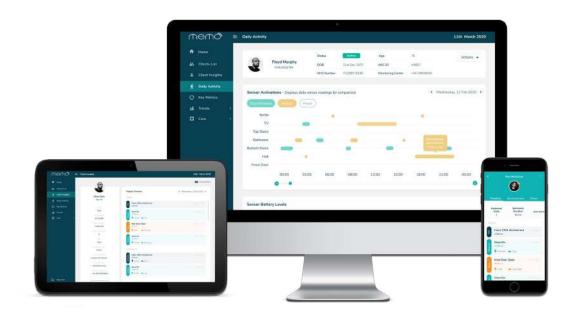
White Paper

Next Generation Telecare: The evidence to date













Executive Summary

This feasibility study set out to show how the Memo Connected Care Suite could benefit users and families by providing positive reassurance and preventative alerts when user activity changed. It would also benefit Social Care through the provision of objective activity data supporting Assessment, Care Planning, and management of resources.

The study included three partners who provide Social Care, 27 Memo Hub® users and 29 family Memo App subscribers. The study was carried out between April and June 2020. The users were selected at speed in mid-April and the criteria were recent hospital discharge or where wellbeing or safety were at risk because of Covid. The project focussed solely on the Activities of Daily Living service which forms part of a Next Generation Telecare service suite. The project was part funded by NHSX via the Covid initiative Techforce 19. The key outcomes were.

Users and Families

The majority of the Users felt positively about the Memo service with the remaining 20% having neutral opinions.

Increasing Independence



I have been able to step back and he now feels he has more control over his own life. He doesn't fully understand how the system works but he certainly felt a change in behaviours of all of his relatives which he loves.

> His independence and confidence has grown massively and he now wants to reduce his own care package for more independence.



83% of families said it provided an increase or significant increase in reassurance and peace of mind. All said it enabled them to provide more support, with 55% saying a lot more support.

Even given the short timescale and sample size a number of preventative interventions by families were descibed in their feedback. 78% said they wanted to continue the service after 6 weeks or requested further information.



Social Care

40% of care plans were adjusted on the basis of new insight delivered by the Memo service.

Care plan size both increased and decreased. The common factor was an increase in quality due to the plan better fitting the clients needs.

Costs avoided exceeded additional new costs for the adjusted care plans.

The final part of the report proposes how, based on this evicence, Next Generation Telecare can enable a new focus on prevention and expanding the circle of care to benefit all the stakeholders within a community's care ecosystem.

Introduction

The urgent need to invest in preventative services and early interventions to delay and slow demand is being increasingly recognised across the care system but as the 2020 Annual ADASS Budget survey makes painfully clear pressures on funding, amplified by Covid in 2020, have never been greater making delivery ever more challenging.

Next Generation Telecare creates an opportunity to broaden the circle of care to engage families, friends, and communities and support early, proactive, and preventative interventions.

As in the previous three years, moving towards prevention and early intervention and engaging people with their communities is one of the most important savings areas identified in 2019/20, enabling a reduction, or delay, in demand for long-term health and social care.

However, turning this rhetoric into reality is extremely challenging in the existing financial context - ADASS Budget Survey 2019

Next Generation Telecare sets out to:

- Provide improved outcomes to users through evidence based personalised care plans that better meet their needs. Encouraging greater independence that enables them to live at home for long as possible.
- Broaden the circle of care supporting people using the strengths of family and community.
- To provide positive reassurance to carers/families, reduce stress and anxiety and create opportunities for early preventative and proactive interventions.
- Provide insight derived from data to support more effective assessment, care planning and review and through the preventative approach reduce or delay demand for social and health care.



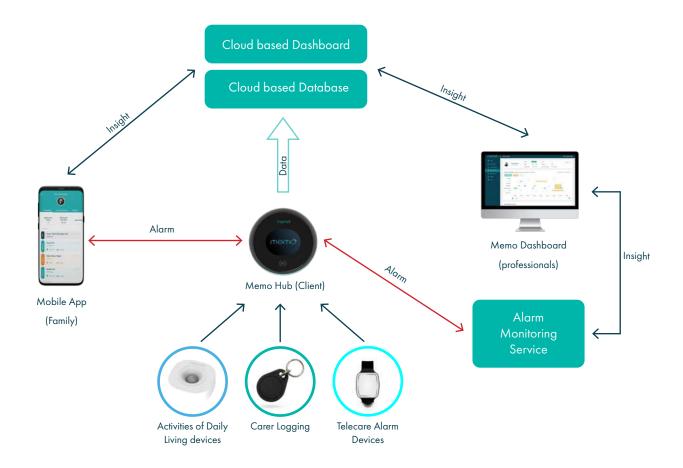
This report sets out to show how by utilising both bottom up and top down approaches to care and support Next Generation Telecare can lead to better outcomes for users, their families, and the care ecosystem while at the same time providing a return on investment. The evidence presented is based on a 6-week rapid feasibility study originally commissioned by NHSX, via the Covid 19 initiative Techforce 19. The study focussed solely on the outcomes from Memo's Activities of Daily Living service.

The study included three partners who provide Social Care, 27 Memo Hub users and 29 family Memo App subscribers. The users were selected at speed during mid-April and the criteria were recent hospital discharge or where wellbeing or safety were at risk because of Covid 19.

The next section briefly describes how Next Generation Telecare works. The evidence section falls into two parts Users and families and Social Care. The final section looks at how the Memo Connected Care suite can be a catalyst in transforming care using new digital tools.

How does Next Generation Telecare work?

The diagram below shows the key components of the Memo Connected Care Suite. At the heart of the system is the Memo Hub that sits within a client's home. Its primary role is to collect activity data which is transmitted to the cloud via its 4G cellular connection. Its secondary role is to act as an optional safety net and to be able to send reactive alarm calls generated both manually via client activation and automatically via telecare devices.



The insight derived from data is displayed to both family members via the Memo App and to professionals via the Memo Dashboard. Personalised alerts created by subscribers as well as Smart (automated) alerts created by the Memo platform can be sent to both the App and Dashboard.

Both Smart Alerts and telecare alarm functionality will be delivered during the second half of 2020 and along with Carer Logging were not part of this evaluation.

Outcomes

Users

The majority of the Users felt positively about the Memo service with the remaining 20% with neutral opinions.

Increasing Independence

I have been able to step back..and he now feels he has more control over his own life. He doesn't fully understand how the system works but he certainly felt a change in behaviours of all of his relatives which he

His independence and confidence has grown massively and he now wants to reduce his own care package for more independence.

Users were reported as being more relaxed and reassured because their family members were more confident due to their new knowledge. There were also a few reports of less "checking" phone calls which can undermine confidence.

Feedback around the form of the Memo Hub and sensors was positive, including the equipment was well designed, looks nice and the sensors are small.

Families, friends and informal carers

The benefits of positive reassurance and peace of mind, derived from user activity and alerts displayed within the Memo App, were widely reported with 83% recording an increase.

The over two thirds of family users (app subscribers) created alerts to provide regular reassurence and 40% also created alerts to flag worries, this later group fequently created alerts for both.

Two thirds reported it took under one minute to create a new rule. They all found the app easy to download and easy or very easy to use. The number of times the app was viewed settled down to an median of 3 times a day by the end of 6 weeks.



There was a strong suggestion that those who did not create any rules logged into the app more frequently than those who did.

Along with greater reassurance many App users also reported they were better able to provide care and support with the new information provided.

Supporting Carers

Great product. Great service. Completely reassured me being able to check mum was OK. I felt in control of being to ensure she well and safe.

The changes included visiting at more suitable times, reducing the number of "checking" phone calls to even checking the user was downstairs before knocking on the door to avoid the risk of falling on the stairs.

They also noted that Memo was particularly useful during Covid when visits to releatives stopped or significantly reduced.

Some subscribers also noted that it ensured they could balance work and caring responsibilities better and avoid any impact on their work. One person shared how she could check Mum was OK by using the app whilst at work.

A number of subscribers also provided examples of preventative actions that were taken as a result of the Memo service. These included calling Mum after the subscriber realised she had not gone to bed as usual and finding she was feeling unwell and possibley dehydrated.

Prevention

Dad likes idea that if anything were to happen overnight, I would be alerted to his not getting up in the morning rather than in the evening when he always speaks to a family member by phone. That would allow me to check up on him or seek further assitance earlier.

In a second example a user was attacked in his home during the night. It was identified shortly after that he was spending more time awake at night time and his daily activity was different. It was suggested that he had become very anxious after the attack. An early intervention from a Mental Health professional provided counselling and reassurance. After two weeks and some support from his sister his sleeping and daily patterns returned to normal.

Finally, at the end of the six-week study over 90% of App subscribers said they would be happy to recommend the service to friends and family.

Over 39% wished to continue with the service and 30% wanted more information before making a decision. Of the No group a number said it was no longer relevant due to changes in needs.



Social Care Outcomes

Care Planning

The Memo Hub clients consisted of two groups, people discharged from hospital and using a reablement service and people where there were concerns over wellbeing and safety due to Covid.

Overall, 40% of care plans were amended in light of the new insight being provided. Care pan size was both increased and decreased and details of the financial impact are described further below. The common theme was adjusting a care plan to better meet the needs of the client and hence increasing the personalisation and the quality.

Examples of changed plans included both avoiding care home admission and one example where a client was significantly more frail than anticipated and care home admission was the best option.

Social Worker Feedback

Grandson delighted to see his Granddad was safe at home and not using the kettle or microwave unless carers were present or leaving the property. The system provided clear evidence and provided reassurances.

Can clearly see when carers are in and these times are matching the care plan.

Happy that client is in the kitchen a lot and mobilising. Happy not in bed all day also plenty of movement around the property.

There were several unexpected insights. For example, a 93-year-old living on his own where the family had requested domiciliary care support. The evidence produced from the Memo system showed he was coping well and had a regular daily activity pattern. Both the Social worker and family agreed he would not benefit from additional support. The family continued with the service to both provide reassurance and alerts should things change.

There were also some suggestions that Memo could be used to better evidence reablement progress and hence shorten the service duration, effectively leading to increased capacity.

Financial

A detailed analysis was carried out looking at 15 clients spread across two partners.

Of the 6 clients in the reablement service one was admitted to Long Term Care and for one client additional home care costs for personal hygiene were not avoided.

Of the 9 Covid vulnerable people, three have not required more domiciliary care. The fourth has received increased domiciliary care at home and has not required Long term Care Admission.



Cohort	Request/Expectation	Outcome	Level of Change	Cost Increase pa	Cost Avoided pa
Discharge	Increase in homecare	Avoidance	30 min per week Home Care		£1,544
Discharge	Reablement/homecare	Increase Save	Long Term Care (LTC) Admission 60 min per day in Home Care	£60,00	£13,104
Vulnerable	Increase in homecare	Avoidance	45 min per day Home Care		£2,948
Vulnerable	Homecare Increase or LTC	Avoidance Increase	Long Term Care (LTC) Admission 15 min per day Home Care	£1,638	£60,000
Vulnerable	Increase in homecare	Avoidance	45min per day Home Care		£2,948
Vulnerable	Increase in homecare	Avoidance	15 min per day Home Care		£1,638
			Totals	£61,638	£82,183
Homecare Support at £18 per hour			Nett Effect	£20,545	

The Memo Service for these 15 Social Care clients would cost £4,875 per year. Efficiencies of £20,000 have already been identified with further upside potential. A £4 return for every £1 invested even allowing for the small sample size and possible variation when scaled further looks like a particularly useful investment in supporting better quality care for both clients and Social Care. These results demonstrate both efficient and effective social care.

Further upside efficiencies are anticipated from longer term use:

- The opportunity for Social Care to use the Memo service to gather longitudinal data where we would expect Client Care Plan reviews (ad hoc or at least annually) to benefit from long term trend evidence.
- Preventative activities. It is almost impossible at this stage to quantify any additional benefits to
 Social or Health Care derived from alerts when activity changes. However, many recognise the
 benefits of moving to a strengths-based approach with an increased focus on the Circle of Care.
 We have seen evidence that early identification of small issues can lead to them being resolved
 prior to a crisis point being reached that would have required additional health or social care
 resources.
- The significant hidden benefits of a more personalised care plan that better fits client's needs, that will lead to greater satisfaction with Social Care services and more importantly a better quality of life.
- Efficiencies to Social Care from the wider use of data are, as yet, unknown.



Transforming Care

Next Generation Telecare is one of the new and emerging innovative digital services to support people live the lives they want. Digital tools create many new opportunities to deliver better outcomes with greater efficiency to all the stakeholders in the care ecosystem.

Outcomes for Social care include better quality care plans delivering enough care rather than just in case care, for families positive reassurance combined with alerts when things change and not least clients who are supported to live the lives they want, in a place of their choice and doing the things that matter to them.

Digital Services to support people

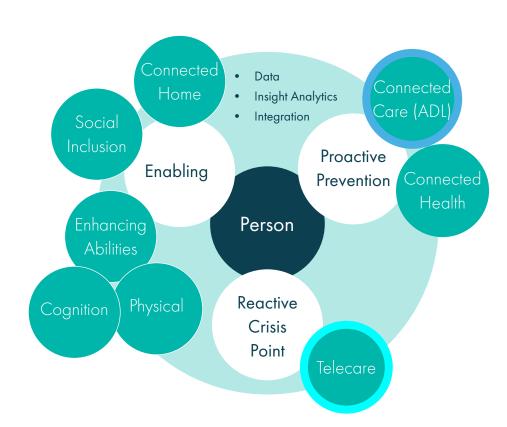
People and their families into which others integrate to maximise:

- Independence
- Reassurance
- Prevention

Delivery of the right type and amount of care, in the right setting, at the right time.

Pillars to support

- Cyber security, consent and data sharing
- Finance and billing new models
- Stakeholders

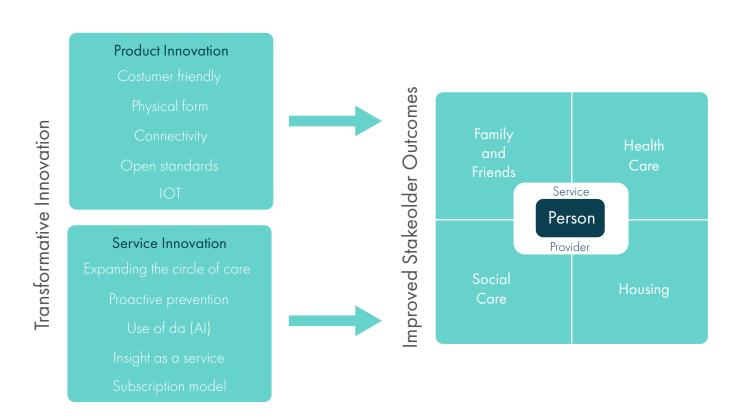


Next Generation of Telecare shifts the focus from traditional reactive telecare that minimise the consequences of an event to one that is proactive and creates opportunities to intervene prior to and avoid crisis point. The new service moves from traditional analogue small incremental innovations to one with rapid innovation while in use that will eventually, through the use of data analytics and AI, become predictive.

Underpinning all of this is the ability to deliver insight derived from data to all the stakeholders in ways that meet their unique requirements.

Next Generation Telecare is not just about product innovation but service delivery innovation too. One of the key benefits of digital is that it enables a new model of continuous innovation and we have an ambitious development roadmap ahead.

Next Generation Telecare



The early evidence presented in this paper demonstrates a new and different method of delivering technology enabled care and support to people living in the community enabled by digital tools. The key new components are:

- A shift to early intervention and prevention.
- Expanding the circle of care.
- Evidence based decision making

Each of these components are valuable individually but in combination, we believe, create a highly desirable outcome to a variety of stakeholders within the care ecosystem.



Frequently asked Questions

Who will pay for all this?

Over the next few years, we expect to see a much more mixed range of funding sources being used. Investment in telecare is anticipated to remain high in the next few years not least due to the need to replace the existing 1.7 million traditional analogue telecare alarms to digital solutions to meet the requirements of the all-digital telephone network due for completion by 2025. The key is to use the new investment in digital to gain the maximum value and benefits for all stakeholders.

As Social Care eligibility thresholds remain high, with increasing demand and the number of working carers continuing to increase, we are already seeing families looking for solutions that meet their needs. At the end of the 6-week evaluation period in our study there was a high demand for the service to continue on a self-funded basis.

What if a client does not have family or an engaged family?

We recognise that not everyone has a supportive family and we see this as an ideal opportunity for existing Alarm Monitoring Centres to offer a new proactive and preventative service.

Isn't my existing telecare provider already doing this?

Sadly, probably not. Existing telecare is characterised by closed and proprietary systems, with slow incremental innovation.

Alcuris was born out of the need to support an aging family member and the family's inability to find a solution that met all their needs. We believe in the value of insight, engagement, consumer friendly design, and interoperability. We are a digital first company delivering a digital dividend.

Is technology alone the answer?

No technology alone will not deliver the complete range of benefits. Change whether large or small is never easy to implement. We work with a Management Consultancy who has existing experience of providing large scale cultural change programmes for Local Authorities.



If you would like to join us on the journey and explore further how Next Generation Telecare could benefit the citizens in your community, please get in touch - info@alcuris.co.uk

Acknowledgements

This work was part funded by the TechForce 19 programme. TechForce 19 is an NHSX Covid-19 response initiative, supported by PUBLIC and the AHSN Network. The views expressed in the publication are those of the author and not necessarily those of NHSX or its partners.

We would also like to thank the three Service Provider Partners Clackmannanshire and Stirling HSCP, East Lothian HSCP, and Stockton Councils without whom this study would not have been possible.



Registered address: ATIC, 5 Oakwood Drive, Loughborough University
Science Park, Loughborough, Leicestershire LE 11 3QF
www.memohub.co.uk & info@alcuris.co.uk

www.memohub.co.uk

in @Alcuris_Itd

\$\mathcal{D}\$ @Memo_hub

© Alcuris Ltd. (2020). Memo Hub®is a Registered Trademark of Alcuris Limited

