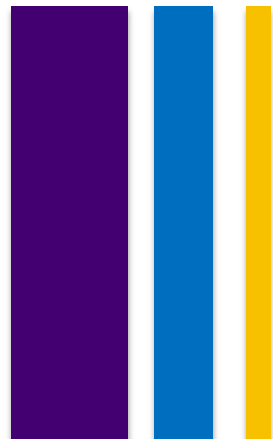




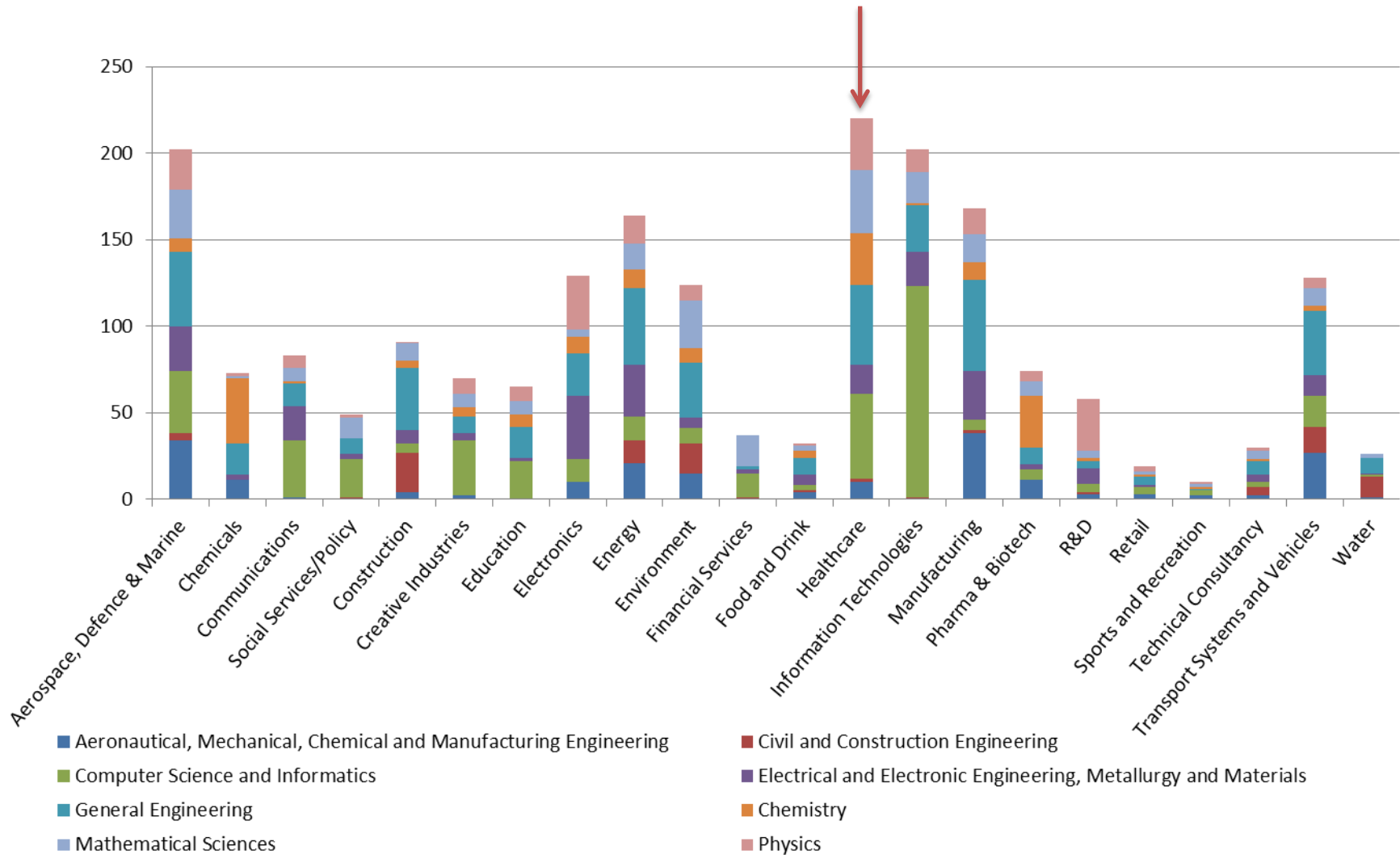
# EPSRC – Healthcare Technologies Strategy

Sarah Ashwood

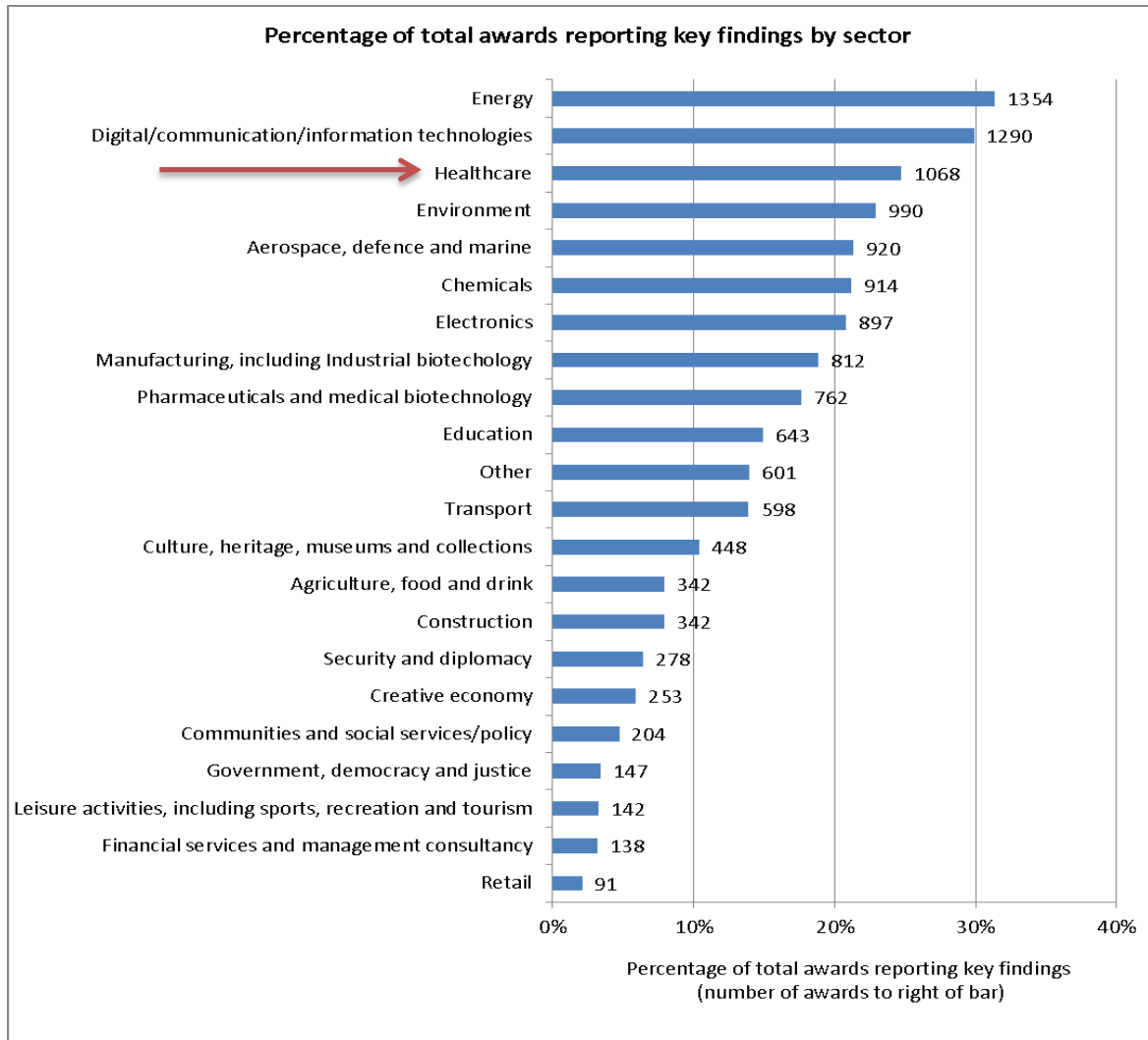
29<sup>th</sup> February 2016



# REF 2014 impact case studies – distribution by sector and Unit of Assessment



# EPSRC Research Outputs analysis 2015



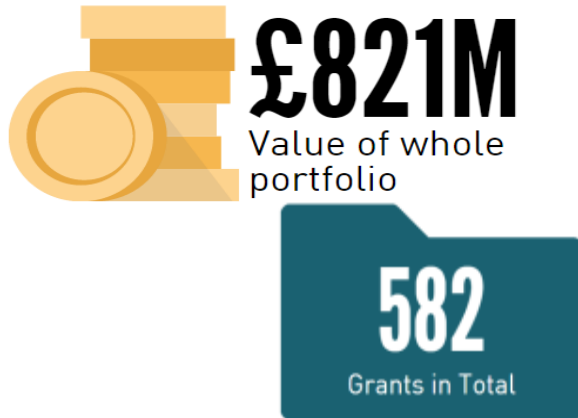
1086 outputs  
relevant to  
healthcare

25% of total  
outputs

# EPSRC Health portfolio

**EPSRC**

Investing in research for  
discovery and innovation



Co-funding with other  
partners leverages over  
**£100M** additional  
funding



**wellcome**trust

**Innovate UK**  
Technology Strategy Board



Grants with Project  
Partner Support

**£20.3M**  
Cash leveraged



**£48M**  
In-Kind Support  
Leveraged

**507**  
Project Partners



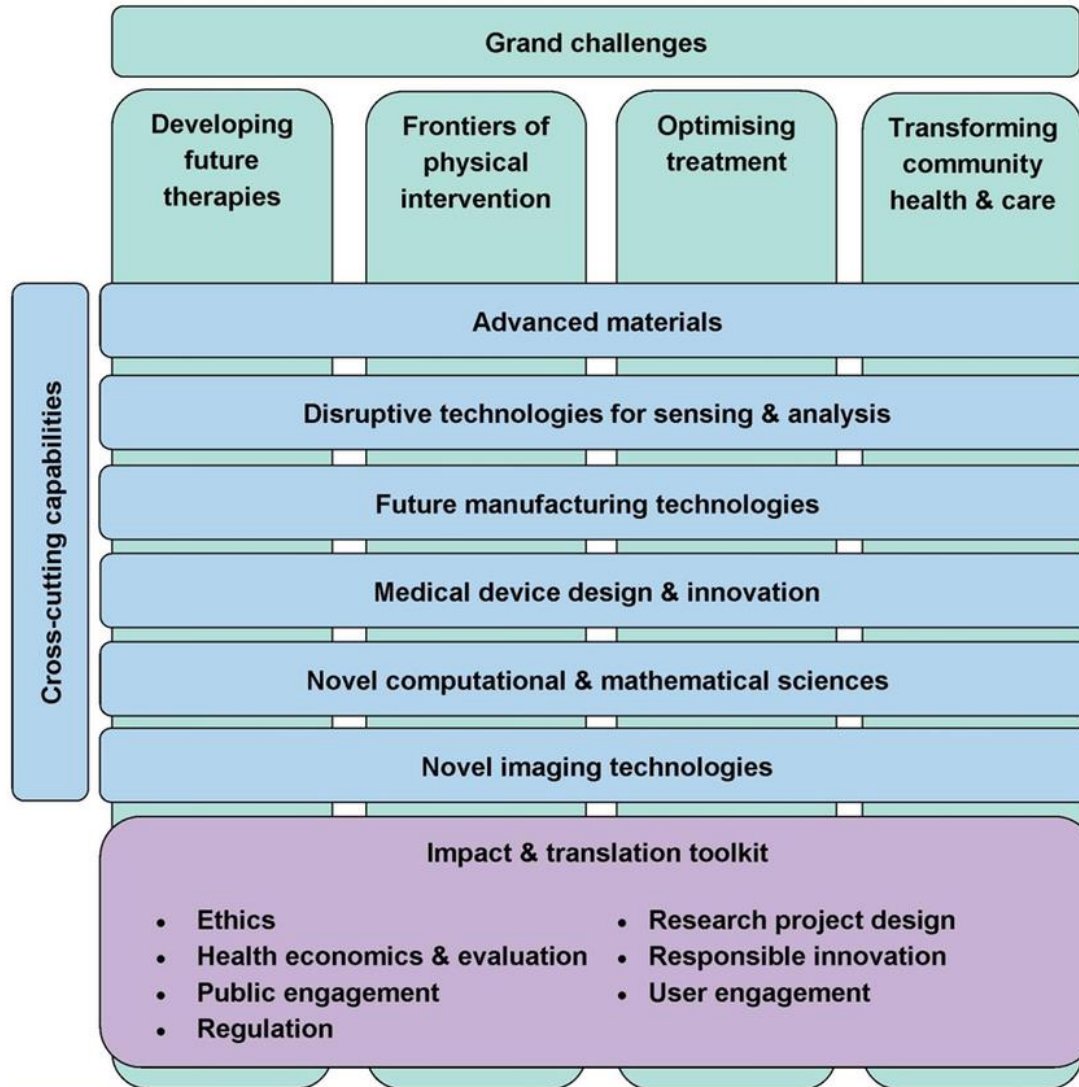
Figures correct July 2015

# Healthcare Technologies Strategy

<https://www.epsrc.ac.uk/files/research/htstrategysummary/>

**EPSRC**

Investing in research for  
discovery and innovation



## Grand challenges

**Developing  
future  
therapies**

**Frontiers of  
physical  
intervention**

**Optimising  
treatment**

**Transforming  
community  
health & care**

*Supporting the development  
of novel therapies with  
technologies to enhance  
efficacy, minimise costs and  
reduce risk to patients.*

*Optimising care through effective  
diagnosis, patient-specific prediction  
and evidence-based intervention.*

*Restoring function, and optimising  
surgery and other physical  
interventions to achieve high  
precision with minimal invasiveness.*

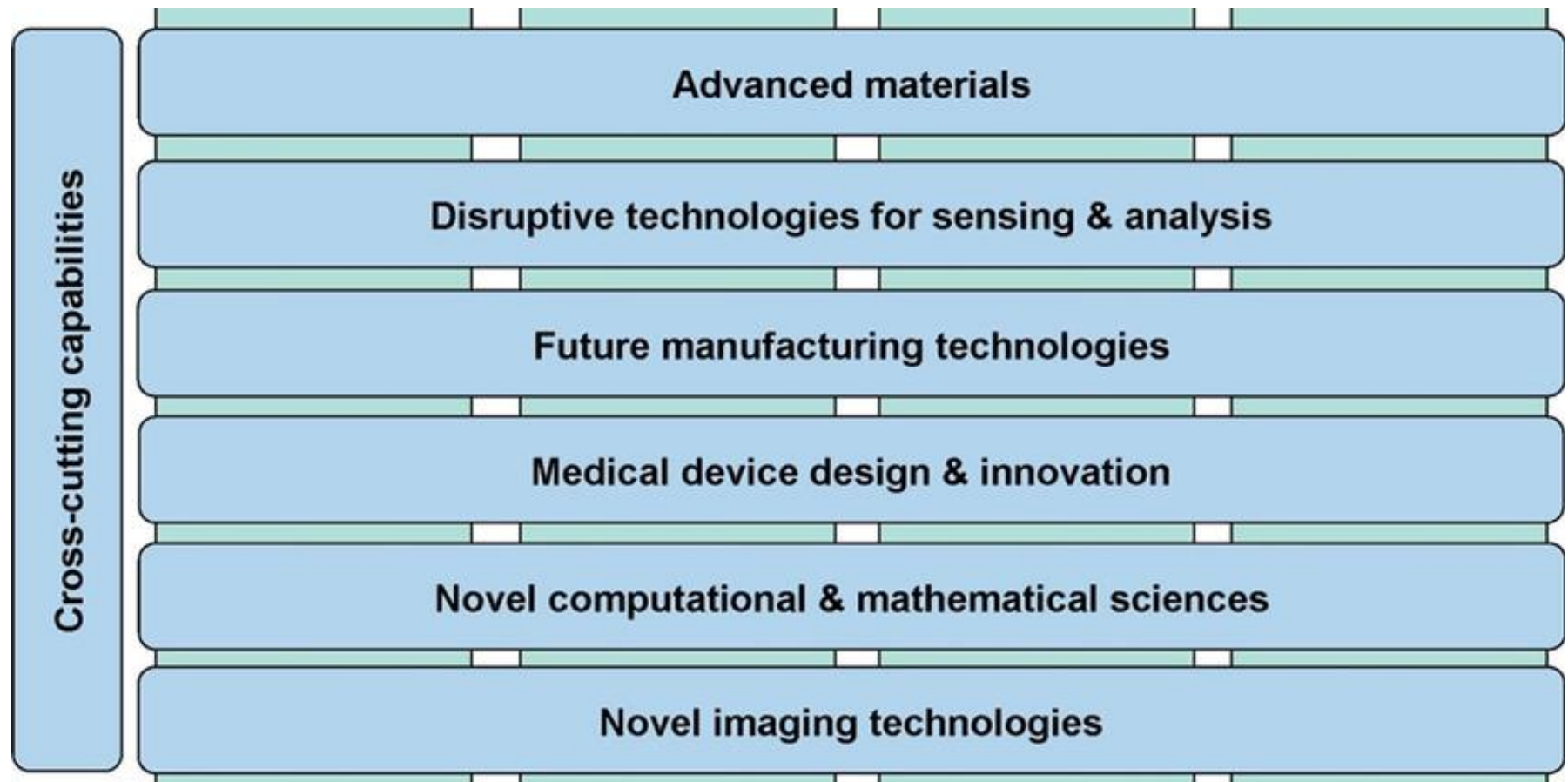
*Using real-time information to  
support self-management of  
health and wellbeing, and to  
facilitate timely interventions*

# Healthcare Technologies Strategy

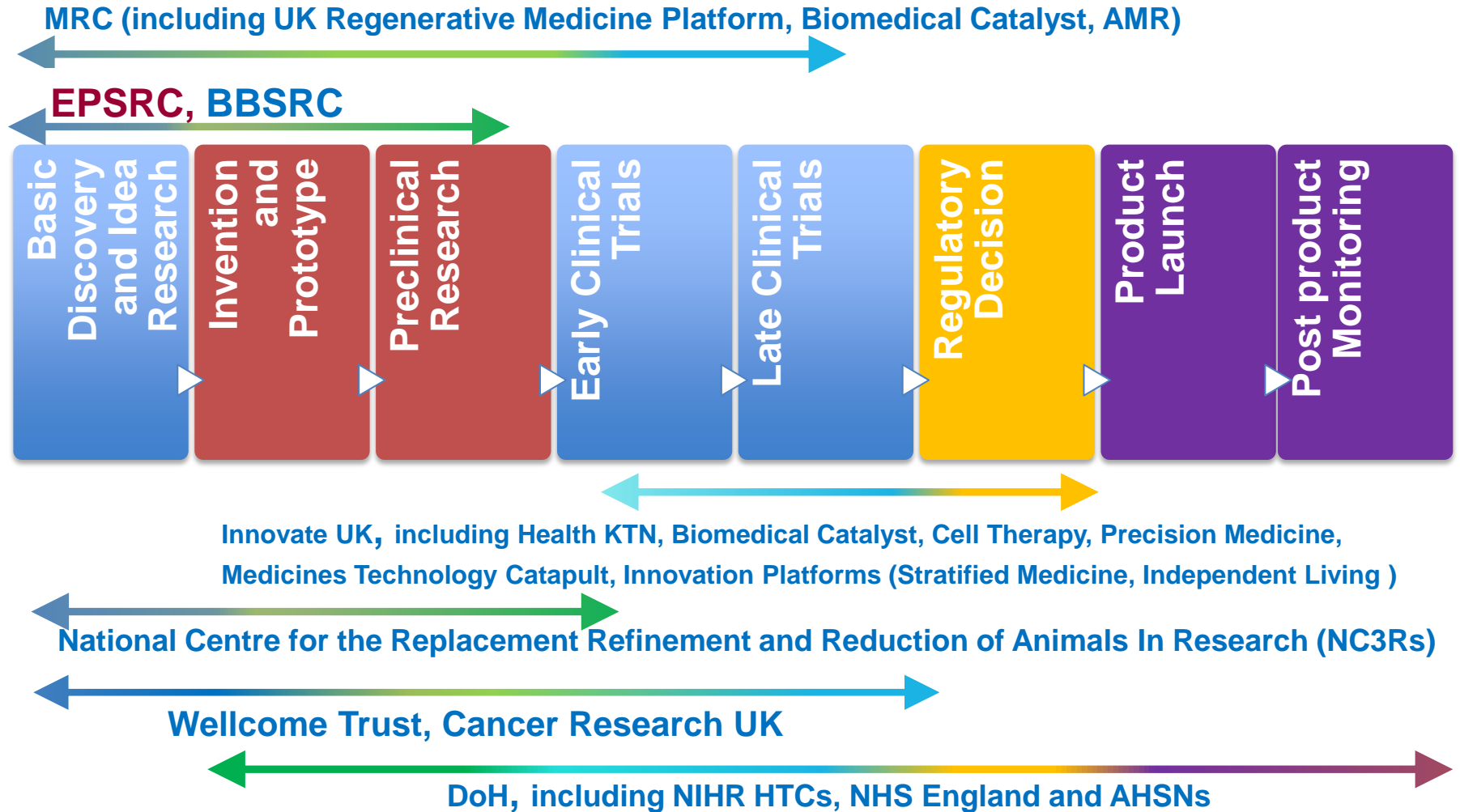
<https://www.epsrc.ac.uk/files/research/htstrategysummary/>

**EPSRC**

Investing in research for  
discovery and innovation



# EPSRC in the healthcare landscape





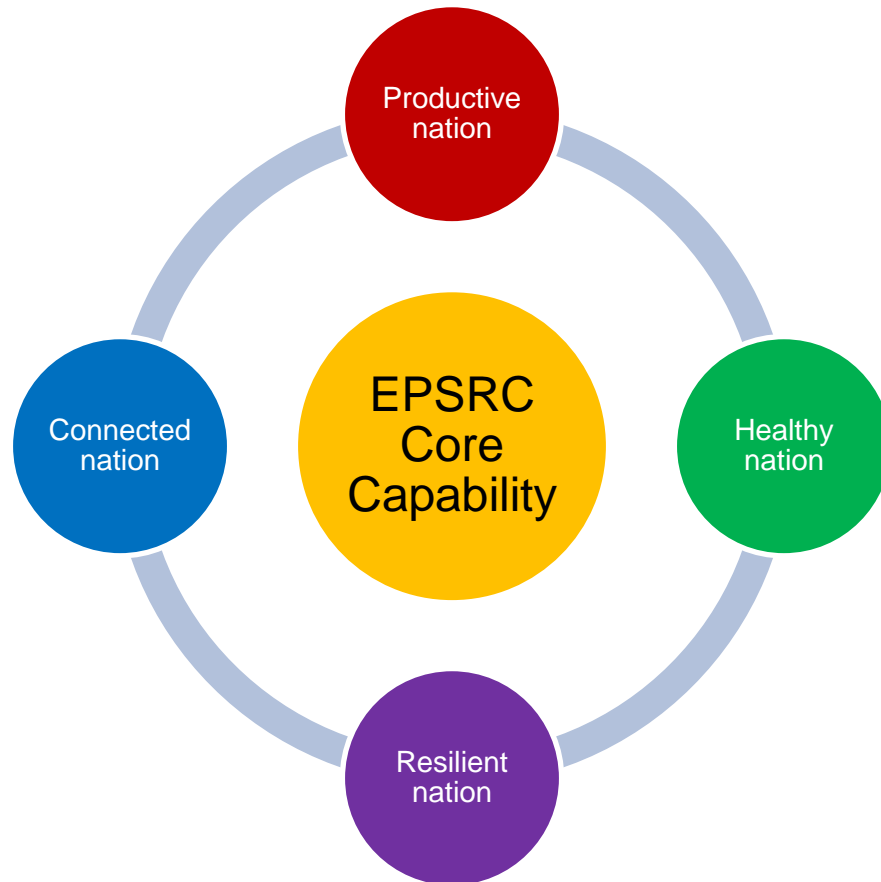
## Impact & translation toolkit

- Ethics
- Health economics & evaluation
- Public engagement
- Regulation
- Research project design
- Responsible innovation
- User engagement

- Intended to encourage researchers to embed thinking about translation and impact into the planning and development of research.
- Could form part of the pathways to impact for proposals, and associated resources may be requested.
- Will be key part of future HT calls for proposals

# Science for a successful nation

## Narrative for the EPSRC Delivery Plan



- The Healthcare Technologies Theme have aimed to embed the Grand Challenge strategy across the organisation.
- As a result the Grand Challenges have fed directly into the narrative for the forthcoming delivery plan, particularly surrounding the Healthy Nation Outcome.

More info can be found here

<https://www.epsrc.ac.uk/newsevents/news/deliveryplanupdate/>

<https://www.epsrc.ac.uk/about/plans/>



## HEALTHY NATION – Improved quality of life through better mental and physical health

H1: Transform  
community  
health and  
care

H2: Improve  
prevention  
and public  
health

H3: Optimise  
diagnosis  
and  
treatment

H4: Develop  
future  
therapeutic  
technologies

H5: Advance  
non-  
medicinal  
interventions

For example:

Developing, characterising and processing advanced materials with novel chemical, physical or mechanical properties, for health-related applications

Innovative sensing systems or analytical technologies that could transform prediction, diagnosis and monitoring for health

Technologies that will enable health-related manufacturing processes, products and systems to function with high precision, efficiency, reliability and repeatability

Design, development, evaluation and production of cost-effective, reliable and effective medical devices

Novel computational and mathematical techniques for prediction, analysis and modelling in healthcare

Novel imaging technologies for diagnostic, monitoring and therapeutic applications

RESEARCH CAPABILITIES

SKILLS & LEADERSHIP

<b>AMBITION H1</b>	<b>Transform community health and care</b>
Using real-time information to support self-management of health and to facilitate timely interventions delivered through new models of care.	
<b>AMBITION H2</b>	<b>Improve prevention and public health</b>
Using technologies to understand and influence behavioural and environmental determinants of health and wellbeing, and to revolutionise built infrastructures to support healthy, independent living.	
<b>AMBITION H3</b>	<b>Optimise diagnosis and treatment</b>
Optimising care through effective diagnosis, patient-specific prediction and evidence-based treatment planning.	
<b>AMBITION H4</b>	<b>Develop future therapeutic technologies</b>
Supporting the development of novel therapies with technologies to enhance efficacy, minimise costs and reduce risk to patients.	
<b>AMBITION H5</b>	<b>Advance non-medicinal interventions</b>
Restoring function, and optimising surgery and other non-medicinal interventions to achieve high precision with minimal invasiveness	

## Science focussed calls

**Potential identified Topics;**  
Targeted therapeutic delivery  
Bioelectronics  
Manufacturing in healthcare

## Building critical mass

Programme grants call  
EPSRC-Wellcome Trust Centres  
Manufacturing hub co-funding

## Supporting future leaders

Challenge Awards  
EPSRC fellowships

## Healthcare Technologies Activities

## CRUK/EPSRC Multidisciplinary Awards

Further two rounds of this  
initiative

## Accelerating research to impact in healthcare

Healthcare Impact fellowships  
Healthcare Impact Partnerships call

## Standard proposals, First Grants

Increased emphasis on good practice in  
impact and translation using the toolkit for  
HT funding.

Less emphasis on GCs as this the route for  
investigator led research ideas.

# Healthcare Team – Who are we?

**Annette Bramley**  
*Theme lead*  
(Overall strategy, budget)

**Nick Cook**  
*Senior Portfolio Manager*  
(Impact)

**Katie Daniel**  
*Senior Portfolio Manager*  
(Regenerative therapies,  
Grand Challenges)

**Anne Farrow**  
*Senior Portfolio Manager*  
(Leaders, Technologies for a  
healthy lifecourse)

**Sarah Hobbs**  
*Portfolio Manager*  
(Digital technologies, ICT)

**Mark Tarplee**  
*Portfolio Manager*  
(Medical Imaging,  
Maths/Engineering)

**Victoria Marlow**  
*Portfolio Manager*  
(AMR, Novel therapeutics,  
drug delivery, Phys Sci)

**Martin Champion**  
*Portfolio Manager*  
(Assistive Technologies,  
Medical devices, Engineering)

**Sarah Ashwood**  
*Portfolio Manager*  
(Clinical tech, Biomaterials  
and Tissue Eng, Engineering)

**Sian Giles, Carla Huynh, Linda Norris**  
*Support Team*

# For more info....

For more information please contact;

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Clinical Technologies, Biomaterials and Tissue Engineering

Engineering and Healthcare Themes

EPSRC

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01793 444301

Alternatively you can contact another member of the Healthcare Technologies theme –  
See our website for details;

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