Manchester Biomedical Research Centre Manchester Clinical Research Facility



Launch Event

6 June 2017

 We are mindful of the purdah period and will look to publicise our event after the general election is complete.

Welcome

Sir Michael Deegan

Chief Executive

Central Manchester Hospitals NHS Foundation Trust

Welcome

Professor Dame Nancy Rothwell
President and Vice-Chancellor
University of Manchester

The importance of clinical research to the citizens of Manchester

Sir Richard Leese

Leader, Manchester City Council

Health Innovation Manchester

Rowena Burns

Executive Chair
Health Innovation Manchester





Section







The rising costs of health and social care and slow introduction of innovative solutions are a major frustration to patients, care providers and policy-makers

Patient Outcomes across Greater Manchester are currently below national averages against a range of disease and

mortality figures and over the next five years, faces significant public health challenges



Increase in over 65s population between 2011 and 2021



Increase in over 85s population between 2011 and 2021



Funding defict to the economy by 2021 if no action is taken

Health Innovation Manchester

The obstacles preventing rapid implementation of innovations:



Fragmented and slow decision-making



Structures which do not assist collaboration and co-ordination



Lengthy and uncertain routes to adoption



Excellent initiatives in one locality are not shared adross the system



Industry fin raltiplicity of organisations/initiatives confusing and add to risk

The Greater Manchester health devolution has enabled the formation of an Academic Health Science System allowing for the acceleration of clinical research into clinical practice

Health Innovation Manchester's vision is to transform the health and wellbeing of Greater Manchester's population by

accelerating the introduction of innovation in our health and social care services







Health Innovation Manchester brings together academic research and clinical excellence with industry innovators, creating shorter and more certain pathways to enable adoption at scale

Health Innovation Manchester covers every stage of the translational pathway from discovery science through to

commissioning and real world evaluation to improve the population health across Greater Manchester



Health Innovation

Manchester
is building upon
the strengths
and synergies of
both the AHSN
& AHSC





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Health Innovation Manchester will enhance Greater Manchester's position, showcasing our city-region's capabilities by aligning local, regional and national initiatives and strategies

Our strategic priorities align with and support not only the Greater Manchester-wide Digital Strategy but also the national

Accelerated Access Review and the UK Industrial Strategy, highlighting Greater Manchester as an exemplar site



GM Digital Strategy

Integration of data records across Greater Manchester for health and for social care

Build Greater Manchesterwide informatics capacity

Provide a single voice for Greater Manchester as we engage in national debate



REGIONAL

Accelerated Access Review

Streamlining mechanisms for identifying and prioritising innovations

Working to accelerate approvals, adoption and evaluation of technologies



UK Industrial Strategy Life Sciences

Inward investment for clinical trials and regional data hubs

Support for the practical and specialist skill shortages

Promote discovery science and RWE and partnerships with industry.





Health Innovation Manchester's development and progress has strengthened since summer 2016 and delivery of the Business Plan is now underway



- Launched in late 2015 as a virtual organisation without dedicated resource
- · Steering Group formalised
- Board and Executive Chair appointed
- AHSC/AHSN merger discussions initiated
- Developing Business Plan with relevant senior input
- Business Plan signed off by Board with agreement that there was a clear delivery plan, and that this should begin immediately
- Delivery of immediate tasks begins
- Transition plan to support AHSC and AHSN combining into one team
- Developing KPIs Recruitment to urgent positions
- Launching the Innovation Pathway and calls for innovations



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Active, relevant and consistent engagement with all partners and stakeholders across the health and social care system will be vital to delivering innovation

Health Innovation Manchester supports a 'One Manchester team' to tackle GM health challenges and support GM health

and wellbeing priorities, working in collaboration to support GM residents and improve outcomes





Health Innovation Manchester is focused on delivering three strategic priorities, exemplar projects and a digital health pipeline to build momentum

Our choice of exemplar projects will balance clinical need with innovation opportunity and support the work of

population health and social care professionals along with the needs of primary and secondary care providers



Informatics

Establishing a Greater
Manchester populationwide informatics capability
as a vital tool to improve
patient outcomes and
access to innovations/
trials. DataWell
implementation is central
to this.



Clinical Research Excellence

Extend our strong research and clinical trials expertise, and strengthen our infrastructure and processes to create a onestop shop for industry.



Precision Medicine

Leverage existing strengths in Precision Medicine, and building on data analytics capabilities, to redesign clinical pathways in the treatment of chronic diseases.



Digital health pipeline

Establishing Greater Manchester as a global hub for digital and MedTech to attract investment, drive business growth, and support innovation and clinical adoption.



Exemplar Projects

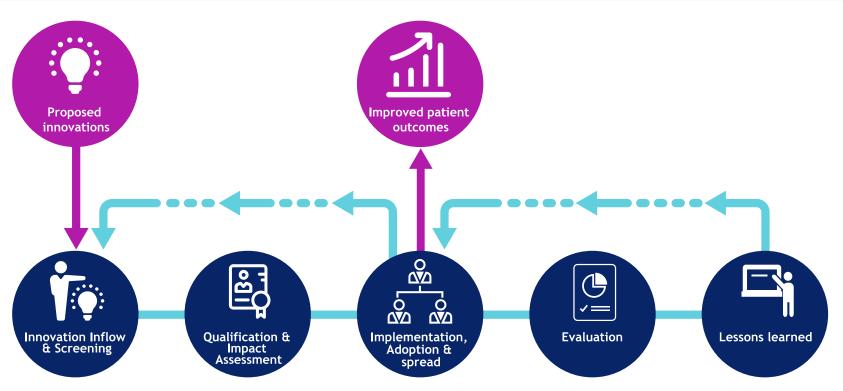
Assessing and expediting existing initiatives to establish and test the Innovation Pathway and its supporting processes to address Greater Manchester's health needs.



The Innovation Pathway: providing structure, organisation and a systematic approach to translation and adoption through the health and social care system

Adoption and spread will be delivered through the Joint Commissioning and Provider Federation Boards,

stakeholder engagement, project management, economics and evaluation support



*The Innovation Pathway developed by Health Innovation Manchester.



Achievements to date and the key activities required moving forward to establish the HInM 'one team', secure resourcing, progress quick wins, and launch the HInM innovation pathway

Achievements to date

Business plan signed off by board

Shadow leadership team created and operational to oversee formal transition of AHSC & AHSN to HINM

Signed MOU with GM HSCP & ABPI to explore to partnership ways of working

Identification of 6-8 exemplar projects to test innovation pathway

Creation of repository for innovations found within the GM footprint

Looking forward

Innovation pathway 'open for business'

Support implementation of Datawell and associated accelerator projects

Implementation of exemplar projects in phased approach

Submission of full 3 year funding application (GM TF)

Establish Industry Advisory Board

Convert Industry excitement & interest into strategic partnerships/initiatives

Establish Annual business planning cycle

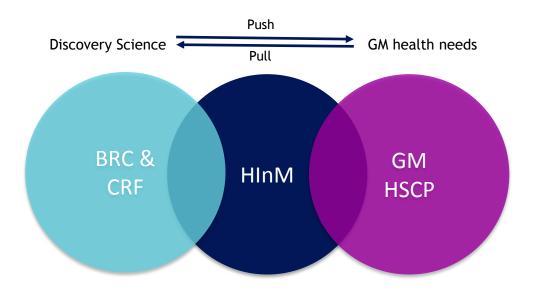


Manchester's BRC & CRF showcase our ability to rapidly translate research will bring major health benefits not only to local citizens but also beyond to a diverse global population

As part of Health Innovation Manchester the BRC & CRF are integrated within the Greater Manchester Health and

Social Care Partnership allowing for scientific breakthroughs to become life saving treatments delivered to patients

The BRC & CRF are vital elements in the growth of Greater Manchester's academic & clinical assets, highlighting our research excellence on an international scale.



The synergistic overlap within Greater Manchester for the pull through of basic science through to clinical practice







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National research landscape

Dr Louise Wood

Director of Science, Research and Evidence Department of Health

Introduction to the NIHR Manchester Biomedical Research Centre

Professor Ian Greer

Dean, Faculty of Biology, Medicine and Health

University of Manchester

Manchester Biomedical Research Centre





Experimental Medicine

Invention Evaluation Adoption Diffusion

- Experimental medicine (EM) is an <u>investigation in</u>
 <u>humans</u> to identify the cause of disease and/or to test
 the validity and importance of new discoveries and
 treatments:
- EM research:
 - Relates, where appropriate, to model systems
 - Precedes and informs development of later-phase trials
 - Bidirectional
 - Forward to later-phase clinical research
 - Generates new hypotheses for laboratory research

Experimental Medicine Infrastructure

Invention

Evaluation

Adoption

Diffusion

Biomedical Research Centres

Translational Research Collaborations

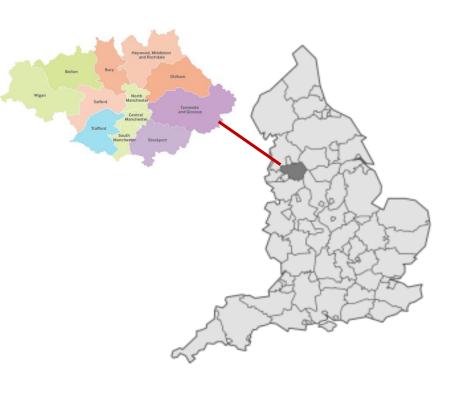
Clinical Research Facilities

Experimental Cancer Medicine Centres

Translational Research / Experimental Medicine

Clinical Research Network

Translational Research Accelerating Health Improvements

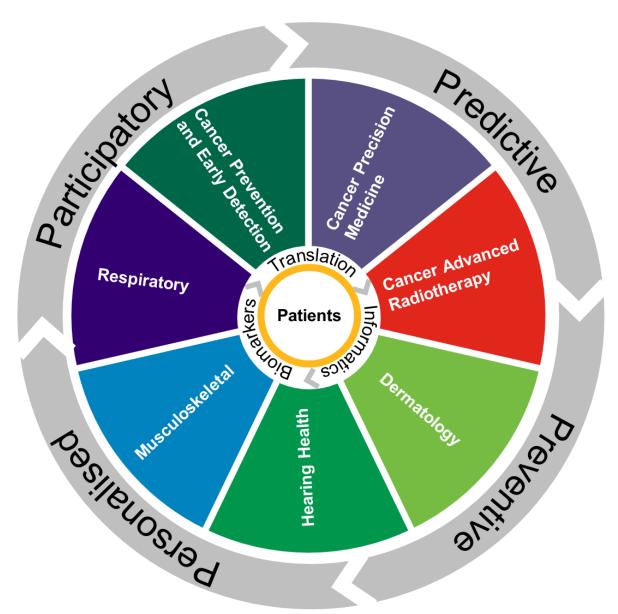


- Access to a defined population
 - Governance arrangements in place
- Drive innovations into healthcare at pace and scale
 - Exemplar for wider NHS
- An agile system
 Influence NHS procurement

Manchester BRC Vision

- Every patient will have a personalised medicine approach as part of routine clinical practice.
- Our ability to rapidly translate research will:
 - bring major health benefits to diverse populations
 - position us as the partner of choice for public, charity and industry collaborators

Manchester BRC Themes



P4 Medicine

PREDICTIVE

PREVENTATIVE

PERSONALISED

PARTICIPATORY

Training

- -Training the next generation of scientists and researchers across all healthcare professions is essential to build capacity and advance discoveries to improve health
- -A shared priority with the Clinical Research Facility
- PhD / Fellowships
- MRes programme in Experimental Medicine
- Allied Health Professional Placements/Tasters in EM
- BRC Seminar Programme

Patient and Public Involvement and Engagement

PPIE connects people with research for mutual benefit

Strategic focus areas include:

- Involving our diverse communities with research
- Innovating with creative arts
- Contributing to the PPIE evidence base
- Building capacity for PPIE



Working with Partners

- Aligning with the industry and business engagement vision of our partners and Greater Manchester
- Build and strengthen our existing collaborations
- Engage with new
 - Industry inc. local SMEs
 - Public
 - Charity Partners

Manchester BRC Expertise

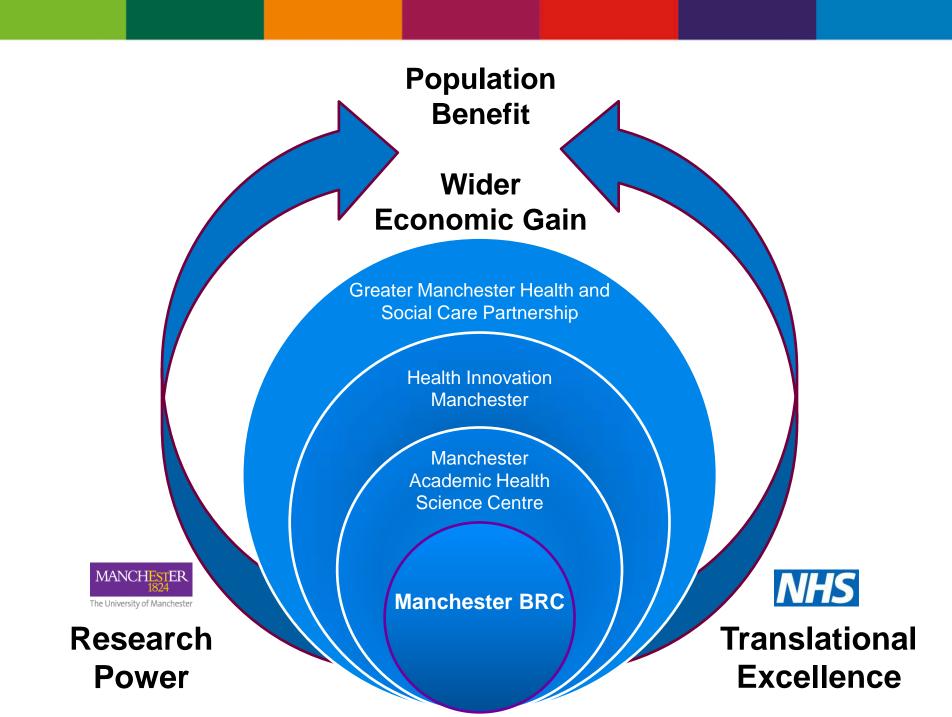
1 Clinical Studies and Expertise

- Large diverse patient cohorts
- Rich health data
- EM medicine study design and delivery
- Integrated Clinical Research Facilities

- 2 Collaborative Research
- Collaborative research projects
- Flexible licensing / commercialisation
- Shared studentships

3) Discovery platforms

- Novel targets / pathways
- Multi'omics approaches
- Molecular pathology
- Biomaterials and nanotechnologies



Manchester Clinical Research Facility





Clinical Research Facilities

Dedicated facilities to support the delivery of externally funded early translational (experimental medicine) research including:

- early-phase studies (phase IIa and earlier);
- early translational (experimental medicine) research studies that are nested within later-phase studies.

Early translational (experimental medicine) research

People- and/or patient- focused research that aims to translate discoveries from basic/discovery science into clinical research, and through to benefits for patients, the health system and for broader economic gain.

What is the NIHR Manchester CRF?

The NIHR Manchester CRF brings together dedicated research space and expertise at:

- CMFT (adults and children's)
- The Christie (NIHR/Cancer Research UK Christie CRF)
- UHSM (South Manchester CRF)

Director and Manager







Helen Pidd

NIHR Manchester CRF £12.5m (2017-2022)

NIHR Manchester CRF

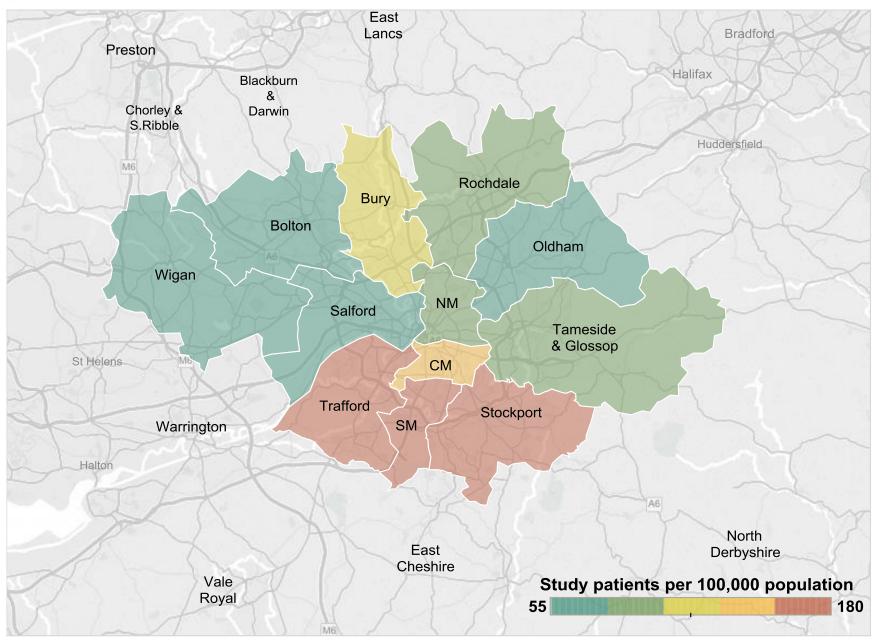
- Largest NIHR CRF nationally
- Largest number of studies active
- Second largest number of EM research subjects recruited
- Second for number of NIHR-citing publications
- 15 global first recruits since 2012

Why bring the CRFs together?

Opportunity presented by the devolution of the Health and Social Care budget in Greater Manchester

- Complementary specialist expertise, facilities and services
- Achieve maximum efficiency and effectiveness
- Potential to become the largest and best NIHR CRF
- Improve equality in research participation opportunities across GM
- Support the DH health and wealth agenda

Greater Manchester - Trial Recruitment 2015-16



Our vision

To speed up the translation of scientific advances and provide research participation as an option for patients of all ages and backgrounds across Greater Manchester.

How does the NIHR Manchester CRF deliver this vision?

We provide:

- World-class infrastructure and experience in the delivery of complex and high-intensity studies across a diverse range of clinical research areas
- Safe and quality assured facilities
- Support for the delivery of experimental medicine research studies in adults and children

Our structure

CMFT

Professor Nick Webb Medical Director

Helen Pidd Operational Director

The Christie

Professor Andrew Wardley Medical Director

Elaine Blowers
Operational Director

UHSM

Professor Jacky Smith Medical Director

Lesley Howard Operational Director

Training
Dr Ben Parker

PPIE Leah Holmes

Communications Emma Smith

Our facilities and services



Inpatient and outpatient 24-hour 7-days a week 50+ beds/chairs 20+ consultation rooms



3 MR scanners, PET/MR and proton beam research unit



Dedicated children's facility



Training opportunities at all levels



Research pharmacy services and clinical trials aseptic unit



24h pre-analytical laboratory processing (PK and PD samples, pharmacogenetic analysis)



Dedicated research staff

Strategic goals (2017–2022)

- Develop the One Manchester CRF
- Grow experimental medicine research across GM
- Increase world-class research across GM, specifically interventional Phase I and II trials
- Increase engagement with the life sciences industry
- 5 Increase training in experimental medicine

How to access our services

If you would like to arrange a tour of our facilities and discuss how we can support your study design and delivery, please get in touch.

Manchester CRF

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UHSM

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Thank you

The NIHR Manchester Clinical Research Facility (CRF) comprises three dedicated experimental medicine research units at Central Manchester University Hospitals NHS Foundation Trust, The Christie NHS Foundation Trust and University Hospital of South Manchester NHS Foundation Trust. Funded by the NIHR, the CRF provides state-of-the-art equipment and facilities for adult and children's studies, and has a team of specialist research nurses and support staff

@Manchestercrf