Subject :	Community Alarm/Telecare Service transition from Analogue to Digital
Purpose :	To provide an update to the Integration Joint Board on the North Ayrshire programme of work for Community Alarm and Telecare Service transition from Analogue to Digital Service
Recommendation :	The Integration Joint Board is asked to: (i) Note the content of the report; (ii) Consider the information and proposals/implications detailed therein.

Direction Required to Council, Health Board or Both	Direction to :-	
	1. No Direction Required	X
	2. North Ayrshire Council	
	3. NHS Ayrshire & Arran	
	4. North Ayrshire Council and NHS Ayrshire & Arran	

Glossary of Terms	
NHS AA	NHS Ayrshire and Arran
HSCP	Health and Social Care Partnership
ARC	Alarm Receiving Centre
PSTN	Public Switched Telephone Network
ISO	International Organization for Standardization
TSA	Tec Services Association

1.	EXECUTIVE SUMMARY
1.1	This report provides an update on how the North Ayrshire Health and Social Care Partnership will support North Ayrshire service users through the national telecommunication providers Analogue to Digital switchover.
1.2	Community Alarm and Telecare users in North Ayrshire currently access this critical Community Care service via technology that is supported by traditional analogue phone lines and voice band data. The current range of Community Alarm and Telecare equipment utilised in North Ayrshire is designed to send calls over the Public Switched Telephone Network (PSTN) and is not designed to be compatible with digital network(s) and digital communication protocols.
1.3	As early as 2023 it may no longer be possible for telecommunication customers to purchase an analogue phone service from many of the main telecommunication providers and all telecommunication providers expect to have fully transitioned their analogue telephone networks to a digital equivalent by 2025. Therefore, to access Community Alarm and Telecare services, service users will require to have a digital

	line installed in their home and access to technology which is compatible with digital lines and digital communication protocols. The Partnership will also require to ensure call monitoring arrangements for Telecare and Community Alarm activations are compatible with digital lines and digital communication protocols.
1.4	The HSCP has established an Analogue to Digital Transition project board, which is supported by attendance from across North Ayrshire Council and the Partnership. The Project Board provides governance for the implementation of the project plan and monitors the team's progress. The project plan lays out the actions that will require to be taken to support the transition and progress updates and escalations are provided on a regular basis to the Partnership's Transformation Board. The project plan has included the development of a robust communication strategy and risk register.
1.5	It is recognised that there are multiple complexities associated with the Analogue to Digital project, some of which are not within our control, however the HSCP is confident that we have robust plans in place to deliver a successful transition. There is regular engagement with agencies nationally, including the Scottish Government's Digital Office, who have confidence in the North HSCP's plans and in the project team for a safe and effective Analogue to Digital transition. Recent benchmarking places the North HSCP in a favourable position in terms of progress when compared to other Local Authority areas.
2.	**BACKGROUND**
2.1	North Ayrshire Health and Social Care Partnership currently delivers a Community Alarm and Telecare service to approximately 4,500 individuals across North Ayrshire both on the mainland and on the islands of Cumbrae and Arran. Service Users who access the Community Alarm and Telecare system have technology installed by HSCP staff, which is connected through their analogue phone lines, allowing them to access and request help and support via a Call Monitoring and Alarm Receiving Centre. The Call Monitoring and Alarm Receiving Centre will direct calls it receives from alarm activations to a variety of sources including HSCP social care staff, medical services, emergency services, family and next of kin. Service users who reside in North Ayrshire Council sheltered housing units have access to the Community Alarm and Telecare service via the complex's Call Warden System. Users of the Community Alarm/Telecare service in North Ayrshire generate in excess of 20,000 calls per month via Community Alarm/Telecare equipment, with the HSCP's dedicated team responding to over 5,000 activations on a monthly basis which require a physical response to provide assistance to people in their homes. The HSCP has a team of Care at Home Assistants who provide a response service to calls and alarm activations across 24 hours per day, 7 days per week.

2.2	Community Alarm and Telecare users have a main Community Alarm unit installed in their homes. This alarm can support additional technology which is installed and connected to the main alarm device, in order to support and monitor service users and to assist them remain as independent as possible in their own homes. Examples of additional technology includes items such as smoke detectors, flood detectors, falls detectors, property exit sensors and epilepsy sensors. Currently, the Partnership predominantly uses Tunstall branded Community Alarm and Telecare equipment purchased via the Scotland Excel Framework. Tunstall are an ISO accredited technology provider and one of the largest providers of Telecare in the United Kingdom. Tunstall's Community Alarms and Telecare equipment is compatible with the call handling software which is utilised by Hanover Scotland who provide call monitoring and alarm activation services on behalf of the North HSCP.
2.3	Community Alarm and Telecare technology is vital in supporting individuals in North Ayrshire to continue to live safely and independently in their own homes, with access to care and support when required, and is utilised by adults across all age groups. There are many benefits to Community Alarm/Telecare technology as detailed below: - Provides access to multiple items of advanced technology to support safety and independent living - Reduces pressure on traditional health and social care services - Provides reassurance and peace of mind to individuals and their families that when an emergency response is required that this can be readily called upon - Preventing hospital admission and supporting hospital discharge - Reducing the need for people to leave their own homes and move into long term care settings The safe roll out of Digital infrastructure is key to ensuring there is minimal disruption to the invaluable service provided as outlined above.
2.4	The Partnership has a contractual arrangement in place with Hanover Scotland who operate Call Monitoring and Alarm Receiving Centre(s) in Glasgow and Edinburgh. Hanover Scotland provide call handling arrangements for all Community Alarm and Telecare activations in North Ayrshire. The current contractual arrangement is in place until May 2024.
2.5	**Current Situation** The HSCP has traditionally purchased Tunstall analogue Lifeline Vi units for installations on analogue lines. As a result of the transition, these units will now only provide a maximum of two years of use and are no longer deemed value for money. It is the advice from the Scottish Government's Digital Office that Telecare service providers should no longer purchase analogue technology. The HSCP has adequate stock of analogue alarm units for use in the interim period and has ceased purchase of analogue Community Alarm and Telecare equipment. The HSCP requires to

purchase equipment to both continue to provide Community Alarm and Telecare services in the interim period, whereby service users will continue to utilise their existing analogue phone lines until these are replaced, and to be able to provide Community Alarm and Telecare services where analogue lines have been replaced with digital lines. This will include in total the replacement of around 3,500 dispersed analogue alarm units.

A project delivery team has been successfully recruited to support the physical roll out of a safe analogue to digital transition. The project team consists of a Technology Enabled Care Lead, who brings to the HSCP valuable experience and technical expertise in the TEC industry, and 4 Technicians.

The HSCP has established an Analogue to Digital Transition project board, which is supported by attendance from across North Ayrshire Council and the Partnership including colleagues from IT, PMI, Community Care Services, Corporate Procurement, Finance and the NHS's Digital Services team. The Project Board provides governance for the implementation of the project plan and monitors the team's progress. The project plan lays out the actions that will require to be taken to support the transition and progress updates are provided on a regular basis to the Partnership's Transformation Board. The project plan has included the development of a robust communication strategy and risk register.

Whilst the procurement exercise for the purchase of replacement alarm units is in progress, it is vital that the HSCP has arrangements in place on an interim basis for critical alarm users who may have already transitioned to a digital line. The majority of alarm users in North Ayrshire continue to access their Community Alarm and Telecare service via analogue lines and new referrals for Community Alarm installations continue to be received, therefore the landscape around this is constantly changing and solutions for ongoing service delivery is assessed and reviewed via the Analogue to Digital Project Board.

The HSCP has invested in a stock of GSM alarm units, which operate via a sim card and a stock of 'hybrid' smart hub units which are both analogue and digital compatible. These hybrid units have a lengthy lead time for delivery, however the HSCP has already received a small stock and is expecting further delivery. As a result the first digital enabled alarm was successfully installed in the home of a service user in the North Coast Locality last month.

2.6	As part of planning for the business case moving forward the project team has required to consider three main elements: 1. The communication route(s) to the Alarm Receiving Centre 2. Compatibility with the Alarm Receiving Centre 3. Compatibility with additional technology which is already installed 'peripherals' such as pendants, fall detectors, smoke detectors, etc.

| 2.7 | **Communication route(s) to the Alarm Receiving Centre**

Traditional analogue units have been very reliable in the last 50 years since the first alarm units were released. This is due to the fact that analogue lines are powered separately from the main grid, and if there was a power cut, the alarm units typically have a battery backup of around 40 hours.

By December 2025, everyone in the UK will have been converted to a digital phone line. If a user has a traditional phone, their phone socket will be removed, and their phone will be connected to a digital router instead. That is not to say they will have broadband, the digital routers are designed only to let someone use their phone, not to connect to the internet.

Unfortunately, it is anticipated that digital technology will not be as reliable as analogue and most digital routers will fail in the event of a power cut. Some networks can supply a router with a battery backup, but they will only provide one hour of power. Digital alarm units also come with a built-in sim card, although these present their own risks as there will be blackspots, particularly in rural areas. Also, mobile networks experience outages from time to time, and mobile masts can also be affected by power cuts. Digital alarm units have roaming sim cards, however roaming across networks isn't always effective.

Due to these issues, it is important to ensure the digital alarm units have both mobile connectivity and are connected via ethernet to the digital router if this is available. Alarm units are programmed to automatically move between the methods of connectivity to ensure risk off loss of connection is minimised.

In areas with a poor mobile signal, there will be the opportunity to move the alarm unit to another location within the home to find a better signal, or where this is not successful to connect the alarm to the digital router. The latter will be the only option when there is no mobile signal in the home however may be the requirement more frequently in some of the rural locations in North Ayrshire, such as on the island of Arran. In these instances, risk assessments will require to be in place in the event of power failure. |
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| 2.8 | **Compatibility with the Alarm Receiving Centre**

Community Alarms are programmed to send information on alarm activations to a Call Monitoring and Alarm Receiving Centre (ARC) – this allows the ARC to interpret the reason for the call and arrange the most appropriate response. When the alarm units send calls through to the ARC, the alarms speak to the software platform used by the ARC using a communication protocol. Most ARCs can receive calls from all units from the main suppliers. |

Community Alarm and Telecare technology currently utilised within the North Partnership is Tunstall branded, and this equipment communicates with the ARC using an analogue language (communication protocol). Hanover Scotland utilise a Tunstall call handling platform to interpret and receive calls made via Community Alarm and Telecare activations. When a Tunstall alarm unit speaks to a Tunstall software platform within an ARC, a more advanced language can be used which is more reliable (i.e. more likely to get through to the ARC), and the call contains more information. For example, an alarm activation by a property exit sensor could contain information such as the location of the sensor alongside the activation. Most ARCs can receive calls from alarm units from the main Telecare suppliers, ie not just the same brand of equipment as per the software platform, however this may have an impact on the quality of information received. Furthermore, when a Tunstall alarm unit is communicating with an ARC which has a software platform that is not Tunstall, the most basic languages are used, for example if a property exit sensor is activated this may communicate as an activation however contain no detail regarding the location.

Similar rules apply to digital communication protocols – and there are currently several digital protocols which can be used by suppliers of Community Alarm and Telecare equipment. Furthermore, as detailed within this report there will be a transition period whereby the North HSCP will be utilising a range of both analogue and digital Community Alarms. Therefore it is vital that any ARC contracted by the Partnership has the functionality to receive and interpret a range of both analogue and digital communications, and consideration should be given to the quality and detail of the information this can generate.

2.9	**Peripheral Compatibility**

The Partnership utilises a range of Community Alarm and Telecare equipment with the main supplier for this being Tunstall. This includes dispersed alarm units, call warden systems and various peripherals which are items that can be programmed to the main alarm such as smoke detectors.

Almost every Telecare manufacturer has their own radio 'protocol' (radio signal) and this is not shared with other suppliers. A good comparison is the Apple Watch in that it is only fully compatible with an Apple iPhone.

The Partnership has invested and deployed around £800k of Tunstall branded peripherals with the majority of this equipment installed in service user's homes therefore it is vital that the procurement of digital alarms allows for both compatibility with the ARC and with existing Tunstall technology to avoid a wider replacement programme which would then require the replacement of all alarm peripherals.

2.10	**Associated Risks**

Ofcom and the Tec Standards Association, (TSA), are working alongside the Technology Enabled Care sector, Regulators and the Scottish Government to understand the challenges presented by this transition and to support Partnerships and Local Authorities through this process. The North HSCP's Project Team have also established good links with the Scottish Government's Digital Office and attend regular progress meetings with colleagues from the Digital Office.

A number of significant risks associated with the transition have been highlighted and continue to be monitored via the Project Board risk register.

- Individual Telecommunications providers will work to different timescales within their own operational and strategic plans. This will have implications for service users within North Ayrshire who receive telecommunication services from a wide range of providers, and many have begun to transition sooner than the 2025 deadline and before replacement digital devices are provided. The Project Team are continuing to discuss with the Digital Office timescales for migration however to date a roadmap for this has not been confirmed.
- The current range of Community Alarm and Telecare equipment utilised in North Ayrshire is designed to send calls over the PSTN. If these devices attempt to connect with the Call Monitoring and Alarm Receiving Centre via a digital network, the call could fail to connect or be lost, with a potential risk to the service user not receiving the requested assistance. The Scottish Government Digital Office advises there is evidence from countries who have already undertaken the transition to digital technology of increased rates of call failure due to the distortion in analogue signalling from analogue telecare equipment as telecommunication providers prepare their networks.
- The Partnership's current Call Monitoring and Alarm Receiving provider, Hanover Scotland, are not yet fully digitally enabled to support receipt of digital Community Alarm and Telecare equipment. However, Hanover are advanced in their testing and have provided regular updates and communications to the HSCP regarding progress. It is anticipated that their Alarm Receiving Centre will be fully digitally enabled in the coming weeks ensuring they can accept the different digital protocols and communication methods coming on to the market, as well as being able to continue to support the existing analogue equipment for as long as necessary. This includes supporting the digital communicators on warden call systems as well as newer fully digital grouped and dispersed alarms.
- Hanover Scotland are the current provider of Call monitoring and Alarm Receiving services for North Ayrshire's Community Alarm and Telecare services. The contract for this has been extended until May 2024 and a procurement process will require to be undertaken for future call handling arrangements.   Re-tendering of this contract was delayed due to the Covid Pandemic and uncertainty around the analogue to digital transition. Hanover Scotland have continued to provide safe and robust call handling services for the Partnership throughout this time. There may, however, be a requirement

for a transition to a new Call Monitoring and Alarm Receiving Centre before the analogue to digital transition is complete.

- North Ayrshire Health and Social Care Partnership spent an average of £207k per year in purchasing new Community Alarm/Telecare equipment over the last 3 financial years. Costs of Telecare equipment have risen since the onset of the COVID-19 pandemic and there have been various supply issues in this period, including a global shortage of semiconductors that are installed in Telecare equipment, which has affected the availability of vital equipment, including smoke detectors and fall detectors. Telecare equipment providers have already indicated that the costs for Partnerships to purchase new digital equipment will be significantly higher, and as recently as April 2023 the cost of one of the newly marketed digital alarm units has increased. From the evidence already available the prices of the new equipment are almost double the current costs, with ongoing yearly costs attributed to sim card rental.

- At present much of the HSCP's Community Alarm/Telecare equipment is recycled. For the first 12 months of implementation, it is envisaged that there will be no opportunity to recycle any equipment. This, again, will have a negative budgetary impact for the Partnership and exacerbate market supply challenges.

- The Analogue to Digital switchover is a UK wide programme therefore it is recognised that whilst some areas have already transitioned to digitally enabled equipment, there is significant demand for this technology. This is currently being seen in limited availability for many items of digital equipment, with lead in times of up to 6 months and longer for delivery.

- North Ayrshire's geographical footprint is in many areas rural and isolated with areas where signal strength is poor or indeed non-existent. Therefore, there are risks associated with digital connectivity and availability of digital service. The Project team are currently planning a scoping exercise in some of the Partnership's most rural areas, including on the islands, to consider any potential network issues and allow for advance planning for implementation.

- Cyber security risk – as Telecare Providers source new and more advanced technologies, this is likely to bring an increased cyber security risk.

Whilst these risks are recognised, it is important to also highlight that the Project Team are actively seeking solutions and mitigations. Some examples of the key actions the team are taking are detailed below:

- The HSCP's Communication and Engagement Officer has developed a robust communication strategy as it has been identified early on in the project that communication and engagement are key to the success of the transition. This proactive strategy has included consistent and ongoing messaging, including information leaflets issued to all new Community Alarm users, written communication on a quarterly basis providing Analogue to Digital updates to all existing users, a press release early in 2023 and ongoing use of social media. The team have also attended various forums including the Irvine

	Seniors forum, and information has been shared with various community groups and networks.
	• A programme of routine visits has been underway since late 2022 and these are almost at 50% completion. This includes a home visit by one of our Community Alarm team to gather information on the equipment and telecommunication details of each Community Alarm user in North Ayrshire. This will provide valuable information in informing the direction of the project when this reaches installation stage. This also provides an opportunity for the team to provide advice and guidance on the analogue to digital transition, and compatibility with our technology.
	• The Project team are currently planning a scoping exercise in some of the Partnership's most rural areas, including on the islands, to consider any potential network issues and allow for advance planning for implementation.
	• The recruitment of a skilled TEC lead will provide valuable knowledge and experience in informing the project. The TEC lead, alongside other colleagues from the Project Team, meets regularly with key stakeholders including the Scottish Digital Office, Telecare providers and other Local Authority areas.
	• Despite the market challenges and supply difficulties, the North HSCP has already been able to procure equipment which is digitally enabled and continue to work alongside procurement colleagues to proactively take opportunities to secure kit.
2.11	**<u>Community Alarm and Telecare Equipment Costs</u>** As already outlined in this report there will be financial implications for the HSCP with the transition from analogue to digital. The HSCP had a successful bid in early 2022 of a grant for £50,000 from the Scottish Government's TEC Programme to support the transition from analogue to digital. The North HSCP is using this grant to fund a Telecare Lead to project manage the analogue to digital programme. The Scottish Government have already confirmed that there is no further funding available to support Partnerships/Local Authorities with the transition of analogue to digital and that any other financial implications, including the full costs of upgrading Community Alarm and Telecare equipment, have to be met by each individual Partnership/Local Authority area. As such North Ayrshire Council has allocated £996k towards the cost of the analogue to digital transition, therefore the total budget for the project is £1,046k. The Partnership also has an annual recurring budget for the purchase of Telecare equipment of £214k. Testing has been ongoing by many Community Alarm and Telecare providers to determine if analogue telecare equipment can operate over a digital connection. However, it remains the view of the Scottish Digital Office that this should not be considered a viable or long-term solution by service providers unless no alternative digital solution exists. Therefore, it is anticipated that the Partnership will require to replace all of its current analogue equipment with an updated digital version of kit for every single user with a dispersed Community Alarm who is utilising the service at present. That current total projected costs associated with the project are £1,165m inclusive of replacement equipment, initial 2-year sim card costs and the costs

associated with the project team. However as described within this report the costs of digital alarm equipment is subject to change and there have been recent cost increases to digital alarm equipment. Furthermore, a procurement exercise is planned to ensure best value for any expenditure therefore costs would be subject to the outcome of this procurement.

There is also currently an average annual spend of approximately £207k on a yearly basis to replace and purchase Community Alarm and Telecare equipment. It is anticipated this ongoing yearly cost will also increase particularly in relation to the cost of digital equipment, compared to analogue alarms which are currently almost double the cost, and ongoing sim card costs per alarm installed which were not required for the analogue alarm units. However, the new digital equipment does provide access to more advanced software solutions for managing and recycling stock, therefore it is anticipated there will be efficiencies linked to stock management and recycling of equipment.

3.	**PROPOSALS**
3.1	It is important that the IJB note the digital developments above and the proposals detailed below.

- A procurement exercise will be conducted for the digital technology required to replace the existing analogue equipment installed in service users homes across North Ayrshire, taking into consideration opportunities to access existing Framework agreements that are currently in place. A service specification has been developed by the project team and takes into account business continuity arrangements to ensure any technology procured provides robust back up arrangements in the event of system down time. The Partnership intend to identify provider(s) of Community Alarm and Telecare equipment which is compatible with existing Tunstall peripherals, and Call Monitoring and Alarm Receiving Centre communication protocols.
- The HSCP will continue with arrangements to ensure Community Alarm and Telecare services can continue to be delivered in the interim period whilst there is a blend of analogue and digital equipment and communication methods for activations.
- A project plan has been developed for the analogue to digital transition. Where possible this will take into account a full survey of the telecommunications position across North Ayrshire – ie which providers are migrating when, when analogue lines will cease to become available, rural signal blackspots etc. The project plan and project board will continue to consider and manage risks associated with the switchover and mitigations to support safe and ongoing use of the Community Alarm and Telecare service. In the continued absence of a national switchover roadmap, in line with advice from the Scottish Digital Office, the replacement programme will commence transition in a planned basis considering risks for priority such as larger populated areas, frequent alarm users and users with the largest number of technology and peripherals.

	• A procurement exercise will require to be conducted for a Call Monitoring and Alarm Receiving Centre which is digitally enabled to receive calls from both analogue and digital devices to meet current and future Community Alarm/Telecare requirements. This procurement exercise must take into account business continuity arrangements to ensure any technology procured provides robust back up arrangements in the event of system down time. • The Community Alarm/Telecare service is a generic service and is currently not age or condition restrictive. In consideration of the potential cost implications linked to the digital transition and beyond there may be the requirement for the introduction of a specific eligibility criteria to access the Community Alarm/Telecare service and future cost/charge considerations.
3.2	<u>Anticipated Outcomes</u>
	The anticipated outcomes of this paper are to update the Integration Joint Board on the potential impact of the forthcoming analogue to digital transition. By providing regular updates of the proposals, financial implications and potential risks it is anticipated that the service will be in a stronger position to plan and deliver a safe and effective switchover for Community Alarm/Telecare users in North Ayrshire.
3.3	<u>Measuring Impact</u>
	The ongoing progress and impact of the analogue to digital transition will be measured via the Analogue to Digital Project Board and via the Transformation Board.
4.	**IMPLICATIONS**
4.1	<u>Financial</u> There will be financial implications linked to the costs associated with the analogue to digital switchover. Details of these costs are provided in section 2.11. The costs are not yet finalised but modelling at this stage suggests that the project is fairly well aligned with existing allocated resources.
4.2	<u>Human Resources</u> None
4.3	<u>Legal</u> None
4.4	<u>Equality/Socio-Economic</u> None
4.5	<u>Risk</u> Medium
4.6	<u>Community Wealth Building</u> None
4.7	<u>Key Priorities</u> The Partnership are committed to investing in technology solutions to provide Early and Effective Support to people in our communities.

5.	**CONSULTATION**
	Representatives from Community Care Services have been involved in regular consultation with the TSA, Scottish Government, Telecommunication and Telecare providers. This consultation will continue throughout the transition from analogue to digital and will incorporate consultation with users of Community Alarm/Telecare services in North Ayrshire. In addition, staff from the Community Care Services team are members of the networking groups who meet to discuss this transitional programme of work and the implementation of the analogue to digital strategy.

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