HDRUK
Health Data Research UK

Better Care Insight Sharing Day

Meeting Summary

Thursday, 1 July 2021

Introduction

The most recent of the quarterly [Better Care](#) Insight Days looked at the latest developments in Health Data Research UK's (HDR UK) four-nations drive to find innovative ways to use data to enable clinicians and patients make the best decisions about healthcare. The event outlined some of the Better Care initiative's overall achievements and considered the programme for the next five years, before taking a deeper dive into the advances being made by specific problems, including a special focus on work from the Midlands.

Key insights

- Better Care projects throughout the UK are developing well and are already yielding significant findings and benefits in areas including epilepsy and multimorbidity.
- Plans for the next five years will continue the fast pace of progress
- A four-nations approach is proving highly effective in allowing research to move forward on many fronts.

Achievements and ambitions

Progress has been made in many areas including defining and demonstrating the unique role that HDR UK can play in developing data-enabled health and social care research. A cross-disciplinary community is now in place with nationally recognised expertise and the infrastructure is in place to continue moving forward.

Alastair Denniston, Deputy Better Care Research Director, outlined the key themes for the next five years, which will be:

- Building better data foundations
- Research and discovery
- Data responsive care system
- Data enabled people.

[Professor Alastair Denniston](#), **Director of INSIGHT and Consultant Ophthalmologist at University of Birmingham, said:**

> *"If we're serious about delivering better care we need to understand the patient's story, not just the hospital's story or the primary care story. And the great thing is we have a number of data resources that we can tap into for that."*

Midlands Showcase

The HDR UK Midlands Better Care Network brings together the universities of Birmingham, Leicester, Nottingham and Warwick plus the University of Birmingham Hospitals Trust.

The showcase saw Nottingham's Joseph Manning describe the OCEANIC Study (which has seen a "huge raft of public and patient involvement and engagement") which is exploring the outcomes for children and families in the first year after paediatric intensive care discharge. Grazziela Figueredo presented case studies on projects including one that is pioneering AI-driven diabetes prognosis with the aim of enabling more effective and earlier interventions.

Omar Khan and Sarah Lim Choi Keung, University of Warwick, discussed the CURe Framework which aims to use data to improve decision making in routine care – modules have already been developed including one that is being used by the Tommy's National Centre for Miscarriage Research.

Krish Nirantharakumar, Birmingham University, summarised projects supported by HDR UK. One was MuM-PreDiCT which is bringing together eight universities and a series of NHS trusts to improve care for pregnant women with multiple conditions. He said it involves: "understanding their care pathways, looking at outcomes, looking at the safety of medication, trying to learn from pregnancy complications, how they predict the future, and following pregnancy, what health conditions people may get."

Project updates

Key figures from Better Care projects across the country offered updates on their work, beginning with Richard Wood, from HDR UK in the southwest of England, who spoke about IPACS (Improving Patient flow between Acute, Community and Social Care). This is researching how greater social care investment, and optimised pathway planning, could reduce patient discharge delays which are losing 500,000 acute bed days a year (and costing £800m).

Peter Bath gave an update for HDR UK North on the Better Care training theme. This is providing twenty 12-week dissertation studentships for Masters students, a dozen six-week placements for NHS staff plus eight workshops and community engagement activities. These will increase NHS health informatics and data science skills capacity, improve capabilities for large scale research and raise awareness about the value of health data for better care.

Owen Pickrell, HDR UK team in Wales, outlined advances in the Better Care for People with Epilepsy study which is using whole population-level data (from the SAIL Databank) to investigate issues including how to reduce the frequency of seizures and how to optimise care and services. The research so far has resulted in findings – including links between epilepsy and deprivation and has identified that patients in areas with specialist epilepsy services are more likely to have the latest and best treatments.

Dyfed Huws, also from HDR UK in Wales, described research into the impact of COVID on cancer epidemiology. This has revealed a 19.1% reduction in diagnosed cases of female breast cancer, 17.2% in colorectal and 7.9% in small cell lung cancer from 2019 to 2020. This is likely to be due to patients' reluctance to seek health plus reduced access to services and has major implications for individual health and medium-term pressures on the NHS.

Wider issues

The Better Care Insights Sharing Day also featured discussions on the creation of an effective learning health system for better care, the role of the AHSN Network, and of the landscape and infrastructure to push forward the adoption of data-driven innovation.