

Research and Innovation (R&I) Strategy 2022-2025

Caring and compassionate Recognising individuality Seeking to involve Team working Taking personal responsibility	Always provide excellent care with compassion	To provide outstanding healthcare to our local communities _____	To offer a range of high-quality, specialist services in Lancashire and South Cumbria (L&SC)	To drive innovation through world class education, training, and research
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- **Caring and compassionate (CC).** We treat everyone with dignity and respect, doing everything we can to show we care.
- **Recognising individuality (RI).** We respect, value and respond to every person’s individual needs.
- **Seeking to involve (StI).** We will always involve you in making decisions about your care and treatment and are always open and honest.
- **Team working (TW).** We work together as one team, and involve patients, families, and other services, to provide the best care possible.
- **Taking personal responsibility (TPR).** We each take personal responsibility to give the highest standards of care and deliver a service we can always be proud of.

Outline

The Trust’s R&I strategy aims to channel the Trusts values above and embedded where possible in the aims. It not only reflects our ambitions of providing secondary and tertiary services care but also act as the cornerstone of research endeavours within the Integrated Care System (ICS) and our local partner trusts therein. The ICS caters for a significant population of circa 2 million and as such an equitable research infrastructure as other similar sized systems should be the aim. An active research philosophy improves clinical outcomes contributes to a Trust’s reputation both regionally & nationally and attracts & retains health professionals. The trust has ambitious plans to develop all facets of a research strategy, including to develop an equitable academic capability to other systems.

- 1) The majority of systems/networks have established medical schools with clinical academic infrastructure across medicine, surgery and other specialities with academic units embracing medicine, nursing, midwifery, and other allied health professional (AHP) specialities. Clinical professors develop teams of senior lecturers / lecturers, research fellows and administrators who all augment clinical services, add to the combined educational / research agenda, and ultimately add to the reputation of the Trust. We plan to build on the developments in neurology including stroke, surgical / medical / radiotherapy oncology, and other areas with Lancaster University, UCLan and Manchester Universities. Develop a distinct profile and envelope for such activity.
- 2) Over the last decade, the R&I team have developed the infrastructure and capacity to undertake studies on the National Institute of Health and Care Research (NIHR) Clinical Research Network (CRN) portfolio. The studies vary from clinical Randomised Controlled Trials (RCTs), observational studies and industry studies evaluated new drugs/ technologies. In the last 4 years, we have had a Clinical Research Facility (CRF) funded by the NIHR to enable us to undertake early phase studies such as early safety trials of new drugs and vaccines. A high recruitment into portfolio trials from early to late phase studies adds to the global research culture, improves reputation, and generates income to pay the salaries of research nurses and administrators. Collaborating with industry will also improve commercial revenue.
- 3) We have developed an in-house innovation hub and developed a regional Edovation support agency in collaboration with UCLan and Lancaster Universities to develop new viable commercial ideas conceived by our employees. We aim for Edovation to support the whole of the ICS. Digital innovation has the scope for enhancing health care but also population-based research.

Therefore, our strategic aims encompass:

- 1) Develop with local and regional Universities the capacity for own clinical academic excellence
- 2) Develop and sustain the capacity to recruit into national portfolio studies
- 3) Develop infrastructure to commercialise employees' ideas
- 4) Develop the credibility to be the hub for R&I activity across the ICS, notably in Experimental Medicine (EM) via the CRF, innovation and digital
- 5) Facilitate trust agendas such as improvement and transformation
- 6) Raising profile including with our local population and increasing diverse participation in research projects
- 7) Developing sub-strategies in key areas e.g., CRF,

Achievements in the last 24 months

- 1) Renewed NIHR funding for Clinical Research Facility £1,000,000 over 5 years for early phase research studies
- 2) Partner in successful Manchester Biomedical Research Centre (£750,000 over 5 years) will fund collaborative research in early detection of cancer, novel radiotherapy, biomarkers, and neurology. Will fund a surgical research fellow in colorectal cancer for 3 years jointly working with Professor in Surgery Andre Renehan at Manchester University. Ambition to have an on-going joint colorectal research collaboration
- 3) Agreement to develop a neurological academic centre with Lancaster University. Plan to add further clinical academics complimenting the Trust's only medical Professor.
- 4) Development of stroke research with Dame Professor Caroline Watkins and Prof Elizabeth (Liz) Lightbody to compliment the Stroke Service
- 5) Appointed a Senior Clinical Academic Radiotherapist with Lancaster University
- 6) Successful MD / PhDs in renal medicine, gynaecological oncology, upper GI surgery, neurology
- 7) Agreement to develop an academic strategy with CEO for the Trust and ICS for the next decade

Key Obstacles

- 1) The pandemic and Brexit have taken a toll on income generation in R&I and we have now to specifically plan more for leveraging opportunities to increase funding. The pandemic also impacted on the development of academic collaborations
- 2) Activity is problematic and we need to get back to pre-pandemic levels of recruitment into portfolio clinical trials. Cancer recruitment has dropped significantly
- 3) Absence of embedded divisional personnel. Need pro-active agreement across all divisions to fund clinical research fellows where feasible so we can support embryonic academic strengths in stroke, neurology, surgery.

This document sets out the Research and Innovation strategy for the next three years.

Aim 1

Forge better links to our Local/partner Higher Educational Institutions (HEIs) and significantly increase clinical academic appointments at all levels in The Trust.

Over time the aspiration is to build and replicate the infrastructure that other systems/networks have achieved with medical schools in the UK that not only deliver undergraduate and postgraduate education for health professionals but also a research / academic focus for the health economy. Examples of such institutions are Warwick, York, Peninsula, Keele Medical Schools. If successful we would like this to be a beacon for the other ICS partners.

Area (Value)	Year One (22/23)	Year Two (23/24)	Year Three (24/25)	Person Responsible
Engagement with HEIs (TW)	Re-establish Quarterly strategy meetings with HEI partners to align key strategic objectives	Maintain regular strategy meetings and form sub-groups and strategy working around themes topics defined	Maintain regular strategy meetings and form sub-groups and strategy working around themes topics defined	Pierre Martin-Hirsch Paul Brown CEO and exec team
Clinical Academic Roles (RI)	The Trust to continue and review/support academic posts, including honorary, to take advantage of the local health services research expertise. Including in NMAHPS positions.	The Trust to continue and review/support academic posts, including honorary, to take advantage of the local health services research expertise. Including in NMAHPS positions.	Clearly defined KPIs and financial expectations for all of these set out in either an SLA or MoU document.	Pierre Martin-Hirsch, Paul Brown CEO and exec team
CAF (TW)	Maintain the present Clinical Academic Faculty (CAF) body of work and staffing to ensure throughput of clinical and AHP research and service improvement projects through R&I, the wider trust staffing, medical students and HEI teams Link departments into divisions/ clinical academics and clinical priorities	Maintain the present Clinical Academic Faculty (CAF) body of work and staffing to ensure throughput of clinical and AHP research and service improvement projects through R&I, the wider trust staffing, medical students, and HEI teams, but look to include at least one other ICS partner	Expand the present Clinical Academic Faculty (CAF) and roll-out to the wider ICS as a LTHTr-led entity	Philippa Olive, Alex Williams, Matron
Academic Office / single global wrapper for academic activity (TW)	Develop a strategic grouping of clinical academics. Collate a database of all health professionals undertaking higher degrees, collate all higher degrees achieved, collate all publications from such activity	Review the possibility of a single academic office within The Trust by April 2024 to support infrastructure and academic training within the 'hub'	Shared academic space planned into the NHP	Pierre Martin-Hirsch, Paul Brown

Aim 2

Continue build the **capability and capacity** within the Trust to lead and deliver high quality research and innovation and offer our patients greater access an enhanced experience and better care through access to research, clinical trials and via the Lancashire Clinical Research facility (LCRF) experimental medicine (EM).

Building on the successes both pre- and post-pandemic we must continue to develop the relationships with the NIHR CRN and thus increase recruitment to trials, develop staffing; develop both the experimental medicine portfolio and partnerships around the LCRF to position ourselves for expansion; and develop our own investigators, workforce, support services and estate to be fit for purpose in the future.

Area (Value)	Year One (22/23)	Year Two (23/24)	Year Three (24/25)	Person Responsible
Patient Recruitment (CC/StI)	To be consistently one of/the top recruiters of patients and participants in Lancashire and South Cumbria	To be consistently one of/the top recruiters of patients and participants in Lancashire and South Cumbria	To be consistently one of/the top recruiters of patients and participants in Lancashire and South Cumbria	R&I Managers
LCRF /EM (TW)	Establish LCRF as the home for EM in L&SC ICS with at least 2 collaborative trials	Establish LCRF as the home for EM in L&SC ICS with at least 3 collaborative trials	Establish LCRF as the home for EM in L&SC ICS with at least 4 collaborative trials R&I Senior Team	Dennis Hadjiyiannakis, Jacqui Bramley
Divisions and Divisional Representation (TW/RI/TPR)	Attend each Divisional Board and work with divisional triumvirates to support the development of their own R&I sub-strategies Appoint a Divisional Research Lead in at least one Division	Attend each Divisional Board and work with divisional triumvirates to support the launch and implementation of their own R&I sub-strategies Appoint a second Divisional Research Lead	Hold annual divisional meetings with divisional managers to support the development and implementation of their own R&I sub-strategies Have Research Lead in the 3 main research active clinical divisions.	Pierre Martin-Hirsch.
Support Service Reviews (TW)	Draft SLAs with key support services (imaging, pathology, and pharmacy) as a basis for ongoing mutual support, starting with one as a pilot	Publish and establish SLAs with key support services (imaging, pathology, and pharmacy) as a basis for ongoing mutual support	Maintain SLAs with key support services (imaging, pathology, and pharmacy) as a basis for ongoing mutual support	Paul Brown, Kina Bennett, Service Leads

Education (TPR)	Develop an NMAHP educational research professional development process for clinical staff in the trust, appointing to post in year 1 and professional development lead for research within education	Appointee to set up an internship model to support academic professional development. 2 interns appointed	Appointee to set up an internship model to support academic professional development. 3 interns appointed with appropriate funding	Nichola Verstraelen, Philippa Olive, Alex Williams
Neurosciences incl Stroke (CC)	Launch the neurosciences elements of the main clinical strategy as embedded in R&I Include Hyperacute Stroke Research Centre (HSRC) planning	Establish the neurosciences elements of the main clinical strategy as embedded in R&I Include HSRC Bid	Embed the HSRC at LTHTr	Hedley Emsley, Pierre Martin-Hirsch
Estate and New Hospital Programme (CC)	Conduct a review with investigators of the potential for more proportionate presence of R&I at Chorley DH to improve, recruitment and improved estate. Publish findings to Education, Training and Research (ETR) and develop strategy. Maintain a presence in New Hospital Programme (NHP) proceedings	Commission a new review of all imaging requirements and capabilities Begin to implement a strategy re CDH Maintain a presence in NHP proceedings	Maintain a presence in NHP proceedings	Pierre Martin-Hirsch, Paul Brown

Aim 3

To Rebuild a sustainable and growth-focussed department

The pandemic and Brexit have taken a toll on income generation in R&I, and we have now to specifically plan more for leveraging opportunities to increase funding and building the workforce.

Area (Value)	Year One (22/23)	Year Two (23/24)	Year Three (24/25)	Person (S) Responsible
Budget (TPR)	Minimise overspend aiming for break-even	Run to at least break-even position	Run to 20k surplus	R&I Senior Team
Income (TPR)	Increase non-commercial grant funding by 10% on previous year, and challenge unfunded work	Increase grant funding by 10% on previous year	Increase grant funding by 10% on previous year	Paul Brown, Matthew Johns
Commercial Studies (TPR)	Increase commercial grant funding by 50% on previous year	Increase to levels to achieve break-even	Increase to levels to achieve 20k surplus	R&I Senior Team
Supporting Professional Activities (RI)	Develop Research Planned Activities (PA)tariff proposal to agree with ETR Committee/Exec	Plot and launch a Research PA tariff proposal	Contribute to consultant appraisal and job planning through provision of evidence for SPA tariff and mandatory training of GCP	Pierre Martin-Hirsch, Karen Swindley
Research Funds (StI)		Build year 2 research pot of ≥ £10,000 from PI fees in commercial clinical trial templates	Build year 3 research pot of ≥ £20,000 from PI fees in commercial clinical trial templates	Paul Brown, Matthew Johns
Staffing recruitment and retention for LTHTr (StI/RI)	Discuss with workforce leadership proactive promotion of R&I as a career at LTHTr	R&I promoted as a career at LTHTr	R&I competencies in all clinical JD/PS	Paul Brown/Nichola Verstraelen

Aim 4

To increase the presence and profile (P&P) in and out of The Trust including the ICS, widening public involvement and encouraging EDI.

We want to the opportunities for staff, patients, and the public to engage with the research agenda and provide a route for them to direct and influence Trust research and innovation priorities, and for the public to access research. Our patient and public involvement/engagement/participation (PPI/E/P) agenda is key. We are keen to involve patients and members of the public, not just as participants of research studies, but in the development and conduct of our research activity. The NIHR encourages patients and the public to access and be actively involved in all health research as it leads to better research, clearer outcomes, and faster uptake of new evidence. All the NIHR's Research Programmes actively engage patients and the public in all stages of research. Building on the successes fashioned around the hugely successful Lay Research Group we intend to have broader and more measurable KPIs in this area. Equality, Diversity and Inclusivity (EDI) are hugely important to both LTHTr and its broader aims but also the NIHR and its strategy and programmes. Allied to the PPI/E/P agenda this will develop with the needs of our community.

Area (Value)	Year One (22/23)	Year Two (23/24)	Year Three (24/25)	Person Responsible
Outputs (TPR)	From the research repository, with the library team, monitor and publish publication outputs to ETR and set benchmarks for next 3 years	From the research repository, with the library team, monitor and publish publication outputs to ETR and monitor vs benchmarks	From the research repository, with the library team, monitor and publish publication outputs to ETR and monitor vs benchmarks	Pierre Martin-Hirsch
Regional Links (RI)	<p>Increase Clinical Research Network (CRN) Speciality Research Leads (SRL)at The Trust to 5</p> <p>Academic Health Science Network (AHSN) – maintain a presence on steering group</p> <p>NIHR Applied Research Collaborative (ARC) – maintain a presence on all main committees and encourage internships</p> <p>Northern Health Science Alliance (NHSA) – maintain presence at AGM and on Council, develop membership of Frailty and Data Groups</p>	<p>Maintain at least 5 CRN leads</p> <p>AHSN – maintain a presence on steering group and await developments in funding</p> <p>ARC – maintain a presence on all main committees and report on internships via CAF</p> <p>NHSA – maintain presence at AGM and on Council, establish membership of Frailty and Data Groups, develop Advanced Therapies</p>	<p>Review position in new CRN/DRN structure and consider R&I personnel as possible SRLs</p> <p>AHSN – maintain a presence on steering group</p> <p>ARC – maintain a presence on all main committees</p> <p>NHSA – maintain presence at AGM and on Council, be established membership of Frailty, Data and Advanced Therapies Groups.</p>	Pierre Martin-Hirsch/Paul Brown/CAF/Anthony Rowbottom

Research Champions (StI)	Maintain 90+ Research Champions (RC) set up champions forums	Measure outputs of champions (star audits)	Set up and commence research champion internships	Nichola Verstraelen
GCP (CC)	Encourage GCP as mandatory training for all consultants in line with Trust Research Quality policy requirements	Ensure GCP as mandatory training for all consultants in line with Trust Research Quality policy requirements	Ensure GCP as mandatory training for all consultants in line with Trust Research Quality policy requirements	Pierre Martin-Hirsch /Kina Bennett
Lay Research Group (StI)	Retain and build Lay Research Group (LRG) with members encouraging a larger and more diverse membership. Renew the 3-year sub-strategy	Retain and build LRG as per year 1 but target at least one clinical patient liaison group subset e.g., Cancer x	Retain and build LRG with members integrated within some clinical divisions, research themes and individual projects	CAF/LRG Lead, Jacqui Bramley
PPI/E Research (StI)	Active portfolio of PPI/E research activity developed ≥ 2 live projects	≥ 2 live projects	≥ 3 live projects	LRG Lead
Sponsorship (StI)	Patient and public involvement in 20% of studies sponsored by and funding bids developed by Trust	Patient and public involvement in 30% of studies sponsored by and funding bids developed by Trust	Patient and public involvement in 40% of studies sponsored by and funding bids developed by Trust	Kina Bennet/PPI Lead
Patient Access – EDI (StI)	To review where our recruited patients come from and establish demographic but also equality and diversity baseline. Create EDI strategy for CRF and R&I to support staff and patient	Benchmark EDI activity vs strategy outcomes	Demonstrate changes in the R&I demographic at LTHTr	R&I Management team, DK, AR, PPI Lead
Co-Designed Research (StI)	Embed the concept of patient-centred research in R&I	Run at least one patient-centred, co-designed study in R&I	Run at least two co-designed study in R&I	Richa Gupta/Paul Brown

Aim 5

Enhance the **commercial strategy** for R&I that feed into The Trust's plans for commercialisation

Equally as important as developing investigators through an enhanced clinical academic apparatus, as per Aim 1, are the growth of commercial clinical trials that will create financial sustainability (aim 3) to enable growth in the areas outlined in this strategy. Moreover we will forge important links with commercial collaborators to boost the health and wealth of local economy.

Area (Value)	Year One (22/23)	Year Two (23/24)	Year Three (24/25)	Person Responsible
Pharma partners – Commercial (TW)	Set up links with CROs and Pharma companies to explore preferred site arrangements, specifically: Panthera CRA Synexus Formalise Medpace arrangement	Exploit these links into collaboration agreements	Demonstrate a small portfolio of collaborative commercial studies from these sources	Nina Vekaria/Kina Bennett/Paul Brown
Commercial Trials (TCC)	Increase commercial clinical trials activity to represent increase in study mix to 20% by year end and income by 10%	Increase commercial clinical trials activity to represent increase in study mix to 25% by year end and income by 10%	Maintain commercial clinical trials activity to represent increase in study mix to 20% by year end and income by 10%	Nina Vekaria, R&I Team Leaders
LCRF (TPR/TW)	Brand the NIHR CRF for EM trials across LSC	Establish LCRF as the home for EM in L&SC ICS with at least 2 collaborative commercial trials with shared budgets	Establish LCRF as the home for EM in L&SC ICS with at least 3 collaborative commercial trials with shared budgets	Dennis Hadjiyiannakis, Jacqui Bramley

Aim 6

Develop an **Innovation and Digital strategy** for R&I that feed into The Trust's plans for commercialisation, that will forge a way for the inventors and entrepreneurs in The Trust to seek out opportunities for commercialisation, and likewise commercial entities such as SMEs to reach-in.

Area (Value)	Year One	Year Two	Year Three	Person Responsible
Innovation (TW)	<p>Establish The Trust's Innovation Hub with brand roll-out, as an NHS entity to cross-fertilise in education and innovation projects. Work actively with UCLan and Medicomm.</p> <p>Establish 15 projects at any one time.</p>	<p>Spin out the Hub with Edovation Brand and discuss with ICS partners its adoption. Work actively with UCLan and Medicomm and Lancaster HIC.</p> <p>Increase to 20 projects</p>	<p>Work actively with UCLan and Medicomm and Lancaster HIC.</p> <p>Increase to 30 projects across the ICS</p>	Paul Brown, Anthony Rowbottom, Karen Swindley, Susan Maxwell
Innovation Pathway (CC/StI)	Re-approve the innovation pathway to link to collaborators, SMEs and HEIs for The Trust PI's and vice versa	Review impact of innovation pathway in accordance with the project targets	Review impact of innovation pathway	Paul Brown, Anthony Rowbottom, Karen Swindley, Innovation Coordinator, Susan Maxwell
Innovation/Pharma partners – Commercial (TW)	Set up links with SMEs and innovation companies to explore preferred site arrangements	Exploit links with SMEs and innovation companies in preferred site arrangements	Exploit links with SMEs and innovation companies in preferred site arrangements	Paul Brown/Nina Vekaria/Kina Bennett/Susan Maxwell
Trusted Research Environment (StI)	<p>Development of the Trust's Trusted Research Environment (TRE) enabling a shared, secure, and structured collaboration environment with Research, academia and industry.</p> <p>Collaboration with commercial partners TriNetX with Anonymised data sharing to create income streams supporting data</p>	Research, Commercial and Academic Collaboration enabled through the TRE	Systems of engagement (e.g., QMED, Dashboard) integrated with analytics to guide changes in practice. Learning health system in place.	Data Science Team

	science.			
Digital/Data (StI)	<p>Develop support and business case for an ICS wide longitudinal Primary and Secondary care data warehouse to support statutory reporting, continuous improvement, data science, PHM, research, and collaboration.</p> <p>Use Neurosciences as starting point</p>	<p>Implementation of Data Warehouse and generation of linked anonymised Neurology data marts for research. Investigate development of specific neurology data marts</p>	<p>Continued Research and Service Improvement utilising longitudinal ICS wide neurology data.</p>	

Aim 7 - Complement and service The Trust's plans for Continuous Improvement

The trust is committed to create an environment of continuous improvement where talent, creativity and care can flourish, and will establish new models of clinical care, embed new patient pathways and to reset our systems to ensure that we remove the current waste and duplication. Within R&I (and the wider Trust) there are clearly a number of linked service improvement projects in progress and planning that can be linked into this overarching programme of work. The Trust has committed to the implementation of robust quality improvement methodology, building capability widely across the organisation. Ultimately, we wish to take this ethos and work to the ICS partners.

Level of Improvement	Year One	Year Two	Year Three	Person Responsible
Trust to System level Improvement (CC)	Promote R&I with R&I theme (Research, Innovation and <i>Improvement</i>) at LHTTr	Promote this ethos in the ICS as part of the ICS-wide R&I strategy	Embed R2I as the ICS was of working	Paul Brown/Ailsa Brotherton
Pathway Level Improvement (CC)	Support strategically chosen Big Rooms (suggest Frailty as a must) ensuring research informs the design of the improvements Participate in the flow coaching academy programme Connect the teams participating in the big rooms to colleagues in universities where appropriate	Support strategically chosen Big Rooms ensuring research informs the design of the improvements Participate in the flow coaching academy programme Connect the teams participating in the big rooms to colleagues in universities where appropriate	Support strategically chosen Big Rooms ensuring research informs the design of the improvements Participate in the flow coaching academy programme Connect the teams participating in the big rooms to colleagues in universities where appropriate	Paul Brown/Ailsa Brotherton
Links to CAF (StI)	Continue the programme of improvement linked to CAF work in R&I and specifically Rapid Conversion Evidence Summaries (RaCES) Link a Fellow to this piece of work at LHTTr	Promote the programme of work with RaCES across the ICS and embed this in the ICS-wide R&I strategy	Maintain and evaluate this work for next cycle	Philippa Olive/Jackie Twamley