

NHS Ayrshire & Arran



Meeting:	Ayrshire and Arran NHS Board
Meeting date:	Monday 15 August 2022
Title:	Innovation in NHS Ayrshire & Arran
Responsible Director:	Dr Crawford McGuffie, Medical Director
Report Author:	Dr Karen Bell, Head of Research, Development & Innovation

1. Purpose

This is presented to the Board for:

- Discussion

This paper relates to:

- Emerging issue

This aligns to the following NHSScotland quality ambition(s):

- Effective

2. Report summary

2.1 Situation

This paper is presented to Board to update Members and enable discussion on Covid-19 related Innovation activity, as well as funding and project management support challenges in taking forward this work.

2.2 Background

At the Board meeting on 21 February 2021 the Medical Director had highlighted the background to Innovation activity in NHS Ayrshire & Arran and the engagement with universities, the Glasgow School of Art and other providers in taking forward service redesign and developing the workforce. Board members had welcomed the update and requested a further update on Covid-19 related innovation at a future meeting, noting that detailed future reporting would be through Healthcare Governance Committee.

The NHS Board recognised that the COVID-19 pandemic had accelerated the rate of delivery of innovation projects across services, with a number of existing projects early adopted and rolled out across the country and acknowledged the benefits of Innovation activity in taking forward the Board's Caring for Ayrshire strategic programme and to attract the best workforce to NHS Ayrshire & Arran.

As agreed at the meeting R&D has been renamed to Research, Development & Innovation. Although a local innovation team has not been established, access to the West of Scotland Innovation Hub regional has provided project management resource to help with the delivery of work locally. Regular meetings with the Transformation team ensures that as appropriate national/regional innovation projects that can feed into the aims of the Caring for Ayrshire Programme are identified, the work of the Programme Planners will also inform the future direction of innovation activity. This will ensure that activity can be directed towards the needs of the organisation, build on the self-generated ideas of staff and develop a wider innovation culture.

The West Node has established fortnightly West of Scotland Regional Group Meetings. These meeting have three main aims

- Develop robust regional governance structures to support the development and roll out of national/local innovation programmes
- Link with the Directors of Planning, Digital Services and Procurement to ensure that innovation activity supports the delivery and transformation of services locally and fits with the strategic plans particularly of Digital Services.
- Support local clinicians and teams to develop and/or roll-out innovation programmes/consortiums.

In addition there are ongoing discussions with SHIP (Scottish Health Industry Partnership) about the amount of funding and requirements for additional resources including programme managers in order to support the level of activity across the West Node. Historically the three innovation Nodes have received similar levels of funding which does not account for the differences in size of the Nodes and so the West Node have asked for this issue to be addressed.

2.3 Assessment

High level information on the key projects are detailed below along with future opportunities. Further detail on these projects will be provided to the Healthcare Governance Committee.

2.3.1 Key Projects

Drones - CAELUS – Future Flight 3 Programme

A Consortium led by AGS Airports in partnership with NHS Scotland (including NHSA&A) has secured £10m funding from the Future Flight Challenge at UK Research and Innovation, UKRI to deliver what will be the UK's first medical distribution network. The funding is for 2 years and will involve live flight trials as part of development of the network.

Glasgow School of Art

Health and Wellbeing Live: Future of Staff Wellbeing - Glasgow School of Art (GSA) - 3rd Year Product Design

In November 2021, the seven week project with the 3rd year Product Design Students completed. The project had three themes

- Theme 1: Spaces for connection and wellbeing
- Theme 2: Staff support services
- Theme 3: Recognition and worth (or 'Staff patient connections')

The project was developed with the Staff Wellbeing Service - Dr Julie Gordon and Dr Hans Hartung and the Transformation Team. Outputs from the 2021 3rd year project have been shared with the Staff Wellbeing team and wider community. Building on the previous work that had been published this work has now been accepted for a Chapter in a Book on 'Human-Centered Service Design for Healthcare Transformation' which will be published in early 2023.

NHS Clinical Entrepreneur Programme

The NHS Clinical Entrepreneur Programme (NHS CEP), delivered by Anglia Ruskin University aims to provide NHS staff with the commercial skills, knowledge and experience needed to successfully develop and spread innovative solutions to the challenges facing the NHS. Professor Wael Agur has successfully secured a Fellowship as part of the Programme. He will be working on developing a Patient Decision Aid (PDA) for women considering surgery for stress urinary incontinence. He will also be supported by the Digital Health & Care Innovation Centre and Scottish Enterprise to deliver the outcomes

Digital Pathology

Discussions are ongoing with the West of Scotland iCAIRD team to explore collaboration with the Pathology Service, Dr Lorna Cottrell and Dr Hayley Morris to look at the systems in Digital Pathology that have been developed locally, the challenges that need to be addressed and the opportunities of sharing local best practice with colleagues in other parts of the region. iCAIRD is The Industrial Centre for Artificial Intelligence Research in Digital Diagnostics. It is an Innovate UK Collaborative with a number of workstreams including developing infrastructure and platform requirements and specific clinical projects.

Mental Health

Learning Disability Service - Glasgow School of Art (GSA)

Day Services in North Ayrshire (now referred to as Day Opportunities) are going through a period of significant change, moving away from a rigid, building based, traditional model of provision, to a much more community oriented/distributed model of provision (but still with the benefit of a high quality building in the background). The Service is engaging with two GSA Intern(s) for 5 weeks over the summer to help inform elements of this transition.

Neurology

vCreate

vCreate is a video platform which was rolled out during COVID to support

- Neonatal Units to provide family integrated care, allowing unit staff to upload short video clips of a baby for parents to view using the vCreate platform.
- Paediatric and Adult ICU Units to allow for sharing of clinical update videos for families of patients who are currently in their care.
- vCreate Neuro - Paediatric Neurology department, allowing patients (or patient carers) to securely share seizure videos and key associated data at the time of suspected seizure, with specialist epilepsy teams for clinical decision making.

As part of the development of additional uses for this software the Project Team based within the West of Scotland Innovation Hub, who have led the development of this software, have requested applications from clinical service areas to participate in a Test of Change pilot using vCreate. This will involve the clinical service using

vCreate for a period of up to 12 months, collecting and analysing usability data that can be used to evaluate the next steps for the vCreate Neuro project. We are part of an application led by NHS Lanarkshire that has been submitted. We expect an outcome on the bid late Summer.

Scottish Health and Industry Partnership (SHIP) – NHS Scotland Innovation Fellowships

A call is underway to fund a number of fellowships. The aims of the scheme are to strengthen the innovation culture to solve real problems in the NHS and social care, improving the quality, efficiency and sustainability of health and care delivery and supporting NHS Scotland's Recovery Plan. Two of our local clinicians have applied for projects in Cardiology and Substance Misuse. The outcome of the call will be known in late Summer.

SHIP National Consortium Challenges

The SHIP team have confirmed that in the next 12 months National Challenges in the following areas will be developed and hosted in one or more test beds:

- Outpatients 25 x 25
- Diagnostics
- Ophthalmology
- Unscheduled Care
- Social Care/Frailty
- Primary Care/Community
- MH/LD/Dementia
- Women and Children
- Alcohol and Drugs
- Diabetes and Endocrine
- COVID Recovery.

These challenges will be undertaken as a once for Scotland approach with depending on the outcomes adoption across Scotland possibly through the ANIA (Accelerated National Innovation Adoption) platform. As mentioned in this paper early involvement in some of the test bed development for these challenges is already underway and as other opportunities arise these will be shared and developed.

Women and Children Health Consortium

The West Node is the host of this national consortium. Bids have been submitted by local teams for consideration for the National Challenge which will launch later in 2022. Talks are also underway with GSA and colleagues in the consortium to explore whether the next 3rd year project could be a possible project with Ayrshire and the Consortium.

Mental Health Consortium

SHIP is funding this Mental Health challenge. The aim of this competition is to develop disruptive innovative solutions that deliver sustainable, accessible and equitable mental health services. The challenge seeks to develop innovative solutions that: Supports people who are not receiving treatment and addressing the backlog of patients; Deliver person-centred and equitable Mental Health support and services to people who are receiving treatment by optimising clinical and social care pathways. There may-be an opportunity for NHSAA to be a test bed for potential solutions.

Eye Health

For this SBRI (Small Business Research Initiative) test bed, led by NHS Forth Valley the challenge is to address the unmet need of next generation home vision testing, so that it can be done at home, in school and in under-served communities, with live remote supervision from healthcare professionals. The project will end in mid-summer 2022. Outcomes will then be considered for future plans.

2.3.2 Future Opportunities

CivTech Challenge

Dr Guhan has been working with SHIL to develop a challenge in respiratory care for consideration for inclusion in a future CivTech programme. If it is accepted onto the Programme, the West Node has confirmed it will support by providing Test Bed access subject to the appropriate regulatory approvals and resourcing.

Imaging

Work is underway to develop projects to support clinician decision making.

Audiology

Work is underway to develop projects to support clinician decision making.

2.3.3 Quality/patient care

There is always a risk that the outcomes of an innovation project may not be positive and in these situations outcomes are not taken forward and there is a missed opportunity for improving patient care although a negative result may provide more information than a positive outcome. There is a core feeling that some of the historical negative outcomes of national projects are in part due to the problem not being clearly identified at the start. Now much more time is spent on the development phase to clearly identify/define the problem/challenge to mitigate this risk. The risk cannot be eliminated and so an organisation needs to have a risk tolerance for failure when attempting to address the wicked problems by engaging with innovation opportunities.

2.3.4 Workforce

As indicated earlier in the paper there is an absence of dedicated project management support within the RDI Team. Activity is ongoing to mitigate this lack, however it also needs to be recognised that Innovation activity also impacts on other areas within the organisation. Last year's paper acknowledged roll-out and implementation of activity that happened and continues to happen due to the invaluable activity/support and expertise of the TEC team and Transformation team. Future innovation activity will generate further work for Digital services and Information Governance during set-up and delivery and ultimately also for TEC for procurement and widespread adoption. If there is an appetite to embrace the opportunities within NHSA&A then this additional workload needs to be acknowledged and appropriately resourced.

Not all test bed projects have positive outcomes but there will always be key learning from the initiatives and hidden benefits. Innovation opportunities provide all staff (clinical and non-clinical) with an opportunity to drive service change over a much shorter timescale than engagement in the traditional research change model, engage with different organisations/professional groups for example - designers, engineers, programmers and time to engage in activity out with the daily commitments. Anecdotally staff involved in the projects that have been detailed in this paper have expressed the value and wellbeing benefits of being involved. Given the workforce

pressures, the opportunity of staff to engage in innovation should be promoted by the organisation.

2.3.5 Financial

NHS A&A receives no direct innovation funding. Funding is allocated on a regional basis. NHS Greater Glasgow and Clyde hold the funds and have developed a West of Scotland Innovation Team. As mentioned above the West Node is in discussion with the SHIP team to secure additional resource for programme management across the West Region. Productive links have been forged with the Caring for Ayrshire Team but in order to move Innovation capacity to the next level, the Board is asked to support the work of the RDI Team to build local Innovation capacity including the sourcing of resources to build local Innovation Capacity.

2.3.6 Risk assessment/management

Key risks are the need for local innovation funding and project management staffing to support Innovation activity within NHS A&A. It needs to be recognised that successful delivery of future Innovation activity requires dedicated project management roles and expertise in addition to the team that deliver research activity (this is a different knowledge and expertise to deliver trial work vs SBRI activity).

In the last year, the new digital innovation governance framework has been established by Digital Services. This framework was established in part for the introduction of new commercially available products. Innovation projects by their very nature will not have a product at the start and so Michelle McLuckie, Head of Digital Systems, and I will continue to work together to identify the appropriate governance route within the digital innovation governance framework for new projects.

2.3.7 Equality and diversity, including health inequalities

Impact assessments will be undertaken as part of project set-up as appropriate.

2.3.8 Other impacts

Innovation plays a key role -

- Development of best healthcare delivery including new models of service delivery
- Challenging workforce thinking
- Organisation reputation
- Recruitment and retention of the best clinical and non-clinical staff who are keen to embrace transformation and to have continuous service improvement as part of the day-to day service delivery.

2.3.9 Communication, involvement, engagement and consultation

The Board has carried out its duties to involve and engage external stakeholders where appropriate:

- Engagement with key stakeholders is an essential part of the development of solutions within innovation projects. This is identified on a case by case basis.

2.3.10 Route to the meeting

This paper has not been considered by any other groups/committees.

2.4 Recommendation

For discussion. Members are asked to discuss the update on current Covid-19 related innovation activities and future opportunities. The Board is asked to support the work of the RDI Team to build local Innovation capacity including the sourcing of resources to build local Innovation Capacity.