

HDR UK Scientific Conference DATA INSIGHTS IN A PANDEMIC

23 June 2021





Time	Sessions
08:45	Plenary welcome: Health Data Research UK – the story so far Andrew Morris, Health Data Research UK
09:00	"Leave no one behind" – Focusing the health data science to address unmet patient need Margaret O'Hara, Patient Representative
09:10	Plenary keynote: How COVID-19 changed the world – global policy insights Maria Van Kerkhove, World Health Organisation (WHO)
09:30	 Panel discussion Devi Sridhar, University of Edinburgh Maria Van Kerkhove, World Health Organization (WHO) Margaret O'Hara, Patient Representative Q&A
09:50	 COVID Data Showcase: Informing the pandemic response National Surveillance: Ian Diamond, National Statistician Improving health through enhanced data linkage to UK SARS-CoV-2 genomes: Sharon Peacock, COVID-19 Genomics UK Consortium (COG-UK) and University of Cambridge Q&A
10:20	BREAK

Convened in partnership with















10:25	Stream A	Stream B	Stream C
Parallel 1: How the pandemic has accelerated the impact of data science on patients	 Health data science at pace – how has discovery been accelerated in a pandemic? Chair: Cathie Sudlow, BHF Data Science Centre Panellists: Martin Landray, University of Oxford - RECOVERY trial – exemplar of a data-enabled clinical trial Liz Sapey, PIONEER – The Health Data Research Hub for Acute Care - Using real world data to improve care pathways for COVID-19 Roz Eggo, HDR UK Fellow - Modelling for prediction and prevention Kirsty Irvine, Patient Representative - Is there room for patient perspective in a pandemic? 	 FAIR use of data at scale Chair: Neil Sebire, Great Ormond Street Hospital, UCL and Health Data Research UK Panellists: 1. Jonathan Sterne, University of Bristol – FAIR use of data at scale 2. Laura North and Richard Fry, HDR UK Public Health, Swansea University - The impact of real-time high-resolution spatial health surveillance of COVID19 linked health data at scale 3. Ben Goldacre, University of Oxford - OpenSAFELY: 58 million patients and 12 months of open science 	 How has data enabled vaccine research? Chair: Munir Pirmohamed, HDR UK North Panellists: 1. Aziz Sheikh, HDR UK Better Care and BREATHE – The Health Data Research Hub for Respiratory Health - Making use of data collected as part of routine care to estimate vaccine effectiveness-EAVE II 2. Paul Elliot, Imperial College London - REACT Study and Vaccine Data 3. Julia Hippisley-Cox, University of Oxford - Data-enabled vaccine research
11:15		BREAK	



11:25	Stream A	Stream B	Stream C
Parallel 2: The effects of COVID-19 across different parts of society	 How can big data tackle health inequalities? Chair: Kamlesh Khunti, HDR UK Midlands Panellists: 1. Rhiannon Owen, Associate Professor of Statistics, Swansea University - Impact of COVID-19 on socioeconomically-deprived communities 2. Laura Shallcross, UCL HDR UK – Better Care - An epidemic within an epidemic – care homes 3. Vahé Nafilyan, Office for National Statistics - Health inequalities amongst ethnic groups 	 Beneath the tip of the iceberg – the indirect effects of COVID-19 Chair: Harry Hemingway, HDR UK London Panellists: 1. Richard Wood, University of Bristol - Using linked data to understand and mitigate the indirect impacts of COVID-19 – perspectives from a healthcare system in South West England 2. Mark Lawler, Professor of Digital Health Queen's University Belfast and Scientific Director DATA-CAN - Impact of pandemic on cancer services – what does this mean for cancer patients? 3. Rashmi Patel, MRC UKRI Health Data Research UK Fellow, King's College London - Remote Mental Healthcare During COVID-19: Insights from Electronic Health Record (EHR) Data 	International masterclass - how did Rwanda, Norway and Singapore respond to COVID? Chair: Agnes Binagwaho, University of Global Health Equity Panellists: 1. Agnes Binagwaho, University of Global Health Equity – Rwanda (title TBC) 2. Camilla Stoltenberg, Norwegian Institute of Public Health – 2 Key lessons from the Norwegian response 3. Teo Yik Ying, Saw Swee School of Public Health – Balancing lives and livelihoods during COVID-19: A case study from Singapore



12:15	Lightning talks
	5 x early career researchers will give a short (4 minute) presentation on their exciting new research.
	Chair: Fatemeh Torabi, HDR UK Wales and Northern Ireland and Swansea University
	 Predicting emergency admissions in the Scottish population? James Liley, University of Edinburgh/Alan Turing Institute Assessment of the likelihood of test positivity in pupils and staff in relation to other recent cases in linked pupils, staff or their households Daniel Thompson, Swansea University Assessment of how accurately telephone triage services identified those who suffered an adverse outcome needing an emergency 111 or 999 response Carl Marincowitz, University of Sheffield A spatial time series modelling approach for tracking COVID-19 cases in England at the Lower Tier Local Authorities level Claudio Fronterre, Lancaster University The UK Biobank COVID-19 Serology Study Jelena Besevic, University of Oxford
12:40	LUNCH BREAK



13:25	Plenary talk: Molecular science and electron John Danesh, Director, HDR UK Cambridge	nic health records: what does the future hold	?
13:50	Stream A	Stream B	Stream C
Parallel 3: How a range of data types are informing the response to COVID-19	Behavioural data in action – the role of self-reported and other data Chair: Susan Michie, University College London Panellists: 1. John Edmunds, LSHTM - Impact of physical distance on UK transmission: Pros and cons of different behavioural measures (CoMix) 2. Stephen Reicher, University of St Andrews – Pandemic fatigue? Adherence to COVID-19 regulations 3. Ed Manley, University of Leeds - SAFER study – transmission of COVID-19 in health care workers	How omics data science can support a global response to health crises Convened in partnership with Genomics England Chair: Chris Wigley, Genomics England Panellists: 1. Sue Hill, Chief Scientist and NHSE Genomics Unit, NHS England – Use of genomics in response to COVID-19 2. Albert Tenesa, Professor of Quantitative Genetics, University of Edinburgh - How genome analysis of COVID patients has informed care: the GenOMICC consortium 3. Ewan Harrison, Career Development Fellow, Wellcome Sanger Institute - COG-UK – A nationwide sequencing effort to understand SARS-CoV-2 biology	Improving care through use of novel and multimodal data Convened in partnership with the Industrial Strategy Challenge Fund, UK Research & Innovation Chair: Alison Cave, UK Research & Innovation Panellists: 1. Fozia Ahmed, Manchester University NHS Foundation Trust - Digital Heart Failure Care Pathways: Building Back Better After COVID 2. Suzy Gallier, PIONEER – The Health Data Research Hub for Acute Care - Leveraging PIONEER data to improve clinical care of COVID-19 patients in intensive care 3. David Gonzalez de Castro, Professor of Genomic Medicine and Consultant Clinical Scientist in Molecular Pathology, Queens University Belfast – The ACTIONED consortium for multimodality diagnostic integration in cancer



14:40		BREAK	
14:50	Stream A	Stream B	Stream C
Parallel 4: Learning from others: The impact of cross-sectoral, multi-regional approach	Chair: Martin Murphy, ICODA Scientific & Strategic Advisory Council (SSAC) Panellists: 1. Calum Semple, University of Liverpool - Impact of agreement on how the world collects its COVID-19 data — ISARIC-CCP 2. Sarah Stock, University of Edinburgh - Finding new ways to bring data together from around the world to determine the impact of lockdown on preterm births worldwide 3. Nevine Zariffa, HDR UK — ICODA - The imperative for and challenges of bringing together data across RCTs 4. Marion Mafham, University of Oxford - Lessons learned from the RECOVERY trial on sharing routine data from clinical trials to MHRA — and going international	'Nothing about us without us': Codevelopment with public and patients Convened in partnership with Understanding Patient Data and Use MY Data Chairs: Natalie Banner, Understanding Patient Data and Maisie McKenzie, Use MY Data Panellists: 1. Ami Banerjee, Associate Professor in Clinical Data Science and Honorary Consultant Cardiologist, University College London – Communicating risk to patients during the pandemic 2. Ana Alvarez, Agile Lighthouse Squad Lead, NHS Test and Trace - 'Nothing about us without us' 3. Margaret Grayson, Patient Representative	 Beyond health data: Cross-sectoral data science at scale Convened in partnership with Administrative Data Research UK (ADR UK) Chair: Emma Gordon, ADR UK programme director, ESRC Panellists: 1. Ruth Gilbert, University College London - Linking together administrative data from health and education 2. Andrew Engeli, Department of Health and Social Care - Wastewater monitoring for Covid-19 surveillance 3. Mark Green, University of Liverpool - Local Data Spaces: Helping Local Authorities tackle the Covid-19 pandemic 4. Nicola Perrin, Director of Policy and Public Affairs, Association of Medical Research Charities-Demonstrating trustworthiness in cross-sector data sharing



15:40	BREAK		
15:50	Stream A	Stream B	Stream C
Parallel 5: The future	 What lies ahead? Health data research beyond the pandemic Chair: Simon Ball, HDR UK Midlands Panellists: 1. Cathie Sudlow, BHF Data Science Centre - A new data asset to improve COVID-19 outcomes in heart disease patients 2. Richard Hobbs, University of Oxford - PRINCIPLE trial 3. Colin McCowan, University of St Andrews, HDR UK Scotland - Pivoting the multimorbidity cohort 4. Ben Johnson, Public contributor – Health inequalities threaten the national and global response to pandemics 	 Cutting edge analytics for the future Chair: David Robertson, HDR UK Scotland Panellists: 1. Kirstie Whitaker, The Alan Turing Institute - Harnessing wearables data for the future 2. Dan Bean, HDR UK Fellow - NLP- enabled improvement of NEWS2 3. Kenny Baillie, University of Edinburgh - Mobilising analytics in genomics for COVID-19 4. Aiden Doherty Associate Professor, University of Oxford - Reproducible machine learning of wearable datasets 	Innovative approaches to data stewardship Convened in partnership with the Open Data Institute (ODI) Chair: Jack Hardinges, Data institutions Programme Lead, Open Data Institute Panellists: 1. Carly Kind, Ada Lovelace Institute - Data Stewardship - As an ideal 2. Wen Hwa Lee, INSIGHT – The Health Data Research Hub for Eye Health - Data Stewardship - Widening participation in practice with the INSIGHT Hub 3. Mad Ball, Open Humans Foundation - Data Stewardship - From the bottom-up



16:40	BREAK
16:50	Keynote fireside chat: Are we ready for the next pandemic? Steve Kern, The Bill & Melinda Gates Foundation In conversation with Caroline Cake, Health Data Research UK
17:15	 HDR UK annual awards Andrew Morris, Health Data Research UK Lightning Talk Award – presented by Fatemeh Torabi, Swansea University, Health Data Research UK Wales and Northern Ireland Team of the Year Award – presented by Anne Ridley, University of Bristol Impact of the Year Award – presented by James O'Shaughnessy, HDR UK Non-Executive Board member
17:25	Plenary summary remarks Andrew Morris, Health Data Research UK
17:30	CLOSE