

Background

Real-world evidence for blood-based biomarkers (BBMs) in diverse populations remains a critical gap in dementia research. Current diagnostic pathways rely on history, examination, and imaging — BBMs offer the potential to supplement and accelerate diagnosis. However, previous studies have used highly selective cohorts lacking diversity and comorbidity, limiting generalisability. READ-OUT (REAL world Dementia OUTcomes) aims to evaluate BBM performance, feasibility, and cost-effectiveness in NHS memory clinic populations.

Results

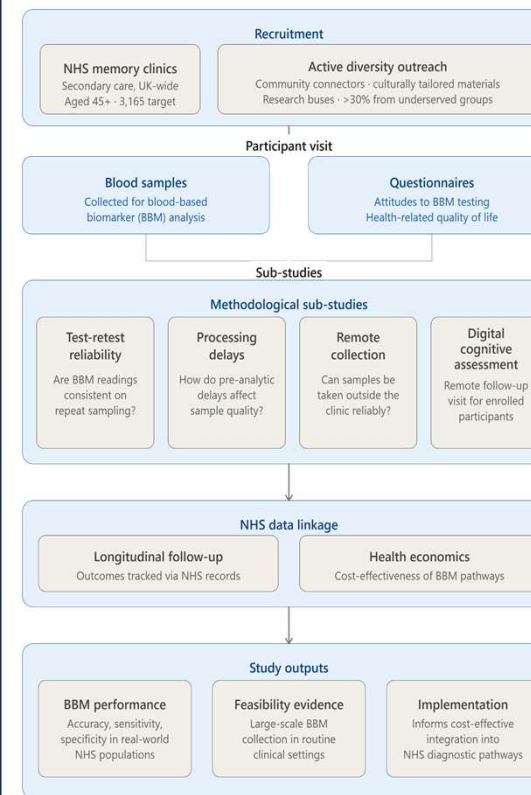
Currently, 28 sites across the UK have been opened with more sites in the pipeline. Over 1000 participants have been recruited by June 2026. Early recruitment metrics demonstrate strong engagement across diverse populations, validating the outreach strategy. Representation from targeted groups is tracking toward the 30% goal. These findings confirm the feasibility of large-scale BBM collection in real-world settings.

Fig 2: Geographic distribution of READ-OUT study sites across the United Kingdom

Green markers indicate sites currently open to recruitment; orange markers indicate sites in set-up. Sites span England, Scotland, Wales, and Northern Ireland.



Methods



READ-OUT will recruit 3,165 participants aged 45+ from NHS memory clinics UK-wide. Active outreach strategies target >30% representation from underserved populations. Participants provide blood samples and questionnaires at their clinic visit. Sub-studies assess reliability, pre-analytic delays, and remote collection. NHS data linkage supports longitudinal follow-up and health economics analysis. A remote digital cognitive assessment evaluates feasibility for dementia diagnosis services

Fig 1: Overview of the READ-OUT study design and data collection pathway.

Blood samples and questionnaires are collected at the participant visit, alongside four methodological sub-studies

Conclusion

READ-OUT embeds diversity, scalability, and patient involvement into its framework, the study creates a robust platform for evaluating BBMs within NHS pathways. This approach not only advances biomarker validation but will also inform cost-effectiveness and implementation strategies.

Contact

For more information on the READ-OUT study, you can scan the QR code or get in touch with the team at readout.dpuk@psych.ox.ac.uk

References

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