

## Centre for Healthcare Technologies

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[www.healthcaretechnologies.ac.uk](http://www.healthcaretechnologies.ac.uk)

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The University of  
Nottingham

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Nottingham University Hospitals **NHS**  
NHS Trust

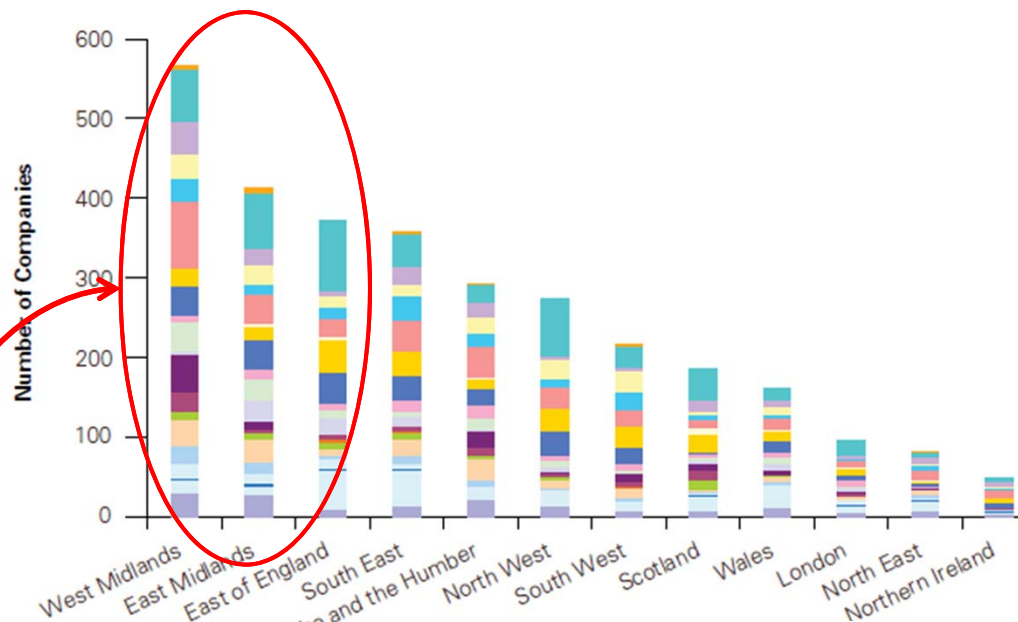
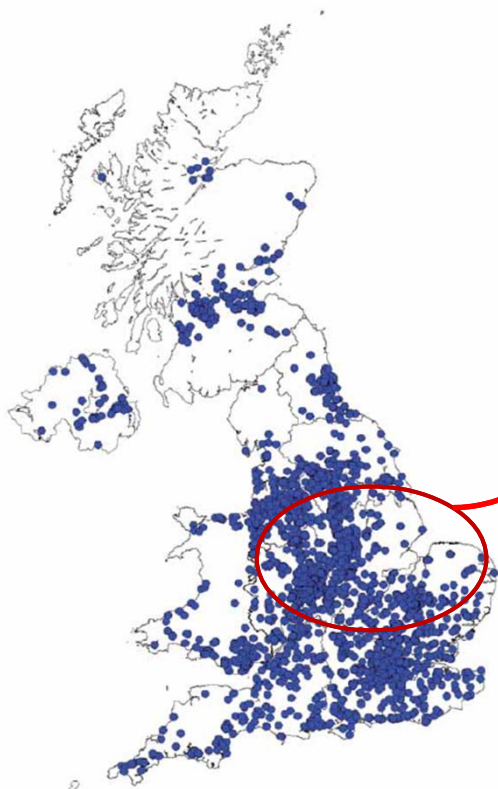
# The future: doom and gloom?

2011

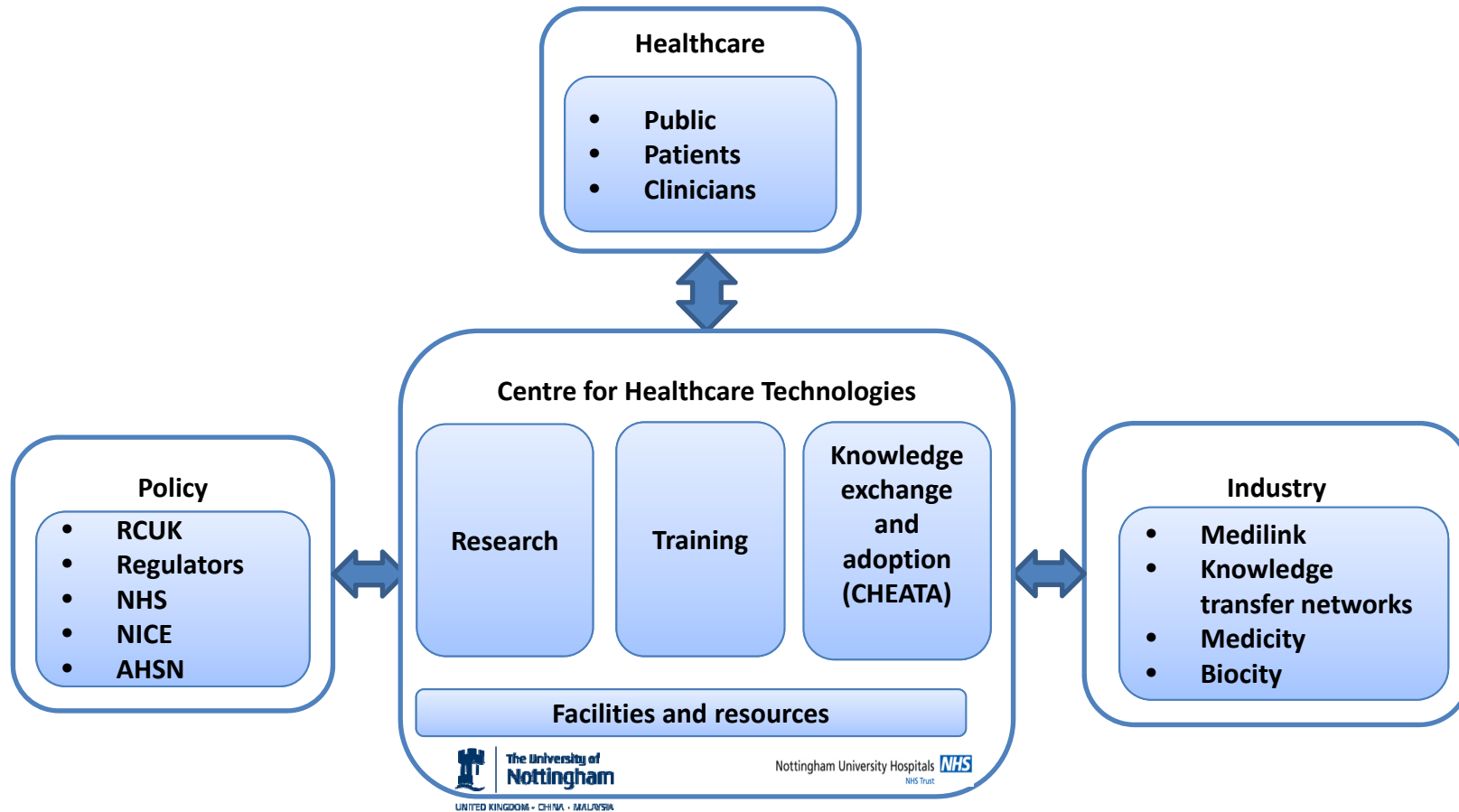


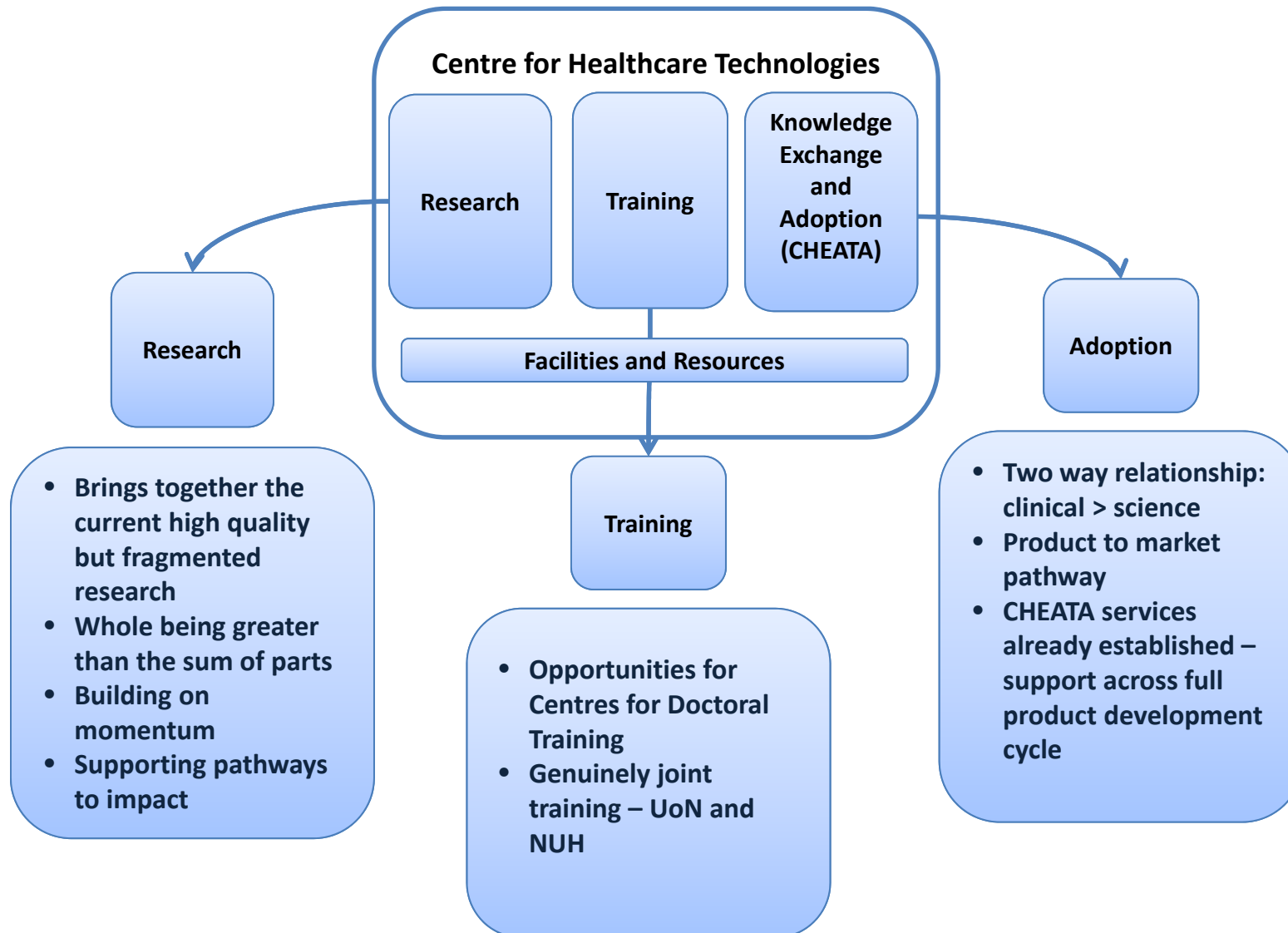
2015



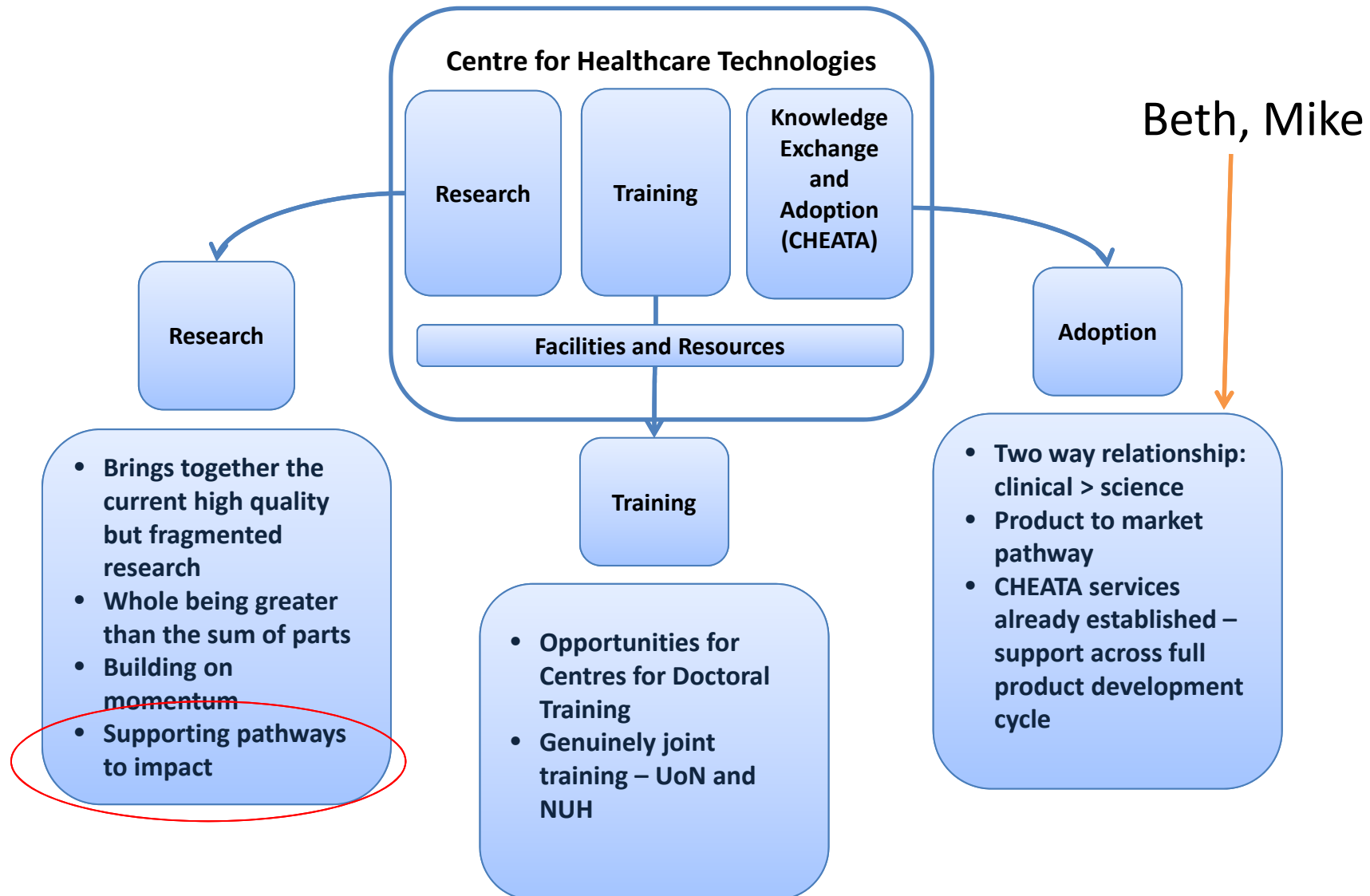


Contains Ordnance Survey data © Crown Copyright and database right [2012]

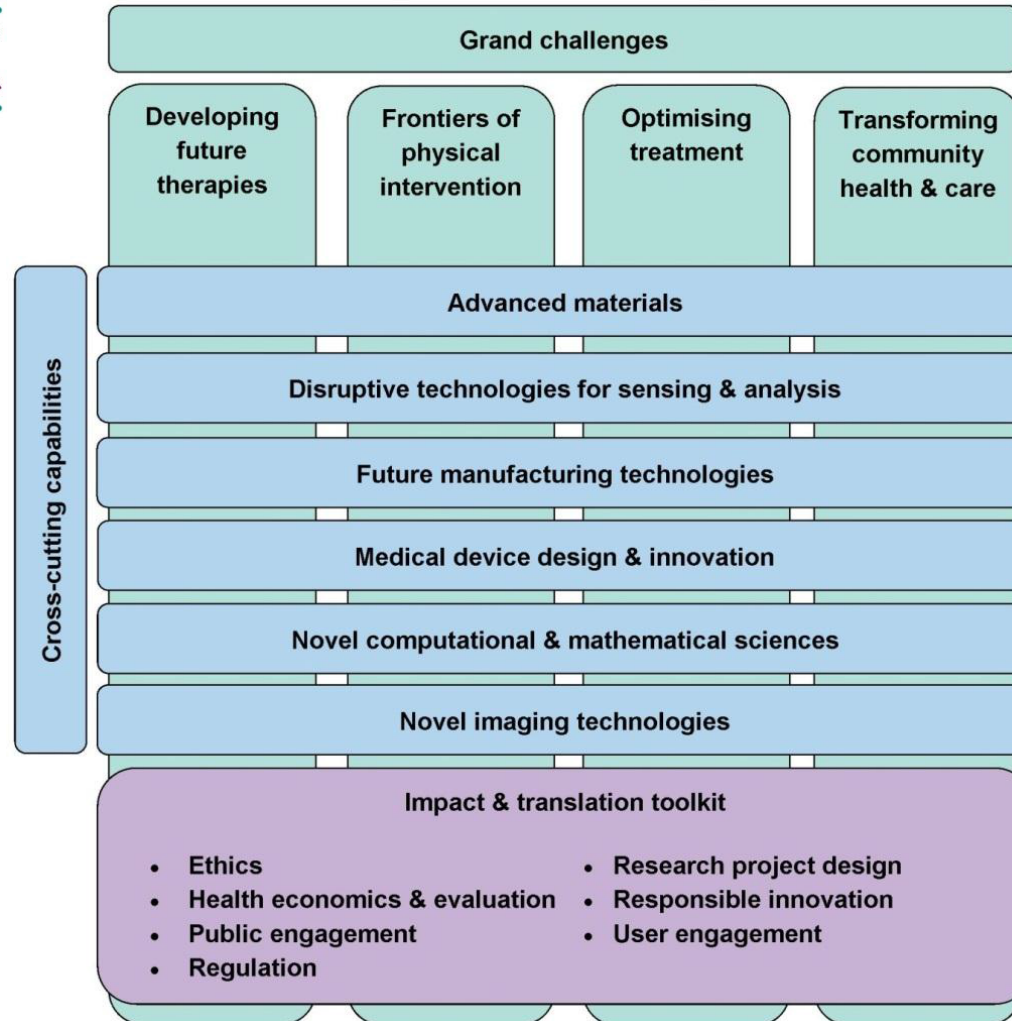








## EPSRC



<b>Ethics</b>	Research projects with healthcare applications often require ethical or other approvals (e.g. NHS R+D) before being undertaken. This is especially true if they involve human participation or the <a href="#">use of animal models</a> . We recommend researchers develop a thorough understanding of the requirements and likely timescales of any approval processes and build this into their applications.
<b>Health economics and evaluation</b>	We encourage researchers to consider the size and significance of the health issue to be addressed and the cost effectiveness and affordability of their proposed solution. We also recommend that researchers develop evaluation techniques to quantify and predict the impact of any new innovations. Note: EPSRC does not fund stand-alone health economic studies but support may be requested as part of the pathways to impact for technology developed in an EPSRC project.
<b>Public engagement</b>	Under EPSRC's Royal Charter, one of our objectives is to generate public awareness; communicate research outcomes; encourage public engagement and dialogue; and disseminate knowledge. Researchers may request funding to support public engagement activities as part of their <a href="#">pathways to impact</a> .
<b>Regulation</b>	We encourage EPSRC researchers to develop an understanding of current regulatory pathways and to engage with regulators to help shape future regulation. Researchers may request funding to engage with experts or undertake training to improve their awareness of possible issues. Some guidance for researchers is available via the <a href="#">MRC Regulatory Support Centre</a> .
<b>Research project design</b>	Researchers are encouraged to consider the future needs of others who may wish to 'take up' and translate their research and build this into the design of their research projects. Steps taken by our community in the early stages of research can help support, for example, regulatory approvals downstream or the de-risking of new concepts.
<b>Responsible innovation</b>	EPSRC promotes a responsible innovation approach and researchers are encouraged to familiarise themselves with our published <a href="#">framework</a> .
<b>User engagement</b>	We recommend that researchers collaborate with appropriate users of their research to increase the probability of successful, rapid translation to products and practices. Users may include business, clinicians, charities, patients, carers, policy makers or other researchers.

<https://www.epsrc.ac.uk/research/ourportfolio/themes/healthcaretechnologies/strategy/toolkit/>



**Regulatory:** *Throughout the project, following the principles and experience that we have acquired through similar projects, we shall continue to develop the product profile documentation with support from CHEATA. This will include user/patient needs evaluation, safety assessment (EN60601-1), design documentation (ISO62366) and risk assessment (ISO14971). In addition, study data sheets will be produced in parallel to manuscript submission to relevant journals.*

**Health economics and evaluation:** *As described in the Case for Support we have developed a Markov health economic model for diabetic foot ulcers where the effect of devices used to improve healing rates or prevent foot ulcers occurring can be investigated [Craven et al 2011]. Through MATCH ([www.match.ac.uk/tools\\_and\\_guides.php](http://www.match.ac.uk/tools_and_guides.php)) we also have experience of the development of health economic tools that can be applied during the device development process [Craven et al 2009, Lu et al 2012]. In this project we will work with CHEATA and our clinical team to review and revise this model based on the likely clinical scenarios for the sock and wound dressing.*

3 projects naming CHT successful in 2016 (£1.65M)

## NIHR i4i programme



What are the key current and future barriers to utilising any new IP/innovation through dissemination and adoption in the healthcare service or through commercial exploitation e.g. potential regulatory hurdles?

Expected Output of Research/Impact Please describe how the outcomes of this research could be translated into the NHS and wider healthcare community to provide improvements in service delivery, patient health and/or wellbeing

Does the proposed research raise ethical issues? If yes, discuss how these issues will be addressed.

Please further describe how patient and public involvement has informed and/or influenced the development of the application and how patients and the public have been actively involved

## Biomedical Catalyst

4. How do you intend to exploit the outputs?

4.2 What is the route to market?

4.3 business model and market?

7. What are the risks to project success?

7.3 Regulatory risks

8. Does the team have the right skills and experience to deliver the project and exploit it?

Support translation activities for healthcare technologies

Cost into RCUK pathways to impact activities  
(current levels 2.5%, EPSRC would (unofficially) like this to be ~10%)

NIHR i4i

MRC Developmental Pathway Funding Scheme

Innovate UK (routes to market activities)





*Questions?*



RPA funds available

Workshops

Grant writing retreat (requested as part of our initial bid)

Travel for visiting academic for seminar

Travel to potential collaborators

Paper writing awayday

Funds for equipment or conference travel would rank lower than these but might be considered if we don't get a good response.

Could you send a brief description of what you'd like to do (<200 words) to Emily Mason ([emily.mason@nottingham.ac.uk](mailto:emily.mason@nottingham.ac.uk)) by the end of the month and we'll let you know the outcome within a week. Funds must be spent by the end of July.