be asked during and after the program to complete surveys and questions to provide feedback about your experience participating in this new service to see how you are coping – this may be phone, video or face to face interviews

## WHAT IS THE LET'S GET TECHNICAL PROGRAM?

Feros Care will implement a Technology Training Program covering learning modules around the device of your choosing. From learning the basics to using social media or internet banking from the comfort of your own home with a dedicated technical support officer. This program is completely personalised and is delivered at your own pace.

#### **HOW LONG WILL IT LAST?**

You will have a dedicated technical support officer for up to 16 weeks and any resources, such as manuals or workbooks, that are given to you are yours to keep. Any equipment such as internet access devices needs to be returned on conclusion of the 16-week program. You may, however, opt out of the program at any time.

#### **IS THERE A COST?**

Feros Care will provide you with everything you need and there is no cost to you to participate in the program.

Participants using their own internet connections may have an increase in their monthly data usage.

Feros Care will provide internet access for the program if this is deemed necessary.

#### **HOW CAN I COMPLAIN OR SEEK HELP?**

Feros Care will provide mechanisms for you or your family to access support or provide feedback to Feros Care. Please call our team on 1300 090 256 for help or to provide feedback.

#### WHY IS A UNIVERSITY INVOLVED?

Southern Cross University, known as "SCU" will help Feros Care undertake an evaluation of the program. This will include data collection in the form of surveys and interviews. A Southern Cross University and/or Feros Care representative may contact you at some point to discuss your experience and views of the pilot.

SCU or Feros Care may also contact your family and friends you have identified, to get their views of the pilot.

#### **CAN I USE THE INTERNET FOR PERSONAL USE?**

If an internet connection is provided, it is only to be used when completing the technical training or working on modules that further develop your learning.

#### WILL THERE BE A CAMERA WATCHING ME IN MY HOME?

There may be a camera installed on your device. However, you control who and when people can see you through the camera.

#### WHO WILL BE COMING INTO MY HOME, AND HOW OFTEN?

You will be provided with a dedicated Technical Support Officer who will meet with you initially to discuss the program and to identify your goals and objectives.

They will show you how to use your device and complete some initial information. Additional visits will be scheduled by the technical support officer to continue your learning journey and to check that all is going well and to answer any questions.

During the program you may receive calls from the Project Group member/s, Technical Support Coordinator. Any visits will be by prior phone appointment.

After the duration of 16 weeks, an evaluation officer will conduct a survey to evaluate the program and get any feedback you may have.

#### HOW IS MY PASSWORD AND SECURITY PROTECTED?

Here at Feros Care, your privacy and security are paramount. When creating any passwords you feel necessary to make, from logging into your Laptop to downloading apps, the Technical Support Officer will guide you on any steps you need help with and then physically remove themselves from view. The Technical Support Officer WILL NOT have access to any of your login credentials or passwords and you are not to share your login credentials or passwords. If under any circumstances they may become privy to any of your information or you have disclosed your information, you will be instructed to reset your passwords.

## WHAT HAPPENS IF I FORGET MY PASSWORDS?

Each account provider offers password recovery for people who forget their passwords – as it is very common! You can contact your account provider directly for assistance.

Feros Care will provide resources for you to take notes during the program and write down anything important that you want to remember at a later date.

#### WHAT HAPPENS IF I GO AWAY OR INTO HOSPITAL?

Call our team on 1300 090 256 to tell them you will not be at home for an extended time. Your training will be placed on hold until you return home.

#### WHAT HAPPENS AT THE END OF THE PROGRAM?

Providing you with the Let's get Technical training program is to help you better understand and build confidence in using your device. We aim to seek your feedback on the benefits and challenges of the program.

At the end of the program, if you wish to continue using the service, Feros Care will be happy to assist you to explore options that maybe available to you through government funding.

If you were provided an internet connection as part of the Let's Get Technical, this will be removed from your home once the 16-week program is concluded.

# PARTICIPANT **CONSENT FORM LET'S GET TECHNICAL**

[NAME], agree to take part in this program and give permission to the staff of Feros Care to initiate a learning program based on my needs and goals, for up to 16 weeks.

#### In giving my consent I state that:

- 1. I understand the purpose of the program, and what is being offered. I understand that being in this program is completely voluntary and I do not have to take part.
- 2. I understand that I can withdraw from the program at any time.
- 3. I understand it is my responsibility to communicate the level of involvement I wish to have and understand Feros Care want me to involve only to a level that I feel comfortable with.
- 4. I have read the Participant Information Statement and understand I am able to discuss my involvement in the program with a Feros Team member if I wish.
- 5. I understand that the Technical Support Officer (hereafter, TSO) will be coming into my home and delivering face-to-face sessions.
- 6. The Feros Team have answered any questions that I had about the program and I understand the answers.
- 7. I understand that I may need to create private passwords. I will not disclose any of this information to the TSO or other Feros personnel. Any passwords I do create should not be written down in an area easily accessed by others. If I do disclose my password it is my responsibility to reset the password/s. I understand I have no obligation to share my password or personal login details with anyone including the TSO, family or friends.
- 8. I understand that by participating in this program, I am part of an evaluation with Southern Cross University and Feros Care. Personal information about me will be collected over the course of this program, stored securely and de-identified before it is provided to Southern Cross University for analysis.



#### **PARTICIPANT CONSENT FORM LET'S GET TECHNICAL**

- 9. I understand that if I choose to participate in an additional case study for the University evaluation the results of this program may be published, and that I may be identifiable in publications should I choose to participate in the additional study.
- 10. I understand that if I choose to participate in an additional case study, that photos or videos of me may be used in Feros Care publications, their website or social media activities.
- 11. I understand there may be an increase in data usage of my pre-existing internet service if I choose to use my own internet device, and I am required to monitor any increased usage. I understand that if I exceed data usage on my internet plan, that I am responsible for any additional financial expenses.
- 12. I understand that in the situation that Feros Care provides internet data, Feros Care will monitor usage levels and advise me if there are any limits being reached.
- 13. I understand that Feros Care recommends the use of anti-virus protection software for my computer, phone and or tablet, and if I need assistance with this, I can ask Feros Care to assist me with virus protection during the program.
- 14. I have read and understand the information about staying safe in the digital world including; avoiding downloading virus/malware, scamming, phishing, identity and finance theft. In the event a scam occurs, I understand that Feros Care is not responsible.
- 15. I understand that if I choose to pay for web applications such as fitness applications, electronic books, online gambling, that I am solely responsible for my resulting financial and emotional wellbeing.

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_



#### **DEMOGRAPHIC INFORMATION**

Email address: (if they have one)						
Country of birth: O	Australia 🔿 Other					
Language spoken at h	<b>nome:</b> O English O Other					
<b>Do you identify as:</b>	<b>Do you identify as:</b> O Aboriginal O Torres Strait Islander O Neither Aboriginal or Torres Strait Islander					
Ethnicity or cultural id	Ethnicity or cultural identity: O Australia O Other					
Do you identify as:	<b>Do you identify as:</b> O Primary school O Some high school O Year 10 O Year 12 O Trade certificate O Diploma O Bachelor degree O Postgraduate					
What is/was your mai	n occupation?					
Last year of paid emp	loyment: or Ourrent					
Income details:	<ul> <li>Employed</li> <li>Self-funded</li> <li>Age pension</li> <li>Other</li> </ul>					
Relationship status:	○ Current spouse/partner ○ Widow ○ Divorced ○ Single ○ Other					

What are your living arrangements?		<b>Do you live with a disability?</b> O Yes	) No
$\bigcirc$ Live alone $\bigcirc$ Living with partner $\bigcirc$ Other	C Living with children C Live with grandkids	Have you had unplanned hospitalisation	in t
		$\bigcirc$ No $\bigcirc$ Yes Days spent in hospital	
Satisfaction with family/social suppor	t	Reason:	
$\bigcirc 1 \bigcirc 2 \bigcirc 3$	$\bigcirc 4 \bigcirc 5$		
Very dissatisfied Neutral	Very satisfied	How often would you contact your GP?	
		◯ More than once a week ◯ Weekly	$\bigcirc$ F
Social/volunteer activities per week:	○ 1 ○ 2 ○ 3 ○ 4 ○ 5 or more	O Every 6 months O Other	
What technology device do you curer	ntly own?	What areas of your life do you currently	rece
$\bigcirc$ Smart phone – if yes choose either	○ Android ○ iPhone	$\bigcirc$ Assistance with cleaning the home	$\bigcirc$
$\bigcirc$ Tablet – if yes choose either $\bigcirc$ An	droid 🔿 iPad	• Food preparation, delivery or recipes	$\bigcirc$
O Computer – <i>Type</i>		Errands and billpaying	$\bigcirc$
○ Laptop – <i>Type</i>		O Personal care	$\bigcirc$
		◯ Safety and Security	$\bigcirc$
How do you connect to the internet?	O Not connected	Communication (incl. technology use)	$\bigcirc$
	O Wifi / NBN	O Cultural/spiritual	$\bigcirc$
	⊖ Through a dongle/device	Other	
	Through a 'hot spot' on my Smart phone		
		What areas do you think technology cou	ld b
		• Assistance with cleaning the home	$\bigcirc$
Any health conditions requiring mana	agement (list)?	Food preparation, delivery or recipes	$\bigcirc$
		Errands and billpaying	$\bigcirc$
		Personal care	$\bigcirc$
		Safety and Security	$\bigcirc$
		Communication (incl. technology use)	$\bigcirc$
Chronic or regular pain	Ourinary or bowel disorder or concern	Cultural/spiritual	$\bigcirc$
Other Chronic Condition	- ,		$\smile$

#### ne last 6 months?

Fortnightly  $\bigcirc$  Monthly  $\bigcirc$  Every 3 months

### ive help with?

- Mowing and gardening
- Shopping for food or clothes
- Mobility
- Nursing care
- Transport
- Social support
- No identified needs

#### e used to help with your life?

- Mowing and gardening
- Shopping for food or clothes
- Mobility
- Nursing care
- Transport
- Social support
- No identified needs



#### **PERSONAL WELLBEING INDEX – ADULT**

The following questions ask how *satisfied* you feel, on a scale from zero to 10. **Zero** means you feel no satisfaction at all and **10** means you feel completely satisfied.

1. How satisfied are you with your standard of living? No satisfaction at all Completely satisfied  $\bigcirc 1 \bigcirc 2 \bigcirc 3 \bigcirc 4 \bigcirc 5$ 08  $\bigcirc$  9  $\bigcirc$  10  $\bigcirc 6$  $\bigcirc$  7 2. How satisfied are you with your health? No satisfaction at all Completely satisfied  $\bigcirc 1 \bigcirc 2 \bigcirc 3 \bigcirc 4 \bigcirc 5$ 06 07 08  $\bigcirc$  9  $\bigcirc$  10 3. How satisfied are you with what you are achieving in life? No satisfaction at all Completely satisfied  $\bigcirc 1 \bigcirc 2 \bigcirc 3 \bigcirc 4$ 05 06 07  $\bigcirc$  8  $\bigcirc$  9  $\bigcirc$  10 4. How satisfied are you with your personal relationships? No satisfaction at all Completely satisfied  $\bigcirc 1 \bigcirc 2 \bigcirc 3 \bigcirc 4 \bigcirc 5 \bigcirc 6$ 07 8 ()  $\bigcirc$  9  $\bigcirc$  10 5. How satisfied are you with how safe you feel? No satisfaction at all Completely satisfied  $\bigcirc 1 \bigcirc 2 \bigcirc 3 \bigcirc 4 \bigcirc 5$  $\bigcirc 6$  $\bigcirc$  7  $\bigcirc 8$  $\bigcirc$  9  $\bigcirc$  10 6. How satisfied are you with feeling part of your community? No satisfaction at all Completely satisfied  $\bigcirc 1 \bigcirc 2 \bigcirc 3 \bigcirc 4 \bigcirc 5$  $\bigcirc 6$ 07 08  $\bigcirc$  9  $\bigcirc$  10 7. How satisfied are you with your future security? No satisfaction at all Completely satisfied  $\bigcirc 1 \bigcirc 2 \bigcirc 3 \bigcirc 4 \bigcirc 5 \bigcirc 6$ 07 08 09 0 10



#### **EHLQ ASSESSMENT TOOL**

		STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
1.	I am sure that my health data are being used by only those who are supposed to use it	0	0	$\bigcirc$	0
2.	Technology makes me feel actively involved with my health	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
3.	Information about my health is always available to those who need it	$\bigcirc$	$\bigcirc$	$\bigcirc$	0
4.	I know how to use technology to get the health information that I need	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
5.	The knowledge I have helps me to have good conversations about health	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
6.	I know how to make technology work for me	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
7.	l use technology to find information about health	$\bigcirc$	0	$\bigcirc$	0
8.	l can enter data into health technology systems	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
9.	My healthcare providers deliver services that I can access through technology	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
10	<ul> <li>My electronic health care data is being stored safely</li> </ul>	$\bigcirc$	0	$\bigcirc$	0



	STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
<b>11.</b> I often use technology to understand health problems	$\bigcirc$	0	0	0
<b>12.</b> I have enough information to take part in conversations about my health	$\bigcirc$	0	$\bigcirc$	0
<b>13.</b> Technology helps me decide what health care is best for me	$\bigcirc$	$\bigcirc$	$\bigcirc$	0
<b>14.</b> I have a clear understanding if how healthcare providers use my data	$\bigcirc$	0	$\bigcirc$	0
<b>15.</b> I understand medical results about me	$\bigcirc$	$\bigcirc$	$\bigcirc$	0
<b>16.</b> My health data are available to me wherever I am	$\bigcirc$	$\bigcirc$	$\bigcirc$	0
<b>17.</b> I quickly learn how to find my way around new technology	$\bigcirc$	$\bigcirc$	$\bigcirc$	0
<b>18.</b> I find that eHealth systems adapt to my skills	$\bigcirc$	$\bigcirc$	$\bigcirc$	0
<b>19.</b> I find technology helps me to take care of my health	$\bigcirc$	$\bigcirc$	$\bigcirc$	0
<b>20.</b> I use technology to share information about my health	$\bigcirc$	0	$\bigcirc$	0
<b>21.</b> Overall, I understand how my body works	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$



		STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
22.	I am sure that only authorised people can access my health data	0	0	$\bigcirc$	0
23.	All the health technology I use works together	$\bigcirc$	0	$\bigcirc$	0
24.	I find I get better services from my health professionals when I use technology	$\bigcirc$	0	$\bigcirc$	0
25.	I use technology to organise my health information	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
26.	I use measurements about my body to help me to understand my health	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
27.	Technology improves my communication with health professionals	$\bigcirc$	0	$\bigcirc$	$\bigcirc$
28.	I find eHealth systems seem to adapt to my individual needs	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
29.	Most of my healthcare providers can be accessed through technology	0	0	0	0
30.	I am confident that healthcare providers use my data appropriately	0	0	0	0
31.	I find eHealth systems are provided to me in a way that suits me	$\bigcirc$	$\bigcirc$	$\bigcirc$	0



	STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
<b>32.</b> I easily learn to use new health technologies	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
<b>33.</b> eHealth systems provide me with easy ways to get what I need	0	0	0	0
<b>34.</b> I have access to health technology that works	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
<b>35.</b> I find technology useful for monitoring my health	0	$\bigcirc$	$\bigcirc$	0



#### **DEMOGRAPHIC INFORMATION**

#### Satisfaction with family/social support $\bigcirc 1$ ОЗ 04 ◯2 Very dissatisfied Neutral Social/volunteer activities per week: 0 1 0

#### How often would you contact your GP?

$\bigcirc$ More than once a week	$\bigcirc$ Weekly	○ Fortnightly	$\bigcirc$ Monthly	O Every 3 months
○ Every 6 months ○ Ot	her			

#### What areas do you think technology could be used to help with your life?

$\bigcirc$ Assistance with cleaning the home	OMow
$\bigcirc$ Food preparation, delivery or recipes	⊖ Shop
○ Errands and billpaying	OMobi
○ Personal care	ONurs
○ Safety and Security	⊖ Trans
$\bigcirc$ Communication (incl. technology use)	
○ Cultural/spiritual	$\bigcirc$ No ic
Other	

◯5
Very satisfied

2	О З	0 4	$\bigcirc$	5 or	more
---	-----	-----	------------	------	------

- ing and gardening
- pping for food or clothes
- ility
- sing care
- sport
- al support
- dentified needs

12 WEEK	PASSPORT QUESTIONNAIRE
EVALUATION	.ET'S GET TÉCHNICAL PROGRAM

12 WEEK	PASSPORT QUESTIONNAIRE
EVALUATION	LET'S GET TECHNICAL PROGRAM

#### **PROGRAM INFORMATION**

#### How often do you use digital technology such as a smart phone or tablet?

- $\bigcirc$  More than once a day ○ Daily
- $\bigcirc$  More than once a week  $\bigcirc$  Weekly
- $\bigcirc$  More than once a month  $\bigcirc$  Monthly
- Rarely Never

#### How often do you use digital technology such as a smart phone or tablet?

- ⊖ Social media eg Facebook
- O Banking/paying bills
- O Shopping
- O Google searches or information requests
- O MyGov services \_\_\_\_
- O Communicating with friends/family
- Other \_\_\_\_\_

#### How would you rate your current confidence in using digital technology and apps?

 $\bigcirc 4$ 

 $\bigcirc 1$ Not confident

Confident

○3

Very confident

 $\bigcirc$  5

#### What else would you like to be able to use the internet for?

O News/Entertainment	$\bigcirc$ Social media	$\bigcirc$ Banking/paying bills
$\bigcirc$ Online shopping	⊖ Google searches	O MyGov services

 $\bigcirc$  Google searches  $\bigcirc$  MyGov services

• Communicating with friends/family

◯2

Oth	er	

#### How many different apps do you use weekly or more? Please list these.

	inany ai			you	asc	meening
01	○ 2	○ 3	04	$\bigcirc$	5 or	more
What a	apps us	ed:				
How c	often do	you us	e your	devic	e to:	connect
	re than	once a	day	$\bigcirc$ D	aily	
	re than	once a	week	$\bigcirc$ W	/eekl	У
	re than	once a	month	$\bigcirc$ M	onth	ly
ORar	ely C	Never				

#### What is the level of control that you feel that you have in your life?

$\bigcirc$ 1	○2	○3	◯4
No control		Some control	

#### What is your ability to independently perform activities of daily living?

○3  $\bigcirc 1$ ◯2  $\bigcirc 4$ No ability Some ability

#### How easy do you think it was to learn to use digital technologies?



or communicate socially?

 $\bigcirc 5$ High control

> $\bigcirc 5$ High ability

 $\bigcirc 5$ Very easy



Now that you have completed the program, are you still afraid or anxious about learning to use digital technologies?

<b>○</b> 1	◯2	<b>○</b> 3	◯4	$\bigcirc$ 5
Very much so		Neutral		Not at all

Do you think that using digital technologies helped improve your life?

◯1	◯2	○3	◯4	○5
Not at all		Neutral		A great deal

#### **PERSONAL WELLBEING INDEX – ADULT**

The following questions ask how *satisfied* you feel, on a scale from zero to 10. **Zero** means you feel no satisfaction at all and **10** means you feel completely satisfied.

#### 1. How satisfied are you with your standard of living?

No satis	faction at al	1						Completel	y satisfied
0 1	○ 2	03	○ 4	05	06	○ 7	0 8	09	0 10
<b>2.</b> Hov	w satisfiec	l are you <b>v</b>	with your	health?					
No satis	faction at al	1						Completel	y satisfied
01	○ 2	○ 3	○ 4	05	06	○ 7	0 8	09	) 10
<b>3.</b> Hov	w satisfied	l are you <b>v</b>	vith what	you are a	chieving	in life?			
No satis	faction at al	1						Completel	y satisfied
01	○ 2	○ 3	○ 4	○ 5	06	○ 7	0 8	09	○ 10
4. How satisfied are you with your personal relationships?									
No satis	faction at al	1						Completel	y satisfied
01	○ 2	○ 3	○ 4	○ 5	○ 6	○ 7	0 8	09	) 10



<b>7.</b> Hov	v satisfied	are you <b>v</b>	vith your f	future se	curit
No satis	sfaction at a	11			
01	○ 2	О З	0 4	05	(

#### **EHLQ ASSESSMENT TOOL**

	STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
<ol> <li>I am sure that my health data are being used by only those who are supposed to use it</li> </ol>	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
2. Technology makes me feel actively involved with my health	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
<b>3.</b> Information about my health is always available to those who need it	$\bigcirc$	0	0	0
<ol> <li>I know how to use technology to get the health information that I need</li> </ol>	0	0	0	0

# ○ 6 ○ 7 ○ 8 ○ 9 ○ 10 or community? Completely satisfied ○ 6 ○ 7 ○ 8 ○ 9 ○ 10 ity? Completely satisfied ○ 6 ○ 7 ○ 8 ○ 9 ○ 10



	STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
5. The knowledge I have helps me to have good conversations about health	0	0	0	0
6. I know how to make technology work for me	$\bigcirc$	0	$\bigcirc$	0
7. I use technology to find information about health	0	0	0	0
8. I can enter data into health technology systems	$\bigcirc$	$\bigcirc$	$\bigcirc$	0
<b>9.</b> My healthcare providers deliver services that I can access through technology	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
<b>10.</b> My electronic health care data is being stored safely	$\bigcirc$	0	$\bigcirc$	0
<b>11.</b> I often use technology to understand health problems	0	0	$\bigcirc$	0
<b>12.</b> I have enough information to take part in conversations about my health	0	0	$\bigcirc$	0
<b>13.</b> Technology helps me decide what health care is best for me	$\bigcirc$	0	$\bigcirc$	$\bigcirc$
<b>14.</b> I have a clear understanding if how healthcare providers use my data	0	0	$\bigcirc$	0

PASSPORT QUESTIONNAIRE LET'S GET TECHNICAL PROGRAM

	STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
<b>15.</b> I understand medical results about me	0	$\bigcirc$	0	$\bigcirc$
<b>16.</b> My health data are available to me wherever I am	0	$\bigcirc$	$\bigcirc$	0
<b>17.</b> I quickly learn how to find my way around new technology	0	$\bigcirc$	$\bigcirc$	0
<b>18.</b> I find that eHealth systems adapt to my skills	0	$\bigcirc$	$\bigcirc$	0
<b>19.</b> I find technology helps me to take care of my health	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
<b>20.</b> I use technology to share information about my health	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
<b>21.</b> Overall, I understand how my body works	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
<b>22.</b> I am sure that only authorised people can access my health data	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
23. All the health technology I use works together	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
24. I find I get better services from my health professionals when I use technology	0	0	$\bigcirc$	0
<b>25.</b> I use technology to organise my health information	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$



	STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
<b>26.</b> I use measurements about my body to help me to understand my health	0	0	0	0
<b>27.</b> Technology improves my communication with health professionals	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
<b>28.</b> I find eHealth systems seem to adapt to my individual needs	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
<b>29.</b> Most of my healthcare providers can be accessed through technology	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
<b>30.</b> I am confident that healthcare providers use my data appropriately	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
<b>31.</b> I find eHealth systems are provided to me in a way that suits me	$\bigcirc$	$\bigcirc$	$\bigcirc$	0
<b>32.</b> I easily learn to use new health technologies	0	0	$\bigcirc$	0
<b>33.</b> eHealth systems provide me with easy ways to get what I need	0	0	0	0
<b>34.</b> I have access to health technology that works	0	0	0	0
<b>35.</b> I find technology useful for monitoring my health	0	$\bigcirc$	$\bigcirc$	$\bigcirc$



#### **DEMOGRAPHIC INFORMATION**

Satisfaction with family	/social support	
○1 ○2	○3	◯4
Very dissatisfied	Neutral	
Social/volunteer activiti	es per week: 📿	1 0
How often would you co	ontact your GP?	
O More than once a wee		⊖ Fort
O Every 6 months	Other	
-		
What areas do you thinl	k technology coι	uld be us
◯ Assistance with clean	ing the home	
○ Food preparation, del	ivery or recipes	⊖ Sho
O Errands and billpaying	9	
O Personal care		ONur
Safety and Security		⊖ Trar
	technology use)	
	teennology use)	
⊖ Other		-

 $\bigcirc$  5 Very satisfied

2 () 3 () 4 () 5 or more

tnightly  $\bigcirc$  Monthly  $\bigcirc$  Every 3 months

#### sed to help with your life?

- wing and gardening
- opping for food or clothes
- bility
- rsing care
- nsport
- cial support
- identified needs



18 WEEK	PASSPORT QUESTIONNAIRE
EVALUATION	LET'S GET TECHNICAL PROGRAM

#### **PROGRAM INFORMATION**

How often do you use digital technology such as a smart phone or tablet?

- $\bigcirc$  More than once a day  $\bigcirc$  Daily
- O More than once a week O Weekly
- $\bigcirc$  More than once a month  $\bigcirc$  Monthly
- Rarely Never

#### What do you use your devices for now? (Indicate what device for what)

- ⊖ Social media eg Facebook
- O Banking/paying bills
- O Shopping
- O Google searches or information requests \_\_\_\_\_
- O MyGov services \_\_\_\_
- O Communicating with friends/family \_\_\_\_\_\_
- Other

#### How would you rate your current confidence in using digital technology and apps?

 $\bigcirc 4$ 

 $\bigcirc 1$ Not confident

Confident

#### What else would you like to be able to use the internet for?

○3

$\bigcirc$ News/Entertainment	$\bigcirc$ Social media	$\bigcirc$ Banking/paying bills
<u> </u>	<u> </u>	0

 $\bigcirc$  Online shopping  $\bigcirc$  Google searches  $\bigcirc$  MyGov services

• Communicating with friends/family

○2

-	
Other	

 $\bigcirc$  5

Very confident

#### How many different apps do you use weekly or more? Please list these.

01	○ 2	○ 3	○ 4	$\bigcirc$ 5 or more	
What a	apps us	ed:			

#### How often do you use your device to connect or communicate socially?

$\bigcirc$ More than once a day	$\bigcirc$ Daily
$\bigcirc$ More than once a week	$\bigcirc$ Weekly
$\bigcirc{\rm More}$ than once a month	$\bigcirc$ Monthly
○ Rarely ○ Never	

#### What is the level of control that you feel that you have in your life?

01	○2	ОЗ	◯4
No control		Some control	

#### What is your ability to independently perform activities of daily living?

01	○2	ОЗ	◯4
No ability		Some ability	

#### How easy do you think it was to learn to use digital technologies?



 $\bigcirc 5$ High control

> $\bigcirc$  5 High ability

 $\bigcirc 5$ Very easy



Now that you have completed the program, are you still afraid or anxious about learning to use digital technologies?

<b>○</b> 1	◯2	<b>○</b> 3	◯4	$\bigcirc$ 5
Very much so		Neutral		Not at all

Do you think that using digital technologies helped improve your life?

01	◯2	○3	◯4	○5
Not at all		Neutral		A great deal

#### **PERSONAL WELLBEING INDEX – ADULT**

The following questions ask how *satisfied* you feel, on a scale from zero to 10. **Zero** means you feel no satisfaction at all and **10** means you feel completely satisfied.

#### 1. How satisfied are you with your standard of living?

No	No satisfaction at all Completely satisfied									
$\bigcirc$	1	○ 2	○ 3	0 4	○ 5	○ 6	○ 7	0 8	09	) 10
2.	2. How satisfied are you with your health?									
No	satisfa	action at al	I						Completel	y satisfied
$\bigcirc$	1	○ 2	○ 3	○ 4	05	○ 6	○ 7	0 8	○ 9	○ 10
3.	How	satisfied	are you <b>v</b>	vith what	you are a	chieving	in life?			
No	satisfa	action at al	I						Completel	y satisfied
$\bigcirc$	1	○ 2	○ 3	0 4	○ 5	06	○ 7	0 8	09	) 10
4.	4. How satisfied are you with your personal relationships?									
No	satisfa	action at al	I						Completel	y satisfied
$\bigcirc$	1	○ 2	○ 3	0 4	05	06	○ 7	0 8	09	) 10



<b>7.</b> Hov	v satisfied	are you <b>v</b>	vith your f	uture sec	:uri
No satis	faction at a	11			
01	○ 2	О З	0 4	05	(

#### **EHLQ ASSESSMENT TOOL**

		STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
1.	I am sure that my health data are being used by only those who are supposed to use it	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
2.	Technology makes me feel actively involved with my health	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
3.	Information about my health is always available to those who need it	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
4.	I know how to use technology to get the health information that I need	0	0	$\bigcirc$	0

# ○ 6 ○ 7 ○ 8 ○ 9 ○ 10 or community? Completely satisfied ○ 6 ○ 7 ○ 8 ○ 9 ○ 10 ity? Completely satisfied ○ 6 ○ 7 ○ 8 ○ 9 ○ 10



	STROI DISAG	NGLY GREE DISAGRE	E AGREE	STRONGLY AGREE
5. The knowledge I have hel me to have good convers about health	ps C ations	) ()	0	0
6. I know how to make techr work for me	nology		$\bigcirc$	$\bigcirc$
7. I use technology to find information about health	С		$\bigcirc$	0
8. I can enter data into healt technology systems	h C		$\bigcirc$	0
<b>9.</b> My healthcare providers of services that I can access through technology	leliver C		$\bigcirc$	$\bigcirc$
<b>10.</b> My electronic health care is being stored safely	e data 📿		$\bigcirc$	$\bigcirc$
<b>11.</b> I often use technology to understand health proble	ms		0	0
<b>12.</b> I have enough information take part in conversation my health	n to C s about		0	0
<b>13.</b> Technology helps me dewind what health care is best f	cide C		0	0
<b>14.</b> I have a clear understand how healthcare providers my data	ling if C		0	0



	STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
<b>15.</b> I understand medical results about me	0	0	0	0
<b>16.</b> My health data are available to me wherever I am	0	0	$\bigcirc$	0
<b>17.</b> I quickly learn how to find my way around new technology	0	0	$\bigcirc$	0
<b>18.</b> I find that eHealth systems adapt to my skills	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
<b>19.</b> I find technology helps me to take care of my health	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
<b>20.</b> I use technology to share information about my health	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
<b>21.</b> Overall, I understand how my body works	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
<b>22.</b> I am sure that only authorised people can access my health data	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
23. All the health technology I use works together	$\bigcirc$	$\bigcirc$	$\bigcirc$	0
24. I find I get better services from my health professionals when I use technology	$\bigcirc$	0	$\bigcirc$	$\bigcirc$
<b>25.</b> I use technology to organise my health information	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$





		STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE	
26.	l use measurements about my body to help me to understand my health	0	0	$\bigcirc$	$\bigcirc$	Client's Name
27.	Technology improves my communication with health professionals	0	0	$\bigcirc$	$\bigcirc$	What made you become interested in the program
28.	I find eHealth systems seem to adapt to my individual needs	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	
29.	Most of my healthcare providers can be accessed through technology	$\bigcirc$	$\bigcirc$	0	$\bigcirc$	
30.	l am confident that healthcare providers use my data appropriately	0	0	$\bigcirc$	0	What do you hope to achieve by doing this progra
31.	I find eHealth systems are provided to me in a way that suits me	$\bigcirc$	0	$\bigcirc$	$\bigcirc$	
32.	l easily learn to use new health technologies	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	
33.	eHealth systems provide me with easy ways to get what I need	0	0	$\bigcirc$	$\bigcirc$	
34.	I have access to health technology that works	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	Do you have any concerns around doing the progr
35.	l find technology useful for monitoring my health	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	○ No

(add emotions felt)?

m?

ram?

CLIENT EXPERIENCE QUESTIONNAIRE LET'S GET TECHNICAL PROGRAM	WEEK SIX CLIENT EXPENDENT QUESTIONNA LET'S GET TECHNICAL PROP
Do you have any mobility or dexterity issues?	
○ Yes	
○ No	Client's Name
Have you had any falls	How are you going with the Let's Get Technical training
○ No	
$\bigcirc$ In the last 3 months	
$\bigcirc$ In the last 6 months	
$\bigcirc$ In the last 6 months	
	What are you oping about the program?
How would you rate your technical support officer "insert name" out of 5 stars	what are you enjoying about the program?
TSO name: 1公 2公 3公 4公 5公	
What feedback would you give your technical support officer in terms of their teaching style?	
	Is there anything you dislike about the program?
In your welcome nack you may have seen information regarding Feros Care's services	
Would you like me to get someone to give you a call about these services?	
○ Yes	How are you finding the resources? e.g the workbook m
○ No	welcome pack? Have you used the stylus?

# PERIENCE NAIRE PROGRAM

raining?

book modules, did you like your

WEEK SIX CLIENT EXPERIENCE QUESTIONNAIRE LET'S GET TECHNICAL PROGRAM	WEEK SIX CLIENT EXPERIENCE QUESTIONNAIRE LET'S GET TECHNICAL PROGRAM
Do you feel like your accomplishing your goals you set with your TSO?	Comments about confidence
○ No	
○ Neutral	
Comments on goals being accomplished	
	How would you rate your confidence out of 5? (1 being not confident at all, and 5 being very confident)
	$\bigcirc 1 \bigcirc 2 \bigcirc 3 \bigcirc 4 \bigcirc 5$
	Is there anything you think we could do bottor?
Do you feel like 1 hour is a good amount of time for a support visit?	is there anything you think we could do better:
<ul> <li>○ 1 hour is good</li> </ul>	
<ul> <li>○ Not enough time</li> <li>○ - ·</li> </ul>	
Comments on visit lenght	
	How is your staff member (TSO) going? Any constructive feedback?
Do you think your confidence to use your device(s) and technology has improved because of the program?	
⊖ Yes	Would you recommend the Let's Get Technical program to others?(0 being not at all, and 10 being extremely likely to recommend)
○ No	Not at all likely Extremely likely
O Neutral	$\bigcirc 1 \bigcirc 2 \bigcirc 3 \bigcirc 4 \bigcirc 5 \bigcirc 6 \bigcirc 7 \bigcirc 8 \bigcirc 9 \bigcirc 10$



CLIENT EXPERIENCE QUESTIONNAIRE LET'S GET TECHNICAL PROGRAM WEEK TWELVE

Were you linked to any other services either community services or Feros Care services

Client's Name	Community Services
	O Feros Care Services
On a scale of 1 to 10, 1 being very poor and 10 being excellent, what did you think of the program?         Very poor         1       2       3       4       5       6       7       8       9       10	What were your highlights during this program?
Did the program meet your expectations?	
<ul> <li>Yes</li> <li>No</li> </ul>	Is there anything we can do to improve your exp
How likely are you to recommend this program to a friend?	
O Extremely likely	
Somewhat likely	
O Neither likely nor unlikely	Do you think doing this program has changed ye
Somewhat unlikely	<ul> <li>Definitely yes</li> </ul>
<ul> <li>Extremely unlikely</li> </ul>	O Probably yes
	<ul> <li>Might or might not</li> </ul>
How likely are you to recommend Feros Care to a friend?	Probably not
O Extremely likely	<ul> <li>Definitely not</li> </ul>
○ Somewhat likely	
O Neither likely nor unlikely	How would you rate your technical support offic
○ Somewhat unlikely	TSO name:

O Extremely unlikely

"Quotes from client"

perience of the Let's Get Technical program?

our life?

cer "insert name" out of 5 stars

\_\_\_\_\_ 1 ☆ 2 ☆ 3 ☆ 4 ☆ 5 ☆

#### LET'S GET TECHNICAL **CUSTOMER JOURNEY MAP**

STAGES	CATALYST	AWARENESS	ENQUIRE	ONBOARDING ★	ONBOARDING 🛨		CHANGING NEEDS ★	GRADUATION ★
ACTIONS	<ul> <li>They have been feeling left behind with technology</li> <li>Wanting to be more independent and have more control over their own lives</li> <li>During COVID using technology was esential to perform activities of daily living</li> <li>Client's family/friends are time poor and don't have the time to teach them at the pace they need</li> <li>Clients feel that in a group training setting they won't get the support they need</li> </ul>	<ul> <li>The client doesn't know where to start looking for technology support. They have heard of the free community group classes at the Library but are unsure they will get the support they need</li> <li>Client recieves communication material from Feros Care promoting their new pilots on offer for 2020</li> <li>Client becomes interested in the Let's Get Technical offering</li> </ul>	<ul> <li>SIGN UP TO PILOT</li> <li>After reading the flyer, the client is excited about the opportunity and calls through to Feros Care to enquire and express their interest</li> <li>On the phone, they answer the eligibility questions with a Feros Care agent</li> <li>The client decides on their lnitial Visit</li> <li>day and time to begin the program, and advises the Feros Care agent</li> </ul>	APPOINTMENT SCHEDULING	<ul> <li>INITIAL VISIT</li> <li>The client meets their Technical Support Officer (TSO) for the first time</li> <li>The client signs a consent form to participate in pilot</li> <li>The TSO gifts clients a Welcome Kit with all of the resources they need for the program</li> <li>They discuss the clients current situation, sets goals and objectives for learning, and commences training</li> <li>They together decide on a day/time and frequency for the client's remaining training sessions</li> </ul>	<ul> <li><b>9 x SUPPORT VISITS</b></li> <li>Client receives 9 x support visits from the Technical Support Officer as per the agreed schedule, where they make progress at accomplishing the client's learning goals</li> <li>Between visits the client works on homework given by their TSO to continue their learning</li> <li>Individual learning goals are accompanied with modules or workbooks specific to the desired learnings</li> </ul>	<ul> <li>Client has realised a new learning goal they want to achieve that is different from the original goals set</li> <li>They still have visits left to achieve the goal</li> <li>In the next visit from the Technical Support Officer, they discuss these new goals and come up with a learning plan for the remainder of the visit</li> </ul>	<ul> <li>In the last session with the Technical Support Officer, they recap over all of the learning goals achieved and the client receives a graduation certificate</li> <li>They say their farewells, and the Technical Support Officer leaves the client with some resources to continue their learning journey independently</li> </ul>
WHO'S INVOLVED	Client	Client	<ul><li> Client</li><li> Feros Central</li></ul>	<ul><li> Client</li><li> Feros Central</li></ul>	<ul><li> Client</li><li> Technical Support Officer</li></ul>	<ul><li> Client</li><li> Technical Support Officer</li></ul>	<ul><li> Client</li><li> Technical Support Officer</li></ul>	<ul><li> Client</li><li> Technical Support Officer</li></ul>
CHANNEL	N/A		<u> </u>	<u> </u>				
CLIENT NEEDS	<ul> <li>Personalised support that is affordable, senior friendly and is individualised to their personality and needs</li> </ul>	Assistance and clarity on the pilot offer and how to sign up	<ul> <li>Further assistance and clarity on the pilot offer and how to sign up</li> <li>Understand the training available, and what devices can be used</li> <li>Choice on what types of things they will learn</li> <li>Easy/fast process</li> <li>Service to occur on a day and time that suits the client – no conflict with personal appointments</li> </ul>	<ul> <li>To know who their Technical Support Officer is</li> <li>Time of the first service to start</li> <li>The duration of the service</li> </ul>	<ul> <li>To achieve their learning goals</li> <li>The trainer to be understanding, patient and not judgemental</li> <li>To enjoy the trainer's company</li> <li>To feel safe and not worried about any personal information being taken advantage of</li> <li>At a time, day and frequency that suits the client</li> </ul>	<ul> <li>To achieve their learning goals</li> <li>To recap on previous learnings</li> <li>The trainer to be understanding, patient and not judgemental.</li> <li>To enjoy the trainer's company</li> <li>To feel safe and not worried about any personal information being taken advantage of</li> </ul>	<ul> <li>To achieve their learning goals</li> <li>To recap on previous learnings</li> <li>The trainer to be understanding, patient and not judgemental.</li> <li>To enjoy the trainer's company</li> <li>To learn new identified skills</li> </ul>	<ul> <li>To have achieved their learning goals</li> <li>To recap on previous learnings</li> <li>To feel confident and independent using technology</li> </ul>
CLIENT STRESSES	<ul> <li>Not knowing where to start looking for help</li> <li>Not wanting to burden anyone</li> <li>Struggling with activities of daily living</li> </ul>	<ul> <li>A lot of 'noise' about technology</li> <li>Too much communication over holiday period</li> </ul>	<ul> <li>Waiting on hold, or not receiving a call back promptly</li> <li>Client doesn't qualify – no device or no internet at home</li> <li>No suitable times for the client to book in the service</li> <li>Client nervous to start the program</li> </ul>	<ul> <li>Client is apprehensive of the gender of the staff member attending</li> <li>Client wants to know the exact time of the appointment</li> </ul>	<ul> <li>Hesitant to sign a consent form</li> <li>Hesitant to commence training</li> </ul>	<ul> <li>Client doesn't feel like they are achieving goals</li> <li>Client cannot keep up</li> <li>Information overload</li> </ul>	Client is now feeling confident and eager, and wishes they had more time on the program	Client worries about not having support after the program
	Evaluation phone interviews	conducted				EOI	Letter 🗍 Brochure	Phone call









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