

Briefing: The scale-up of Discover-NOW to the London Secure Data Environment (SDE)

Context

This briefing provides the ICHP Board and Member Executives with summary detail relating to the scale-up of [Discover-NOW](#) health data research hub in North West London to the London Secure Data Environment (SDE).

The following has been developed in collaboration with [OneLondon](#), as part of the NHS England (London Region) team supporting the launch of the Health Data for London initiative and scaling up the London SDE.

**For more information, please contact Rebekah Tailor, Associate Director at ICHP:
07414 602666 / rebekah.tailor@imperialcollegehealthpartners.com**

Overview

Over the last six years, Discover-NOW has pioneered the use of real-world evidence in health research, supporting NHS, academia and industry partners to harness real-world data from North West London's 2.9 million population to improve health outcomes and accelerate innovation to detect, prevent and treat health conditions.

Supported by the newly formed Health Data for London partnership, and with continued national funding from the Data for R&D programme, Discover-NOW is scaling up for the whole of London, as the London SDE. Once fully operational, the London SDE will provide controlled access to a de-identified linked dataset covering more than 10 million people, enabling safe, ethical and efficient access to data for care, planning, and research.

Some of the Discover-NOW Team - currently hosted by ICHP - will form the London SDE Research Service, bringing six years' experience to continue to support commercial, NHS and academic partners to apply for, access, and use this real-world data for translational research and development. The rest of the Discover-NOW Team will be reintegrated into ICHP to continue to deliver our real-world evidence service provision.

Key takeaways

London's data infrastructure

- North West London has invested in data-driven innovation for over a decade, first with the development of Whole Systems Integrated Care (WSIC), joining up patient information to support direct care; and then with the Discover dataset, a de-identified, linked data set of over 2.9 million people, supporting research and development.
- Discover-NOW was established in 2019 to support access to the Discover dataset and provide real-world evidence and analytic services via a team hosted by ICHP - one of London's three health innovation networks.
- Supported by the Health Data for London partnership, and with continued national funding from the Data for R&D Programme, Discover-NOW is scaling up for the whole of London, as the London SDE.
- Once fully operational, the London SDE will provide controlled access to a de-identified linked dataset covering more than 10 million people, enabling safe, ethical and efficient access to data for care, planning, and research.

- The London SDE will be more than just a data repository: it is designed to accelerate innovation into real-world use, enabling a “first-to-trial, first-to-deployment” pipeline so that effective solutions can be rapidly tested and adopted across London’s health and care system.
- The London SDE underpins the ambition for London to become the world’s healthiest global city - strengthening care services, supporting research excellence, and attracting new investment into the capital’s health tech and life sciences ecosystem. In doing so, the London SDE drives a shift toward innovation-led, place-based models of care that align with the NHS Long Term Plan, while building one of the broadest and deepest health data assets anywhere in the world.
- The development of the London SDE will be guided by Health Data for London (HDfL) - see below.
- The SDE’s real-world evidence offer is supported by London’s three health innovation networks - ICHP, UCLPartners, and the Health Innovation Network South London - which are nationally commissioned to spread innovation at scale.
- The scale-up of the London SDE will happen in phases between Q4 2025/26 and Q1 2026/27, with a view to the service being fully operational by 1 April 2026.
- Applications to access data from the London SDE will be assessed by local data access committees (including public members) to ensure that approved applications demonstrate clear public benefit.

London SDE driver projects

Three NHS-led driver projects will be first to access and make use of the scaled-up London SDE. These include:

- A project on Antimicrobial Resistance to predict and reduce ‘bug-drug’ mismatches that can lead to avoidable and serious infections in hospitals and care home settings
- A project on prevention, early detection and treatment for CVD. This includes work building on the cluster-randomised controlled trial for an AI-powered stethoscope, which has involved 12,000 patients from 200 GP surgeries in the UK
- A project to support children and young people’s mental health by building a much richer picture of the current demand for services and looking to develop methods for proactive care and early intervention. This involves joining up data across care settings, including the new Mental Health Support Teams based in schools

Health Data for London (HDfL)

- Health Data for London (HDfL) is a new formal partnership between NHS and university leaders, providing the strategic governance and collective leadership for London’s health data agenda to align priorities, investment, and delivery.
- Health Data for London will be formally launched on 18 November as part of London Life Sciences Week.

Examples of using real-world data to drive innovation

Some examples of how we’ve used real-world data to drive innovation in North West London include:

- Patients at risk of heart attacks and stroke can be proactively identified by their GP practices and offered a lipid management treatment, Inclisiran - a six-monthly injection. Working in close

partnership with industry we redesigned the care pathway using community-based administration of a novel therapy, which would usually require a hospital appointment. A clear example of shifting from analogue methods to digital, moving care from the hospital to the community, and from acute treatment to better prevention.

Partnership between ICHP, NWL ICB, Novartis

- Analysing de-identified data from a cohort of 91,000 patients with Chronic Kidney Disease (CKD) to identify gaps in testing for early CKD diagnosis and treatment intervention. This project also confirmed the feasibility of developing a Machine Learning model to predict the likelihood of a patient developing significant CVD and renal outcomes at the onset testing for CKD.

Partnership between Discover-NOW, Boehringer Ingelheim, NWL ICB

- Evaluation of de-identified data from over 76,000 patients with coronary artery disease to understand how secondary prevention methods can impact mortality rate.

Partnership between Discover-NOW, NWL ICB, Heart Division at Royal Brompton and Harefield Hospitals

- Understanding the current and future economic and healthcare impact of dementia. This included investigating patterns in diagnosis and staging, and whether patients who have been diagnosed at an early stage - with mild cognitive impairment - have different resource utilisation from those with moderate or severe dementia.

Discover-NOW partnership with the Alzheimer's Society and Camell Farrar

ICHP position statement

Dr Dominique Allwood, CEO of Imperial College Health Partners, said:

“The scaling up of the London Secure Data Environment is an exciting and significant step forward in data-driven health innovation. Building on the success of existing data initiatives and assets in North West London, including Whole Systems Integrated Care (WSIC) and Discover-NOW health data research hub, the London SDE will be a powerful catalyst for research, planning, and accelerating innovation for patient benefit.

“Together with colleagues across London’s health innovation networks, ICHP will partner with the SDE to use this real-world data asset to drive innovation at pace and scale for the benefit of our local populations.”