

# Research in the Trust

## Quarterly Trust Board Report

### March 2021

This year has been challenging for research activity and our research teams but at the same time exciting and has presented a multitude of research opportunities.

#### Research Activity and COVID-19

As the pandemic progressed in early 2020, some of the Trust's research activity was paused based on prioritisation guidance from the National Institute for Health Research (NIHR) and our research delivery staff were redeployed to work on Urgent Public Health COVID-19 studies. In March/April 2020 228 studies were paused (by Sponsor/Trust) with the remaining 332 continuing. All research performance targets, e.g. number of patients recruited, were removed.

As we entered Summer 2020 after the first wave of the pandemic ended, we went through a program of 'restart' and reviewed which studies could be restarted based on criteria relating to study viability, safety and capacity/ site readiness within in the context of the pandemic. By then end of July we had restarted 45 of the paused studies with this increasing to 90 by the beginning of October.



We were also at this time, starting to plan to be one of four regional vaccine trial hubs, under the leadership and management of our Patient Recruitment Centre (PRC) (see later). This took an enormous amount of planning by our PRC team and required the mobilisation of the majority of our clinical research workforce to assist with the delivery of the Novavax COVID-19 vaccine trial. The delivery of this trial was a truly city-wide collaborative effort and was done in conjunction with primary care and our local CCG, GPs, Bradford District Care NHS Foundation Trust, Airedale NHS Foundation Trust, Bradford Council and the University of Bradford.

A dedicated website ([www.bepartof.bradfordresearch.nhs.uk](http://www.bepartof.bradfordresearch.nhs.uk)) was developed to enlist research volunteers and over 4000 people signed up to take part. The trial started in October and nearly 200 staff have helped out in delivering this trial to date with 726 volunteers recruited.

Presently we are still prioritising UPH COVID-19 work but looking to continue to restart paused projects and start new ones.

Credit must be given to all our research teams over the last year, both clinical and non-clinical staff, for their dedication, hard-work and enthusiasm to work flexibly and outside their specialty to deliver research that has helped treat those suffering with COVID-19 as well as vaccine trials to prevent it.

### **NIHR National Patient Recruitment Centre: Bradford**

In November 2020 the National Institute for Health Research (NIHR) launched five new National Patient Recruitment Centres (PRCs) to enable more late phase commercial clinical research to be delivered within the NHS and make it easier for people to take part in studies.



The Bradford centre is one of five regionally based NPRCs funded through a £7m investment as part of the Government's Life Sciences Industrial Strategy and Sector Deal 2 - a series of measures to strengthen the UK environment for clinical research.

Funding to run the PRC based at the Bradford Institute for Health Research (BRI) was awarded to the Trust by the NIHR in early 2020 after a competitive bidding exercise for the five centres which are the first NIHR-funded research infrastructure wholly dedicated to delivering commercial research.

The new research centres are designed to make it quicker and easier for life science companies to deliver late-phase clinical research at pace and scale through the NHS. In turn, they will increase the number of commercial studies that can be delivered within the UK - benefiting patients who will gain earlier access to innovative new treatments and diagnostics, as well as the NHS and wider economy by attracting additional investment from the global life science industry. Further information available on the PRC is available at <https://local.nihr.ac.uk/prc/bradford/>

### **BIHR Phase VI extension**

The Wolfson Centre for Applied Health Research was completed and opened in 2019, being the fifth research building added to the Trust's Health Research Hub in the last 13 years:

- Phase I 2007: Renovation of Temple Bank House to create the Bradford Institute for Health Research.
- Phase II 2008: Renovation of Temple Bank House outbuildings to create the Clinical Research Facility (now the Patient Recruitment Centre)
- Phase III 2010/11: Extension to Temple Bank House to create additional research office and meeting space due to an increase in research activity and capacity.
- Phase IV 2016: Extension to Clinical Research Facility to create additional clinical and office space.

- Phase V 2019: Build of the Wolfson Centre for Applied Health Research in collaboration with the Universities of Leeds and Bradford.

This impressive suite of research buildings provides an excellent base for a large number of our research teams and is testament to the continuing success the Trust has had over the last 14 years in building its research infrastructure and capacity. However, due to this incremental nature of growth, the buildings have been built in a fragmented way and lack little cohesion.

A new frontage to the BIHR buildings encompassing Phases I-IV (as described above) is to be built that provides a new clear and single entrance for patients and visitors, additional meeting and breakout/ informal meeting space along with a covered walkway leading to the Wolfson Centre for Applied Health Research.

By doing this we will create a statement building with a real 'stage' presence. There will be cohesiveness to the buildings (which will in effect become one building) with a new frontage which will provide 'a shop window' to the interactive, high-quality and collaborative research that we are renowned for. It will provide additional waiting space for patients and a reception area for the whole complex which will improve security and the flow of people through the building as well as providing a clear 'welcome' to patients, staff and visitors and enhance their experience.



## Applied Health Research

As well as working on UPH COVID-19 research, our applied health research teams have, where possible, continued with their research activity.

## Academic Unit for Ageing and Stroke Research



As one of the most successful applied health research centres in the UK, the ASR has a current grant income of £10.8M (ASR led), including hosting two NIHR Programme Grants and three NIHR Health Technology Assessment Grants, as well as hosting a major theme in the Yorkshire and Humber Applied Research Collaboration.

The past year has been an unusual year, and like many other services our research projects have been disrupted by the COVID-19 outbreak. Our teams have worked incredibly hard in restarting our research projects and trials to continue to address important clinically relevant questions in ageing and stroke. Some examples of key milestones/achievements:

- We are pleased to announce that our multi-site cluster randomised controlled RECREATE trial, part of the large £3m programme grant has opened to recruitment in January 2021. The trial aims to recruit 1156 participants to evaluate the clinical and cost-effectiveness of an intervention that intends to enhance health and disability outcomes for stroke survivors through reducing sedentary behaviour.
- The NIHR HTA funded home-based exercise intervention for older people with frailty trial has resumed its recruitment activities in many sites and has reached a significant milestone of recruiting a total of 600 participants.
- Our team on the multi-site cluster randomised controlled trial which aims to evaluate a personalised care planning programme to improve quality of life for older people with frailty has been working tirelessly with GPs, Age UKs and CRNs across Yorkshire and Humber and the North West in setting up the trial. The definitive trial is scheduled to start recruitment in March.

### OUR HIGHLIGHTS

April 2020 – January 2021



**£10.8m**  
Active grants  
led by ASR

**12**  
Active projects  
led by ASR



**22**  
Publications

**27.6**  
WTE Staffing



**7**  
PhD students

- The Community Ageing 75+ Research Study has successfully completed a telephone survey with 142 older people in the Bradford area to investigate self-isolation and social distancing, health and exercise, mood, access to health and care services, food shopping, information access and communication, and reported positive and negative experiences during the period of lock-down. The outcome has been published in Age and Ageing <https://doi.org/10.1093/ageing/afaa255>.

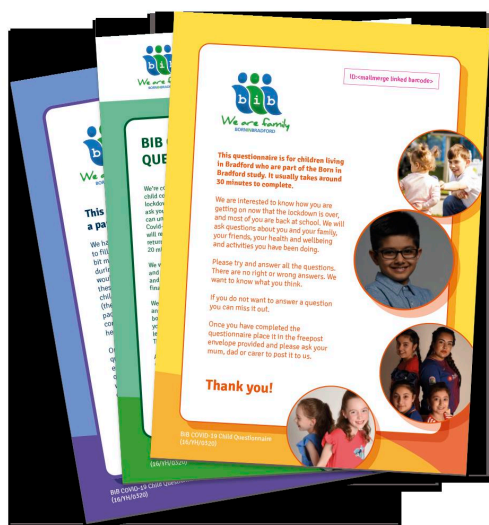
We are proud of our research team members who have taken active roles in conducting multiple vaccine trials in Bradford, as well as those supporting the frontline teams in tackling the virus, and volunteering for various roles in hospital services to ensure excellent patient care is preserved.

## BORN IN BRADFORD

Born in Bradford aims to understand why some families fall ill and why others stay healthy. We are a people powered research project, and together with our communities and stakeholders aim to make positive changes to improve the lives of families living in our city and beyond. We host three birth cohort studies (the Born in Bradford Family Cohort, Born in Bradford's Better Start and BiB4All) encompassing over 50,000 Bradford residents in addition to a range of other initiatives including the Better Start Bradford Innovation Hub, Bradford Inequalities Research, the Healthy Childhood theme of the Yorkshire and Humber Applied Research Collaboration, Connected Bradford, Join Us: Move Play, the LEAP, the Centre for Applied Education Research and various other externally funded applied health research studies.

2020 has seen many new challenges and opportunities for the Born in Bradford programme. In March 2020 we worked with the wider team at BIHR to establish a local Covid-19 Scientific Advisory Group (C-SAG) to harness Bradford's research expertise, infrastructure and skills to support the Covid response and recovery through data and intelligence, tailored to the district. C-SAG work has included investigating how the lives of communities and families in the District have been affected by COVID-19 through support from our Born in Bradford and CARE75+ cohorts; the epidemiology of and impacts on wider health services in the District of COVID-19 through linked data and Connected Bradford; insight to support the rollout of COVID-19 vaccinations in the District.

Our Born in Bradford families have been pivotal in helping us understand the impacts of the pandemic within our multi-ethnic communities. Since April 2020 we have rapidly deployed surveys to cohort participants to explore the health, social and economic impact of the pandemic within our multi-ethnic communities. We have obtained grant funding of over £500,000 in funding to progress this work from the UKRI and the Health Foundation.



Our Centre for Applied Education Research has worked closely with schools to capture the impact of Covid-19, and to help support them as they respond to the changes and challenges created by the pandemic. This has included a series of webinars, and the establishment of a free mental wellbeing service for school leaders and staff. CAER are currently



hosting a number of research studies, including a large project across Bradford and York funded by the Department for Education, which aims to speed up Autism Spectrum Condition diagnoses and reduce existing inequalities (<https://caer.org.uk/punch/>).

In our 'business as usual' throughout the pandemic we are delighted that our team continued to recruit to our BiBBS and BiB4All routine data linkage cohort with a combined recruitment total of over 6000 families! Our BiB4All success has inspired others to follow our lead – the Born and Bred in (BaBi) project is now in set up in Leeds, Doncaster and Wakefield under the leadership of the BiB4All team in Bradford. Our Yorkshire and Humber ARC is leading the way regionally to ensure our learning spreads across the district.



Our Connected Bradford database reached a new milestone in 2020, connecting routine data from general practice NHS, local authority and education for over 1.2million individuals. This system wide database will help us understand local health needs, map care pathways, catalyse quality improvement and help to deliver our shared goals in improving lives across Bradford as part of our recovery from the pandemic.

The JU:MP team have also been very busy. This project aims to develop and evaluate a whole systems approach to creating a step change in children and young people's physical activity levels. In December a bid for £6 million to Sport England was submitted for the next phase of the project. During lockdown a physical activity calendar was distributed to over 50,000 homes and has also been distributed to schools, community hubs and asylum seeker/refugee families across the whole Bradford district. This has resulted in a reach of over 30,000 children, young people and families.

2020 has also seen a focus on our healthy places research, with the launch of two new projects. ATHLETE, funded by the EU Horizon 2020 funding stream will establish a prospective "exposome" (the entirety of all non-genetic exposures from conception) study across 80,000 mother-child pairs and 15 cohorts to measure the exposome across the first two decades of life and its impact on health, and translate evidence to policy recommendations and prevention strategies.

We have also been working very closely with Bradford Council on their plans to implement a city wide clean air zone as part of the Bradford Clean Air Plan. Our new project 'BiB Breathes' funded by the National Institute for Health Research will evaluate the health, air quality and economic impacts of Bradford's Clean Air Plan. We will recruit primary school age citizen scientists to record pollution levels during their school commute to see whether implementation of the plan reduces pollution. We will use routine health data from over 500,000 Bradford residents to explore whether the plan improves heart and lung health, and babies birth weights up to three years post implementation.

We have also been working closely with our sister project ActEarly. Just over one year old, this exciting new project aims to engage communities and stakeholders in Bradford and Tower Hamlets (London) together in a 'City Collaboratory' to reduce prevalence of non-communicable diseases by

focusing on healthy places, healthy livelihoods and healthy schools. As part of this project we are developing a co-production strategy which will give communities a central voice in our plans.

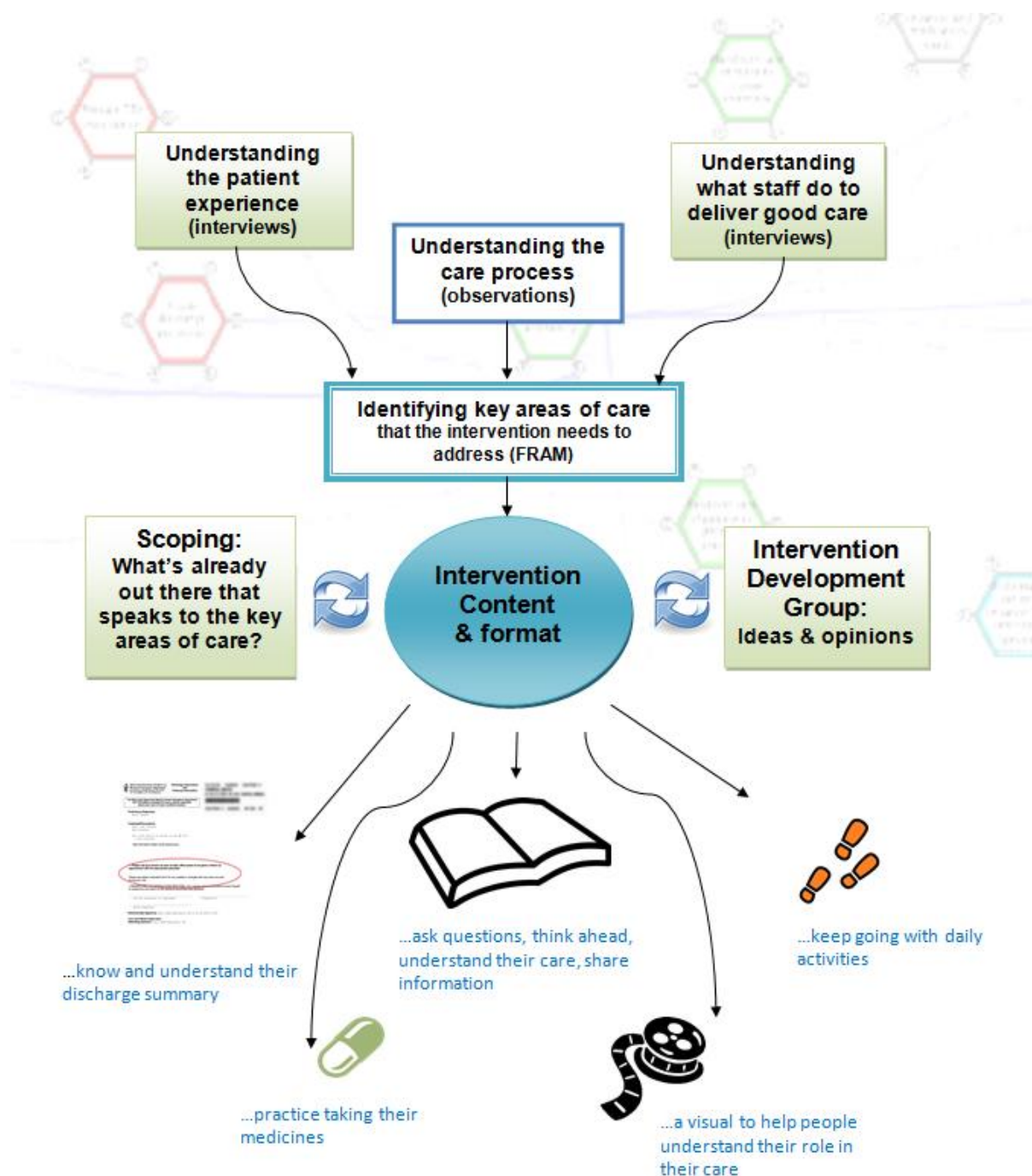
### **Quality and Safety Research team**

The Quality and Safety team currently host one of the countries three NIHR Patient Safety Translational Research Centres which has responded rapidly to the COVID-19 pandemic, with a particular focus on staff wellbeing during the crisis and beyond. We have achieved additional funding from NIHR HS&DR (£280,000) and the Burdett Trust (£83,000) during the last 6 months to further develop this work. The first of these studies will explore the impact of redeployment on nursing staff and how this process can best be managed to optimise staff wellbeing, performance and retention. We will be working with three Trusts, BTHFT, Oxford University Hospital and Barts. In the second of these studies, the focus will be on staff across the West Yorkshire Critical Care network. In this study we will deliver an on-line adaption of our successful 'RE-BOOT' (REcovery-BOOsting Training) intervention, and evaluate the efficacy of this intervention in preparing critical care nurses for, and aiding recovery after, stressful clinical events (e.g. adverse events, unexpected patient deaths, dealing with the COVID-19 crisis).



In February 2021, Rebecca Lawton, Director of the Quality and Safety team was invited by NHS England and NHS Improvement to talk to the newly appointed Patient Safety Specialists across the country about the research her group does to 'deliver research that makes healthcare safer'. She hopes to work closely with this group of more than 200 patient safety experts (including our own here at BTHFT) to understand and respond to their priorities. Please see the website for further information [www.yqsr.org](http://www.yqsr.org)

Over the last three years our Partners at Care Transitions team have been developing an intervention to support older people as they move from hospital to home (see figure below for how we have done this). In April 2021, we will launch this intervention: 'Your Care Needs You' and undertake a large-scale evaluation across 12 Trusts and more than 40 wards in the Yorkshire and Humber region and beyond. This large cluster randomised controlled trial will evaluate whether an intervention to support greater involvement of older people and their families as they transition from hospital to home improves their experience, increases safety and is cost effective. BTHFT will be one of our trial sites and we look forward to working with the unplanned care team on this.



## Yorkshire and Humber Improvement Academy

We are now in our eighth year within Bradford Institute for Health Research. Our focus is on supporting health services to implement research with the ultimate aim of generating higher quality and safer health and care services across our region.

In this year, as for the last 6 years, we have been commissioned by the Yorkshire & Humber AHSN to deliver NHS England's Patient Safety Improvement Programmes in our region. This year Clinical Leadership Fellows, Elizabeth Sweeting (GP Registrar) and Oliver Coen (Oncology Registrar), have joined Mel Johnson's Patient Safety Collaborative team to deliver a range safety improvement



programmes that have been sensitively continued during the covid pandemic. These include supporting rapid set up of Oximetry@home, covid virtual ward, supporting care homes to identify and escalate deteriorating patients, and improving safety in our maternity and neonatal care units. This year we have hosted Vivien Dolby in a regional post as Lead Midwife for Maternal Enhanced Critical Care audit – an initiative funded by the maternity Clinical Network and led by Bradford Consultant Anaesthetist Debbie Horner.

### *Virtual delivery of training*

The Improvement Academy has developed a range of masterclasses, workshops and training courses. This year we have spent time translating our tried and tested face-to-face courses into a format that is successful virtually. This has the advantage of making it easy to work with geographically distant teams including working with *Public Health Wales* to deliver an **Achieving Behaviour Change** course focussed on addressing behaviours related to using PPE during covid, and **Structured Judgement Review** virtual training courses to mental health teams in Cornwall and Kent. Other training that we have adapted to the virtual environment includes our popular ‘silver’ **quality improvement training ‘learning by doing’** which we will be delivering to 80 FY1 doctors across Yorkshire, **understanding data for improvement**, and masterclasses that support teams in ‘**getting to the heart of patient and staff experience**’.



### *Implementation Partner*



This year we strengthened our role as implementation partner to the Yorkshire & Humber Applied Research Collaboration. *Kristian Hudson* has joined as Implementation Specialist, putting implementation centre stage through a new podcast series of interviews with international implementation experts. We are implementation partner on several new research and improvement bids.

### *Caring for Caregivers*

Looking after healthcare staff has never been more important. This year we have supported the development of a staff listening service at Bradford Teaching Hospitals, we continue to collaborate with the Yorkshire Quality and Safety Research Group in developing workforce support including the ‘second victim’ website for staff affected by errors, and a new just culture -assessment framework. Our approach to patient experience now includes addressing staff experience at the same time.

