



NHS Golden Jubilee and University of Strathclyde

Strategic Partnership

Shared Interests Summary

Introduction

The relationship between the University of Strathclyde (UoS) and NHS Golden Jubilee (NHS GJ) has grown to a point where a Strategic Partnership Agreement and Contracts Framework Agreement have now been completed.

This document provides details of the areas of shared interest which will form the basis of a request by NHS GJ to receive University Hospital Status from UoS. Provided below are details of initial areas of shared interest between the two respective organisations, but collaboration is not limited solely to these topics.

NHS Scotland Academy based at NHS Golden Jubilee

1. Overview

The NHS Scotland Academy (NHSS Academy) will be based at the NHS Golden Jubilee (NHS GJ) as part of a hub and spoke national academy model for NHSScotland (NHSS). Critically, it will offer accelerated training for a wide range of subjects and professions through residential and simulated virtual reality learning to support a resilient and skilled workforce for NHS health and care in Scotland. The NHSS Academy will provide UoS with the opportunity to play a significant role in the development, expansion and delivery of this new model for Scotland. Through the strategic partnership, UoS will support NHS GJ and the wider NHS community, where appropriate, to develop optimal innovative education and training models to ensure NHSS has a highly trained and resilient workforce.

A national NHSS Academy will provide a coordinated approach delivering training linked to workforce development and skills gaps, recruitment and NHS needs.

Delivering the NHSS Academy through NHS GJ offers the unique opportunity to base the Academy within a national NHS facility which is a recognised centre of clinical excellence with outstanding clinical, learning and conference hotel facilities to immediately support a new approach for workforce development and sustainability. A prestigious NHSS Academy brand will be built upon this reputation for excellence.

2. NHS Scotland Academy Objectives

The aim of the NHS Scotland Academy is to provide needs driven, accelerated, high quality training delivered in state of the art facilities within a centre of excellence. Programme design will be aligned to need and will be linked with recruitment to attract and develop the right numbers of people at the right time, with the right skills and values to deliver high quality healthcare.

The specific objectives of the NHS Scotland Academy will be to:

- Develop training courses linked to national recruitment and workforce needs, addressing existing shortfalls and plans specifically to:
 - Support post COVID-19 pandemic recovery plans
 - Improve retention in areas difficult to recruit in
 - Approach training in a more cohesive way across Scotland
 - Develop a workforce to meet the needs of elective centres and address areas where recruitment is challenging
- Deliver accelerated training within state of the art training facilities based at a centre of excellence linked to conference hotel facilities

- Provide exciting and attractive training programmes and scholarships linked to recruitment and career progression.
- Design training and education based on upper quartile models of care, such as the Golden Jubilee Model of elective care to support national spread of best practice.

Achieving these objectives will enable a more effective, efficient and resilient workforce offering quality training, skills development and career satisfaction. The continued development and expansion of the Academy model is vital to NHS Scotland's ability to continue to grow and develop our workforce.

3. Key Elements of the NHS Scotland Academy

The main elements of the development of NHSS Academy model at NHS Golden Jubilee are:

- **Accelerated Training delivered to match need**

New courses will be designed to optimise delivery in a modular way through compressed, accelerated training which fully utilises the state of the art facilities and residential aspects, where appropriate, to offer evening courses and simulation training wherever possible.

- **State of the Art Facilities – Innovative, High Quality, Residential**

NHS GJ will work in collaboration with strategic partners to design and install new innovative training facilities providing virtual reality (VR) and simulation training suites in addition to further electronic enabled links with our advanced clinical facilities. These will be embedded within the existing hotel and conference facilities and will be supported by unique attributes NHS Golden Jubilee already has to offer including:

- Golden Jubilee Conference Hotel enabling residential training courses with direct access to hospital services
- Clinical Skills Centre with live links to operating suites, cardiac catheterisation labs and auditorium.
- Hospital services with nationally and internationally renowned best in class models of care

- **Educational Programme**

NHS GJ and NHS Education for Scotland (NES) will develop a comprehensive educational programme in partnership with academic institutions and professional bodies which will include:

- An extended range of vocational courses for clinical and non-clinical roles in the NHS, prioritised to match workforce needs across NHS Scotland,
- Clinical skills courses for medical, nursing and other clinical staff which will train people in clinical skills and procedures that are nationally and internationally recognised as high quality and best in class,
- Training and developing pilot modules in a range of other areas such as Leadership, Data Analytics, Estates and Facilities, and Corporate Governance.
- Fellowships to provide extended duration training for highly specialist roles within NHS GJ specialty areas such as orthopaedics, ophthalmology, cardiothoracic and intensive care.

The educational programme will be flexible and, through working with strategic partners, will be delivered using a variety of teaching methods including distance learning and residential courses. All courses will be digitally enabled with e-learning integral to our approach.

There will be a focus on developing a sense of value and belonging for each student as part of a recognised and respected entity which they will have lifelong involvement with as a student and Alumni.

- **Workforce Planning, Recruitment and Scholarships**

The critical purpose of the NHSS Academy is to ensure that the workforce development needs of NHSS are met in a timely, effective and efficient way. NHS GJ will work with NHSS Boards and Strategic Partners to:

- Understand NHS Scotland workforce needs in relation to specialist and advanced roles, including numbers of staff required by when,
- Prioritise the roles to be supported by the Academy, planning for recruitment to appropriate courses and ensure this aligned with recruitment to vacancies and new posts across NHS Scotland.
- Agree funding of training posts, where required, to enable course attendance and vocational placements.

4. Strategic Partnership

UoS will be an integral partner for NHS GJ to achieve the objectives outlined in Section 2 above.

The proposed partnership will:

- Enable both organisations to develop optimal innovative education and training models to ensure NHSS has a highly trained and resilient workforce.
- Support an educational model that will underpin the continued development and expansion of the NHSS workforce.
- Support both organisations to develop training courses to suit the needs of NHSS and address current and forecast areas requiring skills growth. Meeting this demand will deliver mutual benefits and an opportunity for UoS to support the continued development and expansion of an ever changing NHSS workforce.
- Review the potential to market courses and facilities nationally and internationally to enable income generation and further benefit both organisations. Areas of mutual interest in the delivery of courses/modules include
 - pharmacy practice (critical care);
 - peri-operative care;
 - leadership;
 - digital health systems;
 - data analytics;
 - operations management;
 - finance and redesign;
 - corporate governance;
 - haptics; and
 - behaviour change.

The COVID-19 pandemic has seen UoS take a leading role in the development of novel teaching and learning approaches. The University and its spin-out companies are providing virtual-reality learning to practitioners. Teams within the University's Faculty of Humanities and Social Sciences are experienced in understanding the balance between

time savings through remote learning against the deeper learning experience in face-to-face learning.

UoS will support the NHSS Academy in assessing and developing best teaching practise for agreed learning outcomes.

The University welcomes co-design and will be pleased to explore opportunities for joint accreditation where appropriate. UoS is a strong partner in the Government's upskilling initiative, allowing learners to collect credit over time to develop individual learning pathways.

Led by the Strathclyde Institute of Pharmacy and Biomedical Sciences, UoS provides the MSc Industrial Biotechnology, a flagship course jointly taught by a consortium of learning providers. UoS and NHSS Academy will utilise cross-institutional accreditation models to develop joint learning with partners like NHS Education for Scotland or NHS Scotland Project Lift.

1. Background

Over recent years there have been a suite of programmes and performance support functions embedded within Scottish Government Management Structures reporting to the Director of Performance for NHS Scotland. These programmes have led on important areas of work to promote improvement in pathways and performance including:

- Scheduled Care Performance Team
- Unscheduled Care Performance Team
- Scottish Access Collaborative
- Cancer Performance and Early Diagnosis Programmes
- Modernising Patient Pathways Programme

This opens further opportunities for the strategic partnership with UoS.

In January 2020, the NHS Scotland Chief Executive and Director of Performance commissioned NHS Golden Jubilee to work with Scottish Government, Health Performance and Delivery Directorate leaders to develop these programmes into a new cohesive national unit which will sit within the NHS GJ portfolio – the national Centre for Sustainable Delivery (CfSD).

During this transition, the COVID-19 pandemic has created critical issues for health and care in Scotland. In response to this enduring challenge, it is now considered that CfSD could play a critical role, working with key partners in driving forward the required change necessary to support the Remobilisation, Recovery and Redesign Programme launched by the Cabinet Secretary for Health.

2. Vision and Function

The ambition of the new CfSD is to become an internationally recognised centre of excellence promoting best practice, a 'Once for Scotland' approach, and enabling a sustainable health and care system. CfSD has two critical functions which have different management and governance approaches.

- Programmes to drive Redesign, Innovation and Sustainability; and
- Performance Management.

3. Strategic Partnership

It is envisaged that CfSD will optimise collaborations with NHS Boards, health and social care partners, third sector organisations, academia and industry to create new opportunities for sustainability and creating a streamlined more joined up approach to avoid duplication and delays in embedding good practice.

The partnership supports the ambition to establish an academic champion role within CfSD, securing a key formal link and associated expertise between NHS GJ, NHSS and UoS.

In achieving the above, the partnership with NHS GJ will facilitate shared benefits including:

- A defined academic link between UoS and NHSS via partnership agreement with NHS GJ. This will enable CfSD to cascade evidence based models, best practice, improvement methodologies and research based change.
- Collaboration on the analysis and reconfiguration of work processes and patient pathways, cost-effectiveness analysis of health technologies and health policies.
- Collaboration on modelling and management of innovation and change for service development and whole systems improvement.
- Collaboration on workforce development, work redesign and leadership.
- Collaboration on digital health and data analytics to inform new models of care and future healthcare strategy and direction.
- Research and Development Programme and associated publication.
- Commissioned programmes of work to support NHSS Strategic drivers.
- Collaborative learning and shared evidence base for improvement and change.

UoS and CfSD are developing solutions to the 'spread challenge' as outlined in a landmark study by the Health Foundation in 2018 on how to support the successful uptake of innovations and improvements in health care.

Working with Scottish NHS Boards, Healthcare Improvement Scotland and collaborators across government and industry when opportunities arise, the partners will identify suitable innovation projects and support adaptation across NHS Scotland, drawing on UoS expertise in delivering sustainable innovation.

UoS has developed an internationally renowned stage-gated process to assess and support innovation. The Innovation and Industry Engagement Directorate brings extensive expertise in stress-testing the viability of novel practises and instrumentation. The team determines innovation cost and revenue balances as well as required investment in terms of innovation champion time and organisational support.

CfSD has appointed the University of Strathclyde to evaluate the new early cancer diagnostic centres (Maguire, Van Der Meer, Egan, Nixon)

NHS Scotland Innovation Accelerator based at NHS Golden Jubilee

1. Overview

Changing demographics, developing technologies, and increasing patient demands is a critical turning point for Scotland's NHS. Future sustainability now rests on the ability to cultivate innovation to create a resilient healthcare system, improve health outcomes and promote economic growth.

Innovation and digital transformation provides a significant opportunity on this very challenging terrain. It offers the potential to improve quality and value with an increased level of personalised care, as well as the emergence of more flexible workforce options through automation, digital and virtual monitoring.

Having received support from Scottish Government, NHS Golden Jubilee (GJ) will launch the NHS Scotland Innovation Accelerator (NIA) which will support small to medium enterprises to develop new ways of working through rapid innovation and implementation of products, services and processes for the benefit of the population.

The proposed strategic partnership between NHS GJ and UoS will enable both organisations to drive the innovation agenda forward and shape resilient healthcare services of the future. In moving forward through ongoing NIA discussions, UoS would envisage a role as a Lead Academic Partner, drawing on the key elements and core expertise across Strathclyde in Innovation, Commercialisation, Industrial Engagement, Training and Health Technology, which could be utilised in establishing the NIA.

Delivered through triple helix collaborations between NHS/Scottish Government, Industry, Academia and other strategic partners committed to Scotland's economic growth, the Accelerator will focus on healthcare/biotech with the essential criterion being that ventures are committed to working with NHS and where there is a shared value in accessing clinical expertise, patients and data.

The NIA will be embedded within the NHS GJ campus, capitalising on the existing conference hotel and research institute infrastructure. This will enable the combination of innovation, research and development with clinical expertise, leveraged through state of the art training facilities and be well positioned to exploit the synergies that will exist with the onsite NHS Scotland Academy and the Centre for Sustainable Delivery.

The model for change will provide a framework with robust governance, access to expertise, funding and accelerated development to enable success.

2. NHS Scotland Innovation Accelerator Objectives

The aim of the NIA is to accelerate research and innovation opportunities by bringing together strategic partners and stakeholders to enable the development, testing and growth of new ideas and to accelerate them towards a robust business model resulting in a route to market and return in investment. This will benefit stakeholders and also the population of Scotland.

The NIA will include an expert team to work with entrepreneurs, NHS Scotland, Regional NHS Innovation Hubs, investors, academia and industry to create a pivotal entry point for innovation within the NHS in Scotland. Critically, it will allow agile working to develop, helping to both identify and create opportunities for innovation, particularly those aligned with the areas of clinical expertise at NHS Golden Jubilee. This will allow the NIA to **attract**

ideas, **analyse** potential and **fast track** products or services which will achieve one or more of the following key objectives:

- Improve Health and Wellbeing
- Promote Economic Growth
- Improve Sustainability for NHS Scotland

The NIA's specific aims are to:

- Create a new and dynamic climate for innovation
- Develop and increase collaborations with current and new strategic partners
- Develop commercial and academic partnerships to aid the delivery of training and education
- Identify and create opportunities for innovation, particularly those aligned with the areas of clinical expertise at NHS GJ
- Enable the infrastructure that is required to identify, support, develop and accelerate innovative ideas
- Create a robust financial framework to support appropriate investment and ensure a sustainable model is in place
- Develop the specification requirements for any purpose-built facility
- Contribute to the development of a National Health and Care Innovation Strategy and a National Governance Framework process to better enable investors, academics, businesses, innovation centres and international partners to work together

Achieving these objectives will:

- Streamline the innovation landscape
- Provide a pivotal entry point for healthcare innovation within the NHS in Scotland
- Improve economic development and generation of return for investment opportunities
- Provide opportunities for meaningful and long-term partnerships with Industry, Academia, Small and Medium Enterprises (SME) and third/public sector through cutting-edge research
- Utilise innovation in thought, design, process, technology, products and practice from various disciplines in NHS GJ and strategic partners
- Embed robust financial and governance processes and arrangements
- Be integral to achieving innovation solutions for providing better patient health and wellbeing outcomes

3. Strategic Partnership

The proposed strategic partnership between NHS GJ and UoS will enable both organisations to drive the innovation agenda forward and shape resilient healthcare services of the future. The NIA will focus on identifying new and effective solutions to current and forecasted health and technology requirements.

In moving forward through ongoing NIA discussions, UoS would envisage a role as a Lead Academic Partner and drawing on the key elements and core expertise across Strathclyde in Innovation, Commercialisation, Industrial Engagement, Training and Health Technology which could be utilised in establishing the NIA.

- An understanding of how to establish, deliver and run Innovation Accelerators

- An understanding of the commercialisation process and programmes
- Development of appropriate leadership, skills and training programmes and modules through the Strathclyde Business School
- Development of major interdisciplinary collaborative research development programmes across all areas
- Industrial engagement working with micro, SME and large companies in aligned areas of interest
- An emphasis on running and delivering national and pan Scotland initiatives
- A long history of cross-disciplinary expertise in medical technologies embedded in industrial projects

The UoS Health and Care Futures programme and the UOS HealthTech Cluster share key strategic drivers with the NIA, working in partnership with the public sector and industry, through the development of state of the art innovation and technologies, to deliver new and effective models of care to improve the outcomes of the people of Scotland.

The COVID-19 pandemic has brought challenges to the health service not seen in generations. As NHSScotland moves forward in this new landscape, partnership working will be crucial to ensure innovative ways of delivering safe, effective and efficient healthcare services are identified and implemented at pace.

A strategic partnership will facilitate collective learning and knowledge exchange, providing mutual benefits for both organisations and NHS Scotland.

Collaborative Research

1. Background

NHS Golden Jubilee facilitates and supports high quality research which conforms to the quality standards required by guidance (Research Governance Framework for Health and Community Care SGHD 2006) and legislation (EU Clinical Trials Directive).

It hosts projects sponsored by device and pharmaceutical companies as well as projects sponsored by Universities and by other NHS organisations.

Committed to facilitating rapid set up of research projects, the average time to review and approve studies is currently under five days against a Chief Scientist Office target of 30 days.

As a tertiary referral centre, the Golden Jubilee National Hospital specialises in a number of areas for the population of the West of Scotland and, in the case of our national services, the whole of Scotland. All clinical specialities are research-active, hosting both commercially sponsored/funded and academic studies through links with Universities.

The main clinical specialties involved in research are:

- Cardiology
- Orthopaedics
- Scottish Adult Congenital Cardiac Service
- Scottish National Advanced Heart Failure Service
- The Scottish Pulmonary Vascular Unit

2 New and existing opportunities

In addition to our core research specialties, we have an opportunity to undertake research in other services and areas. For example, our robotic programme has been continually growing since 2018 in our progression to becoming a leading UK institution in robotic surgery, and we have an ambition to explore next steps and advances in this arena.

3 Strategic Partnership

The proposed strategic partnership between NHS GJ and UoS will enable both organisations to drive the research agenda forward in existing and new specialties and supporting areas of healthcare linked to patient and staff experience. We will:

- Build upon current research activity which is currently predominantly within the field of bioengineering
- Expand current areas of research in collaboration with UoS
- Focus on areas already identified as being of interest to both organisations

Both organisations will develop PhD opportunities as well as non-traditional pathways through Professional Doctorates. This will support career development and remove hurdles for NHS staff to become research active. The partners will pursue opportunities to develop Clinical Research Fellowship and Clinical Academic positions to further joint research work. The University will benefit from joint appointments through strengthening its Research Excellence Framework agenda.

The partners will develop frameworks to apply for major funding. The UoS brings extensive experience in its Research and Knowledge Exchange Services to align research capabilities to national and international funding opportunities. The research teams at UoS are skilled in utilising pilot studies to support large cross-disciplinary funding bids.

- UoS Health and Care Futures will work with NHS GJ to monitor the funding landscape and align projects to emerging Government and charity funding targets.
- The University's Health Tech Cluster team will support the partners in industry-related research and development.
- UoS Business School research is leading in patient pathway design.
- The Engineering and Science Faculties are at the forefront of digitally-supported health care.
- Researchers from the Humanities are developing patient-centred healthcare research.

In combining strength across disciplines, UoS and NHS GJ will develop research beyond traditional approaches.

Complex health problems require holistic solutions, spanning disciplines and schools of thought. UoS and NHS GJ will jointly develop competitive research initiatives tackling complex health problems.