Integration Joint Board
09 May 2024

Subject :	**Community Alarm and Telecare Service transition from Analogue to Digital Update Report**
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 and the update on progress provided, including noting the risks

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	
HSCP	Health and Social Care Partnership
ARC	Alarm Receiving Centre
PSTN	Public Switched Telephone Network
SHU	Sheltered Housing Unit

1.	**EXECUTIVE SUMMARY**
1.1	This report provides an update on how the North Ayrshire Health and Social Care Partnership is supporting North Ayrshire service users through the Telecommunication Providers Analogue to Digital switchover. Community Alarm and Telecare users in North Ayrshire traditionally accessed this critical Community Care service via technology that is supported by analogue phone lines and voice band data. Analogue Community Alarm and Telecare equipment 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. As such, to ensure people can continue to access this much needed service, there is a requirement to replace all analogue technology with a digitally enabled equivalent.
1.2	The Partnership's Analogue to Digital transition plan has been in progress since 2022 and at the onset of this there was recognition that there were a number of unknowns associated with the transition. Since this date there have been ongoing challenges in progressing with the transition which has impacted on the project, including many which are outwith the Partnership's control. This includes the impact of the COVID

	Pandemic, timescales associated with the telecommunications switchover, technology developments and financial costs.
2.	**BACKGROUND**
2.1	North Ayrshire Health and Social Care Partnership delivers a Community Alarm and Telecare service to over 4,300 individuals across North Ayrshire both on the mainland and the islands of Cumbrae and Arran. Service Users who access the Community Alarm and Telecare system either have technology installed by HSCP staff, which was traditionally connected through their analogue phone lines, allowing them to access and request help and support via a Call Monitoring and Alarm Receiving Centre, or access this via a Call Warden System within Sheltered Housing properties. The Call Monitoring and Alarm Receiving Centre will direct any calls it receives to a variety of sources including HSCP social care staff, medical services, emergency services, family and next of kin. Users of the Community Alarm and 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 6,000 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 on the mainland, with a reduced response service on the islands.
2.2	Since as early as 2023 it has not been possible for some customers to purchase an analogue phone service from many of the main telecommunication providers and all telecommunication providers are expected to have fully transitioned their analogue telephone networks to a digital equivalent by 2025. Therefore, Community Alarm and Telecare users will require to have a digital solution in place within their homes in order to access Telecare and Community Alarm technology and supports. Ofcom and telecommunication providers have confirmed that systems which are currently reliant on analogue and voice band data will be affected by this change. This includes systems such as security alarms, cash terminals, fire alarms and Community Alarm/Telecare systems.
2.3	The move to digital systems is well underway and many providers previously accelerated their switchover to be complete by the end of 2023. As a result of accelerated timescales from telephony providers, the Scottish Local Government's Digital Telecare Office encouraged Telecare Providers to make the shift to digital solutions from as early as 2023, and the North Partnership is progressing to have digital solution(s) in place by the end of 2024. Unfortunately, however, there has been no clear roadmap provided by the telecommunication providers, and whilst many people have transitioned to a digital line from an analogue line, there is awareness within the Telecare community that the timescales for providers to switch over may now extend well beyond the original 2025 deadline meaning that there will continue to

	be a mix of telephone network arrangements for at least the next 2 years (ie both analogue and digital telephone lines).
2.4	Hanover (Scotland) are the current provider of Call Monitoring and Alarm Receiving Services for North Ayrshire's Community Alarm and Telecare services. Following a recent procurement exercise Hanover (Scotland) have been awarded a further contract to provide this service in North Ayrshire for a period of up to 4 years.
2.5	The HSCP has 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. The Partnership has employed a dedicated project team, consisting of a TEC Lead and 4 x Technicians, to support the transition and they are currently progressing an implementation plan with an anticipated project completion date of early 2025.
3	**ASSESSMENT**
3.1	Digital Equipment Procurement As the North Partnership predominantly use Tunstall branded Community Alarm and Telecare equipment there was a requirement for the new digital alarm solution to be compatible with the range of Tunstall devices already installed in North Ayrshire homes – of which there can be several in each home in addition to the base alarm unit with an approximate stock value of over £800k. This limited the options available to only 2 Telecare equipment providers and there have been significant concerns during the period alarms required to be purchased around the rising cost and reduced availability of digital equipment, which had been impacted by the COVID pandemic and a global shortage of parts impacting on equipment supply. As such, a decision was made to procure Tunstall branded digital alarms which ensured compatibility with both the existing Call Handling software platform and the current stock of Community Alarm and Telecare equipment. Tunstall are an ISO accredited technology provider and one of the largest Telecare providers in the UK. The service purchased a digital alarm solution and have a stock of 3,000+ digital alarm units for installation to support the transition plan. No analogue alarms have been purchased since 2023 and an installation plan is in place to complete the replacement of all existing dispersed analogue alarms by the end of August 2024. There remains a requirement to procure an additional number of digital devices and the team are continuing to explore new digital alarm technologies and testing these to ensure there is a range of equipment available which will increase resilience and

	support business continuity plans. It is expected the remaining alarms will be purchased in the next few months.
3.2	Installation Plan

The programme for replacing alarms commenced in 2023 with approximately 3,500 dispersed analogue Community Alarms requiring to be replaced. To date around 2,200 digital alarms have been installed across North Ayrshire and the project plans to complete the full replacement of analogue alarms by the end of August 2024. There is, however, a final stage of the installation plan linked to reprogramming that will mean the timescale for project completion extends to early 2025.

The installation plan and replacement programme is being undertaken geographically based on the most populated areas in North Ayrshire, with the majority of analogue alarms in the Irvine and Kilwinning and Three Towns area replaced. The team currently installing replacements in the North Coast Locality and following this will move on to the Garnock Valley and the Islands of Cumbrae and Arran. |
| 3.3 | Call Monitoring and Alarm Receiving Centre/Connectivity Risks

Community Alarm units have been operating via analogue telephone lines for the last 30-40 years. They communicate with the alarm receiving centre (ARC) using traditional landlines and rarely fail. Unfortunately, leading up to the deadline date of December 2025, analogue connectivity is expected to become less reliable. An example of this occurred recently when analogue units using the Talk Talk network failed to fully connect to the Call Monitoring Centre and presented as 'Handshake Fail' calls. This affected most Tunstall providers across the central belt in Scotland. The situation settled after a couple of weeks.

Digital alarms use mobile connectivity via an in-built SIM card (via both an analogue route and a digital route) and can also connect to a broadband router if this is in place. If both communication paths are available, the reliability is similar to analogue units. If there is only one path available, there is a greater risk that calls may fail. |
| 3.4 | All of the digital alarms currently being installed by the team in this phase of the implementation plan are installed via the in-built SIM card (analogue route). This is due to the current ARC not yet being fully digitally enabled to receive end to end digital alarm activations. The timescale for 'digital readiness' has been pushed back several times and delayed by approximately 18 months so far. It is anticipated that the new 'go-live' date for digital readiness with the call handling provider will be June 2024 and operational teams and commissioning colleagues have been working with the call handler to resolve this issue and urgently progress.

It was not possible to delay the implementation of digital alarms until the call handling provider could accept digital calls as more and more alarm users were finding their telephone lines transitioned to digital which meant their existing analogue alarm was not compatible and required to be replaced. Therefore, the current implementation |

	plan is working with a temporary interim solution, in that digital alarms are connected to the ARC via the in-built SIM card, and will require a final stage of the implementation plan to re-programme each alarm once the ARC can fully receive end to end digital calls.
3.5	It is important to note that whilst the in-built SIM card connection is favoured by the Scottish Digital Office as the first route of connection, with broadband connections considered vulnerable due to power outages, there is a risk of call failure without the additional resilience of the back-up connection via the broadband router. There was a Europe wide SIM outage in June 2023 which resulted in 400 SIM units (Digital units and analogue GSM units) in North Ayrshire all failing to work simultaneously, leaving service users affected for approximately 14 hours. Fortunately, these outages are very rare and there has been no further issue since June 2023. This interim solution could not be avoided as described there is not an alternative solution as telephony providers had commenced transition to digital lines rendering existing analogue alarms obsolete and unreliable. In terms of risk mitigation the service has learned from the incident in June 2023, and has a SIM Outage Standard Operating Procedure in place to respond to such incidents in the future and to ensure the most vulnerable service users are safe and prioritised. Furthermore the status of all installed digital units can be monitored through an online portal. The digital technicians monitor this portal daily to ensure that any units losing connection are identified quickly.
3.6	The requirement to have a final stage of installation, which will require the reprogramming of over 2,000 alarms if not more, was unexpected and has impacted on the proposed completion of the project. Re-programming can be undertaken remotely, however this would be a last resort and the preferred option will be for a further home visit to each service user to safely re-programme and test Community Alarm equipment. It is anticipated that all Community Alarm and Telecare service users in North Ayrshire will have a digital alarm solution installed in their home by the end of August 2024 and as such are not at risk when analogue phone lines are withdrawn/unavailable. The re-programming of alarms to ensure a second layer of connectivity via the broadband (where available) will be undertaken as soon as possible. Tunstall have agreed to provide a technician dedicated to the North Partnership to support the reprogramming for a period of 3 months. Final timescales on the full completion of installation and re-programming will not be fully understood until the ARC has a final go live date, as this will be dependent on the number of alarms to be reprogrammed which is increasing week on week, however it is anticipated that the re-programming will be fully completed in early 2025.
3.7	The team remain vigilant around the potential challenges related to connectivity issues in the more rural locations in North Ayrshire including on the islands of Arran and Cumbrae and in some areas of the mainland. A number of scoping visits have already

been undertaken on the islands to consider the current mobile environment and the potential issues that may arise from this.

As part of the project planning the team have opted to plan transition in areas of poorer connectivity, such as on the islands of Arran and Cumbrae, until the end of the replacement programme. By then it is expected that the team will have more expertise and experience of mainland issues to ensure that the best possible option(s), including alternative technology, which could be provided to users in these areas. There may, however, be scenarios where there is either no mobile signal or no broadband router available and the desired resilience of connections will not be possible and as such robust planning and risk assessment will be required to mitigate risk associated with this.

3.8	**Shared Alarm Receiving Centre/Call Handling Platform**

Unlike a number of other Local Authority's, including both East and South Ayrshire, the North Partnership does not provide an inhouse Call Monitoring and Alarm Receiving Centre. As such, Call Handling is commissioned externally, and whilst within the terms of the contract and service specification the service can describe and detail service requirements, there are often limits to this from a technical perspective and this can be subject to change based on the Call Handlers own specifications and contractual arrangements.

The Scottish Digital Office have appointed Chubb Skyresponse (CS) as the preferred supplier of its 'Shared ARC' contract. Several local authorities have stated their intention to use the CS platform. The Partnership's Call Handler, currently have a Tunstall ARC platform, however this may be subject to change due to their own contractual arrangements.

Non-Tunstall platforms are technically unable to support the analogue protocols (languages) built into Tunstall alarm units. Analogue protocols will be used as an important backup after transition, for when digital connectivity fails, which can happen occasionally. This presents a risk as it means alarms will be less resilient, especially those relying on SIM connectivity alone. This could result in various issues, in particular 'Handshake Fail' calls where the unit fails to fully dial through to the platform. |
| 3.9 | **Sheltered Housing Unit Installation Plan**

NAC have a number of Sheltered Housing Units (SHUs), each containing a warden call system. These systems will also have to be upgraded to be compatible with digital landlines. This work is delayed until the ARC is fully digitally enabled. Property Management colleagues have been in contact with Openreach and await information on when various SHU units will switch to digital. This will allow planning to prioritise the units which need to be targeted first. |

3.10	Financial update
	The North Ayrshire Council capital budget for the analogue to digital project is just over £1m which included £50k of temporary Scottish Government funding. The cost of digital alarm equipment is more expensive at around double the cost of the traditional analogue alarms, costing from £225 - £335 per alarm unit with ongoing yearly sim card costs of around £45 per year from year 3 onwards. These units have also increased in cost in recent years and the initial project was based on a cost of around £200 per alarm unit. There remains around 500 digital alarm units to be purchased and with a potential extension required for the project team to be extended to approximately March 2025 resulting in a shortfall within the capital budget of around £221k. A request has been made to the Capital Programme Group for additional funding and it is expected that this will be approved to support the remainder of the project to completion. It is also recognised that there will be ongoing yearly SIM costs for each alarm and there may be a requirement to permanently recruit to some new posts due to a technical requirement linked to Community Alarm technology. Financial planning is ongoing in relation to these increased ongoing annual costs.
4	**SUMMARY**
	There are several plans in place to mitigate the risks that have been identified within this report. The Analogue to Digital Programme Board continues to meet regularly and holds a Risk Register linked to the project. The Project Team have robustly risk assessed various scenarios associated with Call Handling arrangements and continue to introduce plans to manage and mitigate any emerging risks. This includes ongoing engagement with stakeholders including the Scottish Digital Office, other Health and Social Care Partnership's and Telecare Provider colleagues. The team have developed a Communication plan which has been implemented throughout the project to increase awareness of the Partnership's plans for the Analogue to Digital transition and there has been ongoing communication directly with users of the service. In addition, the team have completed a plan of Routine Visits to all Community Alarm and Telecare users and are now developing plans for future undertaking of these, including the plan and programme for testing equipment. As the programme develops it will be essential in the next few years to consider future equipment lifespan and a longer-term equipment replacement programme and costs.
5	**PROPOSALS**
5.1	The IJB are asked to note the updates provided in the report and acknowledge the highlighted project risks, as summarised below.

		• Call Handling and Alarm Receiving Centre digital readiness and call handling platform proposals • Financial Position including project costs and ongoing yearly costs • Connectivity and risk of call failure • Project Timescale linked to re-programming
5.2	<u>Anticipated Outcomes</u>	
	The robust programme approach and planning for the Analogue to Digital switchover for our Community Alarm service users is anticipated to minimise any disruption, deliver a safe and effective switchover and secure the future resilience of the service provided for Community Alarm/Telecare users in North Ayrshire.	
5.3	<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.	
6	**IMPLICATIONS**	
6.1	<u>Financial</u> There will be financial implications linked to the costs associated with the analogue to digital switchover. Financial planning is ongoing in relation to potential increased ongoing annual costs.	
6.2	<u>Human Resources</u> None	
6.3	<u>Legal</u> None	
6.4	<u>Equality/Socio-Economic</u> None	
6.5	<u>Risk</u> Medium	
6.6	<u>Community Wealth Building</u> None	
6.7	<u>Key Priorities</u> The Partnership are committed to investing in technology solutions to provide Early and Effective Support to people in our communities.	

7	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. There has been ongoing engagement with Community Alarm users and their families via the developed communication strategy. In addition, staff from the Community Care Services team and the project 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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