

HEALTH AND CARE ANALYTICS

Conference 2023

11 – 12 July

University of Birmingham
Birmingham Medical School

Wednesday 12th July

Wolfson Common Room

08:30 – 09:00

Welcome and Arrival Refreshments

Leonard Deacon Lecture Theatre

09:00 – 09:05

Introduction - Peter Spilsbury

09:05 – 09:35

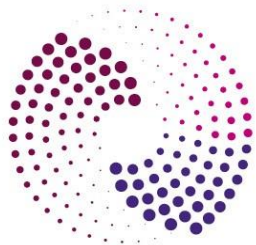
Michael Blastland

09:35 – 10:05

Clare Griffiths & Pouria Hadjibagheri

10:05 – 10:35

John Newton



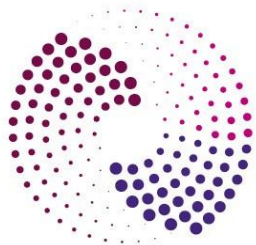
HEALTH AND CARE ANALYTICS

Conference 2023

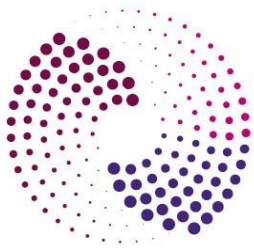
11 – 12 July

University of Birmingham
Birmingham Medical School

<p><u>Leonard Deacon Lecture Theatre</u> 10:35 – 10:50 Building a whole system model for a five year forward plan for Leicester, Leicestershire and Rutland (15 mins)</p> <p><i>Janine Dellar, Leicester, Leicestershire and Rutland ICB</i></p> <p>10:50 – 11:05 Comparing need-adjusted supply of GP practice consultations over time and Integrated Care Boards in England (15 mins)</p> <p><i>Steven Wyatt, Strategy Unit</i></p>		<p><u>Lecture Theatre 3</u> 10:35 – 11:05 Essex’s first ever Oral Health Needs Assessment (30 mins)</p> <p><i>Jyotsna Srinath, Essex County Council</i></p> <p><i>Paola De Pascali, Essex County Council</i></p>	<p><u>Lecture Theatre 4</u> 10:35 – 10:50 Participation in a community-based pre-natal programme helps pregnant women with a BMI over 25 to increase their physical activity levels (15 mins)</p> <p><i>Sophie Hedges, National Children's Bureau</i></p> <p>10:50 – 11:05 Waste not, want not: promoting participation of UK clinical graduates in NHS services (15 mins)</p> <p><i>Lucina Rolewicz, Nuffield Trust</i></p>	<p><u>WF15</u> 10:35 – 10:50 Democratizing the Modelling of Population Ageing and its Impact on Demand for Healthcare (15 mins)</p> <p><i>Paul Seamer, Strategy Unit</i></p>
<p><u>Wolfson Common Room</u> 11:05 – 11:25 Refreshment Break</p>				



<p>Leonard Deacon Lecture Theatre 11:25 – 12:10 Expert by experience panel (45 mins)</p>	<p>Arthur Thomas Lecture Theatre 11:25 – 11:40 Impact of ambulance performance improvement strategies - estimation through discrete event simulation (15 mins) <i>Martina Bargeman Fonseca, NHS England</i></p> <p>11:40 – 11:55 Analysis of NHS community data to improve flow in acute hospitals (15 mins) <i>Sara Ward, NHS England</i></p> <p>11:55 – 12:10 Rapid growth of diagnostic testing in A&E has increased waiting times for patients (15 mins) <i>Andrew Jones, Strategy Unit</i></p>	<p>Lecture Theatre 3 11:25 – 11:40 Who needs a Junior Doctor? Can artificial intelligence write discharge letters for elective tonsillectomy surgery (15 mins) <i>Chris Bodimeade, East Surrey Hospital</i></p> <p>11:40 – 11:55 Predicting exacerbations of COPD: a machine learning approach (15 mins) <i>Prasanth Peddaayavarla, Arden & GEM CSU</i></p> <p><i>Kamil Barczak, Arden & GEM CSU</i></p>	<p>Lecture Theatre 4 11:25 – 11:40 Harnessing routinely generated General Practice (GP) data to reduce the burden of cardiovascular diseases (CVDs) across Greater Manchester (GM) (15 mins) <i>Matthew Conroy, NHS Greater Manchester Integrated Care (ICB)</i></p> <p><i>Aseem Mishra, NHS Greater Manchester ICS</i></p> <p>11:40 – 11:55 Testing the application of a city-wide segmentation model for planning care and tracking population outcomes in Leeds (15 mins) <i>Nick Grudgings, NHS ICB in Leeds</i></p> <p><i>Alex Brownrigg, NHS ICB in Leeds</i> <i>Benjamin Alcock, NHS Arden and GEM CSU</i></p>	<p>WF15 11:25 – 11:55 The Cost of Living: Creating an interactive dashboard to drive action and reduce inequalities in Suffolk (30 mins) <i>Alexander Garwood, Suffolk County Council</i></p> <p>11:55 – 12:10 Towards developing a better data culture: starting a new journey at the Royal Free (15 mins) <i>Sean Hession, Royal Free London NHS Foundation Trust</i></p>
--	--	---	--	--



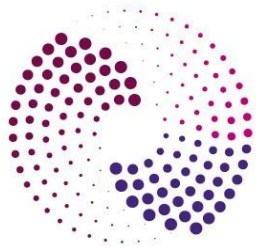
HEALTH AND CARE ANALYTICS

Conference 2023

11 – 12 July

University of Birmingham
Birmingham Medical School

		<p><u>Lecture Theatre 3</u> 11:55 – 12:10 Web application to discover SNOMED-mapped entities in unstructured clinical text using Named Entity Recognition and Linkage with MedCAT, Apache SOLR and Python (15 mins)</p> <p><i>Timothy Howcroft, Lancashire Teaching Hospitals NHS Foundation Trust</i></p>	<p><u>Lecture Theatre 4</u> 11:55 – 12:10 Development and practical use in delivering pro-active care and modelling future population health need of a population segmentation in which segments halve in size and double in per person spend (15 mins)</p> <p><i>Nick Hassey, Bristol, N Somerset S Gloucestershire ICB</i></p> <p><i>Peter Thomson, Bristol, N Somerset S Gloucestershire ICB</i></p>	
--	--	--	---	--



HEALTH AND CARE ANALYTICS

Conference 2023

11 – 12 July

University of Birmingham
Birmingham Medical School

	<p><u>Arthur Thomas Lecture Theatre</u> 12:10 – 12:25 Forecasting emergency department admissions for operational decision support in the NHS (15 mins)</p> <p><i>Elizabeth Johnstone, NHS England</i></p> <p><i>Jane Kirkpatrick, NHS England</i></p> <p>12:25 – 12:40 A review of the impact of the Covid pandemic on the provision of urgent and emergency care across hospitals in the Northwest of England (15 mins)</p> <p><i>Kelly Bishop, NHS Midlands and Lancashire CSU</i></p> <p><i>Andy McCann, NHS Midlands and Lancashire CSU</i></p>	<p><u>Lecture Theatre 3</u> 12:10 – 12:25 Semi-Automating the Clinical Coding Process: Improving Efficiency, Accuracy and Support for Clinical Coders (15 mins)</p> <p><i>Prajwal Khairnar, Northern Care Alliance NHS Foundation Trust</i></p> <p>12:25 – 12:40 Linking of diverse intra institutional and government raw data sources to monitor the impact of COVID-19 on hospital health care resources in a major district general hospital NHS Trust during the pandemic (15 mins)</p> <p><i>Arun Sahni, Mid & South Essex NHS Trust</i></p>	<p><u>Lecture Theatre 4</u> 12:10 – 12:25 Modelling NHS Acute Trust Catchment Populations (15 mins)</p> <p><i>Steven Knuckey, Office for Health Improvement and Disparities</i></p> <p><i>Antoinette Woodhouse, Office for Health Improvement and Disparities</i></p> <p>12:25 – 12:40 The Health Index for England: understanding the nation's health and its determinants (15 mins)</p> <p><i>Greg Ceely, Office for National Statistics</i></p>	<p><u>WF15</u> 12:10 – 12:25 Unleashing the Influence of Data: How a Mental Health Nurse is Driving Improvements in Learning Disability Services (15 mins)</p> <p><i>Nadine Rooney, West Yorkshire and Barnsley Learning Disability Services ICS</i></p> <p>12:25 – 12:40 Case study of visualising vaccination uptake by geographical area (15 mins)</p> <p><i>Catriona Scott, NHS Lothian</i></p> <p><i>Bethany Hitchen, NHS Lothian</i></p>



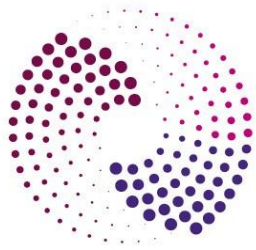
HEALTH AND CARE ANALYTICS

Conference 2023

11 – 12 July

University of Birmingham
Birmingham Medical School

<p><u>Wolfson Common Room</u> 12:40 – 13:40 Lunch</p>				
<p><u>Leonard Deacon Lecture Theatre</u> 13:40 – 13:55 Building capability in System Dynamics within Health and Care; the experience of an applied learning programme in the Midlands (15 mins) <i>Stacey Croft, Strategy Unit</i></p> <p>13:55 – 14:10 How to introduce self-service Statistical Process Control at an industrial scale in an NHS Trust (15 mins) <i>Thomas Nicholas, East London NHS Foundation Trust</i></p>	<p><u>Arthur Thomas Lecture Theatre</u> 13:40 – 14:10 Exploring the uses and benefits of NHS England’s privacy-enhancing artificial data (30 mins) <i>Alistair Jones, NHS England</i></p> <p><i>Scarlett Kynoch, NHS England</i></p>	<p><u>Lecture Theatre 3</u> 13:40 – 14:10 Evaluating Outcomes and Healthcare Resource Utilization in Critical Limb Threatening Ischaemia (CLTI) Patients: A Data-Driven Analysis of Revascularisation versus Primary Amputation (30 mins) <i>Santosh Kumar, Health Economics Unit (MLCSU)</i></p> <p><i>Maria Paraskevopoulou, Health Economics Unit (MLCSU)</i></p> <p><i>Rayne Wang, Health Economics Unit (MLCSU)</i></p>	<p><u>Lecture Theatre 4</u> 13:40 – 14:10 The limitations of pulse oximeters in measuring blood oxygen saturation: An analysis using routinely collected data from a large UK teaching hospital (30 mins) <i>Andrew Fogarty, University of Nottingham</i></p>	<p><u>WF15</u> 13:40 – 14:10 The Suffolk Office of Data and Analytics - providing the compelling reason to act (30 mins) <i>Michaela Breilmann, Suffolk Office of Data & Analytics (SODA)</i></p>



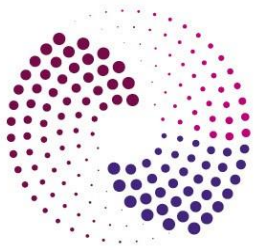
HEALTH AND CARE ANALYTICS

Conference 2023

11 – 12 July

University of Birmingham
Birmingham Medical School

<p>Leonard Deacon Lecture Theatre 14:10 – 14:55 What do leaders want from analysts? (45 mins)</p>	<p>Arthur Thomas Lecture Theatre 14:10 – 14:40 Splink: Data Linkage at Scale (30 mins)</p> <p><i>Ross Kennedy, Ministry of Justice</i></p> <p>14:40 – 14:55 Implementing the OMOP common data model in an NHS Trust using data build tool (DBT) (15 mins)</p> <p><i>Quinta Ashcroft, Lancashire Teaching Hospitals NHS Foundation Trust</i></p>	<p>Lecture Theatre 3 14:10 – 14:25 Improving Hospital Mortality Benchmark Measures (the Summary Hospital-level Mortality Indicator, SHMI) using Machine Learning and Feature Engineering (15 mins)</p> <p><i>Adam Hollings, NHS England</i></p> <p>14:25 – 14:40 Transformation of 100,000K registry and programme-collected data for observational cancer research (15 mins)</p> <p><i>Georgia Chan, Genomics England Ltd</i></p>	<p>Lecture Theatre 4 14:10 – 14:25 Developing a targeted, partnership-driven approach to the measurement and monitoring of inequality in Manchester (15 mins)</p> <p><i>Amanda Dixon, Manchester City Council</i></p> <p><i>Neil Bendel, Manchester City Council</i></p> <p>14:25 – 14:40 East Kent Hospitals - Analysing Inequalities and Unwarranted Variation. Designing an analysis framework that is simple to use, but has statistical rigour (15 mins)</p> <p><i>Marc Farr, East Kent Hospitals University NHS Foundation Trust</i></p>	<p>WF15 14:10 – 14:40 A look into multimorbidity: the burden of multiple, co-occurring, long-term conditions in the population of England (30 mins)</p> <p><i>Alex Owens, NHS Arden and Gem CSU</i></p> <p>14:40 - 14:55 Exploration of preferences among people with COPD for to inform resource allocation: a discrete choice experiment study (15 mins)</p> <p><i>Jack Ettinger, Health Economics Unit</i></p>
---	--	---	---	--



HEALTH AND CARE ANALYTICS

Conference 2023

11 – 12 July

University of Birmingham
Birmingham Medical School

		<p><u>Lecture Theatre 3</u> 14:40 – 14:55 The methodology behind developing cancer-specific virtual cohorts to support the Edinburgh Cancer Informatics programme (15 mins)</p> <p><i>Mahéva Vallet, University of Edinburgh</i></p>	<p><u>Lecture Theatre 4</u> 14:40 – 14:55 Is the cost-of-living crisis causing some people to reduce their use of essential medicines? (15 mins)</p> <p><i>Michael Cheetham, North East London ICB</i></p>	
--	--	--	--	--



HEALTH AND CARE ANALYTICS

Conference 2023

11 – 12 July

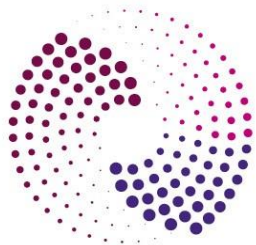
University of Birmingham
Birmingham Medical School

Wolfson Common Room

14:55 - 15:15

Refreshment Break

	<p><u>Arthur Thomas Lecture Theatre</u> 15:15 – 15:30 Using linked data to understand inequalities in place of death (PoD) and inform the design of integrated PEOC (Palliative and End of Life Care) (15 mins)</p> <p><i>Kate Warren, The Royal Wolverhampton NHS Trust</i></p> <p>15:30 – 15:45 Identifying Health Inequalities in Elective Waiting Lists (15 mins)</p> <p><i>Simon Wellesley-Miller, NHSE</i></p>	<p><u>Lecture Theatre 3</u> 15:15 – 15:45 Considering Data Hazards in health and care analytics through a shared vocabulary of risks (30 mins)</p> <p><i>Natalie Zelenka, University of Bristol</i></p> <p><i>Nina Di Cara, University of Bristol</i></p> <p><i>Huw Day, University of Bristol</i></p>	<p><u>Lecture Theatre 4</u> 15:15 – 15:45 Quality Assurance Framework for Data Linkage – assuring population-scale data linkage to help tackle cardiovascular disease (30 mins)</p> <p><i>Liliana Valles, NHS England</i></p> <p><i>Rupert Chaplin, NHS England</i></p>	<p><u>WF15</u> 15:15 – 15:45 Blood collection in England - Understanding and optimising donor flow (30 mins)</p> <p><i>Emily Baldwin, NHS Blood and Transplant</i></p>
--	---	--	---	--



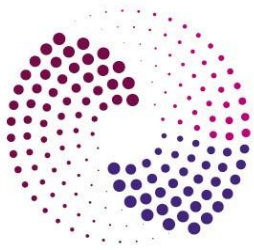
HEALTH AND CARE ANALYTICS

Conference 2023

11 – 12 July

University of Birmingham
Birmingham Medical School

<p>Leonard Deacon Lecture Theatre 15:45 – 16:00 Cutting the production time of emergency care statistics from 3 days to 1 hour: a RAP success story (15 mins)</p> <p><i>Andrew Berry, NHS England</i></p> <p><i>Amelia Noonan, NHS England</i></p> <p>16:00 – 16:15 Case study showing how R was used to automate production of a weekly report that helped reduce acute discharge delays across England</p> <p><i>Dean Wales, NHS England</i></p>	<p>Arthur Thomas Lecture Theatre 15:45 – 16:00 Evaluating the presence and magnitude of health inequalities in ICBs at PCN and Place-level using advanced analytics (15 mins)</p> <p><i>Sonia Hayre, Arden and Gem CSU</i></p> <p>16:00 – 16:15 Equity of access to community services after hospital discharge (15 mins)</p> <p><i>Steven Wyatt, Strategy Unit</i></p> <p>16:15 – 16:30 Deprivation: Its impact on how people access healthcare (15 mins)</p> <p><i>Chris Morris, NHS South, Central and West CSU</i></p>	<p>Lecture Theatre 3 15:45 – 16:00 Beyond checklists: critical thinking about data ethics, technology and AI (15 mins)</p> <p><i>Harriet Sands, NHS England</i></p> <p><i>Michael Hodge, Ministry of Justice</i></p>	<p>Lecture Theatre 4 15:45 – 16:15 Generating Synthetic Data for the NHS (30 mins)</p> <p><i>Jonathan Pearson, NHS England</i></p> <p>16:15 – 16:30 Providing contextual metadata to data linkage – a case study for emergency hospital readmission rates (15 mins)</p> <p><i>Kenneth Quan, NHS England</i></p>	<p>WF15 15:45 – 16:15 The years of life lost to common multimorbidity combinations: An application of Markov models to the NHS Bridges to Health National Segmentation Dataset (30 mins)</p> <p><i>Adrian Pratt, NHS Arden & GEM CSU</i></p>
---	--	--	--	--



HEALTH AND CARE ANALYTICS

Conference 2023

11 – 12 July

University of Birmingham
Birmingham Medical School

Lecture Theatre 3

16:00 – 16:30

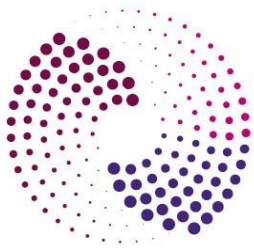
An embedded patient and public involvement and engagement approach leads to high-impact outcomes in health and social care analytics projects: learnings from the Networked Data Lab (30 mins)

Chamut Abebe & Zoe Ruziczka, The Health Foundation

Patricia McKinney, Leeds ICB

Helen Butters, West Yorkshire Integrated Care Board (Leeds)

Sharon Gordon, University of Aberdeen



HEALTH AND CARE ANALYTICS

Conference 2023

11 – 12 July

University of Birmingham
Birmingham Medical School

Leonard Deacon Lecture Theatre

16:30 – 16:45

Closing Remarks

Chris Beeley

[Back to top](#)