#### NIHR Applied Research Collaboration Oxford and Thames Valley Showcase 2022

# Event programme and brochure

www.arc-oxtv.nihr.ac.uk arc\_oxtv@phc.ox.ac.uk @arc\_oxtv



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# A message from our director

#### **Professor Richard Hobbs, CBE**

Head of Department, Nuffield Department of Primary Care Health Sciences, University of Oxford



I am delighted to welcome you to the ARC Showcase Event 2022, an opportunity for people to learn about and experience some of the tremendous work that's going on to improve the health of people in our region, and the wide variety of research and capacity development that's underway within the ARC.

The aim of the event is to

raise awareness of all the work that we have been doing but also to bring in more of our partners, creating opportunities for more collaborative working and greater alignment with local needs. In these ever-changing times, there is so much demand for people's resource and capacity, part of our role is to support you and we hope you will get a sense of the support we can provide to underpin research in our evolving health and care systems.

Today provides a wonderful opportunity for people from many different organisations and disciplines to come together to talk about and explore the contribution that health research makes to improving lives by finding better ways of delivering health and care, from new drugs to new ways for people to help themselves. Health research can add years to life and quality of life to years, it can also help the NHS, Social Care and Public Health systems become more efficient and effective. Please take the opportunity to talk to as many of our research teams, ARC staff and our partners, and to share your priorities for research and health improvement across the region.

A key priority for us all is to improve health equity and with that in mind we have tried to showcase some of the work that we've been doing through this brochure, as well as through the presentations today and launching new initiatives to provide resource and knowledge exchange to reduce health inequity, through more inclusive involvement in and recruitment to research.

This is our first in-person event since the ARC was formed back in 2020; it is a real opportunity to bring people together and we hope that this will be the first of many opportunities for us to meet different stakeholders and work more collaboratively as we plan for the future to support our health and care systems.

## About the NIHR ARC OxTV

We are the National Institute for Health and Care Research (NIHR) Applied Research Collaboration Oxford and Thames Valley (ARC OxTV).

The NIHR funds, enables and delivers world-leading health and social care research that improves people's health and wellbeing and promotes economic growth.

The ARCs are a collaboration of health, social care and public health focused organisations (including universities, local NHS trusts, councils and charities) working together in the Oxford and Thames Valley region. We are hosted by Oxford Health NHS Foundation Trust and led from the University of Oxford's Nuffield Department of Primary Care Health Sciences.

We carry out "applied" research – research intended to solve practical problems – as opposed to more curiosity-driven "basic research". By sharing our resources and expertise and working closely with our partners and the people of the region, we research solutions to the health and social care priority problems of local people, NHS and social care services, as well as broader national priorities.

Where our research shows a benefit for patients and the public, we work with our NHS and social care partners to put these findings into action much faster than is typical for new research findings.

We strive to increase the region's ability to do this kind of work. We do this through training and developing new systems of working together and sharing knowledge, creating a legacy of applied research ability.



# A message from our host organisation

#### **Dr Nick Broughton**

Chief Executive Officer, Oxford Health NHS Foundation Trust



able to provide. The trust also hosts other parts of the NIHR infrastructure which provides considerable join up and avoids duplication. We are able to pool resources across the different funding streams and really support each other to deliver our different parts of this complex research ecosystem.

I have been really pleased to see how the ARC has developed, partnerships have grown and strengthened and hope you will agree with me from what you see today that there is a diverse portfolio of research that's going on, from small community support projects right the way through to national evaluations and clinical trials.

The focus on applied research and the partnership with the Academic Health Science Network, as well as our health and care partners, means that we can truly get the research evidence into practice much faster.

We have been able to adapt to real-life situations and develop new ways of delivering research in order to accommodate rapid roll-outs and the demands of the health and care system.

The ARC outputs have already shaped policy, services and interventions, added to the evidence base, and this is not just locally but nationally focusing on where the need is.

Today provides us with an opportunity to share more widely what's already happening, what is in progress and, of course to see what our future priorities should be, aligned with NIHR's vision for applied health and care research. We would very much appreciate your support and input in the influencing and shaping of this strategy for the future and for you to come on this journey with us.

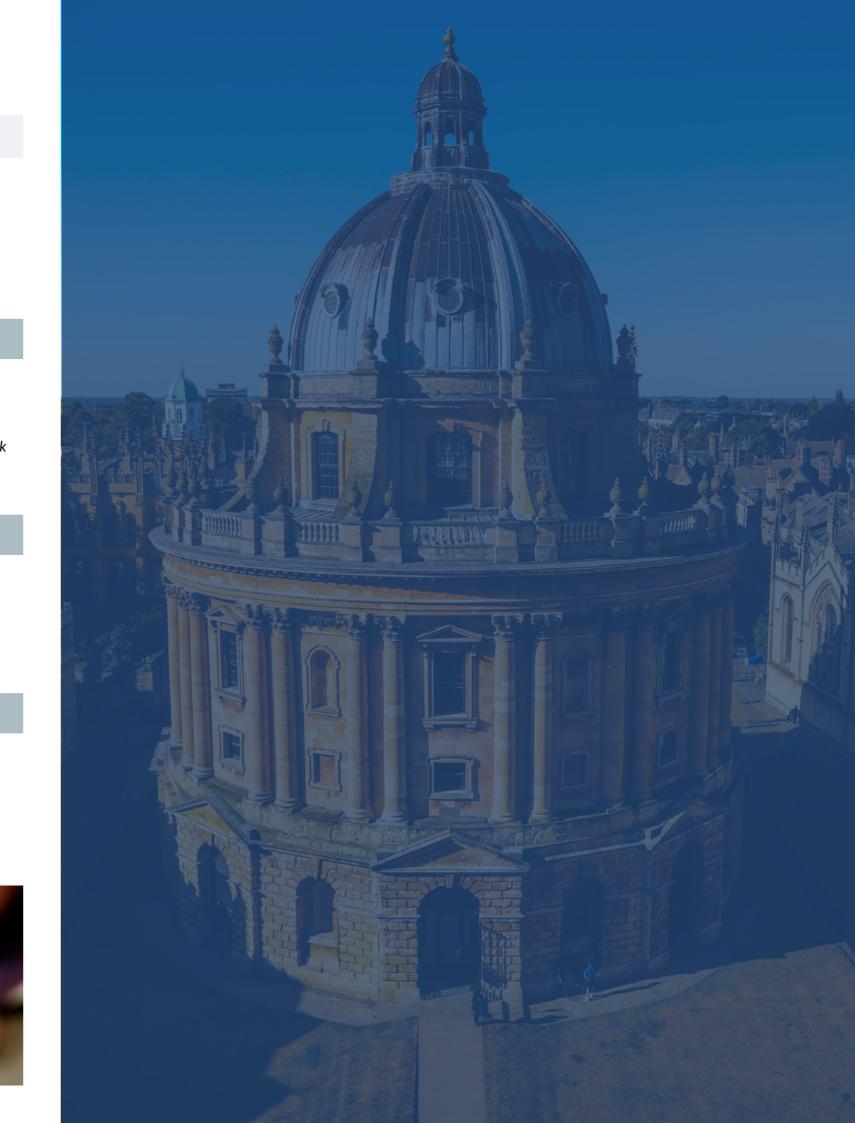
As the host trust for the Applied Research Collaboration Oxford and Thames Valley we are proud to see all that has been achieved, particularly through the challenging times of the COVID pandemic.

The ARC has been incredibly agile in terms of the research infrastructure and support that they've been

# Full programme

Morning session	9.00	Registration and poster viewing			
	9.30	Welcome, overview of the day and introduction to the ARC	Prof Richard Hobbs & Dr Nick Broughton		
	10.00	NIHR's Vision for the Future	Prof Lucy Chappell	Session Chair: Prof Richard McManus	
	10.20	ARC & Academic Health Science Network Partnership and Opportunities	Prof Gary Ford		
	10.40	Panel Q&A			
	11.00	Tea break and poster viewing			
	11.30	Mental Health	Prof Mina Fazel, Prof Cathy Creswell, & Prof Andrea Cipriani		
	12.00	Integrated Care and Care Home Research	Prof Apostolos Tsiachristas & Dr Jonathan Taylor	Session Chair: Prof Raymond Fitzpatrick	
	12.30	Maternity and High Blood Pressure	Dr Katherine Tucker & Lucy Goddard		
Afternoon session	1.00	Lunch and poster viewing			
	2.00	Prevention: Implementation of Interventions for Underserved Populations.	Dr Paul Doody & Dr Lauren Bandy		
	2.30	Digital Health – NHS App	Dr Claire Reidy	Session Chair: Dr Sara Ward	
	2.45	Family Safeguarding	Dr Ruta Buivydaite		
	3.00	Tea break and poster viewing			
	3.15	Current Landscape Focus on Health Inequalities (NHS Race and Health Observatory)	Prof Habib Naqvi		
	3.30	Health Equity and the Role of Community Engagement	Prof Mahendra Patel	Session Chair: Prof Stavros Petrou	
	3.45	Closing remarks and poster prize-giving	Prof Stavros Petrou		





# **Speaker Biographies**



#### **Professor Richard Hobbs, CBE**

Head of Department, Nuffield Department of Primary Care Health Sciences, University of Oxford

Richard Hobbs is Nuffield Professor of Primary Care at the University of Oxford, and Head of the Nuffield Department of Primary Care Health Sciences.

He has served many national and international scientific and research funding boards in the UK, Ireland, Canada and WHO, including the BHF Council, British Primary Care Cardiovascular Society and the ESC Council for Cardiovascular Primary Care. He currently chairs the European Primary Care Cardiovascular Society, a WONCA Special Interest Group.

He is one of the world's most referenced academic leaders in primary care, and has developed at Oxford one of the largest and most highly ranked centres for academic primary care globally. He has also made major contributions to growing primary care academic capacity, in terms of people development and research networks.

He is only the fifth ever recipient of the RCGP Discovery Prize in 2018 (an occasional award made since 1953) and received the first Distinguished Researcher Shine Prize from WONCA World in 2018.



#### **Dr Nick Broughton**

Chief Executive Officer, Oxford Health NHS Foundation Trust

Nick was appointed Chief Executive Officer of Oxford Health NHS Foundation Trust on 15 June 2020.

He brings a wealth of experience to Oxford Health, having joined from Southern Health NHS Foundation Trust, where he led the organisation from a Care Quality Commission rating of 'Requires Improvement' in 2017 to 'Good' in January 2020.

Prior to that, Nick was Chief Executive of Somerset Partnership NHS Foundation Trust, where he also led the trust from 'Requires Improvement' to 'Good'. As a consultant psychiatrist for more than 20 years specialising in forensic psychiatry, he has held medical and clinical director roles, and a variety of other managerial positions, including as a director of Imperial College Healthcare Partners. He obtained his medical degree from Cambridge and completed his training at St. Thomas' Hospital, London.



#### **Professor Lucy Chappell**

Chief Executive Officer of the NIHR and Chief Scientific Adviser to the Department of **Health and Social Care** 

Professor Lucy Chappell is also chair of the NIHR Strategy Board. She has overall responsibility for DHSC research and development and for supporting the Department's analysis.

Lucy is also Professor of Obstetrics at King's College London, Honorary Consultant Obstetrician at Guy's and St Thomas' NHS Foundation Trust, and President of the Blair Bell Research Society. She is an NIHR Senior Investigator, a former NIHR Research Professor, and was previously a member of the NIHR HTA Clinical Evaluation and Trials Board.



#### **Professor Gary Ford, CBE**

Chief Executive Officer of Oxford Academic Health Science Network

Professor Gary Ford is also Consultant Stroke Physician at Oxford University Hospitals NHS Foundation Trust, and Professor of Stroke Medicine at Oxford University. He is current Chair of the AHSN Network of 15 AHSNs across England and implementation lead for the Oxford and Thames Valley NIHR ARC.

He has been involved in many service innovations in UK stroke care in the last 20 years including developing the first thrombolysis protocol for acute stroke in England and the Face Arm Speech Test (FAST). Gary was Director of the National Institute for Health Research (NIHR) Stroke Research Network from 2005 to 2014. He was awarded a CBE in 2013 for services to research in stroke medicine.

He is a non-executive Director at NICE and a member of the NIHR Strategy Board. In 2018 Gary was identified as one of seven NIHR research legends whose work has transformed care in the NHS.

#### **Professor Richard McManus**

Professor of Primary Care Research, Nuffield Department of Primary Care health Sciences, University of Oxford

Richard McManus is a GP and Professor of Primary Care Research at the University of Oxford who leads a programme of research around self-monitoring of blood pressure. He is particularly interested in how self-monitoring can be used to ensure patients receive remote management at times when face-to-face clinic appointments are difficult.

He leads Oxford's contribution to the NIHR School for Primary Care Research. He chairs the Blood Pressure Monitoring Working Party of the British Hypertension Society and is a Chair of the NIHR Doctoral Fellowship Panel. He has provided expert advice to NICE (member of 2011 and 2019 Hypertension Guideline Development Groups), and the European Society of Cardiology/European Society of Hypertension (member of 2018 Guideline Development Group).

Richard also leads the 'Helping Patients to Manage Their Own Conditions' theme within the NIHR ARC OxTV.

#### **Professor Mina Fazel**



Professor of Adolescent Psychiatry Department of Psychiatry, University of Oxford

Mina's research focuses on how to improve access to mental health interventions for children and adolescents.

She has a particular interest in school-based mental health interventions and each year since 2019 her team has been running the OxWell Student Survey in order to better understand what school pupils need and when. In 2021 they collected data on over 30,000 young people from 180 schools across ten regional authorities.



#### **Professor Cathy Creswell**

Departments of Psychiatry and Experimental Psychology at the University of Oxford

Cathy Creswell is a Professor of Developmental Clinical Psychology in the Departments of Psychiatry and Experimental Psychology at the University of Oxford, an Honorary Consultant Clinical Psychologist in Oxford Health NHS Foundation Trust, and an NIHR Senior Investigator. Cathy leads the 'Mental Health across the Lifecourse' theme in the Oxford and Thames Valley ARC.



#### **Professor Andrea Cipriani**

NIHR Research Professor Department of Psychiatry, University of Oxford

Andrea is NIHR Research Professor at the Department of Psychiatry, University of Oxford, and Honorary Consultant Psychiatrist at Oxford Health NHS Foundation Trust. His main interest in psychiatry is evidence-based mental health and his research focuses on the evaluation of treatments in psychiatry, mainly major depression, bipolar disorder and schizophrenia.

He is also currently Editor-in-Chief of Evidence-Based Mental Health, and on the Editorial Board of the Lancet Psychiatry and the Australian and New Zealand Journal of Psychiatry.



#### **Associate Professor Apostolos Tsiachristas**

Associate Professor at the Health Economics Research Centre (HERC). University of Oxford

Apostolos is an Associate Professor at the Health Economics Research Centre (HERC), University of Oxford, where he is leading a programme of research that focuses mainly on the economic evaluation of new models of care delivery and organisation, as well as on financial incentives in healthcare.

Apostolos is involved in several experimental and observational studies across a wide range of services for prevention, diagnosis and treatment in diverse clinical areas including mental health, geriatrics, diabetes, cardiovascular disease and cancer.

#### **Dr Jonathan Taylor**

Researcher, Health Services Research Unit, Department of Population Health, University of Oxford

Jono Taylor is a Researcher within the Health Services Research Unit working on the provision of high-quality health and social care services. Jono has a BA in History (University of Cambridge), MPhil in Social and Economic History (University of Cambridge), and a DPhil in Social and Economic History (University of Oxford).

Before joining the University of Oxford, Jono worked as a Senior Research Associate, based at the University of Bristol's School for Policy Studies. Jono was responsible for managing an NIHR-funded project which sought to improve the health and wellbeing outcomes of care leavers.



#### **Dr Katherine Tucker**

Senior Researcher, Nuffield Department of Primary Care Health Sciences, University of Oxford

Katherine is an Academic Research Fellow Lead for the Nuffield Department of Primary Care and the NIHR ARC OxTV Training / Career Development Lead.

With over 20 years' experience of working in academic research relating to human health, Katherine's research expertise is in cardiovascular pathology and diagnosis working in hypertension research, in particular developing and testing interventions to support patient involvement.



#### Lucy Goddard

Lucy is a registered midwife and is currently working towards a DPhil at the University of Oxford, based in the Nuffield Department of Primary Care Health Sciences. She is supervised by Professor Richard McManus, Dr Katherine Tucker, Dr Nerys Astbury and Dr Jennifer MacLellan.

Lucy has a keen research interest in understanding more about the determinants of health and adverse outcomes specifically in relation to weight, diet and physical activity during pregnancy. Lucy's thesis is exploring the role of lifestyle interventions during the antenatal period for women who experience high-risk pregnancies.

#### **Professor Ray Fitzpatrick**

University of Oxford

From 1998 to 2003 Ray served on the Council of Medical Research Council, and Chair of MRC's Public Health and Health Services Research Board. From 1996 Ray has been Professor of Public Health and Primary Care at the University of Oxford. He served two periods as Head of the University's Department of Public Health.

Ray was Fellow and Dean, Nuffield College, Oxford. He was National Programme Director, NIHR Health Services and Delivery Research. He was a member of the Scientific Advisory Committee, Arthritis Research UK. He is Deputy Director of a Department of Health and Social Care Policy Research Unit ('Quality, Safety Outcomes of Health and Social Care' (QSO)). He is a PI and theme leader of the recently awarded NIHR Oxford & Thames Valley Applied Research Collaboration (ARC). The focus of his research is on evaluation of health and social care services, and the use of evidence from patient reported outcomes and measures of health status and patient experience.



Postdoctoral Health Service Researcher, Nuffield Department of Primary Care Health Sciences, University of Oxford

Paul joined the Health Behaviours Team at the Nuffield Department of Primary Care Health Sciences in January 2022 as a Postdoctoral Health Service Researcher, primarily on the National Enhanced Service Incentive for weight management in primary care (NESIE) project.

Prior to joining the University of Oxford, he worked as a Postdoctoral Research Fellow on the Irish Longitudinal Study on Ageing (TILDA) at Trinity College Dublin, University of Dublin, where he remains a Visiting Research Fellow.



#### **Dr Lauren Bandy**

#### Post-doctoral Researcher, Nuffield Department of Primary Care Health Sciences, University of Oxford

Dr Lauren Bandy is a post-doc researcher in the Food Purchasing group of the Health Behaviours team. She is interested in how the food environment shapes our diet and our health. Her research explores how food sales data and nutrition composition data can be used in combination to monitor how food companies are responding to nutrition policies in the UK, including the voluntary sugar and salt reduction targets and the Soft Drink Industry Levy.

She also works with leading supermarkets to evaluate the impact different in-store interventions have on food purchasing patterns, and more recently has joined a working group on the out of home food sector with the local authority in Oxfordshire.



#### DPhil student, Nuffield Department of Primary Care Health Sciences, University of Oxford

#### Emeritus Professor of Public Health and Primary Care, Department of Population Health,



#### Dr Ruta Buivydaite

Research Associate in Risk and Safety Lab, Department of Experimental Psychology, University of Oxford

Ruta's research interest is in improvements and interventions on a system level. She is currently working on evaluation of a new Family Safeguarding model that is implemented by Oxfordshire County Council.

The aim of this new model is to introduce multidisciplinary teams (including of adult workers) that are more efficient and family-focused. The aim of her research is to evaluate the effectiveness of the FSP model by using different performance indicators. She is also closely working with service users and other relevant stakeholders to co-produce key measures and assist with implementation of this new model.



#### **Dr Sara Ward**

**Chief Operating Officer, Oxford Academic Health Partners** 

Sara's academic career included research and teaching in molecular and developmental biology with the MRC, at St Mary's Paddington and Great Ormond Street Institute of Child Health. Since relocating to Oxfordshire, she has directed a broad range of research, management, strategy and performance improvement activities while based at Saïd Business School and subsequently as an interim manager and independent consultant.

Sara returned to the medical sciences in 2018 and has been actively involved in applied research and collaborations in health and care since then. She is a member of the Oxford and Thames Applied Research Collaboration (ARC) Strategy Board. Now employed in the NHS, she is on another journey of discovery as the operational lead for Oxford Academic Health Partners, working across complex organisational boundaries.



#### **Dr Habib Naqvi**

**Director of the NHS Race and Health Observatory** 

Dr Habib Naqvi is Director of the NHS Race and Health Observatory, which works to identify and tackle ethnic inequalities in health and care by facilitating research, making health policy recommendations and enabling long-term transformational change.

Habib joined the NHS in 2001, managing large public health research programmes in the South West of England. He spent a number of years working at the Department of Health and Social Care where he led national equality and diversity policy, including on the health sector's response to the UK government's review of the Public Sector Equality Duty.

He joined NHS England in 2013, where he directed the development and implementation of national health equity programmes for the NHS workforce, patients and communities. Habib has spoken and written widely on health equity and has given evidence to the House of Commons Health and Social Care Committee.

Habib volunteers as a trustee of the Mary Seacole Trust and at Somerset County Cricket Club. He was awarded an MBE in the 2019 Queen's Birthday Honours for services to equality and diversity in the NHS and was listed in the Health Service Journal's '100 most influential people in health in 2022'.

Habib is on Twitter: @DrHNagvi



#### **Dr Claire Reidy**

Health Services Researcher, Nuffield Department of Primary Care Health Sciences, University of Oxford

Dr Claire Reidy is a Chartered Psychologist, Implementation Scientist and Health Services Researcher at the Nuffield Department of Primary Care Health Sciences. Claire is currently working on evaluating the national roll-out of the NHS App in England using qualitative research methods.

Her research interests lie in digital health and digital innovations, health psychology, selfmanagement strategies, as well as the part that social networks and social support play in managing a long-term condition, especially Type 1 diabetes and Type 2 diabetes.

#### **Professor Mahendra Patel, OBE**

Professor of Pharmacy at multiple UK universities and overseas in US

Mahendra is a multiple award-winning pharmacist and academic with a national and international profile. He is Professor of Pharmacy at UK universities and overseas in the US and until recently in Penang Malaysia.

He is a founding member of the Royal Pharmaceutical Society and has served them for many years as National Pharmacy Board Member and Treasurer. His outstanding contributions in advancing pharmacy have been regularly recognised, receiving a Fellowship from the Royal Pharmaceutical Society and the prestigious President's Charter Award.

Mahendra is one of the national leads in the world's largest recruiting randomised interventional clinical trials for Covid-19 treatment with the University of Oxford. His innovative work with NICE led him to become one of the first to gain a fellowship with NICE (2013).

He is a Patron of the Commonwealth Pharmacy Association supporting work in less economically advanced countries. He no longer leads on the International Federation of Pharmacists (FIP) Champions Programme with 50 Pharmacy Champions appointed across the world.

Mahendra is highly active in promoting issues of equality, diversity and inclusion (EDI) within the NHS. In 2019, he received an Outstanding Service Award for the British Association of Physicians of Indian Origin (BAPIO). He is a formal advisor on EDI matters to many national pharmacy organisations and is Professional Advisor to the Chief Pharmaceutical Officer NHS England. He has an important role as board member of the newly established UK Commission on Pharmacy Professional Leadership.

Mahendra was recognised in the Queen's New Year's Honours 2022 for services to pharmacy and was made an Officer of the British Empire (OBE). He has since received the highly distinguished Pharmacy Business Ram Solanki Lifetime Achievement Award.

#### **Professor Stavros Petrou**

Sciences, University of Oxford, NIHR ARC OxTV Deputy Director

Stavros Petrou is Professor of Health Economics in the Nuffield Department of Primary Care Health Sciences. Having previously held posts as Health Economist at the University Oxford (1997-2010) and Professor of Health Economics at the University of Warwick (2010-2019), he returned to Oxford in July 2019.

A highly regarded academic, he is one of only two health economists to have held an MRC Senior Non-Clinical Research Fellowship. He has been an NIHR Senior Investigator since 2017. He has served as a core member of the Department of Health's Policy Research Programme Commissioning Panel, a member of NIHR Programme Grants for Applied Research funding panels, and currently serves on a number of external committees and editorial boards. He serves as a mentor to mid-career academic researchers through the NIHR mentoring programme.



#### Professor of Health Economics, Nuffield Department of Primary Care Health

# The ARC OxTV Core Team

#### **Dr Paula Wray**

#### **Senior Manager**

Paula provides project management and manages the ARC core team. Paula's key areas of interest are around reducing health inequalities, improving public involvement practice and capturing the many facets of impact. She sits on the NIHR Equality, Diversity and Inclusion Programme Board and is a workstream lead for the development of the NIHR Value Framework.

#### Sarah Brown

#### **Programme & Implementation Manager**

Sarah works with researchers and clinicians to help improve outcomes for patients and the public by supporting the implementation of ARC research outputs into practice.

She works closely with the Oxford Academic Health Science Network (AHSN) who are driving the implementation of ARC research outputs both regionally and, where relevant, nationally.

#### Dr Bethan McDonald

Public Health and Social Care Lead, Consultant in Public Health UK Health Security Agency Bethan is a Consultant in Public Health working within the ARC OxTV and the UK Health Security Agency. Her roles within research and practice facilitate collaborations across the local public health infrastructure.

#### **Dr Claire Schwartz**

#### Programme and PPI Manager (currently on maternity leave)

Claire previously worked on cardiovascular research in Bristol, Birmingham and the University of Oxford, with a particular interest in improving the management of hypertension. Claire leads on patient and public involvement (PPI) in the ARC and has experience of working with patients and the public in research, and using their expertise and unique perspectives.

#### **Esther van Vliet**

#### **PPI Manager (maternity cover)**

Esther is part of Claire's maternity cover. She focuses on PPI within the governance of the ARC and the review and implementation of various processes within the ARC, related to PPI and beyond.

#### **Una Renard**

#### Public Involvement Officer (maternity cover)

Una is the other half of Claire's maternity cover. She is the first point of contact for public contributors and researchers. Una works on community engagement and supports the development of PPI training.

#### **Dawn Shaw**

#### **Administrative Assistant**

Dawn is a key part of the ARC team, responsible for many vital administrative activities and helping the rest of the team to stay organised.

#### **Ana Mendez Franco**

#### **Grants Officer**

Ana is also a key member of the ARC's core team. She manages the finances of the ARC, allowing the rest of the team to focus on supporting our researchers and the ARC's wider vision.

#### **Gavin Hubbard**

#### **Communications Lead**

Gavin supports researchers and staff to communicate their work: its meaning in a broader context and its impacts to a wide range of different groups, including directly engaging with the public.

# How the NIHR ARC OxTV works

#### **NIHR ARC OxTV Operational Organisation**



## **NIHR** National Institute for Health and Care Research

ARC OXTV I Chaired by Al Director	Executive Group RC OxTV
unning of the AF	ager ger opment Lead Care Lead
s	ARC Implementation Oversight Group Provides oversight of the progress of implementation of ARC research outputs, and reports to the Executive group Membership:

# **Training and** capacity building



The NIHR ARC OxTV promotes the development of skills in producing, understanding and using evidence in the health and social care, and public health sectors.



# In numbers

Researchers from across the UK and EU have attended the 'Designing

effective infographics, data visualisation, and visual abstracts' online training to date



### supported by the NIHR **ARC OxTV**

AHP. social care or public health research Interns



Intake for the newly created MSc in Applied



**Digital Health** 

Senior research

#### We offer a wide range of opportunities and programmes to those working in the Thames Valley region and beyond.

- Care
  - Pre- and post-doctoral Internships for Allied Health Professions (AHPs) and others working in health and social care or public health. Co-funded with Health Eduction England (third round recently confirmed)
- Senior Research Fellowships jointly with local NIHR partners Oxford Health Biomedical Research Centre (mental health specialism) and Oxford Biomedical Research Centre
- real-world evaluation

  - Introduction to Evidence Based Practice online course (Centre for Evidence Based Medicine, University of Oxford) (University of Reading, University of Oxford)
  - Academic mentorship for Public Health Specialty Registrars
  - Funding for Doctoral Studentships
  - Communications training (delivered in partnership with the NIHR ARC West), including:
    - How to win at Twitter

To find out more about any of our opportunities, visit our website www.arc-oxtv.nihr.ac.uk or email arc\_oxtv@phc.ox.ac.uk

- Our training programmes and opportunities include:
- Webinars for patients and the public
- Two new Master's degrees in Applied Digital Health and Social

- Novel methodologies including Interrupted Time Series for
- Research training for Public Health workforce, including: • Research skills workshops and webinars (Ethox, Oxford University, Oxford Brookes University)

- Designing effective infographics, data visualisation, and visual abstracts (also delivered for NIHR SPCR Trainees Day 2022) • Writing for a lay audience
- Bursaries for externally run courses for example, Real World Evidence, Implementation and so on

# Implementation

Implementation is the process of promotion and uptake of health and social care, and public health interventions (treatments, services or diagnostics) that have proven effective in research into routine practice.

Implementation of research outputs is key to support the delivery of the ARC's vision:

'Improving people's health, wellbeing and care, by working together with all involved in Oxford and the Thames Valley'

However, the process of implementation is not straightforward; what works for one research output in one setting, might not work for another. Implementing research outputs into the highly complex health and care system is what we call a non-linear process.

To help navigate this, we work closely with **Oxford Academic Health Science Network** (AHSN), who have extensive expertise in successful implementation, adoption and spread of evidence-based innovations within this system.

Additionally, the understanding of our local and regional priorities working with the Oxford AHSN brings, and being responsive to these priorities, is more likely to result in successful implementation.

Through this collaborative approach, we can provide implementation support to all ARC projects from development stage through to conclusion and final outputs, ensuring that the work we support has the best possible chance to make an impact in the shortest possible time.

To support us in achieving the above, we have developed an Implementation Strategy which contains four main pledges (see right).

#### Implementation of research outputs locally, regionally and nationally

One of the main aims of the ARC is the successful implementation of research outputs which are responsive to and reflect the local and regional priorities within the health and care system.

#### **Evaluation of implementation of** research outputs

It is important to evaluate how easy it was to implement research outputs and innovations into routine, ongoing care as a matter of course. This can be achieved through the academic field of implementation science. There are many different implementation frameworks and theories which can be used to support this.

### **Capacity development**

We will provide opportunities to support staff to develop knowledge, experience and confidence in implementation science and implementation practice, along with the skills needed to complete effective real-world evaluations.

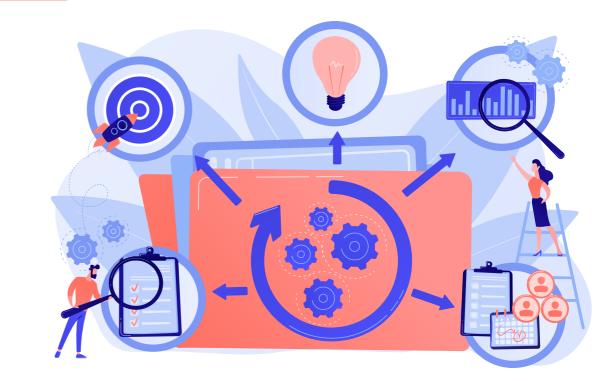
#### Establish a joint approach to realworld evaluation

There is an increasing recognition of the importance of rigorous and robust real-world evaluations of service transformations to understand the benefits as well as the harms. This information can then be used to inform future commissioning decisions across the health and care system.

#### Where to find out more

- View or download our implementation strategy via our website : www.arc-oxtv.nihr.ac.uk/implementation
- Contact Sarah Brown (Programme and Implementation Manager): sarah.brown@phc.ox.ac.uk

# **Evaluation support**



**Evaluations tell us what** works and what does not.

An evaluation should be a rigorous and structured assessment of a completed or ongoing activity.

Are you currently planning or considering completing an evaluation?

The NIHR ARC OxTV may be able to help.

We offer an evaluation service. which ranges from drop-in clinics to more in-depth support.

Once the ARC Core Team have The service is open to health and reviewed your request, we will either pass it to relevant ARC theme care organisations, public health and third sector organisations across leads for further consideration or Oxford and the Thames Valley. signpost you to other organisations for support if we are unable to help.

The aim of the service is to increase the capability and capacity for organisations to complete their own well-designed evaluations of a programme, service or initiative, to understand what is working well and where improvements could be made. normally one-off meetings) or

To access the service we will need you to complete a short form; this gives us all the information we need to triage your request.

It is important your evaluation aligns with the priorities and research themes for the ARC (see www.arcoxtv.nihr.ac.uk/our work).

Also, you will need to have funding in place for your evaluation or be

#### Where to find out more

- For more information please contact Sarah Brown (Programme and Implementation Manager) sarah.brown@phc.ox.ac.uk
- Visit www.arc-oxtv.nihr.ac.uk/evaluation to complete the form or find out more.



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considering where to source this from.

The theme leads may meet with you to understand your evaluation in more detail, suggest a drop-in clinic for high-level support and guidance with your evaluation (these are decline the request, providing a reason for this.

Occasionally, we may provide more in-depth support with an evaluation; this is most likely if there is strong alignment with our priorities and sufficient funding is available.

# Patient and Public Involvement in the NIHR ARC OxTV

Patient and public involvement (PPI) and community engagement run throughout the NIHR Applied Research **Collaboration Oxford and Thames** Valley's programme.



Through PPI, the ARC ensures that lived experience from patients, carers, service users and members of the public have direct input in how research is conducted and how our organisation runs.

PPI within the ARC is tailored to the needs of each project.

Some work in collaboration with charities and their members, others have setup their own panels around a certain lived experience, or researchers have built relationships with individuals. Emphasis is put on what lived experience is relevant to the project and who should have a place at the table to strengthen the project.

#### **Examples of PPI within the ARC:**

#### Young people's advisory groups

Young people advisory groups have been invaluable to the OxWell Schools work (See page 25).

The research team relied on the groups to help shape their questions and there were also discussions with other stakeholders including teachers, headteachers and commissioners.

The young people involved initiated dissemination of the research findings via TikTok, and two school leavers were employed as part of the team to lead this.

#### **Older and Frail Persons Focus** Group

As part of the development of their NIHR advance postdoctoral fellowship application on participation in strength and balance training by older adults, a researcher worked with the ARC PPI team to setup an 'Older and Frail Persons Focus Group' meeting.

Here they gained input for their application from eight individuals aged 75-86 who attended this one-off session, which helped shape the successful fellowship application.

#### **Our PPI offer to partner organisations**

- We have PPI expertise in-house and can advise you on how to set this up within your organisation or deliver a training session on PPI for your team
- Community organisations who are looking to evaluate their work can gain support and training from our researchers in how to do an evaluation
- We are keen to collaborate with other organisations to reach out jointly to minoritised communities to build relationships with them
- To read more about PPI within the ARC, take a look at our website: www.arc-oxtv.nihr.ac.uk/public-involvement

# The CUBE

#### The Cube is a Public Involvement Evaluation Tool being piloted between ARC **OxTV and ARC West**

There has been increasing emphasis on the need to evaluate public involvement for a number of reasons, including demonstrating impact and value for money to funders.

Fundamental to successful public involvement is the idea that people with different kinds of knowledge need to work together to solve complex problems, e.g. people involved in the delivery of services may need to work with scientists and patients or the public to tackle an important issue.

These people need to be able to share their different perspectives on an equal basis, so that the value of each person's contribution is understood and acknowledged.

This may sound obvious enough, but in practice it is often difficult to achieve. There are a number of reasons for this.

Traditionally, in our society, scientific knowledge has been seen as more valuable than other forms of knowledge.

National Institute for Health and Care Research



"The evaluation cube is a fascinating way of judging the impact of public involvement. It is simple to complete and gives both researchers and public contributors information into where the public input is working well and where it could improve and provides valuable insights into any different perceptions that can lead to closer working in partnership."

one another.

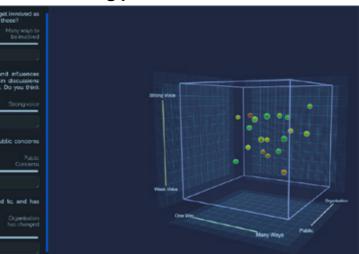
public.

Public Contributor with experience of using the Cube Framework

#### Where to find out more

- Anyone wishing to use the Cube should email cubesupport@thisequals.net (if you are an ARC OxTV researcher, say so, as you will be covered as part of the joint ARC pilot)
- Research published in the journal *Health Expectations*: Evaluating patient and public involvement in health research: from theoretical model to practical workshop. Available online at: doi.org/10.1111/hex.12486

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Furthermore, organisations are often hierarchical in structure and are working with limited time and resources and in competition with

All these things can work against the possibility of creating egalitaria working relationships between professionals and patients and the

#### **The Cube Framework**

So, how do we know if we have created genuinely egalitarian working relationships that are



needed to maximise the potential of public involvement?

We have developed a fourdimensional framework that will allow you to 'map' the quality of your public involvement.

This involves you rating your involvement along four different dimensions. This can be done faceto-face or online.

Different people can rate involvement along each dimension and add comments so that a visual representation of the 'map' of involvement can be built up.

The tool can be used within the same project at different points in time to identify important issues, provide feedback and assess progress in addressing them.

The Cube can also be used to compare involvement between different projects or organisations.

Digital health 
• COVID-19 
• Completed work

**Leveraging Faith-Based Organisations in Raising Awareness on Pulse Oximetry:** an exploratory mini-study

#### At a glance

- Oxfordshire is a predominantly affluent area but has pockets of high deprivation and health inequalities
- Working with local GP practices, we realised there was a large socio-economic skew in who uses oximeters (i.e. more educated and affluent people have oximeters)
- Covid-19 has had a bigger impact on those over 65. with co-morbidities, from a minority ethnic background and/or those who live in more deprived areas
- We ran an exploratory qualitative study in partnership with Oxfordshire CCG and Oxford AHSN. where we distributed free pulse oximeters through community partners to people in need
- Equity of access to pulse oximetry was improved



### Background

It is known that patients with serious coronavirus symptoms often do not go to hospital early enough, and this can have a negative impact on outcomes.

Promoting general public knowledge of monitoring with pulse oximeters can mean people whose health is deteriorating rapidly but without visible signs are more likely to be identified and can get the help they need as guickly as possible.

Some populations are at much higher risk of developing COVID-19 and its complications. These include:

- people aged over 65 •
- those with co-morbidities (e.g. diabetes, lung disease, heart disease)
- people from minority ethnic groups
- poorer people.

Individuals falling into more than one of these groups are at even greater risk.

Early oxygen therapy improves outcomes in acute Covid-19, but many people who need it have 'silent hypoxia' (i.e. no symptoms). Pulse oximeters help to detect this. These simple devices measure oxygen levels and heart rate. They can give early warning that someone is unwell with Covid-19 or another health condition.

Distribution of pulse oximeters and other medical devices requires individuals to have a fixed address; individuals with homelessness therefore do not get access. This study gave them access to the technology and was supported by the local GP practice who could not initially provide the technology due to the fixed address requirement.

This inequity should be flagged when other initiatives are rolled out.

### What we did

A collaboration between community leaders, GPs, NHS commissioners, researchers and the Oxford AHSN supported groups at greater risk from Covid-19.

Between January 2021 and September 2021 pulse oximeters were made freely available at a local food bank, mosque and a homeless shelter linked to a GP practice.

They were given to 15 people at each venue along with supporting information. These people were subsequently contacted as part of a research study.

Key themes that emerged included:

- initial lack of knowledge around what an oximeter is and what it can be used for
- willingness to learn how to use a pulse oximeter and take regular readings at home
- enthusiasm and positivity around the device's ease of use
- lack of preventive education around Covid-19 and viruses in • general in vulnerable communities
- community platforms as potential route to raise awareness on the benefits of pulse oximetry.

#### **Real-world impact**

Equity of access to pulse oximetry was improved. Community leaders, trusted and well-respected figures in minority groups, have the capacity to influence healthcare promotion and engagement on a communal scale.

Engaging with trusted figures, tapping into existing community support systems and utilising word-ofmouth spread could all help to enfranchise vulnerable communities.

The lessons learned from this initiative are being applied to disseminating health education through other community networks.

Recommendations were provided to Oxfordshire CCG on how to improve the uptake of pulse oximeters in deprived groups. The Oxford AHSN shared learning from this initiative regionally and nationally through AHSN and NHS networks.

#### Where to find more

• Read Laiba's blog post at: www.phc.ox.ac.uk/oximetry

**"The lessons** learned from this initiative are being applied to disseminating health education through other community networks."

#### Who

A collaboration, led by DPhil Student Laiba Husain, between:

- community leaders,
- GPs,
- NHS commissioners.
- University of Oxford researchers, and
- the Oxford AHSN.

- Oxford AHSN Patient Safety case study: bit.ly/AHSNOximetry
- Email: laiba.husain@phc.ox.ac.uk

Mental health 

COVID-19

Emergency Services

Ongoing

**Supporting Hospital** and Paramedic **Employees during and** after Covid (SHAPE)

#### At a glance



Reliable recovery rates for PTSD, after just six weeks



Reliable recovery rates for depression, after just six weeks





#### Background

There are many ways to save a life. The latest research shows that improving the health of doctors, nurses, ICU staff and paramedics improves the delivery of patient care.

This means people seeking hospital treatment get better care from staff who are well.

Before the pandemic, we had developed an evidence-based intervention that halved rates of PTSD and depression in paramedics.

During the pandemic, we modified it to target risk factors that are specific to healthcare workers.

Called SHAPE, the programme achieves reliable recovery rates of 94% for PTSD and 65% for depression in just six weeks.

We are now evaluating whether this training for new wellbeing coaches across the south-east is good value for money and effective.

"Work-related stress has been an all-time high for me and my peers due to the COVID-19 pandemic. Fortunately, though, my weekly calls with my wellbeing coach have mitigated that stress significantly. For this, I am eternally grateful. I feel very lucky to have had this support."

- A paramedic who had SHAPE over six weeks.

### **Potential**

Do wellbeing coaches, outside of the development team, achieve similarly high recovery rates? Answers to our questions will give vital information about how to implement the programme across England, in other countries and how to update it for at-risk occupations.

Working with seven NHS Trusts, we expect to improve the lives of over 200 healthcare workers by the end of September 2022 and with further funding, over 400 in the next year.

Importantly, this project offers scope to reach significantly greater number of people as we determine robust methods for dissemination nationally that could also be applied internationally in our work with our collaborators in Singapore, Australia, the US and Canada.

Studies have demonstrated that improving the health of frontline staff improves the delivery of patient care, meaning that the impact of a healthy hospital workforce directly benefits the general population through earlier physical health recovery and return to work after hospital treatment.

These sorts of benefits are invaluable, with potential for substantial societal cost savings.

#### Pathways to impact

To use this research in the real-world, outside of a trial, we need to demonstrate that SHAPE can be scaled up and still work as well as the original intervention.

This is often a challenge in public health.

We have adopted a train-the-trainer model to train a core group of wellbeing coaches who could become supervisors to train and supervise further wellbeing coaches in the delivery of the SHAPE intervention.

We currently have 40 trained wellbeing coaches to deliver SHAPE.

We will compare the outcomes they achieve with their cases to the outcomes achieved by the research team.

This will allow us to evaluate our wellbeing coach outcomes and calculate the costs associated with delivering SHAPE, including supervision, which will inform the potential success and costs of this approach for much wider adoption across the NHS.

#### Who

The SHAPE team works with **Oxford Centre for Anxiety** Disorders and Trauma at the University of Oxford.

#### **Partner organisations**

- NHS England and NHS **Improvement South East** region
- Berkshire Healthcare NHS • Foundation Trust
- Surrey and Borders Partnership NHS Trust
- University Hospitals Sussex **NHS Foundation Trust**
- Southern Health NHS Foundation Trust
- Kent and Medway NHS and Social Care Partnership Trust
- Oxford Health NHS Foundation Trust
- Homerton University Hospital NHS Trust

#### Where to find more

- www.shaperecovery.com
- www.arc-oxtv.nihr.ac.uk/ research/SHAPE

Research in practice • Learning • Global • Ongoing

### From clinical trials to clinical practice: Making research count for patients

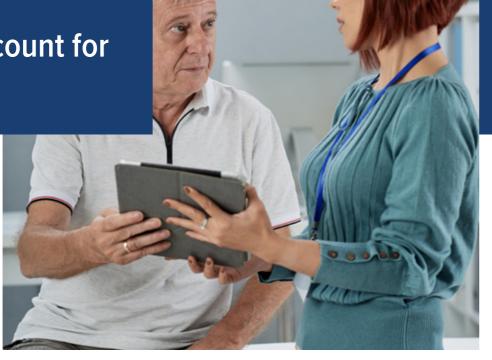
**Clinical research is carried out** to improve how people are cared for.

However, research findings can take a long time to change clinical practice and actually reach patients.

This project's main goal is to create and test a way for researchers to share their findings with clinicians so that they can be used in their everyday clinical practice and help patients faster.

By using a digital learning and implementation strategy, we can give clinicians quick access to resources and information.

We went on to show that clinicians who finish the digital learning packages can give high-quality care to patients.



### Background

Typically, it takes 17 years for clinical research to become standard healthcare practice.

When new interventions (treatments or services) do make it into healthcare practice, there is no guarantee that they will stay the same and work as well as they did in the research that generated them.

To give patients faster access to new health innovations while keeping the effectiveness of interventions, new approaches are needed.

The goal of this project was to come up with and test a way to speed up the process of putting evidence-based physiotherapy interventions from clinical trials into everyday practice - an 'implementation operating model'.

We collaborated with colleagues from the University of Exeter to develop this work, supported by funding from the NIHR ARC OxTV and the Mireille Gillings Foundation (University of Exeter).

Contact

#### Where to find out more

• www.ndorms.ox.ac.uk/rrio

www.ndorms.ox.ac.uk/SARAH-translated

• Dr Esther Williamson esther.williamson@ndorms.ox.ac.uk

#### What we did

After identifying the target intervention, our implementation operating model involves:

- 1. Using the knowledge gained from a clinical trial, along with input from patients and the public, to co-create a digital learning and implementation package. This includes groups of patients and health professionals in the UK, Turkey, India, Japan, Canada and Brazil.
- Using feedback and service evaluations to monitor clinical effectiveness and repeatedly refine and improve the digital package.
- 3. Making the digital package freely available with ongoing evaluation, including information about reach and the experience of learners through embedded questionnaires.

### Key findings

Service evaluations conducted for two of the digital packages (back pain and Rheumatoid arthritis) demonstrated that when health professionals completed the digital package and then provided the intervention to patients, clinical outcomes were similar to trial results. Thus, demonstrating that effectiveness had been maintained.

### What does this mean?

Using a digital learning and implementation strategy means that we can share effective interventions rapidly with clinicians so that the benefits can reach their patients in a much shorter time frame than through traditional means, such as relying on published papers.

The digital learning and implementation package for recovery after breast cancer surgery was available within six weeks of publication of clinical results.

The comprehensive learning packages mean that clinicians have access to high-quality training to maintain fidelity of the treatments as they are translated from a clinical trial into real-world clinical practice.

#### **Real-world impacts**

We have reached 20,000 learners to date. The digital learning packages are freely available and can be accessed at any time from any location making them highly accessible.

Although the majority of packages are designed for health professionals, we know that many people living with health conditions also complete the courses. Universities are also using the learning packages with their students.

This work is continuing to expand with digital training packages being developed for recently completed NIHRfunded physiotherapy trials of interventions for older people with spinal stenosis (BOOST Trial) and rotator cuff disorders (GRASP Trial).

We are evaluating a digital package designed for people with rheumatoid arthritis so they can access a hand exercise programme directly via the internet to make this programme accessible to as many people as possible.

#### Digital learning packages (free to access)

- www.futurelearn.com/courses/cbt-for-back-pain
- www.futurelearn.com/courses/prevention-of-shoulder-problems-prosper-programme
- www.futurelearn.com/courses/pdsafe-falls-prevention-in-parkinsons-the-therapists-approach-

#### Who?

- Dr Esther Williamson (University of Oxford)
- Dr Cynthia Srikesavan (University of Oxford)
- Professor Sallie Lamb (University of Exeter)
- Dr Helen Richmond (University of Exeter)

### In numbers

### 20,000

**70**%

4.5

Learners have engaged with our digital learning packages over the last three years, from

#### **183 countries**

Materials for patients with **Rheumatoid Arthritis translated** into

#### **13** languages

of learners reported learning new knowledge and skills

report putting their learning into use

out of 5, average quality rating of courses (range 4.5 - 4.8)

Training 
• Research capacity building • Digital health

### Master's programme in **Applied Digital Health**

A one-year, full-time course, designed to teach the interdisciplinary knowledge and skills needed to drive innovation in the fastgrowing area of digital health.



#### Background

Digital health is the use of digital information, mobile and smart technologies, and connectivity to improve health and health services. Over the last ten years, it has become an important part of healthcare in the UK and around the world. These technologies have the potential to:

- make delivery of healthcare more efficient,
- make access to care easier.
- lower healthcare costs,
- improve equity and quality of care, and
- make care and treatments more personalised and accurate.

Digital interventions, diagnostics and monitoring can help with cheaper, remote care that doesn't take place in expensive hospital settings. They can also help people make decisions quickly, improve scalability, reduce travel and revolutionise care when the information gathered at medical visits isn't enough to diagnose or treat someone.

With the help of new digital data sources, epidemiology (the study of how often diseases occur in different groups of people and where) and disease surveillance (detecting disease outbreaks quickly before they spread) could be improved, and real-time evidence could be used to back up health policy.

With health apps and websites, people can get better access to services and learn how to take care of themselves.

Digital health has a lot of potential that needs to be used for the future of health services and the economy, both in the UK and elsewhere. To do this, people need to be given the skills and knowledge they need right away.

### What does this mean?

In response to this need, the Applied Digital Health theme of the NIHR ARC OxTV, led by Professor John Powell, has created a new Master's programme in Applied Digital Health that is open to students from many different fields.

This is a one-year, full-time course that teaches the interdisciplinary knowledge and skills needed to drive innovation in this fast-growing area.

It uses the strengths of the ARC OxTV and the Nuffield Department of Primary Care Health Sciences, as well as the University of Oxford's other experts.

The course is made up of eight taught units, which are followed by a ten-week dissertation.

Each module focuses on a different way digital health can be used to solve problems in healthcare in the 21st century.

Clinical informatics for better monitoring of care quality and public health, using electronic health data to improve diagnosis and prognosis, improving outcomes through remote patient monitoring and digital diagnostics, using digital tools to help people change their physical and mental habits, putting in place more efficient and effective models of primary care, and lowering the cost of care are some of the solutions.

Currently open for applications for entry in 2023-2024.

#### **Module titles**

- Foundations of Digital Health
- **Clinical Informatics for Trials and Health Surveillance**
- Harnessing Big Data to Improve Care
- Remote Monitoring and Digital Diagnostics
- Supporting Health Behaviour Change using Digital Tools
- Digital Transformation of Primary Care
- Economics of Digital Health
- User-focused Design and the Lifecycle of Digital Health Innovation

#### Where to find out more

- Online at www.phc.ox.ac.uk/MSc-applied-digital-health
- Email: adh@phc.ox.ac.uk

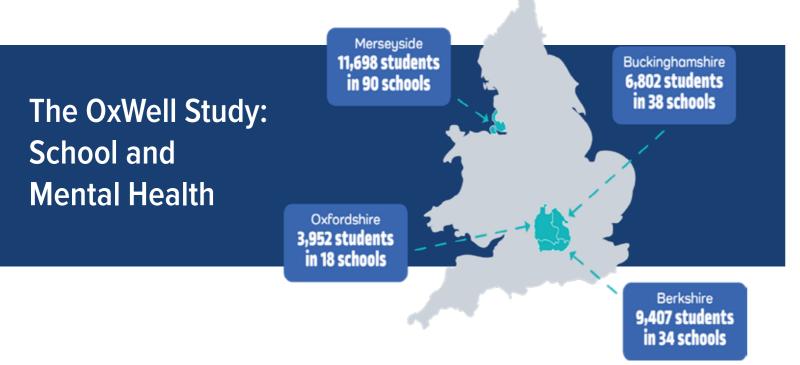


Adolescence 

Partnership building 

Informing services 

Ongoing



The OxWell Student Survey measures the wellbeing (health and happiness) of children and young people aged 9-18.

The survey is a collaboration between young people, schools, local authority partners and the OxWell Study team at the University of Oxford's Department of **Psychiatry**.

The questions in the survey address a range of issues relevant to wellbeing, including questions about lifestyle and school life (see diagram below).



### Background

OxWell aims to better understand the mental health and wellbeing of school students by:

- Asking about their worries and how they might like to receive support
- Providing schools and services with information about what young people want
- Supporting positive change by providing insights into young people's lives and experiences
- The survey has already collected data from over 50.000 students in three waves of data collection (2019-2021).



### What does this mean?

The research generated by the survey is now being used at a national, local and school level to help provide valuable insights into what students need, which factors influence their wellbeing and how they would like to access help if they have mental health difficulties.

The crucial next step is to respond to what young people have told us by providing the kinds of support that young people want and need, supported by professionals and their local communities.

We intend to use the dataset to carry out much more research, and we will work closely with young people and partners to continue to maximise its impact.

### **Key findings**

OxWell has found that:

- Loneliness is widespread and associated with a range of negative outcomes
- Informal sources of support following self-harm are most often sought but not necessarily perceived as sufficiently helpful
- There are barriers to accessing care primarily around privacy concerns
- Poor sleep is common
- Bullying concerns are prominent
- A sense of 'school belonging' is important to respondents.

### 2023 and beyond...

OxWell has big plans for the future, inducing:

- Rolling out interventions: starting with primary schools
- Even more ambitious survey to cover:
  - the cost of living crisis
  - experiences of racism
  - shape and weight concerns
- New survey for special schools
- Many more analyses planned, including on adversity, migration, service preferences and substance misuse.

#### Where to find out more

- Online at www.oxwell.org and www.psych.ox.ac.uk/research/schoolmentalhealth
- All research information is online at DOI: 10.17605/OSF.IO/SEKHR
- **@oxwell study**

#### Who?

- Professor Mina Fazel (University of Oxford)
- Dr Holly Bear (University of Oxford)
- Dr Galit Geyulayov (University of Oxford)
- Dr Simon White (Cambridge University)

#### In numbers

### 50.000+

**Students** 

200+ Schools

4 **Counties in England** 

9 Peer-reviewed publications

4 Youth advisors

#### 38.000

Views of an influencer's TikTok video about OxWell: bit.ly/OxWellTikTok

Health behaviours 

Shopping 
Diet 
Policy 
Completed

### The impact of removing promotional stands of seasonal confectionery on food purchasing behaviour

The UK government is planning to introduce changes to where confectionery and other foods high in sugar, fat and salt can be promoted in supermarkets.

In order to establish what impact this policy might have on shopping habits, we worked with a leading retailer to evaluate a realworld trial.



### Background

The amount of energy and sugar we consume in our diet exceeds the dietary recommendations in the UK for all age groups, and in 2021, two in three children aged 10-11 were overweight or obese.

As part of its Childhood Obesity Strategy, the government has introduced legislation to restrict the promotion of foods high in sugar, fat and salt from prominent locations in stores, such as ends of aisles and by checkouts.

We evaluated an in-store intervention to test the impact this legislation might have on what we buy in the supermarket.

#### What we did

We partnered with a major retailer to remove free-standing promotional displays of Easter confectionery products between February and April of 2019 in 34 stores in two areas of London.

We compared weekly sales in stores where no displays were used vs. in 151 control stores where no changes to the promotional stands were made, using an interrupted time series analysis.

We assessed the impact of removing the promotional displays on the weekly sales of confectionery, measured by value (GBP) and volume (kg), and if it changed the amount of sugar, fat and salt people were buying.

### **Key findings**

We found that the number of seasonal confectionery items sold only increased by 5% in the intervention stores during the run up to Easter, compared to an increase of 18% in the control stores where the promotional displays remained.

There was also a reduction in the total number of calories and fat purchased from these products, but no difference in the amount of sugar or saturated fat sold.

#### What does this mean?

Removing seasonal confectionery promotions from prominent locations in supermarkets can reduce the amount of unhealthy foods people are buying in store.

This study showed that even changes to just one subcategory of foods - seasonal confectionery - led to reductions in the calorie content of total food purchases.

This provides promising evidence that the legislation in England to restrict promotions of less healthy foods may help reduce overconsumption and improve the population's diet.

#### **Real-world impacts**

The results of these findings were disseminated to retailers and manufacturers of the Consumer Goods Forum (CGF) via a report.

We are also continuing our work with retailers to try and evaluate the impact of other in-store changes to the placement, promotion and price of other food categories high in sugar, fat and salt.

Evidence from this trial might also be useful to local Public Health teams that are considering working with local businesses, such as independent corner stores.

#### Where to find out more

- The summarised results are published in the journal PLOS Medicine at: dx.plos.org/10.1371/journal.pmed.1003951
- For more information, contact Dr Lauren Bandy: lauren.bandy@phc.ox.ac.uk



#### Blood pressure • Pregnancy • Self-monitoring • COVID-19 • Completed

### Measuring blood pressure in pregnancy during Covid

High blood pressure is a problem for around 1 in 10 women during pregnancy, and can put both mother and baby at risk. Blood pressure is therefore checked at most antenatal clinics.

The coronavirus pandemic had a profound effect on such blood pressure monitoring, with NHS **England distributing** around 16.000 monitors to maternity units for selfmonitoring use, as well as the rapid development of guidelines for selfmonitoring.

This project aimed to assess how well responses aiming to increase self-monitoring faired, considering both maternity units and women.



### Background

The COVID-19 pandemic forced the clinical community to adopt selfmonitoring of blood pressure for pregnant and postnatal women (SMBP).

At the start of the COVID-19 pandemic, national guidelines for selfmonitoring in pregnancy were quickly produced.

Pregnant women were advised to avoid social contact and isolate themselves to avoid COVID-19.

Guidance recommended prioritising self-monitoring for women with high blood pressure during pregnancy, those at risk of high blood pressure or those required to self-isolate.

NHS England offered free BP monitors for pregnancy, and 71% (125/177) maternity units in the UK accepted.

Maternity units received 16,000 BP monitors.

### What we did

We aimed to examine how maternity units used SMBP during the COVID-19 pandemic and its benefits and drawbacks for women and healthcare professionals.

Our evaluation included surveys of maternity unit staff and women, interviews with women, and analysis of routine information about women with monitors.

#### Maternity survey

NHS England emailed all 125 maternity units in England that received free BP monitors to complete a survey.

#### Pregnant and post-partum women surveyed

Using an online survey, maternity units asked pregnant or post-partum women about self-monitoring. The charity Action on Pre-eclampsia (APEC) advertised the survey on Twitter.

Analysis of maternity unit data on women provided with self-monitoring All maternity units that received free BP monitors from NHS England/Improvement were asked to provide anonymous information about women (and their babies) who used one to measure their own blood pressure.

#### In-depth interviews with women

Between January and March 2021, phone interviews were conducted with self-monitoring women at five NHS hospitals. Two social scientists with experience interviewing pregnant women invited and informed women about the study.

### Key findings

Self-monitoring was mostly used to provide additional BP monitoring for women with high blood pressure or those thought likely to develop it.

Overall maternity units and women were positive about its use in terms of reducing the need for additional face-to-face contacts and giving women more control and insight into their own BP.

However, there were challenges in setting up self-monitoring services rapidly and making them work within the usual clinic set-up. Particular issues were around interpreting self-monitored readings and getting monitors back after pregnancy.

#### What does this mean?

Many maternity units in England began a self-monitoring service for women with or at risk of high blood pressure from March 2020.

For this kind of service to work in the longer term, more information is needed as to how to best adapt long-standing clinical practice to include self-monitoring, as well as including guidance on things like what to do if a woman's own readings are very different from her doctor's or midwife, and what to do after the baby is born.

#### **Real-world impacts**

This project has already had significant real-world impact, in that NHS England are already using the results to understand how best to use selfmonitoring of blood pressure in the future.

In linked work from our group, we know that many women with high blood pressure have taken the issue into their own hands and have bought their own monitors to better understand what is happening to their own blood pressure.

These results are a good example of how ARC-funded work, in this case including collaborations between Oxford and London, can help to understand common issues affecting thousands of women each year.

#### Where to find out more

- The summarised results are published in the journal Pregnancy Hypertension at: doi.org/10.1016/j.preghy.2022.07.006
- Email: arc oxtv@phc.ox.ac.uk

#### **Collaborators**

- NIHR ARC OxTV

- School of Life Course Sciences, King's College London
- Nuffield Department of Primary Care Health Sciences, University of Oxford
- Institute of Applied Health Research, University of Birmingham
- Nuffield Department of Women's & Reproductive Health, University of Oxford
- The Healthcare **Improvement Studies** Institute, University of Cambridge
- Maternity and Women's Health Policy Team. NHS England and NHS Improvement

Health records • Data • Safety and privacy • Covid-19 • Ongoing

Unlocking the value of health data in the midst of a pandemic: OpenSAFELY



Developed rapidly to answer urgent clinical questions about COVID-19, research generated using the OpenSAFELY software platform – the world's largest secure analytics platform for electronic health records - had a near immediate impact on both healthcare and policy.

OpenSAFELY set a new standard for accountable, open and safe computational data science using electronic health records.

### Background

The UK is in a unique position when it comes to health data. Our GP records are perhaps one of the richest and most complete sources of health data in the world. Tapping this resource has the potential to uncover associations, links or other patterns that could both change healthcare for individual people and the way healthcare is delivered, for the better.

The rapid response in a time of huge uncertainty due to the emergence of COVID-19 underscored the potential of such a resource to understand which traits, pre-existing conditions or groups of people were most at risk from infection, and respond accordingly to protect them.

But how to do this safely, securely, accountably and quickly without exposing patients sensitive - and confidential - data, or risking this data falling into the wrong hands by moving it about the country for analysis?

#### What we did

The OpenSAFELY team managed this where others had failed, and in a way that, importantly, still safeguarded people's data.

Rather than copying, moving or downloading the data to analyse elsewhere, risking infringing people's privacy (even if pseudonymised first), OpenSAFELY went straight to the horse's mouth, as it were.

They worked with the organisations that store the GP data as part of business as usual for the NHS – specifically TPP and EMIS – and developed an open-source software platform that enables researchers to run code across the GP data remotely, without them ever needing to see the data or to move it.

Importantly, they also worked with patients' groups, representative bodies, and privacy advocate groups to ensure that the approach was acceptable to all.

It meant that trusted researchers - following a rigorous application process - could safely and securely run analyses and ask questions on almost real-time data from around 58 million people without that data ever leaving its original secure database.

All queries run against the GP data are logged, all approved projects, and all analytical code is shared in the public domain so that everyone can see what the data is being used for, and others can re-use or sense check the analytical code.

### What does this mean?

So, what does all this mean? What can be done with access to all these patient records?

The truth is, we're at the tip of the iceberg at the moment. But so far, there are 84 separate projects using OpenSAFELY-TPP and OpenSAFELY-EMIS, from researchers across the UK.

The lessons learned from building OpenSAFELY have also been used as sevidence in the government-commissioned review Dr Ben Goldacre is leading on better, broader and safer access to health data for research.

However, the project has also had more tangible and immediate impact as, indeed, it was set up and hoped to.

For example, OpenSAFELY-TPP and OpenSAFELY-EMIS were used to provide answers to urgent clinical questions early in the pandemic, identifying those most at risk of hospitalisation or death from COVID-19, the risks associated with living with children, and the effectiveness of certain COVID-19 treatments.

A further important impact was the discovery and confirmation of ethnic differences in infections and COVID-19 hospitalisation in England, with some minority ethnic populations facing both higher risks of infection and worse outcomes than the white population. Finally, OpenSAFELY was included as a case study in a series of citizens' juries commissioned by NHSX, the National Data Guardian, and was included as a case study in the NHS data strategy.



The citizens' juries, carried out by colleagues at the NIHR ARC Greater Manchester, found that the jurors considered OpenSAFELY to be the most transparent, trustworthy and secure of the three datasharing initiatives looked at.

To summarise, OpenSAFELY-TPP and OpenSAFELY-EMIS have demonstrated the power of leveraging one of the UK's greatest and most unique healthcare assets - NHS GP records - and continues to do so. As a fully portable, modular and open-source software platform, it can be used to unlock such benefits from any healthcare database in England or elsewhere.

#### Where to find out more

- You can find more details, findings and links to the tools themselves at: www.opensafely.org
- Or follow the project on twitter @OpenSAFELY

#### **OpenSAFELY** studies

To date, OpenSAFELY has been used to investigate and provide crucial information to the NHS and government on a wide range of questions, including:

- factors associated with Covid-19-related hospital deaths
- the link between Covid-19 deaths and chronic obstructive pulmonary disease or asthma
- the effect of hydroxychloroquine on Covid-19 mortality
- the factors associated with Covid-19 deaths vs other causes; the connection between the use of non-steroidal anti-inflammatory drugs and Covid-19 death
- ethnic inequalities in Covid-19 deaths (and whether this has changed over time)
- whether it is possible to predict the risk of Covid-19-related death for adults in the general population
- the risk associated with different variants of SARS-CoV-2
- the longer-term clinical impact of Covid-19 hospitalisation. across the NHS

### Interning in research as a social worker:

A social worker's story of undertaking a research internship alongside her social care role to investigate the impact of adversity on child development



Emily is a manager in a local authority within the early help sector. She is completing an internship at the NIHR Oxford and Thames Valley Applied Research Collaboration (ARC).

Emily's social care experience helped her identify a research question that aims to improve care services.

A key part of Emily's research has been to gain a fuller understanding of how different services identify children who have experienced adversity. She is investigating how systems could work more cooperatively to support this group of children earlier.

### My path into research

I have worked in social care for more than 15 years. I've really enjoyed engaging in research relevant to my field of early identification of children's emotional and mental health needs.

It is a fortunate story of how I ended up doing this research internship. My own curiosity and passion led me to it.

I began to develop an interest in the effects of trauma and adversity, particularly the impact of that on children. When reviewing children applying for education health and care needs assessments, who were not open to children's social care, I saw a pattern indicating that some children had experienced varying degrees of adversity in their early years. This was possible to see when reviewing children's social care data. I wanted to understand further how adversity impacted them and what services they entered later in their life.

I explained this during a chance conversation with staff working on the Oxford Brain Story-building brains for lifelong health, a research project at the University of Oxford. The project looks at the science of brain development and how this information could be best disseminated to frontline workers. The psychologists at the Brain Story kept me in mind a few weeks later when the ARC advertised an internship. They encouraged me to ly to investigate the issues I had spoken about.

### Applying and getting permission

I was fortunate that my managers were interested in the internship and happy for me to pursue it. It was the first time they had received a request to be seconded to complete research.

Once they considered the benefits of understanding more about these issues, it was approved.

The funding for my internship has enabled my role to be backfilled by another member of staff.

### My research project

As part of my research, I have begun to explore the extent to which early adversity is a factor in children's presentation across different services.

I have conducted a more extensive data review to understand my initial observations. I've found the trend has continued and currently in 57% of 100 case notes reviewed, children have had exposure to adversity, the majority in their early years. I have captured the range of adversity with a view to thinking about future service needs.

I have created and distributed a questionnaire to a range of different professionals, to understand more about children referred to their services and how their understanding of adversity influences their practice. I will also be conducting qualitative interviews with partner agencies to explore their understanding of the impact of adversity and how our systems could better work together to address this.

The results will be important to inform better service collaboration and integration. I aim to provide recommendations on how an understanding of children's life experiences could inform decisions on diagnosis and education, health and care plans, as well as consider what interventions might be needed earlier to support families.

### Tips for other social care practitioners considering research

- Be curious and don't discount yourself from NIHR schemes before finding out more. My application called for a 'clinical mentor' and I was fortunate to have one in place through my contact with the Brain Story. The NIHR can put you in touch with mentors and assist with applications. If you are interested, reach out to the funding organisation and find out more.
- Reach out to your local ARC team. They have offered me lots of support. The world of research was • completely new to me, and at times I have felt imposter syndrome seep in, but less so once I asked for help.
- Believe in your value. Our role in front-line practice is so useful in research. We have access to systems and an understanding of how our services do or don't work well together, so our influence and knowledge are really important.

#### Where to find out more

- Emily's findings will be published by the ARC in January 2023
- www.nihr.ac.uk/health-and-care-professionals/your-path-in-research

"The opportunity to complete this internship has supported my own professional development and increased my skills, knowledge and understanding of how to undertake research. Taking part has reinforced the importance of using my own organisation's data to review needs, so our systems can work better for children and families."

## **ARC Resource**



#### Diversity and inclusion in research toolkit

It is known that diverse ethnic and racial groups are both under-served and under-representation in clinical trials.

This is a concern for many reasons, but in particular because many health conditions disproportionately effect people from under-represented communities, with COVID-19 being the most recent example.

It is important to understand the reasons why recruitment to clinical trials does not always include the people for whom the research is most relevant.

Reasons often include a - not necessarily unreasonable mistrust of health research and the medical

profession, alongside practical and logistical barriers such as information that is hard to understand or not easily available, and a lack of knowledge or awareness about clinical trial opportunities.

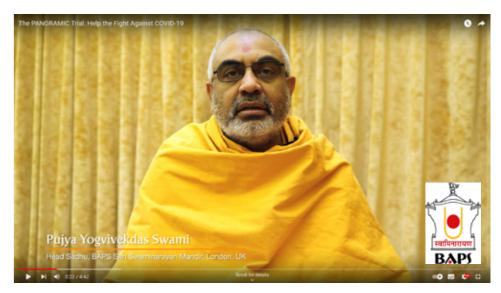
The COVID-19 pandemic underscored these inequalities, and the NIHR ARC OxTV supported PRINCIPLE, and later PANORAMIC, trials recognised the need to recruit participants most at risk of developing serious disease.

These trials took novel approaches to reach out to diverse communities through trusted individuals and groups - and was the genesis of an evolving toolkit.



#### Where to find out more

• View and feedback on the current version of the toolkit online at: www.arc-oxtv.nihr.ac.uk/EDItoolkit



Sadhu Yogvivekdas, Head of the BAPS Shri Swaminarayan Sanstha, UK and Europe, explained details of the PANORAMIC trial to its vast network of worshipers and followers as part of an online sermon.

#### Equity in research: a toolkit

It is vitally important that the success and lessons learned from the PANORAMIC and PRINCIPLE trials are not lost.

Working with Professor Mahendra Patel, Pharmacy, Inclusion and Diversity Lead of both PANORAMIC and PRINCIPLE trials, we are developing a toolkit. This evolving resource builds on the learning from the engagement strategies of PANORAMIC and PRINCIPLE trials, and the understanding of the importance of community involvement to help address disparities in health research.

The toolkit will be freely available for researchers and communities to use

Currently, the toolkit includes advice on working with:

• Places of worship and faith leaders,

Medical and healthcare professional organisations,

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#### - NIHR Applied Research Collaboration Oxford and Thames Valley Showcase 2022 -

# Event programme at a glance

	9.00	Registration and poster viewing
Morning session	9.30	Welcome, overview of the day and introduction to the ARC
	10.00	NIHR's Vision for the Future
	10.20	ARC & Academic Health Science Network Partnership and Opportunities
	10.40	Panel Q&A Chair Prof Richard McManus
	11.00	Tea break and poster viewing
	11.30	Mental Health
	12.00	Integrated Care and Care Home Research
	12.30	Maternity and High Blood Pressure
Afternoon session	1.00	Lunch and Poster Judging
	2.00	Prevention: Implementation of Interventions for Underserved Populations.
	2.30	Digital Health – NHS App
	2.45	Family Safeguarding
	3.00	Tea break and poster viewing
	3.15	Current Landscape Focus on Health Inequalities (NHS Race and Health Observatory)
	3.30	Health Equity and the Role of Community Engagement
	3.45	Closing remarks and poster prize giving