Digital Health & Care Innovation Centre

This paper is presented to the September 2023 Moray IJB to give an update on the progress of the Moray Growth Deal, Rural Centre of Excellence for Digital Health and Care Innovation

This £5 million UK Government funded programme of the Rural Centre of Excellence (RCE) Research and Development (R&D) programme as part of Moray Growth Deal, commenced in late 2021 with the ambition to create a unique ecosystem in the Moray region to foster economic development and create jobs through the creation of a physical Demonstration and Simulation environment (DSE) at UHI Moray, underpinned by a virtual R&D infrastructure, five living labs and a robust skills and workforce development programme.

Working closely with the citizens, health and social care Moray, NHS Grampian and third sector organisations, the living labs methodology uses co-design approaches to validate and address key national and local strategic priorities in order to release clinical and care capacity and make services more accessible enabled by digital to meet targeted demand, and to improve the health and wellbeing outcomes for the citizens of Moray. http://www.moray.gov.uk/moray_standard/page_114144.html

The image below provides a visual representation of the R&D infrastructure, assets and Living Lab (LL) R&D themes and the skills programme being progressed within the RCE. This section summarises the activity with the Appendix providing more detail as a fuller update for the IJB on progress made for each LL in the last two months and anticipated activity and milestones over the next period. Summary as follows;

1. Demonstration and Simulation environment now open for R&D workshops and showcase activities with stakeholder, this is housed at UHI Moray.
2. The virtual R&D infrastructure has been set up for industry and partners to simulate and test their innovation in a safe (not live) environment to de-risk innovation.
3. Three (LL1 – Self management, LL2 Care in Place and LL3 Long Term condition management) of the five Living Labs have progressed through the innovation process over the past 12 months, from early stages of co-designing and validating the need and current state, with all moving now to developing prototypes that will allow user testing in the Living Labs, encouraging user feedback and evaluation, the evidence gathering and evaluation of these LL is being impartially led by UHI.
4. The further two LL (LL4 – Smart Housing/Communities and LL5 – Mental health) are progressing through the early stages of scoping and codesign, with the team working with key partners (LL4 undertaken in partnership with the Housing Mix project, focussed on Leanchoil trust and potentially Hanover housing - TBD)

5. The skills work has undertaken stakeholder consultation over the last 12 months, resulting in the development of Micro credentials which is being led by UHI Moray and is now developing a skills knowledge exchange event in the Autumn 2023.
6. The sustainability of the RCE is being considered early, with a special working group set up and a range of bids underway to ensure further funding is leveraged into the RCE in preparation for the end of the UK Gov funding period for RCE (June 2025).
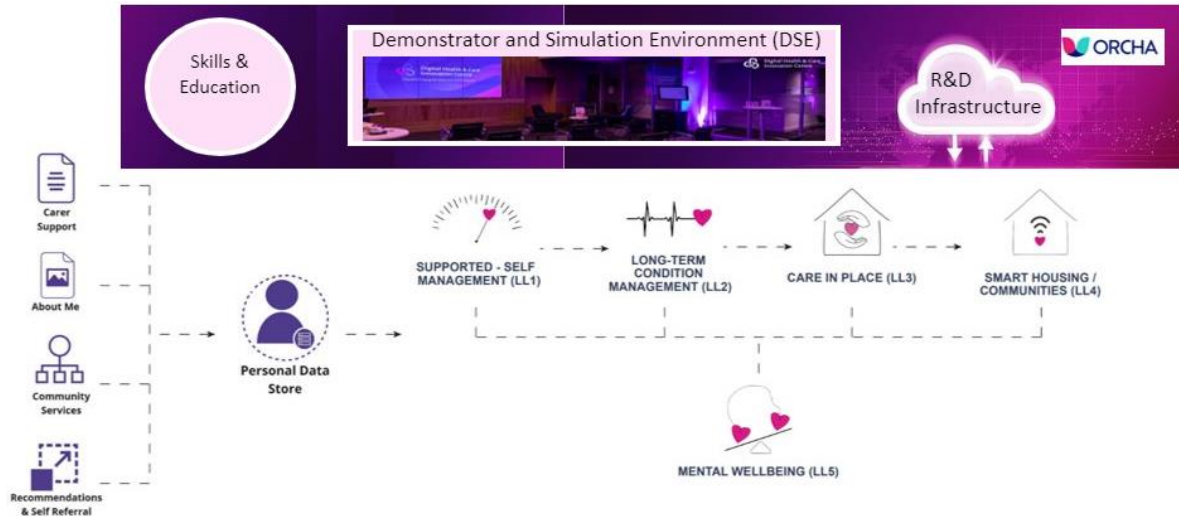

Image 1: Key R&D assets and the 5 Living Lab (LL) Themes

APPENDIX 1
Living Lab 1: Supported Self- Management

	DEFINE	CO-DESIGN	CALL TO INDUSTRY	SIMULATIONS	LIVING LABS	ADOPTION (BAU potential)
LL1 SUPPORTED SELF MANAGEMENT	July 2021 – May 2022	June 2022 – Sep 2022	N/A	Sep 2022 – Sep 2023	Oct 2023 – May 2024	June 2024 – Sep 2024

The digital weight management app supported by the Grampian Dietetic Service is in a period of user testing with both clinical staff and citizens. This will refine the apps that will be trialled within the service at the start of 2024. An evaluation plan is being developed by UHI, and patient cohorts identified for the live testing phase. Recruitment will be Grampian wide, reflecting the remit of the dietetics team, with an estimated 25% recruited from Moray. Information governance is being developed with NHS Grampian to include data sharing arrangements.

Next Milestone: Information governance documentation completed – Dec 2023

LL2 Long-Term Condition Management- NHS Pathway

	DEFINE	CO-DESIGN	CALL TO INDUSTRY	SIMULATIONS	LIVING LABS	ADOPTION (BAU potential)
LL2 LONG TERM CONDITIONS CO-MANAGEMENT	March 2023 – June 2023	July 2023 – Sep 2023	Oct 23	Nov 2023 – March 2024	April 2024 – Dec 2024	Jan 2025 – March 2025

The define and initiate stages have been approved by The RCE board and a call to industry is due to go live early October with an award completed in December, to allow development activities to commence in early 2024. The call will seek industry partners to propose innovative solutions to access deprivation and better population management for the type 2 diabetic population in Moray. This will be built integrate NHS and leisure centre services to create a more sustainable model. This will allow clinical resources to be directed to those with the greatest need, while bringing additional capacity and resources to the system to support and monitor lower need and stable patients. A foundational 'virtual diabetes clinic' will be developed between primary and secondary care over the autumn 2023. A technology supplier awareness event is being planned for the end of September to generate interest in the call.

As with LL1, evaluation and information governance planning are being progressed.

Next Milestone: Call Open - Oct 2023

LL2 Long-Term Condition Management- Community Pathway

Define and initiate stages are being progressed with the Community Occupational Therapy Service, with workshops in progress to map current and preferred future pathways.   Key area identified include:
- Enhanced self-help information related to equipment and adaptations to be added to early access platform developed in LL3, to reduce referral rate to the service
- Use of Personal Data Store to improve quality of referral information received to reduce triage time and enable better prioritisation of referrals for onward action, including potential access to self-prescribing platform.

Next Milestone: Define and initiate stages approved at RCE Board- October 2023

LL3 Care in Place

	DEFINE	CO-DESIGN	CALL TO INDUSTRY	SIMULATIONS	LIVING LABS	ADOPTION (BAU potential)
LL3 CARE IN PLACE	Oct 2021 – April 2022	May 2022 – Nov 2022	Dec 2022 – Jan 2023	Jan 2023 – Jan 2024	Feb 2024 – Aug 2024	Aug 2024 – Dec 2024

Functional prototypes for the early access platform and Personal Data Store are under development. This will equip informal carers and their cared for person with the ability to complete an 'about me', a self-help support and signposting website, and professional tools

to receive referrals and review and edit the 'about me'. This will now go through a period of user testing with health and care professionals and service users. This will inform final adjustments required prior to a real work trial in the Forres locality from February 2024. Information governance and evaluation needs are also being finalised.

Next Milestone: User testing complete - Dec 2023

Living Lab 4 Smart Housing/Smart Communities

	DEFINE	CO-DESIGN	CALL TO INDUSTRY	SIMULATIONS	LIVING LABS	ADOPTION (BAU potential)
LL4 SMART HOUSING/ COMMUNITIES	April 2023 – Oct 2023	Nov 2023 – Feb 2024	TBC	March 2024 – May 2024	June 2024 – Jan 2025	Feb 2025 – May 2025

Define and initiate work is underway for this living lab, with work commenced on developing an asset for the DSE in Elgin to demonstrate the benefits of the proactive and preventive use of combined telehealth and digital telecare/activity monitoring. Collective stakeholder feedback will be used to inform a call to industry to develop an innovative data integration, monitoring and alerting platform aimed at early intervention of decline, managing unscheduled care, supporting hospital at home and reducing length and frequency of hospital admissions and care packages.

An appraisal of smart community site options is also ongoing in partnership with the Housing Mix project

Next Milestone: Define and Initiate stages approved at RCE board – Nov 2023

Living Lab 5 Mental Wellbeing

	DEFINE	CO-DESIGN	CALL TO INDUSTRY	SIMULATIONS	LIVING LABS	ADOPTION (BAU potential)
LL5 MENTAL WELLBEING	Jan 2023– Aug 2023	Sep 2023 – Jan 2024	Jan 2024 – Feb 2024	Feb 2024 – May 2024	June 2024 – Jan 2025	Feb 2025 – May 2025

Engagement discussions are ongoing with <u>statutory,</u> and third sector services and demand validation workshops are planned for October 2023 to prioritise the scope for this living lab. It is likely that the following two distinct pathways will be developed, if capacity within H&SC and budget allow:
1. Mental wellbeing (MWB) pathway to develop tools and social prescribing linked to the early access platform and personal data store to support early intervention and self-management
2. Mental health (MH) pathway to develop digital tools to support an aspect of statutory clinical services to be confirmed

Next Milestone: Definition stage approved by RCE board – November 2023

Strategic work

In addition to the five living labs, RCE are also contributing at a working group and strategic level to the development of the frailty pathway for Moray through linking living lab crossover and facilitating knowledge exchange opportunities with DHI frailty related projects in other regions.

Engagement and Communication

DHI has procured a new communityngagement platform for the citizen panel. The RCE pages are expected to go live In October 2023 and will include engaging functionality such as forums, news feeds and chat rooms and will also host the sign up and latest codesign opportunities for the citizen panel.

Monthly sessions are being planned for the DSE in Elgin form next month, this will be an opportunity to view the facility and learn more about the work underway. From February 2024 subject specific educational/awareness sessions will be run in partnership with out DHI colleagues in Glasgow.

Skills and Workforce Development

Moray Digital Health & Care SkillsFest
This in-person event taking place in UHI Moray in November will have a broad focus, considering the path from early education (primary school) to post-education and upskilling of the health and care workforce, career changers and Moray citizens. This is the first DHI skills-related event, and will include informative presentations, panel discussions, and interactive workshops seeking to address some key questions, including: what digital skills and competencies do the health and care sector (and industry employers) need?; what skills do we need for the future?; and what needs to happen next?

Work is progressing on the development of four online micro-credentials in partnership with UHI Moray. The focus of these short courses is to increase the digital health and care knowledge and competencies of people providing direct care in Moray – including those who work in people's homes (both paid and unpaid), Personal Assistants and volunteers.

Sustainability
Work continues to progress on the RCE sustainability plan through collaborative cross sector development and pursuing of international investment and funding opportunities. The long-term ambition is for the RCE to have a permanent presence in Moray supporting innovation for the foreseeable future, and beyond the current funded period from the Moray Growth Deal.