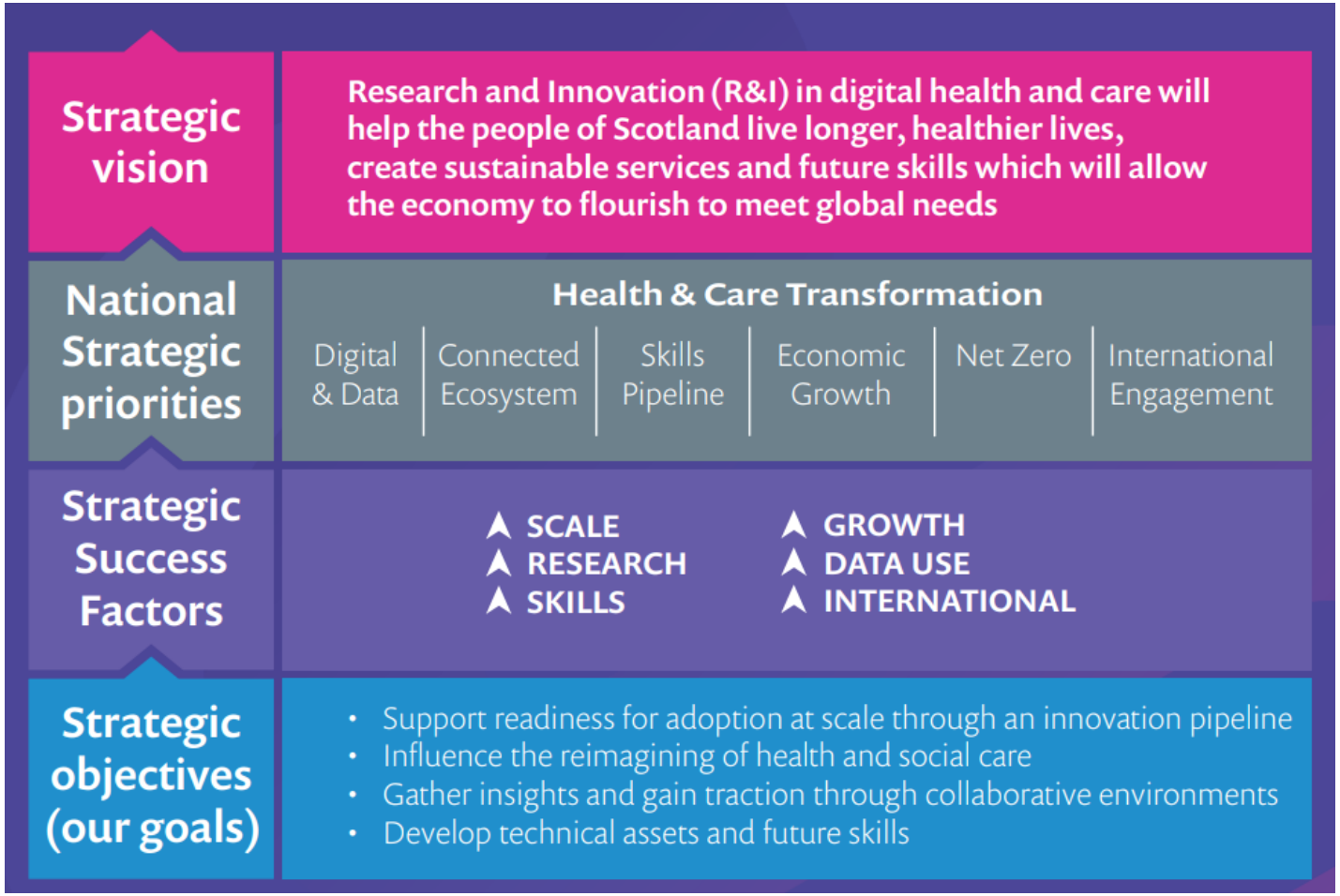
EHTEL – 4/12/24

Digital Health & Care Innovation Centre

Digital Health and Care Innovation in Scotland
Paradigm to prevention, case studies and the future

Janette Hughes – Director of Planning and Performance

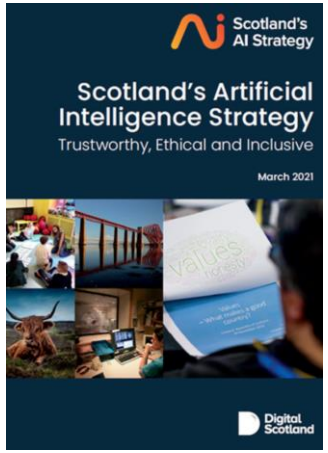
DHI strategic objectives – our 10-year strategy on a page

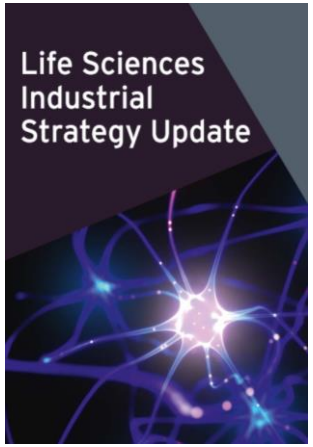


Our focus is to shift the balance of care and increase readiness levels

SHIFTING THE BALANCE OF CARE

Health is Wealth – we need to make the person the focus





Person-centred vision

'I have access to the information, tools and services I need to help maintain and improve my health and wellbeing.

I expect my health and social care information to be captured electronically, integrated, and shared securely to assist service staff and carers that need to see it …

… and that digital technology and data will be used appropriately and innovatively, to:

- *help plan and improve health and care services*
- *enable research and economic development, and*
- *ultimately improve outcomes for everyone.'*
- *Co-design embedded…*

Ref: Digital Health Social Care Strategy 2017-22

DHI blends three strands of innovation to improve partners readiness

DEMONSTRATING

Service model innovation

Technical/Digital innovation

Business model innovation

INTEROPERABLE

Accepted service models

READINESS TO ADOPT/ SCALE

DHI help partners get READY for SCALING Digital Health and Care Innovation

Technical readiness levels		Service readiness levels		Business readiness levels
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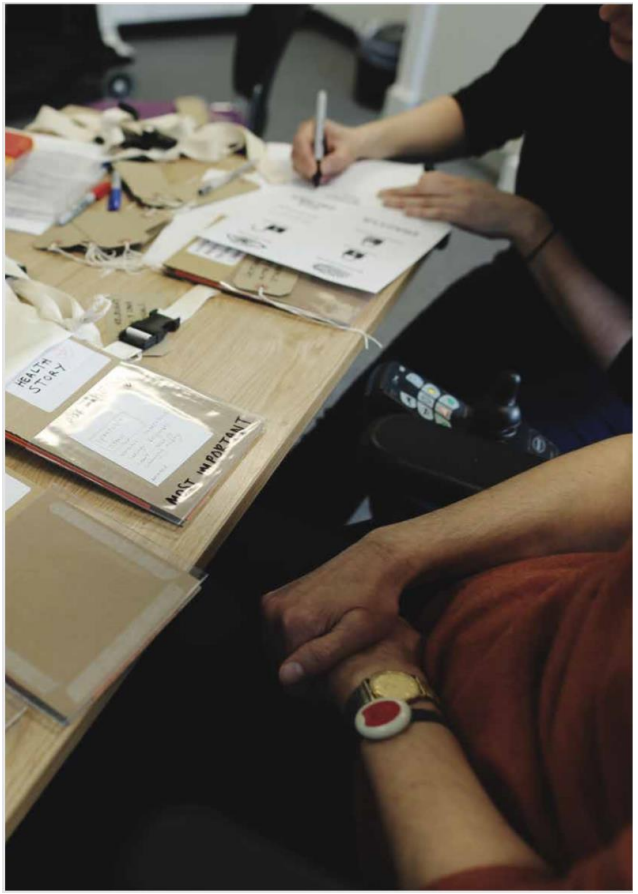
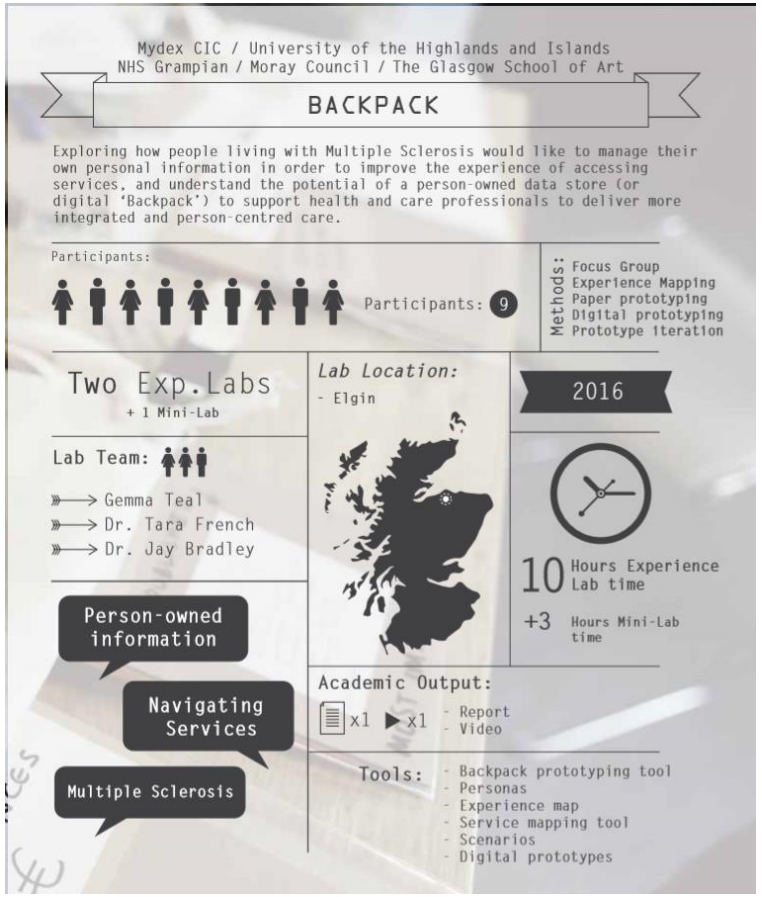
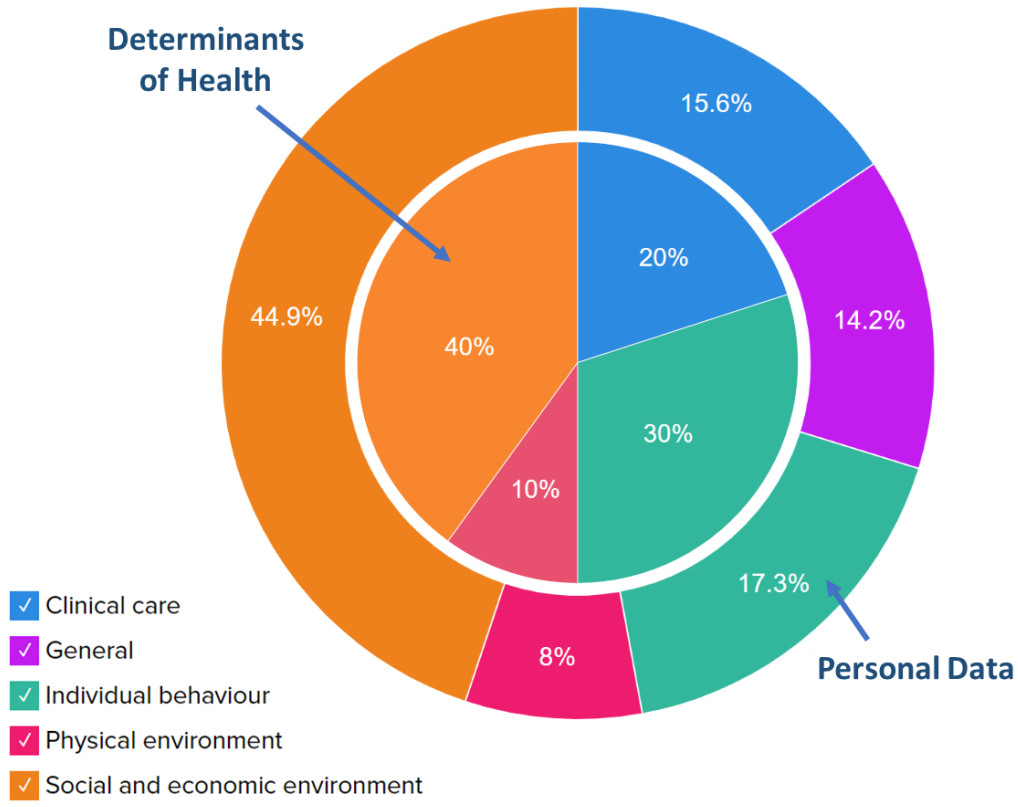
Co-design – creating the right conditions for Whole system and whole of Life approach







Common Unmet Needs - across the system

52 Co-Design Projects	41 Health & Care Orgs	3500+ Citizens	1000+ Care Providers

As a citizen co-managing care, I want:	
	To tell my story once
	Meaningful dialogue with professionals
	To access and understand my data & guidance
	To do things on my own terms
	To unlock or unblock the care i need

#1 Personal Data Store infrastructure tested in 5 Rural Living Labs

A Personal Data Store (PDS) enables cloud-based, citizen-controlled storage and exchange of personal data across people, organisations and sectors.

Context :– Diabetes Key Facts

Diabetes is a significant health condition and continues to be a leading cause of ill health , and health complications across NHS Scotland .

Affects 1 in 20 people

Over 80% of Diabetics in Scotland are T2

Scotland has the highest No of Children with T2 Diabetes

++ Under 40 with T2

620,000 people in Scotland are at risk of developing T2 Diabetes .

Pre-Diabetes

Burden of Disease Study (2024)* estimated by 2044 , 40% increase living with T2 Diabetes in Scotland

Impact

- Increased pressure on Health and community services
- Increase burden on PLWD to manage their condition
- Increased risk of complications and hospital admissions
- Lack of resource to support early intervention

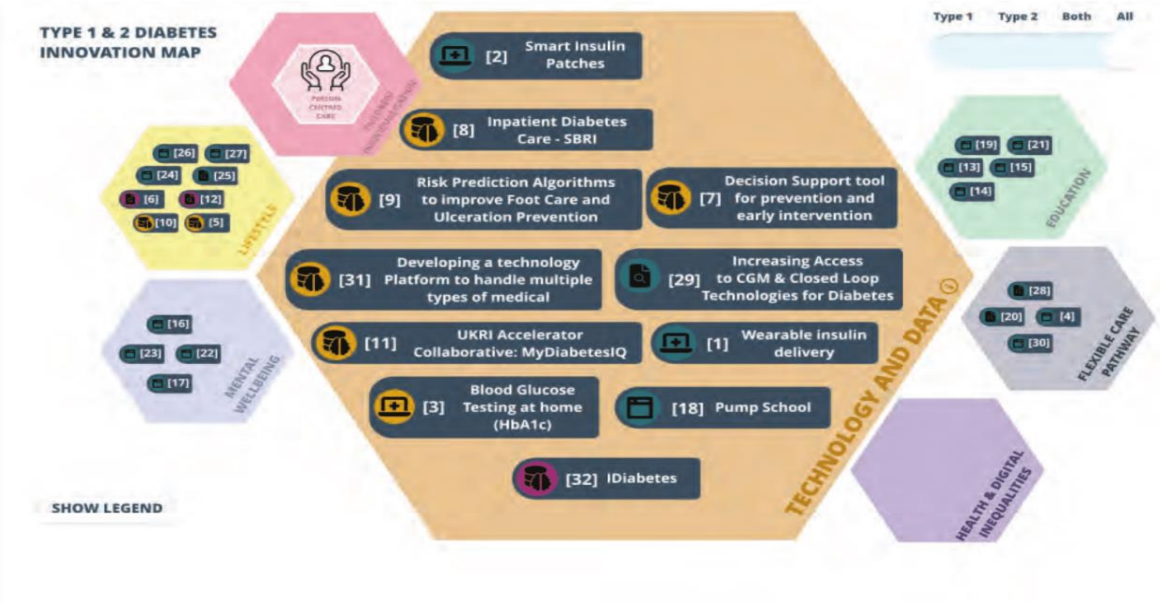
Policy Shift towards Diabetes Prevention Priority for Government

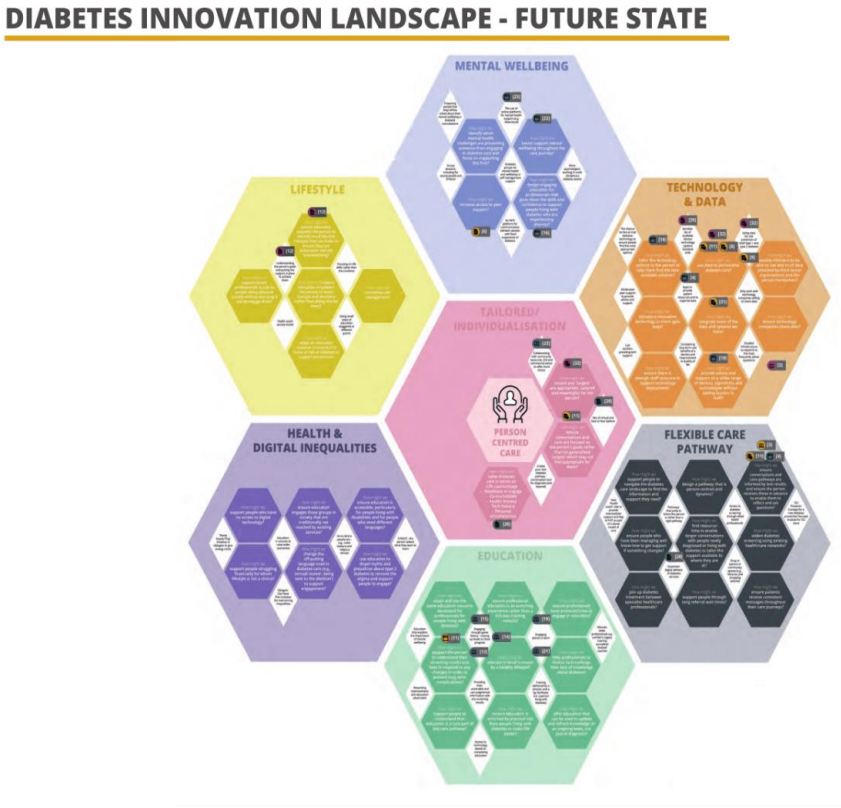
Digital Health is a key enabler underpinning transformation

* Source, Public Health Scotland, 2024

Transforming Diabetes Care through Innovation Project – 2022/23

Landscape review -mapped current projects across Diabetes Innovation Landscape used design research approaches to validate and identify key priorities for Innovation



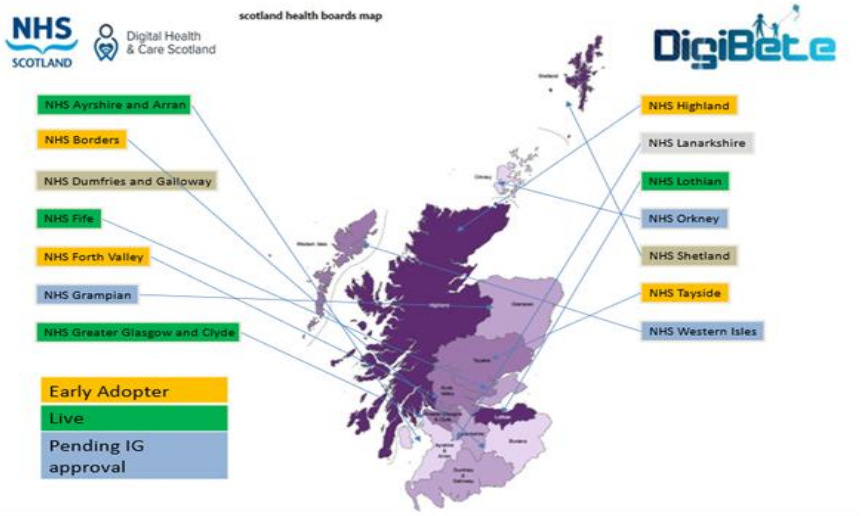


https://www.dhi-scotland.com/projects/transforming-diabetes-care-through-innovation

Example 1 DigiBete App Scale Up Project

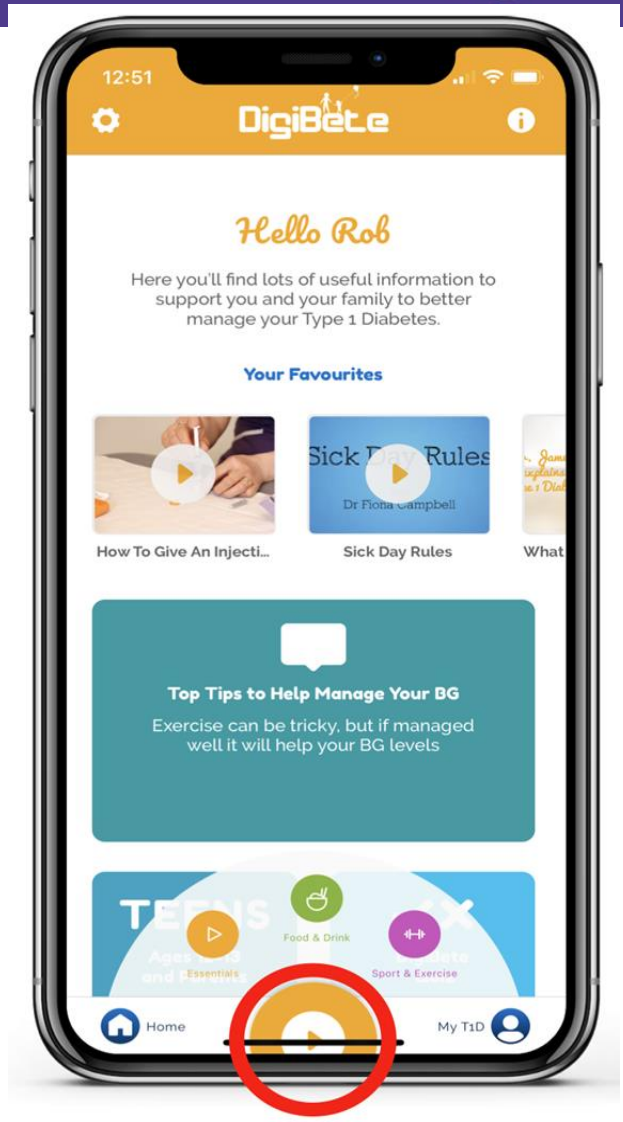
Project Aims : to improve access to remote supported self-management and educational support for CYP and their families. For HCP's generate efficiencies from use of " once for Scotland" educational content and reduce variation

- Implementation & Scale up Project, Funded by Scottish Government, Sponsored by Scottish Diabetes Group
- Evaluation Phase 1 - High levels of satisfaction and both clinical and cost effective
- In 2024 Business Case secured two-year Contract to provide Universal Access to Children and Young people and families living with Diabetes across Scotland ,



Implementation Status :

- ✓ Overwhelming Positive Response from Clinical Community and3rd Sector
- ✓ Phase 2 commenced July 2024 - 1700 users (46% of < 17 and under Children) Registered so far
- ✓ Scaled up and in use across 10 Health Boards
- ✓ Access to T2 Diabetes Platform and Educational Training Platform for Schools



READY for SCALING Digital Health and Care Innovation

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Digibete –
Start date – March 2022 to present date

RED = present stage
GREEN = Start point

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Preventing Diabetes Project – DHI, Right Decision Service and NHS Grampian

Aim Evaluate the potential for a widely accessible low cost digitally-enabled app (RDS) and service approach to help reduce type 2 diabetes-related risk for pre diabetes

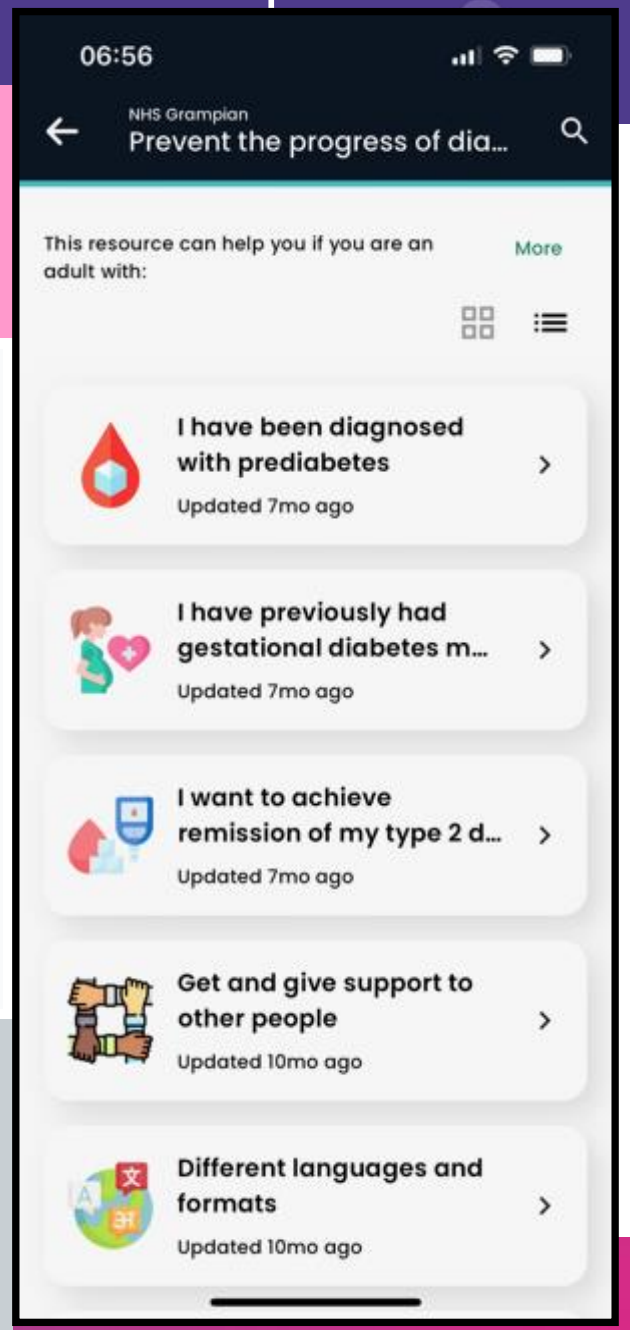
Method : Rapid Evidence Review, Co Design Workshops to inform App content, 8 week pilot with 1x GP practice in Moray and pre and post evaluation led by HIS.

Service Model Approach

- Case Finding from GP records
- Send link to Prevent the Progress of Diabetes web and mobile app via RDS
- **Optionally** A 10-minute call by phone or Near Me with a dietitian to support sign posting and health advice.
- Pre and Post intervention Questionnaire.

Evaluation

- **60 respondents** to both pre- and post-intervention questionnaires (19.4% response rate) * 130 used the App
- **Usage** : 62.7% used the app at least once /Ease of use 92.3%
- **Behaviour Change** : 88% of those who had used the app had made or planned to make a change at week 8:
- **Readiness to Change** : 94% noted improved Knowledge after accessing the App



Conclusion and Learning

- Expansion and further Scale up use of App across NHS Grampian
- Service Model - Self Efficacy Levels - High, Medium, Low & tailored support for different subgroups
- Further development and evaluation of Service Bundle Approach with GP sites

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RDS–
Start date – Feb 2022
to present date

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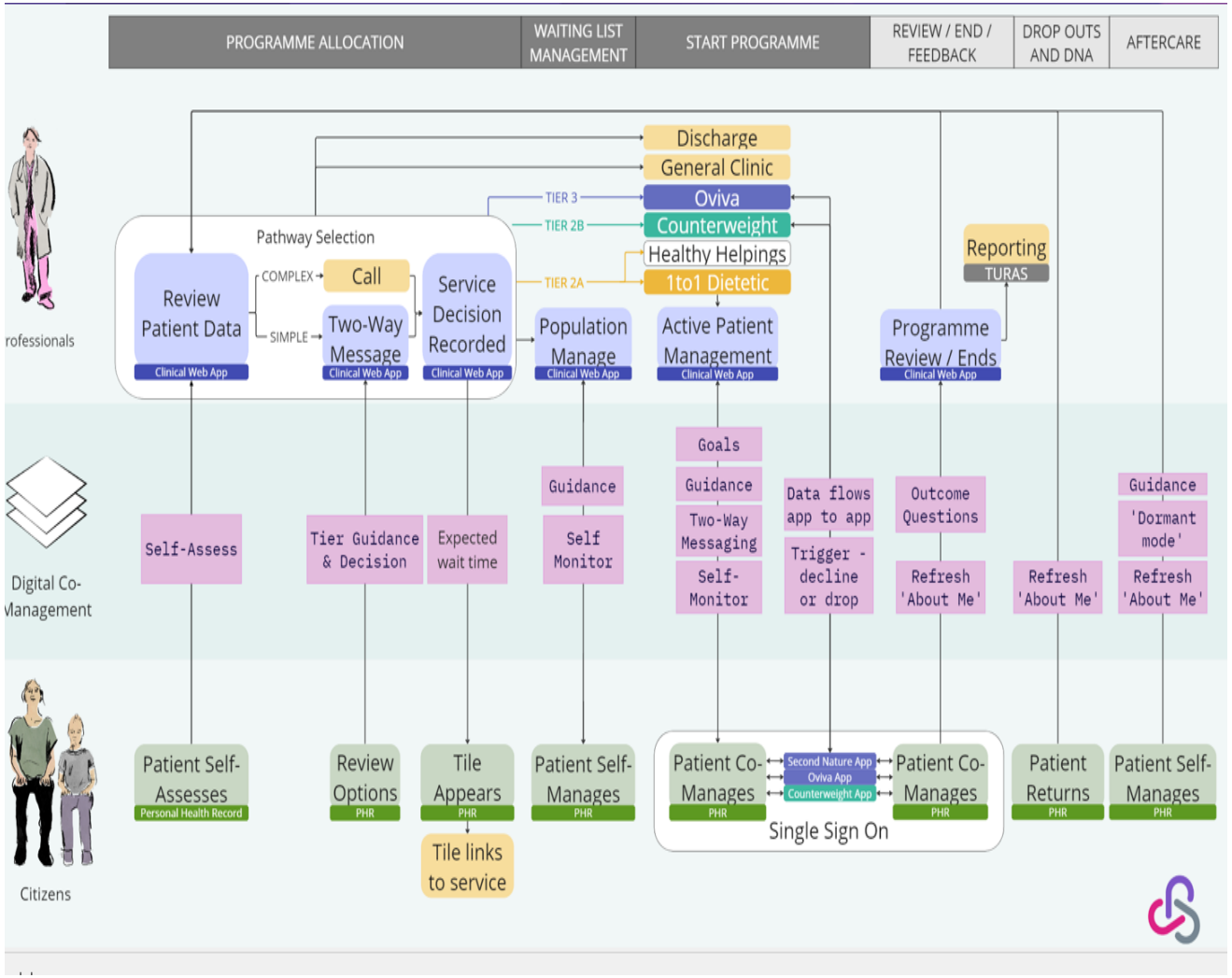
Example 3 Living Lab 1/2 – Rural Centre of Excellence



Aim : To develop and test a novel Weight Management digitally enabled service model which will support population health approaches and remote, personalised supported self management

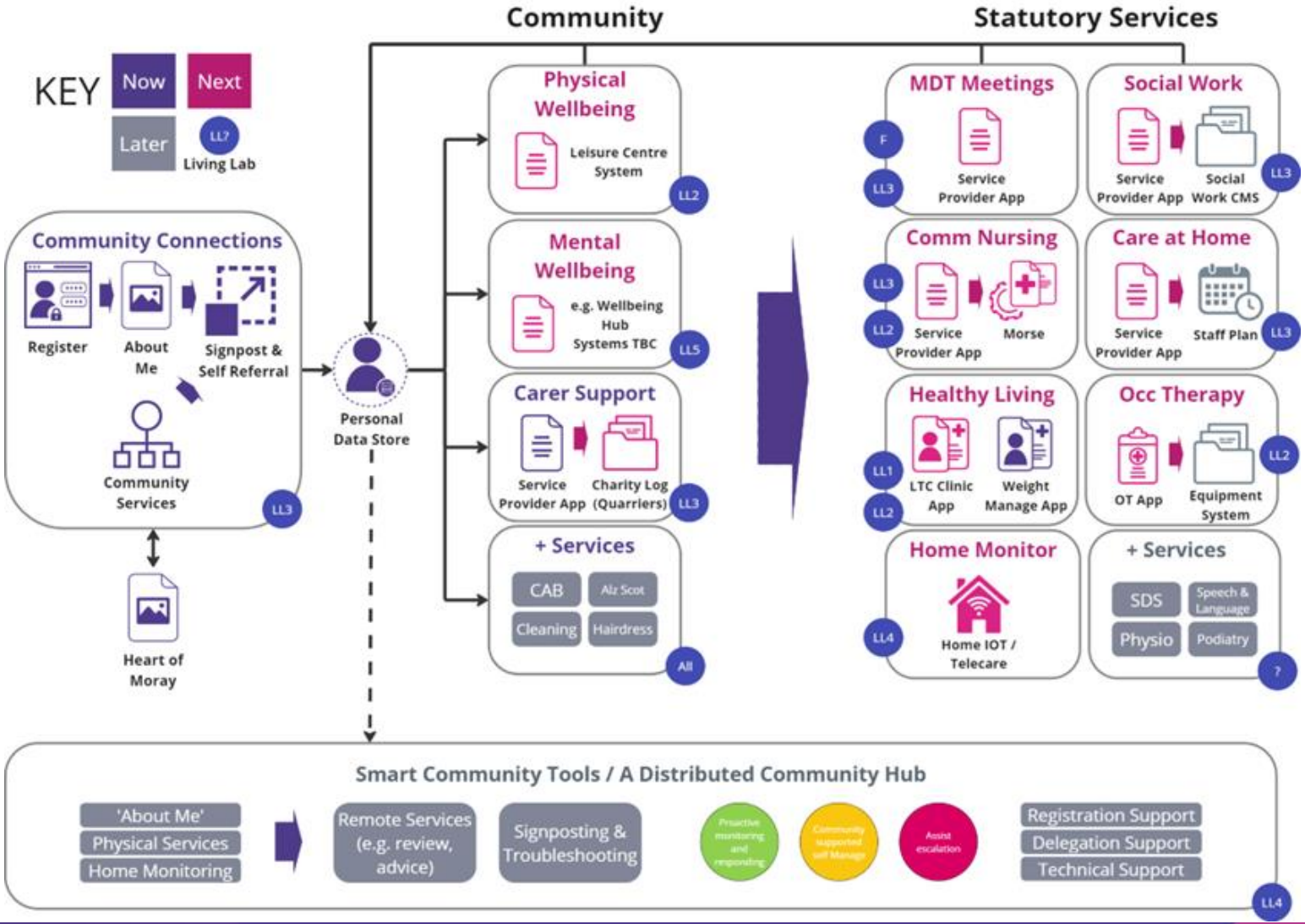
Beneficiaries : High BMI ; T2 Diabetes and Pre-Diabetes

Project Status – ongoing until 2026

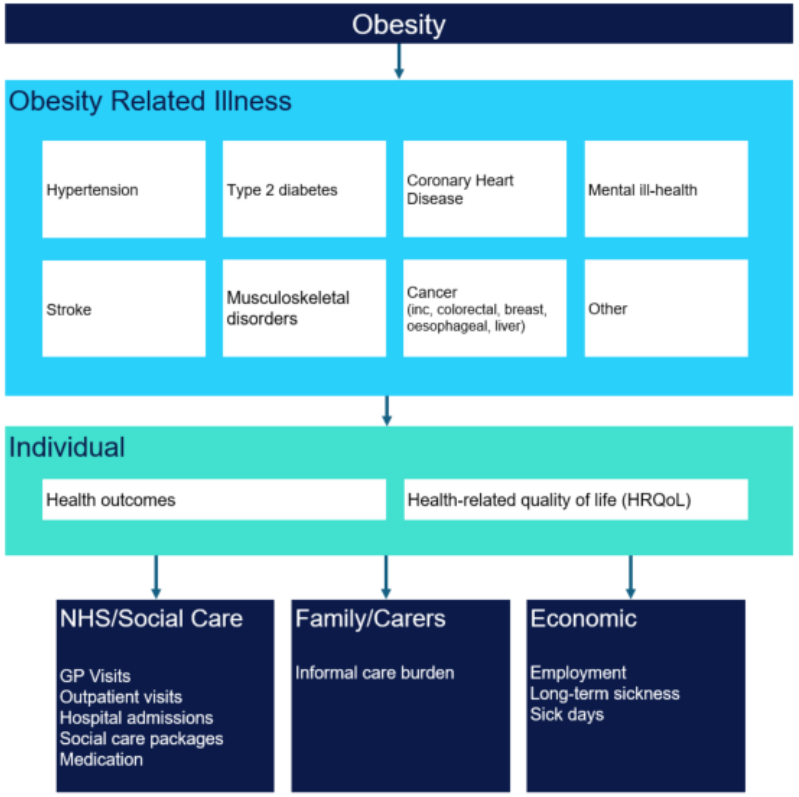
Value Proposition

- Generate efficiencies for NHS – expand reach of service
- Enhanced vetting & population management
- Access to PDS – data health capture
- Enabling Self-assessment - co managed care
- Access to Trusted Apps (ORCHA)
- Integrated data from wearables
- Self-referral optimising 3rd sector and wellbeing sector (leisure)

Living Lab 1 – Self management Obesity



Obesity impact expected



Diet and Lifestyle Challenges

Economic Impact through R&D and Company Growth (GVA↑)

Social Impact through community health improvement (QoL↑)

Environmental Impact through remote digital access (GHG↓)

1 Costs_of_obesity_in_Scotland_Frontier_Economics.pdf (nesta.org.uk)

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LL3 – Obesity
Start date – March 2022 to present date

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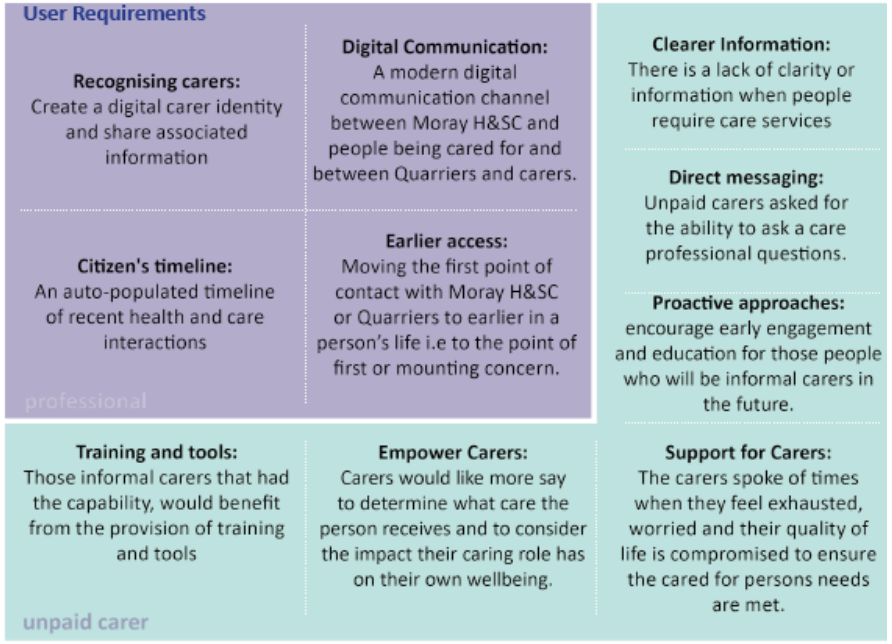
Community support and connections to other services



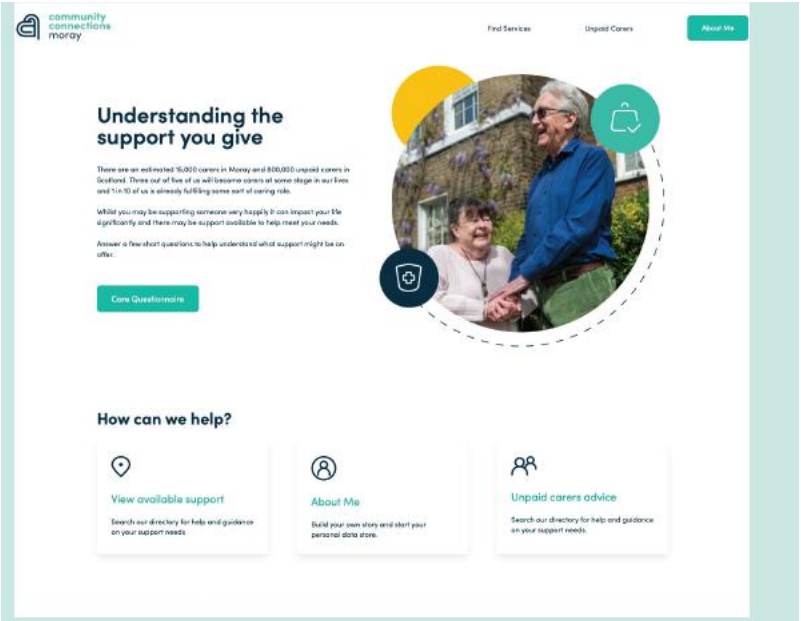
Digital Tools

Two digital tools have been developed and tested in collaboration with staff from Moray Health and Social Care Partnership, Quarriers and citizens in the Moray area with the hope they will make a difference to the experience of older people and unpaid carers looking for support:

Community Connections Moray helps a person to find community support early and can introduce them to services they choose through sharing their details and asking for contact. Moray has a rich and diverse range of supports which can be overwhelming to search through. Community Connections will help to find the support that suits the person and their personal circumstances more easily.

Personal Data Store is a secure platform which aims to help a person to tell their story once and in their own words, identify their need for support and share their story with services. Over time it is anticipated that the Personal Data Store will reduce repetition of information and support services to work together better, with the person at the centre sharing their own expert knowledge of their health conditions and the support they need.

The data store is provided by a company called Mydex a social enterprise company. They have considerable experience is this area and are working with several partnerships across Scotland to improve how citizens share their data with services. your Personal Data Store belongs to you not the health service or social care and you can delete it when you choose.



Community Connections Feedback

LANGUAGE AND UNDERSTANDING

"I liked how some of the langauge was more casual, how it would be spoken like 'relationship to you' "

Overall accessibility:

"Everything seem to be relevant to my life."

"For me - the reminiscence [wasn't useful], but I can understand how it would be helpful to others."

LOOK AND FEEL

"Depending on the age of unpaid carer, could be warmer and more inviting. Could there be a page for a younger audience?"

"It says at the very start "about me" and follows to words like "people I support", it reflects what I need."

Overall visual appeal:

"I think it will make things a lot easier in future if I need to find other help or support."

"I'm very excited to be taking part in the project. If I can help in any way to make it easier to navigate the caring system for future carers I will feel like I've achieved something."

Well explained

Relevant information

Fresh

Person centred

Easy to follow

Simple

Challenge understanding login stages

Future

Help navigating care system

Easy access

EXPERIENCE AND USABILITY

Overall navigation experience:

OTHER COMMENTS

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Care in Place – LL3 – Start date – March 2021 to present date

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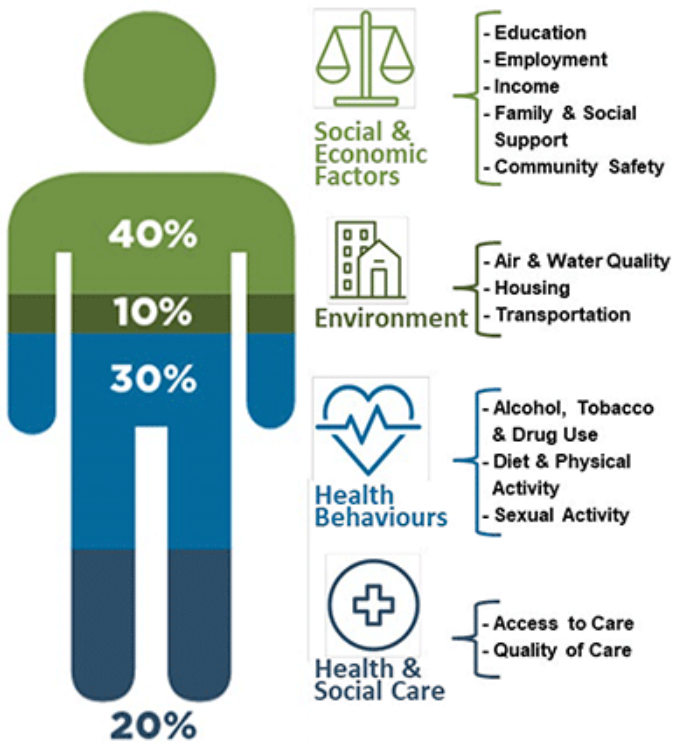
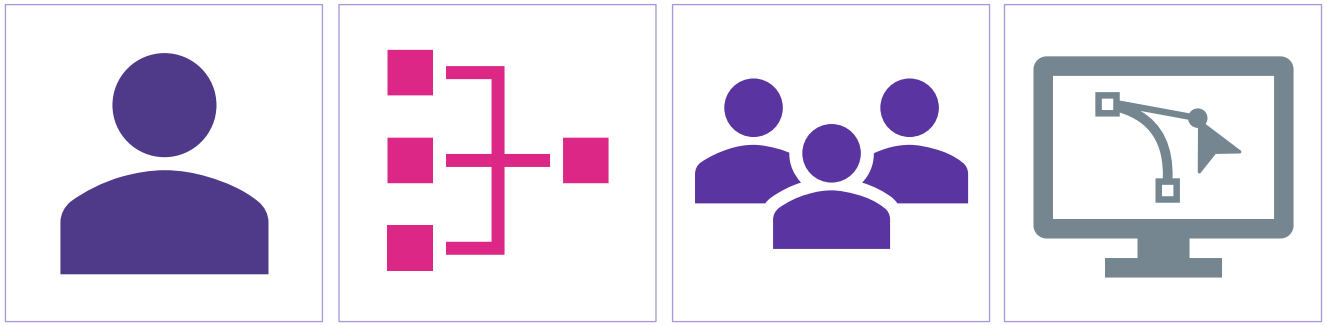
Road to better prevention and prediction – Social Determinants of Health Data



Health and social care services contribute only 20% of the modifiable determinants of health, with the social, economic and environmental factors (50% collectively) being the primary drivers of our health and wellbeing.

Image from - Realistic Medicine - Doing the right thing: Chief Medical Officer annual report 2022 to 2023 [1]



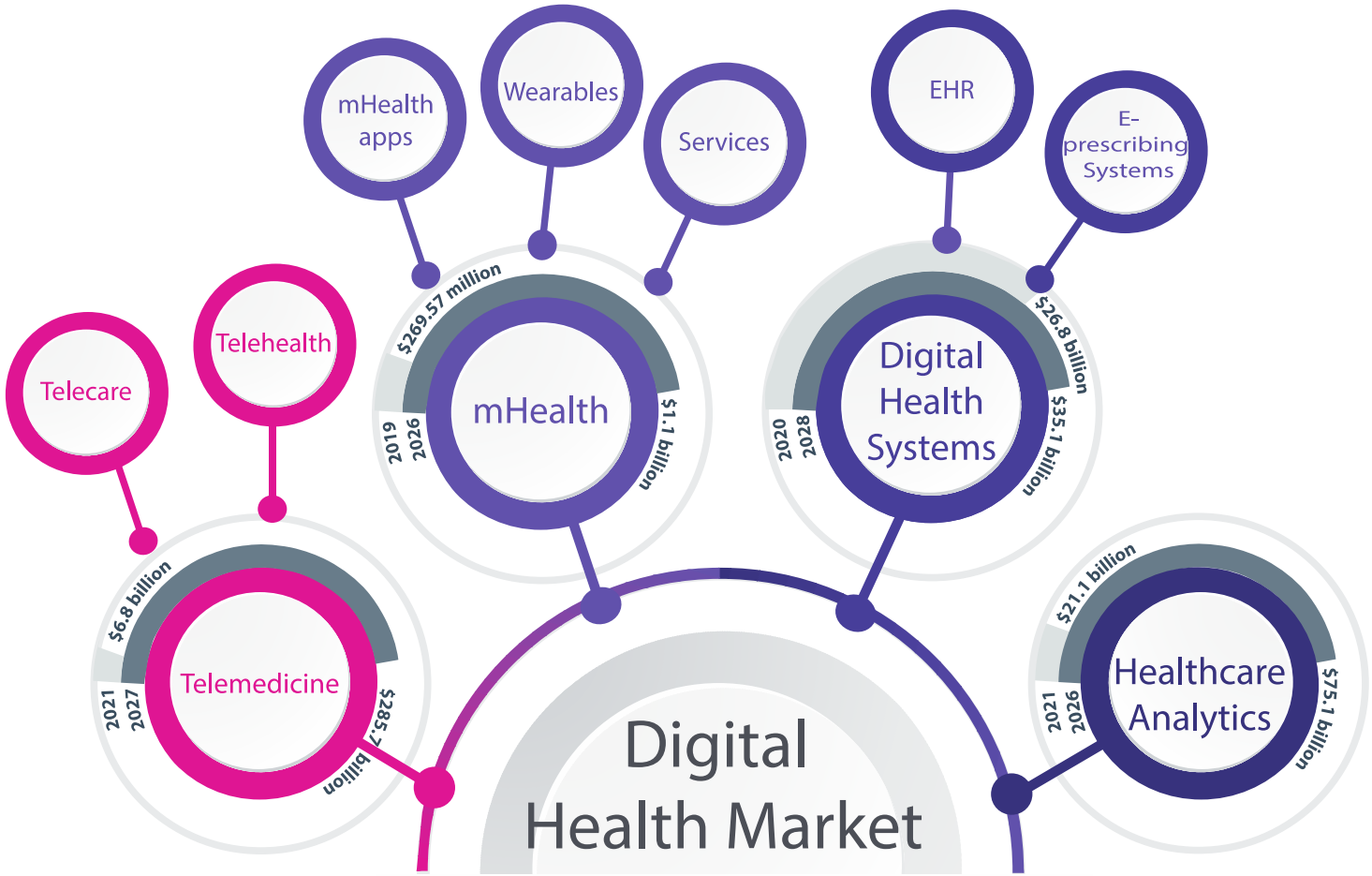
Individual Empowerment	Health System Change	Population Data	Data-driven innovation
Personal Data Stores	Testing	Drive prevention	Gamification
	Living Labs	Improve services	Personalisation
	Experimentation		Predictive

Unique dataset comprising data about the wider determinants of wellbeing

Data-driven R&D becomes possible

Creation of a trusted research environment

Health is Wealth – A Global Opportunity worth $700bn by 2030



Many thanks

Contact us

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