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**Report To:** Inverclyde Integration Joint Board      **Date:** 21 September 2020

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**Subject:** UPDATE -TECHNOLOGY ENABLED CARE (TEC)

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## **1.0 PURPOSE**

- 1.1 This report provides an update on the development of Technology Enabled Care (TEC) within Inverclyde over the last 12 months.

## **2.0 SUMMARY**

- 2.1 The main focus has been on the implications of the national move to digital technology. By 2025, telecoms companies will have replaced analogue telephone lines with digital equivalents. This means that the current telephony that telecare relies upon to operate will discontinue and therefore have a significant impact on the service as analogue telecare equipment cannot be guaranteed to operate reliably over digital telephone lines. The strategic agenda to address this issue is outlined within Scotland's Digital Health and Care Strategy and Delivery Plan and in order to deliver solutions to this complex problem, the Scottish Government's Technology Enabled Care Programme (TEC) has invested in the Local Government's Digital Office (LGDO), Digital Telecare portfolio of programmes.
- 2.2 Digital Telecare has developed a "Playbook" containing best practice for implementing digital telecare. This includes guidelines on technical solutions; cyber security and data protection; implementation; migration and testing and operational processes.
- 2.3 In October 2019, Inverclyde made a joint bid to the Scottish Government's TEC Programme Board for one-off test of change funding. This was successful and has allowed the HSCP to work alongside neighbouring authority, Renfrewshire HSCP, to progress the testing of new digital alarm units within service users' homes.
- 2.4 The potential financial implications associated with the move from analogue to digital telephony were highlighted in the IJB report dated 10 September 2019. All non digital alarm devices will need to be replaced.
- 2.5 Due to the pandemic a significant amount of work has been paused however, the service has introduced ARMED (HAS Technology Ltd) as a response to the impact of isolation on vulnerable and older people. It has been identified that service users have experienced significant loss of function around mobility and cognitive ability. There is a

subsequent impact on resources as this decline is resulting in an increase in demand for service as well as the adverse effect on quality of life. As a result, Inverclyde HSCP has introduced remote ways of working to support service users living at home who are at risk of losing their abilities due to reduced activity levels or social isolation.

- 2.6 Digital technology is also a focus of the Inverclyde Health and Social Care Strategic Plan 2019-2024, and as part of our vision and value, is underpinned by the “Big Actions”  
The use of technology to support and manage long-term conditions forms part of Big Action 4. Inverclyde HSCP continues to make headway in supporting people to self manage their long term conditions through transformation funding using remote home and mobile health monitoring. This is in line with the Scottish Government’s drive to encourage greater self-management and has also been a strong focus of the TEC Programme which includes COPD, diabetes and hypertension.

While there has been number of service users participating in home and mobile health monitoring, there has been a delay in progress due to COVID 19. A report is expected to be produced in January 2021 detailing the progress of this piece of work.

- 2.7 The current Scottish Executive priority is to fund future tests of change. The aim of any proposed test “must align with the overarching TEC programme aim which is to support more citizens to make greater use of technology to manage their own health and wellbeing at home and in the community”. It has recently been announced that the TEC Programme, in partnership with Digital Telecare, will shortly be issuing an invitation to apply for funding to progress telecare service development in one or more of four areas:

- The transition from analogue to digital telecare
- Telecare proactive outbound calling (Test of Change)
- Remote working for call handlers (Test of Change)
- Data collection, extraction and reporting

Inverclyde HSCP intends to put a case forward for funding in one or more of the above areas when nominations are invited in the first week of September 2020.

### **3.0 RECOMMENDATIONS**

- 3.1 That the Integration Joint Board notes the progress and achievements within TEC over the past 12 months, supports our continued role in the national digital transformation and continues to promote digital telecare through the test of change opportunities from Scottish Government.
- 3.2 That the Integration Joint Board agrees the requirement for the establishment of a working group to manage securely, the safe and sustainable transition and deployment of a digital telecare service in Inverclyde.
- 3.3 That the Integration Joint Board notes the future financial pressure for the Council as a result of the changeover from analogue to digital and that there will be a further update following the outcome of the digital test of change.

**Louise Long**  
**Corporate Director (Chief Officer)**  
**Inverclyde HSCP**

## 4.0 Background

- 4.1 There are approximately 2,100 service users within Inverclyde with a community alarm service. Of this number, over 520 also have enhanced telecare packages or standalone equipment which accounts for 970 pieces of kit in use. These packages consist of a wide variety of environmental sensors such as smoke, flood and heat detectors as well as personal sensors like fall detectors, bed exit monitors and door contacts. Of those utilising technology, 72% are over 75 years old which is an increase of 12% from last year. (see appendix 1 for the breakdown of enhanced telecare).
- 4.2 The service has seen a decrease in the total number of service users from 2200 in 2019 to under 2100 in 2020, as well as a reduction in the number of referrals from 619 in 2019 to 241 up until August 2020. This reduction is most likely due to the impact of the COVID 19 pandemic and it is expected that the number of referrals will start to increase during the last quarter of 2020. The number of people with enhanced TEC packages has, however, increased from 400 to over 500 which includes standalone equipment, this is equipment that is not monitored by the alarm receiving centre and is, instead, responded to by family living at the same address or by staff in supported living accommodation. This demonstrates that enhanced TEC is a major component in keeping people at home, independently for longer.
- 4.3 By 2025, telecoms companies will have replaced analogue telephone lines with digital equivalents. Openreach (part of the BT group) has confirmed that the process of migrating to digital telephone lines has already started and the rollout is scheduled to be completed by 2025. Details of initial telephone exchanges where analogue services will no longer be available for sale have been set to end in June 2021 (although existing analogue in these exchanges will continue to operate after this date). There are no exchanges in this initial group located within Inverclyde. The Digital Office (DO) will monitor the announcements by Openreach and keep partnerships up to date. The DO is in regular contact with Ofcom, allowing any issues or questions relating to telecom companies, plans or performance to be raised.
- 4.4 Other local authorities are beginning to get underway with their plans for implementing digital telecare which falls into three categories:-
- 1) Ensuring the continued ability to deliver reliable and safe telecare services
  - 2) Meeting increased demand for telecare services, and
  - 3) Developing and improving the range of telecare services that are offered to users.

The “Playbook” is an interactive resource guide to assist partnerships in their transition planning and implementation to digital telecare and provides an outline business case for the roll-out of digital telecare in Scotland.

It is intended over the next few months to establish a working group with representation from other services to start to look at Inverclyde’s position with regard to the impending transition and requirement to develop a plan for implementation.

- 4.5 The test of change will see Inverclyde and Renfrewshire HSCPs; Bield (BR24) Alarm Receiving Centre; the Local Government Digital Office and 2 equipment manufacturers, TeleAlarm and Legrand working together to trial and test 50 digital alarm units across both local authority areas installed in service users’ homes for a period of three months.

While the project has been delayed due the COVID 19 pandemic, between November 2019 and August 2020, the service has:-

- Established a project team which is being supported by the Local Government Digital Office
- Worked with Bield (alarm receiving centre) to ensure that their call handling platform is digital ready with appropriate software installed to ensure connectivity,

- and penetration testing completed.
- Completed cyber security questionnaire with digital alarm suppliers
- Data Protection Impact Assessment and Risk Register completed
- Initial in house testing completed over several months using SCAIP digital protocol
- Staff training on the new equipment and management portals completed.

The project is scheduled to commence live on 14<sup>th</sup> September 2020 and will run for approximately three months. It is expected that the results will confirm the benefits associated with digital technology in that there will be better connectivity; increased reporting on failing equipment; improved voice quality; faster connection to the ARC; simpler installation and reconfiguration to name but a few. Inverclyde HSCP has agreed to carry out an evaluation of the test of change and will inform the TEC Programme Board and Digital Office by January 2021.

- 4.6 From 24<sup>th</sup> August 2020, a Technology Enabled Care (TEC) pilot using ARMED, (HAS Technology Ltd) will facilitate the monitoring of service users' activity levels enabling people to be more aware of how much they are moving and to work towards personal targets to improve their physical and mental wellbeing as well as identify and escalate any potential risks. The pilot will involve service users who are able to use and understand the benefits of the equipment and set personal goals. The system will also be given to people who are at risk of falls.

Fifty service users participating in the pilot will receive two pieces of equipment, the Armed device and a mobile phone. The Armed Device is worn on the wrist and works very much like a "fit bit" linked to a mobile phone. This would be used as part of the support package identifying safe exercise and activity within the current social distancing guidance. The device also enables monitoring of over-activity and sleep patterns where there may be an impact on peoples wellbeing or a risk of falls.

The Armed Device works in conjunction with the home care monitoring system storing data collected from devices used by service users in the community. This will enable our long term condition nurse to monitor results, respond to triggers and participate in regular discussions with service users about progress and their health and wellbeing.

Progress will be reported in January 2021 and evaluation will be carried out.

- 4.7 The use of technology to support and manage long term conditions forms part of Big Action 4.

#### Chronic Obstructive Pulmonary Disease (COPD)

In the last 12 months, the service has replaced its Docobo home health monitoring hubs and also introduced the Docobo App for those who are confident in using this preferred method of communication. This has allowed the service increased capacity to use and recycle the home health hubs to a larger cohort of people. There are currently 32 people being supported using this method.

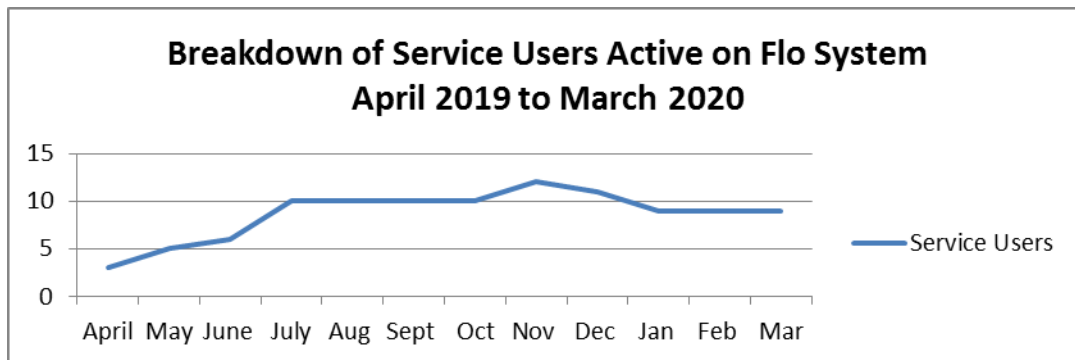
Data taken from the Docobo system has evidenced that there has been a reduction of 83 hospital admissions from the period April 2019-March 2020 which equates to a significant cost saving.

(see appendix 2 for Case Study Mr R)

(see appendix 3 for Case Study Mr H)

#### Diabetes

Florence (FLO) (mobile App) is also being used to improve self-care in Type 1 Diabetes and increase the number of patients self-administering insulin, thus reducing the number of home visits required by the community nursing team.



The above chart highlights the number of users currently using FIO from April 2019 – March 2020. (See Appendix 5 for Case Study Mrs B)

In addition to the above, collaborative work with the acute diabetes specialist teams in both the hospital and community has been ongoing. This has involved the consultant physician reviewing all diabetic patients on the District Nursing caseload via a virtual clinic to optimise treatment plans and include health improvement measures.

All 32 patients have now been reviewed resulting in a reduction of 373 visits per week to 208. The consultant physician has agreed to carry out these reviews on a regular basis.

### Hypertension

Florence (FLO) is also being used by patients in the community to both diagnose and monitor hypertension. This has meant clinicians have saved time in a reduction of face to face consultations and allowed patients to be more in control of their condition.

There are currently 21 patients being monitored across 3 GP Practices using FLO. This has meant a saving of 21 hours in health practitioners' time.

- 4.8 As part of planning for the transition and implementation, Inverclyde HSCP will require to consider all costs associated with implementing and operating the chosen digital telecare deployment approach including costs for staffing resources and supporting infrastructure.

## 5.0 IMPLICATIONS

### FINANCE

5.1

Cost Centre	Budget Heading	Budget Years	Proposed Spend this Report £000	Virement From	Other Comments

Annually Recurring Costs / (Savings)

Cost Centre	Budget Heading	With Effect from	Annual Net Impact £000	Virement From	Other Comments

### LEGAL

- 5.2 There are no legal implications arising from this report.

## HUMAN RESOURCES

5.3 There are no human resources implications arising from this report.

## EQUALITIES

5.4 Has an Equality Impact Assessment been carried out?

	YES
X	NO – This report does not introduce a new policy, function or strategy or recommend a change to an existing policy, function or strategy. Therefore, no Equality Impact Assessment is required.

How does this report address our Equality Outcomes?

Equalities Outcome	Implications
People, including individuals from the above protected characteristic groups, can access HSCP services.	TEC is inclusive of people with protected characteristics
Discrimination faced by people covered by the protected characteristics across HSCP services is reduced if not eliminated.	TEC reduces risk in the community for vulnerable groups
People with protected characteristics feel safe within their communities.	TEC equipment can reduce risks and can ensure a greater feeling of safety in the community.
People with protected characteristics feel included in the planning and developing of services.	TEC is promoted in many different locations, including Your Voice, acute setting, Carers Centre, and other events
HSCP staff understand the needs of people with different protected characteristic and promote diversity in the work that they do.	This is included in mandatory training for staff
Opportunities to support Learning Disability service users experiencing gender based violence are maximised.	TEC reduces risk in the community for vulnerable groups
Positive attitudes towards the resettled refugee community in Inverclyde are promoted.	TEC is open to the Refugee community.

## 5.5 CLINICAL OR CARE GOVERNANCE IMPLICATIONS

There are no clinical or care governance implications arising from this report.

## 5.6 NATIONAL WELLBEING OUTCOMES

How does this report support delivery of the National Wellbeing Outcomes?

National Wellbeing Outcome	Implications
People are able to look after and improve their own health and wellbeing and live in good health for longer.	Services support greater self-management of chronic conditions through remote home health monitoring. Services also support the use of technology to enhance independence and wellbeing through safer walking

	initiatives.
People, including those with disabilities or long term conditions or who are frail are able to live, as far as reasonably practicable, independently and at home or in a homely setting in their community	Services support people to live independently, for longer at home using a variety of technologies that can summon assistance in an emergency, monitor activity and provide reassurance for carers.
People who use health and social care services have positive experiences of those services, and have their dignity respected.	Services are delivered in line with National Care Standards and comply with Scottish Social Services Council and Care Inspectorate requirements.
Health and social care services are centred on helping to maintain or improve the quality of life of people who use those services.	Services support people to have a greater choice and control in their care and wellbeing.
Health and social care services contribute to reducing health inequalities.	Where inequalities arise, services are provided to those with assessed needs and are given early intervention and support
People who provide unpaid care are supported to look after their own health and wellbeing, including reducing any negative impact of their caring role on their own health and wellbeing.	Unpaid carers are supported and are involved in care planning taking into account their role. Carers are signposted to other support organisations.
People using health and social care services are safe from harm.	Services are delivered in line with National Care Standards and comply with Scottish Social Services Council and Care Inspectorate requirements.
People who work in health and social care services feel engaged with the work they do and are supported to continuously improve the information, support, care and treatment they provide.	Staff are recruited and supported develop their skills and knowledge through continuous professional development, supervision, training, team development sessions, briefings.
Resources are used effectively in the provision of health and social care services.	Resources are used appropriately and as an integral part of quality cost effective care and support.

## 6.0 DIRECTIONS

<b>Direction Required to Council, Health Board or Both</b>	Direction to:	
	1. No Direction Required	
	2. Inverclyde Council	X
	3. NHS Greater Glasgow & Clyde (GG&C)	
	4. Inverclyde Council and NHS GG&C	

## 7.0 CONSULTATION

- 7.1 The report has been prepared by the Chief Officer of Inverclyde Health and Social Care Partnership (HSCP) after due consideration with relevant senior officers in the HSCP.

## **8.0 BACKGROUND PAPERS**

- 8.1 Breakdown of Enhanced TEC (appendix 1)
- Case Study Mr R (appendix 2)
- Case Study Mr H (appendix 3)
- Case Study Mrs B (appendix 4)



**APPENDIX 1 – Enhanced TEC**

<b>Equipment Type</b>	<b>Numbers of TEC Equipment in Use</b>
Fall Detector	283
Smoke Detector	203
Heat Detector	81
Flood Detector	3
Gas Detector	20
Bed Exit	81
Chair Exit	25
Carer Alert	53
Sensor Controller	49
Door/Window Contacts	85
Epilepsy Monitor	37
Passive Infra-Red (PIR)	2
CO2 Monitor	0
Big Button	2
Key Switch	1
Enuresis Monitor	1
Falls X	9
GPS Safer Walking Technology	37
<b>Total</b>	<b>972</b>

**APPENDIX 2 – Case Study Mr R**

## How Telehealth has helped change my life.

Mr R is a 73 year old gentleman who has Chronic Obstructive Pulmonary Disease (Stage 3) and requires oxygen. He lives alone and maintains his independence which includes driving his car.

Mr R has been using the new Docobo remote home health hub for approximately 2 years and agreed to participate in a promotional video for the service about how he finds using the equipment.

Question – How long does it take you each day to put your readings in?

“About two minutes in the morning then you can get on with your daily life. If anything goes wrong they will get in touch with you one way or another, either by phone or through the tablet. It’s no bother, if I can do it, anyone can do it rest assured. It gives you more independence.”

Question - How do you feel about nursing involvement ?

“The nurses are never in your face. You’re on your own, given slack to do what you want to do. Unrestricted is a better word I think”

“Since I’ve started using this the visits from my GP have been few and far between, because I self medicate so I’m not really waiting for prescriptions or anything like that and the chemist will deliver them to your door when ready. I try to keep it to a minimum, but I do keep a prescription for antibiotics and steroids in the house, that if I feel I’m not well or have a chest infection, I can decide either or both of them. It’s me that decides. If I’m not sure, I can phone the doctor for advice. So you’re not stuck in any way or restricted in any way”

“I used to be sitting in the hall with the hub next to the phone line, now I don’t need to bother, I just take my tablet (with the App downloaded) into the kitchen or living room and sit and do it. So I put on my band (blood pressure cuff) for my blood pressure and take my oxygen saturation levels and that’s me, put it into the tablet right away and it’s not any more than two minutes in the morning. I only do it once a day anyway. Oh aye, you’ll get plenty of help, if you cannae get it in the one they will come back and tell you. If I can dae it anyone can dae it believe you me. I wasn’t brought up with computers or modern technology - that left me behind. I couldn’t dial a phone, work a mobile phone. Now I can send texts, I’m on Face book, I’m just a dandy”. Mr R laughs “you can cut that out.”

## **The Patient's Journey 28/11/19**

Mr H has been using the Docobo remote Home Health Hub for approximately five years. Mr H believes that having the hub at home has saved him from hospital on a few occasions, as he had a quick response from the district nurses who monitor his daily results.

"The nurses have been a great support and call to check I'm okay"

Mr H feels that with this support he can now self manage his condition more sufficiently, which in turn has given him confidence to be more in control of his health and treatment.

"Before I would wait on the nurse or GP telling me to start my standby medication, now I feel I don't need to do this. I now know when I need to start."

When asked if doing this daily was a nuisance Mr H responded saying,

"No, no, it doesn't take long and knowing a professional is looking over my results is a comfort."

Mr H feels the main benefit is being in control of his own health issues and feels his views are important.

He further asked if the app was on his mobile would it work in England. When the reply was yes he said

"Great! I haven't been able to visit my daughter in England for a long time as you can't take the hub."

15/01/2020. Following on from previous visit to Mr H nurses visited today and applied the docobo App to both Mr H mobile phone and his tablet. Whilst there Mr H completed his question set and observations on his phone with no issues. He again mentioned how this App would give him the freedom to visit his daughters and their families who both live out with the local area. This is another way in which Mr H feels more in control of his own health and by changing over from the home health hub to the App he feels he is no longer tied to the house.

## **APPENDIX 5 – Case Study Mrs B**

Mrs B is a 76 year old lady who has been an insulin dependent diabetic for many years. She has always dealt with her own medication regime and felt she was doing well.

Recently however this has changed.

Mrs B explained "My husband was diagnosed with dementia, which at the start was okay; things seemed to be just the same at home. Then as things got worse for him, I found my diabetes was getting more and more out of control and I was forgetting to take my readings and insulin, especially at tea time."

Mrs B feels she manages in the morning as she gets up first and takes her blood glucose readings and insulin before attending to her husband.

“Once I do my insulin in the morning, I get Mr B up and we have breakfast together.”

Mrs B attended the nurse specialist regarding her diabetic control and spoke to the long term condition nurse there regarding FLO a text messaging service. It was explained that the service would prompt her when readings were due and when she needed to take her insulin.

Mrs B agreed and enrolled on 22<sup>nd</sup> November 2019. It was agreed that FLO would send her a daily text at 5pm in the evenings. Since starting using FLO Mrs B has been very consistent and has inputted daily readings when FLO requests this information.

Mrs B said “This is a great wee service; it’s like having a wee person in your ear reminding you to do your stuff”

“My results have improved and I am managing things better, I know I miss an odd time but all in all, I’m a lot better than I was beforehand.”

