



Partnership Annual Progress Report March 2023

Introduction

It has been 1 year since the relationship between the University of Strathclyde (UoS) and NHS Golden Jubilee (NHS GJ) grew to the point where a Strategic Partnership Agreement and Contracts Framework Agreement resulted in NHS Golden Jubilee receiving University status. At that time, a shared interest document was created that provided details of initial areas of shared interest between the two respective organisations, with the agreement that collaboration was not limited solely to these topics.

It was agreed that the aims and objectives of the partnership:

- Will help support the recovery of NHS Scotland.
- Will help support NHS remobilisation in a sustained way.
- Is socially progressive and makes a positive difference to the lives of people across Scotland and beyond.
- Will support both institutions as 'places of useful learning' – our responsibility to research, teach and be of benefit to society, providing best in class, accredited education which complements and supports all aspects of healthcare.
- Will make best use of the combination of specialised academic and healthcare experience to explore exciting and beneficial reform to patient care and workforce roles.
- Will deliver genuine world-leading innovative solutions to healthcare and staff delivery models.

This short summary paper provides an update on work carried out between our organisations in the past year, highlighting accomplishments against the key areas outlined in the shared interest document.

Corporate collaborations

A number of joint initiatives, teaching activities and events have taken place over the past year.

Education and learning

On 23 September 2022, a senior team across NHS Golden Jubilee took part in an Innovation Masterclass focusing on how the National Elective Co-ordination Unit (NECU) could be taken forward. This proved extremely successful for all participants and outcomes of the day have helped prioritise the work of this important national waiting times initiative.

NHS Golden Jubilee's Chief Executive was a virtual speaker at the Health and Care Futures Showcase on 'The Future Hospital and Beyond Its Walls' in October of last year and Katie Cuthbertson from CFSD presented and participated in a related panel discussion at the event. Senior staff within NHS Golden Jubilee also attended to learn more about the topic and network with key individuals. Before her departure to NHS Lanarkshire, visiting Professor Jann Gardner was involved in UoS SEED developing Knowledge Exchange projects and forums, and will continue to contribute in her new role to UoS Health and Care Futures.

We are also progressing honorary University appointments of senior personnel from the Golden Jubilee with applications in progress for Kevin Kelman and Mark MacGregor to join the Department of Work, Employment and Organisation and the Department of Management Science respectively.

We are also currently developing a range of student masters projects in the fields of data analytics, digital health, building and estates, leadership and hospitality. These projects will act as effective mechanisms to promote joint working and importantly provide students with 'real life' learning experience of conducting research in the NHS.

Communication, marketing and events

In terms of communications, marketing and events, both organisations have been working to mutual benefit. This includes:

- Promotion of University courses and opportunities within Golden Jubilee;
- Promotion of NHS GJ vacancies through the University careers function;
- Awareness raising through internal communications;
- PR through university status and the report relating to rapid cancer diagnostic services;
- University attendance at NHS Golden Jubilee showcase of 26 August 2022; and

We are moving the Strategic Partnership between the University of Strathclyde and the NHS Golden Jubilee University Hospital into the next phase. On the 14 March 2023, Professor Jim McDonald and Gordon James, Chief Executive of the Golden Jubilee, will be opening the floor for a celebration of the NHS Golden Jubilee's University Hospital status and an exciting workshop aimed at developing further developing collaboration future research. Colleagues from across the Strathclyde Faculties will be presenting the art-of-the-possible followed by a large networking event to develop new research opportunities and relationships.

NHS Scotland Academy based at NHS Golden Jubilee

Research

The NHS Scotland Academy is developing joint research with the University in the areas of pedagogy, upskilling and the development of 'once for Scotland' solutions. The Academy identified key challenges arising in the National Endoscopy Training Programme and in Endoscopy Non-Technical Skills as well as challenges identified by NHS Scotland Assure, National Treatment Centres and the Nursing and Midwifery Council.

A meeting to outline joint research opportunities was held in January 2023. The Academy is currently identifying areas suitable for student projects and for joint research funding bids.

Meetings are taking place between the University's 'Living Lab' team and the Academy to develop joint work on demonstration environments.

Pharmacy

At the onset of our partnership a number of pharmacy related teaching options were explored through the NHS Scotland Academy. These are now pursued through NHS Golden Jubilee's newly appointed Director of Pharmacy. We are envisaging co-designing teaching and training for pharmacists and looking into placement opportunities to enrich learning.

Close collaboration between the pharmacy team at the University and at NHS Golden Jubilee might also open opportunities for joint research and development in the future.

National Elective Co-ordination Unit (NECU)

In support of the evolving National Elective Co-ordination Unit (NECU) concept and associated operating framework, we are currently developing with the University Department of Management Science a multi-criteria decision support tool. This effectively aids the flow of appropriate patients through available capacity, ensuring optimisation of constrained resources and improving patient access.

An initiation meeting took place 15 September 2022, however, due to the current system pressures within the NHS, we are currently reviewing the opportunities with a view to realigning the project.

Rapid Cancer Diagnostic Services (RCDS)

The University of Strathclyde was asked to deliver the independent evaluation of the Rapid Cancer Diagnostic Services in NHS Ayrshire & Arran, NHS Dumfries & Galloway and NHS Fife. Since then 2 new RCDSs (NHS Borders and Lanarkshire have been commissioned.

An Interim Report was published November 2022:

<https://www.gov.scot/news/interim-report-shows-value-of-rapid-cancer-diagnostic-services/>.

The final report is due in November 2023 and will provide a more in-depth analysis of this new service provision across 5 boards in Scotland.

Information Governance: 'once for Scotland' Solutions

In March 2022, we jointly attempted to secure funding through the Nuffield Fund to undertake a Research Project entitled: 'Information Governance: Enabling Fair and Inclusive Health Innovation'. The project aimed to identify barriers to data access and develop guidance for an information governance that supports and drives innovation. Unfortunately, the bid was unsuccessful.

Applying Industrial Informatics to Health Challenges

The University is taking an active interest in supporting innovation to address the national backlog in elective care. A joint meeting with CfSD and Strathclyde Industrial Informatics researchers was held in October 2022.

Participants identified a range of areas where approaches in industrial informatics could be applied to address the backlog using innovations from other sectors such as energy and space.

The University of Strathclyde is in the process of identifying research funding calls to support the conduct of 1-2 early proof of concept studies.

Collaborative Research

In terms of facilitating research relationships between our two organisations, we are actively developing the following:

- An Information Sharing Agreement. NHS Golden Jubilee already has this kind of agreement in place with others and it helps facilitates setting up specific projects.
- An agreement relating to the use of residual human tissue by University of Strathclyde. Given that the University is already pursuing this kind of agreement with NHS Lanarkshire, it would be sensible that NHSGJ consider a similar agreement which would enable researchers to access residual tissue (assuming all other regulatory requirements have been met).
- A high level Intellectual Property sharing agreement. This would facilitate the 'ideas factory' approach between our two organisations.
- A document that would facilitate access for staff in both organisations.

Digital Health Innovation Hub

NHS Golden Jubilee joined the University in a large consortium bid for an EPSRC funded Digital Health Hub. Together with the University of Surrey, NHS Lanarkshire and the Scottish Digital Health and Care Innovation Centre (DHI) the team proposed a holistic approach to digital transformation in healthcare, encompassing training and education, practise and innovation. The bid received favourable reviews positively highlighting the close NHS involvement. In a highly competitive call, the bid was ultimately not successful.

Artificial Intelligence/Data Science

We jointly started a project to review the feasibility to develop and implement an Artificial Intelligence (AI) and Machine Learning (ML) software system as a means of reading post-operative arthroplasty X-rays.

The team have considered the current process for the review of post-operative X-Rays and in October 2022 held a workshop to review mapping output and explore feasibility of further development with colleagues across both organisations.

This is now transitioning into our research function and as initial step, we are preparing a research project specification and application (scheduled April 2023).

Orthopaedics and Robotics

This is a focus area of joint work that helped spawn the strategic partnership. Led by the Department of Biomedical Engineering and the NHS Golden Jubilee's Orthopaedics team, work is ongoing in a range of areas. New options are emerging for joint projects in AI and orthopaedics – one being x-ray image analysis for arthroplasty (above). There is also ongoing work across a range of robotics research and development.

University researchers and NHS practitioners held a joint workshop to better align future research with clinical needs.

Digitally-transformed Future Surgery

The NHS Golden Jubilee is a partner in a large consortium research bid led by the University of Strathclyde. The research will address healthcare challenges on a National level: Surgery is a critical treatment delivered by NHS. The total UK economic burden of surgery stands around £10.9 billion per annum, amounting to close to 10% of the total NHS budget. There is a clear clinical need for minimising surgical operations, healthcare costs, patient waiting lists, and associated patient complications.

To address this need, we aim to digitally transform future surgery, particularly for cancer, by creating a ground-breaking real-time digital twin assisted surgery (DTAS) technology.

Securing this bid for an overall value of £4 million in a highly competitive funding environment marks a huge success for the partnership.

Sustainability

Designing out Theatre Cap Waste Project

In line with NHS Scotland's focus on sustainability, we have commenced a project describing the requirements for the implementation of reusable theatre caps. To date a project group has been formed, project initiation document completed and distributed, and a multi-disciplinary workshop was held on 20 January 2023 to generate ideas on this.

Green Transitions Ecosystems Hub

The University's Department of Design Manufacturing and Engineering Management is leading a consortium bid for a Green Transitions Ecosystems (GTE) Hub with the UK Arts and Humanities Research Council. This work aligns with the CfSD's national Green Theatres Project and with the NHS Golden Jubilee's Board work towards sustainability.

This proposal is an excellent exemplar of our joint aspiration to tackle challenges in the healthcare environment by joining solutions across diverse sectors.

The bid for a total funding of £4.6 million and focuses on:

- Re-useable theatre gowns
- Redesign of ophthalmology drapes
- Circular economy – recycling materials – e.g. deposit return scheme

Conclusion

Both the University of Strathclyde and NHS Golden Jubilee have cemented their working relationship over the last year, focusing on the aims and objectives of the partnership. Moving forward, to continue to meet patient expectations and provide quality care, we must constantly develop to meet the needs of patients and our NHS workforce.

The foundations of our mutually beneficial partnership will continue to be based on the following pillars and we look forward to more new and exciting opportunities.

Collaboration – We bring people together to help deliver an NHS that is fit for the future. It's active, dynamic and responsive as well as being open to new ideas and having a willingness to share our ideas and knowledge.

Innovation – We are focussed on discovering and applying knowledge with impact, and encouraging creative thinking and new ideas. We're not afraid to do things differently and push boundaries, whether through new ways of working or collaborations.

Excellence – We set and maintain high quality standards to be 'best in class'. It's about being creative, inspirational, avoiding duplication, and being ambitious.

Confidence – We are bold and challenging about what we do and support appropriate and managed risk in our decision making. We prove our skills and expertise and show integrity to ensure what we say matches with reality.

Person-centred – We are committed to our staff, patients and students, providing opportunities and investment where it is most needed.



Welcome to

NHS Golden Jubilee

home to the:

- Golden Jubilee University National Hospital
- Golden Jubilee Conference Hotel
- Golden Jubilee Research Institute
- NHS Scotland Academy
- National Centre for Sustainable Delivery



University of
Strathclyde
Glasgow

Pedestrian access only. No hospital vehicle access.