UHL Research and Innovation: Quarterly Trust Board Report July 2017

Author: Director of Research & Innovation Sponsor: Medical Director

Trust Board paper M

Executive Summary

Context

UHL is a Trust active in Research and Innovation (R&I). This report describes current R&I performance against metrics, projects under development, new challenges and potential threats.

Questions

- 1. Is UHL performing well in the delivery of quality research at expected volume?
- 2. Are large projects planned with appropriate partners and managed appropriately?
- 3. Are upcoming challenges understood?

Conclusion

- 1. UHL performs well in delivering high quality research as judged by NIHR and LCRN data but recruitment has fallen. An accompanying paper provides an analysis and action plan is in place.
- 2. A larger number of large projects are in development, some being close to start date. There is a wide range of NHS and Academic partner engagement.
- 3. A number of challenges are recognised and planning is in place to mitigate risks.

Input Sought

Report is presented for information and assurance.

For Reference

Edit as appropriate:

1. The following objectives were considered when preparing this report:

Safe, high quality, patient centred healthcare [Yes] Effective, integrated emergency care [Yes]

Consistently meeting national access standards [Not applicable]

Integrated care in partnership with others [Yes]
Enhanced delivery in research, innovation &ed' [Yes]
A caring, professional, engaged workforce [Yes]
Clinically sustainable services with excellent facilities [Yes]
Financially sustainable NHS organisation [Yes]
Enabled by excellent IM&T [Yes]

2. This matter relates to the following governance initiatives:

Organisational Risk Register [Yes] Board Assurance Framework [Yes]

- 3. Related Patient and Public Involvement actions taken, or to be taken: [Insert here]
- 4. Results of any Equality Impact Assessment, relating to this matter: n/a
- 5. Scheduled date for the next paper on this topic: [TBC]
- 6. Executive Summaries should not exceed 1page. [My paper does comply]
- 7. Papers should not exceed 7 pages. [My paper does comply]

UHL R&I Quarterly Trust Board Report July 2017

1. Introduction

This report describes current R&I performance against metrics, projects under development, new challenges and potential threats.

2. Research Performance

The activity of UHL in initiating and delivering clinical research is performance monitored by both the NIHR Central Commissioning Facility (NIHR CCF) and the East Midlands Clinical Research Network (EM CRN). In turn the UHL R&I Office reports research CMG level activity and performance to each CMG via the R&I Executive Committee.

2.1 NIHR CCF.

NIHR league tables (http://www.nihr.ac.uk/research-and-impact/nhs-research-performance/league-tables/) published in The Guardian show that for 15/16 UHL was the 6th highest recruiting trust in England. Equivalent figures are not yet available for 16/17

UHL is also judged by its performance in recruiting patients into initiated trials within time and target. In Q1 2016/17 this figure has been excellent and represents a sustained improvement. Overall in terms of delivering research UHL remains ranked in League 1 (of 7) by NIHR.

2.2. EM CRN.

Table 1: Cumulative Recruitment Numbers of Patients into UHL Studies 2015/16 and 16/17

	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Cumulative Recruitment 15/16	1078	1946	3112	4112	4972	5961	7477	9327	10112	10923	12546	13479
Cumulative Recruitment 16/17	1037	1953	3037	3894	4709	5459	6079	7044	7562	8198	8729	10586

Recruitment into portfolio clinical trials for 16/17 was approximately 20% lower than the same period in 15/16. UHL R&I has analysed recruitment and established an action plan to actively manage for 17/18 (see accompanying paper).

3. New Projects Underway

3.1 Opening of Children's Research Space

After a refurbishment supported by charitable and research funds, and a contribution from the Trust, the Children's Research Space officially opened at LRI in June 2017 with wide media coverage. There is now a wonderful Research Space at LRI (Balmoral level 0) with adjacent adult and children's facilities.

3.1 NIHR Leicester BRC, NIHR Leicester CRF and Experimental Cancer Medicine Centre (ECMC).

These major elements of NIHR funded infrastructure will commence their new activities from 1st April 2017. A new UHL structure chaired by Director of R&I – NIHR Integrated Operations Group (NIOG) – will support the efficient functioning of <u>all</u> elements of NIHR infrastructure at UHL.

3.2 100,000 Genomes Project

UHL is recruiting above trajectory to rare diseases and approaching trajectory in cancer.

4. Projects in Development

4.1. Bioinformatics

UHL has supported a University of Leicester bid to become a substantive site of the UK Farr Institute for Health & Biomedical Informatics research.

4.2. Biobanking

UHL is a supporting partner in a bid to MRC led by University of Leicester to establish the East Midlands Bioresource Partnership (EMBIOP). This has been shortlisted and interviews will take place in August 2017.

5. UHL Research Strategy

The development of a new 5 year research strategy is a supporting objective to the UHL Quality Commitment. Therefore we will develop a new 5 Year Research Strategy with the University of Leicester in order to maximise the effectiveness of our research partnership. The two organisations will work together to develop this. A draft will be presented to UHL Exec Strategy Board in September 2017.

6. Innovation/Enterprise Activities

We are working with Leicester Precision Medicine Institute and the Healthcare Innovation Hub Medipex to commercialise the Stent Project and NeedleGuide – a device for safe placement of needles and cannulae.

7. Focus on R&I Business Intelligence

EDGE is a database solution used by the R&I Team at UHL. It was procured for our use by CRN-EM in 2015. Since then we have developed it into more than just a database – it is now a Business Intelligence tool with huge potential. UHL is now a national leader in the use of this system.

UHL's use of EDGE is not replicated in any Trust anywhere else in the UK. The solution is not just used by R&I, it is a system utilising functionality to allow all departments involved in any research study to record their participation and in some areas authorisation to participate.

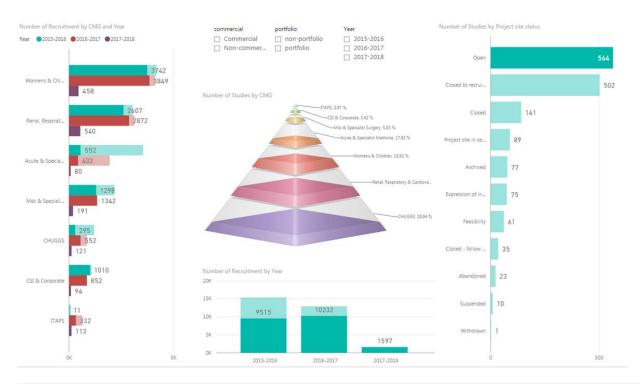
The system allows two levels of information. R&I utilises this functionality to separate the information required by the Trust as a whole including R&I compliance information, and the information required by either support departments eg imaging, pharmacy etc, and the individual specialty areas within the CMGs. Our vision is for all CMG authorisations and Support Departments to utilise the system to provide electronic authorisation. It provides a unique audit trail & evidence that only authorised signatories have signed off and eliminates a great deal of email traffic too.

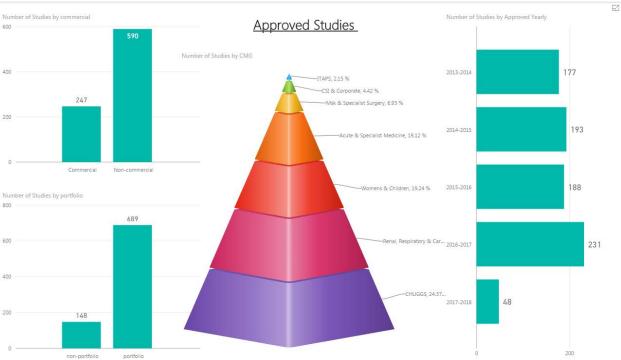
Carolyn Maloney (Head of Research Operations) considers that the system is intuitive. National changes for approvals process and the structure of CMGs/Specialties within UHL lend themselves perfectly to the setup of the system. Carolyn led her team, quietly working to 'build' the system for use at UHL and learned that UHL's use was different to most other Trusts in the UK. Several Trusts that had been using the system for a number of years were visited and a number of ideas taken. UHL uses the system far more extensively than any other Trust and as such, we're unique and are being recognised by other NHS Organisations and EDGE for our innovation and development.

EDGE invited Carolyn to deliver a presentation at their conference in Southampton along with Viswin Mallayan the UHL R&I Business Intelligence Manager who delivered a presentation. Following this the UHL team have been visited by Leeds, Chelsea & Westminster, Brighton, Dagenham, Barking & Redbridge, & LPT Trusts to have live demonstrations of the system and have been invited to speak at North West London CRN, & Birmingham. The invitations are increasing and our development of our own system continues.

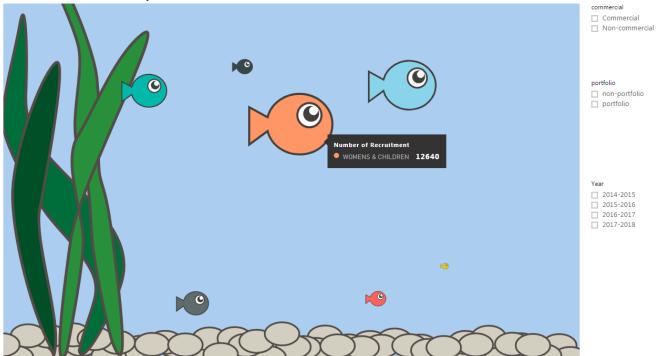
UHL collects a huge amount of information within the system and reports can be produced using any of the information within the system. Viswin has introduced a data visualisation tool which has revolutionised reports that we now produce.

MSPowerBI is a very powerful data visualisation tool and Viswin now uses this to produce fabulous interactive reports from the data within EDGE (see Figures below for examples). His presentation at the EDGE conference went down extremely well and as a result was invited down to Southampton to initially train the EDGE Team & also to deliver two webinars on the interaction between EDGE & PowerBI - one for the UK the other for Canada.





Number of Recruitment by CMG



8. New/Existing Challenges

6.1. Delivery of 100,000 Genome Project.

Recruitment remains under close scrutiny. Genomics team working with relevant clinical specialities to facilitate recruitment.

6.3. Hope Unit at Glenfield

Efforts continue to identify suitable space for Hope Unit at Glenfield Hospital

Nigel Brunskill, June 2017

UNIVERSITY HOSPITALS OF LEICESTER NHS TRUST

REPORT TO: TRUST BOARD JULY 2017

DATE: 6 July 2017

REPORT FROM: Nigel Brunskill, Director of Research and Innovation

SUBJECT: Recruitment to research studies – analysis and action plan

Background and Analysis

UHL has established a good record with regard to recruitment to national studies. The table below shows the improvement in total recruitment and ranking compared with other NHS Trusts since 2010/11. However the recruitment data for 2016/17 shows a reduction of over 20%.

Year	No. recruiting studies	Recruitment	% difference compared with previous year	Rank NHS Trusts in England
2010/11	208	8609		9
2011/12	246	8838	2.7%	11
2012/13	283	7982	-9.7%	12
2013/14	330	10018	25.5%	12
2014/15	319	12564	25.4%	6
2015/16	316	13479	7.3%	6
2016/17	319	10586	-21.5%	Not available

(Data from NIHR league tables and EM CRN partner report for 2016/17)

Whilst there has been a fall in recruitment nationally, it is important to understand any local factor contributing to a fall in recruitment in order to mitigate any negative impact on future CRN infrastructure funding.

One compounding factor is the introduction of a new local project management system (LPMS). The introduction of the new system is part of an initiative by the NIHR to improve the efficiency and scope of reporting. It has become clear that there discrepancies between the new system (EDGE) and the existing local and national systems (CPMS and ODP). It is possible that UHL recruitment has been under reported. The present financial model used by the NIHR uses recruitment data from ODP to calculate the activity component of the funding model. It is therefore important to ensure the recruitment data is accurate. Moreover, future financial modelling will use data from EDGE rather than ODP.

The following is an action plan to address (1) the data issues and ensure accuracy of data, (2) assess and take remedial action where necessary to halt the decrease in recruitment, and (3) ensure studies recruit to time and target as this metric will be will become an important component of future NIHR funding allocation models.

These activities will be supported by the continuing development of EDGE the UHL R&I Business Intelligence Tool.

Research Recruitment Action Plan

		Completion date	Monitoring
Discrepancies in			
recruitment data		0 1 1 -	
Identify studies open	Run relevant report on	Sept 17	Weekly Recruitment
in the period 1 st 2015	EDGE		Meeting
Oct to Oct 2017			
(NIHR recruitment period)			
Check recruitment	Work with RSO, research	Continuous	Weekly Recruitment
data in studies	groups to verify data	Continuous	Meeting
identified above	groups to remy data		
Monitor data accuracy	Data Team to monitor	Continuous	Weekly Recruitment
	data alignment between		Meeting
	EDGE and ODP		-
Patient identifier field			
Revise guidance on	Agree change of wording	June 17	Weekly Recruitment
recruitment data	with CRN; circulate to	23.10 11	Meeting
upload to EDGE and	Recruitment Points of		3
circulate to research	Contact embedded within		
groups	research groups		
Ensure field	Continuous monitoring by	Continuous	Continuous Data
completion	Data Team		Team review;
			Weekly Recruitment
			Meeting
Maximise portfolio			
adoption			
Check open non-	Review report on all non-	July 17	Weekly Recruitment
portfolio studies that	portfolio studies; identify		Meeting
•			
may be eligible for	studies for potential		9
•	studies for potential retrospective adoption;		g
may be eligible for	studies for potential retrospective adoption; work with relevant CRN		
may be eligible for	studies for potential retrospective adoption; work with relevant CRN staff on retrospective		9
may be eligible for	studies for potential retrospective adoption; work with relevant CRN		9
may be eligible for adoption	studies for potential retrospective adoption; work with relevant CRN staff on retrospective		
may be eligible for	studies for potential retrospective adoption; work with relevant CRN staff on retrospective	June 17	Weekly Recruitment
may be eligible for adoption Time and Target	studies for potential retrospective adoption; work with relevant CRN staff on retrospective adoption	June 17	
may be eligible for adoption Time and Target RAG rate all studies	studies for potential retrospective adoption; work with relevant CRN staff on retrospective adoption Run report on all open studies;		Weekly Recruitment Meeting
may be eligible for adoption Time and Target RAG rate all studies with respect to	studies for potential retrospective adoption; work with relevant CRN staff on retrospective adoption Run report on all open studies; identify red RAG-rated	June 17 June 17	Weekly Recruitment Meeting Weekly Recruitment
may be eligible for adoption Time and Target RAG rate all studies with respect to	studies for potential retrospective adoption; work with relevant CRN staff on retrospective adoption Run report on all open studies; identify red RAG-rated studies in top quartile		Weekly Recruitment Meeting
may be eligible for adoption Time and Target RAG rate all studies with respect to	studies for potential retrospective adoption; work with relevant CRN staff on retrospective adoption Run report on all open studies; identify red RAG-rated studies in top quartile recruitment target;	June 17	Weekly Recruitment Meeting Weekly Recruitment Meeting
may be eligible for adoption Time and Target RAG rate all studies with respect to	studies for potential retrospective adoption; work with relevant CRN staff on retrospective adoption Run report on all open studies; identify red RAG-rated studies in top quartile recruitment target; review at weekly Project		Weekly Recruitment Meeting Weekly Recruitment Meeting Project Review
may be eligible for adoption Time and Target RAG rate all studies with respect to	studies for potential retrospective adoption; work with relevant CRN staff on retrospective adoption Run report on all open studies; identify red RAG-rated studies in top quartile recruitment target; review at weekly Project Meeting; RSO to	June 17	Weekly Recruitment Meeting Weekly Recruitment Meeting Project Review Meeting (weekly);
may be eligible for adoption Time and Target RAG rate all studies with respect to	studies for potential retrospective adoption; work with relevant CRN staff on retrospective adoption Run report on all open studies; identify red RAG-rated studies in top quartile recruitment target; review at weekly Project Meeting; RSO to feedback/information	June 17	Weekly Recruitment Meeting Weekly Recruitment Meeting Project Review Meeting (weekly); Weekly Recruitment
may be eligible for adoption Time and Target RAG rate all studies with respect to	studies for potential retrospective adoption; work with relevant CRN staff on retrospective adoption Run report on all open studies; identify red RAG-rated studies in top quartile recruitment target; review at weekly Project Meeting; RSO to feedback/information gather with research	June 17	Weekly Recruitment Meeting Weekly Recruitment Meeting Project Review Meeting (weekly);
may be eligible for adoption Time and Target RAG rate all studies with respect to	studies for potential retrospective adoption; work with relevant CRN staff on retrospective adoption Run report on all open studies; identify red RAG-rated studies in top quartile recruitment target; review at weekly Project Meeting; RSO to feedback/information	June 17	Weekly Recruitment Meeting Weekly Recruitment Meeting Project Review Meeting (weekly); Weekly Recruitment Meeting
may be eligible for adoption Time and Target RAG rate all studies with respect to	studies for potential retrospective adoption; work with relevant CRN staff on retrospective adoption Run report on all open studies; identify red RAG-rated studies in top quartile recruitment target; review at weekly Project Meeting; RSO to feedback/information gather with research groups and update EDGE	June 17 Continuous; weekly	Weekly Recruitment Meeting Weekly Recruitment Meeting Project Review Meeting (weekly); Weekly Recruitment