NIHR | Brain Injury MedTech Co-operative

Finding Unmet Needs in Perinatal and Paediatric Brain Injury Care Pathway

An Inclusive and Evidence-based Approach

Innovation Partnership Zone:
Child Health Technology Conference 2021

Visit: www.brainmic.nihr.ac.uk
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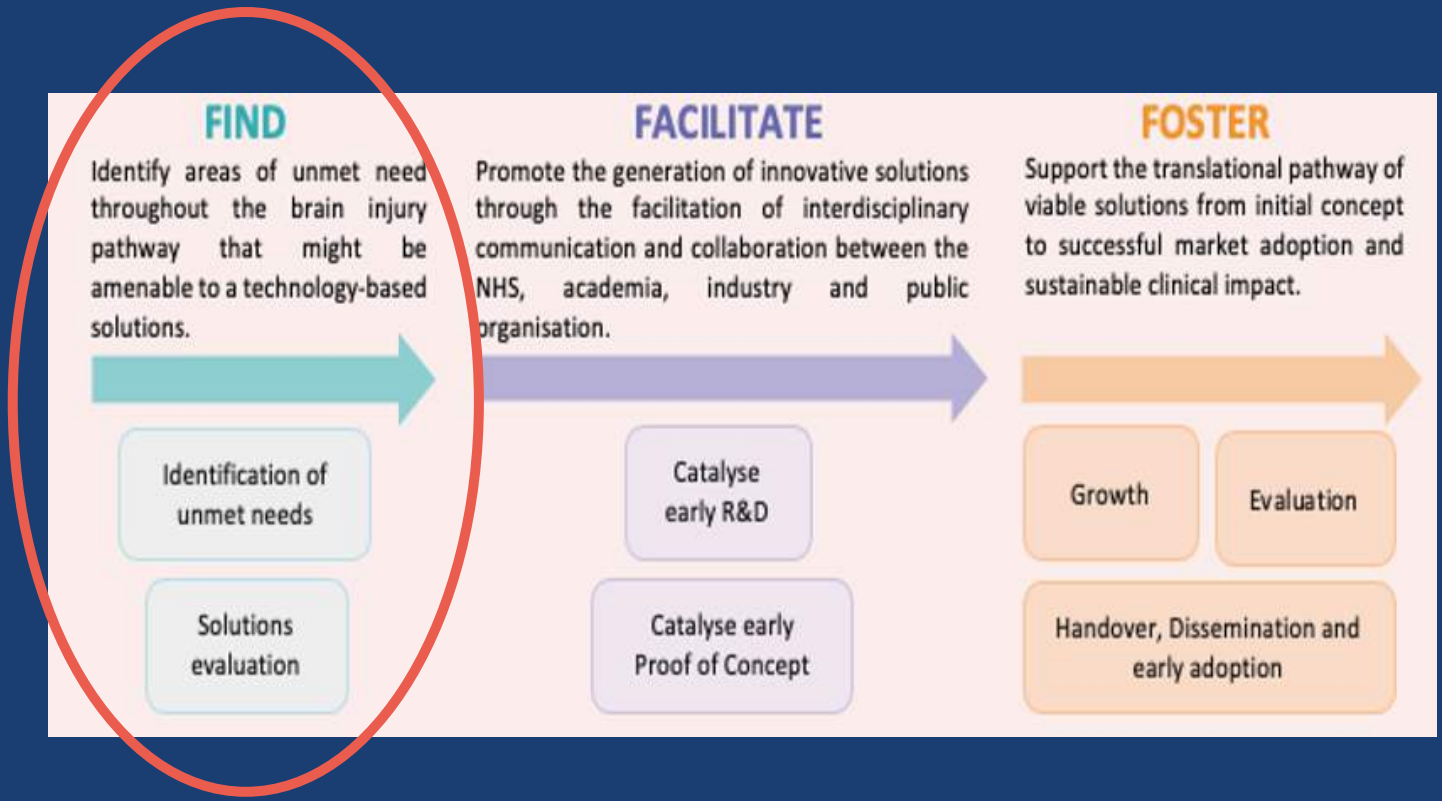
A Focus on Find...

The NIHR Brain Injury Healthcare MedTech Co-operative (MIC) was set up to "**Find, Facilitate and Foster**" the solving of problems for this patient group through technological solutions.

In order to "Find" these problems a wide range of activities were undertaken in order to develop a "Directory of Unmet Needs".



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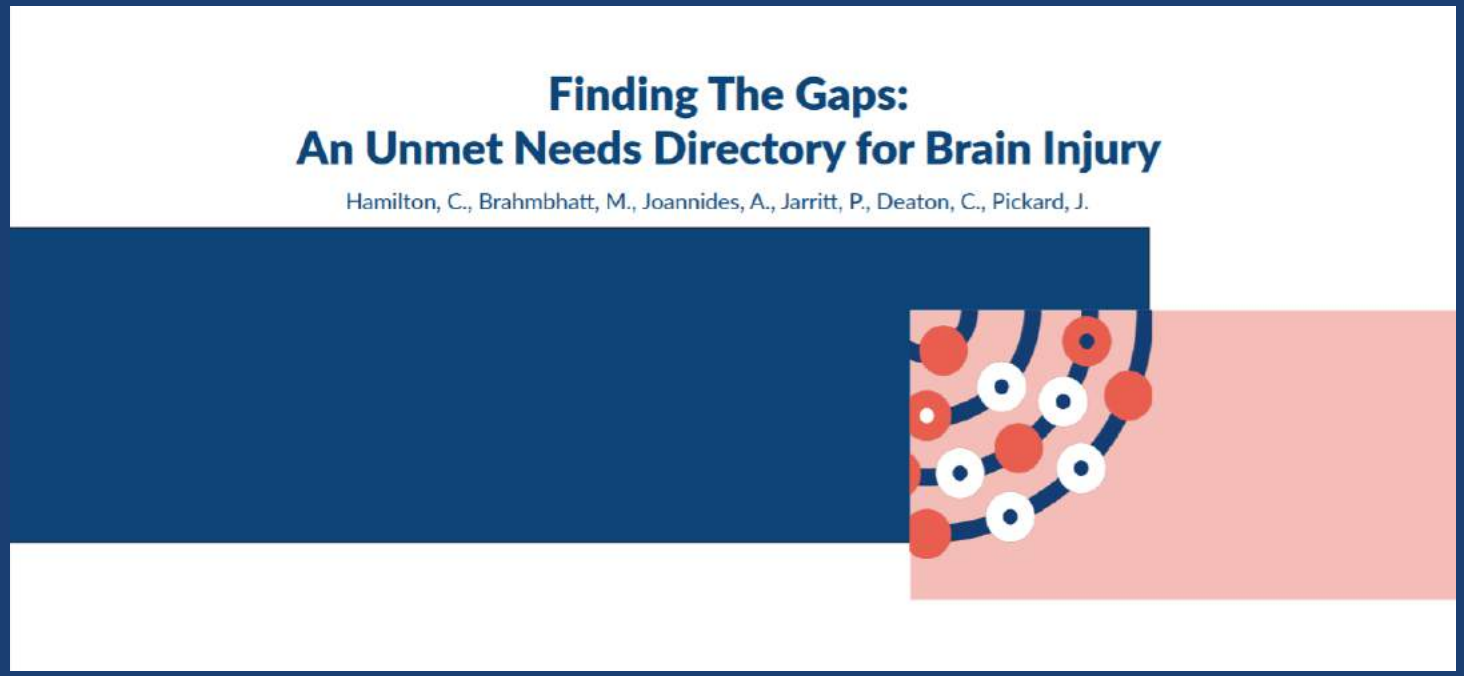
Finding the Gaps:
The Development of the Directory of Unmet Needs (DUN) for Brain Injury



To review the brochure, and find out more visit:

https://www.brainmic.nihr.ac.uk/unmet-needs-directory

Driver for Change - The Golden Window

Filmed on the Neonatal Intensive Care Unit in Cambridge over a 72 hour period, the Golden Window follows a baby being cooled and exploring the challenges faced by parents and staff looking after sick and preterm babies.

Watch the trailer now

The full film is available at:

https://vimeo.com/111026340

Providing the Case for Change

1. Designing the landscape for technological development in Neonatal Neurocritical Care
    1. Strategic Roadmapping
    2. Parent and Carers Surveys and Workshops
    3. Publication & Integration with DUN

    Hamilton C et al. https://innovations.bmj.com/content/4/4/163

2. Paediatric Neurorehabilitation: Finding and Filling the Gaps
    1. Charities and Third Sector Needs Analysis
    2. Parents and Professional Strategic Roadmapping
    3. Publication & Integration with DUN

    Hamilton C et al. BMJ Innovations 2017 doi:10.1136/bmjinnov-2017-000202

3. MedTech for One Healthy Baby
    1. Review National Policy for Reducing Stillbirths and Neonatal Brain Injury
    2. Ecosystem Modelling
    3. Strategic Roadmapping

    https://www.brainmic.nihr.ac.uk/paediatrics-and-neuro-development

ORIGINAL ARTICLE

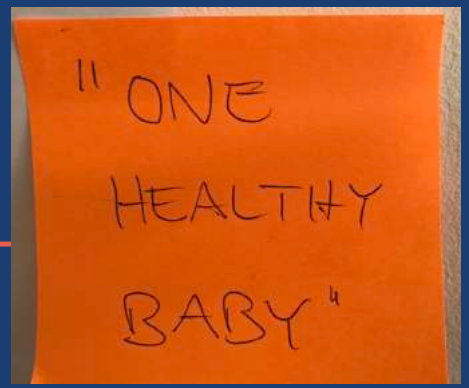
Paediatric neurorehabilitation: finding and filling the gaps through the use of the Institute for Manufacturing strategic roadmapping method

Colin Hamilton,[1] Anna Maw,[2] Andrew Gill,[3] Mita Brahmbhatt,[4] Robert Phaal,[5] John Pickard[6]

ABSTRACT

INTRODUCTION AND BACKGROUND

BMJ



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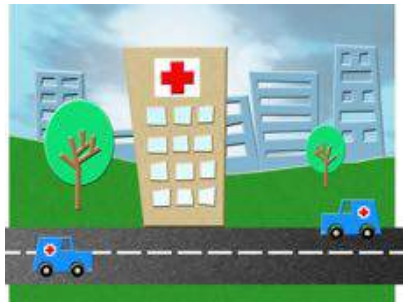
Unmet Needs post Pandemic

Real World Impact on Perinatal and Paediatrics

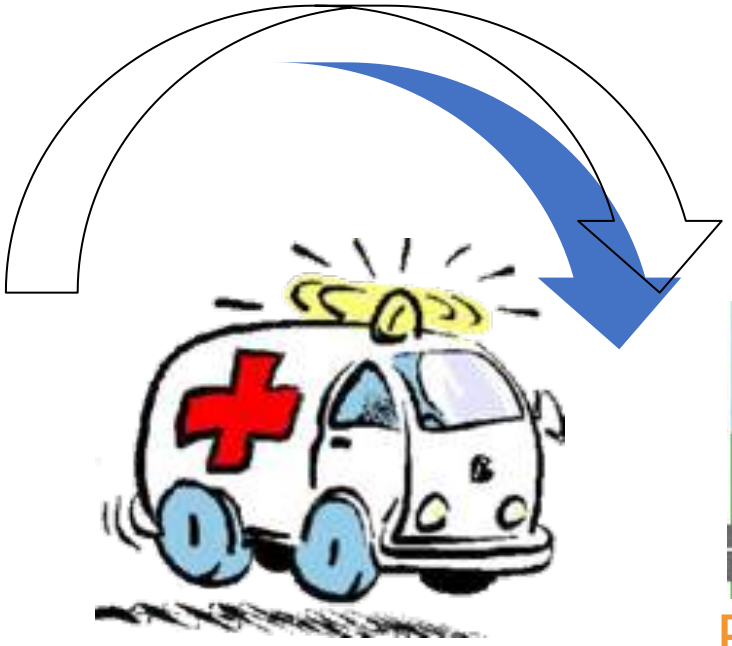
East of England
Neonatal Neuroprotection

The Problem

CEDARS-SINAI



Local Hospital



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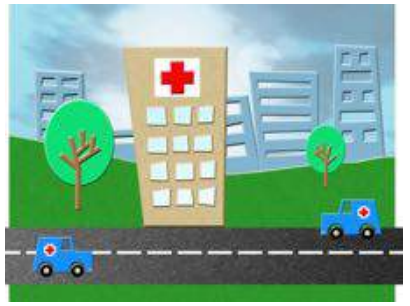

Regional Hospital

What does the project aim to achieve?

- The aim is to bring parents into the heart of their baby's management during the critical first few days of life, even if they are in separate hospitals.
- *Parents have expressed the feeling that their baby was 'taken away from them', and that they 'didn't know what was going on'*
- By embedding secure virtual communication tools, we will enable parents to have access to their baby at all times and ensure appropriate and timely communication with the doctors and nurses.
- *Empowering parents in this way will mark a change from a 'paternalistic' style of medical management to a more collaborative approach*

The Health Foundation

https://q.health.org.uk/

https://q.health.org.uk/idea/2020/talk-to-us-together-enhancing-parent-experience-of-neonatal-encephalopathy/

"Brain development begins soon after conception and continues at least through young adulthood. It is shaped by a complex interplay between genes and the environment. There is evidence for critical periods in brain development, such as adolescence, when it comes to social cognition."

Sahakian, B et al

Link to the article:
https://theconversation.com/how-the-pandemic-may-damage-childrens-social-intelligence-154975

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