

Board of Directors (Public)

Item 4.1

Subject: Research & Innovation Strategy – Progress Update
Date of meeting: 24th November 2015
Prepared by: Nina Spofforth, Interim Research & Innovation Manager and Dr Mark Jackson, Director of Research & Informatics
Presented by: Dr Mark Jackson, Director of Research & Informatics

Board Report

BAF Ref	Impact on BAF Risk Rating?
5	None

1. Executive Summary

The new Research & Innovation Strategy is at an early stage of implementation.

Our planned initiatives are moving forward.

Recruitment is slightly behind plan but a recovery plan is underway.

There are no areas causing concern.

2. Background

The Board approved the current strategy for Research & Innovation in April 2015. As such, this strategy is immature in its development. That said, there have been some important early work done to date that is presented below.

3. Issues

The strategy has been constructed around six pillars. Brief progress is presented for each area.

➤ Promote Research & Innovation in our Priority Areas

We have made considerable progress in advancing our activity in digital healthcare. Farsite is a software query tool that allows information to be searched from general practice. We have approval from Knowsley CCG to approach individual GP practices to become early adopters in using this tool for the purposes of population health management. This will, in time become part of our community offering. This tool will

allow us to identify patients who are sub-optimally managed for cardiorespiratory disease and organise practice specific improvement programmes. This enhancement to our community offer will provide research opportunities in collaboration with primary care in the medium term.

We have established a “Big Data” warehouse with our ICMS colleagues at the Brompton & Harefield NHSFT. This technology allows us pull information from our joint data warehouses into a single analytical space for the purposes of joint research. Our first project on aortic surgery is almost complete. The ICMS Executive Committee will assess the business case for future investment.

We have begun recruitment of patients to the national 100,000 genome project. The project will sequence 100,000 genomes from around 70,000 people. Participants are NHS patients with a rare disease, plus their families, and patients with cancer. Whilst this is not strictly a research project, the resources to drive it forward are being provided by the research department. In the rare diseases chapter, we have recruited 16 of the 30 participants recruited so far in the UK.

We have established a baseline of the perceptions of the public about LHCH as a research active hospital. In the 2015 members’ survey, a question was asked about what LHCH is recognised for. Fifteen percent of responses was for “being at the cutting edge” in second place behind quality of care. Our communications programme hopes to build upon this strong foundation over the lifetime of this strategy.

To date, we have secured three media citations as a consequence of research & innovation at the Trust:

1. *International Clinical Trials day publicity: Radio Merseyside (Keith Wilson) (May 2015)*

Keith Wilson, our patient ambassador, was interviewed on Radio Merseyside to promote International Clinical Trials Day, with specific reference to LHCH.

2. <http://www.liverpoolecho.co.uk/news/liverpool-news/liverpool-scientists-launch-world-leading-9779775> (Aug 2015)

Headline: “Liverpool scientists launch world-leading genetic research which could lead to cancer cure”.

LHCH mentioned as one of the Merseyside organisations making up the North West Coast NHS Genomic Medicine Centre as part of the 100,000 genome project.

3. <http://www.liverpoolecho.co.uk/news/liverpool-news/liverpool-pensioner-becomes-one-first-9691107>

Headline: “Liverpool pensioner becomes one of the first patients in medical history to be given wireless pacemaker”.

The wireless pacemaker was implanted by the team LHCH as part of a global trial in which 780 people will receive the pioneering new devices. LHCH is one of four places in the UK that can implant the devices.

In October 2015, LHCH recruited the first UK participant to the InsMed trial, a study of liposomal amikacin for inhalation (LAI) in adult patients with nontuberculous mycobacterial (NTM) lung infections caused by mycobacterium avium complex (MAC) that are refractory to treatment.

We have begun discussions with John Hunt, Professor of Musculoskeletal Biology at the Institute of Aging & Chronic Disease, University of Liverpool around opening up our research laboratory lab to collaborative work with his team. We have also initiated discussions with PeptigelDesign, a local SME who are developing injectable peptide based hydrogels for cardiac regeneration applications. This will advance our commitment to research and service developments in regenerative medicine.

- Build a culture that promotes supports and values research and innovation activity within the Trust

We are planning a multidisciplinary Innovation forum for November. This will bring together:

- Education about what innovation is
- An evaluation of our previous activity in innovation
- A platform for staff to advance desired innovative changes to service which may require commissioner approval
- A forum to identify priorities for innovation to facilitate matchmaking with external agencies (Universities, SME's etc.).

There will also be a Research & Innovation session for Board at the away day in December.

Research performance reports have been implemented within the Divisions performance reports to promoter activity throughout the Trust.

Changes to our innovation policy have been agreed with Executives that rewards the innovator much more than previously, and there are a couple of innovation projects in the pipeline where significant intellectual property has been contributed from our staff which should be the first test of this policy.

- Develop capacity and capability for research and innovation within the Trust

We have commenced our joint working with Fundraising to establish our new venture ICE CAP, Improving Clinical Effectiveness by the Continuous Assessment of Practice. We are calling this a “new disruptive technology in clinical research”. A steering group has been established, and the development of a business case is well under way. An external Consultant is advising us on fundraising strategy and our new fundraising manager is in post.

We have attracted a £1.6m grant to provide the clinical trials services for RIPCORDER, which will explore the additional value of fractional flow reserve measurement to diagnostic angiography in its ability to alter the management of patients with suspected coronary artery disease. Dr Stables will be reducing his clinical commitments to head up this new unit, and accommodation space has been secured in the Surgical Admissions Unit, next to and physically connected to the Research Unit so that day to day interaction can be maintained.

Our academic staff (Dr Sloan & Professor Postmus) are beginning to develop new trials and submit grant proposals, although Dr Sloan will be leaving us in December

due to personal reasons. Professor Postmus is leading the development of new collaborations in lung cancer which will see many more patients participating in research than ever before. Two honorary professorships have been conferred on Mr Oo and Dr Walshaw. Dr Stables has been encouraged to apply to the University of Liverpool for a personal chair in translational medicine.

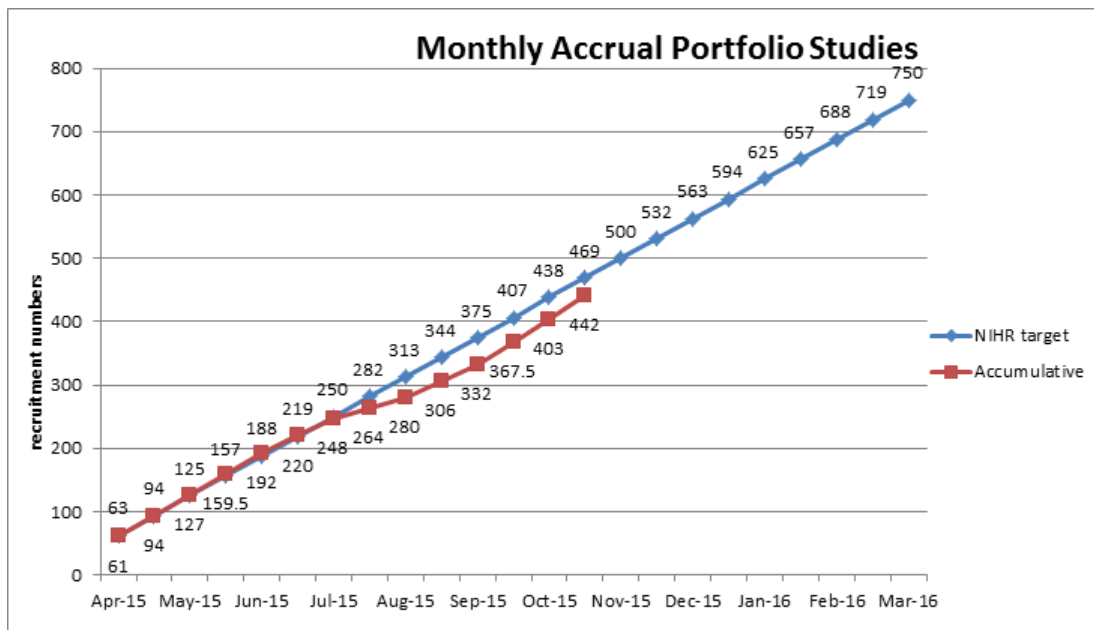
- Maximise opportunities for our patients to take part in research

We continue to grow our commercial research portfolio (15% growth compared to 14/15).

We have an established patient ambassador as part of our research staff who has a growing national profile.

Reasonable performance in terms of meeting key NIHR approval (60% vs. national mean of 67%) and recruitment targets (ranked 14th) when benchmarked nationally.

We have however suffered a small slowdown in overall recruitment to clinical trials, and at the time of writing are 27 cases behind target. However, the gap is being narrowed by mobilising nurses working on trials that have historically recruited only low numbers to higher recruiting trials. This strategy will be reconsidered once we are back on target which we anticipate will be December 2015.



- Maximise opportunities for research and innovation collaborations with external partners

To date, we have submitted two innovation bids which involve work with SME's (care4today in cardiac rehabilitation and self-management in respiratory medicine). The respiratory medicine project is being driven by our community respiratory team and has been funded (£50,000) by the AHSN. We anticipate other projects to spin out of this collaboration.

Dr Jackson has joined the North West Coast Collaboration for Leadership in Applied Health Research and Care (CLAHRC) Board. Additionally, he represents the Trust on the Local Clinical Research Network Provider Group who will soon be re-working the funding allocation model. LHCH will be lobbying for additional resources given the size of our research portfolio. Collaboration with Liverpool Health Partners remains strong; their strategy is under review and we are attempting to get cardiovascular disease recognised as an emerging research priority for the city. The Trust is also a key player in the shaping the strategy of the North West Cancer Research Centre in association with the University of Liverpool and other local Trusts, ensuring a strong commitment to lung cancer research.

New partnerships have been developed with SAS (Big Data), North West eHealth (Farsite), Medical Imaging Technologies (innovations in RFID-enabled patient tracking, associated staff/patient information apps, staff/departmental scheduling software, case-related information functionality for case-specific safety/planning), Aseptika - self management in respiratory medicine).

➤ Governance

Maintenance of excellent levels of in date good clinical practice registration amongst our research active staff (97%).

The backfill of our Head of Research & Innovation with an Interim focussed on delivering the strategy and dealing with the operational work of R&I (our principal risk for research & innovation on the Board Assurance Framework, and the source of the reduced risk score).

The development and implementation of a suite of dashboards which record and present progress against the metrics agreed in the strategy.

4. Conclusion

The new Research & Innovation Strategy is at an early stage of implementation.

Our planned initiatives are moving forward.

Recruitment is slightly behind plan but a recovery plan is underway.

There are no areas causing concern.

5. Recommendations

The Board of Directors are asked to review this progress report and be assured that good progress is being made against the Research & Innovation Strategy whilst recognising the relatively early stage of maturity.