

Research, Innovation and Knowledge

Annual Report 2021-2022



© NHS Fife 2022 Published December 2022

This document is licensed under the Creative Commons Attribution-Noncommercial-NoDerivatives 4.0 International Licence. This allows for the copy and redistribution of this document as long as NHS Fife is fully acknowledged and given credit. The material must not be remixed, transformed or built upon in any way. To view a copy of this licence, visit https://creativecommons.org/licenses/by-nc-nd/4.0/

www.nhsfife.org

Contents

1. Executive Summary	2
2. Introduction	3
3. Research, Innovation and Knowledge Activity and Income	4
4. Research, Innovation and Knowledge Finance and Income	l1
5. Innovation	l5
7. Clinical Innovator Career Spotlight – Joyce Henderson	21
8. Research, Innovation and Knowledge Clinical Research Support 2	25
9. Research Innovation and Knowledge R&D Approvals and Support Team 3	30
10. Research, Innovation & Knowledge User Experience	37
11. Clinical Research and Innovation Champions	38
12. Opportunities and Challenges	12
13. Conclusions	14
14. Publications	1 5
15. Appendix 1 – RIK Structure	57

1. Executive Summary



The NHS Fife R&D Department, now the Research, Innovation & Knowledge (RIK) Department has seen 20 years of significant sustainable progress and is increasingly able to support high quality and more complex research and innovation related activities in Fife, working with partners in the NHS, Universities, Industry and other relevant stakeholders.

Throughout these years this department has utilised a multitude of innovative models to help sustain the increasing research activities in Fife. One such example is the R&D research nurse model with research nurses located within the R&D Department, which has had acclaim due to its effective results in recruiting, establishing and communicating the research activities within various fields. This model was instrumental in Fife becoming a major recruitment site for several COVID-19 related national studies following a rapid 10-day turnaround during both lockdown periods to make Fife's very busy clinical environments research friendly and active. Another example is the Clinical Research Facility at the Victoria Hospital in Kirkcaldy enabling complex clinical trials to occur locally, again for the benefit of Fife patients.

These and other examples are only possible due to the Research, Innovation & Knowledge department's ability to work with colleagues spanning the clinical and academic divide. The delivery business model around innovation and diversity in investment and activities allow this department to move forward with confidence. Last but not least this is also a testament to the effective and responsive leadership qualities that NHS Fife's RIK Assistant Director and Innovation Champion, Professor Frances Quirk has brought. In these challenging times Professor Quirk and the team have sustained and further improved the credibility, professionalism and governance of this department internally to NHS staff and externally to our partners. Professor Quirk has also been instrumental in establishing the first building blocks of a Fife health innovation agenda.

RIK in Fife has again utilised the principles of added value and critical mass to good effect. We look forward to next year, keen to work even more closely with neighbouring Health Boards, Universities and other agencies either under the auspices of the East of Scotland Research Node, Health Innovation South East Scotland (HISES) and other similar national and regional collaborations in a landscape that is continuously changing and demanding only the best for our Fife citizens that we serve with pride. We, especially, also look forward to continue to synergise our research and innovation strategic priorities with the University of St Andrews, our local university and medical school.

Many thanks to the whole RIK team for their consistent hard work and commitment towards the implementation of the Research strategy. We also thank Dr Christopher McKenna who has supported RIK even when his attention has been needed urgently elsewhere.

We are all looking forward to another exciting and productive year.

Professor Alex Baldacchino

Research, Innovation & Knowledge Director, NHS Fife

2. Introduction



This report details the activities within Research, Innovation and Knowledge (RIK) across NHS Fife from April 2021 to March 2022. The report details progress made over the last 12 months in relation to ongoing work, previously identified challenges and identifies the key challenges currently facing RIK.

There were significant changes over this period, not least responding to the ongoing impact of COVID-19 pandemic, addressing recovery, resilience and growth and the requirements to make adjustments to our ways of working, restarting suspending studies and continuing to respond to the Scottish Government Urgent Public Health priorities.

The period that this report covers was the first full year for Professor Frances Quirk in the role of Assistant Director Research, Innovation and Knowledge providing the opportunity to experience the full cycle of work, albeit a less than usual one with the ongoing impact of COVID-19 on our clinical research portfolio and workforce. This has also been our first full year as the rebadged Research, Innovation and Knowledge (RIK) Department with the addition of Innovation and Library and Knowledge Services towards the end of 2020.

Continuing significant developments within RIK include our relationships with the Universities of St Andrews and Dundee in relation to research activities and the South East Region Innovation Hub (HISES) for Innovation. The joint clinical academic appointments and Honorary Fellowships with the University of St Andrews have produced benefits in terms of closer collaboration and contribution to an expanding NHS Fife research culture. Work has advanced particularly well with the University of St Andrews, with a renewed commitment to partnership between the University of St Andrews and NHS Fife with the establishment of a Joint Research Office project and planning team reflecting key representation across the two organisations. The intention of the Joint Research Office team is to review and refine current research governance processes and the provision of relevant education and training to facilitate collaborative working and contribute to a more effective and efficient platform for joint research.

Professor Frances Quirk

Research, Innovation & Knowledge Assistant Director, NHS Fife

3. Research, Innovation and Knowledge Activity and Income

Research

1. R&D Studies and Recruitment

1. Number of Research Studies & Participants Recruited

The following R&D activity summary includes the studies open to recruitment in NHS Fife at some point within the 2021-2022 financial year. A further 56 studies had completed recruitment but were still collecting data during this period.

Data has been obtained from the NHS Fife R&D database (EDGE) and excludes PIC (Patient Identification Centre) and NLI (No Local Investigator) studies. Data are updated continually and figures are accurate at the time of collation.

1.1 Number of Commercial/Non-commercial Studies

Research is categorised as 'commercial' (funded by the pharmaceutical or medical device industry) or 'non-commercial'. Non-commercial research is further divided into "eligible" or "non-eligible" (NEF) depending on the organisation(s) funding the study.

Eligible studies are those that are funded by an organisation on the Chief Scientist Office (CSO) eligible funders list (which includes some charitable organisations, research councils or Government bodies). NHS Fife receives funding from the CSO via NHS Research Scotland (NRS) to support the running of these 'eligible' studies. NEF studies are those that either have no funding or are funded by an organisation which is not included on the CSO eligible funders list. NHS Fife does not receive any funding from CSO to support the running of these studies.

A total of 97 studies were actively recruiting participants during this period.

The specialties involved in commercial studies were: Dermatology (3), Musculoskeletal (2), Children (1), Diabetes (1) and Gastroenterology (1).

The top 5 non-commercial research active areas in terms of number of studies were: Cancer (13), Children (8), Stroke (8), Cardiovascular (7) and Infectious Diseases and Microbiology (7).

All Recruiting Studies by Funding Type & Scottish Specialty

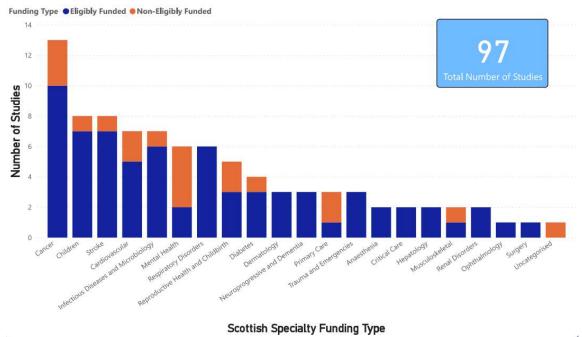


Fig 1

1.2 Number of Participants Recruited

A total of 2296 new participants were recruited during this period.

A total of 37 participants were recruited in Commercial studies Musculoskeletal (19), Gastroenterology (15), Dermatology (2) and Children (1).

1664 participants were recruited in Eligibly funded studies.

The top 5 Scottish Specialties in 2021-2022 in terms of recruited participants for Eligibly funded studies were: Reproductive Health & Childbirth (667), Infectious Diseases & Microbiology (515), Trauma & Emergencies (99), Critical Care (96) and Respiratory (71).

A total of 595 participants were recruited in Non-Eligibly funded studies.

Total Recruitment by Scottish Specialty and Funding Type

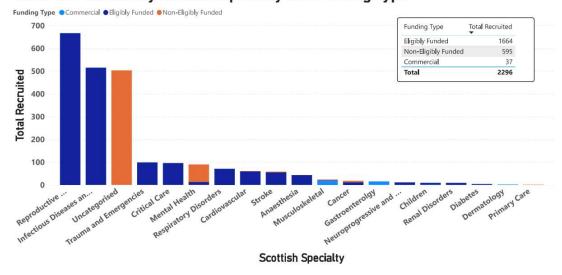


Fig 2

1.3 Types of Study

NHS Fife has a balanced portfolio of studies ranging from observational to complex interventional studies (including Clinical Trials of Medicinal Products (CTIMP)) across a number of therapeutic areas.

Of the total of 97 studies, 23 were Clinical Trials of a Medicinal Product, 16 were Clinical Trials of an intervention and 2 were Clinical Trials of a medical device.

The number of studies according to study type and disease specialty are shown below:

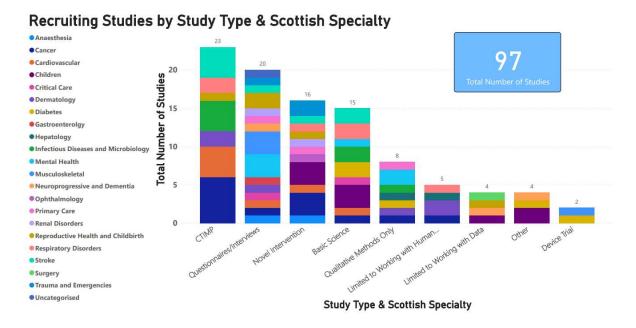


Fig 3

2. NHS Fife Sponsored Studies

The UK Policy Framework for Health and Social Care 2017 (UKPF) and The Medicines for Human Use (Clinical Trials) Regulations 2004 require that an organisation taking on the role of 'Sponsor' must ensure that there are proper arrangements in place to initiate, manage, monitor and finance a study. Prior to accepting this role, the NHS Fife will undertake a review and risk assessment to ensure that the acceptance of sponsorship is desirable and appropriate.

NHS Fife does not currently have the infrastructure in place to Sponsor CTIMPs but between 2021 and 2022 NHS Fife Sponsored 7 Non-CTIMP studies. These were all non-interventional studies e.g., studies administering questionnaires or interviews or limited to working with data.

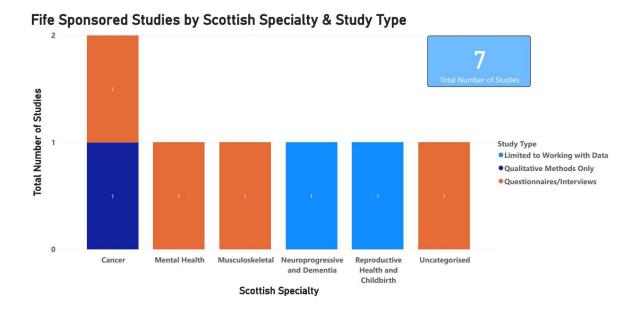


Fig 4

3. NHS Fife Research Active Staff

NHS Fife staff can be involved in the delivery of research by becoming the Chief Investigator (CI), or Principal Investigator (PI). The CI is the person designated as having overall responsibility for the design, conduct and reporting of a study, while the PI is the named individual who has responsibility for oversight of the study at a specific site for multisite studies.

3.1 NHS Fife Chief Investigators

A total of 9 NHS Fife staff members acted as Chief Investigator for a research study over this period.

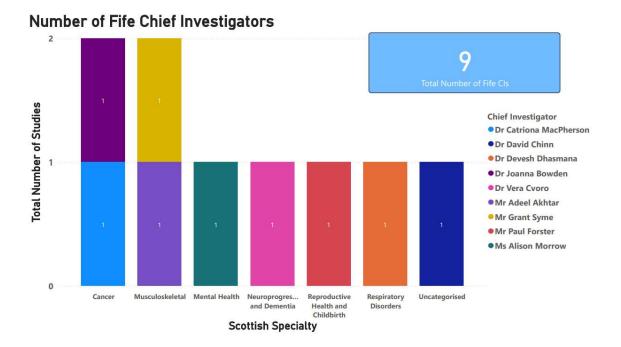


Fig 5

3.2 NHS Fife Principal Investigators

A total of 51 NHS Fife staff members acted as Principal Investigator for a research study.

The top 6 research active Scottish Specialties with NHS Fife PIs were Cancer (7), Children (7), Respiratory Disorders (5), Dermatology (4), Mental Health (4) and Reproductive Health and Childbirth (4).

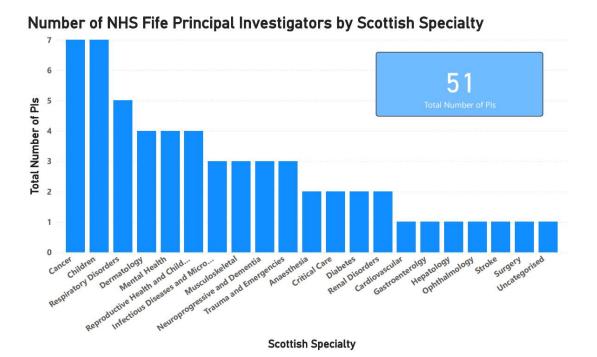


Fig 6

The majority of staff were Principal Investigator on a single study while 4 members of staff were Principal Investigator on 5 or more studies.

Supply 25 25 25 26 27 28 Number of Studies led by a Principal Investigator

Number of Studies for each Principal Investigator

Fig 7

4. Trends in Research Activity

The following figures show the total recruitment and total number of studies for 2019-2020, 2020-2021 and 2021-2022. The figures for 2019-2020 and 2020-2021 reflect the figures reported in the Annual report for those financial years.

The increase in Non-Eligibly funded and Eligibly funded recruitment seen in 2021-2022 (Fig 8) was due mainly to two large questionnaire studies which accounted for 503 and 794 recruits respectively.

The figures reported for the total numbers of studies in 2019-2020 (Fig 9) included both recruiting studies and studies in follow-up. These figures have been reported separately in 2020-2021 and 2021-2022.

Total Recruitment by Financial Year

Funding Source • Commercial Studies • Eligibly Funded • Non-Eligibly Funded

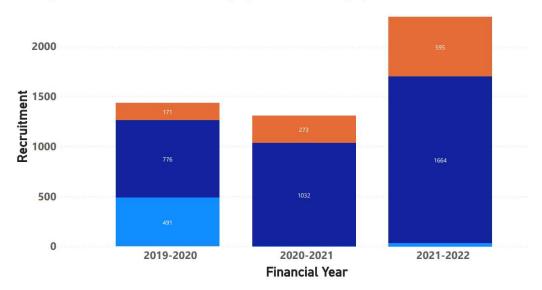


Fig 8

Number of Studies by Financial Year

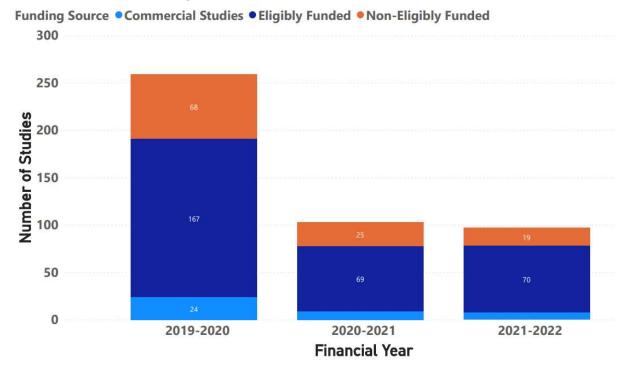


Fig 9

4. Research, Innovation and Knowledge Finance and Income

1. Funding

On an annual basis, NHS Fife RIK receives an allocation from Chief Scientist Office (CSO) to support clinical research activity and general infrastructure. Normally this allocation would be calculated using activity-based measures, however, due to the exceptional circumstances caused by the COVID-19 pandemic this approach is currently not being used as the pandemic greatly reduced clinical research activity.

CSO also provide funding for Health Innovation South East Scotland (HISES) through NHS Lothian. HISES is setup with the purpose of delivering "Government's vision to utilise the innovation process to deliver a healthier and wealthier nation for the future."

As well as CSO funding, NHS Fife also receives Network funding to further clinical research in areas such as Cancer, Dementia, Diabetes, & Stroke, which is provided through NHS Tayside as the nodal Health Board, Lothian, & the University of Dundee.

The following graphs show total funding provided by CSO & other contributors over the previous 3 financial years, from 2019-202020 to 2021-2022. However, the key points to note are:

- Initial CSO funding has increased by £8,000 between 2020-2021 and 2021-2022 from £826,000 to £834,000, however, funding is down £14,000 from 2019-202020 to 2021-2022 from £848,000 to £834,000
- The movements within the other sources of funding relate to income received as an allocation from CSO relating to COVID-19 studies such as RECOVERY, GenOMICC, & ISARIC.
- Funding received from the South East Scotland Health Innovation Hub (HISES) has increased over the past 3 financial years, from £17,670 in 2019-202020 to £63,036. A total increase in funding of £45,366 from 2019-202020 to 2021-2022.

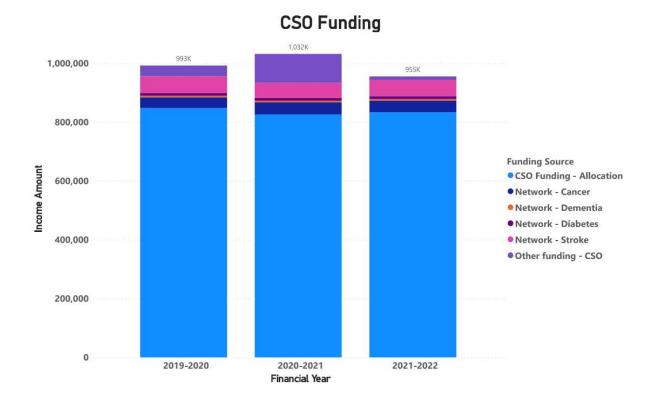


Fig 10

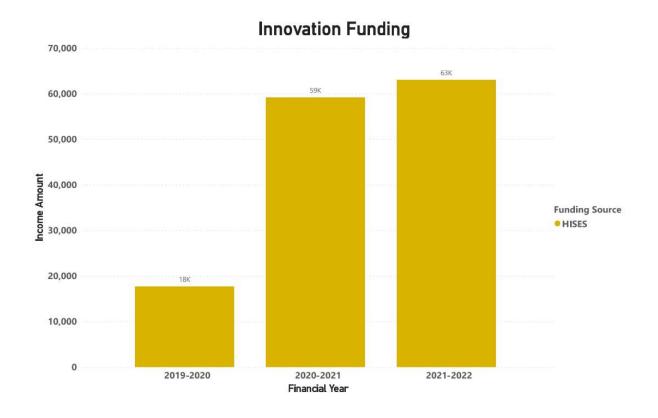


Fig 11

2. Income

2.1 Commercial Income

Commercial income for 2021-2022 was £77,000, down £42,000 from 2020-2021. The reduction in income was due to the lack of income received from Diabetes studies which totalled circa £60,000 in 2021-2022.

As shown in the following graph, Dermatology studies generated the majority of commercial income for RIK, totalling £44,000.

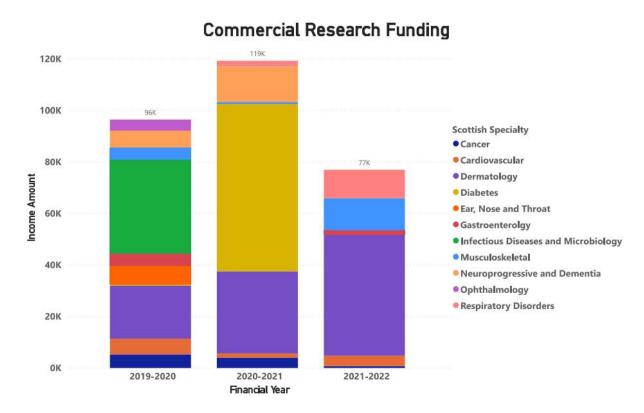


Fig 12

2.2 Non-Commercial Income

Over the previous 3 financial years, non-commercial income has increased by £33,000 to £145,000 in 2021-2022 from £112,000 in 2020-2022, after a reduction in income by £9,000 from 2019-2020 to 2020-2021, where total income was £121,000 in 2019-2020.

For 2021-2022, as shown in the following graph, studies within the Respiratory and Infectious Diseases and Microbiology fields generated the most non-commercial income for NHS Fife, totalling circa £80,000 and £40,000 respectively.

Non-Commercial Research Funding

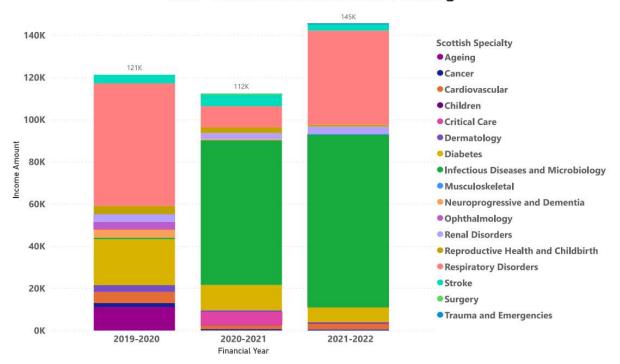


Fig 13

5. Innovation



Neil Mitchell Innovation Manager NHS Fife (commenced April 2022)

NHS Fife is a member of Health Innovation South East Scotland (HISES), one of the three Regional Innovation test beds, set up by the Chief Scientist Office. HISES is a collaboration of three NHS Boards - NHS Fife, Lothian and Borders, with NHS Lothian taking the role of lead host board. HISES forms part of a national network created to deliver the Government's vision to utilise Innovation to deliver a healthier and wealthier nation for the future. The majority of the Innovation activity that RIK has supported has been focused on HISES hosted Small Business Research Initiatives (SBRIs). NHS Fife has contributed to the review, discussion and approval of projects to be hosted by HISES.

NHS Fife supported Phase I of the Kindocoin, Delayed Discharge SBRI in 2020-2021, which developed an innovative technology- based solution to link statutory services to 3rd sector organisation providing services in the community. Phase II of this SBRI is running with two companies in NHS Lothian, with the support of NHS Fife and is due to complete in March 2023. Other SBRI's supported by HISES, with input from NHS Fife, include:

- Care Homes Platform identifying how current care home captured data can be utilised
 in the development of a minimum care home data set that in time can be used for
 analysis, risk identification and creation of decision support tools.
- **Multi-Morbidity** development of data-driven solutions that can improve and personalise care plans for patients with multimorbidity. This will use analytical models in the clinical system that could assist with the risk assessment of patients. Phase II is due to launch in October 2022.
- Hip Fractures developing a system using routinely collected health data and dataanalytic techniques to improve the outcomes for patients with hip fractures. One company has successfully launched into Phase II in August 2022
- Care Calendar This Innovation focuses on stroke patients and ensures that actions required as part of their Stroke Bundle are undertaken and recorded. This should maximise positive patient outcomes, whilst enhancing the patient flow through secondary care on to discharge and beyond.

NHS Fife is also supportive of Innovation nationally through membership of National Consortia. NHS Fife staff currently contribute to 3 National Consortia; the Dermatology Artificial Intelligence (AI) Consortium, the Eye Health Consortium and the Drug Deaths Consortium. The Dermatology AI consortium is seeking to deliver the vision of '25 by 25' – skin cancer diagnosis within 25 minutes by 2025, through the use of AI. The Eye Health Consortium will be launching an Eye Health Innovation Challenge to develop innovative technology to enable remote home vision testing for Glaucoma. The Drug Deaths consortium is chaired by Professor Alex Baldacchino (former NHS Fife Director of Research) and aims to find innovative solutions to prevent drug deaths using overdose detection and response technology.

NHS Fife has developed the Innovation Governance Framework, providing a route for Innovation projects to be reviewed and scrutinised ensuring robust and deliverable projects, this is aligned with the Innovation Governance Framework developed and implemented at HISES.

NHS Fife has invested in Innovation locally with the appointment of an Innovation Manager within Research, Innovation and Knowledge. The Innovation Manager will have a primary role in driving forward Innovation locally, as well as liaising with our regional partners in HISES and nationally with the Scottish Health and Industry Partnership (SHIP) on catalyst challenges and Small Business Research Initiative (SBRI) funding. The Innovation Manager will work in partnership with NHS Fife Innovation Champion and Assistant RIK Director, Professor Frances Quirk and the recently appointed Clinical Innovation Champion, Dr Susanna Galea-Singer.

Dr Susanna Galea-Singer is an Addiction Psychiatrist, Clinical Lead for Addiction Services and Clinical Innovation Champion. Appointed as Clinical Innovation Champion in March 2022 after a competitive selection process, Susanna brings a wealth of experience in Innovation. Susanna has a Master's in Innovative design and worked in New Zealand as the lead for Innovation within XXX. Susanna is featured in section X.

SHIP launched the first round of Clinical Innovation Fellowships in 2022 and after a highly competitive application process, NHS Fife's Advanced Physiotherapy Practitioner, Joyce Henderson, was awarded a SHIP Clinical Innovation Fellowship, one of only 9 across Scotland and the only one awarded to an Allied Health Professional. This is the first round of Innovation Fellowships and a great achievement for Joyce and NHS Fife. Joyce is the Lead Advanced Practice Physiotherapist within Women, Children and Clinical Services and her Fellowship will focus on Artificial Intelligence (AI) assisted screening of Developmental Dysplasia of the Hip (DDH). Joyce is featured in this Annual Report under our Career Spotlight in section 4.

Lastly, NHS Fife regularly works with InnoScot Health to identify, protect, develop and commercialise healthcare innovations to improve patient care. From the period January 2021 to January 2022, two NHS Fife projects were disclosed and discussed with InnoScot Health. Four projects are currently being supported by InnoScot Health; providing advice on copyright and licensing, and supporting idea development and industry discussions, as well as liaising with academic partners. InnoScot Health also contributes to NHS Fife RIK Operational Meetings, as well as contributing regionally to HISES Network Group and Oversight Committee. InnoScot Health provides advice and training to NHS Fife in Intellectual Property and Innovation education sessions, as well as regulatory guidance.

6. Research, Innovation and Knowledge Library and Knowledge Services



Alan Mill, Library Assistant Marie Smith, Library Services Co-ordinator/Librarian Hannah Colston, Librarian Wendy Haynes, Librarian

The year 2021-2022 brought another difficult period for NHS staff coping with the ongoing pandemic. The Library & Knowledge Service continued to support staff and students by providing access to both online and physical resources, answering enquiries, carrying out literature reviews, and delivering user education sessions. From mid-2021-2022 staff ceased working from home and returned to the library to provide a personal presence to best support library users.

Staff well-being continued to be a priority during the year. Working through the pandemic has proved challenging for all staff and we have made efforts to support each other and stay connected throughout this period. Technology such as MS Teams has allowed us to stay connected to our colleagues, library users and the wider NHSS library network.

We look forward to 2022-2023 and anticipate consolidation of core library service provision to service users following home working and continued development of collaborative working with the wider RIK Department.

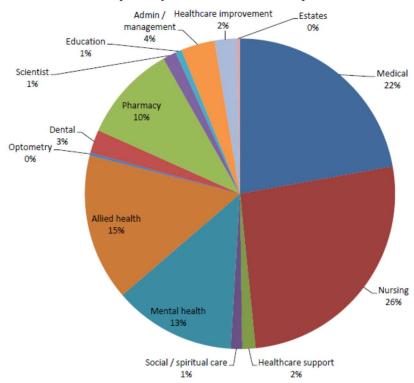
NHS Fife Library & Knowledge Service - Core Business Activity

Activity	Numbers/data/quantity
Library patrons:	
Total number of registered library users at 31st March 2022	1,943
New borrowers registered	288
Library:	
Total number of books in stock	3,692
Books added to stock	132
Book loans:	
Book loans from own stock to NHS Fife patrons	160
Book loans from own stock to external Boards' patrons	48
Book loans to NHS Fife patrons supplied by external NHSS libraries	58
Book renewals	354
Book returns	201
Resource Sharing requests:	
Journal articles requested from the British Library or CLA Licence Plus	69
Books borrowed from the British Library	11
Journal articles supplied from national ejournal subscriptions	22
Literature searches / evidence searches / scoping	20
searches	
User education Individual or small group	Online Learn@Lunch session with pharmacists, promoting library services. 13 individual sessions.

Number of registered individuals with a library/Athens account at 31/3/22:	NHS Fife workforce:	% of workforce registered:
1,943	9,796	20%

Total number of accesses to The Knowledge	19,711
Network, Library Search and national	
subscription resources 2021-2022	

Library user/Athens accounts by area of work



Progress and Service Highlights

Bulletin

In April 2021 the Library & Knowledge Service (LKS), in liaison with the R+D team, introduced a Bulletin containing details of journal articles and similar papers authored by NHS Fife staff. This "Local authors' Bulletin" is now well established and is produced on a monthly basis. So far twelve have been circulated to relevant individuals both in NHS Fife and beyond. The aim is to highlight research and related activity that is taking place across NHS Fife and identify research-active individuals. The bulletin is also posted on StaffLink and added to the RIK webpages on the NHS Fife website.

Journal Club

We were approached in summer 2021 by the Public Health, Health Protection team with a request to support a regular journal club for team members. The journal club was initiated with the aim of supporting team-building with a new complement of staff who were working from home, and providing an educational opportunity to prompt discussion and learning across a range of relevant health topics. In discussion with the journal club lead, library staff select and appraise journal articles on a specific topic for each 6-weekly meeting. A librarian attends each meeting and assists with facilitating each session.

A great opportunity for learning and feedback from the team is positive.

Review of Stock Management Policies

During 2021 library staff carried out a review of the service's stock management policies and procedures. These documents cover all aspects of selection, acquisition, receipt, processing, cataloguing, stock editing and annual stock check. Revised policies and procedures have been documented and implemented although work is ongoing to finalise all documentation.

Review of Bookstock

We undertook a review of specific sections of the bookstock at VHK and Stratheden libraries during 2021-2022. Tasks such as this have been difficult to carry out during COVID-19 restrictions whilst LKS staff were working from home. Staff have returned to the workplace and are catching up with a number of duties that require a physical presence in the library. A range of new titles has been purchased for VHK and Stratheden. We have particularly focussed on enhancing the Well@Work collection held at VHK. This collection provides a range of titles to support staff health and well-being and is available to all staff across NHS Fife.

Library & Knowledge Services User experience

We are just at the beginning of the project. The information has helped with clarity of thinking and project planning.

The service provided was very helpful. It saved me time and ensured completeness of the search.

Thank you for your help - responded very quickly and information provided was well presented and easy to access.

[The information provided] allowed us to update the resources we use for training/education.

[The information provided] allowed us to update the resources we provide to patients and carers.

Information now added to NHS Fife adult catheterisation procedure documents.

[Information provided] allows the department to start planning/creating protocol for ERAS patients coming in for cystectomy for bladder cancer.

7. Clinical Innovator Career Spotlight – Joyce Henderson



Joyce Henderson, NHS Fife Lead Advanced Physiotherapy Practitioner, has been awarded an Innovation Fellowship from the Scottish Health and Industry Partnership (SHIP)

1. When did you first become interested in Innovation?

Joyce has always had an interest in Innovation, has a curious mind, is keen to identify and solve problems and finding solutions to pathways or processes that are not working well.

When things are not working effectively and efficiently, this causes frustration and Joyce enjoys mapping the issues and looking for solutions. Inefficiency costs money and time, both of which the NHS are short of. Her journey to Innovation started following a training session, when a number of participants, including her, had difficulty mastering the task and struggled to learn the new skill. Joyce began to investigate the training process and identified that the tools used could be improved. This led to collaboration with an industry partner and subsequently the development of a prototype, which Joyce is keen to test during her Clinical Innovation Fellowship.

"I really enjoy looking for solutions to problems or processes in all aspects of life".

2. What drives you to innovate or be involved in Innovation?

Joyce is primarily driven to improve the lives of patients, and their families, work colleagues and community as a whole. The NHS is under a tremendous pressure and without Innovation and Innovators the NHS will struggle to cope with increasing demand. The COVID-19 pandemic has highlighted there are demonstrable health inequalities across the nation, and we now have the opportunity to address these inequalities. Scottish Government and NHS leaders have shown there is an appetite for transformational change. Digital and technological Innovations and advancements that are key to the NHS becoming the efficient and effective workforce we want to be and deliver preventative and proactive models of care that are so needed.

"We can't work any harder, so we must work smarter".

3. What's your Ambition?

Joyce's ambition for her Fellowship project is to see transformational change in services. She is passionate about Women and Children's Services, therefore developing and leading in transformation change for the service is important to her. COVID-19 has highlighted weaknesses in care and other pressures have demonstrated that healthcare is not equal and vulnerable families need more support. Digital and technical advancements that are becoming available will help us to streamline our services, create capacity and fundamentally shift the balance from low value, high demand tasks helping us enable experienced and skilled clinicians to deliver the best possible care at the right place and right time.

4. What is your Career Highlight?

Being awarded an inaugural Clinical Innovation Fellowship has been the highlight of Joyce's career. She is delighted to have this opportunity and particularly pleased to be the first and only Allied Health Professional (AHP) in this cohort. Joyce believes this is a clear signal that Scotland is keen to support all staff to be Innovators. This recognises the value of AHP's and frontline staff, and what they can offer in leading Innovation and delivering transformational change. This is a great opportunity to demonstrate the value of Innovation and raise awareness of Innovation among all staff.

5. What does the Future look like for you?

Joyce's goal is to demonstrate that Innovation is for everyone. Joyce is truly impressed with the depth and breadth of talent that lies in the Innovation field in Scotland. Joyce believes that NHS Scotland is at the beginning of an exciting new epoch of digital and technical advancements. Joyce wants to be a leader in the early adoption, and validation, of the best clinical tools, technology and artificial intelligence to guide and improve healthcare outcomes for her patients. Joyce would like to continue to develop further novel approaches and applications.

"I want to encourage other would- be Innovators"

Joyce would also like to see a greater emphasis on Innovation in the undergraduate curriculum and postgraduate training courses and would relish the opportunity to be involved in shaping that process.

6. What advice would you give to Future Innovators?

"Get your thinking caps on!"

The NHS needs more Innovators and novel products, and it is the frontline staff that are key to developing these. Joyce would encourage anyone interested in Innovation to reach out to the Innovation team within RIK, as well as network and collaborate to develop your ideas. Find likeminded individuals and establish a great team around you. The knowledge and support Joyce received from HISES and the NHS Fife Innovation team, specifically her mentor Professor Frances Quirk and Innovation Manager Neil Mitchell has been invaluable and a great source of encouragement. Perseverance and resilience are key attributes to anyone looking to Innovate.

"if you believe in it, stick with it, be resilient and persistent"

There will be barriers but if you are determined, it is achievable. The NHS, along with regional and national bodies, like HISES and SHIP are keen to see Innovation flourish and offer advice and help in developing and guiding aspiring Innovators. Joyce believes that her journey has been difficult and challenging; particularly when you factor in clinical demands, but being involved in Innovation has definitely been one of the best things she has ever done.

8. Research, Innovation and Knowledge Clinical Research Support

R&D Nursing



Susan and Sandra who are part of the clinical research team organising some sampling for one of our studies in the Clinical Research Facility, Victoria Hospital in Kirkcaldy.

Nursing Team: **Lead Nurse Karen Gray** leads the nursing team of 22. This is made up of 10 Senior Research Nurses, 5 Research Nurses, 5 Clinical Research Assistants, 1 senior research assistant and a nursing support officer.

Activity: The number of patients recruited to NHS research trials in 2021-2022 was 2296. This shows an increase in activity over the previous year, this uptake in recruitment is directly linked to the COVID-19 studies we conducted during the pandemic (See chart below). While the pandemic may not yet be over, we have managed to reopen all suspended trials and open some new ones. We are very proud of our contribution to the national pandemic studies, for which we recruited over 580 participants in 2021/22. NHS Fife participation in clinical research demonstrates our commitment to improving the quality of care we offer and to making our contribution to wider health equity and improvement. Our research teams' work in collaboration with the clinical staff to inform the best possible treatment opportunities and with active Health Board participation in research this leads to better patient outcomes across all specialties.

Research experienced many challenges in activity in 2021-2022 due to the impact the COVID-19 pandemic had on normal services within the Health Board. Research staff responded well to the unprecedented challenges, and by the start of 2021 we had reopened our previously suspended studies. We have managed to increase our staffing to continue to support research alongside the additional workload of ongoing COVID-19 studies.

Highlights: Despite the challenges we have had remarkable success in Orthopaedics , Dermatology and in National trials such as <u>SIREN</u>, <u>PANORAMIC</u> and <u>ISARIC</u>. With the Orthopaedic Centre planned to open later this year we have had notable growth within this area and the workforce developed accordingly. NHS Fife research has contributed a significant amount to the development of national COVID-19 management policies and the team has responded to the changing landscape of clinical research with enthusiasm and good humour. The challenges have been great and have stalled us in many ways, but the past year has seen some fantastic work being done and the integration of research into standard care practice in many specialties, especially in the Respiratory department and has been an unexpected benefit of these challenges.

Motivation: Research is a key element of quality and improvement in healthcare systems and to be a part of that is something that the Clinical Research Team feels immensely proud of. The team demonstrate professionalism and excellence every day and strive to provide as many opportunities and treatments for patients as possible.

To continue to support this level of engagement with the clinicians we have expanded our team to include additional research nurses and clinical research assistants to deliver the best opportunities and quality research to the people of Fife. This will allow us to continue to grow and develop our capabilities and capacity to support even more research within NHS Fife.

The Dermatology Clinical Research Team



Anna Morrow – Senior Dermatology Research Nurse

Led by **Senior Research Nurse, Anna Morrow**, our Dermatology team has continued to offer trials to patients from various Dermatology specialties, including paediatrics and for Alopecia patients.

Principal Investigators:

Dr Ann Sergeant, Dr Alice Tidman, Dr Megan Mowbray, Dr Sally McCormack, Dr Alastair Mitchell

Summary of Activity: The research team work closely with the Dermatology clinical team to deliver a variety of research studies to the patients of Fife. We run a range of studies from observational, which can help evidence the best practice, to clinical drug trials, looking at the safety and efficacy of treatments for patients with mild to severe degrees of their condition. There has been particular focus recently on biologic medications. Since returning from maternity leave in May, I have been working on setting up several new studies that are hoping to be open to recruitment by the end of this year.

Highlights: Receiving positive feedback from patients is always rewarding and on a recent patient feedback form a study participant wrote "This study has changed my life" which has to be a personal highlight since starting this role and a reminder of the impact our work can have.

Motivation: Prior to taking on this role I underestimated the impact dermatological conditions can have on a person's quality of life. I am highly motivated by the first-hand benefits I have been able to witness in our study participants and the way in which it improves so many aspects of their life, from confidence, to relationships, to work and general mental and physical well-being. Being involved in research allows us to bring trials and medications to the Fife patient population that sometimes would not otherwise be available to them. An added benefit of running clinical drug trials is the cost saving it means for the Health Board, allowing that funding to be used elsewhere in NHS Fife.

The Diabetic/Critical Care Team



Susan Fowler (L) — Senior Research Nurse and Sandra Pirie (R) is one of our Research Nurses working in Diabetes and Critical Care.

Clinical Research Staff: Team Lead Susan Fowler, Sandra Pirie (Research Nurse) and Evgeniya Postovalova (Clinical Research Assistant).

Principal Investigators: Dr Robert Thompson Anaesthetics), Dr Michael MacMahon (Anaesthetics), Dr Caroline Styles (Ophthalmology), Dr Catherine Patterson (Diabetes), Dr Patrick Liu (Respiratory), Dr Katie Hunter (Anaesthetics)

Recruiting Studies:

Genomiccs, Heal COVID, Optimise II, Flo-ela, PHADE, Lumira HbA1C, Innodia

Follow-up: SIREN, LENS, SNAP 3

Highlights: <u>Genomiccs</u> is a research study that aims to identify genes that cause people who develop an infection, which would be mild in the main, to become critically unwell. The identification of these genes aims to allow the development of targeted therapies for individual patients.

During the COVID-19 pandemic, the study incorporated critically unwell COVID-19 patients. One of the treatments identified, Baricitinib, was able to be put forward to trial as part of the <u>RECOVERY Trial</u> (which NHS Fife is also part of) as a direct result of study findings, Baricitinib was found to be effective in patients with severe COVID.

This year has brought an alarming rise in small children and babies developing acute severe hepatitis in the UK and other countries around the world. It was unclear what was responsible for this sudden increase and to try to understand why and help prevent any future cases, <u>Genomiccs</u> has now included affected children (and their parents) in the study to identify genes that may be helpful in recognizing specific groups of individuals who are susceptible to this.

To date NHS Fife research nurses have recruited 61 participants into the Genomiccs study.

The Stroke Care Team



Dr Vera Cvoro (L) – Consultant in Stroke Medicine and Mandy Couser (R) is our Senior Stroke Research Nurse.

Recruiting Studies: Optimas, TICH-3, ENRICH-AF, TRUSTED, TRIDENT, LACI-2, PRECIOUS

Clinical Research Staff: **Senior Research Nurse Mandy Couser** leads the Stroke research team, assisted by Hannah Hughes (Research Nurse) and Evgeniya Postovalova (Clinical Research Assistant).

Principal Investigator: Dr Vera Cvoro (Stroke)

Highlights: The <u>OPTIMAS</u> study aims to identify the best time to start taking a direct oral anticoagulant (DOAC) such as Edoxaban, following an ischaemic stroke in people with Atrial Fibrillation, to prevent further ischaemic strokes.

Currently 52 participants have been recruited to the study (the target was 15). NHS Fife are hugely grateful to Stroke survivors in Fife, who have embraced this study so enthusiastically and in February this year our Stroke research team celebrated being the top recruiter in the UK despite being one of the smaller Health Boards involved in the study.

Clinical Trials Pharmacy



Pharmacy Team:
Senior Pharmacist —
Clinical Trials, Clare Cliff
with Maria Simpson,
Senior Pharmacy
Technician Clinical Trials
and Audrey Hunter,
Senior Pharmacy
Assistant.
Alison Casey has joined
the team to provide
Senior Pharmacist
maternity leave cover.

Activity and Highlights: Continuing to dispense treatment for patients randomised to open studies. We also continue to review and provide pharmacy advice for potential studies.

We have worked with the research teams to open several new CTIMP studies (including TICH-3, ARIEL, FOxTROT2, MAGIC, SOT-01, MucAct), and have processed amendments for the open CTIMP studies in a timely manner.

Within pharmacy the clinical trials team is doing a great deal of work to streamline the in house training provided to the wider pharmacy team. The wider pharmacy team are vital to dispensing clinical trial prescriptions at both QMH and VHK.

Motivation: Research is a key element of quality and improvement in healthcare systems and to be a part of that is something that the clinical trials pharmacy team feels very proud of.

9. Research Innovation and Knowledge R&D Approvals and Support Team

9.1 R&D Approvals Team and Support



R&D Approvals and Support - From left to right Dr Penny Trotter (R&D Research Coordinator) in post since June 2022, Aileen Yell (R&D Research Coordinator), Roy Halliday (R&D Support Officer), Linzi Wilson, (Approvals Assistant).

R&D Approvals Team

The R&D Approvals Team consists of Aileen Yell, (R&D Research Coordinator) who retired in June 2022 but is currently providing support to her replacement Dr Penny Trotter (R&D Research Coordinator) in post since June 2022 and Linzi Wilson, (Approvals Assistant).

Research Approvals

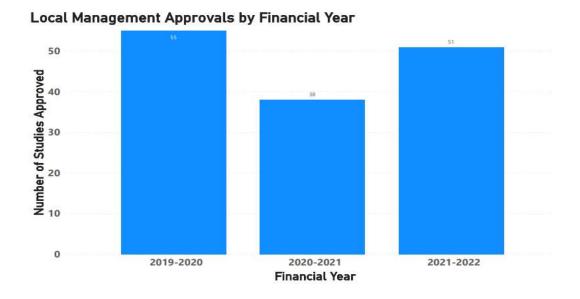
All research conducted within the NHS must have R&D Management Approval in order to ensure that the legal obligations of the Board are met. Approval also provided insurance/indemnity for research studies under the Clinical Negligence and Other Risks Indemnity Scheme (CNORIS). The Approvals Team ensure that such research studies are reviewed and approved within national timelines. This can include working with researchers and staff to provide advice and assistance for types of approval that are required, reviewing documentation, checking any implications around resource and costing, information governance, risk assessment, arranging contractual reviews, processing Research Passport applications and dealing with any queries which arise during the process.

Between April 2021 and March 2022 the number of local management approvals was 51 studies as shown below in Figure 1. Figure 2 shows the NHS Fife Local Management Approvals by Financial Year 2019-2020, 2020-2021 and 2021-2022.

Figure 1 NHS Fife Local Management of Approvals by Month – April 2021 – March 2022



Figure 2 NHS Fife Local Management Approvals by Financial Year



Research Amendments

The majority of research projects which are approved will be subject to amendments during the period the studies are active or in follow up. The Approvals Team liaise with local study teams to ensure there are no issues around capacity or resources/costings and review and process the amendments timeously.

Between April 2021 and March 2022 the number of local management approvals was 235 study amendments approved as shown below in Figure 3. Figure 4 shows the NHS Fife approval of amendments by Financial Year 2019-2020, 2020-2021 and 2021-2022.

Figure 3 NHS Fife Approval of Amendments by Month – April 2021 – March 2022

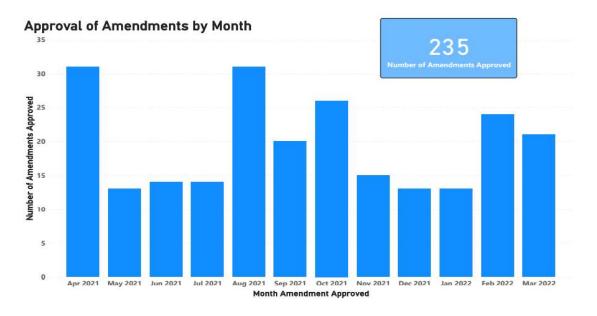
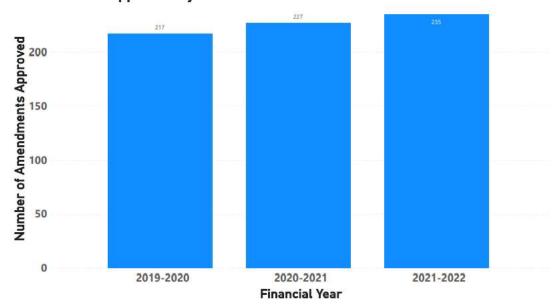


Figure 4 NHS Fife Amendments Approved by Financial Year





R&D Support

The R&D Support Officer Roy Halliday, provides overall administrative support to the RIK Department, including being a primary point of contact for the RIK Team, responding to all types of enquiries, organising and minuting of meetings, regular production of the RIK Bulletin, providing support to the Assistant RIK Director and other team members where required. The R&D Support Officer is also responsible for the processing of feasibility requests, ordering via the e-Procurement Scotland system (PECOS), Scottish Standard Time System (SSTS) and assisting with the delivery of the R&D Education Programme.

Highlights

The team have continued to be involved in the use of the EDGE Research Management Platform, particularly in relation to the creation and modification of Approvals and Amendment Workflows, Attributes, the creation of new studies, updating and maintaining accurate records in relation to existing studies, amendments, etc. The team have successfully continued to work between home and office.



R&D Approvals and Support - From left to right Linzi Wilson, (Approvals Assistant), Aileen Yell (R&D Research Coordinator), Dr Penny Trotter (R&D Research Coordinator) in post since June 2022, Roy Halliday (R&D Support Officer).

9.2 Research, Innovation and Knowledge Quality and Performance



Quality and Performance (from left to right):

Julie Aitken (Quality and Performance Lead), Penny Trotter (Quality and Performance Assistant) who became R&D Research Coordinator in June 2022, Rachel Kuijpers (Quality & Performance Assistant in post since August 2022), Isla McBain (Quality & Performance Assistant) in post since September 2022

Between April 2021 and March 2022 the R&D Quality & Performance Team consisted of Julie Aitken (R&D Quality and Performance Lead) and Penny Trotter (R&D Quality and Performance Assistant).

The R&D Quality & Performance Team are responsible for a number of activities including:

Management of SOPs and Work Instructions

Standard Operating Procedures (SOPs) and Work Instructions (WIs) are vital to ensure efficient, controlled and uniform conduct across all studies.

The R&D Quality and Performance Team ensure all SOPs and Work Instructions are constructed in accordance with the standard format, regularly reviewed and distributed and made available to staff as appropriate. They work with R&D Department admin and research staff to review the content of these documents and suggest improvements, as well as identifying gaps in the existing suite of documents where new procedures are required. This is an ongoing cycle and feeds in to the continuous development of the department.

Between April 2021 and March 2022 10 SOPs and 14 Work Instructions and their associated forms and templates were reviewed, updated and re-issued. One new SOP (SOP46, Version 1) was issued in this time period.

Audit

The team are responsible for performing audits across all the clinical research conducted in NHS Fife. This covers a wide range of activities, looking at studies and their activities as well as procedures within the R&D Department itself. The audits are intended not only to ensure compliance to SOPs, WIs and study protocols but to assist those being audited by identifying and addressing issues and helping to identify improvements that can be made to streamline processes.

Tracking Research Activity and Performance

The team liaise with research teams to review study progress and timelines, collate recruitment figures and update local and national databases to track all research activity in NHS Fife.

Highlights

Embedding the EDGE Research Management Platform

Over the last year the team have been busy working with the R&D Approvals Team, Clinical Trials Pharmacy Team and R&D research teams to further develop our use of EDGE for managing all aspects of the life cycle of a research project. As SOPs and Work Instructions are revised and updated, the aim is to develop EDGE workflows and attribute to replace, where appropriate, the forms and checklists associated with the SOPs and Work Instructions. This helps streamline processes and provides increased visibility across all the R&D teams and members of the research team.

All R&D approvals processes and study set-up processes are recorded and tracked on EDGE, details of all recruits are added and study documentation stored on the system. This has helped improve communication between the various teams and allows recruitment activity to be collated quickly.

The team circulate monthly reports to colleagues throughout the department using data from EDGE, which help identify bottle necks in the study set-up process and form the basis of regular reviews of individual study progress.

The R&D Quality and Performance Team delivers ad hoc EDGE training to research teams on the use of EDGE and assist staff with queries as they arise.

9.3 Research, Innovation and Knowledge Education and Training

During 2021-2022 our Senior Research Advisors (Dr David Chinn and Dr Fay Crawford (who left NHS Fife in July 2021) gave Statistics help to 10 staff, advice on writing up a thesis, paper, development of a proposal to 7 staff, advice on funding to 3 staff.

In addition to revising study guides, preparing a paper (published in 2022), planning and implementing a survey on research capacity and culture in NHS Fife, analysing data, 7 teaching sessions.

10. Research, Innovation & Knowledge User Experience



Jayne Wilson, Add Aspirin participant

R&D Participant Experience

The Add Aspirin study at NHS Fife was led by Dr Sally Clive, Dr Alan Christie, and Dr Caroline Michie. NHS Fife R&D Senior Oncology Research Nurse Fiona Adam, and her team give a big thank you to Fife patients like Jayne who have taken part in research helping to improve treatments for other patients.

The multi-disciplinary team are invaluable in helping the R&D team produce high quality research data and immense gratitude also goes to everyone in NHS Fife who helps support research.

Quote from Jayne Wilson, Add Aspirin participant

"Taking part in the trial was easy and it also gave me peace of mind as I was regularly monitored. The research team have all been amazing and at the end of the phone if I've ever needed them. Hopefully this research will lead to some positive results and help many people like me in the future."

11. Clinical Research and Innovation Champions

As an element of the enabling strategy to increase Clinical Research and Innovation activity and grow our Chief Investigator and Principal Investigator numbers a competitive call was launched in March 2022 for Clinical Research Champion and Clinical Innovation Champion roles.

These roles are intended to support practitioners to take on a wider organisational contribution to enhancing culture, capacity and capability and provide for the equivalent of half a day a week for 2 years (reviewed after 12 months) to facilitate this engagement.

Three Clinical Research Champions (Dr Helen Brotherton, Dr Phil Walmsley, Dr Devesh Dhasmana) and one Clinical Innovation Champion (Dr Susanna Galea-Singer) were appointed.

Clinical Innovation Champion- Spotlight



Susanna Galea-Singer, Addiction Psychiatry

1. What motivates you to fit Innovation into your busy clinical life?

Innovation is a way of finding solutions to complex issues that, as clinicians, we are constantly wrestling with. Innovation gives you the tools and a framework to look at things differently and think differently. Innovation provides a link to Industry and Academia; giving you access to other ways of working and thinking, which might provide a more effective and efficient solution. I also find that Innovation is a great way to bring the team together; defining a challenge to find a solution for – a clear focus. It is often frontline staff, who will have the greatest insights into what a solution might look like.

2. Why did you apply for the Clinical Innovation Champion Award?

I applied for the Clinical Innovation Champion Award because I want to drive and contribute to NHS Fife's journey of transformation. Innovation is about doing things differently – it is about transformation – it is about delivering 'what people value' in the 'way that people value'. In applying for the champion role, I was applying for dedicated time and space for innovation within a busy clinical life.

3. What will be the benefits of your role as Clinical Innovation Champion for NHS Fife and our patients and staff?

The benefits of my role as Clinical Innovation Champion are that I have access to patients, their families, frontline staff, and staff in more leadership and/or managerial positions. I am also exposed to the challenges faced by healthcare and the potential systemic barriers to overcoming such barriers. This means that I am in a position to define challenges and to seek innovative ideas to address such challenges from people who use and are the fabric of the healthcare system. Being also in a leadership position I can serve as the link to facilitate the approval and implementation of such ideas.

4. What advice would you give clinicians/Health professionals thinking about growing Innovation capacity and capability within their area or service?

I would advise clinicians or HCPs to embrace Innovation as a way forward. We often focus on 'improving the known', which is good – but we disproportionately spend little time 'inventing the new'. While we are always improving our services, this doesn't mean that we are taking our service forward; we need to focus on innovative, transformational change. Innovation is a way to find a solution to ongoing problems in your service. Innovation uses evidence and provides a way of testing something in the real world, in clinical practice. To grow capacity in your area, speak with the Innovation Team within RIK; reach out to colleagues who can help drive forward Innovative ideas, allowing you to make the changes needed in your service.

Clinical Research Champion - Spotlight



Phil Walmsley, Orthopaedics and Trauma

1. What motivates you to fit research into your busy clinical life?

Throughout medical training and into consultant practice, I have had a persistent interest in why we use the procedures or treatments we carry out. By devoting time to this activity, it helps develop my understanding and refine my clinical practice, all of which benefits patients.

2. Why did you apply for the Clinical Research Champion Award?

It provides an opportunity to promote and expand clinical research within NHS Fife as well build links with St Andrews University School of Medicine. In addition, I would like to offer help and support to staff who want to become more involved with clinical research at any level.

3. What will be the benefits of your role as Clinical Research Champion for NHS Fife and our patients and staff?

It is beyond doubt that hospitals with an active research culture also provide better care for the patients they treat. Involvement with clinical research assists clinicians with providing care using the most up to date knowledge and improves patient care. By promoting and expanding this activity across the board everyone benefits.

4. What advice would you give clinicians/Health professionals thinking about growing research capacity and capability within their area or service?

Please get in touch if you are interested in taking part in clinical research, regardless of whether you are simply interested in learning more about clinical research or want to develop a more active role. There is support available and you can draw on the experience of others who are doing this currently.

Clinical Research Champion - Spotlight



Helen Brotherton, Paediatrician and Neonatologist

1. What motivates you to fit research into your busy clinical life?

As a Paediatrician and Neonatologist I consider that research is essential to improve outcomes for newborns, children and their families. I first realised this when working in West Africa, faced with unacceptably high mortality rates and a need to identify feasible, effective interventions to improve postnatal newborn care. This is also true in Scotland, where there are still many unanswered questions about how to ensure optimal outcomes for our most vulnerable patients.

2. Why did you apply for the Clinical Research Champion Award?

I applied for the Clinical Research Champion Award to try and promote a positive research culture within the Paediatric Department, especially on the Special Care Baby Unit. We are actively engaged in research studies such as the multi-site FEED-1 trial, and it is important to have dedicated time for research to ensure we contribute high quality data and patient involvement.

3. What will be the benefits of your role as Clinical Research Champion for NHS Fife and our patients and staff?

I am involved in discussions with other NHS Research centres about involvement in multi-site neonatal trials and am promoting the research capabilities of NHS Fife Paediatric department to an external network. This not only adds to the reputation of NHS Fife as a research active health board, but brings potential benefits to staff through enhanced training and for patients via involvement in studies.

4. What advice would you give clinicians/Health professionals thinking about growing research capacity and capability within their area or service?

I would encourage health professionals to liaise closely with the Research & Development (R & D) department when planning local research. The R & D department are a wealth of research knowledge and expertise and are incredibly helpful during research set up. I would also strongly recommend engaging with the NIHR Associate PI Scheme, so that research interested colleagues can undergo formal training and mentorship and be a 'Research Champion' within your department.

12. Opportunities and Challenges

In order to ensure the successful implementation of the NHS Fife Research Strategy a series of annual 'priorities' have been selected from it, to be progressed. An update on identified priorities / challenges to be taken forward within RIK in 2021 -22 were as follows:

- **a.** R&D participation in the development of the medical and nursing clinical academic career development in Fife has been continued with discussion about the Associate PI Scheme and Clinical Research Practitioners.
- **b.** Preparations for a potential inspection by the Medicines and Healthcare products Regulatory Agency have continued.
- **c.** Details of research-related academic degree programmes and bursaries, encouraging staff to apply, have been circulated and there was a successful outcome in the NRS Career Researcher Fellowship 2022 Round for Dr Adeel Akhtar.
- **d.** Liaising closely with universities and other academic institutions to establish Research and Innovation projects, programmes and opportunities.
- **e.** We have continued to support and participate in the NHS Research Scotland (NRS) East Node, establishing joint documentation and actively participating in membership of groups and committees.
- **f.** We have continued to support the Health Informatics Centre (HIC), consolidating and adding to the joint Tayside and Fife HIC Database to facilitate service-based evaluations/research. We have developed a relationship with the South East Region data repository and asset, DataLoch.
- **g.** The infrastructure and processes required for NHS Fife to act as Sponsor for increasingly complex studies is being delivered.
- **h.** Greater activity and collaboration with academics, pharmaceutical and medical device companies are resulting in increased utilisation of the Clinical Research Facility.

Challenges for RIK IN 2021-2022

During 2021-2022 the Research, Innovation and Knowledge teams within NHS Fife have had to adapt to the impact of COVID-19 on the clinical research profile and priorities and changes to ways of working for all areas, as well as maintained recent advances, delivering: research activity focused on COVID-19 and Urgent Public Health studies; compliance with the research governance framework, monitoring 100% of Fife Sponsored studies; the adoption of a revised R&D Education Programme to online delivery for relevant programmes, the adaptation of Library Services to moving back from primarily online support to onsite, in person support. All teams have risen extraordinarily well to these challenges but they have had an impact on productivity, staff wellbeing and ability to address non-COVID-19 related priorities.

Opportunities for RIK in 2021-2022

One of our aims for 2021-2022 was to understand our own community better, to achieve this we developed and implemented a project involving a validated survey (the Research Capacity and Culture Tool (RCCT)) and including semi-structured interviews for participants willing to discuss their thoughts about Research and Innovation at NHS Fife. The survey also included some additional questions about the perceived impact of the COVID-19 pandemic on participation in Research. We received over 500 responses to the survey and approximately 60 staff volunteered to participate in an interview. The survey identified that lack of protected time was the main barrier to active research participation, that lack of visibility of current research and innovation activity impacted on perceived research culture and the perceived importance of research within NHS Fife. Interview participants provided some useful insights and excellent suggestions for greater connectivity with University partners, increasing the visibility of research and how research could be embedded across teams.

Outcomes from the RCCT Survey and interviews will contribute to informing our RIK strategy for 2022-25.

2021-2022 also saw the finalisation of our Chief Investigator and Principal Investigator Growth Strategy, with review and input from colleagues at the University of St Andrews. Dr Fleur Davey, one of our Senior Research Advisors and Senior Research Nurse has been the main driver for the development of this strategy and this document provides an important platform for the next phase of our capacity and capability growth.

R&D Strategy priorities (2021-2022)

All activities detailed in the prioritised plan of the R&D Strategy for 2021-2022 are ongoing or have been achieved.

13. Conclusions

Significant progress continues to be made implementing many aspects of the Research & Development Strategy, promoting the research and innovation agenda, developing a research and innovation culture and raising the profile of RIK, whilst continuing to build strong alliances with colleagues at HISES, the University of St Andrews and with the wider research, innovation and knowledge communities.

The teams within RIK rose to the continued challenge of the impact of the COVID-19 pandemic on daily operations and priorities and the Clinical Research Team, led by Karen Gray, are to be particularly commended on their agility, flexibility and high standards of professionalism in meeting the priorities of the Scottish Governments Urgent Public Health studies, restarting suspended studies and initiating new ones in a resource constrained environment, maintaining high quality and adherence to MHRA guidelines throughout.

The NHS Fife Executive Lead for RIK, RIK Director and Assistant RIK Director have ensured a significant raising of the profile of NHS Fife RIK and the promotion of Fife as an important, emerging player in the current, and future Scottish research agenda.

14. Publications

Research and related activity: publications by NHS Fife staff

Produced by NHS Fife Library and Knowledge Service
Fife.libraries2@nhs.scot; 01592 643355 ext 28790
NHS Fife Library and Knowledge Service

Abed Al Ahad, M., Demšar, U., <u>Sullivan, F.</u>, and Kulu, H. (2022). <u>'Air pollution and individuals'</u> <u>mental well-being in the adult population in United Kingdom: a spatial-temporal longitudinal study and the moderating effect of ethnicity.</u>', *PLoS ONE*, 17(3), e0264394.

Achison M., Adamson S., Akpan A., Aspray T., Avenell A., Band M.M., Bashir T., Burton L.A., Cvoro V., Donnan P.T., Duncan G.W., George J., Gordon A.L., Gregson C.L., Hapca A., Henderson E., Hume C., Jackson T.A., Kemp P., Kerr S., Kilgour A., Lyell V., Masud T., McKenzie A., McKenzie E., Patel H., Pilvinyte K., Roberts H.C., Rossios C., Sayer A.A., Smith K.T., Soiza R.L., Steves C.J., Struthers A.D., Sumukadas D., Tiwari D., Whitney J. and Witham M.D. (2022) LACE randomized controlled trial., Journal of Cachexia, Sarcopenia and Muscle, 16 Feb 2022.

Aiyegbusi O, FrletaGilchrist M, Traynor JP, Mackinnon B, Bell S, Hunter RW, Dhaun N, Kidder D, Stewart G, Joss N, Kelly M, Shah S, Dey V, <u>Buck K</u>, Stevens KI, Geddes CC, McQuarrie EP and Scottish Renal Biopsy Registry. (2021) 'ANCA-associated renal vasculitis is associated with rurality but not seasonality or deprivation in a complete national cohort study.', *RMD Open*, 7(2).

Akhtar M.A., Hoellwarth J.S., AlJawazneh S., Lu W., Roberts C. and Al Muderis M. (2021) <u>Transtibial osseointegration for patients with peripheral vascular disease: A case series of 6 patients with minimum 3-year follow-up.</u>, JB & JS Open Access, 6(2).

Arab A.Z., Conti A.A., Davey F., Khan F. and Baldacchino A. (2021) <u>'Relationship between cardiovascular disease pathology and fatal opioid and other sedative overdose: a post-mortem investigation and pilot study.'</u>, *Frontiers in Pharmacology*, Nov 2021.

Aslam T., Ghanchi F., Scanlon P., Steel D., Saad A., AzuaraBlanco A., <u>Styles C.</u>, McAuley D., Steel D.H., Ghanchi F.D., Eleftheriadis H., Efraimidis S., Acharya N., Waugh N., Mistry H., Maredza M., Sivaprasad S., Aslam T.M., Chong V., Bailey C., McNally C., Menon G., Cook J., Wang A., Sones W., Prior L., Lois N., Aldington S., Scanlon P.H. and Ivanova, K. (2021) <u>'Multimodal imaging interpreted by graders to detect re-activation of diabetic eye disease in previously treated patients: The emerald diagnostic accuracy study.', Health Technology Assessment, 25(32).</u>

Asselta R. ... Pollock K. et al (2021) 'X chromosome contribution to the genetic architecture of primary biliary cholangitis.', Gastroenterology, 160(7), pp.2483-2495.e26.

Ayalew M.B., Dieberg G., <u>Quirk F.</u> and Spark M.J. (2021 Jul 16) '<u>Development and validation of explicit criteria to identify potentially inappropriate prescribing for adults with type 2 diabetes mellitus.', Research In Social & Administrative Pharmacy.</u>

Ayantunde B., <u>Clyde D.</u> and <u>Ekatah, G.</u> (2021) <u>'Compliance with the Royal College of Surgeons of England guidelines on the surgical consenting process in the era of the COVID-19 pandemic.', British Journal of Surgery. Conference: Association of Surgeons of Great Britain and Ireland Congress. Virtual, 108(SUPPL 7), pp.140-141.</u>

Balfe, C., <u>Jacob, B.</u>, Hickey, N., Moore, D., Mulcahy, D. and Loo, B. (2021) <u>'Exploring diastolic pressure ratio to fractional flow reserve discordance and a hypothesis on tailoring diastolic pressure ratio cut-off values to improve diagnostic accuracy in the mid- and distal-LAD.', *International Journal of Cardiology. Heart & Vasculature*, 34, pp.100784.</u>

Balfour K., McCarthy A., Hey S.Y., Kousha O., Singano E., Mulwafu W., <u>Walker D.F.D.L.</u> and <u>Blaikie, A.</u> (2021) <u>'Comparative evaluation of a low-cost solar powered otoscope with a traditional device among health care workers in Malawi.'</u>, *Laryngoscope Investigative Otolaryngology*.

Bannon R., Stewart K. and Bannister, M. (2021) 'Non-technical skills for surgeons and ear nose and throat surgery.', Journal of Laryngology and Otology. Conference: ENT Scotland Winter Meeting. Stirling United Kingdom, 135(5), pp.1.

<u>Bannon R, Stewart KE</u> and <u>Bannister, M.</u> (2021 Feb 20) 'Non-technical skills in oral and maxillofacial and head and neck surgery: systematic review', *British Journal of Oral & Maxillofacial Surgery*. [No full text available]

Bell S, Campbell J, Lambourg E, Watters C, O'Neil M, Almond A, <u>Buck K</u>, Carr EJ, Clark L, Cousland Z, Findlay M, Joss N, Metcalfe W, Petrie M, Spalding E, Traynor JP, Sanu V, Thomson P, Methven S and Mark PB (2022) <u>'The impact of vaccination on incidence and outcomes of SARS-CoV-2 infection in patients with kidney failure in Scotland.'</u>, *Journal of the American Society of Nephrology*, Feb 2022.

Blackmur J., Chew E., Trail M., <u>Brodie K.</u>, Santoni N., Rodger F., Hamilton D., Gaba F., Randall S., <u>Chapman A.</u> and Laird A. (2021) <u>'Assessment of the lower ureteric excision technique</u> <u>associated oncological outcomes for upper urinary tract urothelial carcinoma: Retrospective, updated interim analysis from the Scottish renal cancer network.'</u>, European Urology, Conference: EAU21 Virtual Congress, 79(Suppl 1), pp.1099.

Blunsum A.E., Perkins J.S., Arshad A., Bajpai S., BarclayElliott K., BritoMutunayagam S., Brooks R., Chan T., Coates D.J.G., Corobana A., CrockerBuque T., Evans T.J., GordonBrown J., Hack B., Hiles H., Khanijau A., Lalwani S., Leong C., MacKay K., Macrae C., Martin B., Martin C.A., McKemey E., Nazareth J., Pan D., Scopazzini M., Simons D., Swinhoe S., Thomas J., Thorburn F., Walpole S., Warne E., Wilson R., MacConnachie A. and Ho, A. (2022) 'Evaluation of the implementation of the 4C mortality score in United Kingdom hospitals during the second pandemic wave.', Medrxiv, (posted Jan 04).

Boland M, <u>Aitken K</u>, Drummond G, Joyce B, de Beaux A, Tulloh B, Lamb PJ, <u>Robertson AG</u> and South East Scotland Bariatric, S. (2021 Nov 12) <u>'Patient preparation for and criteria to progress to bariatric surgery are not standardized across the UK: results of a national survey.', *Obesity Surgery*.</u>

Boland M., <u>Aitken K.</u>, Drummond G., Joyce B., Tulloh B., Lamb P. and <u>Robertson, A.</u> (2021) 'Medical weight management (tier 3) services are not standardised across the United <u>Kingdom: results of a national survey.'</u>, Obesity Surgery. Conference: 12th British Obesity and Metabolic Surgery Society Annual Scientific Meeting, BOMSS 2021.Oxford United Kingdom, 31(SUPPL 1), pp.S4.

<u>Boog K.</u> and <u>Cooper, M.</u> (2021) **'Long acting reversible contraception.'**, *Obstetrics, Gynaecology and Reproductive Medicine*, 31(7), pp.185-191. [No full-text available]

Boog, K. (2021) 'Managing the side effects of contraception', Journal of Prescribing Practice, 3(5), pp.184-188.

<u>Boog, K.</u> (2021) <u>'Managing the side effects of contraception'</u>, *Practice Nursing*, 32(6), pp.226-231

Boyd K., Canny A., Wall L., Christie A., Skipworth R., Graham L., <u>Bowden J.</u>, Stephen J., Hopkins S., Macpherson S., Atkins C. and Weir, C. (2021) <u>'Advance care planning in primary care for people with gastrointestinal cancers: a feasibility trial.'</u>, *Palliative Medicine, Conference abstracts from the 17th World Congress of the EAPC*, Sep 2021.

Bravo L. ... <u>Sgro A.</u>, <u>Rashid M.M.</u>, <u>Milne K.</u>, <u>McIntyre J.</u>, <u>Akhtar M.A.</u>, <u>Turnbull A.</u>, <u>Brunt A.</u>, <u>Stewart K.E.</u> et al (2021) <u>'Machine learning risk prediction of mortality for patients undergoing surgery with perioperative SARS-CoV-2: The COVIDSurg mortality score.', *British Journal of Surgery*, 19(4).</u>

Broderick C., <u>Watson L.</u> and Armon, M.P. (2021) <u>'Thrombolytic strategies versus standard anticoagulation for acute deep vein thrombosis of the lower limb.', Cochrane Database of Systematic Reviews, 2021(1). Article number CD002783. Date of Publication: 19 Jan 2021.</u>

Brown L., Agrawal U. and <u>Sullivan, F.</u> (2021). <u>'Using electronic medical records to identify</u> <u>potentially eligible study subjects for lung cancer screening with biomarkers.'</u>, *Cancers*, 13(21), 5449.

Brown, L., <u>Sullivan, F.</u>, Treweek, S., Haddow, A., Mountain, R., <u>Selby, C.</u> and Beusekom, M.v. (2021) <u>'Barriers, facilitators and pathways of a lung cancer screening (LCS) programme: COBELT co-design...14th European public health conference (virtual), public health futures in a changing world, November 10-12, 2021, European Journal of Public Health, 31(Suppl 3), pp.iii270-iii271.</u>

Brunt ACC, Gillespie M, Holland G, Brenkel I and Walmsley P (2022) 'Results of 'two-in-one' single-stage revision total knee arthroplasty for infection with associated bone loss:

Prospective five-year follow up.', Bone & Joint Open, 3(2), pp.107-113.

Buchanan, P. (2021) 'Recovery and restoration', Dermatological Nursing, 20(3), pp.8-8. [No full text available]

<u>Buchanan P.</u> (2021) **'Emergency steroid cards and guidance for dermatology nurses'**, *Dermatological Nursing*, 20(2), pp.8-8. [No full text available]

<u>Bulteel N.</u>, Henderson N., Parris V., Capstick R., Premchand N., Hunter E. and Perry, M. (2021) <u>'HIV testing in secondary care: a multicentre longitudinal mixed methods electronic survey of non-HIV specialist hospital physicians in south-east Scotland and northern England.', *Journal of the Royal College of Physicians of Edinburgh*, 51(3), pp.230-236.</u>

<u>Burns, J.</u>, Conway, D.I., Gnich, W. and Macpherson, L.M.D. (2021) 'A systematic review of interventions to link families with preschool children from healthcare services to community-based support', Journal of Public Health, 43(2), pp.e224-e235.

Caparrotta T.M., Greenhalgh A.M., Osinski K., Gifford R.M., Moser S., Wild S.H., Reynolds R.M., Webb D.J. and Colhoun, H.M. (2021) 'Sodium-glucose co-transporter 2 inhibitors (SGLT2i) exposure and outcomes in type 2 diabetes: A systematic review of population-based observational studies.', Diabetes Therapy, 12(4), pp.991-1028.

Caparrotta T.M., Templeton J.B., Clay T.A., Wild S.H., Reynolds R.M., Webb D.J. and <u>Colhoun</u>, <u>H.M.</u> (2021) <u>'Glucagon-like peptide 1 receptor agonist (GLP1RA) exposure and outcomes in type 2 diabetes: A systematic review of population-based observational studies.', *Diabetes Therapy*, 12(4), pp.969-989.</u>

Cezard, G., McHale, C.T., <u>Sullivan, F.</u>, Bowles, J. K. F. and Keenan, K. (2021) <u>'Studying trajectories of multimorbidity: a systematic scoping review of longitudinal approaches and evidence.', *BMJ Open*, 11(11), e048485.</u>

<u>Chan D.M.L.</u> and <u>Yalamarthi, S.</u> (2021) <u>'Surgical clinicians' views on the current admission</u> <u>booklet in NHS Fife.',</u> *British Journal of Surgery. Conference: Association of Surgeons of Great Britain and Ireland Congress. Virtual,* 108(SUPPL 7), pp.205.

Chan D.M.L. and Yalamarthi, S. (2021) 'Surgeons' views on documentations on resuscitation and escalation status in emergency surgical admissions.', British Journal of Surgery.

Conference: Association of Surgeons of Great Britain and Ireland Congress. Virtual, 108(SUPPL 7), pp.204-205.

<u>Chan D.M.L.</u> and <u>Yalamarthi, S.</u> (2021) <u>'Resuscitation and escalation status documentation in acute surgical admissions: A re-audit Feb 2020.',</u> British Journal of Surgery. Conference: 45th Association of Surgeons in Training International Surgical Conference, ASiT 2021. Virtual, 108(SUPPL 6), pp.42.

Chang Y.T., Kearns P.K.A., Newton J., Larraz J., Forbes D., Beswick E., Leighton D., Langlands G., Swingler R.J., Chandran S., Pal S., <u>Benvenga A.</u>, Bethell A., Byrne S., Artal J.C., Connor M., Craig G., Davenport R., Duncan C., Dolezal O., Flett M., Gorrie G., Hatrick J., <u>Lassak K.</u>, Lennox H., Marshall L., McEleney A., Millar K., Morrison I., <u>Murrie L.</u>, Preston J., Saravanan G., Simpson D., Starrs M., Stewart S., Stott G., Thomson D. and Webber, C. (2022) <u>'Motor neuron disease is not clustered or associated with socioeconomic deprivation in Scotland.'</u>, *Medrxiv*, 28 Feb 2022.

Chappell, F.M., <u>Crawford, F.</u>, Horne, M., Leese, G.P., <u>Martin, A.</u>, Weller, D., Boulton, A.J.M., Abbott, C., Monteiro-Soares, M., Veves, A. and Riley, R.D. (2021) <u>'Development and validation of a clinical prediction rule for development of diabetic foot ulceration: An analysis of data from five cohort studies.', *BMJ Open Diabetes Research & Care*, 9(1), pp.05.</u>

Clarke S, Skinner J, Drummond I and <u>Wood, M.</u> (2021) <u>'Twelve tips for using tactical decision</u> games to teach non-technical skills.', *Medical Teacher*, pp.1-7.

Clement N.D., Hall A.J., Kader N., Ollivere B., Oussedik S., Kader D.F., Deehan D.J., Duckworth A.D., Horton J., Murray E., Arnold D., Sripada S., McLean I., McDermott M., Johnston A.T., Gibson A., Clark M., Groom S., Kelly M., Jenkins P.J., Hazirika S., Walmsley P., Holloway N.J., Ohly N.E., Clarke J.V., Warwick C., Dall G.F., Kanya I., Patton J.T., Moran M., Scott C.E.H., Patton R.F., MacPherson G.J., Zaki S., Galloway R., Nightingale J., Afzal I., Field R.E., Pintar V., Chang J.S., Shenfine A., Reed M., Inman D., Atkinson K., Watson S. and Smith, K. (2021) 'The rate of COVID-19 and associated mortality after elective hip and knee arthroplasty prior to cessation of elective services in UK: A multicentre study conducted during March 2020.', *The Bone & Joint Journal*, 103-B(4), pp.681-688. [No full text available]

Clyde D., Li L., Swan R., McLean R. and Brown, L. (2021) 'Patient demographics and outcomes following emergency presentation with a groin hernia; a 15-year retrospective cohort study from the north of England.', British Journal of Surgery. Conference: Association of Surgeons of Great Britain and Ireland Congress. Virtual, 108(SUPPL 7), pp.25.

Clyde D., Li L., Swan R., McLean R. and Brown, L. (2021) 'Trends in management and outcomes for patients presenting acutely with inguinal hernia.', British Journal of Surgery. Conference: Association of Surgeons of Great Britain and Ireland Congress. Virtual, 108(SUPPL 7), pp.3.

<u>Clyde D.</u>, Li L., <u>Swan R.</u>, McLean R. and <u>Brown, L.</u> (2021) <u>Trends in investigation, management and patient outcomes following emergency presentation with groin hernia.',</u> British Journal of Surgery. Conference: 45th Association of Surgeons in Training International Surgical Conference, ASIT 2021. Virtual, 108(SUPPL 6), pp.159-160.

<u>Clyde D.</u>, Li L., <u>Swan R.</u>, McLean R. and <u>Brown, L.</u> (2021) <u>'Patient demographics and outcomes following acute presentation with an inguinal hernia; a 15-year retrospective cohort study from the north of England.', British Journal of Surgery. Conference: 45th Association of Surgeons in Training International Surgical Conference, ASIT 2021. Virtual, 108(SUPPL 6), pp.8.</u>

Coe J., McAndrew K. and Slater B. (2021) 'Transfer training: Ensuring ongoing education in a pandemic.', Anaesthesia. Conference: Trainee Conference 2021. Newcastle United Kingdom, 76(SUPPL 5), pp.95.

Colombo M., Shehni A.A., Thoma I., McGurnaghan S.J., Blackbourn L.A.K., Wilkinson H., Collier A., Patrick A.W., Petrie J.R., McKeigue P.M., Saldova R. and <u>Colhoun, H.M.</u> (2021) <u>'Quantitative levels of serum N-glycans in type 1 diabetes and their association with kidney disease.'</u>, *Glycobiology*, 31(5), pp.613-623.

Conway D.I., Culshaw S., Edwards M., Clark C., Watling C., Robertson C., Braid R., O'Keefe E., McGoldrick N., Burns J., Provan S., VanSteenhouse H., Hay J. and Gunson, R. (2021) 'SARS-COV-

2 positivity in asymptomatic-screened dental patients.', *Journal of Dental Research*, pp.220345211004849.

Cordell H.J. ... <u>Pollock K.</u> et al (2021) <u>'An international genome-wide meta-analysis of primary biliary cholangitis: Novel risk loci and candidate drugs.'</u>, *Journal of Hepatology*, 75(3), pp.572-581.

Crocamo, C., Bachi, B., Cioni, R. M., Schecke, H., Nieminen, I., Zabłocka-Żytka, L., Woźniak-Prus, M., Bartoli, F., Riboldi, I., Appleton, J. V., Bekaert, S., Zlatkute, G., Jouet, E., Viganò, G., Specka, M., Scherbaum, N., Paavilainen, E., <u>Baldacchino, A. M.</u> and Carrà, G. (2022). 'Professionals' digital training for child maltreatment prevention in the COVID-19 era: a pan-European model.', International Journal of Environmental Research and Public Health, 19(2), 885.

Cummins DM, Marshall C, Asfour L, Bryden A, Champagne C, Chiang YZ, Fairhurst D, Farrant P, Heal C, Holmes S, Joliffe V, Jones J, Kaur MR, Meah N, Messenger A, Mowbray M, Takwale A, Tziotzios C, Wade M, Wong S, Zaheri S and Harries, M. (2021 Nov 26) Frontal fibrosing alopecia survey of severity assessment methods in routine clinical practice and validation of the IFFACG measurement guidance.', Clinical & Experimental Dermatology.

Cunningham, K. B., Rogowsky, R. H., Carstairs, S. A., <u>Sullivan, F.</u> and Ozakinci, G. (2022). '<u>Social prescribing and behaviour change: proposal of a new behaviour change technique concerning the 'connection' step.', *Health Psychology and Behavioral Medicine*, 10(1), pp.121-123.</u>

Cunningham S.G., Urquhart W.M., Taylor A., <u>Jamieson F.</u>, <u>Robertson S.</u>, Neilan L., <u>Gillies N.</u>, <u>Brown K.</u>, MacDonald N. and <u>Chalmers, J.</u> (2021) <u>'Data linkage to reduce severe hypoglycaemia.'</u>, *Diabetic Medicine. Conference: Diabetes UK Professional Conference 2021. Online*, 38(SUPPL 1), pp.74.

Dave R.V., Kim B., Courtney A., O'Connell R., Rattay T., Taxiarchi V.P., Kirkham J.J., Camacho E.M., Fairbrother P., Sharma N., <u>Cartlidge C.W.J.</u>, Horgan K., McIntosh S.A., Leff D.R., Vidya R., Potter S., Holcombe C., Copson E., Coles C.E., Cutress R.I., Gandhi A. and Kirwan C.C. (2021) <u>'Breast cancer management pathways during the COVID-19 pandemic: Outcomes from the UK 'alert level 4' phase of the B-MaP-C study.'</u>, *British Journal of Cancer*, 124(11), pp.1785-1794.

Decano, A., Pettigrew, K. A., Sabiiti, W., <u>Sloan, D. J.</u>, Neema, S., Bazira, J., Kiiru, J., Onyango, H. A., Asiimwe, B. and Holden, M. (2021) '<u>Pan-resistome characterization of uropathogenic</u> <u>Escherichia coli and Klebsiella pneumoniae strains circulating in Uganda and Kenya, isolated from 2017-2018</u>.', *Antibiotics*, 10(12), 1547.

Diernberger K., <u>Bowden J.</u>, Fallon M.T., Luta X., Droney J., Lemmon E., Gray E., Ennis H., Marti J. and Hall, P.S. (2021) <u>'Patterns and costs of hospital-based cancer care in the last year of life: A national data linkage study in Scotland.'</u>, *Journal of Clinical Oncology, Conference*, 39(15 suppl), e18732.

Doggui R., Elsawy W., Conti A.A. and <u>Baldacchino, A.</u> (2021) '<u>Association between chronic psychoactive substances use and systemic inflammation: A systematic review and meta-analysis.', Neuroscience and Biobehavioral Reviews, 125, pp.208-220.</u>

Ekhtiari H., Zare-Bidoky M., Sangchooli A., Janes A.C., Kaufman M.J., Oliver J.A., Prisciandaro J.J., Wustenberg T., Anton R.F., Bach P., <u>Baldacchino A.</u>, ... Zilverstand A. (2022) 'A methodological checklist for fMRI drug cue reactivity studies: development and expert consensus.', *Nature Protocols*.

El-Osta, A., Alaa, A., Webber, I., Riboli Sasco, E., Bagkeris, E., Millar, H., Vidal-Hall, C. and Majeed, A. (2021) 'How is the COVID-19 lockdown impacting the mental health of parents of school-age children in the UK? A cross-sectional online survey.', BMJ Open, 11(5), pp.e043397.

Falconer R., <u>Semple C.M.</u>, Walker K.G., Cleland J. and Watson, A.J.M. (2021) <u>'Simulation for technical skill acquisition in open vascular surgery.'</u>, *Journal of Vascular Surgery*, 73(5), pp.1821-1827.e2.

Falconer R., <u>Semple C.</u>, Cleland J., Walker K. and Watson, A. (2021) <u>'Improving engagement with home-based surgical skills simulation.'</u>, British Journal of Surgery. Conference: 45th Association of Surgeons in Training International Surgical Conference, ASIT 2021. Virtual, 108(SUPPL 6), pp.218.

Fernando, F., Charalambous, L., <u>Patrick, L.</u> and Byrne, G. (2021) <u>'Readers' panel: Would better flexible working options help nurses recover from the pandemic?'</u>, *Nursing Standard*, pp.12-12.

Finucane A, Carduff E, Meade R, Doyle S, <u>Fenning S</u>, Cumming S, Hekerem D, Rahman F, Lugton J, Johnston B and Murray, S.A. (2021 Aug 16) <u>Palliative care research promotion in policy and practice: A knowledge exchange process.</u>, *BMJ Supportive & Palliative Care*.

Flook M, Jackson C, Vasileiou E, Simpson CR, Muckian Agrawal U, McCowan C, Jia Y, Murray JLK, Ritchie LD, Robertson C, Stock SJ, Wang X, Woolhouse MEJ, Sheikh A and Stagg, H.R. (2021) Informing the public health response to COVID-19: A systematic review of risk factors for disease, severity, and mortality.', BMC Infectious Diseases, 21(1), pp.342.

<u>Flynn M, Sheldon A</u> and <u>Bannister, M.</u> (2021) <u>'Trainee-trainer outcomes in mastoid surgery: a comparative study.', *Journal of Laryngology & Otology,* pp.1-17.</u>

Forget P, Patullo C, Hill D, Ambekar A, <u>Baldacchino A</u>, Cata J, Chetty S, Cox FJ, de Boer HD, Dinwoodie K, Dom G, Eccleston C, Fullen B, Jutila L, Knaggs RD, Lavand'homme P, Levy N, Lobo DN, PogatzkiZahn E, Scherbaum N, Smith BH, van Griensven J and Gilbert, S. (2022) <u>'System-level policies on appropriate opioid use, a multi-stakeholder consensus.'</u>, *BMC Health Services Research*, 22(1), pp.329.

Fraile-Navarro D., Azcoaga-Lorenzo A., Agrawal U., Jani B., Fagbamigbe A., Currie D.B., Baldacchino A.M., and Sullivan F. (2022) 'Development of an algorithm to classify Primary Care Electronic Health Records of alcohol consumption: experience using data-linkage from UK Biobank and Primary Care electronic health data sources.', BMJ Open, 12(2), e054376.

Glasmacher S.A., Larraz J., Mehta A.R., Kearns P.K.A., Wong M., Newton J., Davenport R., Gorrie G., Morrison I., Carod Artal J., Chandran S., Pal S., Thomson D., <u>Murrie L.</u>, Preston J., Chavada G., Swingler R., Leighton D., Duncan C., Connor M., Simpson D., Dolezal O., Lassak K.,

Benvenga A., Bethell A., Craig G., Cunningham L., Flett M., Hatrick J., Lennox H., Marshall L., McEleney A., Millar K., Byrne S., Stewart S., Storey D., Stott G., Thornton C. and Webber, C. (2021) 'The immediate impact of the COVID-19 pandemic on motor neuron disease services and mortality in Scotland.', Journal of Neurology, 268(6), pp.2038-2040.

Glasmacher S.A., Kearns P.K.A., Larraz J., Stirland L., Mehta A.R., Newton J., Weir C.J., Chandran S., Pal S., Davenport R., Thomson D., <u>Murrie L.</u>, Preston J., Chavada G., Swingler R.J., Leighton D., Morrison I., Gorrie G., Duncan C., Connor M., Simpson D., Dolezal O., Lassak K., Benvenga A., Artal J.C., Bethell A., Craig G., Cunningham L., Flett M., Hatrick J., Lennox H., <u>Marshall L.</u>, McEleney A., Millar K., Byrne S., Stewart S., Storey D., Saravanan G., Stott G. and Webber, C. (2021) <u>'Prevalence of multimorbidity and its impact on survival in people with motor neuron disease.'</u>, *European Journal of Neurology*, 28(8), pp.2756-2765.

Graham A., Coe J. and <u>Leeuwenberg I.</u> (2021) <u>'Get up and go: Anaesthetic technique and early mobilisation following elective total knee replacement.</u>', *Anaesthesia. Conference: Trainee Conference 2021. Newcastle, United Kingdom,* 76(SUPPL 5), pp.41.

Green, D.L., Keenan, K., Huque, S.I. ... <u>Sloan, D.J.</u> et al (2021) <u>'The role of multidimensional poverty in antibiotic misuse: a study of self-medication and non-adherence in Kenya, Tanzania and Uganda.', SSRN.</u>

Haggarty N., Kelly C., <u>Allen R.</u>, Grant R., Brindle W., Robertson A., OrpenPalmer J., Veryan J., Fineron P., Cahill A., <u>Jafferbhoy H.</u>, Seenan J.P., Koulaouzidis T., Arnott I. and Salunke, S. (2021) <u>'National microscopic colitis disease registry: Variations in patient journey.'</u>, *Gut. Conference: British Society of Gastroenterology's Campus 2021.Virtual*, 70(SUPPL 1), pp.A97-A98.

Hall, A.J. and <u>Dunstan, E.</u> (2022) <u>'Day-case total hip arthroplasty: A safe and sustainable approach to improve satisfaction and productivity, and meet the needs of the orthopaedic <u>population'</u>, *Orthopaedics & Trauma*, 36(1), pp.14-21.</u>

Hamilton WG, <u>Brenkel IJ</u>, Barnett SL, Allen PW, Dwyer KA, Lesko JP, Kantor SR and Clatworthy MG (2021) <u>'Comparison of existing and new total knee arthroplasty implant systems from the same manufacturer: A prospective, multicenter study.', *JAAOS: Global Research and Reviews*, 5(12), e21.00136.</u>

Hancox, J., Ayling, K., Bedford, L., Vedhara, K., Roberston, J. F. R., Young, B., das Nair, R., <u>Sullivan, F. M.</u>, Schembri, S., Mair, F. S., Littleford, R., and Kendrick, D. (2022). <u>'Psychological impact of lung cancer screening using a novel antibody blood test followed by imaging: the <u>ECLS randomized controlled trial.'</u>, *Journal of Public Health*, 14 Mar 2022.</u>

Harvey P.R., ... <u>Noaman I.</u>, ... <u>Driscoll P.</u> et al (2021) 'Pancreatic enzyme replacement therapy in patients with pancreatic cancer: A national prospective study.', *Pancreatology*, 21(6), pp.1127-1134. [No full text available]

Hazelton C., Mcgill K., Pollock A., Campbell P., Thomson K., <u>Chung C.</u>, Dorris L., Gillespie D., Hunter S., Nicolson D., Williams L. and Brady, M. (2021) <u>'Perceptual disorders after stroke intervention evidence review (PIONEER): a scoping review.'</u>, *European Stroke Journal, Conference*, 6(1 Suppl), pp.3-513.

Hemmati Z, Conti AA and <u>Baldacchino, A.</u> (2022) <u>'Ophthalmic outcomes in children exposed to opioid maintenance treatment in utero: A systematic review and meta-analysis', Neuroscience & Biobehavioral Reviews, 136, pp.104601.</u>

Henderson P, Quasim T, Shaw M, MacTavish P, Devine H, Daniel M, Nicolson F, O'Brien P, Weir A, Strachan L, Senior L, Lucie P, Bollan L, Duffty J, Hogg L, Ross C, Sim M, Sundaram R, Iwashyna TJ and McPeake, J. (2022 Mar 21) <u>'Evaluation of a health and social care programme to improve outcomes following critical illness: A multicentre study.'</u>, Thorax, 21 March 2022.

Hides K., Robertson E. and <u>Tydeman, G.</u> (2021) <u>'Successful reduction of recurrent uterine</u> <u>incarceration resulting in livebirth after previous stillbirth.</u>', *BJOG: An International Journal of Obstetrics and Gynaecology. Conference: Royal College of Obstetricians and Gynaecologists World Congress, RCOG 2021. Virtual,* 128(SUPPL 2), pp.103-104.

Hoellwarth JS, Tetsworth K, <u>Akhtar, MA</u> and Al Muderis, M. (2021) <u>'Transcutaneous</u> <u>osseointegration for amputees: lessons from the past of relevance to the future.'</u>, *Bone & Joint Research*, 10(10), pp.690-692.

Hoellwarth JS, Tetsworth K, Akhtar, MA and Al Muderis, M. (2022) <u>'The clinical history and basic science origins of transcutaneous osseointegration for amputees'</u>, Advances in Orthopaedics, 2022, pp.7960559.

Hohn A., Jeyam A., Caparrotta T.M., McGurnaghan S.J., O'Reilly J.E., Blackbourn L.A.K., McCrimmon R.J., Leese G.P., McKnight J.A., Kennon B., Lindsay R.S., Sattar N., Wild S.H., McKeigue P.M. and Colhoun, H.M. (2021) 'The association of polypharmacy and high-risk drug classes with adverse health outcomes in the Scottish population with type 1 diabetes.', Diabetologia, 64(6), pp.1309-1319.

Hollander K, Klower M, Richardson A, Navarro L, Racinais S, Scheer V, <u>Murray A</u>, Branco P, Timpka T, Junge A and Edouard, P. (2021 Aug 01) <u>'Apparent temperature and heat-related illnesses during international athletic championships: A prospective cohort study.', *Scandinavian Journal of Medicine & Science in Sports*.</u>

Hunter J.E., Phillips M.E., Walker F.D.L. and Busby D. (2021) 'Post-viral olfactory dysfunction treated with acupuncture.', Acupuncture in Medicine. [No full text available]

Huppler L, <u>Robertson AG</u>, Wiggins T, Hollyman M and Welbourn, R. (2022) **'How safe bariatric surgery is - an update on perioperative mortality for clinicians and patients',** *Clinical Obesity*, e12515. [No full text available]

Jellett, R. and Muggleton, J. (2022) <u>Implications of applying "clinically significant impairment"</u> to autism assessment: Commentary on six problems encountered in clinical practice, Journal of Autism & Developmental Disorders, 52(3), pp.1412-1421.

Jeyam A., Gibb F.W., McKnight J.A., Kennon B., McGurnaghan S.J., Blackbourn L.A.K., Hatam S., McKeigue P.M. and Colhoun, H.M. (2021) 'Reductions in HbA1c following flash monitor initiation in people with type 1 diabetes are not associated with worsening diabetic retinopathy: Preliminary analyses from a nationwide observational study in Scotland.',

Diabetic Medicine. Conference: Diabetes UK Professional Conference 2021. Online, 38(SUPPL 1), pp.80-81.

Jeyam A., Gibb F.W., McKnight J.A., Kennon B., O'Reilly J.E., Caparrotta T.M., Hohn A., McGurnaghan S.J., Blackbourn L.A.K., Hatam S., McCrimmon R.J., Leese G., Lindsay R.S., Petrie J., Chalmers J., Philip S., Wild S.H., Sattar N., McKeigue P.M. and Colhoun, H.M. (2021) 'Marked improvements in glycaemic outcomes following insulin pump therapy initiation in people with type 1 diabetes: A nationwide observational study in Scotland.', Diabetologia, 64(6), pp.1320-1331.

Jeyam A, Gibb FW, McKnight JA, O'Reilly JE, Caparrotta TM, Hohn A, McGurnaghan SJ, Blackbourn LAK, Hatam S, Kennon B, McCrimmon RJ, Leese G, Philip S, Sattar N, McKeigue PM, Colhoun HM and Scottish Diabetes Research Network Epidemiology Group (2021 Oct 07) 'Flash monitor initiation is associated with improvements in HbA_{1c} levels and DKA rates among people with type 1 diabetes in Scotland: a retrospective nationwide observational study.', Diabetologia, Oct 2021.

Jones RA, Mortimer JW, Thompson CSG, ClarkStewart S, Hogg G, Keni S, McCulloch V, Alashkham A, Dhumale S, Maclean SJ, Vella M, Findlater GS, Sinclair DW, <u>Yalamarthi S</u> and Gillingwater, T.H. (2021) <u>'Improving surgical training: establishing a surgical anatomy programme in Scotland.', International Journal of Surgery</u>, 96, 106172.

Karabayas M., Brock J., Rutherford M., Fordyce G., Fluck N., Kardash S., Moran L., Richmond R., Tan A., Sznajd J., Lambie S., Khalid M., Else S., Davies C.A., <u>Duncan M.</u>, <u>McLaren J.</u>, Duncan S., Murphy S., Hasan F. and Basu, N. (2021) <u>'Variation in immunosuppressant impact on severe COVID-19 outcome: Preliminary results from the COVID-19 Scottish Registry of Autoimmune Rheumatic diseases (SCAR-19).', Rheumatology (United Kingdom). Conference: Annual Conference of the British Society for Rheumatology, BSR 2021. Virtual, 60(SUPPL 1), pp.14-15.</u>

Kousha, O., Staniszewski, B., <u>Ulloa, J.L.</u>, Tarafdar, S., Ellis, J. and <u>Blaikie, A.</u> (2021 Jun 11) <u>'Frugal retinal laser training simulation eyes.'</u>, *Eye*.

Kousha O, Ganesananthan S, Shahin B, Ellis J and <u>Blaikie</u>, <u>A</u> (2021 Dec 23) <u>'Comparative</u> evaluation of a new frugal binocular indirect ophthalmoscope.', *Eye*.

<u>Kousha O.</u>, Tarafdar S., and Ellis J. (2022) '<u>A mathematical determination of foveal attachment in primary rhegmatogenous retinal detachment when obscured by bullous retina</u>.', *International Journal of Retina and Vitreous*, 8, 10.

Koutsavlis, I. (2021) 'Progressive multifocal leukoencephalopathy in multiple myeloma. A literature review and lessons to learn.', Annals of Hematology, 100(1) January 2021.

Kremel D., Siatos D. and Al Jaafari, F. (2021) 'Ureteroscopy in the day case setting: It's worth it! Retrospective single surgeon outcomes analysis during service relocation (inpatient to daycase) in a DGH.', Journal of Clinical Urology, 14(6), pp.465-469. [No full text available]

Lois N., Cook J.A., Wang A., Aldington S., Mistry H., Maredza M., McAuley D., Aslam T., Bailey C., Chong V., Ganchi F., Scanlon P., Sivaprasad S., Steel D.H., <u>Styles C.</u>, AzuaraBlanco A., Prior L., Waugh N., Saad A., VaideanuCollins D., McNally C., Jackson A., Rice R., Barbour C., Bell L.,

Ghanchi F.D., Madanat Z., Menon G., Chandran M., Mathews S., Galal M., Eleftheriadis H., Efraimidis S., Cook J., Sones W., Acharya N., Fatum S., Savage J., Scanlon P.H., Ivanova K., Aslam T.M. and Ali, Z. (2021) <u>'Evaluation of a new model of care for people with complications of diabetic retinopathy: The EMERALD study.'</u>, *Ophthalmology*, 128(4), pp.561-573.

Lois, N., Cook, J., Wang, A., Aldington, S., Mistry, H., Maredza, M., McAuley, D., Aslam, T., Bailey, C., Chong, V., Ghanchi, F., Scanlon, P., Sivaprasad, S., Steel, D., Styles, C., Azuara-Blanco, A., Prior, L. and Waugh, N. (2021) 'Multimodal imaging interpreted by graders to detect reactivation of diabetic eye disease in previously treated patients: The EMERALD diagnostic accuracy study.', Health Technology Assessment, 25(32), pp.1-104.

Lott C., Truhlar A., <u>Alfonzo A.</u>, Barelli A., GonzalezSalvado V., Hinkelbein J., Nolan J.P., Paal P., Perkins G.D., Thies K.C., Yeung J., Zideman D.A., Soar J., Khalifa G.E.A., Alvarez E., Barelli R., Bierens J.J.L.M., Boettiger B., Brattebo G., Browne D., Brugger H., Darocha T., Deakin C.D., Dunning J., HunyadiAnticevic S., Koster R.W., Lockey D.J., Pasquier M. and Schmitz, J. (2021) <u>'European resuscitation council guidelines 2021: Cardiac arrest in special circumstances.'</u>, *Resuscitation*, 161, pp.152-219.

Lott, C., Truhlar, A., <u>Alfonzo, A.</u>, Barelli, A., Gonzalez-Salvado, V., Hinkelbein, J., Nolan, J.P., Paal, P., Perkins, G.D., Thies, K., Yeung, J., Zideman, D.A. and Soar, J. (2021) <u>'[Cardiac arrest under special circumstances]</u>', *Notfall & Rettungsmedizin*, 1-77.

Luta, X., Ottino, B., Hall, P., <u>Bowden, J.</u>, Wee, B., Droney, J., Riley, J. and Marti, J. (2021) <u>'Evidence on the economic value of end-of-life and palliative care interventions: A narrative review of reviews.</u>', *BMC Palliative Care*, 20(1), pp.89.

Luta X., Diernberger K., <u>Bowden J.</u>, Droney J., Hall P.S. and Marti, J. (2021) <u>'Patterns and costs of hospital-based cancer care in the last year of life: A national data linkage study in England.', *Journal of Clinical Oncology, Conference*, 39(15 SUPPL), 2021.</u>

Luta X., Diernberger K., Archer S., Williams I., Kilkenny C., <u>Bowden J.</u>, Droney J., Hall P.S. and Marti, J. (2021) <u>'Understanding value in end-of-life care: a mix-methods study of population-based data and people in England and Scotland.'</u>, *Palliative Medicine, Conference 17th World Congress of the EAPC*, Sep 2021.

MacFarlane H., Baldock T.E., McLean R.C. and <u>Brown L.R.</u> (2021) <u>'Patient outcomes following emergency bowel resection for inflammatory bowel disease and the impact of surgical subspecialisation in the north of England: A retrospective cohort study.', World Journal of Surgery, 45(5), pp.1376-1389.</u>

MacIsaac F. and McGowan, B. (2021) 'Where have all the heart attacks gone? evaluation of the impact of COVID-19 on patient numbers presenting with acute myocardial infarction.', Scottish Medical Journal. Conference: 30th Annual General Meeting of the Scottish Cardiac Society. Virtual, 66(3), pp.NP21-NP22.

MacLeod C., Mowat C., Winter J., Todd J., Ray C., Maxwell F., McKinley A., Noble C., Collins P., Wilson L., <u>Cruikshank N.</u>, Hendry P., Leggett G., Fletcher J., Weber B., Moug S. and Watson, A.J.M. (2021) <u>'Follow-up of small and diminutive colonic polyps - how to balance the risks in the COVID-19 era.'</u>, *Colorectal Disease*.

Madar J., Roehr C.C., <u>Ainsworth S.</u>, Ersda H., Morley C., Rudiger M., Skare C., Szczapa T., te Pas A., Trevisanuto D., Urlesberger B., Wilkinson D. and Wyllie, J.P. (2021) <u>'[Newborn resuscitation and support of transition of infants at birth: European resuscitation council guidelines 2021]'</u>, *Notfall Und Rettungsmedizin*, 24(4), pp.603-649.

Madar J., Roehr C.C., <u>Ainsworth S.</u>, Ersdal H., Morley C., Rudiger M., Skare C., Szczapa T., te Pas A., Trevisanuto D., Urlesberger B., Wilkinson D. and Wyllie, J.P. (2021) <u>'European resuscitation council guidelines 2021: Newborn resuscitation and support of transition of infants at birth.'</u>, *Resuscitation*, 161, pp.291-326.

Madurasinghe VW, Bower P, Eldridge S, Collier D, Graffy J, Treweek S, Knapp P, Parker A, Rick J, Salisbury C, Man Torgerson D, Sheridan R, <u>Sullivan F</u>, Cockayne S and Dack, C. (2021) <u>'Can we achieve better recruitment by providing better information? Meta-analysis of 'studies within a trial' (SWATs) of optimised participant information sheets.', *BMC Medicine*, 19(1), pp.218.</u>

Main A., Pak U., <u>Allison J.</u> and Campbell, A. (2021) <u>'Obstetric and perinatal outcomes among ethnic and cultural groups in a Scottish tertiary centre hospital.</u>', *BJOG: An International Journal of Obstetrics and Gynaecology. Conference: RCOG National Trainees Conference, NTC 2021. Virtual,* 128(SUPPL 1), pp.139.

Mariappan P., Johnston A., Trail M., Hamid S., Hollins G., <u>Dreyer B.A.</u>, Ramsey S., Padovani L., Garau R., Guerrero Enriquez J., <u>Simpson H.</u>, Hasan R., Sharpe C., Thomas B.G., Bhatt J., Ahmad I., Nandwani G.M., Chaudhry A., Boden A., Khan R.S., Maresca G., Dimitropoulos K., Graham C., Hendry D., Paramananthan S.L., Loy G., Baker S.C., Grigor K.M. and Smith G. (2022) 'Ceasing surveillance in low risk non-muscle invasive bladder cancer after only 12 months of being recurrence free is un-safe: A validation study from the Scottish bladder cancer quality performance indicator (QPI) programme.', *European Urology, Conference: EAU22 - 37th Annual EAU Congress*, 81(Suppl 1), pp.s244-s245. [No full text available]

Mariappan P., Johnston A., Trail M., Hamid S., Hollins G., <u>Dreyer B.A.</u>, Ramsey S., Padovani L., Garau R., Guerrero Enriquez J., <u>Simpson H.</u>, Hasan R., Sharpe C., Thomas B.G., Bhatt J., Ahmad I., Nandwani G.M., Chaudhry A., Boden A., Khan R.S., Maresca G., Dimitropoulos K., Graham C. and Hendry D. (2022) 'Multicentre real world long-term outcomes in 2773 primary non-muscle invasive bladder cancer (NMIBC) patients managed within the Scottish bladder cancer quality performance indicator programme.', *European Urology, Conference: EAU22 - 37th Annual EAU Congress*, 81(Suppl 1), pp.s242-s243. [No full text available]

Marks B., McLean R., <u>Brown L.</u> and O'Loughlin, P. (2021) <u>'Ischaemic bowel in the north of England: trends in management approach and patient outcomes.'</u>, Colorectal Disease, Conference: Annual Meeting of the Association of Coloproctology of Great Britain and Ireland, 23(SUPPL 1), pp.41.

Marks B., McLean R., <u>Brown L.</u> and O'Loughlin, P. (2021) <u>'Ischaemic bowel in the north of England: Trends in management approach and patient outcomes.'</u>, *British Journal of Surgery. Conference: 45th Association of Surgeons in Training International Surgical Conference, ASIT 2021. Virtual*, 108(SUPPL 6), pp.4.

Martin A, Nzelu D, Briley A, <u>Tydeman G</u> and Shennan, A. (2022) '<u>A comparison of technicques</u> to disimpact the fetal head on a second stage caesearean simulator.', *BMC Pregnancy & Childbirth*, 22(1), pp.34.

Martin S, <u>Blacklock C</u>, McBride M, Quinn J and Hill, C. (2021) <u>'Throat packs in cleft and craniofacial surgery.', Journal of Craniofacial Surgery</u>, 32(3), pp.952-955.

Martins, I., Louwen, F., Ayres-de-Campos, D. and Mahmood, T. (2021) **'EBCOG position statement on COVID-19 vaccination for pregnant and breastfeeding women'**, *European Journal of Obstetrics, Gynecology, & Reproductive Biology,* 262, pp.256-258. [No full-text available]

Mbelele, P. M., Sabiiti, W., Heysell, S. K., Sauli, E., Mpolya, E. A., Mfinanga, S., Gillespie, S. H., Addo, K. K., Kibiki, G., Sloan, D. J., and Mpagama, S. G. (2022). 'Use of a molecular bacterial load assay to distinguish between active TB and post-TB lung disease.', International Journal of Tuberculosis and Lung Disease, 26(3), pp.276-278.

McBriar D., <u>Jacob B.</u> and Benson, G. (2021) <u>'The riete score: a useful screening tool for occult malignancy in VTE and STP?'</u>, Research and Practice in Thrombosis and Haemostasis, Conference 2021, 5(S2).

McCormack, B., Cable, C., Cantrell, J., Bunce, A., Douglas, J., Fitzpatrick, J., Forsyth, N., Gallacher, J., <u>Grant, J.</u>, Griffin, L., Guinnane, C., Hollis, K., Kernaghan, K., <u>Kinninmonth, M.</u>, Mason, F., Maxwell, G., McIntyre, P., Mullay, S., Ridge, G. and Taylor, J. (2021) <u>'The Queen's Nurses collaborative inquiry - understanding individual and collective experiences of transformative learning'</u>, *International Practice Development Journal*, 11(1), pp.1-18.

McDougall M. and Ridley, E. (2021) 'Junior doctors' attitudes to fluid prescribing in NHS Fife.', Scottish Medical Journal. Conference: Scottish Renal Association Medical and Nursing Conference. Virtual, 66(2), pp.NP13-NP14.

McDougall M, Guthrie B, Doyle A, <u>Timmins A</u>, Bateson M, <u>Ridley E</u>, Drummond G and Vadiveloo T (2022) <u>'Introducing NICE guidelines for intravenous fluid therapy into a district general <u>hospital.'</u>, *BMJ Open Quality*, 11(1), e001636.</u>

McEachan, J.E. (2022) 'What's new in carpal tunnel syndrome? Commentary and personal opinions.', Journal of Hand Surgery: European Volume, 25 Feb 2022.

McGovern D., Lees J., Kidder D., Smith J., Traynor J., Dhaun N., Hunter R., Joss N., Kelly M., MacKinnon M., Cousland Z., Shiell K., Lim M., Geddes C.C., McQuarrie E. and Stevens, K. (2021) Predicting outcomes in ANCA associated vasculitis: The complete Scottish experience., Nephrology Dialysis Transplantation. Conference: 58th ERA-EDTA Congress. Virtual, 36(SUPPL 1), pp.45.

McGovern J., Young J., <u>Brown L.</u> and McLean, R. (2021) <u>'The impact of surgical subspecialisation on patient outcomes in those admitted with gallstone disease in the north <u>of England: A retrospective cohort study.'</u>, *British Journal of Surgery. Conference: Association of Surgeons of Great Britain and Ireland Congress. Virtual*, 108(SUPPL 7), pp.41.</u>

McGurnaghan, S.J., McKeigue, P.M., Read, S.H., Franzen, S., Svensson, A., Colombo, M., Livingstone, S., Farran, B., Caparrotta, T.M., Blackbourn, L.A.K., Mellor, J., Thoma, I., Sattar, N., Wild, S.H., Gudbjornsdottir, S., Colhoun, H.M. and Swedish National Diabetes Register and the Scottish Diabetes Research Network Epidemiology Group (2021 Jun 09) 'Development and validation of a cardiovascular risk prediction model in type 1 diabetes.', Diabetologia.

McPeake, J., Shaw, M., MacTavish, P., Blyth, K., Devine, H., Fleming, G., Gemmell, L., Griffin, J., Grose, P., Henderson, M., Henderson, P., Hogg, L., King, K., McInnes, I., O'Brien, P., Puxty, K., Rainey, C., Sharma, V., Sim, M., Strachan, L., Siebert, S. and Quasim, T. (2021 Jun 30) Longterm outcomes following severe COVID-19 infection: A multicenter cohort study of family member outcomes.', Annals of the American Thoracic Society.

McPeake J, Shaw M, MacTavish P, Blyth KG, Devine H, Fleming G, Griffin J, Gemmell L, Grose P, Henderson M, Henderson P, Hogg L, King K, McInnes I, O'Brien P, Puxty K, Rainey C, Sharma V, Sim M, Strachan L, Siebert S and Quasim, T. (2021) Long-term outcomes following severe COVID-19 infection: A propensity matched cohort study. BMJ Open Respiratory Research, 8(1), pp.12.

McSorley S.T., Digby J., <u>Clyde D.</u>, <u>Cruickshank N.</u>, Burton P., <u>Barker L.</u>, Strachan J.A., Fraser C.G., Smith K., Mowat C., Winter J. and Steele R.J.C. (2021) <u>'Yield of colorectal cancer at colonoscopy according to faecal haemoglobin concentration in symptomatic patients referred from primary care.', *Colorectal Disease*, 23(7), pp.1615-1621.</u>

Messinis IE, Messini CI, Anifandis GM, Daponde A, Mukhopadhyay S and Mahmood, T. (2021) **'EBCOG position statement: inequality in fertility treatment in people of colour.',** *European Journal of Obstetrics, Gynecology, & Reproductive Biology,* 266, pp.74-76. [No full text available]

Michalova L., <u>Dhasmana D.J.</u>, Chaudhuri R., Yang J.F., Smith S.J. and Morris, P.G. (2021) <u>'The role of generalised anxiety in asthma outcomes: Experiential avoidance and self-efficacy as mediators.', *Thorax.Conference: British Thoracic Society Winter Meeting 2021. Online,* 76(SUPPL 1), pp.A127-A128.</u>

Mohaddes Ardabili, H., Akbari, A., Rafei, P., Butner, J., Khan, R., Khazaal, Y., Arab, A.Z., Qazizada, M.R., Al-Ansari, B., and <u>Baldacchino, A.M.</u> (2021) <u>'Tramadol, captagon and khat use in the Eastern Mediterranean Region: opening Pandora's box.', *BJPsychInternational*, pp.1-5.</u>

Morrison S. and Brunt, A. (2021) 'The pen is mightier than the sword; but the keyboard may be better.', British Journal of Surgery. Conference: 45th Association of Surgeons in Training International Surgical Conference, ASIT 2021. Virtual, 108(SUPPL 6), pp.62.

Morrow A, Walker K, CalderMacPhee N and Ozakinci G (2022) <u>'The active ingredients of physical activity and / or dietary workplace-based interventions to achieve weight loss in overweight and obese healthcare staff: A systematic review', Journal of Behavioral Medicine, 7 Feb 2022.</u>

Murgitroyd E., Yao X., Kerssens J., Walker J. and Wild, S. (2021) Mortality following major lower extremity amputation in people with and without diabetes in Scotland 2004-2013., British Journal of Surgery. Conference: Association of Surgeons of Great Britain and Ireland Congress. Virtual, 108(SUPPL 7), pp.58.

Murgitroyd E., Yao X., Kerssens J., Walker J. and Wild, S. (2021) 'Mortality following major lower extremity amputation in people with and without diabetes in Scotland 2004-2013.', British Journal of Surgery. Conference: 45th Association of Surgeons in Training International Surgical Conference, ASiT 2021. Virtual, 108(SUPPL 6), pp.292-293.

Murray SC, Thompson CS, Walker DL and Bannister, M. (2021) <u>'Extreme laryngeal candidiasis:</u> Airway obstruction.', BMJ Case Reports, 14(8).

Musisi, E., Sessolo, A., Kaswabuli, S., Zawedde, J., Byanyima, P., Kasiinga, S., Sanyu, I., Uwimaana, E., Walimbwa, S., Ola, J., Ssengooba, W., Sekaggya, C., Joloba, M. L., Worodria, W., Huang, L., Gillespie, S. H., <u>Sloan, D. J.</u> and Sabiiti, W. (2022). '<u>High Mycobacterium tuberculosis bacillary loads detected by tuberculosis molecular bacterial load assay in patient stool: a potential alternative for nonsputum diagnosis and treatment response monitoring of tuberculosis.', *Microbiology Spectrum*, 10(1), e02100-21.</u>

Oag EC, Stirling PHC and McEachan, J.E. (2021 Dec 02) 'Long-term outcomes following surgical repair of acute injuries of the thumb metacarpophalangeal joint ulnar collateral ligament.', Hand Surgery and Rehabilitation. [No full text available]

O'Dowd E, <u>Mackenzie J</u> and Balata, H. (2021) <u>Lung cancer for the non-respiratory physician.</u>, *Clinical Medicine*, 21(6), pp.e578-e583.

O'Reilly J.E., Jeyam A., Caparrotta T.M., Mellor J., Hohn A., McKeigue P.M., McGurnaghan S.J., Blackbourn L.A.K., McCrimmon R., Wild S.H., Petrie J.R., McKnight J.A., Kennon B., <u>Chalmers J.</u>, Phillip S., Leese G., Lindsay R.S., Sattar N., Gibb F.W. Colhoun H.M. and Scottish Diabetes Research Network Epidemiology Group (2021 Jul 08) <u>'Rising rates and widening socioeconomic disparities in diabetic ketoacidosis in type 1 diabetes in Scotland: A nationwide retrospective cohort observational study.', *Diabetes Care*.</u>

PairoCastineira E....<u>MacMahon M., Fowler S.</u>, <u>McGregor A.</u>, <u>Coventry T.</u> et al (2021) <u>'Genetic mechanisms of critical illness in COVID-19.'</u>, *Nature*, 591(7848), pp.92-98.

Palmateer NE, Dickson E, Furrie E, Godber I, Goldberg DJ, Gousias P, Jarvis L, Mathie L, Mavin S, McMenamin J, McNeilly TN, Murcia P, Murray J, Reid G, Robertson C, Templeton K, von Wissmann B, Wallace LA, Waugh C and McAuley, A. (2021) 'National population prevalence of antibodies to SARS-CoV-2 in Scotland during the first and second waves of the COVID-19 pandemic.', Public Health, 198, pp.102-105.

Parkes, T., Foster, R., McAuley, A., Stevenson, D., Matheson, C. and <u>Baldacchino, A. M.</u> (2022). '<u>Chronic pain, prescribed opioids and overdose risk: a qualitative exploration of the views of <u>affected individuals and family members</u>.', *Drugs: Education, Prevention and Policy*.</u>

Parmar A, Macluskey M, Mc Goldrick N, Conway DI, Glenny AM, Clarkson JE, Worthington HV and Chan, K.K. (2021) <u>'Interventions for the treatment of oral cavity and oropharyngeal cancer: Chemotherapy.'</u>, Cochrane Database of Systematic Reviews, Issue 12, Art. No. CD006386.

Pascall D.J., Mollett G., Vink E., Shepherd J.G., Williams T., Wastnedge E., Blacow R., Hughes J., Robertson D.L., Lycett S., <u>Bulteel N.</u>, Campbell R., Campbell A., Clifford S., Davis C., da Silva

Filipe A., Fjodorova L., <u>Forrest R.</u>, Goldstein E., Gunson R., Haughney J., Holden M.T.G., Honour P., James E., Lewis T., McHugh M., Onishi Y., Parcell B., Sakka N.E., Shabaan S., Smollett K., Templeton K. and Thomson, E.C. (2021) <u>'The SARS-CoV-2 Alpha variant caused increased clinical severity of disease in Scotland: A genomics-based prospective cohort analysis.', *Medrxiv*, 24 Aug 2021.</u>

Patrick, L. (2021) 'A focus on recruiting men panders to bogus inequality concerns:

Recruitment campaigns that are aimed at men hijack worries about under-representation and benefit society's most advantaged group', Nursing Standard, , pp.22-22.

Patrick, L. (2021) 'Misogyny thrives when women are silenced: Sarah Everard's murder has exposed the grim reality for many women online and in the workplace – and nursing is not immune', Nursing Standard, pp.11-11.

Pietropaolo A, Geraghty RM, Veeratterapillay R, Rogers A, Kallidonis P, Villa L, Boeri L, Montanari E, Atis G, Emiliani E, Sener TE, <u>Al Jaafari F</u>, Fitzpatrick J, Shaw M, Harding C and Somani, B.K. (2021) 'A machine learning predictive model for post-ureteroscopy urosepsis needing intensive care unit admission: A case-control YAU endourology study from nine European centres.', *Journal of Clinical Medicine*, 10(17):3888.

Plevris N., Robertson A., Fulforth J., Hall R., Jenkinson P., Campbell I., Kane C., Arnott I., Sutherland D., Veryan J., Saunders J., Lam W., Naismith G., Chuah C., Kelly C., Watts D., Gaya D., Macdonald J., Sennan J.P., <u>Jafferbhoy H.</u>, Mowat C., Bain G., Jones G. and Lees, C. (2021) 'Real-world effectiveness and safety of ustekinumab for the treatment of crohn's: The Scottish ustekinumab cohort.', Gut. Conference: British Society of Gastroenterology's Campus 2021. Virtual, 70(SUPPL 1), pp.A112-A113.

Quinn S., Rhynas S., <u>Gowland S.</u>, <u>Braid N.</u>, Cameron L. and Ewing, N. (2021) <u>'Evaluating talking mats TM with the inpatient intellectual disability forensic population.'</u>, Journal of Intellectual Disability Research. Conference: 13th European Congress of Mental Health in Intellectual Disability. Berlin Germany, 65(8), pp.706.

Raman, R. and Fleming, L. (2021) 'We need to talk about codeine: An implementation study to reduce the number of emergency department patients discharged on high-strength cocodamol using the behaviour change wheel.', Emergency Medicine Journal, 38(12), pp.895-900.

Rashid M., Clyde D., Driscoll P.J. and Jafferbhoy, H. (2021) 'What did we miss? A 5-year retrospective cohort study calculating the endoscopy miss rate for UGI cancers in a Scottish district general hospital.', British Journal of Surgery. Conference: Association of Surgeons of Great Britain and Ireland Congress. Virtual, 108(SUPPL 7), pp.34.

Ravenscroft, J., St Clair Tracy, H., and <u>Blaikie, A</u>. (2021) <u>'Cerebral Visual Impairment on the web: an exploration of an educational web resource as a bridge to public understanding.', Frontiers in Communication</u>, 6:727230.

Reid C, Laird B, Travers S, McNiff J, Young S, Maddicks J, Bentley A and <u>Fenning, S.</u> (2021 Oct 28) <u>'Death from COVID-19: management of breathlessness: a retrospective multicentre study.', BMJ Supportive & Palliative Care, Oct 2021.</u>

Ridley, E. (2021) 'Fluid prescribing and administration: Are we following NHS Fife IV fluid guidance?', Scottish Medical Journal. Conference: Scottish Renal Association Medical and Nursing Conference. Virtual, 66(2), pp.NP14.

Roberts T. ... <u>Gray K.</u> et al (2021) <u>'Psychological distress and trauma during the COVID-19 pandemic: Survey of doctors practising anaesthesia, intensive care medicine, and emergency medicine in the United Kingdom and Republic of Ireland.', British Journal of Anaesthesia, 127(2), pp.e78-e80</u>

Robertson A.G.N., Wiggins T., Robertson F.P., Huppler L., Doleman B., Harrison E.M., Hollyman M. and Welbourn R. (2021 Jul 16) <u>'Perioperative mortality in bariatric surgery: Meta-analysis.</u>', *British Journal of Surgery*.

Robertson I., O'Brian L., Clark N., McIntyre S., Grant E., Cochrane L. and Foley N. (2022) '<u>Development of a self-management workbook and virtual programme for patients in the Fife pain management service during the COVID-19 pandemic.</u>', *Physiotherapy (United Kingdom)*, 114(Suppl 1), pp.e84-e85.

Robinson L., <u>Gordon J.</u>, Ryan M. and Mair, A. (2021) <u>'How to save a small fortune! Improving the quality, clinical and cost effectiveness of oral nutritional supplement (ONS) prescribing in <u>NHS Scotland.'</u>, South African Journal of Clinical Nutrition. Conference: International Congress of Dietetics, ICD 2021. Virtual, 34(3), pp.151.</u>

Rudan I, Adeloye D, Katikireddi SV, <u>Murray J</u>, Simpson C, Shah SA, Robertson C, Sheikh A and E.A.V.E.,II (2021) '<u>The COVID-19 pandemic in children and young people during 2020-2021: Learning about clinical presentation, patterns of spread, viral load, diagnosis and treatment.', *Journal of Global Health*, 11: 01010.</u>

Rudan I, Adeloye D, Katikireddi V, <u>Murray J</u>, Simpson C, Shah SA, Robertson C, Sheikh A and , E.A.V.E.,II (2021) '<u>The COVID-19 pandemic in children and young people during 2020-2021: A complex discussion on vaccination</u>.', *Journal of Global Health*, 11: 01011.

Sakalis V., Gkotsi A., Mpolosis N., Stratis M., Charpidou D., <u>Tsafrakidis P.</u> and Apostolidis, A. (2021) 'P0035 A meta-analysis of the effect of urological and non-urological medication on <u>morphometric parameters of the prostate</u>.', *European Urology*, 79(Supplement 1), pp.S50-S51.

Sakalis V., Gkotsi A., Stratis M., Mpolosis N., Charpidou D., <u>Tsafrakidis P.</u> and Apostolidis, A. (2021) '<u>P0018 Does mirabegron improve sexual health in patients with overactive bladder (OAB) and sexual dysfunction? A systematic review and meta-analysis</u>.', *European Urology*, 79(Supplement 1), pp. S23-S24.

Sakalis V, Gkotsi A, Charpidou D, <u>Tsafrakidis P</u> and Apostolidis, A. (2021) <u>'The effect of pharmacotherapy on prostate volume, prostate perfusion and prostate-specific antigen (prostate morphometric parameters) in patients with lower urinary tract symptoms and <u>benign prostatic obstruction.</u> A systematic review and meta-analysis.', *Central European Journal of Urology*, 74(3), pp.388-421.</u>

<u>Sandeman D</u>, Syed MBJ, Kimenai DM, Lee KK, Anand A, Joshi SS, <u>Dinnel L</u>, <u>Wenham PR</u>, <u>Campbell K</u>, <u>Jarvie M</u>, <u>Galloway D</u>, <u>Anderson M</u>, <u>Roy B</u>, Andrews JPM, Strachan FE, Ferry AV, Chapman AR, <u>Elsby S</u>, <u>Francis M</u>, <u>Cargill R</u>, Shah ASV and Mills, N.L. (2021) <u>Implementation of</u>

an early rule-out pathway for myocardial infarction using a high-sensitivity cardiac troponin T assay.', Open Heart, 8(2).

Sarica S.H., Gallacher P.J., Dhaun N., Sznajd J., Harvie J., McLaren J., McGeoch L., Kumar V., Amft N., Erwig L., Marks A., Bruno L., Zollner Y., Black C. and Basu, N. (2021) 'Multimorbidity in antineutrophil cytoplasmic antibody-associated vasculitis: Results from a longitudinal, multicenter data linkage study.', Arthritis and Rheumatology, 73(4), pp.651-659.

Savona-Ventura, C. and Mahmood, T. (2022) 'A scientific review commissioned by the European Board and College of Obstetrics and Gynaecology (EBCOG)', European Journal of Obstetrics & Gynecology & Reproductive Biology, 271, pp.217-219. [No full text available]

Saxby, E., Cheng, K., O'Connell, N., Sanders, R. and Agarwal, P.K. (2021 Jun 11) 'Is there an association of socioeconomic deprivation with acute primary angle closure?', Eye.

Schofield, J., <u>Steven, D.</u>, Foster, R., Matheson, C., <u>Baldacchino, A.</u>, McAuley, A. and Parkes, T. (2021) 'Quantifying prescribed high dose opioids in the community and risk of overdose.', *BMC Public Health*, 21(1), pp.1174.

Seaton R.A., Cooper L., Gibbons C.L., Malcolm W., ChooKang B., <u>Griffith D.</u>, Dundas S., Brittain S., Hamilton K., Jeffreys D., McKinney R., Guthrie D. and Sneddon J. (2021) <u>'Antibiotic prescribing for respiratory tract infection in patients with suspected and proven COVID-19: Results from an antibiotic point prevalence survey in Scottish hospitals.', *JAC-Antimicrobial Resistance*, 3(2), pp.dlab078.</u>

<u>Sevier-Guy, L.</u>, Ferreira, N., <u>Somerville, C.</u> and Gillanders, D. (2021) <u>'Psychological flexibility</u> and fear of recurrence in prostate cancer.', *European Journal of Cancer Care*, e13483.

Sgro A, Wu DA and Yalamarthi, S. (2021 Mar 31) <u>Improving metronidazole prescription</u> practices in surgical patients: A full cycle audit.', *Postgraduate Medical Journal*.

Shankar R, Goodwin M, <u>Toland J</u>, Boyle A, Grant A, Pearson J, Storer A, Higgins R, Hudson S and Reuber, M. (2021) 'Oro-mucosal midazolam maleate: Use and effectiveness in adults with epilepsy in the UK.', Epilepsy & Behavior, 123, pp.108242.

Sharma S, Higgins C, <u>Cameron P</u>, Bimali I, Hales TG, Bennett MI, Colvin L and Smith, B.H. (2021 Sep 25) 'Validation of the Nepali version of the self-reported Leeds Assessment of Neuropathic Symptoms and Signs (S-LANSS) in adults with chronic pain and predominantly low-literacy levels.', *Journal of Pain*. [No full text available]

Shaw SCK, Grosjean B, McCowan S, <u>Kinnear M</u> and Doherty, M. (2021) <u>'Autistic role modelling in medical education.'</u>, *Education for Primary Care*, 1-2.

Shepherd A., <u>Proc J.</u>, Zhang C. and <u>Simmons, R.</u> (2021) <u>'Theatre complex alarm fatigue: improving patient safety by decreasing theatre noise pollution and increasing alarm specificity.'</u>, *Anaesthesia, Conference: Annual Congress of the Association of Anaesthetists 2021*, 76(SUPPL 6), pp.67.

Shepperd S, Butler C, CradduckBamford A, Ellis G, Gray A, Hemsley A, Khanna P, Langhorne P, Mort S, Ramsay S, Schiff R, Stott DJ, <u>Wilkinson A</u>, Yu LM and Young, J. (2021 Apr 20) <u>'Is comprehensive geriatric assessment admission avoidance hospital at home an alternative to hospital admission for older persons?: A randomized trial.', *Annals of Internal Medicine*.</u>

Shepperd S, CradduckBamford A, Butler C, Ellis G, Godfrey M, Gray A, Hemsley A, Khanna P, Langhorne P, Makela P, Mort S, Ramsay S, Schiff R, Singh S, Smith S, Stott DJ, Tsiachristas A, Wilkinson A, Yu LM and Young J (2022) 'Hospital at Home admission avoidance with comprehensive geriatric assessment to maintain living at home for people aged 65 years and over: a RCT.', Health and Social Care Delivery Research, 10(2), Jan 2022.

Shi, W., Vasishta, S., Dow, L., Cavellini, D., Palmer, C., McKinstry, B., & <u>Sullivan, F.</u> (2021) '<u>Early experience with an opt-in research register - Scottish Health Research Register (SHARE): a <u>multi-method evaluation of participant recruitment performance</u>.', *BMC Medical Research Methodology*, 21, 286.</u>

Simoes J.F.F....<u>Akhtar M.A.</u>, <u>Brunt A.</u>, <u>McIntyre J.</u>, <u>Milne K.</u>, <u>Rashid M.M.</u>, <u>Sgro A.</u>, <u>Stewart K.E.</u>, <u>Turnbull A.</u> et al (2021) <u>'Outcomes from elective colorectal cancer surgery during the SARS-CoV-2 pandemic.'</u>, *Colorectal Disease*, 23(3), pp.732-749.

Singh S, Gray A, Shepperd S, Stott DJ, Ellis G, Hemsley A, Khanna P, Ramsay S, Schiff R, Tsiachristas A, <u>Wilkinson A</u> and Young, J. (2021 Dec 31) <u>'Is comprehensive geriatric assessment hospital at home a cost-effective alternative to hospital admission for older people?'</u>, Age & Ageing, 51(1).

Squires M, Wise H, <u>Holmes H</u> and Hadfield, K. (2021) **'Lithium heparin interference in the Abbott enzymatic creatinine assay: The significance of under-filled tubes.',** *Annals of Clinical Biochemistry*, 45632211040673. [No full text available]

St John L and <u>Walmsley, R.</u> (2021) <u>'The latest treatment interventions improving mental health outcomes for women, following gender-based violence in low-and-middle-income countries: A mini review</u>, *Frontiers in Global Womens Health*, 2, pp.792399.

Stewart K., Bannon R. and Bannister, M. (2021) 'Operation theatre observer telescope: Preliminary experience.', Journal of Laryngology and Otology. Conference: ENT Scotland Winter Meeting. Stirling United Kingdom, 135(5), pp.4.

Stirling P.H.C., Jenkins P.J., Duckworth A.D., Clement N.D. and McEachan, J.E. (2021) 'Comorbid status influences quality of life following carpal tunnel decompression.', Hand Surgery and Rehabilitation, 40(3), pp.338-342. [No full text available]

Stirling PHC, McEachan JE, Rodrigues JN and Harrison, C.J. (2021 Dec 28) 'QuickDASH questionnaire items behave as 2 distinct subscales rather than one scale in Dupuytren's disease.', Journal of Hand Therapy. [No full text available]

Stirling P.H.C., Ng N., Duckworth A.D. and McEachan, J.E. (2021) 'Extensor indicis transfer improves function in patients after rupture of the extensor pollicis longus tendon.', Hand Surgery and Rehabilitation, 40(3), pp.343-346. [No full text available]

Stirling PHC, Jenkins PJ, Ng N, Clement ND, Duckworth AD and McEachan, J.E. (2021)

'Nonresponder bias in hand surgery: Analysis of 1945 cases lost to follow-up over a 6-year period.', Journal of Hand Surgery: European Volume.

Stirling P, Malhas A, Rymaszewski LA, Paton M, McEachan JE and Jenkins, P.J. (2021) **'The changing epidemiology of radial head replacement over a 22-year period in Scotland.',** Annals of the Royal College of Surgeons of England, 103(8), pp.612-614. [No full text available]

Stirling P.H.C., Jenkins P.J., Clement N.D., Duckworth A.D. and <u>McEachan, J.E.</u> (2021) <u>'Self-perceived hand normality before and after surgical treatment of Dupuytren contracture.'</u>, *Journal of Hand Surgery*, 46(5), pp.403-408.

Stirling, P.H.C., Ng, N., Jenkins, P.J., Clement, N.D., Duckworth, A.D. and McEachan, J.E. (2021 Jun 09) Hand-arm vibration and outcomes of surgery for Dupuytren's contracture.', Occupational Medicine (Oxford).

Styles C., O'Connell N. and Anderson, M. (2021) 'Do systematic diabetic retinopathy screening programmes prevent severe sight impairment?', European Journal of Ophthalmology, Conference: 31st Meeting of the European Association for the Study of Diabetes Eye Complications Study Group, EASDec, Odense Denmark, October 2021. [No full text available]

<u>Tait M., McCahill C.</u> and <u>Bhaskar V.</u> (2021) <u>'Preparing for life after diamorphine: Comparing three different intrathecal opiate preparations in obstetric anaesthesia for lower segment caesarean section.', Anaesthesia. Conference: Trainee Conference 2021. Newcastle United Kingdom, Anaesthesia, 76(SUPPL 5), pp.69.</u>

Tay Wee Teck JB and <u>Baldacchino</u>, <u>A.</u> (2022) <u>'Why do different forms of knowledge matter in evidence-based drug policy?'</u>, *American Journal of Public Health*, 112(S2), pp.S140-S142.

Tay Wee Teck J, <u>Baldacchino A</u>, <u>Gibson L</u> and <u>Lafferty</u>, <u>C</u>. (2021) <u>'Using microdosing to induct patients into a long-acting injectable buprenorphine depot medication in low threshold community settings: A case study.', Frontiers in Pharmacology</u>, 12, pp.631784.

Thomas, J., Martin, L. and Muir, G. (2021) 'Getting to grips with grip strength: A scoping review of patients mapped against sarcopenia consensus cut points...virtual physiotherapy UK conference, November 13-14, 2020.', Physiotherapy, 113(Suppl 1), pp.e61-e61.

<u>Thompson C.</u>, <u>Nolli T.</u> and <u>Bannister M.</u> (2021) <u>'Parotid incidentalomas: A systematic review.'</u>, Journal of Laryngology & Otology, 1-5.

Tolomeo S., Steele J.D., Ekhtiari H. and <u>Baldacchino, A.</u> (2021) **'Chronic heroin use disorder and the brain: Current evidence and future implications.',** *Progress in Neuro-Psychopharmacology and Biological Psychiatry,* 111, 110148. [No full text available]

Tolomeo S, <u>Davey F</u>, Steele JD and <u>Baldacchino</u>, <u>A.</u> (2021) <u>'Compulsivity and impulsivity in opioid dependence.', *Drug & Alcohol Dependence*, 229(Pt A), article 109018.</u>

Tolomeo S., <u>Baldacchino A.M.</u>, Volkow N. and Steele D. (2022) '<u>Protracted abstinence in males</u> <u>with an opioid use disorder: partial recovery of nucleus accumbens function</u>.', *Translational Psychiatry*, 12, 81.

Tominey, S., <u>Timmins, A.</u>, Lee, R., Walsh, T.S. and Lone, N.I. (2021) <u>'Community prescribing of potentially nephrotoxic drugs and risk of acute kidney injury requiring renal replacement therapy in critically ill adults: A national cohort study.', The Journal of the Intensive Care Society, 22(2), pp.102-110.</u>

Topcu G, SavonaVentura C, AyresdeCampos D, Mukhopadhyay S, Messinis I, Mahmood T, Cassar OA and Grixti Sultana, S. (2022) 'Provision of antenatal care in Europe - A scientific study commissioned by European Board and College of Obstetrics and Gynaecology (EBCOG).', European Journal of Obstetrics, Gynecology, & Reproductive Biology, 272, pp.30-36. [No full text available]

<u>Trail M.</u>, Hindley R.G. and <u>Al Jaafari, F.</u> (2021) **'Contemporary surgical management of benign prostatic obstruction: Does there remain a place in the toolbox for TURP?',** *Journal of Clinical Urology***, 2021. [No full-text available]**

Trail M., Good D., Clyde D., Brodie K., Leung S., Simpson H., Kata S.G., Tsafrakidis P., Chapman R.A., Mitchell I., Janjua K. and Al Jaafari, F. (2021) 'Day case greenlight laser photoselective vaporisation of the prostate (gl-pvp): Evaluation of outcomes from a district general hospital experience of 538 cases.', Journal of Endoluminal Endourology, 4(3), pp.e8-e16.

Trivioli G., Canzian A., Maritati F., Fenoglio R., Pillebout E., Letizia Urban M., Mohammad A., Nogueira E., Silvestri E., Eriksson P., Segelmark M., Novikov P., Harris H., Smitienko I., Moiseev S., Farisogullari B., O'Sullivan D., Ponte C., Lamprecht P., Hocevar A., Karadag O., Little M., Emmi G., Jayne D., Mcadoo S., Roccatello D. and Vaglio, A. (2021) 'Renal outcome after rituximab in adult-onset IgA vasculitis and crescentic IgA nephropathy: A multicentre study.', Nephrology Dialysis Transplantation. Conference: 58th ERA-EDTA Congress. Virtual, 36(SUPPL 1), pp.27.

Turnbull K., Spy R., Warnakulasuriya S. and McDougall M. (2021) 'Aim high QI: The use of quality improvement to reduce intra-operative hypotension.', Anaesthesia. Conference: Trainee Conference 2021. Newcastle United Kingdom, Anaesthesia, 76(SUPPL 5), pp.18.

Valo E, Colombo M, Sandholm N, McGurnaghan SJ, Blackbourn LAK, Dunger DB, McKeigue PM, Forsblom C, Groop PH, Colhoun HM, Turner C and Dalton RN. (2022) 'Effect of serum sample storage temperature on metabolomic and proteomic biomarkers.', Scientific Reports, 12(1), pp.4571.

Walker S.P., Keenan E., Bintcliffe O., Stanton A.E., Roberts M., Pepperell J., <u>Fairbairn I.</u>, McKeown E., Goldring J., Maddekar N., Walters J., West A., Bhatta A., Knight M., Mercer R., Hallifax R., White P., Miller R.F., Rahman N.M. and Maskell N.A. (2021) 'Ambulatory management of secondary spontaneous pneumothorax: A randomised controlled trial.', *European Respiratory Journal*, 57(6) [No full text available]

Watson, L. (2021) 'Public health and ethics: The case of prenatal screening and Down's syndrome.', Journal of Public Health, 43(3), pp.e493-e494.

Webber, R. (2021) <u>'Editorial - medical litigation in the 21st century.'</u>, Scottish Medical Journal, 66(4), pp.166-167.

Wemyss C, Hobson S, Sweeney J, Chua PR, Binti Mohd Khairi SA, Edwards M, <u>Burns J</u>, <u>McGoldrick N</u>, Braid R, Gorman M, Redmond S, Clark C, Brown C, Watling C, Conway DI and Culshaw, S. (2022) <u>'Improving participation and engagement with a COVID-19 surveillance programme in an outpatient setting.'</u>, *BMJ Open Quality*, 11, pp.e001700.

Wetzlmair, L.C., Kitema, G.F., O'Carroll, V., El-Awaisi, A., Power, A., Owens, M., Park, V., McKinley, M., Anderson, E.S. and Loder-Fink, B. (2021) 'The impact of Covid-19 on the delivery of interprofessional education: it's not all bad news.', British Journal of Midwifery, 29(12).

<u>Williams F</u>, Lenihan F and Rowe, A. (2021) <u>'Continuing clozapine treatment after a diagnosis of cardiomyopathy.', *Irish Journal of Psychological Medicine*, 38(3), pp.227-231.</u>

Yapp LZ, <u>Walmsley PJ</u>, Moran M, Clarke JV, Simpson AHRW and Scott, C.E.H. (2021) <u>Infographic: The effect of hospital case volume on re-revision following revision total knee arthroplasty.</u>', Bone & Joint Journal, 103-B(4), pp.600-601.

Yapp LZ, <u>Walmsley PJ</u>, Moran M, Clarke JV, Simpson AHRW and Scott, C.E.H. (2021) <u>'The effect of hospital case volume on re-revision following revision total knee arthroplasty.'</u>, *Bone & Joint Journal*, 103-B(4), pp.602-609.

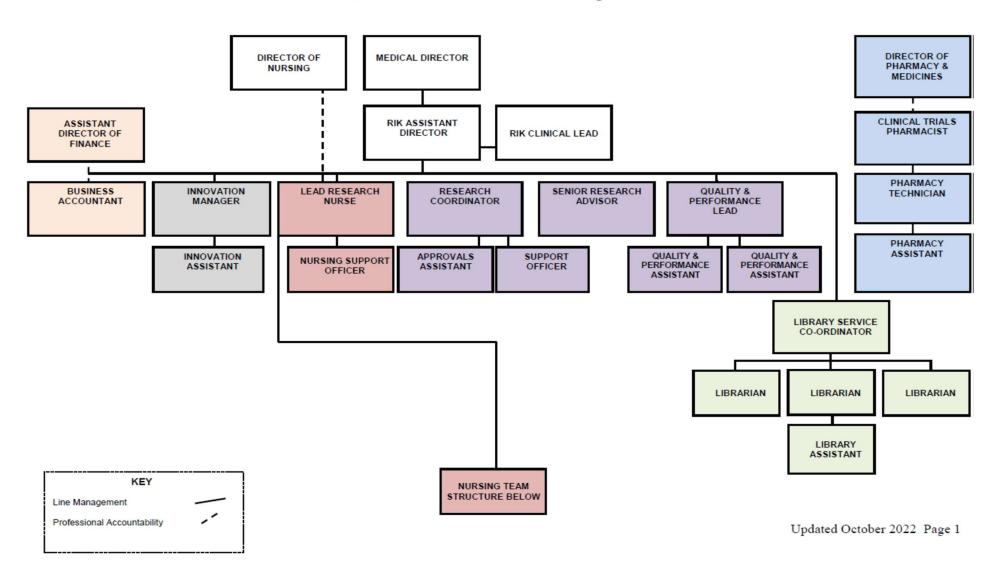
Zachariou M., Arandjelovic O., Sabiiti W., Mtafya B. and <u>Sloan D.</u> (2022) '<u>Tuberculosis bacteria</u> <u>detection and counting in fluorescence microscopy images using a multi-stage deep learning <u>pipeline</u>.', *Information*, 13(2), 96.</u>

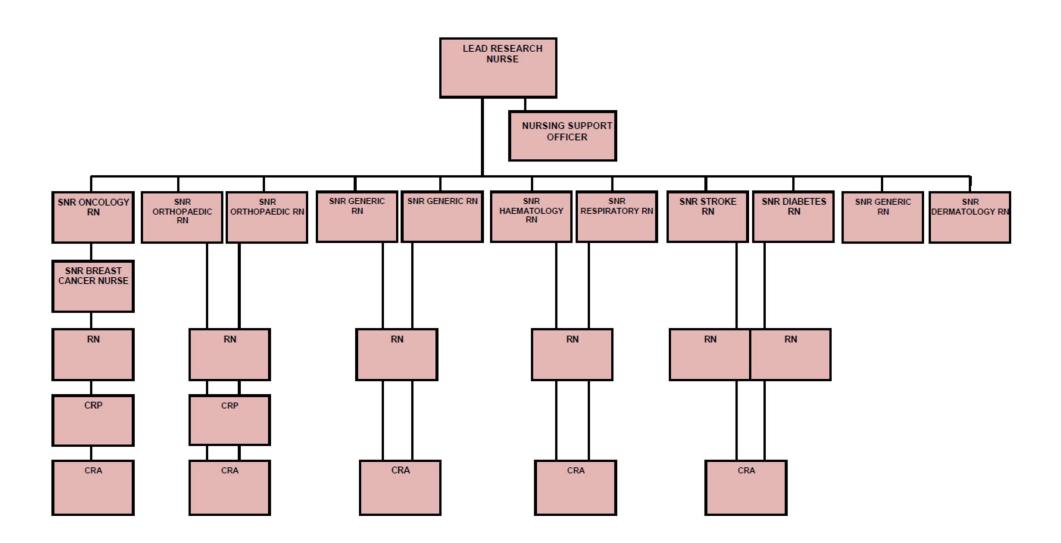
<u>Zhang C.</u> and <u>Shaw N.</u> (2021) <u>'A curious case of hiccups during laparoscopic surgery.'</u>, *Journal of Anaesthesiology Clinical Pharmacology*, 37(2), pp.304-305.

Zimmerman E., Martins N.N., Verheijen R.H.M. and Mahmood, T. (2021) **'EBCOG position statement - simulation-based training for obstetrics and gynaecology during the COVID-19 pandemic.'**, European Journal of Obstetrics and Gynecology and Reproductive Biology, 258, pp.457-458. [No full-text available]

15. Appendix 1 – RIK Structure

Research, Innovation and Knowledge Staff Structure





KEY

RN: Research Nurse

CRP: Clinical Research Practitioner

CRA: Clinical Research Assistant

Updated October 2022 Page 2

NHS Fife provides accessible communication in a variety of formats including for people who are speakers of community languages, who require Easy Read versions, who speak BSL, read Braille or use Audio formats.

NHS Fife SMS text service number 07805800005 is available for people who have a hearing or speech impairment.

To find out more about accessible formats contact: fife-UHB.EqualityandHumanRights@nhs.net or phone 01592 729130

NHS Fife

Hayfield House Hayfield Road Kirkcaldy, KY2 5AH

www.nhsfife.org

- (f) facebook.com/nhsfife
- ★ twitter.com/nhsfife
- Instagram.com/nhsfife
- in linkedin.com/company/nhsfife