

Virtual Conference 2021 Day 1 Monday 8th November 2021

Time	Speaker	Title
09:30	Professor Mohammed Mohammed , NHS-R Community	Opening and Welcome
09:45	Ellen Coughlan , Programme Manager, The Health Foundation	Advancing Analytics: Community and Capability
10:05	Peter Spilsbury , Director, The Strategy Unit	What should the NHS learn from the NHS-R Community
10:25	Natalia Domagala , Head of Data Ethics Policy, Cabinet Office	Implementing data ethics initiatives in the public sector
Break		
11:05	Colin Angus , Senior Research Fellow, University of Sheffield	Challenges and opportunities in visualising COVID data using R
11:25	Madeleine Whelan and Will Yuill , Hertfordshire County Council	COVID-19 Modelling using R
11:45	Colin Fay , Data Science and Engineering at ThinkR	<i>Title to be confirmed</i>
Break		
12:25	Jessica Pang , Improvement Cymru, Public Health Wales	Our journey to RShiny applications for COVID-19 Sampling and Testing
12:45	Ben Murch , NHS England and NHS Improvement and Emma Gara , NHS Bristol, North Somerset & South Gloucestershire CCG	Modelling the impact of first wave Covid-19 on mental health service capacity across a local health system
Break		
14:00	Lightning Talks	
14:05	1. Lee Coulson , Senior Information Analyst, NHS Devon CCG	Simple Geospatial Visualisation Using Leaflet
14:15	2. Anne Alarilla , Senior Data Analyst, The Health Foundation	Using R to analyse survey data
14:25	3. Sebastien Peytrignet , Data Analyst, The Health Foundation	What can an online shopping algorithm teach us about coordinating outpatient care?
14:35	4. Tom Jemmett , Senior Healthcare Analyst, The Strategy Unit	Introduction to OOP in R with S3
14:45	5. Martine Wauben , Interim Head of Data Science, DHSC	Voices of the public: using text data
Break		
15:05	6. Jay Hughes , Data Engineer, The Health Foundation	Introducing an R package to process CPRD Aurum data
15:15	7. Andy South , Data Scientist, University College London Hospital	Developing R & data skills in clinicians at UCLH through a fellowship program & training
15:25	8. Lydia Briggs , Data Scientist, Great Ormond Street Hospital NHS Trust	Automated Data Processes in Clinical Operations – A pilot study for the Cardiac M&M meetings
15:35	Close	

Virtual Conference 2021 Day 2 Tuesday 9th November 2021

Time	Speaker	Title
09:30	Rich Gillett and Andrew Johnson , Patient Safety and Clinical Quality Directorate, Government for Western Australia, Department for Health	Down underR: our journey using R for quality assurance in Perth Australia
09:50	Sarah Culkin , Head of Analytics, NHSX	Free and open - what is the role of the centre?
10:10	Rony Arafin , Chief Operating Officer, AphA	Empowering Analytics using Open Source Tools
10:30	Emma Rand , Senior Lecturer in the Department of Biology at the University of York	You can make an R package too!
Break		
11:10	Jacob Anhøj , Centre of Diagnostic Investigation, Rigshospitalet, University of Copenhagen	Run Forest, run! - Understanding variation using runs analysis
11:30	Peter Higgins , Professor of Gastroenterology, University of Michigan	Introducing the {medicaldata} teaching package
11:40	Lluís Revilla Sancho , Bioinformatician	Improving (analysis) process: developing packages
12:00	Simon Wellesley-Miller , Information Manager at Devon Partnership NHS Trust and Christopher Reading , Divisional Information Specialist, Worcestershire Acute Hospitals NHS Trust	NHSRplotthedots
Break		
12:30	Simon Moss with Dr Richard Wood , NHS Bristol, North Somerset and South Gloucestershire CCG	Use of PathSimR to support COVID-19 mass vaccination and stroke service centralisation
12:50	Will Yuill , Principal Epidemiologist, Public Health, Hertfordshire County Council	Putting R into Production
13:10	Hazel Kirkland and Chris Beeley , Lead Pharmacist and Senior Data Scientist, Nottinghamshire Healthcare NHS Trust	Putting the R in phaRmacy- forecasting and stock control using R for pharmacy inventory management
Break		
15:00	Afternoon with International Colleagues	
15:05	Frank Harrell , Professor of Biostatistics in the School of Medicine at Vanderbilt University	Statistical Mistakes to Avoid
15:50	Gergely Daroczi and Ajay Gopal , Rx Studio Inc.	R package and APIs for Scaled Personalized Medicine
16:05	Jeroen Ooms , Staff Research Engineer with @ropensci at UC Berkeley	The r-universe project
16:25	Close	

Virtual Conference 2021 Day 3 Wednesday 10th November 2021

Time	Speaker	Title
09:30	Gary Hutson , Senior Data Scientist, Ascent	NHS-R Solutions
09:45	John Lodge , Head of Quality Improvement (London Region), NHS England and NHS Improvement. Co-founder of Hexitime	Hexitime: the skill exchange and timebank for improving health and care services
10:05	Suki Panesar , Deputy Director, NHS England and NHS Improvement	Connecting the data and analytic workforce and creating a social movement for good: the story of AnalystX
10:25	Simon Wellesley-Miller , Information Manager, Devon Partnership Trust	Interactive reports using HTML widgets in R Markdown
Break		
11:05	Hugo Cosh and Zoe Strawbridge , Public Health Wales	Shiny doesn't have to be scary: an easy way in with RMarkdown
11:25	Dr Kate Bamford , Senior Data Surveillance Scientist, East Midlands Health Protection Team UK Health Security Agency	Using R Markdown, Reactable and Crosstalk to create an interactive COVID-19 review tool
11:45	Kieran Zucker , NIHR Clinical Lecturer, University of Leeds	Self Service Analytics and Automatic Document Generation with R
Break		
12:25	Heather Turner , R-Ladies EPSRC Research Software Engineering Fellow, University of Warwick	Supporting Equality, Diversity and Inclusion in the R Community
12:45	Adam Watkins , Advanced Improvement Analyst/Uwch-ddadansoddwr Gwelliant, Improvement Cymru (Public Health Wales)	Mapping public transport travel times - building on and enabling the work of others
Break		
15:05	Lightning Talks	
15:10	1. Hugo Herrera , Head of Analytics, East Suffolk & North Essex NHS Foundation Trust	Analysing A&E capacity and demand with R
15:20	2. Dr William Bryant , Senior Data Scientist, Great Ormond Street Hospital NHS Trust	Predicting length-of-stay to improve patient flow – operational data science using R, `tidymodels` and `targets`
15:30	3. Neli Garbuzanova , Deputy Head of Transformation, NHS England	R challenges and opportunities in the delivery of NHS service
Break		
Key-Note		
16:00	Julia Silge , Data Scientist and Software Engineer at RStudio	Creating features for machine learning from text
16:45	Chris Beeley , Senior Data Scientist, Nottinghamshire Healthcare NHS Trust	Closing Remarks

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Speaker Biographies

Adam Watkins – Advanced Improvement Analyst/Uwch-ddadansoddwr Gwelliant, Improvement Cymru (Public Health Wales)

Adam Watkins is an improvement analyst who has worked in NHS Wales for nearly 10 years in Improvement Cymru and other national service improvement bodies in NHS Wales. In 2018, he was awarded AphA Analyst of the Year for his work on the implementation of the Welsh Nurse Staffing Levels Act 2016.

Adam and his colleagues in the Improvement Cymru analysis team are working on embedding R in their day-to-day work, and trying to better understand how they can use it and other tools to ensure that their work is reproducible, maintainable, and shareable across NHS Wales and beyond.

He's interested in how we can build and share analytical tools across the public sector in Wales and the UK. His presentation on driving and public transport times looks at how existing open source tools can be used with R to create travel-time matrices and other products that other analysts can easily use in their own work.

Ajay Gopal - Rx Studio Inc.

Andrew Johnson - Patient Safety and Clinical Quality Directorate, Government for Western Australia, Department for Health

Dr Andrew Johnson is a biostatistician with a background in neuropsychological research and Bayesian statistics – if you've ever had a problem using RStan, he's probably helped! Andrew joined WA Health in early 2021 and has since been working to align the WA approaches to healthcare quality monitoring with statistical best-practice, as well as to develop new methods.



Andy South - Data Scientist, University College London Hospital

Andy is delivering R [HYPERLINK "https://github.com/uclh-criu/learning-datascience"](https://github.com/uclh-criu/learning-datascience) training and mentorship for a group of clinicians at University College London Hospital. He has been active in the R community for more than 10 years. He is based at the Liverpool School of Tropical Medicine, also co-leading the afrimapr ([HYPERLINK "http://www.afrimapr.org"](http://www.afrimapr.org) www.afrimapr.org) project providing R components and training for mapping data in Africa.



Anne Alarilla - Senior Data Analyst, The Health Foundation

Anne is a senior data analyst at the Health Foundation, where she works with various data sets including patient-level and survey data to help develop a better understanding on how to improve care for people with complex needs. She previously worked as an analyst for Cancer Research UK and NHS Blood and Transplant. Her background is in psychology, particularly health psychology.

Ben Murch – Senior Analyst, NHS England and Improvement

I have worked in a variety of analytics roles within the NHS and healthcare, including several years as part of the modelling and analytics team at BNSSG CCG. I currently work with workforce data at NHS England and Improvement. I am a senior fellow of the NHSR Community and have degrees in mathematics and qualifications in healthcare leadership and analytics.



Chris Beeley - Senior Data Scientist, Nottinghamshire Healthcare NHS Trust

Christopher Reading - Divisional Information Specialist, Worcestershire Acute Hospitals NHS Trust

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Speaker Biographies

Colin Angus – Senior Research Fellow, University of Sheffield

Colin is a public health policy modeller, health economist and recovering mathematician who spends most of his time building and wrestling with complicated mathematical models related to alcohol policy and its effects on health and health inequalities. When he's not doing this he likes to draw graphs in R and post them on Twitter where he can be found @VictimOfMaths. Using ggplot as a coping mechanism he has spent much of the pandemic wrangling and visualising COVID data in an effort to make some sense of what has been going on.



Colin Fay - Data Science and Engineering at ThinkR

Ellen Coughlan – Programme Manager, The Health Foundation

Ellen Coughlan manages a programme of work at the Health Foundation seeking to advance the use of data analytics in the health and social care system. This portfolio has awarded over £3m funding to sixty projects in the health and care system, including the Strengthening Social Care Analytics programme that supports innovative projects to solve the challenges facing social care analytics in the wake of the pandemic. Ellen's background is in primary care, having led an analytics unit in one of the largest GP federations in the country, and also has experience in mental health service provision and tobacco and alcohol research.



Emma Gara - Head of Business Intelligence (Contracts and Commissioning) NHS Bristol, North Somerset & South Gloucestershire (BNSSG) CCG

I have worked in NHS analytics for 24 years, in various organisations along the M4 corridor, including consultancy work in NHS Wales. My current role in the Bristol, North Somerset and South Gloucestershire system is focussed on Mental Health and Primary Care. Last year I led the analytics work stream of the systems' response to the pandemic impact on mental health. A business case informed by the work led to £3m additional investment in a programme of mitigations. This project was an extension of that work.



Emma Rand – Senior Lecturer in the Department of Biology at the University of York

Emma Rand is a Senior Lecturer in the Department of Biology at the University of York where she specialises in data science and reproducibility. She leads the UKRI funded project Cloud-SPAN which trains researchers in cloud-based high performance computing for 'omics. She is a Software Sustainability Institute Fellow, the Teaching team lead for R Forwards and delivers R package development workshops online.



Frank Harrell – Professor of Biostatistics, Vanderbilt University School of Medicine, Nashville Tennessee, USA

Dr. Harrell received his PhD in Biostatistics from UNC in 1979. Since 2003 he has been Professor of Biostatistics, Vanderbilt University School of Medicine, and was the department chairman from 2003-2017. He was Expert Statistical Advisor for the Office of Biostatistics for FDA CDER from 2016-2020. He is Associate Editor of Statistics in Medicine, and a member of the Scientific Advisory Board for Science Translational Medicine. He is a Fellow of the American Statistical Association and winner of the Association's WJ Dixon Award for Excellence in Statistical Consulting for 2014. His specialties are development of accurate prognostic and diagnostic models, model validation, clinical trials, observational clinical research, cardiovascular research, technology evaluation, pharmaceutical safety, Bayesian methods, quantifying predictive accuracy, missing data imputation, and statistical graphics and reporting.



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Speaker Biographies

Gary Hutson - Senior Data Scientist, Ascent



Gergely Daroczi - CTO, Rx Studio Inc.

Gergely Daroczi is an enthusiast R user and package developer, Ph.D. in Sociology, former assistant professor, currently working in the industry with 15 years of experience in data science, engineering, cloud infrastructure, and data operations at SaaS, fintech, adtech, and healthtech companies with a strong interest in building scalable data platforms on the top of R and AWS. He maintains a dozen CRAN packages related to using R in production (automated reports, logging, database connections, API integrations), co-authored a number of journal articles in social and medical sciences, and wrote a book on "Mastering Data Analysis with R".



Hazel Kirkland - Lead Pharmacist, Nottinghamshire Healthcare NHS Trust

Heather Turner – EPSRC Research Software Engineering Fellow, University of Warwick

Heather is an EPSRC Research Software Engineering Fellow in the Statistics Department at the University of Warwick. She has previously worked as a statistician for Pfizer and as a freelance statistical programming consultant. She has been an R user since 2001 and has co-authored several CRAN packages, notably the statistical modelling packages gnm, BradleyTerry2 and PlackettLuce. Heather is on the board of the R Foundation and chairs the Forwards taskforce for underrepresented groups in the R community. She is also a co-organizer of R-Ladies Remote.



Hugo Cosh – Principal Public Health Intelligence Analyst, Public Health Wales

Hugo Cosh lives in Cardiff and works for Public Health Wales as a Principal Public Health Intelligence Analyst.

In the past few years, Hugo and his team have been learning to use R as a more efficient way of turning raw data into meaningful stories about the health of the Wales population.

As well as looking to develop the team's use of R to create reproducible analytical pipelines, Hugo has particular interests in data visualisation and exploring innovation through data science.



Hugo Herrera - Head of Analytics , East Suffolk and North Essex NHS Foundation Trust

Jacob Anhøj – Centre of Diagnostic Investigation, Rigshospitalet, University of Copenhagen

I am a medical doctor working at Rigshospitalet in Copenhagen, Denmark. I graduated in 1992 and after nine years of clinical work and research I worked four years in a pharmaceutical company with clinical research and health IT while taking a diploma in IT. Since 2005 I have worked almost exclusively with patient safety and quality improvement in healthcare. My main interest and area of research is the use of statistical methods in quality improvement. At present my main job involves surveillance of hospital infections and antibiotic use in the Capital Region of Denmark. I have used R since 1999 and am the maintainer of the qicharts2 R package.



Jay Hughes - Data Engineer, The Health Foundation

Jay is a data engineer at the Health Foundation. He works with analysts, researchers and data managers to build analysis tools, pipelines and data products to support innovative analyses. He also implements new, improved analytical workflows and helps to promote good data science practice and open working.

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Speaker Biographies

Jeroen Ooms – Staff Research Engineer with rOpenSci at UC Berkeley

Jeroen is the lead infrastructure engineer for the rOpenSci group at UC Berkeley. He has written (too) many CRAN packages, and also maintains the compilers and build infrastructure for R on Windows. In this presentation he talks about rOpenSci's r-universe project: an open, fully automated platform for publishing software and articles based on R.



Jessica Pang – Improvement Analyst, Improvement Cymru, Public Health Wales

Jessica Pang is an improvement analyst who has worked in NHS Wales for 7 years in Improvement Cymru (formerly 1000 Lives Improvement Service) in Public Health Wales. She is the deputy branch lead for the Welsh branch of AphA and recently became a professionally registered healthcare analyst. In 2019, fate (otherwise known as Kate, Jessica's manager) intervened and she picked up the programming language of R to create her first RShiny application. Through many mistakes and do overs, Jessica became an R user. Since that first foray into R, she has learnt many things that have improved her R coding and RShiny dashboard creations, many of them at previous NHS-R Community conferences.



This year, with her team mobilised to work on COVID-19, the knowledge used and accumulated since that first tool led the creation of a suite of applications to monitor different aspects of the operational side of sampling and testing within Public Health Wales. It is these dashboards and the process of building and developing them that Jessica will demonstrate today.

John Lodge - Head of Quality Improvement (London Region), NHS England and NHS Improvement. Co-founder of Hexitime

John is a senior manager in the UK NHS where he works as the Head of Quality Improvement for London. During his NHS career he has delivered healthcare change programmes at a national, regional and hospital level in the UK NHS and wider public sector. In 2018 he co-founded the skill exchange and timebank for improving healthcare services, Hexitime.com which has developed an international reach and won multiple innovation awards.

John is committed and focussed on empowering people and service users to innovate and participate in the improvement of health and care services. In recent years John has become a social enterprise entrepreneur to realise this passion and enjoys working with and mentoring other innovators to help people.

Twitter: @NHS_Man_John

LinkedIn: <https://www.linkedin.com/in/johnlodge/>



Julia Silge - Data Scientist and Software Engineer at RStudio

Julia Silge is a data scientist and software engineer at RStudio PBC where she works on open source modeling tools. She is an author, an international keynote speaker, and a real-world practitioner focusing on data analysis and machine learning practice. Julia loves text analysis, making beautiful charts, and communicating about technical topics with diverse audiences.



Kate Bamford – Senior Data Surveillance Scientist, East Midlands Health Protection Team, UK Health Security Agency

Kate has been working for UKHSA (formally PHE) since October 2020, where she has worked on various aspects of the pandemic response. Before this she completed a PhD at the University of Warwick on veterinary epidemiology, studying sheep mastitis. She has been using R for over 5 years, first to count sheep and now to count COVID!



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Speaker Biographies

Kieran Zucker – NIHR Clinical Lecturer and Honorary Clinical Oncology Specialist Registrar, University of Leeds

[Dr Kieran Zucker](#) | School of Medicine | University of Leeds

Lee Coulson - Senior Information Analyst, NHS Devon CCG

Lee is an ex telecomms engineer who moved into the public sector in 2006, and is currently a senior analyst for NHS Devon CCG. He has been involved in a wide range of analytics / systems development / web development projects and is passionate about using free and open source software in the NHS including Python, Linux, R and RShiny. He is currently studying part time for an MSc in Health Data Science at Exeter University.



Lluís Revilla Sancho - IBD lab of Dr. Julian Panès

Lluís is a bioinformatician currently working on his PhD at the IBD lab of Dr. Julian Panès. His research interests focus on functional enrichment and annotation. He likes helping improve processes for users in a variety of activities, from programming in research to open source activities. To assist in this process and for research he has created packages available at [Bioconductor](#), [CRAN](#), [rOpenSci](#), [rOpenSpain](#) and [GitHub](#).



Lydia Briggs - Data Scientist, Great Ormond Street Hospital NHS Trust

Lydia is a former Chemistry PhD student turned data scientist, working in the Digital Research Environment (DRE) at Great Ormond Street Hospital (GOSH). Over the past 18 months, Lydia has been involved in numerous dashboarding, statistical and analytical projects to aid clinicians with their research and provide insights into hospital operational management and patient care.



Madeleine Whelan – Senior Epidemiologist, Hertfordshire County Council

Madeleine is a Senior Epidemiologist at Hertfordshire County Council. Her role involves undertaking analysis to improve the understanding of health and factors which influence health within the local area. Over the past 2 years the team she works in has moved almost exclusively to completing analysis in R. Throughout the COVID-19 pandemic Madeleine was involved in the creation of analytics, modelling, and dashboards to monitor and predict the spread and impacts of COVID-19.



Martine Wauben - Interim Head of Data Science, DHSC

I am interim Head of Data Science at DHSC. Our team help analysts use data science practices and techniques on projects including COVID-19, medicines supply, and consultation analysis. I support data science capability and community building across health and social care, and advocate for open code and sharing across silos.



Mohammed Mohammed - Principal Consultant, The Strategy Unit

Professor Mohammed A Mohammed is an academic with extensive experience of applied health services research, including quality of care, patient safety and improvement science. Mohammed has 90+ peer reviewed publications, including landmark papers in the Lancet (on understanding variation in healthcare), BMJ (on bias in hospital mortality statistics), evaluation of a care bundle (JAMA Surgery) and a prize-winning study that developed an electronic frailty index for primary care (Age and Ageing).

Mohammed led the development of the first primary care mortality monitoring system (BJGP) and was an expert witness to the Shipman Inquiry (BMJ). His current research projects include the development of automated risk equations for use in hospitals (BMJOpen).

As academic director of the YH-AHSN and Improvement Academy, Mohammed has delivered scores of highly rated courses on variation, systems thinking, improvement science and mortality statistics to senior and front-line clinical staff in the NHS over the last ten years.

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Speaker Biographies

Natalia Domagala – Head of Data Ethics Policy, Cabinet Office

Natalia leads on data ethics policy at the Central Digital and Data Office, Cabinet Office in the UK. She previously advised on open government and open data policies for the Department for Digital, Culture, Media and Sport in the UK, and implemented open data challenges for 360Giving. She has research experience in anthropology, gender, civic tech, and economic development, and she has recently co-edited a book: [Situating Open Data: Global Trends in Local Contexts](#). Natalia is a Policy Fellow at the Centre for Science and Policy, University of Cambridge. She received her MSc in Local Economic Development from the London School of Economics and Political Science and her BA in Anthropology and Media from Goldsmiths, University of London.



Neli Garbuzanova - Deputy Head of Transformation – Specialised Commissioning and Health & Justice at NHS England, East of England

I am a legal, procurement and commissioning professional with significant experience working for international law firms, the European Commission, and the NHS. As Deputy Head of Transformation in the NHS, I am responsible for advising on and leading complex health services projects. My team and I provide evidence-based advice and support to senior leaders and teams to help design holistic strategies for NHS services and make informed decisions.



With a degree in International Commercial Law and MCIPS qualification, my experience includes negotiating novel procurement legislation at the European Commission, leading on NHS procurement policies, and cooperating with the United Nations to revise commercial regulations.

Peter Higgins - Professor of Gastroenterology, University of Michigan

Dr. Peter Higgins, MD, PhD, MSc (CRDSA – Clinical Research Design and Statistical Analysis) is a Professor of Gastroenterology and Hepatology at the University of Michigan.

He trained at Duke University, where he did his MD and a PhD in molecular cancer biology, and at the University of Michigan, where he did a Master's degree in Clinical Research Design and Statistical Analysis.

His clinical interest is in IBD, and he is the director of the IBD Program University of Michigan, where the IBD group cares for a cohort of 9,200 IBD patients.

He has served as the IBD editor of the American Journal of Gastroenterology, as a member of the AGA IBD Quality of Care Initiative, and as the chair for the AGA Immunology, Microbiology, and IBD section. He is the vice-chair of the Crohn's and Colitis Foundation Scientific Advisory Committee.

His basic science research interests are in the mechanisms and treatment of intestinal fibrosis in Crohn's disease, the use of novel imaging methods to measure fibrosis, and the role the microbiota play in IBD recurrence.

His clinical research interests include the development of novel anti-fibrotic therapies for Crohn's disease, value-based insurance models, rescue therapies for severe UC, and patient reported outcomes in IBD.

His interest in reproducible medical research led him to coding in R, and his teaching led him to develop the e-book (a work in progress) Reproducible Medical Research with R (https://bookdown.org/pdr_higgins/rmrwr/) and the {medicaldata} R package.

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Speaker Biographies

Peter Spilsbury – Director of The Strategy Unit

Peter is a nationally recognised expert in the use of analytical thinking combined with pragmatic action to drive strategic innovation in health and care services. He has a particular interest in collaborative working, grounded in clinical engagement and leadership, and the delivery of workable strategic change in complex systems. During his 35 year career with the NHS he has worked for hospitals, health authorities, regional authorities and primary care trusts in the West Midlands in director roles leading on commissioning, planning and strategy. He also has extensive experience in both programme leadership and assurance. He has a strong personal reputation for his integrity, commitment to NHS values and independence of thought, and is a trusted advisor for many.



Peter has worked on the development of national policy (including the Operating Framework) and was asked by DH to broker national agreements in relation to payment policies for specialist hospitals. He led a national review of Payment by Results reporting to the then Secretary of State, delivering 'Options for the Future of Payment by Results 2008/09-2010/11'.

Peter has led the development and evaluation of major strategic frameworks for whole economies as well as service strategies at a more granular level and large scale business cases. He has regularly participated in national programmes of strategic work in an advisory capacity. He has led many innovative programmes of work including Investing in Health in the West Midlands, with its ahead- of- its- time emphasis on early intervention and care closer to home. That cumulative experience, however, has led him to increasingly question the value of 'grand plans' and to become ever more focused on what can be done practically to enable the dynamics of self-improving systems, equipped with the right skills and fully informed by evidence and high quality analysis and feedback mechanisms.. For this reason he seeks out opportunities to work with health organisations and systems that are really driven to be innovative with discipline, that don't just swallow the latest fashion or group-think and that trust and support the imagination, skills and experience of their front line to do the right thing for their patients and public.

Peter has built The Strategy Unit over the last decade into a highly regarded, expert and trusted service that not only uses but also adds to the national and international evidence base about 'what works and why'- he revels in the team of people that he has gathered around him and the fantastic feedback they receive for the innovative, important and useful work that they do. Peter's continued ambition for the Strategy Unit, working with its partners, is to further grow in-house capability to undertake complex strategic work that makes a real difference and to offer the NHS, local government and the third sector a proven high quality consultancy alternative that works to NHS values

Peter studied at Magdalen College, Oxford University and has a degree in Politics, Philosophy and Economics.

Rich Gillett - Patient Safety and Clinical Quality Directorate, Government for Western Australia, Department for Health

Mr Rich Gillett is originally from the UK with over 20 years experience in performance, safety and quality reporting. He has been using R for over 10 years and has a focus on using the results from the analysis to drive better decision making and make a difference to the quality of the debate. Rich moved to Perth, Australia in 2017 in the Healthcare Quality Intelligence Unit at the State Government. He has introduced funnel plots and statistical process control charts to the way healthcare quality is monitored.



Dr Richard Wood – Head of Modelling and Analytics, BNSSG CCG

Richard set up the Modelling and Analytics team at BNSSG CCG in June 2018 to provide a specialist analytical service to one of the country's largest healthcare systems. Since its formation, he has led development of a linked data resource, combining health data records for the one million population, and has overseen a variety of analytical projects to improve healthcare management through better use of data. He has a special interest in reusable open-source models and projects at the interface of practical application and academia.

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Rony Arafin – Chief Operating Officer, Apha, Head of Analytics – NHS England and NHS Improvement



Rony has extensive Analytical and Business Intelligence experience, worked with various private and public sector organisations, and over 12 years' experience within the NHS, he is a Honorary Member of the University of Exeter Medical School.

Rony has been named as the Top 100 Most Influential Data Leader in 2021 (DataIQ), representing the analyst community in this prestigious list.

As the Head of Analytics for NHS England and NHS Improvement, Rony is leading the Data and Analytics team. In previous roles, Rony has worked as the Assistant Director of Information for the Devon STP, led Informatics teams in Acute, Community and Mental Health Trusts to deliver Business Intelligence, Clinical Systems and Application Development services. Rony has been responsible for delivering innovative analytics solutions, his work includes focusing on co-design, application of advanced methods to deliver insight and intelligence. He has also been at the forefront of the move to data visualisation to provide compelling stories.

Rony have successfully led various transformation and quality improvement programmes working with executives, clinicians and multi-disciplinary staff group at all levels to improve the quality of care and the experience of patients and colleagues.

Sarah Culkin - Head of Analytics and Data Science, NHSX



Following a PhD in Chemistry, Sarah joined the Government Operational Research Service (GORS) and has held a range of analytical and research positions both at the Department of Health and in the NHS. In 2015 Sarah established and led a Data Science Unit within the Department of Health. Following a stint in Data Policy in NHS England, Sarah was moved into the newly established NHSX, where she is Head of Analytics and Data Science and leads the NHSX analytics unit. The unit focuses on openly publishing work, building wider communities of practice, analytics support for NHSX programmes and missions, innovative analytics and data science and developing the analytical profession in health and care.

Sebastien Peytrignet - Data Analyst, The Health Foundation

Sebastien is a Data Analyst with the Health Foundation's Networked Data Lab, where he collaborates with teams across the UK using linked data. His background is in medical statistics, having worked on observational trials at Manchester's Centre for Musculoskeletal Research, as well as experience in consultancy and at the World Trade Organisation. He is originally from Switzerland and has a background in Economics.

Simon Moss – Simulation Engagement Analyst, Bristol, North Somerset and South Gloucestershire CCG

Simon is a Simulation Engagement Analyst within the Modelling and Analytics team at Bristol, North Somerset and South Gloucestershire CCG. Having joined the NHS in August 2018, Simon joined the team in September 2020 on secondment from the Insights & Engagement team at the CCG. He is currently working on facilitating end user involvement and uptake of PathSimR, an open source R-based tool designed to model patient flow and capacity along clinical pathways.

Simon Wellesley-Miller – Information Manager, Devon Partnership Trust (Soon to be moving to NHSE/I)



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Speaker Biographies

Suki Panesar – Deputy Director, NHS England and NHS Improvement

Sukhmeet trained as a clinician in emergency medicine and public health in London and enjoys playing in the domains of management consultancy, health policy and academia. Furthermore he is widely published in the field of health services research specifically patient safety and health system redesign. In his current role, he leads digital transformation, strategy and development across a large group of 500+ individuals across the disciplines of data and analytics across NHS England and NHS Improvement. The purpose of this team is to provide better insights to support decision-making across the system using a population health lens not only via useful products and services but also using a collaborative approach via the world's largest community of data professional and analysts (AnalystX).



Tom Jemmett – Senior Healthcare Analyst, The Strategy Unit

Before joining the Strategy Unit, Tom had over 10 years of experience working for the NHS as an Information Analyst in the acute sector at The Royal Wolverhampton NHS Trust and then at The Dudley Group NHS Foundation Trust. While at Dudley, projects included text mining A&E diagnoses and time series forecasting skin cancer referrals, as well as helping to develop the trusts Data Warehouse.

Tom completed his BSc in Computer Science and Pure Mathematics at The Open University and has a keen interest in Artificial Intelligence and Machine Learning.

Tom's recent work includes interactive Systems Dynamics modelling of Mental Health demand caused by Covid-19, an analysis of the last 2 years of healthcare activity for all decedents in the West Midlands and developing the training offer of the NHS-R community



Dr William A Bryant - Senior Data Scientist, Great Ormond Street Hospital (GOSH)

Will's first degree was in Physics, and he has a PhD in biochemical engineering. He spent 8 postdoc years building models of microbial metabolism, before moving into healthcare data science at GOSH. He has worked on dozens of research projects providing analytical support, modelling, and data engineering advice and in many other capacities whilst promoting advanced analytics as a vital component of modern healthcare within the NHS. In his current role he manages a small team of data scientists who provide analytics solutions to various stakeholders in the Trust, works to co-ordinate services between data teams and on proof-of-principle advanced analytics solutions for operational development (amongst other things).



Will Yuill – Principal Epidemiologist at Hertfordshire County Council

Will is Principal Epidemiologist at Hertfordshire County Council and a NHS/OHID Modelling Fellow at Cambridge Judge Business School. He leads a team specialising in using analysis to understand the distribution and determinants of health and wellbeing and to support evidence-based decision making to improve outcomes. During the COVID-19 pandemic, Will led on the adoption of R within Hertfordshire, with the team creating tools, dashboards, and analytics to enable senior leaders to understand and respond to the virus' impact and spread. The team are now starting to apply R to a wide array of public health topics, as well as promote R as a data science tool locally.



Virtual Conference 2021

Speaker Biographies

Zoe Strawbridge - Senior Public Health Intelligence Analyst, Public Health Wales

Zoe Strawbridge lives in Bristol and works in Cardiff for Public Health Wales as a Senior Public Health Intelligence Analyst.

Zoe enjoys exploring new datasets using innovative methods and developing automated processes to support more efficient ways of working. Zoe currently project manages a team of 6 people, developing an R shiny profile to help visualise data on the recovery from the covid-19 pandemic. Within this role Zoe enjoys exploring opportunities to develop her R skills and knowledge.

