

# Report to the Meeting of the

# Oxford Health NHS Foundation Trust

**BOD 08/2023**

(Agenda item: 10)

# Board of Directors

**25 January 2023**

**Oxford Health Biomedical Research Centre (BRC) impacts to 30 November 2022**

**For Information**

**Executive Summary**

The **Oxford Health Biomedical Research Centre** (BRC) was created by Oxford Health NHS FT in partnership with the University of Oxford following success of an application to the National Institute of Health Research (NIHR) in the 2016 round of NIHR Biomedical Research Centre (BRC) funding. This funding was renewed for five years from 1 December 2022 with the Oxford Health BRC now including 11 additional partner universities and NHS Trusts across England operating as a national network of centres of excellence focusing on brain health.

The final report for the initial BRC funding period (2017 to 30 November 2022) is due to be submitted to NIHR by the end of January 2023. As part of this exercise, the BRC was asked to provide a list of five impacts of BRC funding and also Added Value Examples (AVE) identifying research of high promise that NIHR can use as case studies for sharing with governmental ministers and departments, patient groups and the public.

We are very proud of the BRC achievements we will report and would like to share these with the Board as examples of how BRC work can ultimately be developed for patient benefit.

We additionally demonstrate how this infrastructure funding provided by NIHR, leads to additional research money being leveraged from other funding sources.

**Governance Route**

The five impact statements and two Added Value Examples were reviewed by the BRC Steering Committee, chaired by Dr Nick Broughton, on 10 January 2023. The comments raised by members have been incorporated into the presented version.

**Statutory or Regulatory responsibilities**

Funding for the Oxford Health Biomedical Research Centre (BRC) is contracted to Oxford Health NHS FT by NIHR. Oxford Health NHS FT holds joint accountability for the BRC with the University of Oxford*.*

**Recommendation**

The Board is provided with the impact statements and summaries of Added Value Examples **for information** to (i) highlight the success of the BRC in its initial funding period to the end of 2022 and (ii) illustrate the diverse work being undertaken which has already led to tangible benefits for patients. Some additional details of NIHR spend for each financial year and the amount of research funding this then leverages from other sources is also provided.

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**REPORT DETAILS**

The commentary below has been submitted by the Oxford Health BRC to NIHR as part of the formal final report covering the contract from 2017 to 30 November 2022. Each impact statement could be no more than 200 words. We have only included a summary of the content of the Added Value Examples.

**Five Impacts of Oxford Health BRC funding**

**1.**

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| **True Colours integrated into clinical care** |
| The [True Colours remote mood monitoring system](https://oxfordhealth.truecolours.nhs.uk/www/en/) captures patient reported outcome measures (PROMS) from individuals with long term mental health problems and other long-term conditions.  Established in 2007 **True Colours**:   * allows symptom reporting of multiple long-term conditions online, via text messages or mobile phone apps * promotes self-management, is well tolerated and can be personalised for lived experience * reduces unnecessary routine follow-up appointments lowering costs and providing more responsive clinical care * enables earlier relapse identification, facilitating more timely intervention   Since 2007 there were >36,000 registered users and >20 deployments including mood, anxiety, substance use, eating, psychosis, self-harm and inflammatory bowel disease. It was deployed in national/international cohorts eg Bipolar Disorder Research Network (UK) and Flourish High Risk Study (Canada). It is used in randomized controlled trials, including the UKRI/NIHR funded PHOSP-COVID study, allowing seamless data transition between research/clinical settings.  Evolutions include psychiatric/physical symptoms, quality of life and medication measurements, adding a cognitive battery plus wearable data eg FitBit (see  <https://europepmc.org/article/PMC/PMC6996723>). Management transferred from Oxford University to Oxford Health NHS FT (2022) embedding True Colours in adult/adolescent clinical services and providing additional research opportunities. This completes translation from early stage research/ innovation to patient care. |

**2.**

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| “**Count Me in” Study has impacted positively on consent rates for research participation** |
| The **Informatics and Digital Health Theme** developed the “Count Me in” study with Oxford Health NHS FT and a pilot project launched in September 2021. It aimed to boost the traditionally low number of patients consenting to be contacted for mental health research.  The study, conducted in three phases across four UK NHS trusts, used focus groups and online surveys to investigate ‘opt-in’ and ‘opt-out’ approaches to discussing research with patients. Under the ‘opt-in’ approach the clinician communicates opportunities to patients with the ‘opt-out’ approach providing all patients the right to be informed about research opportunities. The age, gender and ethnicity of patients was also monitored. The published findings showed that ‘opt-out’ has significant advantages for both patients/ researchers and supported more inclusive research recruitment (<https://europepmc.org/article/MED/33225713>).  Having adopted the ‘opt out’ approach, data from December 2022 indicated 22,741 patients were eligible for contact about Oxford Health NHS FT studies, 368 (1.6%) locally opted out of research contact. 1,025 patients have been contacted by Oxford Health researchers to discuss research opportunities since launch and 281 (27.4%) of patients have consented to, and participated in, research. |

**3.**

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| **Immersive virtual research will transform the lives of patients with mental illness** |
| Virtual Reality (VR) creates multi-sensory patient experiences the brain processes as real and are tailored to unique behavioural health needs. The **Precision Psychological Therapies Theme** pursued a dual approach of evidence-based, clinically-validated research, plus commercialisation, to advance VR innovation for patient benefit.  [gameChange](https://gamechangevr.com/), designed with people with lived experience of psychosis (dehabilitating agoraphobia), uses VR to simulate everyday situations: a café, shop, pub, street, doctor’s surgery and a bus. In a published clinical trial (<https://europepmc.org/article/MED/35395204> ) of 346 psychosis patients in nine NHS Trusts, gameChange led to significant reductions in agoraphobic avoidance with most benefit to those who found it hardest to leave the house and had severe anxiety, depression, delusions and hallucinations. Benefits were maintained at six-months follow-up and there were very high treatment up-take rates. Preliminary health economic analysis indicates the treatment is cost-effective.  [**OxfordVR**](https://oxfordvr.co/), spun-out from Oxford University is currently (December 2022) seeking funding to merge with **[BehaVR](https://www.behavr.com/behavr-and-oxfordvr-seriesb/" \o "Behavr press release" \t "_self)**, a US-based leader in VR/digital therapeutic experiences to provide mental health therapies. OxfordVR’s [gameChange](https://gamechangevr.com/) was recently granted FDA Breakthrough Device designation. This merger, and raising further funds, will help facilitate integration of gameChange into UK/USA clinical services. |

**4.**

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| **Oxford** **Brain Health Clinic a successful, scalable integrated clinical research service** |
| In August 2020 the **Older Adults & Dementia Theme** developed the Oxford Brain Health Clinic (BHC), a research-enabled clinical service for memory clinic patients. It aims to provide earlier/ more accurate diagnosis and to stratify patients into treatment trials focused on preserving cognitive health in later life. Instead of the traditional CT scan, memory clinic patients are offered BHC appointments comprising higher quality MRI, cognitive, clinical assessments plus research assessments (additional imaging and saliva sampling). Consent for research participation is sought, with patients and their accompanying relative/friend given a choice of the level of participation. Memory clinic doctors report greater confidence in diagnosing patients with BHC reports. A high proportion of patients consent to research (>90%, 80%, 70% for data use, additional assessments and recontact) producing highly representative research data.  The BHC model offers other advantages:   * Positive feedback (>150 patients) with reduced appointment times * Research training/capacity development opportunities for staff working in/around memory clinics * Scalable –2023 extension from one to three sites in the Dementia-TRC network and beyond * PPIEP engagement integrated with feedback incorporated * Significant stakeholder engagement eg with ARUK on policy to facilitate BHC site expansion |

**5.**

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| **Remote delivery of Cognitive Behavioural Therapy will allow more patients to benefit** |
| The **Precision Psychological Therapies Theme** areworld leaders in developing Cognitive Behavioural Therapy (CBT), which following rigorous experimental and clinical studies, is made available through the NHS [Improving Access to Psychological Therapies](https://www.england.nhs.uk/mental-health/adults/iapt/) (IAPT) Programme. CBT involves significant therapist time which may be difficult for patients to commit to, and with a workforce shortage, may be hard to access. These difficulties and concerns were exacerbated in the COVID-19 pandemic when in-person consultations were not possible so BRC researchers focused on training NHS therapists in remote, on line treatment delivery. Further innovations (2021/22) led to internet versions of treatments for Social Anxiety Disorder (iCT-SAD) and PTSD (iCT-PTSD) being developed. iCT-SAD gives similar recovery, reliable improvements but only needs 6.8 hours research team therapists time compared to 18.4 hours. Freeing up therapist time thus enables more patients to recover and helps with the [NHS Long Term Plan](https://www.england.nhs.uk/long-term-plan/) to increase the individuals who can access IAPT services to 1.9 million by 2023/24.  Our Added Value Example highlights the Theme’s contribution to clinician capacity development, focused on ability to deliver high standard therapy and providing research skills to evaluate and develop practice. |

We also submitted two **Added Value Examples** below and provide the summaries.

**1.**

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| **Adult Mental Health Theme** |
| **Mental and brain health following COVID-19 infection: incidence, risks and mechanisms** |
| Persisting effects of COVID-19 on mental and brain health are a significant concern. In a series of influential publications, we have produced high-quality, large-scale evidence to inform the issue. Since April 2022 we have shown the 2-year trajectory of risks, how these differ depending on age, viral strain, and prior vaccination, and have identified a possible mechanism. The work has received global media interest and is influencing policy documents and briefings from many organisations, including WHO, NICE, NIH, and governments. The work is therefore informing public and policymakers, shaping evidence-based policies, and preparing the way for testing of therapeutic interventions. |

**2.**

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| **Precision Psychological Therapies Theme** |
| **Training the workforce and providing additional capacity: Investing in the next generation of clinical academics researching high impact psychological treatments** |
| It is acknowledged that translating experimental research into patient benefit is crucially dependent on the availability of an adequately trained workforce and that insufficient individuals pursuing research alongside their clinical duties remains a limiting factor in many fields. The **Precision Psychological Therapies Theme** under the leadership of Anke Ehlers, David Clark, Daniel Freeman (and previously Chris Fairburn) has undertaken world-leading research which has had a substantial impact on cognitive behavioural therapy (CBT) and other therapies, including work to establish, and enhance, the NHS Improving Access to Psychological Therapies (IAPT) Programme. Alongside their impact on research and its translation to tangible patient benefits these leaders have made a very strong commitment to supporting and mentoring the next generation of researchers. This has created its own impact for society through the boosting of capacity of accredited practitioners whilst ensuring the recruitment, and subsequent retention, of talented clinical academics. As new researchers then become more established in their field, they in turn embed mentoring and support of their own research teams as the ‘norm’ ensuring that each subsequent generation of researcher acquires better expertise and training.  The support from the BRC has directly contributed to several successful applications for externally funded personal fellowships. It is also notable that all are female researchers, within the context of women being underrepresented in science and NIHR’s strategy to promote equality, diversity, and inclusion in research. |

Below we also illustrate how theNIHR infrastructure funding is used to leverage, and leads to, additional research money being obtained from other funders. Note that unlike NIHR expenditure (2nd column) it is not possible to add all the leveraged funds (3rd column) together as the amounts are dependent on the duration of the funding which spans different financial years.

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| **Financial Year** | **Actual NIHR expenditure** | **Leveraged funding to conduct specific research projects (ie amounts raised through other separate awards)** |
| To March 2018 | £1,494,986 | £64,860,456 |
| 2018/19 | £3,845,967 | £82,064,277 |
| 2019/20 | £2,850,279 | £81,329,758 |
| 2020/21 | £2,816,081 | £78,690,748 |
| 2021/22 | £2,817,587 | £84,600,986 |
| 2022/23  (8 months) | £1,888,319 | £78,488,281 |
|  | **£15,713,219** | N.B. cannot be added together |