UK clinical research infrastructure – supporting the development of innovative therapies

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“Life science - and the UK’s role in it - is at a crossroads.

Behind us lies a great history of discovery, from the unravelling of DNA to MRI scanning and genetic sequencing.

We can be proud of our past, but this government is acutely aware that we cannot be complacent about the future.”

David Cameron

December 2011
“The old ‘big pharma’ model is becoming more difficult to maintain. In its place is a new focus on translational medicine - more early stage clinical trials with patients, more external innovation, more collaboration.”

“This is an ambitious strategy to:

• open up universities and business to more collaboration;
• invest in the best ideas at an early stage;
• remove regulatory barriers;
• open up the NHS to new innovations and new clinical trials.”
What is required for the innovation pathway to flow effectively?

Early-phase clinical research

Learn (early ‘go / no go’)

Late-phase clinical research

Confirm (fail rarely)

Delivery to time, budget and quality

Shorter timelines
What can the UK offer to research partners?

- World leading science
- World class facilities
- NHS patients

National Institute for Health Research (NIHR)
The NIHR Health Research System

People

Research Infrastructure

Research Systems

Research Programmes

Universities

NHS Hospitals

Patients & Public
> £0.5 billion p.a. investment in relevant infrastructure to support clinical research at all points in the development pipeline
NIHR Research Infrastructure

- Leaders in scientific translation across a wide range of disease and therapeutic areas
- Based within the most outstanding NHS and University partnerships in the country.
- Provide a direct route to work with leading investigators and clinicians with the expertise to translate fundamental biomedical research into new and improved therapeutic approaches
NIHR Research Infrastructure

- **Invention**
  - Early-phase clinical research
    - NIHR Biomedical Research Centres
    - NIHR Biomedical Research Units
    - NIHR Clinical Research Facilities
    - Experimental Cancer Medicine Centres

- **Evaluation**
  - Late-phase clinical research

- **Adoption**

- **Key Points**
  - Dedicated research facilities for early-phase volunteer and patient studies.
  - Run by experienced researchers, research nurses and support staff.
  - Provide assistance throughout the research process from trial design through to data collection and study management.
NIHR Biomedical Research Centres and Units

Recent £800million Government investment to support NIHR Centres and Units - the largest ever commitment to early stage health research

NIHR Biomedical Research Centres

Newcastle*
Cambridge
Imperial
University College
Great Ormond St*
Moorfields*
Guy’s & St Thomas’
Marsden*
Maudsley*
Southampton
Oxford

NIHR Biomedical Research Units

Leeds
• Musculoskeletal

Manchester
• Musculoskeletal

Liverpool
• Gastrointestinal

Birmingham
• Gastrointestinal

Oxford
• Musculoskeletal

Bristol
• Cardiovascular
• Nutrition, Diet, Lifestyle

Southampton
• Respiratory

Newcastle
• Dementia

Nottingham
• Hearing
• Gastrointestinal

Leicester
• Cardiovascular
• Respiratory
• Nutrition, Diet, Lifestyle

Cambridge
• Dementia

University College
• Dementia

Imperial
• Cardiovascular
• Respiratory

Maudsley
• Dementia

Barts & London
• Cardiovascular

Maudsley
• Dementia
 Trials are investigating the safety of using retinal cells derived from stem cells injected directly into the retina to treat people with advanced Stargardt disease, a form of macular degeneration that causes disabling loss of sight in young people.

The Moorfields Biomedical Research Centre is collaborating with the US company Advanced Cell Technology (ACT) to undertake the study.
NIHR Research Infrastructure

Invention

Evaluation

Adoption

Early-phase clinical research

Late-phase clinical research

NIHR Biomedical Research Centres

NIHR Biomedical Research Units

NIHR Clinical Research Facilities

Experimental Cancer Medicine Centres

NIHR Clinical Research Network

• Eight Clinical Research Networks
• Work together to facilitate the delivery of high quality clinical research across the country
• Operate across all areas of disease and clinical need
Scale of opportunity for research partners

Access via a single point of entry to world class science in world leading institutions and patients across the NHS

NOCRI supports industry through:
• sign-posting
• introductions
• establishing collaborations
• managing relationships
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