

Overview of the Research & Development Directorate

Quarter 3 (Jul - Sep) 2023-24



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Executive summary

Royal Papworth Hospital NHS Foundation Trust

1. Investment in People and Diversity Five Year Targets

- July 2023 an ATIR was submitted and approved by the Investment Committee for the appointment of 5 'research leaders' as departmental champions of research to drive forward both personal and departmental research outputs. To support of non-medical research with 1 research leader appointed from nonmedical staff. Plus infrastructure costs for the R&D Department to support the Research Leader posts and wider Trust.
- The 2 day Research Skills course is to be restarted (first session in November 2023)

2. Tissue Bank Five Year Target

- Approval has been gained to relocate the lab currently in the JCBC to the HLRI. Discussions are ongoing about relocating the freezers from the off-site facility
- The ethics approval has been renewed for a further 5 years and amended so that researchers can apply for data only



Research Strategy (2023-28) 5 year Targets - overview

Investment in People and Diversity Five Year Targets

- 1. Five 'Research Leader' (50/50) posts appointed
- 2. Reduction in study approval time by 25% by investment in RDD staff and cultural changes
- 3. Steering group established for Allied Health and Nursing Professionals and Clinical Scientists to promote research
- 4. A series of institutional cultural changes to promote and facilitate research

Papworth Clinical Trials Unit Five Year Target

To expand by 25% the portfolio of trials with an emphasis on novel trial design in cardiothoracic medicine via closer collaboration with academic and industry partners

Digital Healthcare and Research Five Year Targets

1. Implement research data solutions for Royal Papworth by 2023 including data anonymisation, automated consent checking and natural language processing

2. Develop information technology, ethical consent and information governance systems to permit de-identified data on all patient to be available for clinical research subject to a patient opt-out

Tissue Bank Five Year Target

- 1. Tissue Bank to be housed on a single site on Cambridge Biomedical Campus in HLRI or RPH
- 2. Create a Tissue and Data bank, with all RPH patients being invited to consent, creating an innovative resource for investigators

Innovation Five Year Target

Innovation Committee to engage with innovators, funders and industry to ensure RPH attracts, develops and delivers innovation to the healthcare market



Research Strategy Implementation Plan

Select a period to highlight at right. A leagend describing the charting follows

| Select a period to highlight at right. | A legend descri | bing the charting | follows. | | Period Highlight: | 9 | F | Plan D | uratio | n | | Actual S | tart | | % C | Comple | te | | Actua | l (be | yond | plan | | |
|---|-----------------|-------------------|-----------------|--------------------|---------------------|--------|---|--------|--------|----|---|----------|------|------|------|--------|------|----|-------|-------|------|------|------|---|
| ACTIVITY | PLAN START | PLAN DURATION | ACTUAL START | ACTUAL DURATION | PERCENT COMPLETE | Months | | 4 5 | 6 | 78 | 9 | 10 11 | 12 1 | 3 14 | 1 15 | 16 1 | 7 18 | 19 | 20 2 | 1 22 | 2 23 | 24 | 25 2 | 6 |
| Launch Research Strategy | 1 | 60 | 1 | 9 | 100% | | | | | | | | | | | | | | | | | | | |
| Investment Committee funding approved | 7 | 1 | 7 | 1 | 100% | | | | | | | | | | | | | | | | | | | |
| R&D Infrastructure posts | | | | | | | | | | | | | | | | | | | | | | | | |
| Appointment of Research Governance post | 8 | 5 | 8 | 4 | 100% | | | | | | | | | | | | | | | | | | | |
| Appointment of a Clinical Project Manager | 9 | 5 | 10 | 5 | ٥% | | | | | | | | | | | | | | | | | | | |
| Appointment of a Research Nurse / CTC (1) | 10 | 5 | 9 | 6 | 20% | | | | | | | | | | | | | | | | | | | |
| Appointment of a Research Nurse / CTC (2) Appointment of a Research | 15 | 5 | | | | | | | | | | | | | | | | | | | | | | |
| Appointment of a Research Nurse / CTC (3) Appointment of a QA | 20 | 5 | | | | | | | | | | | | | | | | | | | | | | |
| Manager | 8 | 5 | 8 | 4 | 100% | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| Research Leader Posts Development of role profiles | | | | | 20% | - | | | | | | | | | | | | | | | | | | |
| for Research Leader posts Appointment of Senior | 8 | 9 | 7 | 4 | | 1 | | | | | | | | | | | | | | | | | | |
| Research Leader Appointment of Research | 11 | 6 | | | • | | | | | | | | | | | | | | | | | | | |
| Leader Appointment of Research | 12 | 6 | | | | - | | | | | | | | | | | | | | | | | | |
| Leader Appointment of Research | 18 | 6 | _ | | | - | | | | | | | | | | | | | | | | | | |
| Leader Appointment of Research | 20 | 6 | | | | - | | | | | | | | | | | | | | | | | | |
| Leader | 24 | 6 | | | | 1 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |

Rerind Highlight: _____ Plan Duration _____ Actual Start _____% Complete _____ Actual (heyend plan)

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Research Leaders

Discussions are underway with the Regius and the plan is for an advert to be released shortly with a focus on Cardiology for the first post.

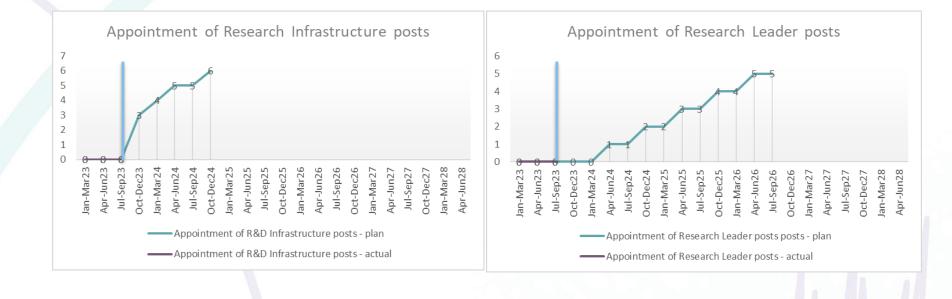
Research Infrastructure posts

- Research Governance post– awaiting completion of pre-employment checks. Expected in post December 2023)
- Clinical Project Manager post to go out to advert October 2023
- Quality Assurance Manager interviews
 to be held October 2023
- 3 Research Nurses (First post went out to advert in September 2023, no suitable applicants so has been readvertised)

Research Strategy (2023-28) 5 year Targets – detail

Highlight shows when we received Investment Committee funding

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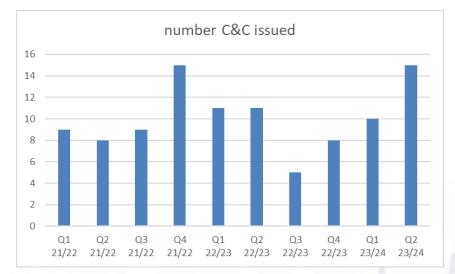
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Spotlight – Research Governance (slide 1 of 2)



The median number of days to studies being open to recruitment (Sponsor Green Light per quarter is currently 83 days (with a spike in Apr – Jun 2023 due to approving 2 very complex studies which had taken longer than anticipated to get set-up).

New metrics (still to be formally published) will be 60 days for commercial studies.



The number of studies being approved has steadily increased over the past 12 months. This increase should be sustained once the new governance posts are in place (anticipated Dec 2023)

Spotlight – Research Governance (slide 2 of 2)

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Aim: to reduce the median time from site selected to first patient recruited to 90 days (current national median) in the next 18 months with a further 25% reduction by the end of year 5. This is split into 60 days for issuing C&C with a further 30 days for recruitment of the first patient.

Actions underway:

- 1) Appointment of an additional band 6 Research Governance Co-ordinator (recruited due in post Dec 2023)
- Additional support for the Governance Team from other local NHS Organisations underway.
 5 days a week support from North West Anglia Foundation Trust for an initial 6 month period (due to end Dec 2023)
- 3) Additional support for Pharmacy funding for an additional part-time Clinical Trials Pharmacist was identified from R&D funds and an application for further funding from the CRN to support this post was succesful. Post has been filled and they started at the end of June 2023.
- 4) Funding has been identified to appoint a Research Governance Facilitator to support the set-up of studies going through the HLRI CRF. The post has been approved and we have appointed due to be in post by early December 2023.

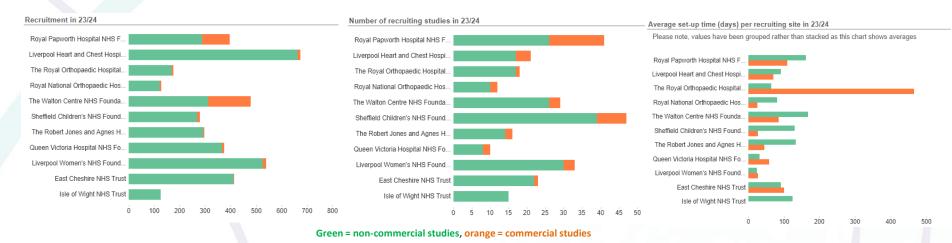
Interim Results

The number of studies being issued Trust Approval (C&C) has increased from an average of 10 per quarter (21/22 - 22/23) to 12 per quarter in 23/24. It is envisaged that this will flow through to shorter approval times as more studies get approved.

Benchmarking

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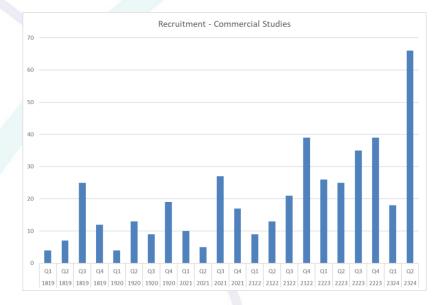
The data below is provided by the NIHR and shows our research activity compares to 10 organisations in the same category (acute, care, CCG etc) for 2023/24. Attendance (trusts) or population (CCGs) is used as a proxy for measuring similarity. The charts show the most similar organisations at the top, with similarity decreasing down the chart.



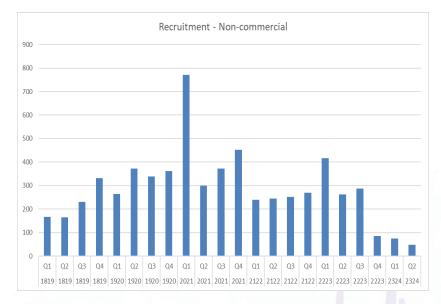
Benchmarking data shows our study approval times are longer than most of our benchmarked Trusts. Compared to Liverpool Heart and Chest Hospital we have a significantly larger portfolio of studies (in particular, commercial studies which tend to be complex with fewer patients recruited).

Patient Recruitment





Recruitment for commercial studies continue to increase year on year and we continue to have UK and Global; firsts for recruitment into commercial studies.



The recruitment for numbers for non-commercial studies are lower this year, but this is due to an increase in complexity of the studies we are running (which is reflected in the income – see next slide)

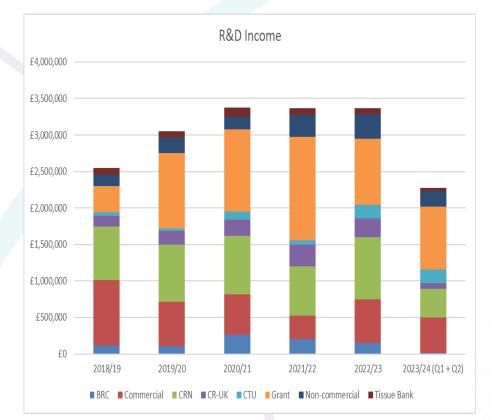
R&D Income

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R&D income over the previous 5 years is shown split into the various categories.

Grant income for this financial year is significantly up on previous years and commercial income is projected to be nearly double that of last year.

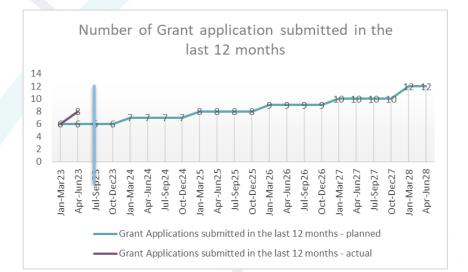
| | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | 2023/24 (Q1 | |
|----------------|------------|------------|------------|------------|------------|-------------|--|
| BRC | £112,825 | £109,452 | £262,765 | £202,628 | £149,970 | £14,860 | |
| Commercial | £895,866 | £603,344 | £550,774 | £321,652 | £600,640 | £484,706 | |
| CRN | £734,623 | £785,757 | £805,600 | £672,355 | £846,861 | £394,344 | |
| CR-UK | £151,451 | £188,495 | £222,991 | £304,895 | £255,478 | £75,130 | |
| CTU | £43,317 | £30,300 | £105,396 | £54,773 | £190,422 | £185,619 | |
| Grant | £364,005 | £1,032,428 | £1,127,996 | £1,419,848 | £901,448 | £860,708 | |
| Non-commercial | £149,810 | £214,451 | £172,289 | £293,772 | £335,788 | £217,028 | |
| Tissue Bank | £97,125 | £90,221 | £124,273 | £95,444 | £87,542 | £46,200 | |
| Total | £2,549,022 | £3,054,447 | £3,372,084 | £3,365,366 | £3,368,150 | £2,278,595 | |

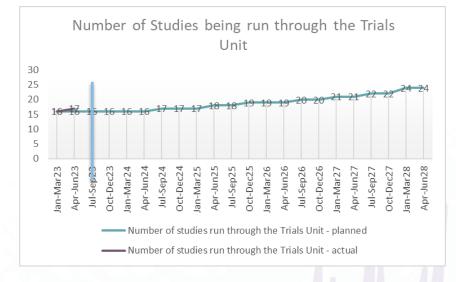


Research Strategy (2023-28) 5 year Targets – detail

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Royal Papworth Hospital NHS Foundation Trust





Investment in People & Diversity – Diversity metrics

Royal Papworth Hospital

For Patients

1) Work is underway to increase the diversity of the PRA panel. A leaflet has been produced by the Communications team to be displayed on the screens in patients rooms.

2) The BI team have developed a dashboard to enable us to monitor ethnicity of patients participating in clinical trials and compare this to the Trusts patient population. This will enable us to more accurately target under-represented groups.

For Staff

1) We are committed to increasing the non-medic PIs and holders of Innovation awards

Currently 10 projects funded through the innovation fund of which 2 are non-medic (20%)

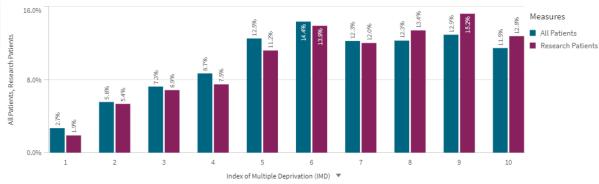


Investment in People & Diversity – Diversity metrics

Royal Papworth Hospital

| | 202 | 2/23 | 2023/24 | | | | | |
|----------------------------|---------------|-------------------|---------------|-------------------|--|--|--|--|
| Metric | All patients | Research patients | All patients | Research patients | | | | |
| Male:female ratio | 60.8% : 39.2% | 50.7% : 49.3% | 61.0% : 39.0% | 56.8% : 432.% | | | | |
| Age | Median = 63 | Median = 66 | Median = 63 | Median = 64 | | | | |
| White British or not known | 88.7% : 11.3% | 92.1% : 7.9% | 87.4% : 12.6% | 91.4% : 8.5% | | | | |

% of Patients by English Indices of Deprivation Decile



The data shows there is a higher percentage of females and people of white origin as research participants than the Trust patient population.

The median age is similar to the Trust.

The social deprivation index for 2023 shows a higher proportion of research patients from the least deprived areas. Health inequality and the access to research studies are both strategic priorities for the Government and the NIHR. We will continue to explore ways of supporting wider access to research studies.

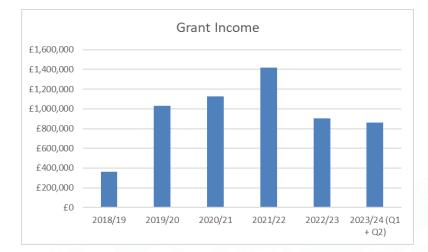
One way that we could look to open up access is through the use of the new Community Diagnostic Centres.

Grant Applications

Royal Papworth Hospital NHS Foundation Trust

Baseline figures





Actions:

- The grant & protocol development workshops (previously called open surgeries) have been restarted first workshop held 1st February 2023
- 2) Appoint a Clinical Project Manager to manage the workshops, provide horizon scanning and support investigators with grant development post due to go out to advert in October 2023

Recent publications





Research publications and papers by Royal Papworth Hospital authors Take a look at recent publications from our colleagues

The below hyperlinks will take you to the abstract on the publisher's website. All full references can be found on the <u>publications page of our website</u> and <u>Library Services</u> are happy to source full text for articles upon request. The Library also tweet any new abstracts via <u>@RoyalPapLib</u> using the hashtag #PapworthAuthors - why not give them a follow?

Left ventricular assist device implantation and concomitant mitral valve surgery: A systematic review and metaanalysis (Preprint)

The Index of Microcirculatory Resistance After Primary PCI: A Pooled Analysis of Individual Patient Data

Report of the 2022 Banff Heart Concurrent: Focus on Non-HLA Antibodies in Rejection and the Pathology of "Mixed" Rejection (Preprint)

What are the outcomes of dietary interventions in Heart Failure with preserved Ejection Fraction? A systematic review and meta-analysis

Assessing the Role of Phosphorylated S6 Ribosomal Protein in the Pathological Diagnosis of Pulmonary Antibody-Mediated Rejection (Preprint)

Surgical intervention for left ventricular assist device outflow graft obstruction due to external compression

'In the news'

Global first achieved

Posted on 20 Oct 2023 at 03:51 PM

Royal Papworth has recruited the first two patients to a new groundbreaking international heart surgery trial that could reduce blood loss.

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Read more

Are you planning an event in the atrium? Library Services will have the books you need to help attract and inform your audience

Last week we were pleased to attend the Black History Month celebration organised by EDI.

In the photo, Cynthia Conquest, Non-executive Director, and Marie Resseguier, Clinical Outreach Librarian, and on display part of our Race Equality collection.

When you book the atrium for an event, remember to also contact <u>Library Services</u> to find out how we can support you.

NIHR East of England Celebration Awards 2023 Research Volunteer Award

Congratulations to Ron Flewett and David Smith, our patient research ambassadors who both won the Research Volunteer of the Year Award last week at the NIHR East of England Celebration Awards 2023. Unfortunately, they were unable to attend the event, but Helen Bowyer, R&D Operational Manager, was kind enough to go on stage to collect their awards for them.

The Research Governance Team, which at Royal Papworth includes Chris Tippell, Emily Hodge, Lauren Patman, Kim Giraud and Marlene Taveira, was a runner up in the 'Breaking Boundaries' category for its collaboration with North West Anglia Foundation Trust. Well done to all!.

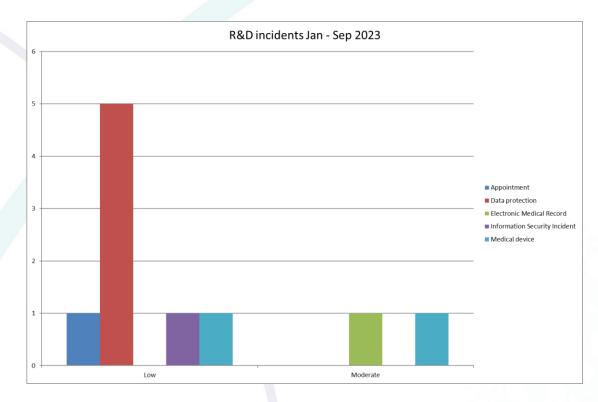






NHS

Quality – incidents & harm (Jan – Sep 2023)





Narrative

The two moderate incidents relate to:

- Use of a clinical grade medical device (mOrgan) for a research study instead of the research grade device.
- 2) Finding medical notes for another patient filed in EMR

Lessons learnt

Retraining of the research team has been instigated and the devices have been more clearly labelled.

There has been no patient harm

Workforce update

Royal Papworth Hospital NHS Foundation Trust

| | Mandatory Training | IPR Compliance | Sickness absence |
|-------------|-----------------------|-------------------|---------------------|
| R&D Total | 87.53% | 78.35% | 1.95% |
| Trust Total | 88.53% | 80.39% | 4.69% |

IPR compliance and Mandatory training are both below the Trust totals.

The next whole team meeting in November will focus on ensuring all staff maintain regular compliance with mandatory training throughout the year, and ensuring IPRs are conducted in a timely manner.

Sickness rates continue to be low.

Results of the 2022 NHS Staff survey show that we have higher than the Trust average results across all domains.

