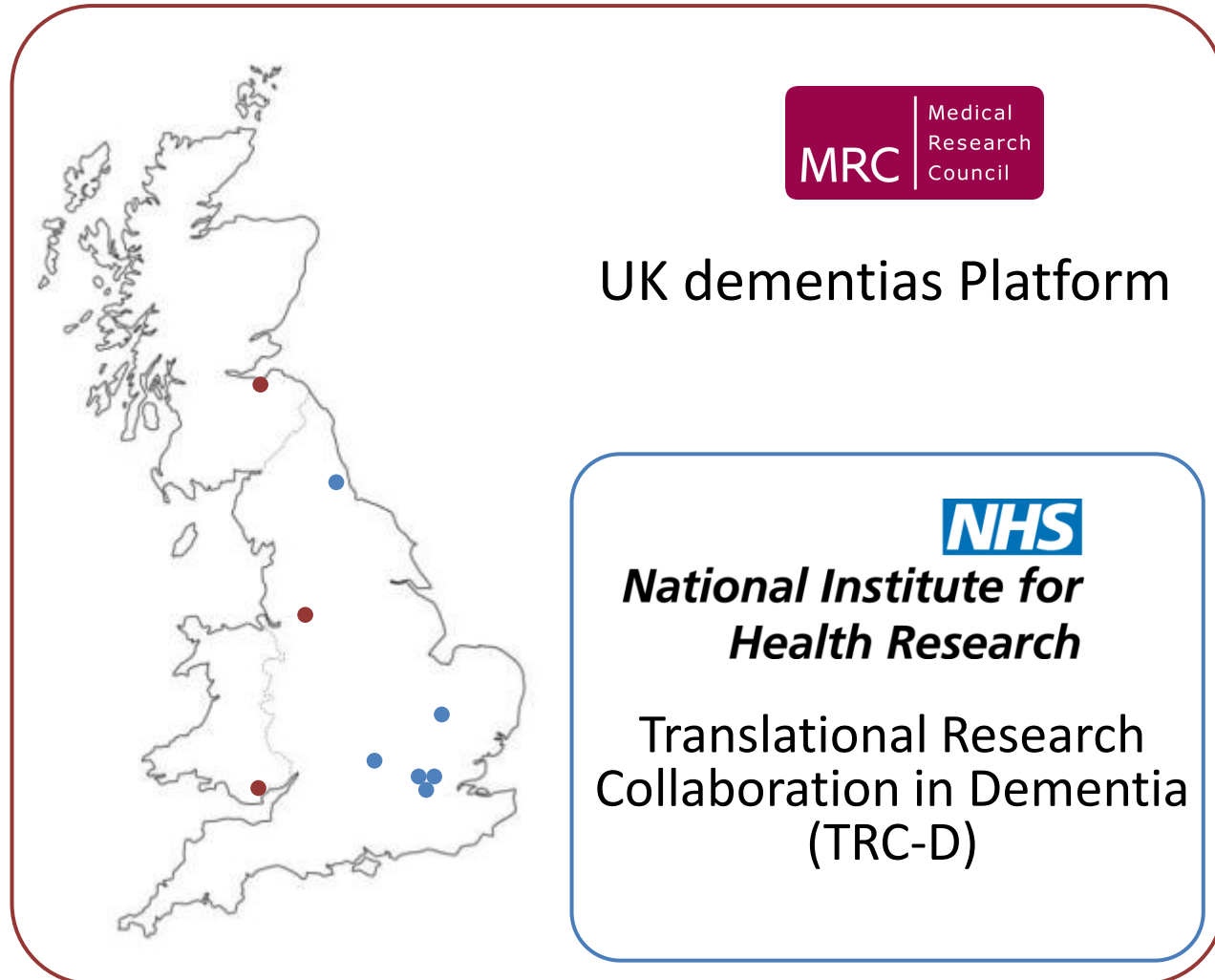


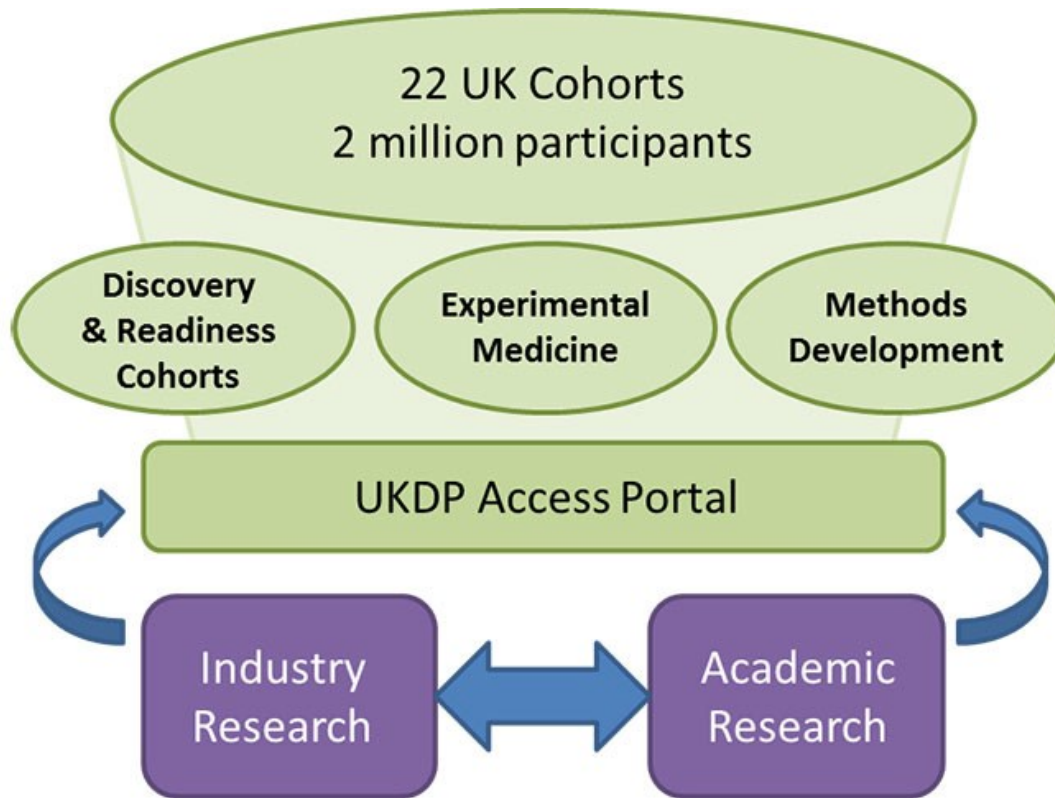
UK Dementias Platform (UKDP)



- National infrastructure for experimental medicine
- Harmonise cutting edge research across centres of excellence
- Facilitate academia-industry partnerships



UKDP development



John Gallacher,
Cardiff

Stage 1, Oct 13, £6M
- Establish cohort(s)

Stage 2, Jan 14, £6M
- Establish EM platform

Capital, Jul 14, £36M
- Imaging
- Stem cells
- Informatics

- 14 work packages (infrastructure, resource building, EM, methods development)
- UKDP Imaging Network: Paul Matthews, Nick Fox, Franklin Aigbirho

UKDP cohorts

Case-rich population cohorts

- e.g. Million Women, Aberdeen BC, Whitehall II, Caerphilly, etc

Prodromal population cohorts

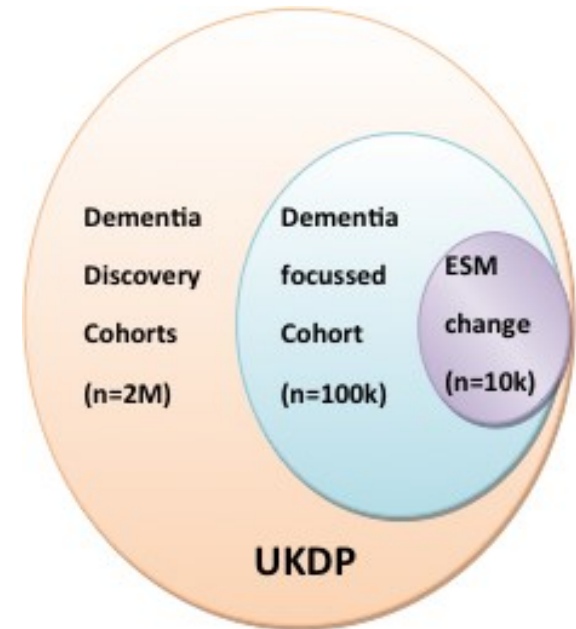
- e.g. UK Biobank (+ imaging extension), Generation Scotland, CamCan, etc

Disease focused and/or genetic at-risk cohorts

- e.g. Track-HD, PICNIC, NIMROD, OPDC, OxVASC, etc

‘Cohort of readiness’

- Rescanning and deeper phenotyping of 10K UKB imaging participants





UKDP Imaging Informatics challenge

1) UKB rescanning

Upscale existing infrastructure (Oxford Big Data Institute) to manage 10K repeated imaging datasets

2) Existing cohorts

Provide infrastructure for data curating management, sharing and analysis for UKDP cohorts:

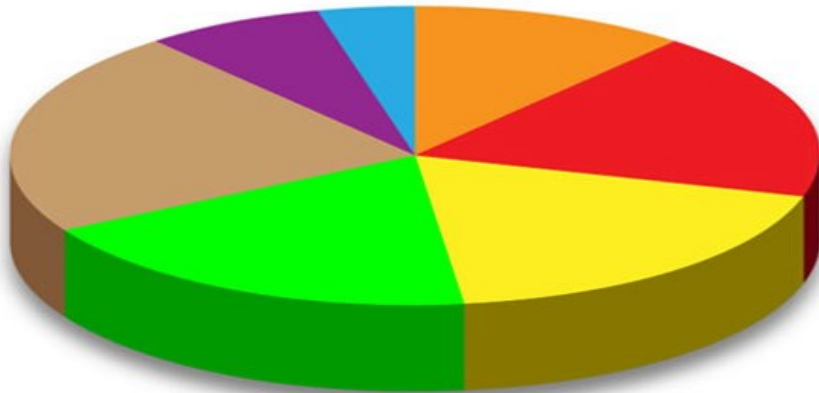
- Hardware for storage and analysis 'farm'
- Databasing and management system

3) Prospective

EM platform for multi-centre studies

Potential for incorporation of clinical upload/analysis 'service'

UKDP Imaging Informatics: 2/3) overview



- Individual cohorts remain separate, with PI retaining control
- Sophisticated security & permissions system
- Access to data granted on 'project' basis
- Analysis 'farm' has all major software installed
- Analysis pipelines (QC, harmonisation, measures) can be incorporated and developed

