

Tayside Medical Science Centre (TASC) Five Year Strategy Document 2022 - 2027



'TASC's role is to facilitate trusted, high quality and innovative clinical research to improve the health outcomes of the people of Tayside and beyond'

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Introduction

This document has been produced to outline the strategic objectives and commitments for the Tayside Medical Science Centre (TASC) for the 5 year period from 2022 until 2027. The Implementation plan aims to assist in allocating resources and reviewing the impact of TASC in supporting Chief Scientist Office and Scottish Government priorities for Health and Social Care (H&SC) research. TASC's strategy is closely aligned with the vision and themes for clinical research delivery as set out in the four nations report of 23 March 2021 'Saving and Improving Lives: The Future of UK Clinical Research Delivery'.

We would like to thank TASC staff for input into this document. We would also like to acknowledge Mrs Jillian Strachan for documentation support.

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TASC Mission and Values

TASC's role is to facilitate trusted, high quality and innovative clinical research to improve the health outcomes of the people of Tayside and beyond. This mission is guided by four key values.

Quality

We aim for excellence in all that we do

Integrity

Having a culture of transparency, trust and accountability

Valuing People

Treat everyone with dignity and respecting diversity

Working Together

Working and communicating openly and as one team



The Context

...As we look to the future, we must use these lessons from COVID-19 as a springboard to build back better. Because we stand at an inflection point for global healthcare. Driven by data and analytics, cutting-edge technologies and treatments, including precision medicines and artificial intelligence, are transforming the way we treat patients... Saving and Improving Lives: The Future of UK Clinical Research Delivery (23 March 2021).

We are in the process of emerging from the pandemic and adjusting to the new modes of delivery of Health and Social Care (H&SC) research. There has been a great deal of useful learning over the last 20 months which will inform our future objectives and actions. We need also to recognise that the H&SC landscape which existed prior to the pandemic remains largely unaltered and in many ways prior challenges have been amplified due to the pandemic. The twin challenges of Covid-19 and chronic disease will drive research and innovation.

“The global economic impact of the five leading chronic diseases -- cancer, diabetes, mental illness, heart disease, and respiratory disease -- could reach \$47 trillion over the next 20 years, according to a study by the World Economic Forum”



Diabetes – affects 366 million



Chronic respiratory disease – affects >700 million



Cancer – 22 million cases/per year



Cardiovascular disease – 32 million MIs & CVAs/year

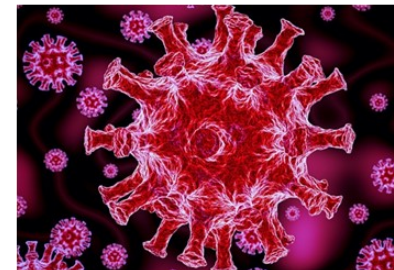
The global economic impact of the five leading chronic diseases – **cancer, diabetes, mental illness, heart failure and respiratory disease** – could reach \$47 trillion over the next 20 years, according to a study by the World Economic Forum.

IMPACT ON HEALTHCARE SERVICES

- Patients with chronic diseases use
- 60% of hospital bed days
 - 80% of primary care consultations

DEATHS from chronic disease in 2008

36 MILLION





We need to calibrate our efforts to address the issues that have emerged over the last couple of years. In May 2020, overall clinical trial enrolment was down 84% compared to the previous year, with oncology – the majority of the UK’s research portfolio – down 88% according to the report by the Association of the British Pharmaceutical Industry (ABPI)¹

Enrolment in Oncology commercial studies recovered to exceed 2019 levels for one month in October 2020, but subsequent COVID-19 lockdowns meant it fell back below 2019 levels and has remained there. Cardio-metabolic studies also saw enrolment fall once more after a brief recovery in late 2020. While Britain initiated the most COVID-19 trials in Europe, its total enrolment levels fell furthest in the continent in 2020 and its recovery lags behind the likes of Italy and Spain.

There are changes to clinical trial regulation related to the Medicines & Medical Devices Act 2021 which along, with the establishment of new Integrated Care Systems and UK-wide momentum behind delivering the vision for clinical research delivery, means that the UK as a whole and Scotland in particular, are well placed to rebuild and grow its clinical research ecosystem.

Research Matters

The importance of research in the NHS is borne out by two recent papers that show there is a correlation between NHS trusts' clinical trial activity and mortality rates and that patients admitted to more research active hospitals have more confidence in staff and are better informed about their condition and medication.

<https://pubmed.ncbi.nlm.nih.gov/29438805/>

<https://onlinelibrary.wiley.com/doi/10.1111/jep.13118>



¹Clinical Research in the UK – An Opportunity for Growth - Association of the British Pharmaceutical Industry (ABPI), Autumn 2021

TASC's Evolution

TASC was established in 2010 to combine the established research strengths of the University of Dundee, (UoD) and NHS Tayside, (NHST) and to catalyse the design and delivery of clinical Research in a safe and effective manner. TASC is a core part of the NHS Research Scotland, (NRS) and its clinical research infrastructure. NRS supports clinical research through partnership working between the Chief Scientist Office (CSO) of the Scottish Government Health Directorate and Scottish Health Boards. NRS works with Scottish Universities and other organisations to ensure that Scotland provides a highly supportive environment for clinical research. A key role of TASC is to lead NRS activity in the East node and to provide the structures and governance that will facilitate clinical research for all health and social care Professionals. TASC also aims to promote a strong culture of high quality research within the wider NHS and academic communities.



The Chief Scientist Office (CSO)

The CSO is part of the Scottish Government Health Directorates and provides core funding for TASC activities through an annual performance based allocation to NHS Tayside. The joint UoD-NHST R&D Director provides leadership of TASC with support from the Senior R&D Manager.

TASC Governance Office

Represents NHST and UoD Co-Sponsors of clinical trials. The governance function reviews and provides approvals for trial sponsorship, study amendments, managing and ensuring onward reporting of breaches and deviations from study protocol. TASC Sponsor role also involves Pharmacovigilance, and Trial Monitoring teams who play a key role in supporting Sponsor responsibilities requirements and compliance with GCP.

Commercial/Non-Commercial R&D Office

The Commercial and Non Commercial teams provide many functions such as research advice, project registration, feasibility assessments, University & NHS Support costings at pre-award stage, generic and local review of research studies, contracts negotiations, site agreements and R&D approval.



TASC Portfolio Team

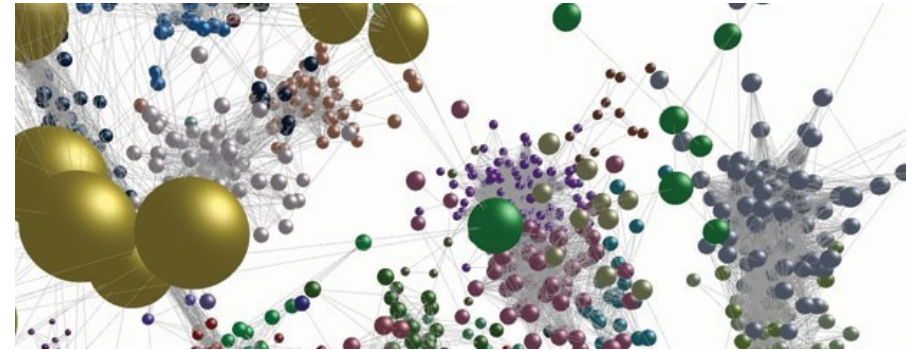
Provide oversight of eligible and extended review studies active within Tayside, ensuring study and recruitment information is reported on local and national R&D systems. In addition, the TASC Portfolio Team have a national role in providing administrative and research management support to Networks and Specialty Groups.

TASC Legal Team

TASC Legal team provides clinical trials contract support and guidance to researchers on behalf of the University and Tayside Health Board.

TASC Finance Team

The TASC Finance Team provides a financial management service to TASC underpinned by effective financial controls ensuring efficient use of resources and guaranteeing processes are in accordance with statutory, regulatory and local requirements.



TASC Training Team

TASC Training Team delivers nationally accredited NRS Good Clinical Practice (GCP) training, regular Targeted GCP training sessions and develops further training courses to meet the needs of clinical researchers.

Clinical Trials Pharmacy Team

Receive, store and dispense Investigational Medicinal Products (IMPs) and maintain the audit trail (either electronically or on paper) of all IMPs. The team review new trials, facilitate their set-up and support monitoring activities through effective communication with service users and research teams.

TASC Quality Assurance Team

Manages the TASC Quality System which underpins good quality research and regulatory compliance. The Quality Assurance (QA) team maintain the library of TASC policies and Standard Operating Procedures which sets out the standards and how they should be met by researchers. TASC QA team provide assurance that GCP compliance and regulatory requirements are met via QA's risk-based audit programme.



Patient and Public Involvement (PPI)

The TASC Patient and Public Involvement (PPI) Manager facilitates PPI at pre-award stages by creating PPI plans and budgets. We also support the formation of diverse PPI groups. PPI input from early research planning stages can greatly strengthen funding applications by ensuring research proposals are relevant and acceptable to the patient population.

Tayside Clinical Trials Unit (TCTU)

Tayside Clinical Trials Unit (TCTU) is a fully registered UK Clinical Research Collaboration (UKCRC) trials unit working with investigators and clinicians to design and deliver high quality clinical research to address important health issues. TCTU support clinical trials of investigational medicinal products (CTIMPs), non-CTIMPs and complex intervention trials across a range of disease indications and patient populations.

Clinical Research Centre (CRC)

The Clinical Research Centre (CRC) is a state of the art purpose built research facility providing space, equipment and staff to support our investigators and industry partners in delivering high quality clinical research. It is a hub for patient facing clinical trial activity, with links to satellite units elsewhere in Tayside, Fife and Perth. Highly experienced research nurses work in specialty teams to support clinical research in diverse areas.



Clinical Research Imaging Facility (CRIF)

The Clinical Research Imaging Facility (CRIF) is a dedicated research imaging unit which houses a powerful 3T MRI scanner, a state of the art 128-slice CT scanner and a digital PET-CT scanner with a unique adjoining interventional suite. The recent investment and installation of the Transcranial MR Guided Focussed Ultrasound (TcMRgFUS) makes CRIF the second site in the UK and the only site in Scotland able to perform this life changing treatment which allows permanent modification of brain function for relief of symptoms including tremor.

Health Informatics Centre (HIC)

Health Informatics Centre (HIC) is an internationally recognised leader as both an academic group and service provider of health informatics, data linkage, software development and secure infrastructure. HIC operates as a Trusted Research Environment for the Scottish Government and NHS Tayside and NHS Fife Health Board Regions delivering secure, research managed 'access to' data under robust governance control. HIC's information security management system is accredited to ISO27001 & Cyber Essentials.



Tayside Biorepository (TBR)

Tayside Biorepository (TBR) is a secure biorepository that collects samples of surplus tissue and other specimens donated by consenting patients. TBR is part of the national Scottish Biorepository network and works closely with NHS Scotland to facilitate the collection of a wide variety of human tissue from NHS patients undergoing procedures that result in tissue that would otherwise be discarded.

TASC's Contribution during the Covid-19 Pandemic

TASC has demonstrated resilience in support of the delivery of high quality clinical research in Tayside when the global Covid-19 pandemic gave rise to extraordinary pressures on the health and care system.

Undertaking COVID-19 research is recognised as a crucial element of the UK and Scottish Government's overall response to the pandemic. TASC, by enabling patients in Tayside to gain access to new treatments, interventions and medicines by conducting clinical trials in Covid patients, has played a central role in this effort.

Strategic guidance from the National Institute of Health Research (NIHR) and the Scottish Chief Scientist Office (CSO) has been followed to prioritise Covid-19 research offering the most potential within the limitations of resource and capacity available to support research.

Tayside Researchers have been able to undertake research studies categorised as Urgent Public Health (UPH) research, in particular the UK-wide trials such as **RECOVERY, PHOSP-COVID, REMAP-CAP** and **PRINCIPLE**.

The STOP-COVID Trial was a multi-centre interventional drug trial led by the University of Dundee Medical School and delivered by the TCTU. Despite considerable challenges, it successfully recruited to target and addressed a clinically important research question. It was the first Urgent Public Health (UPH) national multi-center drug trial led from Scotland and it investigated the use of Brensocatib as a possible anti-inflammatory drug therapy for Covid-19. The TASC team have been proud to play a part in supporting the exemplary work of the entire NHS Tayside and University of Dundee community in meeting the challenges of the pandemic. This has seen the delivery of 33 new clinical trials with over 3,300 people involved including **RECOVERY** and **REMAP-CAP** that have defined new treatment strategies for Covid-19.

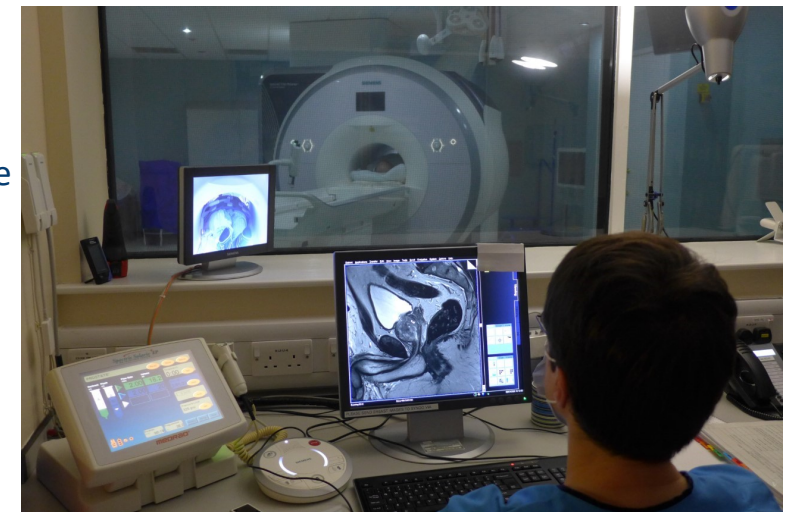
Towards the end of 2020 Tayside began participation in a vaccine study from Janssen for a two-dose regimen, the **ENSEMBLE 2** trial. As a key achievement the Clinical Research Centre (CRC) at Ninewells successfully recruited the first global patient to this international study.

TASC's Strategic Vision

Our strategy follows the themes outlined in the 'Saving and Improving Lives' report. Our main aim is to tailor these to reflect local strengths and capabilities and to ensure that we play an integral role in the development of Scotland as a preferred location for Health and Social Care research.

1. Clinical Research Delivery Embedded in NHS

Embedding clinical research within routine healthcare has significant benefits to both patients and healthcare systems in terms of outcomes. We recognise that the profile and visibility of clinical research in NHST is sub-optimal and that the pressures of the pandemic have seen many previously research active NHS staff moved to the frontline of clinical care delivery. The successes in Covid-19 research highlighted in the media, particularly around vaccine discovery affords us a window of opportunity to further increase awareness and NHS engagement with clinical research. This should occur at all levels – TASC must play an active role in providing information and support for all healthcare staff working in the NHS. There are also felt to be process barriers that hinder the progress of projects and make people less inclined to take up research as a career and personal development option. Often momentum that is created through the work of clinical academics does not always translate to a wider adoption in NHS. When clinical and academic engagement does occur, there is a strongly positive response from researchers, clinicians and patients.



Towards this end we will

- **Engage with Human Resources Directorates**

TASC will create and foster a research rich environment, where research is expected and actively encouraged: we will support established and early career researchers from across the breadth of local clinical and allied health professions by (a) promoting career pathways in research; (b) assisting with grant applications to a range of academic and commercial funders; (c) working with researchers to develop relevant research questions and (d) addressing local clinical and population healthcare needs.

- **Explore Opportunities to Highlight NHS Tayside**

NHS Tayside is a research active Health Board and we will promote this by providing details of trial involvement opportunities. Highlighting that it is a patient's right to access innovative medical treatments via participation in clinical trials.

- **Implement the TASC Commercial Trials Engagement Strategy**

The implementation of our recently developed Commercial Trials Engagement Strategy was paused due to the pandemic. We will build and enhance links by identifying research champions for each clinical specialty. The TASC commercial team are working with colleagues in the University and NHS Tayside to deliver the aims of the strategy. A key objective is to increase the number of NHS Tayside staff taking part in commercial research by making it easier, targeting communications and enabling inexperienced researchers to participate in clinical trials. Our aims include training and developing potential Principal Investigators (PIs), working with our key stakeholders to promote and support clinical research in Tayside covering key career stages. We will also aim to providing mentoring and role models for new researchers.

Exemplar

- TASC have actively sought engagement of ward staff in delivering clinical research. For example, we are engaging with Gastroenterology (GI) ward nurses who will work alongside CRC research nurses to support commercial research studies in acutely unwell GI inpatients.
- With the organisational shift towards certain specialist Services moving to Perth Royal Infirmary (PRI), we have responded to the need for more trials to be supported out of PRI. With the support from the Tayside Health Fund, we are also working with current researchers and recruiting new dedicated medical and nursing research staff to maximise the utilisation of the Gannochy Suite, resource and support available at Perth Royal Infirmary. The aim is to deliver an innovative commercial trial in respiratory medicine - expected to commence early 2022 with other studies in set up, especially in haematology and oncology, which will run from PRI in 2022 and beyond.

2. Patient Centred Research

Even before the pandemic the centrality of research was often overlooked. One study indicated that the UK ranks 4th behind the USA, Germany and Spain in terms of patients recruited globally (across all phases) and according to the 2019 UK Government Life Sciences Competitiveness Indicators, this equates to under 3% of the global share.

Towards this end we will

- **Increase Patient and Public Involvement Activity**

We recognise that Patient and Public Involvement (PPI) can greatly improve the acceptability, quality and relevance of research. Many funders now require evidence of PPI in funding applications. TASC has recently set up PPI groups to support researchers in performing PPI at pre-award research planning stages.



- **Support Patient Groups**

We will expand our patient involvement beyond PPI groups to engage specifically with patient groups in disease specific areas. This will empower patient groups to champion access to clinical trials for patients in disease specific areas.

- **Promote Online Engagement**

We will actively aim to promote the National Institute of Health Research (NIHR) “Be Part of Research” website that enables patients to be involved in ongoing clinical research in Tayside.

2. Patient Centred Research (continued)

Research has been central to the NHS since its foundation of the NHS in 1948. Indeed, the NHS constitution states that it “...will work at the limits of science – bringing the highest levels of human knowledge and skill to save lives and improve health. It touches our lives at times of basic human need, when care and compassion are what matter most...”.

Aligning with this TASC’s mission is to support...research to improve the health outcomes of the people of Tayside and beyond.



Exemplar

- **TASC PPI group**
A group of members of the public and patient representatives who are interested in research has been formed. This group can provide patient experiences and feedback to a wide range of research applications.
- **Covid PPI group**
This represents a group of patients who have had Covid, have experiences of being treated for Covid and/or have experiences of long-Covid. This group can provide patient experiences and feedback to Covid related research applications.

These groups are available to provide PPI support, such as online meetings to input into research design, as well as document reviews such as lay summaries, research applications and patient information sheets.

3. Streamlined Efficient and Innovative Clinical Research

An efficient and streamlined process in approvals and governance remains a challenge within the ever-changing regulatory landscape with multiple new UK-wide initiatives. There needs to be a balance between proactively seeking improvements and change and the risk of disruption that this brings. There is concern that the pace of change without the opportunity to allow current processes to bed-in and be evaluated means that both R&D departments as well as researchers expend significant energy on process rather than on innovative science. There remain challenges that poor quality applications risk hindering timelines for approval and study start-up.

Towards this end we will

- Continue to enhance the pre-award support process. During the last 3 years the TASC has worked with the University of Dundee/NHS Tayside research support teams to develop a greatly enhanced pre-award process for research applications that is easily accessible on our newly updated website.
- Actively contribute to Scottish response to the NIHR and Health Research Authority (HRA) process streamlining initiatives such as model contracts, Integrated Research Application System (IRAS) as a portal for research approvals and the MHRA/NICE/SMC Innovative Licensing and Access Pathway which provides an integrated UK approach to accelerate time to market and facilitate rapid patient access to medicines.
- Offer a wide range of standard and bespoke training events that underpin the fundamentals of Good Clinical Practice (GCP) and developing the skills of experienced and new researchers. In addition to the popular 1-2-3 (Sponsor, REC & Approvals) training session, we will expand TASC training to include topics such as **“Common pitfalls to avoid”**.

- Explore options to increase the reach of the highly subscribed annual Specialty Trainee Course in clinical research this has the potential to scale-up nationally. We aim to develop the training offering in response to regulatory, market and technology trends and in response to our HSC research community's requirements. Engagement with researchers at this early opportunity will provide this feedback and enhance the success rate of research funding applications.
- Expand our Clinical Research Centre (CRC) doctors service to include new staff at the Perth Royal Infirmary (PRI). This will enable local Principal Investigators to be confident of delivering more clinical trials due to the support for trial visits and adverse event assessments provided by the dedicated CRC doctors.

Exemplars

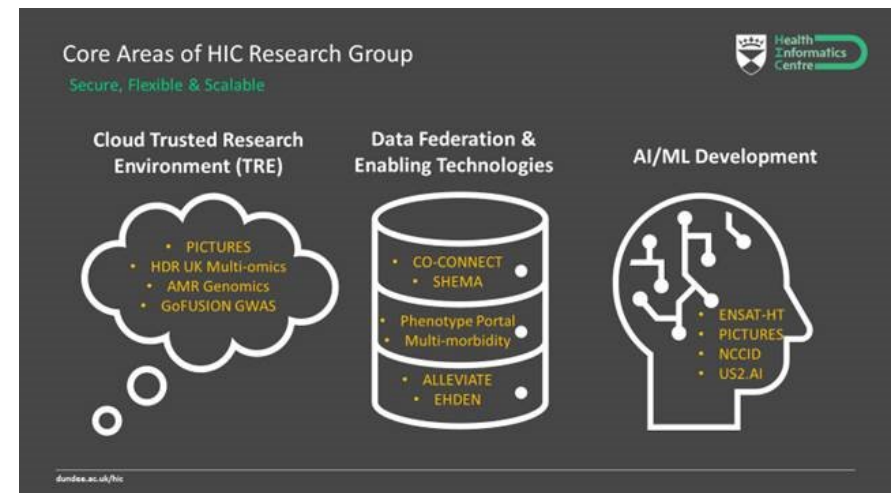
- TASC offers a unique feasibility and study set up service supported by trained clinical research nurse facilitators with extensive experience in delivering clinical trials and supporting R&D. Our facilitators work with commercial sponsors from first point of contact to site initiation and the delivery of research. They support our PIs and study teams in a range of activities including completing accurate feasibilities, identifying recruitment strategies, liaising with support services and trouble shooting and aim to provide a service that ensures the smooth set up and delivery of commercial trials. We are currently reviewing our feasibility activities with a view to streamlining processes, triaging feasibilities and focusing more on supporting sponsors and study teams with the set up and delivery of clinical trials.
- TASC has created a new Business Development Manager role to provide a single point of contact (tasc.research@dundee.ac.uk) for all TASC related queries. This important role is held by an experienced Manager who will guide researchers on process and provide researchers with a single point of contact thus providing consistent high quality advice.

4. Research Delivery Enabled by Data & Digital Tools

Data and digital tools have the potential to dramatically improve researcher access to relevant patient populations. NHS Research Scotland has developed a health informatics support infrastructure, with core support provided to four regional Data Safe Havens. This supports regulated and secure access to NHS data. These Safe Havens work in tandem with the national electronic Data Research and Innovation Service (eDRIS) and Health Boards to deliver research and help identify patients to take part in studies. We will also look to addressing the policy and regulatory issues that can impact on the adoption new technology and tools. A key area of data and digital assisted research delivery is enhanced patient recruitment using existing databases and working towards remote and decentralised trials with e-consent and remote monitoring.

Towards this end we will

- Further develop work with the TriNetX commercial research network and we will aim to roll this facility out by Q3 2022. Being part of the TriNetX network will bring enhanced feasibility based on accurate and up to date health data and will build on our TASC mission to optimise research opportunities which improve the health outcomes of the people in Tayside.
- We will engage with NHS Tayside Digital Directorate to explore research-specific opportunities within the Electronic Health Record initiative such as enabling flags for research patients who are admitted to hospital for more rapid pharmacovigilance reporting and bespoke access for both Sponsor and commercial monitors to examine source documents electronically.



- We will further integrate tissue (via the Tayside Biorepository), data (via the Health Informatics Centre) and specific patient populations (via SHARE) by creating improved pathways for approvals and governance processes that are bespoke for tissue and data. Collaboration between these initiatives will result in a streamlined process to enhance identification of available tissue and associated data and maximise opportunities for research.

Exemplars

- The Health Informatics Centre (HIC) maintains an information security management system accredited to ISO27001 and is a leading Trusted Research Environment/'Safe Haven' within the UK and the Health Data Research (HDR UK) network and represents Dundee as a HDR Alliance Member. HIC provided data services for numerous trials during the global Covid-19 Pandemic and is recognised with UK-wide 'Hub Status' as part of the HDR UK network with the ALLEVIATE Hub the hub for APDP (Advanced Pain Discovery Platform) Pain Research Data.
- Tayside has pioneered the development of consent-for-contact with the creation of the Scottish Health Research Register (SHARE). This is now a register of almost 290,000 pre-consented potential participants who have consented for their health records to be searched against eligibility criteria to enter research studies. SHARE also provides a mechanism for the collection of spare blood obtained through routine clinical activities, allowing large scale and rapid set up to facilitate more efficient trial delivery. Mechanisms are also being explored to further enhance the use of routinely collected NHS data to support trials in Scotland and to work with equivalent organisations in supporting UK wide trials.

5. A Sustainable and Supported Research Delivery Workforce

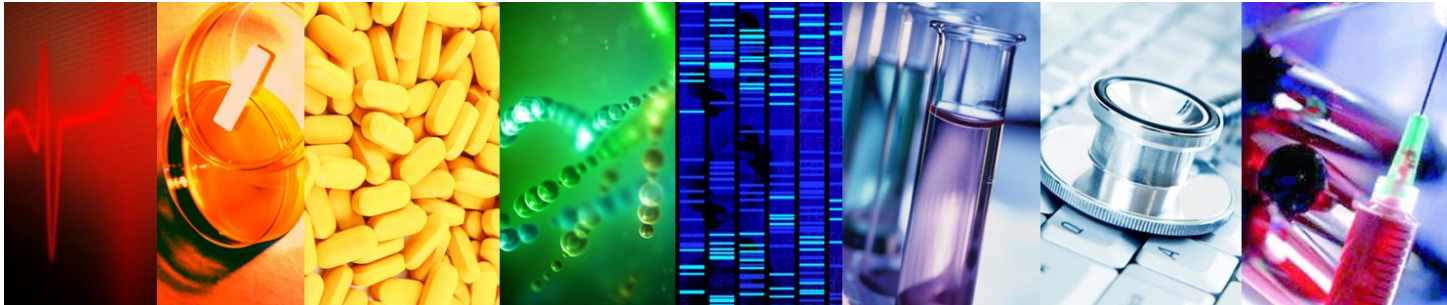
We recognise the need for an adequately resourced, appropriately skilled and supported research delivery workforce. This is critical in a post-pandemic world where remote/hybrid working becomes more commonplace. The National Institute for Health Research (NIHR) has developed the professional identity, standards and regulatory accountability for Clinical Research Practitioners and has created the Associate Principal Investigator role.

Towards this end we will

- Promote and support programmes such as the NIHR Associate PI role locally ensuring more staff within the NHS can support research and in turn, be supported by these initiatives.
- TASC will continue to actively seek out potential researchers in all areas of healthcare including Allied Health Professionals (AHPs) and support services. Through annual appraisal and performance review, TASC will continue to allocate appropriate researcher support sessions as well as encourage applications to the NRS Fellowship scheme both for clinicians and AHPs.
- We recognise the need to develop the skills, capability and experience of the TASC team and will look to the development of a TASC-specific mentoring/buddy programme and consideration of include flexibility for skills development and cross-skilling in job roles. In the short term we are looking to leverage the lesson learned on agile working to support ongoing delivery and to build resilience into our operations including consideration of incorporating flexibility for cross-skilling and cover in new job descriptions.

Exemplar

TASC has developed a team of local GCP trainers able to provide a programme of TransCelerate compliant GCP training (which can also be responsive to needs of individual teams) as well as being part of the wider NRS GCP training infrastructure. This both supports the training needs of the research workforce and provides a development opportunity for our trainers. Tayside has also pioneered the delivery of the Introduction to GCP training in an online format, providing a way for our researchers to access training easily, regardless of location.



2022 - 2027 Five Year Strategy Implementation Plan

Theme 1 – Clinical research delivery embedded in NHS			
Activity	Action	Impact	Comments
Expand the scope of research across the NHS Tayside area	Increase the utilisation of the Gannochy Suite at Perth Royal Infirmary (PRI) by providing dedicated Doctors and Research Nurses	Increase patient recruitment, number of active projects and expansion into new	
Increased commercial engagement	Implementation of current commercial strategy	Increase in number of studies and study value placed in Tayside	
Scope potential for development of a NHS Tayside wide clinical research mentoring scheme	SLWG of TASC and Clinical Research Staff	Increase in number of active researchers in HSC	Align with existing schemes such as CSO Clinical and Non-clinical research fellowships and NIHR Associate PI scheme
Develop role of Clinical Research Nurses (CRN) in increasing research awareness	SRNs to join clinical care group/MDT meetings	Increase patient recruitment, number of active projects	
Research as an integral part of the NHS Tayside induction process	Medical/Nursing student placements in CRC	Increase in awareness of HSC research across all staff	
	Agree inclusion of research with NHS Tayside HR and develop induction pack content for all new NHS Tayside staff		

Theme 2 - Patient centred research			
Activity	Action	Impact	Comments
Expand current PPI programme	Retain PPI post in TASC to champion development and link with other University/School of Medicine and NHST activity	Increase in patient involvement and feedback. Increase in PPI input into clinical trials	
Develop new communications channels for wider patient awareness and engagement	Use of e-health tools/portals e.g., Near Me and social media to publicise opportunities for people to be part of research	Increase in patient recruitment, number of active projects	Linked to research delivery enabled by data & digital tools
Develop role of Clinical Research Nurses (CRN) in increasing patient focused research	New collaborations between CRNs and ward nursing and medical team	Increase in patient recruitment, number of active projects	
Raise profile of research across patient pathways	Determine scope for referencing current trial opportunities in outpatient clinic letters	Increase in expressions of interest	
	Engagement with NHS Estates on alerting to research activity in hospital signage	Feedback from visitors to and staff in hospitals	

Theme 3 - Streamlined, efficient and innovative clinical research			
Activity	Action	Impact	Comments
Improve the quality of research applications	Expand the TASC seminar series (e.g., 1,2,3) to cover new topics relevant to research application/bid management	Increase in bid quality and conversion rate	Linked to research delivery enabled by data and digital tools
	TASC Business Development Manager role to provide early stage triage and advice on applications	Increase in number of studies linked with Biorepository and Safe Haven	
	Determine scope to utilise the full range of TASC infrastructure		
Scotland-wide roll out of the TASC Specialty Trainee Course	Work with Clinical Academics and NRS/University teaching infrastructure to develop a robust course capable of in-person and on-line delivery	Increase in number of research active staff locally and Scotland-wide	
		Possible income generation	
Unified governance processes	Develop common governance and approvals processes for trials encompassing Biorepository, HIC and SHARE	Increase speed and number of approvals	
Workload management	Weekly review of capacity and capability by CRC operational management team	Improve resource allocation and response times	

Theme 4 - Research delivery enabled by data and digital tools

Activity	Action	Impact	Comments
Improvement in researcher access to patient populations	Inclusion of notification of ability of patients to be involved in research through amendment of NHS Tayside Privacy notice	Increase in volunteer and participant numbers	Linked to Theme 2
	Engage with NHST Information Governance and Caldicott to allow clinicians to access lists on patients under care for the purposes of research		
	Highlight SHARE to patients during routine and elective procedure consenting	Increase in the number and value of commercial studies placed in Tayside.	
Use of better patient identification and recruitment systems	Increase usage of TriNetX and similar tools to increase speed and quality of study feasibility and patient recruitment	Also, number of 'first-in' studies	
Progress engagement with NHS Digital Directorate	Dialogue with commercial sponsors on user-friendliness of trial tools	Improvement in data delivery efficiency	
Benchmark best practice in remote trial delivery	Focus on clinical trials including eCRF and results Databases Engage with e-health records initiatives and trial patient admission alert systems	Improved PV reporting timelines	
	Engage with Local teams to share knowledge on processes and technology linked to NIHR remote/ decentralised trials working group	Increase in number of remotely delivered trials	

Theme 5 - A sustainable and supported research delivery workforce

Activity	Action	Impact	Comments
Establish a TASC-specific mentoring and development programme	Short life working group to determine feasibility and structure of such a programme	Increase in job satisfaction and staff retention	
	Also look at a similar programme for CRNs		
Provision of research skills training and development across	Active promotion of CSO Fellowships programme	Increase in job satisfaction and staff retention	See also Theme 1
	Continued development of TASC Training Seminars & Events	Increase in numbers of active researchers across all HSC settings	
Skills for the future	Active horizon scanning to identify technology and process development such as those related to Artificial Intelligence, that require re/up skilling	New training/development programmes	
iMatter	iMatter will continue to be the main method for reviewing staff perceptions and for setting short/medium term improvement initiatives. This will include building relationships and cross-functional team working	Annual iMatter survey and action plan implementation	