

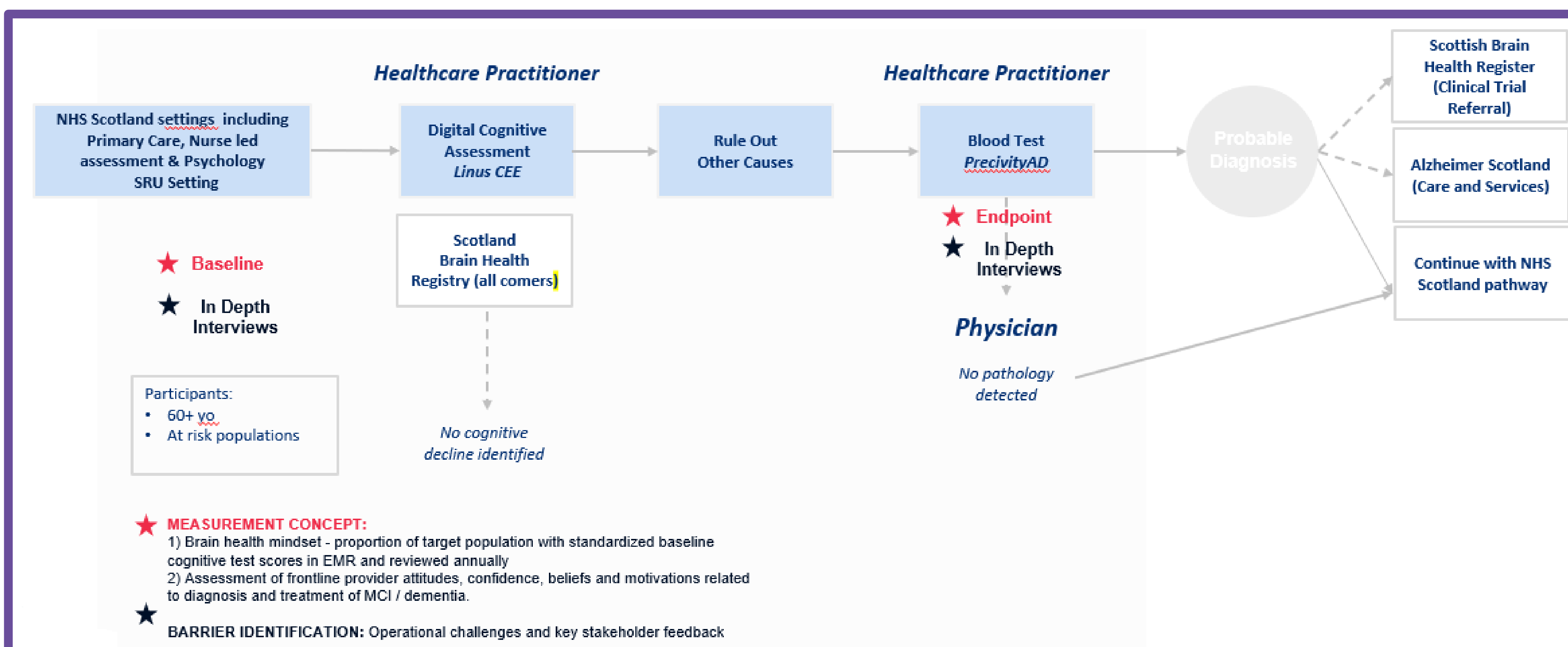
Patient, clinician and stakeholder experience around the implementation of a digital cognitive assessment and blood based biomarker in the early detection pathway of a Scotland site in the Davos Alzheimer's Collaborative (DAC) program

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Background

Progress in biomarkers and understanding of disease state have allowed the development of new innovations in diagnosis, and as a result, new treatment strategies aimed at slowing the progression of cognitive impairment or preventing symptoms if used early in the disease. The DAC global program is testing how equipped current healthcare systems are for early detection.

It is understood that there are significant delays in integrating health innovations into standard practice (Bauer and Kirchner, 2020). This flagship quality improvement project involved the implementation of novel tools (Linus Health's Core Cognitive Evaluation™ (CCE)) and a blood-based biomarker (BBM) (C2N Diagnostics' PrecivityAD®) into clinical practice in NHS Dumfries & Galloway in partnership with Brain Health Scotland. Clinician and patient experience were captured throughout this 18-month project.



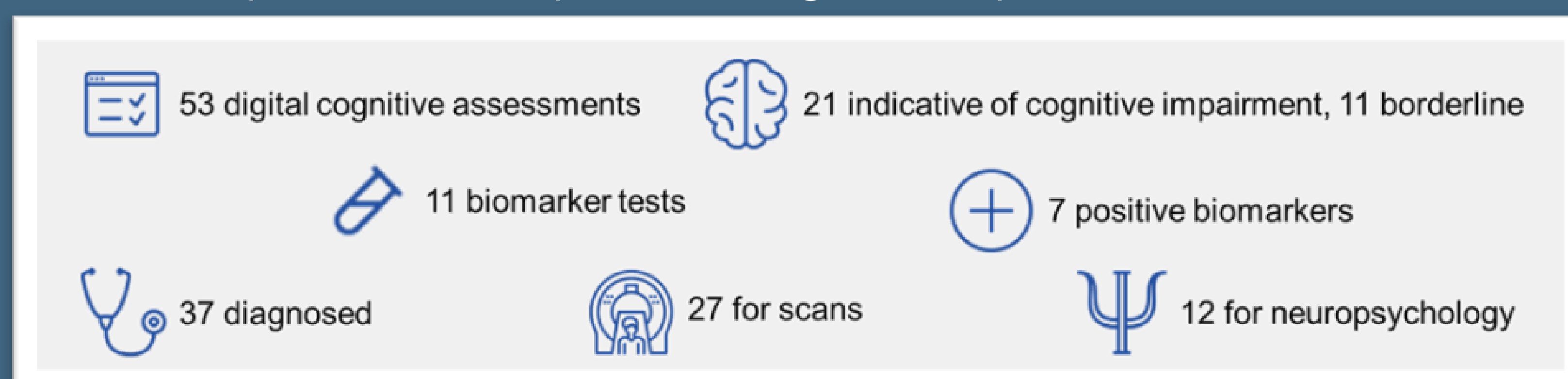
Method

- Baseline surveys with clinicians.
- Baseline and end of programme semi-structured qualitative interviews with clinicians and feedback gathered throughout the project.
- End of program semi-structured qualitative interviews with key stakeholders within the health system.
- Use of a locally developed questionnaire for patients around the Digital Cognitive Assessment (DCA).
- Focus Groups for patients and care partners focused on diagnostic process and use of DCA and BBM.
- Recording and feedback of facilitators and barriers throughout the project.

Impact and Conclusion

The tools are beneficial in supporting diagnostics

- ✓ First UK/European Health service use of Blood Based Biomarkers for Alzheimer's and highly useful in some cases
- ✓ Linus CCE™ impact on follow up for Mild Cognitive Impairment v Preclinical



Focus groups held with 6 individuals (4 men; 2 women) with MCI or Alzheimer's disease in August 2023

- ✓ Practical lifestyle advice often outweighed discussions on the clinical value of early detection tools like Digital Cognitive Assessments and BBMs in diagnostic pathways.
- ✓ Pleased to be receiving additional investigations and engagement with a specialist programme is seen as a positive.

ID	Focus group	DCA date	CCE +/-	BBM date	BBM return	BBM +/-	Diagnosis	Age
P1	Aug 2023	5 months earlier	+/-	4 months earlier	2 months earlier	-	MCI	82
P2		9 months earlier	NA	NA	NA	NA	AD	72
P3		8 months earlier	+/-	3 months earlier	2 months earlier	-	MCI	60
P4		5 months earlier	+/-	3 months earlier	1 month earlier	-/+	MCI	75
P5		7 months earlier	+	5 months earlier	1 month earlier	+	AD	82
P6		6 months earlier	+	3 months earlier	1 month earlier	+	AD	73

Learning around multiple considerations for the implementation of Digital Cognitive Assessments and Blood Based Biomarkers in practice in future such as clinician confidence, communication with patients and practical arrangements to comply with NHS requirements. This work is contributing to the DAC program scaling learning globally to position healthcare systems to speed the latest treatments and innovations to those who need them. Additionally informing local pathways and the national work of Brain Health Scotland.

Reference: Bauer, Mark S. & Kirchner, JoAnn (2020). *Psychiatry Research*. Volume 283, 2020.



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I changed my eating, I never was a bad eater but probably a stress eater. I've cut out bread and look at more of a Mediterranean style diet and have more of a lentil-based diet, a lentil meal every week – patient feedback

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