

## NHS Lanarkshire

### Strategic Academic Partnerships Report – Update to Planning, Performance & Resources Committee.

#### Period covering June 2022 – November 2023.

This report covers the developments and ongoing progress between NHS Lanarkshire and our three formally recognised strategic academic partners; Glasgow Caledonian University (GCU), University of Strathclyde (UoS) and University of West of Scotland (UWS). It also outlines ongoing work with other academic partners where there is no formal organisational partnership in place.

Over the last year, progress in our strategic academic liaisons, like all other aspects of health care, continued to be affected by the coronavirus pandemic, but nevertheless, significant progress has continued to be made. It is noted again how helpful our university partners were to NHS Lanarkshire during the pandemic, particularly in our covid modelling work with the University of Strathclyde, which last year, was given national recognition and won national awards.

Despite the ongoing challenges, a number of milestones have been achieved with various strategic university partners and continue to evolve.

#### 1. University Departments:

Just prior to the start of the pandemic, three of our departments were successful in being awarded University Departmental status by Glasgow Caledonian University. These are

- **The University Department of Stroke Care at University Hospital Monklands**
- **The University Department of Psychological Services (pan Lanarkshire)**
- **The University Department of Podiatry (pan Lanarkshire).** It has been noted by the Head of the UK College of Podiatry that this is the first such university department of podiatry in the UK, so a UK first for the GCU/NHSL partnership.

These three university departments continue to prosper. In Podiatry applications to join our department have significantly improved in the last year, up from five at band 5 last year to twenty-two this current year.

The three departments university departmental status will be due to be considered for renewal in 2024 and as such each department is currently working up its documentation of application for renewal and it is hoped that these will be successful.

#### 2. Honorary Appointments:

One of our senior staff has been given an honorary chair in the last year by the University of Strathclyde:

- Professor Patricia Graham ( Head of Psychological Services)

Two members of staff – our HSCP Chief Officers, have been given honorary chairs at the Glasgow Caledonian University:

- Professor Ross McGuffie
- Professor Soumen Sengupta

In addition, Mrs Janice McClymont (Head of Occupational Therapy) has been awarded a honorary fellowship at GCU.

The earlier awards of honorary fellowship to Mrs Margot Russell, Mr Peter McCrossan, and Mrs Claire James have been renewed for a further 3 years.

At the University of Glasgow, Professor Cindy Chew, Consultant Radiologist at University Hospital Wishaw, has been awarded an honorary chair.

Details of staff working in our partnership universities who have been given honorary status in NHS Lanarkshire in order to facilitate ongoing collaboration are detailed in the tables below;

**University of Strathclyde** (this list represents an increase of six new (**in bold**) honorary academic staff now contributing to the life and work of NHSL)

Professor Roma Maguire	Visiting Professor of Digital Health & Care	Computer & Information Sciences, Digital Health & Care
Dr Kim Kavenagh	Honorary Senior Statistician	Mathematics & Statistics
Dr Robert van der Meer	Honorary Reader In Management Science	Management Science / Business School
Ms Gillian Anderson	Honorary Research Associate	Management Science / Business School
Mr Chandrava Sinha	Honorary Research Assistant	Management Science / Business School
Professor Terry Gourlay	Visiting Professor of Biomedical Engineering	Biomedical Engineering
Professor Phil Rowe	Visiting Professor of Rehabilitation	Biomedical Engineering
Mr Roy Bowers	Visiting Principal Teaching Fellow	Biomedical Engineering
Dr Sylvie Coupaud	Visiting Lecturer in Biomedical Engineering	Biomedical Engineering
Dr Mario Giardini	Visiting Senior Lecturer in Digital Health	Biomedical Engineering
Mr Chris Gourlay	Visiting Researcher	Computer & Information Sciences, Digital Health & Care
Professor Anja Lowit	Visiting Professor	Speech & Language Therapy
Dr Anja Kushmann	Honorary Chancellor's Fellow	Speech & Language Therapy
Dr Joanne Clelland	Honorary Senior Lecturer	Speech & Language Therapy

Dr Wendy Cohen	Honorary Senior Lecturer	School of Psychological Sciences & Health
Professor Maggs Watson	Honorary Professor of Pharmacy	Institute of Pharmacy & Biomedical Sciences
Professor George Crooks	Honorary Professor	Digital Health & Care Institute
Professor Feng Dong	Honorary Professor	Computer & Information Sciences, Digital Health & Care
Professor Sir Harry Burns	Honorary Professor	Public Health
Dr Alex Mavroeydi	Honorary Senior Lecturer in Physical Activity for Health	School of Psychological Services & Health
Dr Alison Kirk	Honorary Reader in Physical Activity for Health	School of Psychological Services & Health
Dr Xanne Janssen	Honorary Senior Lecturer in Physical Activity for Health	School of Psychological Services & Health
Ms Mhairi Patience	Honorary PhD Student	School of Psychological Services & Health
Mrs Carolyn Andrews	Honorary Teaching Fellow	Speech & Language Therapy
Dr Grainne McGill	Honorary Chancellor's Fellow/Lecturer	Department of Architecture
<b>Professor John Reilly</b>	<b>Honorary Professor of Physical Activity and Public Health Science</b>	<b>Department of Physical Activity for Health</b>
<b>Professor Alec Morton</b>	<b>Honorary Professor of Management Science</b>	<b>Strathclyde Business School</b>
<b>Mr Konstantinos Koutsouradis</b>	<b>Honorary Teaching Associate in Management Science</b>	<b>Strathclyde Business School</b>
<b>Dr Helen Mulvana</b>	<b>Honorary Senior Lecturer in Biomedical Engineering</b>	<b>Department of Biomedical Engineering</b>
<b>Dr Natalie Weir</b>	<b>Honorary Lecturer in Pharmacy</b>	<b>Strathclyde Institute of Pharmacy &amp; Biomedical Sciences</b>
<b>Professor Matthew Smith</b>	<b>Honorary Professor of Health History</b>	<b>Department of History</b>

**Glasgow Caledonian University:**  
(no changes)

Professor Anita Simmers	Dean	School of Health & Life Sciences
Profssore Helen Gallagher	Vice Dean	School of Health & Life Sciences
Dr Nicola McLarnon	Associate Dean, Learning Teaching & Quality	School of Health & Life Sciences
Professor Fred Van Wijck	Professor in Neurological Rehabilitation	School of Health & Life Sciences
Dr Gordon Hendry	Senior Research Fellow	School of Health & Life Sciences
Professor Jacqueline Mccallum	Professor of Nursing	School of Health & Life Sciences
Professor Joanne Booth	Professor of Rehabilitation Nursing	School of Health & Life Sciences
Professor Lawrence Elliott	Profesor of Nursing	School of Health & Life Sciences
Professor Lorna Paul	Professor of Allied Health science	School of Health & Life Sciences
Professor Niall Strang	Professor of Vision Sciences	School of Health & Life Sciences

### 3. Partnership Working:

#### Allied Health Professions ( AHP) Strategic Academic Partnerships Update

This section contains the AHP developments and ongoing progress between NHS Lanarkshire and our strategic academic partnerships with Glasgow Caledonian University (GCU) and the University of Strathclyde (UoS) It also provides visibility of ongoing work with other academic partners where a formal organisational partnership has yet to be established.

#### University Partnership Working:

##### Glasgow Caledonian University (GCU)

Significant student placements are provided by all the AHP professions except for Spiritual Care.

#### Number of student placements provided 2022/23:

Professional Group	Total
Dietetics	13
Occupational Therapy	68
Orthoptics	16
Physiotherapy	156
Podiatry	18
Radiography	37
<b>Total GCU Placements</b>	<b>308</b>

### **International Students**

In partnership with GCU, NHSL provided two international postgraduate placements for students from the United Arab Emirates in diagnostic imaging. Through this arrangement, two NHSL radiography staff benefit as they can obtain master's modules to accrue credits toward an MSc.

Each of the NHSL Heads of Service for the services listed above is involved in each GCU course programme Board, which provides a quality assurance mechanism for each course.

### **Academic Homes**

Some universities are now moving away from having designated university departments and toward instigating a Professional / Academic Homes approach to offer better clinical /academic career opportunities. Academic homes aim to foster career development opportunities, enhance collaboration and develop capacity and capability in the four pillars of practice. Furthermore, the promotion of the Funding Agreement supported by the NMAHP Practice Development Centre with GCU enables AHP staff to undertake postgraduate modules to support the development of AHP staff.

### **AHP Students Employment Opportunities within NHS Lanarkshire**

Opportunities for AHP students to join the NHSL Staff Bank have been shared with GCU and the University of Strathclyde. GCU has been influential in promoting part-time paid employment opportunities for AHP students via the NHSL Staff Bank. The current 2023/24 opportunities assist staff with recruitment and staffing challenges, which in turn aids the Board in various ways. A prime example of helpful assistance given by GCU students was to the podiatry service, where the students have been carrying out diabetic screening.

### **AHP Lecturer Practitioners**

Unfortunately, the number of AHP lecturer practitioners has reduced due to the financial pressures and reorganisation faced by the GCU. Only one, a specialist podiatrist, remains in this role, working half a week as a diabetic specialist practitioner at University Hospital Hairmyres and the other half as a lecturer in diabetes and vascular issues at GCU.

The Head of Orthoptics, was until recently seconded to the Vision Department at GCU one day per week, however the secondment ended due to a restructuring within the department.

### **Future Areas for Exploration with GCU**

The Director of AHPs and the Vice Dean of the School of Health and Social Care at GCU meet regularly to discuss workforce, recruitment and development ideas. In partnership with NHSL, GCU is keen to explore creative ways to share simulation resources and expertise of the AHP professions within Lanarkshire. Work is ongoing to link GCU to the Lanarkshire Care Academy by promoting NHS Lanarkshire as a preferred employer.

Professor Dawn Skelton, Professor of Ageing and Health within the Centre for Living School of Health and Life Sciences at GCU, is a respected expert in ageing and frailty. Prof Skelton was a great asset in developing the NHSL Falls Strategy and has been assisting in developing the forthcoming NHSL Rehabilitation Strategy.

## University of Strathclyde

### Practice Placements:

Speech and Language Therapy (SLT), Orthotics, and Prosthetics departments continue to host student placements for both courses.

### Number of student placements provided 2022/23:

Professional Group	Total
Orthotics and Prosthetics	5
Speech and Language Therapy	25
<b>Total University of Strathclyde Placements</b>	<b>30</b>

The head of orthotics is an external examiner for the fourth-year BSc. orthotic and prosthetic degree course.

### Sports and Physical Activity BSc students

During 2022/23, a 50-hour placement experience for the year 3 BSc Sports and Physical Activity was developed for students at Strathclyde University around promoting physical activity in line with Active Hospitals work (on the UHW site), with the Falls team and with Health Improvement.

The intention is to replicate these placements during 2023/24, with the potential to build on this previous success and to host the Year 4 students in the academic year 2023/24 for their final year project.

A memorandum of agreement was developed and enabled students to identify an area of interest to them in 2022/23. The students will have placements in the falls team, MSK clinics, and health improvement. It is also intended that the fourth-year Sports and Physical Activity students will design an activity programme to aid the active hospital initiative implemented in UHW. After completing their degree course, several students apply for the fast-track Physiotherapy MSc program for those with a postgraduate degree supported by NES.

### Pharmacy:

#### Student Placements: 2022/23:

Placement	Offered	Matched	Delivered
Year 4 Semester 1	70 days (14 students)	60 days (12 students)	59 days (12 students)
Year 3 Semester 1	35 days (7 students)	35 days (7 students)	32 days (7 students)
Year 5 Semester 1	60 days (12 students)	55 days (11 students)	50 days (10 students)
Year 5 Semester 2	65 days (13 students)	60 days (12 students)	59 days (12 students)
Year 4 Semester 2	60 days (12 students)	60 days (12 students)	58 days (12 students)
Year 3 Semester 2	35 days (7 students)	35 days (7 students)	34 days (7 students)
<b>Total</b>	<b>325 days (65 students)</b>	<b>305 days (61 students)</b>	<b>292 days (60 students)</b>

## Pharmacy: Primary Care Collaboration with University of Strathclyde

- Undergraduate
  - Development of Experiential Learning Primary care placement frameworks to support facilitators in practice. This framework was developed by the prescribing team in primary care and has now been adopted nationally.
  - Prescribing team involvement in the delivery of year 2 clinical skills training
  - Prescribing team input into University of Strathclyde Experiential learning handbook review. This includes review of learning outcomes and suggested activities.
  - Involvement in facilitating workshops
  - Involvement in Entrustable Professional Activities research project
  
- Postgraduate
  - Pharmacist undertaking MSc including research project
  - PHD student – substance misuse
  - Assessment of OSCE for independent Prescribing Course
  - Involvement in teaching for Independent Prescribing Course – substance misuse

### **Research Collaboration, Service Review & Evolution with the University of Strathclyde.**

One of many research collaborations with the University of Strathclyde is led by Dr Gillian Sweeney, Specialist Occupational Therapist, who has been seconded to the Sir Jules Thorn Centre for the Co-creation of Rehabilitation Technology at Strathclyde University for 50% of her time to assist with a research project entitled:

*Future Rehabilitation: Validation of an intensive, individualised stroke rehabilitation service delivered through technology.*

The number of individuals who have a stroke is large – the Scottish incidence in 2020/21 for under 75s was 87 per 100,000 population, and for those aged 75 and over for the same period it was 1,060 per 100,000 population. Although many people do survive a stroke, natural recovery in physical / functional ability is limited. The literature shows that intensive functional practice can enhance recovery and improve functional independence and quality of life.

University Hospital Wishaw has allocated a space adjacent to the acute stroke wards for an in-patient technology-enhanced rehabilitation gym (TERG). This TERG will replicate on a smaller scale the TERG located within the Sir Jules Thorn Centre for the Co-creation of Rehabilitation Technology at Strathclyde University.

The unit opened on the 8th of November 2023. In the fullness of time, it is hoped to create a smaller-scale replica of the unit within the new Blantyre Life facility. Since its opening, the TERG unit has hosted visits from the NHS Lanarkshire Chief Executive and several Non-Executive members of the Board.

Several other AHP research collaborations with various university partners are highlighted later in this paper.

It was proposed that the South Lanarkshire Council Health and Social Care partnership set up a TERG at their state-of-the-art Blantyre care hub, which has a sizable gym space and can be used by the occupants of the 20 transitional step-down beds in the hub and the 20 technology-enabled homes next door as well as by all community-dwelling stroke survivors across south Lanarkshire. Funding to support this development is currently being reviewed.

The Department of Speech and language Therapy (SLT) at Strathclyde has assisted with the Lanarkshire SLT service review, which is currently being undertaken. The service is keen to develop a lecturer/practitioner post in conjunction with Strathclyde; discussions are ongoing.

## **University of the West of Scotland (UWS)**

### **Strategic Discussions**

Due to restructuring and personnel changes in UWS, except for Nursing courses, there has been slightly slower progress in developing strategic liaisons with the University. However, early discussions have taken place with the new Principal of the University, Prof James Miller and there are plans to create a strategic partnership board, similar to those NHSL has with GCU and the University of Strathclyde, as part of the work plan for 2023/24.

Although UWS have no AHP courses in the curriculum, they have a degree course in sports and activity, which may be worth exploring areas of mutual benefit. It should be noted that UWS have specialist areas, including labs for health and performance, exercise biochemistry, cardiovascular imaging, biomechanics, and a physiotherapy suite.

## **Queen Margaret University (QMU) Edinburgh**

Most QMU placements are sought by the QMU in the East of Scotland. There are a small number of placements provided in NHS Lanarkshire. However, this may present an opportunity to be expanded upon.

### **Number of student placements provided 2022/23**

<b>Professional Group</b>	<b>Total</b>
Occupational Therapy	19
Podiatry	14
Speech and Language Therapy	2
<b>Total QMU Placements</b>	<b>35</b>



## **Edinburgh Napier University (ENU)**

Edinburgh Napier University has developed two new MSc (pre-registration) courses designed for graduates who wish to qualify as Occupational Therapists or Physiotherapists with eligibility for registration with the Health and Care Professions Council (HCPC) through an accelerated two-year route. The traditional route to HCPC is through a four-year undergraduate BSc.

This approach is fairly new, with a small cohort of students in each course. Consequently, the number of placement requests within NHS Lanarkshire may increase, but is currently only one placement in the last year,

## **Robert Gordon University (RGU) Aberdeen**

There are a limited number of physiotherapy placements (2) requested by RGU. In the academic year 2022/23

## **Herriot Watt University (HWU)- Research Engagement with the National Robotarium**

The National Robotarium has requested engagement with the NHSL Physiotherapy Service. One of the PhD students from the University is researching the use of robots to inform the design of an upper limb robotic system. It is hoped that the robotic interventions will be carried out within the Blantyre Life Centre once the research is in the testing phase. The NHSL research department has also been involved in deploying this research approach.

During 2022/23, 377 Occupational Therapy Students attended clinical placements within NHSL from GCU, RGU and QMU. These placements were provided in various locations, eg Acute, Community, Primary Care, Mental Health and Learning Disabilities.

## **Glasgow Caledonian University**

### **Partnership with Nursing Education and Training;**

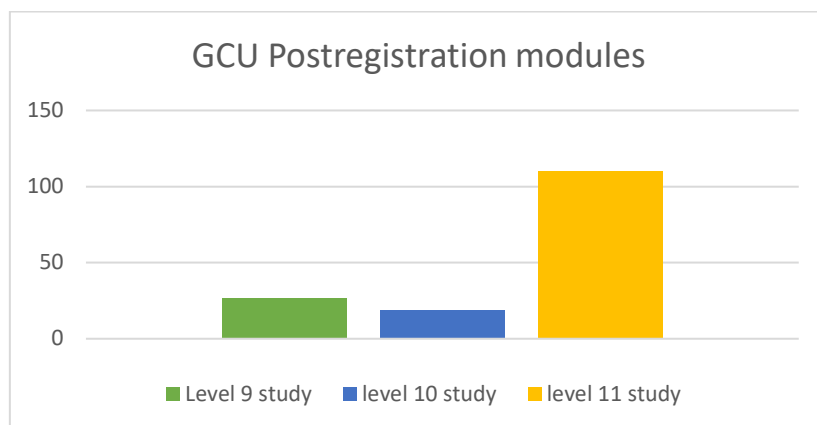
#### Pre-registration

Working with the department of Nursing and Community Health Studies continues.

As part of the memorandum of agreement, NHS Lanarkshire supports practice placements for GCU nursing students for Child and Learning disability fields of practice. Work is continuing to widen the placement capacity so that Adult and mental health nursing students may also be offered placement in NHS Lanarkshire.

In addition, NHS Lanarkshire works collaboratively with GCU to support Return to Practice students from all Nursing fields of practice and midwifery to return to the NMC register. This not only involves the provision of practice placements but has included NHS Lanarkshire staff teaching within the university setting. Over the course of 2022/23 10 RtP students have been supported to meet the requirements for return to the Nursing & Midwifery Council (NMC) register. This cohort comprised of 3 mental health, 1 midwifery and 6 adult nursing return to practice students. In addition to supporting RtP students in practice placements, additional support was delivered throughout the academic element of the programme, with clinical assessment and skills support delivered by Practice development staff. On completion all successful candidates were offered post in NHS Lanarkshire.

Post-registration studies continue to be supported at GCU through a financial agreement. There is an increasing move to supporting more Masters level (level 11) study with 110 modules being funded compared to 27 at level 9 (degree level). However, following collaborative working with GCU, there was an increased provision of modules being delivered at level 10 (honours level) in line with work relating to the national transforming roles agenda. Consequently 19 modules were funded at this level.



Over the course of the year there has been joint working to develop a lecturer practitioner role within childrens services. This post was recruited to following a successful evaluation of the role. Subsequently a further lecturer practitioner role that covers both Adult and mental health fields of practice has been appointed to further enhancing collaborative approaches.

As part of the recruitment strategy NHS Lanarkshire participated in the GCU student virtual careers fair and have engaged in the newly qualified practitioner recruitment process, with circa 145 students completing the NHS Lanarkshire preference survey and invited to participate in matching conversations. This is an increase on the previous year.

Regular operational meetings continue to be held between the Department of Community Health and Nursing Studies at GCU and NHS Lanarkshire, which has resulted in support for writing for publication within the NMAHP Practice Development team. Prof Andrea Nelson has provided coaching support to the tissue viability nursing team as this is an area of special interest for her resulting in a publication (Cuthbert J, Campbell L (2023) Adapting a Tissue Viability Education Programme to Online Learning. Nursing Times [online]; 119:12) & Tissue viability NHS Lanarkshire near me video consultation )Poster presentation at Wounds UK conference Authors L. Maguire, D. Richardson, J. Cuthbert, N. Mcphail and L. Mearthur)

NHS Lanarkshire is involved with GCU in the validation of programmes of study as part of the partnership arrangements which has resulted in the development of models of programme delivery which better meet the needs of both organisations and practitioners.

#### **Future Areas for Exploration with GCU;**

To further develop the GCU role as partners in the professional and academic homes work programme.

## University of the West of Scotland (UWS)

**Strategic level;** Whilst there is strategic work being undertaken with the University of the West of Scotland and the West of Scotland education leads, strategic engagement as part of the university partnership agreement with UWS has been limited. As noted, a new Principal was appointed in late 2022 and it is anticipated that, going forward, there will opportunity to re-establish and better develop the strategic partnership with the university.

**Operational level;** The relationship with UWS continues to work well at an operational level with UWS being the main supplier for student nurses and midwives. NHS Lanarkshire provides practice learning placements for circa 930 UWS nursing and midwifery students over the course of 2022/23. As with GCU, work continues to build up and increase placement capacity as services recover, and to accommodate increased Scottish Government nursing and midwifery student targets.

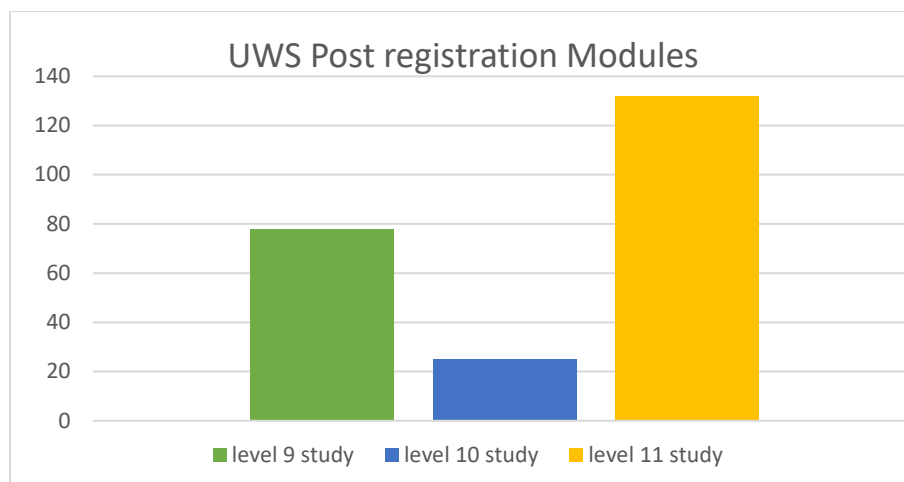
As part of the recruitment campaign for newly qualified nurses and midwives UWS students participated in NHS Lanarkshire's student preference survey, resulting in circa 273 being invited to participate in matching conversations

The BSc paramedic science programme continues with UWS, as regional provider. NHSL currently supports circa 120 students within non-SAS placements across all years of the programme and will continue to evolve placement support and capacity as the years progress.

UWS is the national provider for the Operating Department Practitioner programme. NHSL continues to provide practice placements for circa 20 students on this programme as part of the perioperative workforce.

In addition to pre-registration studies UWS is the Scottish Government preferred provider for the Specialist Community Public Health programme for health visiting and school nursing as well as the Graduate certificate in integrated community nursing award.

Through the annually negotiated Service Level Agreement, UWS also support a significant number of NMAHPs on the post registration studies:



As a result of the matching programme referred to above, a total of newly qualified nursing graduates have been recruited to substantive posts from a variety of universities:

Abertay University	1
Edinburgh Napier University	10
Glasgow Caledonian University	37
Open University	1
Open university	1
Robert Gordons University	2
The Open University	1
University of Dundee	2
University of Glasgow	2
University of the Highlands and Islands	1
University of the West of Scotland	149
University of Stirling	6
(university not documented)	20
<b>Grand Total</b>	<b>233</b>

#### **Future work:**

UWS, along with other university partners to continue to be involved in the evolution of the professional and academic homes work programme as a means to enhance strategic partnership arrangements.

#### **University of Glasgow**

**Undergraduate Nursing Education;** Currently NHS Lanarkshire does not support placement experience for the undergraduate nursing programme at University of Glasgow, however the Bachelor of Nursing (hons) students were invited to participate in the NHS Lanarkshire recruitment process for newly qualified nurses. Three students submitted preference surveys and have been invited to be involved in the matching conversations process.

As part of the ongoing partnership work, an Honorary appointment to the post of Senior Lecturer was appointed by University of Glasgow. Through this role, NHS Lanarkshire was invited to meet with a delegation from the Ministry for Health from Singapore, hosted by University of Glasgow Department of Nursing studies and share the work being undertaken in the board relating to career pathway development, from level 2 to level 8 practitioners.

#### **The Open University**

**Nursing Education;** Work continues with the Open University as NHSL enters into it's fourth year of involvement with the institution for pre-registration nursing. There are currently NHSL employed healthcare support workers engaged in the BSc nursing programmes.

Discussions to examine a similar model for AHP professions with the Open University have commenced and will feed into the National AHP workforce and education review by Scottish Government. The Director of AHPs and the director of NMAHP Practice Development have had initial discussions with the Open University regarding the potential to develop an AHP apprenticeship model similar to the successful apprenticeship model offered by the Open University for nursing students. The Open University are also engaged in the work programme to develop professional academic homes.

## **Queen Margaret University (QMU)**

Whilst there is not a strategic partnership currently with QMU, at an operational level practice learning placements for a number of pre-registration AHP programmes are supported by NHSL as noted earlier. Additionally NHSL supplements the Scottish Government funded School Nursing programme by accessing the post-registration programme at QMU for existing NHSL employed staff.

## **Edinburgh Napier University (ENU)**

As a means to address some of the workforce challenges faced by midwifery across Scotland ENU has developed a post graduate diploma programme for registered adult nurses to become midwives over an 18-month period. NHS Lanarkshire continues to support this programme through the provision of practice placements

Normally NHS Lanarkshire does not involve ENU in the recruitment campaign for nurses and midwives, however due to difficulties in recruiting children's nurses and learning disabilities nurses (both taught as preregistration programmes) it was agreed to include that student cohort in the preference survey for NHS Lanarkshire. Sixty-four students responded and have now been invited to take part in matching conversations.

Similar recruitment approaches for newly qualified nurses were undertaken with Robert Gordons University, University of Stirling, Abertay University and the University of the Highlands & Islands and the University of Dundee. A further sixty-six students took part in the preference survey and have been invited to participate in matching

## **Academic Partnerships - Medical Education**

The NHS Board delivers undergraduate medical education for 3 main universities; Glasgow, Edinburgh and Dundee, with Glasgow being our main partner. At any one time NHSL has 110-120 students at varying seniority in the medical school on placement in secondary care with additional placements in primary care. The clinical years of the new Health & Care Professions (HCP-Med) curriculum previously reported on, are well established at University Hospital Monklands. The Board has seen around an average 20% uplift in undergraduate student number over recent years, and anticipate further increase. Total Additional Cost of Teaching income was approaching £5million for 22-23.

NHSL continues to facilitate and encourage clinical medical colleagues to seek Honorary academic contracts, including Honorary Clinical Associate Professor, Senior Lecturer and a Clinical Lecturer

The NHS Lanarkshire Undergraduate quality data is once again very strong and showing high quality across all departments that deliver. This is a multiyear trend. This is in the context of the ongoing board pressures and rising medical student numbers with some department seeing 50 – 100% increase on medical student numbers compared with pre pandemic.

The Department of Medical Education (DME) is pleased to see a significant increase in the number of primary care practices delivering undergraduate education with many delivering FY2 placements. This is translating into GPST trainees' / GP posts with 6 new rotational posts in the Board area, with linked secondary care posts. This expansion of primary care education

has been a piece of work that began pre-pandemic, but is showing success, despite the radically changed environment in primary care. The Department is pleased to have successfully appointed a Deputy Director of Medical Education to develop this work in the undergraduate setting particularly, and is focussing on a locality based model, drawing on learning from early work.

The Department has continued to develop GP simulation teaching and courses. These are being shared with colleagues from Glasgow University, the main medical school partner university. The GP education clinical fellow post has had a positive effect on developing and delivering a GP simulation project 2022/23. A GP simulation pilot aimed at 3rd year undergraduate medical students was delivered by the GP fellow, senior clinical skills specialist and GP clinical lead trainer. There were a total of 11 half-day sessions. A total of 40 students attended across these sessions. The feedback was positive - interestingly the majority are considering a career in primary care. The session saw a significant increase in confidence scores across acute skills and management, situational awareness, coping with stress and decision making. The department is currently in conversation with the University of Glasgow to deliver across the whole year group, which would attract additional ACT income

The professionalism work-stream continues to develop in partnership with Glasgow University, led by Dr Scott Oliver who is Lead for Professionalism at the university. The work-stream teaches all stages of the undergraduate curriculum at University of Glasgow and to develop a suite of teaching materials relevant to other medical students throughout the undergraduate curriculum. Direct teaching activity has included:

- co-facilitating lecture and workshop sessions with pre-medical “GAP” students and developing, co-ordinating and co-facilitating a professionalism simulation course
- co-hosting a student selected component and elective placement in medical education focused on developing content around safe use of social media for medical students.
- Resource development has included co-ordinating and co-hosting a series of professionalism podcasts; drafting educational posters and handouts on specific professionalism topics (e.g. ‘how to assess capacity’, ‘confidentiality’) to enhance teaching during clinical attachments;
- writing and then developing faculty to deliver specific sessions to students on clinical attachment (e.g. ‘giving driving advice’, ‘working with interpreters’).

University Hospital Hairmyres delivered a successful medical student apprenticeship pilot over the winter of 22-23, with medical students (final year) paid to support the medical wards at a weekend as assistants to the junior medical staff and wider clinical team. The evaluation of this was very positive. The Corporate Management Team (CMT) has approved this again for this coming winter. This is intended to continue to develop in order to form the later years of an apprenticeship style / work as you learn model. With the aims of supporting clinical services and wider staff, allowing local students to work in local healthcare and increase future recruitment and retention.

The Scottish Government has a commitment to increase medical school places by 500 in this parliament, of which 300 have already been implemented. The results of a consultation and ministerial decision are awaited for the final 200 places. The DME, working with the Board’s Executive Medical Director has on behalf of NHS Lanarkshire and in conjunction with Glasgow

University submitted an outline proposal for developing a Clinical Medical School in Lanarkshire with a potential third Higher Education Institute from West Central Scotland. Discussions are on-going, pending the aforementioned ministerial decision.

As before, overall, NHSL continues its extensive placements of Glasgow, Edinburgh and Dundee University undergraduate medical students across most disciplines in the board area.

A number of colleagues have taken on central roles with the University of Glasgow in the recent past, adding to our existing staff who have sessional commitments in central teaching roles; including Dr Anne Chapman and Dr Scott Oliver who have taken on roles in the delivery of Professionalism and Dr Annapurna Pandravada in central obstetrics and gynaecology teaching for the University.

The Department of Medical Education also recently hosted a national conference on professionalism in healthcare in Glasgow (*see link below*) and has had a number of presentations/ abstracts and publications accepted in the last year – see Appendix 1 for details of these.

**Professionalism in Healthcare 23:** <https://professionalisminhealthcare.co.uk/blog/>

#### 4. Research, Development & Innovation

NHS Lanarkshire's Research & Development Strategy (2023-2026) defines the Board's overall Strategic R&D Aim, which is to *"...Maximise the level of high-quality, NHS Ethics-approved research being carried out within NHS Lanarkshire for the benefit of our patients, staff and the organisation as a whole..."*

The importance of our academic partnerships in achieving that aim is emphasised within one of the eight key objectives detailed within the R&D Strategy, which is to **"Strengthen academic collaboration"**.

As noted therein *"...Developing and exploiting academic collaborations is strategically important for the Board's future direction...The benefits to be realised from such academic collaborations are wide-ranging and will continue to develop...From the perspective of R&D, the main focus is on developing research collaborations. This may take many forms such as NHS-Hosted but University-led research, collaborative grant-funded projects, development of joint clinical / academic posts, hosting students to conduct research as part of postgraduate studies..."*

The Board's Strategic Academic Liaison Working Group (SALWG) has overall responsibility for the development and oversight of our University Partnerships, with growth of research being a key element. Academic collaboration is also strengthened through the work of the Joint Governance Boards that have been established between NHS Lanarkshire and our Partner Universities.

As noted here and in prior reports – including the NHS Lanarkshire's R&D Committee 2022-23 Annual report to the Healthcare Quality Assurance and Improvement Committee (HQAIC) - several NHS Lanarkshire departments, and individual clinicians, have collaborative research relationships with academic colleagues that pre-date the formalising of our academic partnerships. These continue to strengthen, and several new areas of collaboration have

emerged over the reporting period (*the range of collaborative activities being carried out by three of our clinical departments – Respiratory Medicine; Stroke Care; Diabetes - are provided as illustrative examples at the end of this section*).

Crucially, we are increasingly seeing tangible benefits in terms of funded research and innovation grant applications where NHS Lanarkshire staff are co-applicants, alongside academic partners.


Summaries of collaborative activities projects with our University Partners are provided at Appendix 2 (Glasgow Caledonian University - GCU) and Appendix 3 (University of Strathclyde - UoS). The listed activities are at various stages of development or implementation, and represent a variety of project types (formal NHS Ethics-approved research, innovation, etc.)

At this stage, the portfolio of research activities being carried out with University of the West of Scotland (UWS) is not as developed as is the case with our other Partners. In part, this follows on from decisions taken nationally by the Health Research Authority / NHS Research Ethics Service in recent years to limit their consideration of certain categories of research (*in particular, many forms of student research, and any research that only involves only NHS staff*). These categories represented a large proportion of the research that was previously carried out in collaboration with UWS. Other, alternative opportunities for collaboration will be explored as that partnership evolves.


Some contrasting examples of projects that showcase collaborative work are provided below.

The Strathclyde examples showcase successful UoS/NHSL grant applications.

The GCU examples highlight major national projects coordinated in Scotland by GCU and where NHS Lanarkshire is a key Study Site delivering the research.

- **SEISMIC SHIFT: [Systems Engineering Innovation Hubs for Multiple long-term Conditions.](#)** 
  - NIHR Grant of £178K (*approved*)
  - Investigators: Prof Anja Maier (UoS - Lead); Prof Andrew Smith (NHSL, Consultant Respiratory Medicine); Dr Beth Sage (NHS Highland).

*This project is exploring how systems-engineering perspectives, methods and tools can transform health services from disease-based to whole-person/symptom-focused healthcare.*

- **SENSor-based Environmental Response System for HEALTHcare (SENSE-HEALTH).** 
  - NHS Scotland Assure Grant of £378K (*conditionally approved – final project revisions being agreed*).
  - Investigators: Miranda Loh (Institute of Occupational Medicine - Lead), Prof Tim Sharpe (UoS), Prof Manish Patel (NHSL, Consultant Respiratory Medicine).

*Objective is to evaluate and make accessible real-time monitoring of indicators of ventilation in hospitals (e.g. CO2) to heighten awareness, inform decision making and support action to improve indoor air quality (IAQ) and reduce infection risk.*



- **Development of a low cost and easy to use electrochemical detection platform for screening cardiac biomarkers at the point of need**

- British Heart Foundation Grant of £647K (*approved*)
- Investigators: Prof Damion Corrigan (Lead), Dr M Jimenez, Dr A Ward (UoS); Dr John Keaney, Divisional Medical Director, Jacqueline McGuire, Consultant Clinical Scientist (NHSL).



British Heart  
Foundation

*Myocardial Infarction (MI) caused 17M deaths globally in 2019, a third of all deaths in people >35. Early diagnosis is key to reducing this burden. We will develop an inexpensive testing platform that will reduce time to diagnosis and facilitate rapid action for people with MI, and that can also be applied to screening for MI in rural/remote communities, low and middle income countries and in primary care.*

- **AMPLE - Analyses of metabolomics and proteomics in breast cancer sub-types**

- Royal College of Physicians and Surgeons of Glasgow Grant of £5K (*approved*)
- Investigators: Dr Nicholas Rattray (University of Strathclyde); Mrs Alison Lannigan (NHS Lanarkshire, Consultant Breast Surgeon).



ROYAL COLLEGE OF  
PHYSICIANS AND  
SURGEONS OF GLASGOW

*Patients with breast cancer can vary considerably in their response to treatment and subsequent prognosis - this can be linked to the classification of breast cancer phenotypes and sub-phenotypes (different characteristics of breast cancers based on various aspects of their pathology). We need to develop more patient-specific stratification to enable more precise drug regimens and better clinical outcomes. This project investigates if multiplexed metabolomics and proteomics (examining the individual chemical and biological molecules of a patient's cancer) can be used to develop better bio-molecular understanding of breast cancer phenotypes, and in particular the 'triple negative' breast cancer sub-phenotypes which often have more limited treatment options and varied response.*

*The NHS R&D team are integrated within the NHS Lanarkshire's breast clinic teams, and aim to recruit around 800 patients to support this research.*

- **CaDeT - Clinical and cost-effectiveness of alternative urinary catheter design**

- NIHT HTA grant of £1.3M (*approved*)
- Investigators: Prof Suzanne Hagen (GCU – Scottish Lead); Dr C Murphy (Southampton – Chief Investigator); Jane Humphrey / Alana Cunningham (Senior Nurses, Lanarkshire South/North H&SCPs).
- CaDeT seeks to improve the lives of patients who use urinary catheters by reducing infections and long-term discomfort. It is testing whether a new design of catheter can overcome some of the issues experienced by long-term users which can have a hugely detrimental effect on their lives.



*New innovations in catheter design could help to reduce the risk of complications and improve patients' quality of life, but so far there has been very little research into how effective and safe these new designs are. Now, the CaDeT clinical trial is testing whether a new design of catheter called the Optitip could provide a safe and more cost-effective alternative that reduces infections and other complications.*

- **SIREN - The SARS-CoV-2 immunity and reinfection evaluation**

- UK Research and Innovation (UKRI) grant of £1.6M initially, with additional Government funding awarded since 2021 (*approved – in extended follow-up*).



- Investigators: Prof Lesley Price (GCU – Scottish Lead, recently retired); Prof Susan Hopkins (Southampton – Grant-holder, Chief Investigator, Chief Medical Advisor at the UKHSA); Prof Manish Patel (NHSL, Consultant Respiratory Medicine)

*The SIREN study has provided valuable evidence on immunity following SARS-CoV-2 infection and COVID-19 vaccination and provided surveillance data on infection and emerging variants. This evidence has played a critical role in informing the national COVID-19 response. In January 2021 the SIREN study published its first analysis of protection following SARS-CoV-2 infection. Crucially the analysis showed that reinfection was possible and could occur, but that there was an over 80% reduction in infection among people who had previously contracted COVID-19 compared to those who had not. The SIREN testing and follow-up period has recently been extended to 2028.*

- **TREADON - Clinical and cost-effectiveness of individualised exercises and foot orthoses in the treatment of plantar heel pain: a randomised multi-arm multi-stage (MAMS) adaptive trial**

- NIHR grant of £1.8M (*grant awarded – study in set-up*)
- Investigators: Dr Gordon Hendry (Glasgow Caledonian University – Scottish Lead Co-ordinator); [Prof Edward Roddy](#) (Keel University – Grant-holder, Chief Investigator); Stuart Horsburgh (NHS Lanarkshire, MSK Podiatry Clinical Lead)



*The aim of the TREADON trial is to show whether exercises and/or foot orthoses (shoe insoles) provide more pain relief for adults with plantar heel pain (PHP) than a self-management advice booklet alone, and whether this is good value for money. Up to 696 adults, 18 years and over, with Plantar Heel Pain (PHP) will be recruited to this trial. Participants will be randomly allocated to receive one of four potential treatments.*

NHS Lanarkshire departments have evolving collaborative relationships with academic colleagues – the following three examples give a flavour of the broad range of work and interaction with different academic departments, and illustrates how the partnerships aim to ultimately benefit our patients.

#### **i. Respiratory Medicine at University Hospital Wishaw**

Significant links have been made between the department and a number of University departments. The first two examples involve working with students from the University Department of Digital Health & Care at the University of Strathclyde.:

##### **a. App to optimise physical activity and weight in patients with chronic respiratory conditions**

There have been therapeutic breakthroughs in the treatment of many respiratory conditions - non-pharmacological interventions are, however, the most effective way to manage some aspects of these patients' conditions. By improving physical activity and optimising weight in chronic respiratory patients, symptom control and mortality can be improved.

We are developing an app to support a graduated programme of physical exercises that are personalised to the patient, and that have achievable goals. The app will use physiological factors and subjective evidence from the patient to set these goals. Through activity monitoring, the app will give positive feedback and - if necessary - a "nudge" to the patient

By addressing physical activity and weight management in patients with chronic disease, this app would aim to make patients feel better and be able to do more activities they wish to do, improving mood, and, potentially, life expectancy.

### **b. Healthy breathing app**

People with asthma and other chronic respiratory diseases often develop problems with how they breathe, which is known as dysfunctional breathing. It has been shown that significant dysfunctional breathing is present in over 30% of asthma patients.

Early intervention with healthy breathing control exercises and techniques in newly diagnosed respiratory patients can help improve health and well-being. They help teach healthy breathing and to treat dysfunctional breathing. These programmes would lend themselves well to a digital application and self-management approach. In this project, there will be close working with respiratory physiotherapists and consultant respiratory physicians in NHS Lanarkshire to combine high quality, validated, physiotherapy-designed breathing control programmes into a digital app which will be of real value for people with asthma and other chronic respiratory diseases.

### **c. SEISMIC SHIFT**

Project described previously. Collaborative link is with the Department of Design, Manufacturing and Engineering Management

### **d. SENSE-HEALTH**

Project described previously. Collaborative link is with the Department of Architecture

## **ii. University Department of Stroke Care at University Hospital Monklands**

Building on the pre-existing research links with both UoS and GCU, the stroke service has expanded its joint working with both institutions. As well as formal research, the service is now exploring more significant joint developments that will benefit Lanarkshire's patients.

NHS Lanarkshire is a front runner in supporting Allied Health Professional (AHP) stroke clinical academic models, with two research active occupational therapists currently working in NHSL's stroke services. As well as championing a research culture, these clinical academic roles support the translation of research evidence into practice and create opportunities for NHSL patients to benefit from participating in stroke rehabilitation research.

A sample of the research, and related collaborative activities, is given below:

- Collaborating with colleagues in GCU (Marian Brady / Myzoon Ali) on the PREdictors of COVID19 OUtcomeS (PRECIOUS) study, which is funded by NIHR.
- Providing research supervision for two PhD Students from GCU. It is hoped that the good experiences of the individual PhD students may encourage them to consider NHS Lanarkshire as an employer
- Partners are considering models to enable NHS Lanarkshire staff to undertake advanced studies, potentially attracting clinical academics to NHS Lanarkshire. Options include:
  - Enabling staff to undertake part-time PhD or Masters study alongside a part-time clinical role, where their research would be carried out in NHSL.
  - A collaborative approach whereby AHPs working in stroke rehabilitation could have course fees covered by the University - recognising their support for collaborative research and potentially avoiding several thousands in fees.

Approaches such as these have the potential to attract high-quality professionals in hard-to-recruit-to areas where substantive, funded and persistent vacancies exist, and for retaining existing staff who have academic career ambitions.

- Collaborating with the Department of Biomedical Engineering at UoS to develop and run trials of co-created rehabilitation technology for supported self-management for patients who have had a stroke. This work will seek to address the lack of a scalable post-stroke rehabilitation service which maximises stroke survivor function and quality of life. This project is described in more detail previously in this report.
- Funding was secured to release three NHSL rehabilitation staff (2 x Speech and Language therapists and 1 x physiotherapist) to work on a Scottish Government funded project to develop and evaluate a Goal setting and Action Planning (G-AP) online training resource. G-AP training enables rehabilitation staff to work in partnership with people who have neurological conditions, such as stroke, to find out what matters to them, and to set and pursue their personal rehabilitation goals.
- The UHM stroke team are co-applicants on a growing number of grants, including:
  - 'Peer-Supported Self-Management in Stroke (PULSE)' and 'PeRsonAlised Community based Telerehabilitation post Stroke to increase rehabilitation time and improve motor recovery' - (*both Stroke Association – with GCU*)
  - 'COMmunicating in STroke cAre and Rehabilitation (COM-STAR)' (*NIHR with City, University of London and University of Sheffield*)

The last example may be an indication that academic partnership working itself facilitates additional beneficial networking with other institutions. Another metric of success is the generation of academic output and the dissemination of research results – for example, the UHM Department of Stroke Care produced 10 peer-reviewed publications and were involved in presenting at 13 national conferences during the reporting period. It will be worthwhile, going forward, in quantifying benefits such as these in other departments.

### **iii. Diabetes at University Hospital Monklands:**

The diabetes service at Monklands is liaising with colleagues in UoS and GCU on a number of projects, particularly involving the support of, and input from, MSc students. The spread of involvement is evolving. A small sample is provided here:

- Collaboration on a MSc student project (Inside the NHS toolbox: using an NHS dataset to validate single measurement of cortisol in adrenal insufficiency.) It is hoped that the output of this project will be really useful from a clinical point of view and also in relation to how to navigate data sharing for research projects between NHS and our University Partners.
- The podiatry service is collaborating on '*Happier Feet*' – developing a technologically advanced orthotic that will automatically adjust the weight-bearing capabilities of the foot, readjusting foot pressures to avoid ulceration in patients with relevant risk factors.
- Pre Assessment: NHSL are implementing a commercial digital Pre-Op Assessment service. The potential is being explored for integrating a capability to enable Heart rate and rhythm detection via smartphone/tablet cameras, and utilising that platform to collect research data for an MSc project. The idea is to define criteria for patients at risk of Atrial Fibrillation / Flutter (AF) via home screening. Remote assessment at home should be

able to help prevent cancellations due to incidental AF findings at pre-assessment, and allow for early intervention and management.

## **5. Summary**

Overall, significant progress continues to be made across the NHS Lanarkshire and the Health and Social Care Partnerships in academic collaboration with partner universities. There has been an expansion not only in the volume of collaborative work undertaken but also in the complexity of projects and in the increasing diversity of links between NHSL and multiple departments and individuals across our strategic partnerships.

There is a mutual desire to explore many more projects and areas of innovation that often require short notice decision making associated with modest sums of fixed term investments.

Further progress in this area will require some increase in operational management support and some resource allocation which would ensure alignment to the Board's strategic plans for 'Our Health Together', the Monklands Replacement Project and the pandemic recovery plans.

Dr Chris Deighan, Executive Medical Director, NHSL

Prof Eamonn Brankin, Associate Medical Director, (Strategic Academic Liaison), NHSL

Mrs Margot Russell, Director, Practice Development Centre, NHSL

Mr Peter McCrossan, Director of Allied Health Professions, NHSL

Mrs Christine Gilmour, Director of Pharmacy, NHSL

Mr Raymond Hamill, Senior Research & Development Manager, NHSL

Dr Ian Hunter, Director of Medical Education, NHSL

**Appendix 1:  
Medical Education Presentations/Abstracts/Publications Accepted 2022-23:**

Event	Poster/Abstract /publication etc.	Author	Date
AMEE	Poster for RMSC	Maddie Spence & Ailsa Gemmell	Aug-23
AMEE	Oral Presentation - PICC line teaching for FY1 doctors	Alex Schlindwein	Aug-23
AMEE	Meded project on professionalism being submitted to AMEE	Ailsa Gemmell	
ASGBI 2023 International Surgical Congress	<p>'The impact of inpatient Magnetic Resonance Cholangiopancreatography on total length of hospital stay'. University Hospital Hairmyres. 2022/23. Talking Poster Presentation ASGBI 2023 International Surgical Congress (Co-author)</p> <p>'Value of magnetic resonance cholangiopancreatography (MRCP) in acute gallstone pancreatitis'. University Hospital Hairmyres. 2022/23. Talking Poster Presentation ASGBI 2023 International Surgical Congress (Co-author)</p> <p>'Retrospective Cohort Study of the Efficacy of Magnetic Resonance Cholangiopancreatography in the Diagnosing Choledocholithiasis in Risk-Stratified Patients'. University Hospital Hairmyres. 2022/23. • Talking Poster Presentation ASGBI 2023 International Surgical Congress (Lead author and presenter)</p>	Carla Stevenson	May-23
AUGIS Scientific meeting 2023	<p>'Do Waiting Times for Inpatient Magnetic Resonance Cholangiopancreatography Affect Total Length of Stay? – A Single-Centre Experience' • Abstract submitted to AUGIS Scientific meeting 2023</p> <p>'The role of Magnetic Resonance Cholangiopancreatography in Gallstone Pancreatitis? – A Single-Centre Retrospective Cohort Study' • Abstract submitted to AUGIS Scientific meeting 2023</p> <p>'Diagnosis of Choledocholithiasis in Risk-Stratified patients: the benefits of Magnetic Resonance Cholangiopancreatography. - A single centre retrospective cohort study' • Abstract submitted to AUGIS Scientific meeting 2023 • Currently in the process of writing for publication</p>	Carla Stevenson	Sep-23
BMJ	Empowering future Leaders: The Value of Simulation in Active Bystander Training for Medical Students, leader-2023-000778.R1	Emma Lydon & others	Submitted
European society of coloproctology 18th scientific conference 2023	<p>'Is Post Colonoscopy Colorectal Cancer (PCCRC) really preventable?'. University Hospital Hairmyres. 2022. • Abstract submitted to European society of coloproctology 18th scientific conference 2023.</p>	Carla Stevenson	Submitted

NES Conference	GREATix: lessons learnt from our experience	Kathryn Twentyman & A Livinston	Apr-23
NES Conference	PICC blood sampling – a high risk procedure frequently performed by junior doctors, not taught at undergraduate or postgraduate level	Kathryn Twentyman & A Schlindwein; N Quail; K Tsang; C Stevenson; M Blair; K Duncan; A Goodwin; K McKie; C Paton	Apr-23
NES Conference	poster submission Surgical Familiarisation Programme	Charlotte Neary	Apr-23
NES Conference	Co-presented 'PES: A Novel, national psychiatry simulation course' during a multiprofessional open paper session	Michael Cooper	Apr-23
NES Conference	Presentation : Driving advice: an 'off the shelf' teaching resource – Alexandra M. Goodwin & Scott W. Oliver	Alex Goodwin	Apr-23
NES Conference	Presentation : “The professional benefits and hazards of social media”: a student selected component – Scott W. Oliver, Alexandra M. Goodwin, Catherine Paton, & Ian Hunter	Alex Goodwin	Apr-23
NES Conference	Oral Presentation - project around students shadowing ward nurses	Maddie Spence	Apr-23
NES Conference	poster presentation - PICC line teaching for FY1 doctors	Alex Schlindwein	Apr-23
NES Conference	'Surgical Familiarisation for undergraduate medical students: The implementation and outcomes of a standardised course protocol.' NHS Lanarkshire. 2022/23. Poster Presentation at NES Conference (Lead author and presenter)	Carla Stevenson	Apr-23
PEDSig Meeting	poster presentation - project around students shadowing ward nurses	Maddie Spence	Jan-22
PIHC 23	'The professionalism Crisis: Reflections on the hidden impact of COVID 19 on undergraduate medical student education' Accepted for Poster presentation at Professionalism in healthcare conference 2023. (Co-author)	Carla Stevenson	Oct-23
PIHC 23	POMS course presentation	Emma Lydon	Oct-23
PIHC 23	Abstracts: The professionalism crisis: Reflections on the hidden impact of COVID-19 on undergraduate medical student education	Kathryn Twentyman	Oct-23

PIHC 23	Abstract: Reflections on Resilience Teaching in Foundation Year 1s	Kathryn Twentyman	Oct-23
PIHC 23	Poster: submission is titled 'Reflective Practice Groups for final year medical students: Are they beneficial?'	Michael Cooper	Oct-23
Prato 2023	Poster: Developing educational materials to facilitate professionalism teaching during clinical attachments - Alexandra M. Goodwin, Scott W. Oliver, Kathleen Collins & Catherine Paton	Alex Goodwin	May-23
Prato 2023	Oral Presentation: Benchmarking 'adequate professionalism' at different stages of undergraduate clinical training; perspectives of medical students and clinicians – Dr Alexandra M. Goodwin & Dr Scott W. Oliver	Alex Goodwin	May-23
Prato 2023	Round table : When, where and how should we assess professionalism? - Scott W. Oliver, Alexandra M. Goodwin, Catherine Paton & Kathleen Collins	Alex Goodwin	May-23
Prato 2023	Poster on professionalism teaching resources, oral presentation on the Delphi study, then round table discussion on assessment of professionalism	Scott Oliver & Alex Goodwin	May-23
Prato 2023	'Surgical Familiarisation for undergraduate medical students: The implementation and outcomes of a standardised course protocol.' NHS Lanarkshire. 2022/23. Talking Poster Presentation at PRATO 9th International Clinical Skills Conference (Lead author and presenter)	Carla Stevenson	May-23
Prato 2023	poster submission and poster presentation with the Surgical Familiarisation Programme	Charlotte Neary	May-23
RCPsych International Congress Liverpool	1. Surviving your first on-call in psychiatry: A bootcamp for junior doctors. 2. An audit of PPI prescribing in elderly patients prescribed SSRIs (not a Med Ed one)	Michael Cooper	Jul-23
Royal Society of Medicine GUT club	Oral presentation	Ailsa Gemmell	Feb-23
UKCEMP meeting	POMS course presentation	Emma Lydon	May-23
UKCEMP meeting	Oral presentation: Benchmarking 'adequate professionalism' at different stages of undergraduate clinical training; perspectives of medical students and clinicians – Dr Alexandra M. Goodwin & Dr Scott W. Oliver	Alex Goodwin	Apr-23
University Hospital Wishaw QI Showcase	Saved by the Bell: Improving Attendance at Foundation Doctor Teaching	Kathryn Twentyman	Jan-22



## Appendix 2. NHS Lanarkshire / Glasgow Caledonian University Collaborations

The following table lists the ongoing and prior collaborative research activities between NHSL and GCU. The areas noted for potential discussion will be used to help direct future activities.

*Research & Innovation workstream leads: GCU: Professor Sharron Dolan, NHSL: Professor Eamonn Brankin, Raymond Hamill*

GCU Research Groups	Areas of current collaboration / Areas of interest for potential development
<p><b>Visual Health</b></p> <p><i>GCU Group Lead:</i></p> <p>Dr Sven Jonuschiet</p>	<p><b>Current</b></p> <ol style="list-style-type: none"> <li>1. NIHR EME clinical trial: “Low-dose atropine eye drops to reduce progression of myopia in children in the United Kingdom” – in collaboration with Queens University Belfast (Lead institution). NHSL is a clinical site. (end Feb '24)</li> <li>2. PhD Project: “Investigation into enhanced patient consultation on post-cataract surgery patient satisfaction with visual outcomes” – Joint GCU and Vision Research Trust funding for PhD project – NHSL co-supervisor (end Sep 2024)</li> <li>3. Entered discussion with NHS Lanarkshire to investigate the feasibility of Ophthalmology at NHS Lanarkshire to gain University status</li> </ol> <p><b>Potential</b></p> <ul style="list-style-type: none"> <li>• Public Health/Scottish eye-care</li> <li>• Stroke vision / Glaucoma / ARMD</li> </ul>
<p><b>Molecular Mechanisms of Diabetes and other long term conditions</b></p> <p><i>GCU Group Lead:</i></p> <p>Dr David Welsh</p>	<p><b>Current</b></p> <ol style="list-style-type: none"> <li>1. Investigating the role of the microbiome in diabetic foot ulcers. Samples have been received from patients attending the diabetic foot clinical who have enrolled in the clinical trial that is being carried out by NHS Lanarkshire to investigate the efficacy of a novel irrigant in wound healing.</li> <li>2. “Use of immunohistochemistry and co-culture model systems to investigate the contribution of M2 macrophages towards chemotherapy resistance in patients with Acute Myeloid Leukaemia”.</li> <li>3. Investigation of the lower incidence of Hepatitis E infections in NHS Lanarkshire in comparison to other health boards. This work is led via the Hepatitis E scoping group chaired by Health Protection Scotland of which the collaborators are members.</li> </ol> <p><b>Potential</b></p> <ul style="list-style-type: none"> <li>• In vivo and in vitro research into pulmonary hypertension</li> <li>• Connexins, wound healing and disease</li> <li>• Blood cancers: Acute Myeloid Leukaemia and Multiple Myeloma.</li> <li>• Current trends in Hepatitis E infection</li> <li>• Bacterial and Viral infections and the contribution to chronic disease</li> <li>• Anti-microbial resistance in waste water (contamination with by-products of antibiotics)</li> <li>• Novel applications to maintain a health microbiome.</li> <li>• Clinical Haematology</li> </ul>
<p><b>Musculoskeletal Health</b></p> <p><i>GCU Group Lead:</i></p> <p>Dr Gordon Hendry</p>	<p><b>Current</b></p> <ol style="list-style-type: none"> <li>1. TREADON Trial NIHR HTA (Keele-led / NHSL hosting as a site)</li> <li>2. MIDI Trial CSO (GCU-led)</li> <li>3. POD-SCAN (Great Foundations) (GCU-led / NHSL hosting as a site)</li> <li>4. MOTION trial NIHR HTA (Edinburgh led - GCU physio lead / NHSL trial partner site)</li> <li>5. ConnectMe MKS podiatry, Scotland pilot data capture as to foot and ankle pathway management</li> <li>6. Two NHS Lanarkshire clinical podiatry research champions have been appointed (0.1FTE) to facilitate clinical research with a strategic link to GCU. project started Oct 23, initially for 1-year</li> </ol>

	<p>7. Planned patient recruitment to GCU PhD study on ankle stability</p> <p>8. NHS Lanarkshire orthopaedics / MSK podiatry service collaborations to explore the implementation of a data driven approach to management</p> <p><b>Potential</b></p> <ul style="list-style-type: none"> <li>• Orthopaedic surgery (lower limb)</li> <li>• Chronic pain</li> <li>• Osteoarthritis / Inflammatory joint diseases (e.g. rheumatoid arthritis)</li> <li>• Biomechanics of musculoskeletal health</li> </ul>
<p><b>Safeguarding Health Through Infection Prevention</b></p> <p><i>GCU Group Lead:</i></p> <p>Professor Jacqui Reilly</p>	<p><b>Current</b></p> <ol style="list-style-type: none"> <li>1. SIREN (Sarscov2 Immunity &amp; REinfection EvaluationN): led in Scotland by GCU– new phase started in October 2023</li> <li>2. Evaluation of the implementation of HARP: COMPLETED</li> </ol> <p><b>Potential</b></p> <p>Area of interest: Healthcare associated infection and antimicrobial resistance &amp; Stewardship and Infection Prevention &amp; Control – our programmes of work in relation to the above focus on epidemiology, economics, patient &amp; staff experience, applied infection prevention &amp; control interventions</p>
<p><b>Substance Use</b></p> <p><i>GCU Group Lead:</i></p> <p>Professor Carol Emslie</p>	<p><b>Current - None</b></p> <p><b>Potential</b></p> <ul style="list-style-type: none"> <li>• Exploratory discussions ongoing re: piloting an alcohol service (PCNOS) in rural areas – North and South Lanarkshire are keen to be involved, with links already in place with the Lanarkshire alcohol drug partnership (ADP).</li> <li>• Director of Psychological Services in NHS Lanarkshire is in active discussions with GCU colleagues re: establishing an extensive research portfolio – some staff members already have part time NHSL / GCU roles.</li> <li>• Opportunities to host GCU Doctorate in Counselling Psychology students are being explored.</li> </ul>
<p><b>Synergy</b></p> <p><i>GCU Group Lead:</i></p> <p>Professor Fredericke van Wijk</p>	<p><b>Current</b></p> <ul style="list-style-type: none"> <li>• Three PhD studentships currently being undertaken; projects include ‘<i>Evaluation of the implementation of person centred goal setting practice in NHSL community rehabilitation teams</i>’</li> <li>• GCU input to the NHS-Lanarkshire Rehabilitation Strategy</li> <li>• GCU input to assessment Stroke Rehabilitation Outcomes</li> <li>• IMPETUS (Stroke Association funded research study)</li> <li>• Development and evaluation of Online G-AP training resource (Scottish Government funded study)</li> <li>• Development and evaluation of an education intervention to support Occupational Therapy evidence informed practice - OT INFORM</li> <li>• Audit of Occupational Therapy evidence informed practice in NHSL (GCU MSc student project) ongoing: student has recently started and it is planned that she will work with Lanarkshire’s OTs in developing the Stroke AHP Clinical academic model</li> </ul> <p><b>Potential</b></p> <ul style="list-style-type: none"> <li>• CSO programme grant application: rejected but will be resurrected for a different call</li> <li>• Next stage of IMPETUS project (evaluation of peer support programme, Positive Stroke Solutions that currently runs in Lanarkshire)</li> <li>• Supporting self-management in people experiencing inequality and/or high treatment burden</li> <li>• Potential stroke 6-month review project using NHSL routine data / NHSL OT in primary care evaluation</li> </ul>
<p><b>Ageing Well</b></p> <p><i>GCU Group Lead:</i></p> <p>Professor Dawn Skelton</p>	<p><b>Current</b></p> <ol style="list-style-type: none"> <li>1. THINK ACTIVITY - Sedentary behaviour reduction – service improvement project (no funding). Started with discussion and training in and use of activPals to document the sedentary behaviour in hospitals (back in 2017). This activity passport has been shared on Twitter and on FB and at multiple conferences and can be adapted for local use (with acknowledgment of original NHSL source).</li> </ol>

	<ol style="list-style-type: none"> <li>2. NHSL collaborated on Stroke Association funded pilot trial - Treat-UI (Transcutaneous Tibial Nerve Stimulation) to treat urinary incontinence in stroke survivors – NHSL co-app, stroke researchers and CRNs.</li> <li>3. Toileting Assessment and Toilet Training for Adults with Learning Disabilities with Incontinence. Co-Is: NHS Lanarkshire. Due to start in Jan 2020 but delayed due to Covid-19)</li> <li>4. The CADET trial was funded by HTA and is recruiting from North and South Lanarkshire HSCP.</li> <li>5. INVINCIBLE STUDY - collecting data on QoL from long term catheter users in NHSL and Pennsylvania USA to compare and look at impact of catheter care policies – was paused due to pandemic – restart TBC</li> <li>6. NHSL/GCU PhD Studentship projects focused on (A: Chronic Pain and development of a brief acceptance-based intervention for GPs in primary care. 2019-2023); (B: Functional decline in older adults in inpatient and ‘Hospital at Home’ settings. 2019-2023; (C examining student led Otago classes for falls prevention in older adults at risk of falls. NHSL physio staff involved in deciding format of student delivered programmes and pathways that can be set up to allow NHSL patients access to GCU student led Otago classes).</li> </ol> <p><b>Potential</b></p> <ul style="list-style-type: none"> <li>• Acute management of incontinence (bladder and bowel) in stroke – seeking NHSL involvement as collaborators on grant applications.</li> <li>• Implementing reasonable adjustments for patients/clients with learning/disabilities.</li> </ul>
<p><b>Sexual Health and Blood Borne Viruses</b></p> <p><i>GCU Group Lead:</i></p> <p>Professor Jamie Frankis</p>	<p><b>Current</b></p> <ol style="list-style-type: none"> <li>1. CSO funded studies: NHSL sexual health staff participation in PrEP telephone interviews</li> <li>2. Sexual and mental health of MSM in Lanarkshire (SMMASH studies)</li> </ol> <p><b>Potential</b></p> <p>GCU are already very well connected with NHSL through strong clinical networks. STIs, sexual health, BBV, and mental health of MSM</p>
<p><b>Social Work &amp; Social Policy</b></p> <p><i>GCU Group Lead:</i></p> <p>Dr Heather Lynch</p>	<p><b>Current</b></p> <p>To be developed.</p> <p><b>Potential</b></p> <p>To be developed.</p>
<p><b>Child and Adolescent Health</b></p> <p><i>GCU Group Lead:</i></p> <p>Professor Simon Hunter</p>	<p><b>Current</b></p> <ol style="list-style-type: none"> <li>1. GCU OT working with NHSL OT Department as the public contributor for convening a PPIE group over a 1 year externally funded (through Royal College of Occupational Therapists) research project of a scoping review looking at service improvement in OT (end Sep '24)</li> <li>2. GCU Professor is part of the National Partners group, which supports local NHS Boards (and local authorities) in their child poverty work.</li> </ol> <p><b>Potential</b></p> <ul style="list-style-type: none"> <li>• Clarification of NHSL service delivery and interest in research building involving children and young people would be helpful; possible areas include</li> <li>• Disadvantaged young people and family relationships</li> <li>• Supporting young people’s engagement with psychological services (the SMYLE study).</li> <li>• Parenting support for families where a parent has an identified mental health problem</li> <li>• Supporting families of children with chronic health conditions</li> <li>• The causes, experiences, and consequences of mental illness stigma for children and young people</li> </ul>
<p><b>Data Science for the Common Good</b></p> <p><i>GCU Group Lead:</i></p> <p>Professor Seb Chastin</p>	<p><b>Current</b> - To be developed.</p> <p><b>Potential</b></p> <ul style="list-style-type: none"> <li>• Discussions around provision of / safe access to NHS Lanarkshire data via the WoS Data Safe Haven</li> <li>• Discussions around data-based projects for MSc students</li> <li>• Working with Katrina Brannigan on establishing an OT outcome routine database</li> </ul>

### Appendix 3. NHS Lanarkshire / University of Strathclyde Collaborations

The following table illustrates projects and collaborative discussions at a point. The evolution of the Partnership has been such that active projects, as well as additional areas for collaboration, are carried out, explored or developed on a weekly basis.

*Research & Innovation workstream leads: Professor Roma Maguire, Dr Jens Sutter, NHSL: Professor Eamonn Brankin, Raymond Hamill*

Project title / comments
Validation of a Digital Cytology System (Comments: Acute).
Human-Centric AI Enabled Immunotherapy Toxicity Prediction for Lung Cancer Patients (Comments: Acute - care delivered across Acute and Primary Care).
Impact Acceleration Account (IAA) - story telling & storyboarding (Comments: Non-specific – concerns patient views of holistic care ).
Investigating A Novel Class Of Gram-Negative Active Antibiotic Suitable For Clinical Use (Comments: Lab based).
Analyses of metabolomics and proteomics in breast cancer sub-types (Comments: Primary Care patient referral / Acute investigation).
Exploratory talks to initiate links between UoS Digital Health and Care and NHSL Clinical e-Health leads (Comments: Discussions across all sectors).
Narrative Medicine as a tool for improving outcomes for patients with breast cancer (Comments: Follow on from L22075 – Applies across all sectors – concerns patient views of holistic care).
Collaboration to identify a programme of projects related to use of, and benefits from, use of the Hospital Electronic Prescribing and Medicines Administration system (HEPMA), including the interface with Primary Care (Comments: Several ideas for individual projects discussed, with some specific focus on the Emergency Department and the interface between Primary and Acute Care ; use of Monoclonal antibodies (MABs - breadth of conditions, etc.); use of direct oral anticoagulants (DOACs - initial prescribing decisions, long-term control, etc.); management of venous thromboembolism (VTE); presentation of 'live' HEPMA/TRAK/clinical data in a way that is useful for clinicians at the point of decision/treatment; i ).
Novel Groove Binder Antibiotics (Comments: Lab based).
Respiratory Physiology: Predicting the discrepancy between lung volumes measured by body plethysmography and single breath gas transfer (Comments: Acute).
Systems analysis and modelling: Exploring the drivers of unsustainable pressures in health and social care (also known as : SEED Funding Health & Social Care) (Comments: Primary / Community care).
the impact of measures to prevent and control infection in care homes (e.g., isolation and reduced visitation) on residents' quality of life. (Comments: Community Care / Care Homes).
DIGITAL RHEUMATOLOGY: Scottish Quality in Rheumatology ('ScotQR') (Comments: project, which was submitted for assessment via the ANIA pathway - unfortunately not accepted. Further sub-projects outlined below).
L23007_ScotQR_S1_NRAS_Sandbox_Test (Comments: 31/01/2023: The Health Foundation has provided funding through NHSX QLABs to explore a Digital Rheumatology Solution (DRS). The project is led by Healthcare Improvement Scotland (HIS) and the delivery is being coordinated by the National Rheumatoid Arthritis Society (NRAS) and Cohesion, the technology provider.).
L23007_ScotQR_S2_Pfizer_Grant (Comments: Pfizer grant bid – not accepted – other funding options being pursued)

SEISMIC (Systems Engineering Innovation hubs for Multiple long-term Conditions) (Comments: Holistic – Acute / Primary Care / Community care. Stage 1 funded and underway. Research bid looking at a systems thinking approach to multi-morbidity associated with respiratory disease possibly with an underlying focus on polypharmacy. <a href="https://www.nihr.ac.uk/funding/22145-systems-engineering-innovation-hubs-for-multiple-long-term-conditions-seismic-development-phase/31866">https://www.nihr.ac.uk/funding/22145-systems-engineering-innovation-hubs-for-multiple-long-term-conditions-seismic-development-phase/31866</a> ).
Open Discussions relating to the Development and Implementation tools and systems of a Future Digital Hospital (Comments: All sectors Initial discussions with Canon and follow-up discussions ongoing).
iKnife - surgical knife using mass spectrometry (MS) to detect cancerous cells ( <a href="https://en.wikipedia.org/wiki/Iknife">https://en.wikipedia.org/wiki/Iknife</a> ) (Comments: Acute - based initial discussions only, but much interest and coalition being formed to work on a grant bid.).
[L23019]: University of Strathclyde potential collaboration with Biochemistry and Histology (Comments: Discussions are acute based initially, but hospital lab provides services for GP and community testing so will involve all sectors going forward). Being led by Senior Lecturer in Clinical Metabolism at Strathclyde Institute of Pharmacy and Biomedical Sciences (SIPBS) - has already been doing some work with a number of NHSL clinicians, but is now exploring links / collaborative working with both Biochemistry and Histology. The vast majority of the research and other work his laboratory links with biochemistry/histology, and he's keen to explore if there are any joint projects we could develop.
Shapemaster project at UHW - Establishing a stroke rehab facility (Comments: Stroke rehab – so cuts across all sectors ).
Centre for Advanced Measurement Research and Health Translation (Comments: Setting likely to cut across all sectors – interest in both Acute and Primary Care Follow-up discussions following meeting with the Relationship Development Director / UK Government Chemist and the Director of Science & Partnerships from the National Measurement Laboratory, and with the head of Strathclyde's Centre for Advanced Measurement Research & Health. A tri-partite initiative (UoS/NML/NHSL) is focussing on Scotland's health and life sciences innovation ecosystem and is yielding a number of projects.
Development of a low cost and easy to use electrochemical detection platform for screening cardiac biomarkers at the point of need (Comments: Setting likely to cut across all sectors – interest in both Acute and Primary Care Successful BHF grant as discussed within the R&D section of this report - related to 'Development of a low cost and easy to use electrochemical detection platform for screening cardiac biomarkers at the point of need').
The Microplate Dx rapid antibiotic susceptibility test (AST) Rplate (Comments: Setting likely to cut across all sectors – interest in both Acute and Primary Care Spin out from Strathclyde looking at rapid diagnostics for antibiotic susceptibility..." – potential for conducting translational studies being explored with Infectious Diseases and Microbiology colleagues in NHSL.
Exploring potential novel clinical role composition alongside Centre for Advanced Measurement and Health Translation (Comments: Initially acute based, but open to all discussions).
Potential collaboration between UoS and Urology re: Measurement Science / Rapid Testing (Comments: Acute based Advances materials (Antimicrobial elastomeric materials) to reduce bacterial adhesion to catheters, stents, wires, scopes to help in the inexorable rise in antimicrobial resistance emerging. ).
Novel therapeutics for the treatment of Candida infections. (Comments: Initial contact was 28/11/2022 – Successful at initial grant stage; full CSO application pending).
ESRC proposal for a Centre for Integrating Care at Critical Interfaces (Comments: Primary Care based).
Using Artificial Intelligence to Determine the Factors Associated with Frequent Attendance at Healthcare Service Facilities (Comments: Public Health (so attendance at all sectors) ).
UKRI cross research council responsive mode pilot scheme: researching community based technology enhanced rehabilitation (Comments: Proposal to research community based technology enhanced rehabilitation).

Identify the gaps in diagnosing lung cancer and Tuberculosis since the COVID-19 pandemic. (Comments: Public Health COVID-19, tuberculosis, and lung cancer are all respiratory illnesses. Although they are different diseases with varying symptoms, they share similar symptoms such as cough, shortness of breath, fatigue, and loss of appetite. This project will measure and describe the magnitude and pattern of the gap in diagnosis currently compared to pre-pandemic and investigate how overlapping symptoms with COVID-19 have made early detection of these respiratory diseases difficult. ).
Tech for Better Care Programme Bid: Frailty - No Need to Fall (Comments: Full-system - Primary Care / Community / Patients at Home).
Enhancing the Post Diagnostic Support Pathway for Dementia using Digital Rehabilitation (Comments: Community based - New submission (Sep 23) The plan is to collect multi-stakeholder input in the co-design of a digital dementia rehabilitation tool as part of enhancing the current PDS pathway for people with dementia. ).
Early Cancer Diagnostic Pathways: A Service Evaluation (Comments: Full system (GP referral-initiated) Evaluation of the Rapid Cancer Diagnostic Service (Scottish Government-led service evaluation that is being carried out on their behalf by Strathclyde – services are in NHS Lanarkshire and NHS Fife, NHS A&A, NHS D&G, NHS Borders).