

Patient Inspired Innovation

Welcome to issue 10 of the NIHR Brain Injury MedTech Co-operative newsletter.

In this edition, find out the latest news about the COVID-19 pandemic and how the NIHR and the Brain Injury MIC are responding to this emergency.

About us

The MIC is one of eleven national Medtech and In vitro diagnostic Co-operatives (MICs) funded by the National Institute for Health Research (NIHR).



The MIC works with patients, carers, academics, clinicians and industry to develop new medical devices, healthcare technologies and technology-dependent interventions to improve treatment and quality of life for patients with brain injuries.

Get Involved!

The MIC has developed a volunteer register for patients, carers and whoever has an interest in the advancement of healthcare technologies. For more information on the Register for Healthcare Involvement and Technology Evaluation (RHITE), please visit our website: <http://www.brainmic.nihr.ac.uk/rhite>

Important:

To unsubscribe from RHITE and this newsletter please send an email to: involve@brainmic.org

NIHR's update on the coronavirus pandemic

New £1.3 million national research programme to evaluate coronavirus tests in hospitals, general practices and care homes

Testing for coronavirus infection could become quicker, more convenient and more accurate, following the launch of a multicentre national programme of research that will evaluate how new diagnostic tests perform in different health and care settings. Determining who has been infected with coronavirus is a key part of the response to the COVID-19 pandemic. Getting quick and accurate test results when people show symptoms ensures that they receive appropriate care and reduces the chance of the disease being passed on.

The main test currently used to detect coronavirus infection (PCR) involves sending samples away to laboratories, which can take up to 72 hours to provide results.

The life sciences industry has developed brand new diagnostic tests both to detect current coronavirus infection and to find out if someone has previously been infected. These new tests - some of which may be able to provide results in minutes at the bedside - have the potential to increase the speed and convenience of testing. However, many of these new diagnostic tests have yet to be thoroughly evaluated in the settings where they're likely to be used.

The COVID-19 National Diagnostic Research and Evaluation Platform (CONDOR) - funded by the NIHR, UK Research and Innovation, Asthma UK and the British Lung Foundation - will create a single national route for evaluating new diagnostic tests in hospitals and in community healthcare settings.

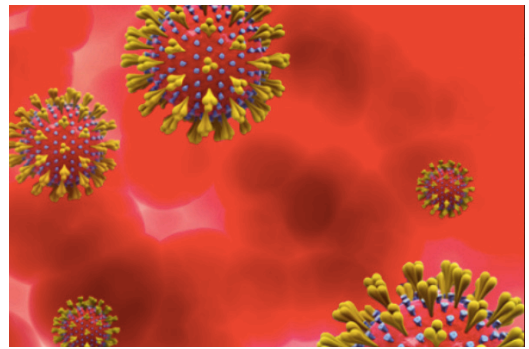
If you want to know more about testing and the latest news from the NIHR's blog on COVID-19, please visit the below page:

<https://www.nihr.ac.uk/covid-19/>

The MIC's response to the pandemic:

The COVID-19 Challenge supported projects

Following the national prioritisation process established by the National Institute of Health Research (NIHR) in response to the novel coronavirus pandemic and the Cambridge University Hospitals NHS Foundation Trust guidelines to help researchers delivering Covid-19 studies, the NIHR Brain Injury MedTech Co-operative (MIC) has been focusing on pandemic related projects and research at a local and national level.



The MIC received 15 completed expressions of interest forms, each of which was reviewed and received formal feedback. Although some funds have been contributed, the MIC has also partnered on a UKRI application as well as provided expertise on technology development.

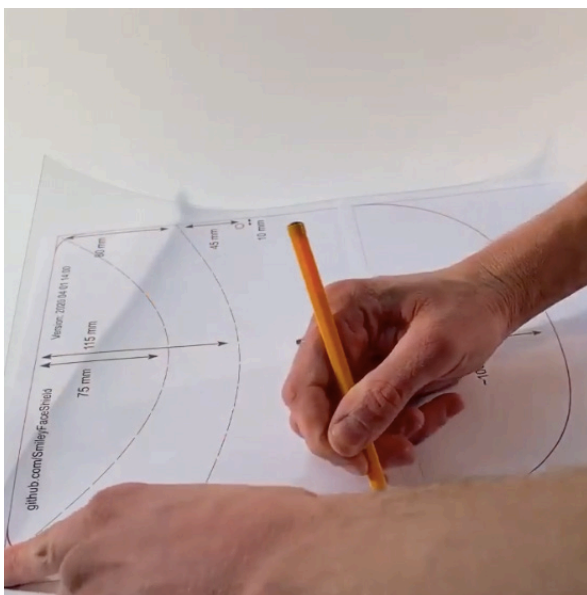
HappyShield

Healthcare workers need face shields in addition to masks and goggles to provide protection from splashes and sprays of infected bodily fluids from Covid-19 patients during a number of high-risk medical procedures and situations. There is currently a significant shortage of face shields globally, which is likely to be particularly severe in less wealthy regions without the ability to buy or manufacture necessary Personal Protective Equipment (PPE) as easily or quickly as wealthy countries.

HappyShield is a new open-source design for a simple, foldable face shield for infection control developed in response to the Covid-19 pandemic.

The aim of this project is to develop a set of designs for face shields which are safe, cheap, easy to mass-produce quickly using materials, equipment, and labour available in low and middle-income regions, are easy to reuse, and are comfortable enough to be worn for extended periods by healthcare workers without inducing pain or discomfort.

This effort has yielded HappyShield, which successfully meets these design goals.



Panoramic facemask™

During the COVID-19 outbreak, Public Health England and the World Health Organisation advocated the wearing of masks or face coverings to reduce transmission of the virus. The increasing adoption of masks presents challenges for people with hearing impairment, or those with difficulties understanding spoken language.

The Clinical Engineering Innovation (CEI) Team at Addenbrooke's Hospital in Cambridge was initially approached by a member of nursing staff who is hard of hearing, so a project was implemented to create the Panoramic facemask™ that would allow lip-reading and better visibility of facial expression and non-verbal cues, with equivalent filtration performance as a standard mask. This need was also supported as a national project by the Chief Scientific Officer for England's office. Research and stakeholder consultation carried out by CEI indicated that the need to wear masks is also preventing several clinical investigations, interventions and treatments requiring a clear "line of sight" to the mouth, lips, tongue and teeth.

To date, CEI has developed several prototypes that will address these concerns, allowing more of the face to be visible, potentially allowing for the resumption of interventions requiring the modelling of oral and facial postures such as treatment for dyspraxia and dysphagia. The prototypes have been tested and developed alongside representatives from a range of staff and patient groups, and we have now settled on two overall designs which fit the needs of our hospital. CEI are conducting production trials with manufacturing partners and are progressing to standardised testing against the requirements for Type IIR surgical masks. CEI have utilised part of their NIHR Brain Injury MIC to fund prototype development, and plan to utilise the rest on lab testing to test the efficacy of certain elements of the design.



A website to find out everything you need to know about COVID-19!

Check this website out!

The NIHR is also supporting a new website by UK Research and Innovation (UKRI) called **Coronavirus: the science explained**, which lays out the evidence and the facts about the virus, the disease, the epidemic and its control. Topics are divided in four main themes and you will find out about the course of infection and disease, how the virus spreads through the populations and who is at risk and why, the latest progress made in diagnostic tests, treatments and vaccines and all about the control measures such as quarantine and social distancing.

Visit the page: <https://coronavirusexplained.ukri.org/en/>

...it continues here...

Become a reviewer for NIHR Evidence! Join the Medicines and Healthcare Products Regulatory Agency (MHRA) Patient Group Consultative Forum

Are you interested in helping to decide what research is shared on NIHR Evidence?

We are looking for patients, carers and the public to register as reviewers and help us determine what research should be promoted on the website.

Reviewers will be asked to read the abstract of a published paper in a research area of their interest before answering questions related to the importance of the paper's findings.

We expect a reviewing task to take between 20 and 30 minutes and we will be offering a payment of £12.50 for each completed review.

Find out more or register to become a reviewer at the link below:

https://evidence.nihr.ac.uk/become-a-reviewer/?utm_source=newsletter&utm_medium=public&utm_campaign=reviewers

Deferred!

BITT Tank event is postponed!

Unfortunately, due to the escalating nature of the COVID-19 virus we have made the difficult decision to postpone this event to later in the year.

We are working on moving the event online and we will provide an update in the next Newsletters.

If you need more info, please, contact the Brain Injury MIC at info@brainmic.org

...Stay tuned for our next newsletter and activities

We wish you all to stay well and healthy!

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