The Research and Innovation Conference 2025 Abstracts

Development and feasibility assessment of a multi-modal education intervention for patients undergoing colorectal surgery (Recover Together)

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Background: Over 42,000 people are diagnosed with bowel cancer in the UK each year and 60% undergo major surgery within 12 months. We must work with patients to provide information they need to actively participate in recovery. Perioperative education empowers patients to recover well after surgery. Previous work revealed education is valued by patients but deprioritised by health professionals (1-2).

Aims: This study aimed to develop and assess feasibility of a multi-modal education intervention to improve recovery after colorectal surgery.

Methods: A series of companion education resources were co-designed, prototyped, and refined by patients and design experts. The final intervention comprised an illustrated booklet, an online video, and an “end-of-the-bed” inpatient goal board. A multi-centre, mixed-methods, feasibility study was undertaken to explore deliverability and acceptability of the intervention in practice. This study was delivered at four hospitals, led by and including Leeds Teaching Hospitals NHS Trust. It comprised diaries (booklet), video analytics (video), observations (goal board), and interviews with patients and healthcare professionals. Clinical outcomes included quality of recovery (QoR-15) and quality of life (EQ-5D).

Results: One-hundred-and-five patients were recruited from four hospitals. The intervention was implemented within four months at all sites. Measures of participant uptake were satisfactory, including booklet (reads: 90%), video (views: 50%), and goal board (goal-setting: 85%), but varied between sites. Early analysis of interviews with 47 participants suggests: (i) patients preferred the booklet to the video and to other written information received prior to surgery, and (ii) patients and healthcare professionals found the goal board motivating, and it provided useful reminders, when used as intended.

Conclusion: A multi-modal intervention was developed to address patient needs around perioperative education. The intervention was deliverable and acceptable to both patients and healthcare professionals. The findings build an argument for a definitive trial and potential future use in practice.

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Integrated medicine optimisation for older people living with frailty: Preliminary results of a qualitative study across multiple health organisations

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Introduction: The UK health system is under growing pressure to meet the care needs of an increasingly older population. Older people are facing significant health challenges such as frailty, co-morbidity, and polypharmacy, putting them at high risk of adverse outcomes. Medicines play a key role in the management of diseases, and several healthcare professionals (HCPs) are often involved in medicine optimisation (MO) processes. Cross-organisational MO is vital to provide more joined-up care (1), however, the way current health systems are designed hinders collaborative working leading to fragmented and uncoordinated care (2). This is associated with risks of medication problems, increased costs, and poorer patient outcomes.

Aims: To explore the issues HCPs are facing when providing MO across organisations.

Methods: Following ethical approval, HCPs were identified iteratively using purposive and snowballing techniques. The first round of recruitment included eight semi-structured interviews conducted online. Recruitment began from NHS Hospital and then extended to other community organisations. The interviews were transcribed and analysed using analytical strategies appropriate for ethnographic data.

Preliminary results: Participants included pharmacy technicians and clinical pharmacists, an advanced care practitioner, and a discharge coordinator. Pharmacists in the home-ward, Primary Care Network, and community pharmacy were also interviewed. Common themes were developed highlighting issues around integrated MO: poor communication about medication changes post-hospital admissions, communication challenges due to numerous systems containing different patient information, and a one-way transfer of information with no feedback loop.

Conclusion: These initial interviews revealed issues commonly encountered by HCPs when providing MO, which can lead to fragmented and disjointed care. Promoting cross-organisational working through policies and procedures and shared electronic health systems can improve and streamline communication paths across organisations. Additional interviews with a diverse range of health and social care professionals are needed to explore the issues around providing integrated MO further.

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Investigating the Impact of Haemolysis and Lipaemia on ALT and Folate Measurements Using the Siemens Atellica Analyser

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Background: For the diagnosis and treatment of illnesses, precise biochemical tests are crucial. A vital indicator of liver function is alanine aminotransferase (ALT), and folate is essential for deoxyribonucleic acid (DNA) formation and repair. However, pre-analytical interferences, particularly haemolysis and lipemia, can impact these tests, potentially resulting in incorrect diagnosis and treatment.

Aims: This study evaluated the impact of haemolysis and lipaemia on ALT and folate measurements using the Siemens Atellica CH analyser, which incorporates mechanisms to reduce interference.

Methods: ALT samples were spiked with increasing lipaemia levels (0–1000 mg/dL), while folate samples were treated with varying haemolysis levels (0–1.0 g/dL), each tested at three analyte concentrations: low, medium, and high. Analysis was conducted using the Atellica CH analyser, employing photometric methods for ALT and immunoassays for folate. Statistical analysis, including t-tests and ANOVA, was performed to assess the impact of these interferences.

Results: The results showed that lipaemia significantly impacted ALT measurements only at levels exceeding 600 mg/dL, beyond Siemens specified threshold of 450 mg/dL. In contrast, haemolysis caused a consistent elevation of folate values across all concentrations, confirming Siemens' assertion that red blood cell folate content artificially inflates serum measurements.

Conclusion: These findings underscore the Atellica analyser's reliability in managing moderate lipaemia for ALT testing but reveal its vulnerability to haemolysis in folate assays. Clinically, the study highlights the need for updated guidelines addressing lipaemia thresholds in ALT testing and the critical importance of rigorous sample handling to minimise haemolysis interference in folate assays.

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Are patients being discharged with the right amount of antibiotics?

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Background: Prescribing systems in Leeds Teaching Hospitals Trust (LTHT) vary between the Emergency Department (ED) and inpatients, with ED prescribing on paper for some patients and inpatients using the electronic prescribing system (eMeds). When antibiotics are prescribed, initial doses can be on paper in ED, and there are also multiple places to prescribe them within eMeds.

Consequently, there is a risk that patients do not receive the correct antibiotic course length on discharge.

Aims:

- To identify whether the correct antibiotic course lengths are prescribed on discharge.
- To identify the different prescription areas that antibiotics are prescribed.
- To identify which World Health Organisation (WHO) Aware/Watch/Reserve categories the antibiotics prescribe fall in.
- To identify the cost of any unnecessary, additional doses prescribed.

Methods: Discharge prescription data from October 2024 was taken and from 3981 antibiotic courses, 65 courses across all clinical areas of LTHT identified for review. Patients had their PPM+ records reviewed to identify where antimicrobials were prescribed, and the number of total doses prescribed. PPM+ clinical notes and antimicrobial guidelines were reviewed to identify appropriate course lengths for antibiotics.

Results:

- 63% of course lengths were too long
- 22% of course lengths were correct
- 15% of course lengths were too short
- An additional 112 doses prescribed from 65 courses of antibiotics on discharge, costing £12.64, extrapolated to £1263 for the month.
- Most additional antibiotics prescribed were in the ‘Watch’ category

Conclusion: Patients are generally not receiving the correct course length of antibiotics on discharge, likely due to the multiple places they can be prescribed. It is also likely that in some cases, the number of intravenous doses is not being taken into account when patients are switched from IV to oral antibiotics. More work needs to be done to raise awareness of ensuring correct course lengths on discharge.

IV Antimicrobial Review…Who #CARES?

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Background: IV antimicrobial review is a marker of antimicrobial stewardship, and national guidance stipulates trusts should be aware of their performance to drive improvement. Leeds Teaching Hospitals Trust (LTHT) previously counted IV antimicrobial reviews via the clinical review function on eMeds, relying on clinicians to complete, with <10% monthly completed. The Pharmacy Infection Team worked with Information & Insight to develop process where clinicians can write #CARES #decision based on the outcome of their review and data is automatically counted. The CARES acronym is from the national ‘Start Smart then Focus’ guideline and stands for ‘Cease, Amend, Refer, Extend & Switch). #CARES was launched at LTHT in September 2024 trust wide.

Aims:

- Improve data collection of antimicrobial reviews to allow for monitoring and supporting AMS performance.
- Improve the number of reviews completed to improve number of patients switched from IV to oral.
- To compare data between the new and previous processes.

Methods: Data is automatically collected monthly and presented on the ‘performance data’ section of the Infection homepage on Leeds Health Pathways.

Results:

- By January 2025, 9% of IV antibiotics had #CARES documented in their clinical notes.
- Speciality and Integrated Medicine had the best performance with 23.97% of IV antibiotics having #CARES documented, followed by Abdominal Medicine & Surgery, with 15.54%.
- Leeds Childrens Hospital, Head & Neck and Chapel Allerton did not have any #CARES documented in Jan 2025.

Conclusion: The #CARES data, compares with the previous clinical review data, a well established system in place for years. More work needs to be done to raise awareness of the new process to encourage further uptake in all clinical areas. More work also needs to be done, to review the different decisions made and identify areas of improvement where there are higher levels of IV antimicrobials being continued.

References:
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A National Collaboration: Promoting Capacity Building of Pre-Analytical Laboratory Services

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Background: Pre-analytical sample processing is a crucial aspect of research, ensuring biological samples are appropriately prepared for transport to an external laboratory or long-term storage on-site. NHS Research laboratories depend on income from commercial research to sustain their services. The national NIHR tariff for pre-analytical sample processing is determined by estimated time required for each procedure. However, every study has unique sample processing requirements outlined in a study-specific lab manual. Estimating processing time is inherently subjective, leading to significant variations between reviewers, which directly affects study costs. Historically, sample processing costs were negotiated locally, allowing each trust to review the lab manual and set appropriate pricing.

In 2023, the National Institute for Health and Care Research (NIHR) introduced the National Contract Value Review (NCVR) to standardise the costs of commercial research across the UK. Its primary aim was to streamline study set-up times by implementing a uniform contract review process. However, it quickly became evident that some trusts were underestimating lab processing times, which had a nationwide impact on funding and resource allocation.

Actions: In response, a Community of Practice (CoP) for pre-analytical laboratories was established, comprising representatives from 20 different hospital trusts across the UK. The group's mission was to standardise lab manual evaluations, ensuring consistent commercial income for laboratories.

Outcomes: The group agreed on a fixed 20-minute processing time per sample, irrespective of the procedural complexity detailed in individual protocols. This standardised duration was then validated against the NIHR intensity tool, a well-recognised measure in CRF research environments.

The results were definitive: applying a fixed 20-minute allocation aligned closely with estimates generated by the intensity tool and more accurately captured real processing times, which were on average 125% higher than those estimated in previous NCVR reviews.

Conclusions: implementing a uniform 20-minute allocation for sample processing within the NCVR framework provides a fair, straightforward, and evidence-based solution. It ensures that even reviewers without a laboratory background can confidently attribute the correct costs for sample processing, bolstering laboratory income and enhancing the overall quality of clinical research support.

1. NIHR tariffs List
2. NCVR Guidance

Urogynaecology Physio Virtual Group

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Background: Face to face Urogynaecology Physiotherapy groups were delivered in pre-Covid times to help patients manage their symptoms prior to being seen for a 1:1 appointment. Best practice guidelines (NICE 2021) advise that digital sources are considered when supporting individuals with pelvic floor dysfunction. Previous audits found 90% of patients rated the group an 8 /10 in providing information about their condition. However, some patients found an in-person group setting embarrassing. The use of a virtual group could help to overcome these barriers for patients and reduce waiting times.

Aims: The aim was to set up a virtual Physiotherapy group with 12 patients per session, delivering information on common Urogynaecological conditions and management advice, including Pelvic floor muscle training. Patients were booked a face to face appointment 6 weeks after this for individual Physiotherapy review, including vaginal examination.

Methods: June 2023 - set up x1 Urogynaecology Physio virtual group per week

Expanded to x2 groups per week due to demand and positive patient feedback

Following patient feedback, we adjusted our pre-group information to add a user guide of how to access the Teams and additional pre-reading.

Permanent service improvement change – now x2 virtual groups per week with 16 patients each and individual 6 week follow up.

Results: We have found that since running the Physiotherapy virtual group, our waiting time to be seen for an initial appointment has decreased by 6 months (52 to 26 weeks for initial appointment). This has allowed patients to be referred and given a session within 6 months, followed by an individual Physiotherapy appointment within 6 weeks. Patient feedback via friends and family of the group sessions have improved, allowing for a more positive experience.

Conclusion: Introduction of virtual groups have improved service efficiencies and most importantly improved patient-centred care within our Urogynaecology Physiotherapy service.

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Evaluating the Prognostic Significance of Circulating mRNAs in Children with Refractory or Relapsed Neuroblastoma (RR-NBL); a BEACON-Neuroblastoma Biomarker Study

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Introduction/Background: Despite therapeutic advances, high-risk neuroblastoma remains clinically challenging, with a 5-year survival below 50%. For relapsed/refractory (RR) cases, overall survival (OS) drops to <20%. Previously, we showed that detecting the adrenergic (ADR) neuroblastoma mRNAs, PHOX2B (paired-like homeobox 2B) and TH (tyrosine hydroxylase), in blood predicts prognosis (1). Given that neuroblastoma comprises both ADR and more mesenchymal-like (MES) cells, which influence progression and relapse (2,3), we analysed the expression of ADR and a panel of MES mRNAs in RR-NBL patients from the BEACON-Neuroblastoma trial (NCT02308527).

Aims: Early risk identification could improve outcomes by guiding treatment modifications. Using ADR markers we predict outcomes in 80% of high-risk patients using simple blood samples. We hypothesis that by including MES-marker expression prognostic information for the remaining 20 % of patient could be obtained.

Methods: RNA was extracted from 2ml blood samples collected in PAXgene™ tubes at trial entry (n=74) and at cycles 2 (n=42), 4 (n=31), 6 (n=24), and end of treatment (n=25) (4). Panels of ADR and MES mRNAs were quantified by RT-qPCR using TaqMan Low Density Arrays (TLDA). Euclidean clustering generated heat maps identifying ADR and MES gene signatures.

Results: Baseline detection of TH, PHOX2B, or both correlated with reduced progression-free survival (PFS) and OS, with combined detection showing stronger associations (PFS HR 2.68; OS HR 2.84). Their presence post-cycle 2 and 6 correlated with progression and poor OS. Clustering of the TLDA data revealed an ADR signature at baseline, which intensified at treatment end, supporting its role in relapse. MES mRNA profiling further stratified patients, offering potential new biomarkers of risk.

Conclusion/Implications: Blood-based detection of TH and PHOX2B at trial entry and treatment end identifies RR-NBL patients at highest risk. MES mRNAs could enhance risk stratification. This simple test could help prioritise children for alternative therapies.

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Evidence of utility of rapid prenatal exome sequencing beyond termination of pregnancy: A 2-year cohort from the Leeds Clinical Genomics Service

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Background: The prenatal exome sequencing (pES) service provides rapid genetic testing for pregnancies with significant foetal anomalies for which a monogenic cause is suspected, and where antenatal diagnosis may alter pregnancy or delivery management. pES tests requested across the Leeds Clinical Genomics Service catchment areas are undertaken by the Birmingham team as per national pathways.

Aims: to evaluate the impact of prenatal diagnoses on pregnancy management including: termination or continuation of pregnancy, altered delivery plans and neonatal management.

Methods: We reviewed all pES cases between 01/08/2021 and 31/12/2023 according to a pre-determined proforma. A retrospective analysis of patient records was undertaken. Patients were identified through local genomics laboratories. Electronic patient records and paper notes were used to collect data.

Results: 62 pES were completed, yielding 15 diagnoses (diagnostic yield 24.2%). Activation of pES ranged from 13+1 weeks to 35 weeks. The median turnaround time was 14 calendar days. In cases where a diagnosis was made, the following pregnancy outcomes were documented: 3 terminations, 11 live births, and 1 stillbirth. Of the live births, antenatal genetic diagnosis facilitated a postnatal palliation plan for 1 and supported a change in management plan to deliver in tertiary or quaternary level service for 8. Understanding of the genetic diagnosis supported local care for the remaining two cases. Three of the liveborn babies did not survive the neonatal period (including the one that received palliative care from birth).

Conclusion: Information from pES aids decision making beyond continuation or termination of pregnancy. It facilitates prognostic information beyond what could be interpreted from antenatal scans alone. Timely planning of delivery and postnatal management including access to tertiary/quaternary services or palliation is valuable to patients and health services.

Delayed gastric emptying does not contribute to worse gastroesophageal reflux and pulmonary function in patients with respiratory disease

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Background: Gastroesophageal reflux (GER) is common and thought to contribute to disease progression, via its aspiration into the lungs, in patients with respiratory disease. Delayed gastric emptying (DGE) can increase GER in patients with GER disease, but its effect in patients with respiratory disease, and how differing lung structure and mechanics influences this, is unknown.

Aim: To understand these inter-relationships and associations with pulmonary function in patients with end-stage chronic obstructive pulmonary disease (COPD), idiopathic pulmonary fibrosis (IPF) and non-IPF interstitial lung disease (non-IPF ILD).

Methods: Twenty two patients with COPD (aged 34-75yrs), 33 with IPF (45-74yrs), and 19 with non-IPF ILD (37-74yrs), of which 10 had fibrotic non-specific interstitial pneumonia (NSIP), 5 chronic hypersensitivity pneumonitis (CHP) and 4 sarcoidosis, referred for gastric emptying studies (DGE, defined as >10% remaining at 4hr), oesophageal high resolution impedance manometry (HRIM), and 24hr pH-impedance (MII-pH), as part of their work-up for lung transplantation at Mayo Clinic, Florida, were evaluated.

Results: Gastric emptying was delayed in a total of 20(27%) patients; 5(23%) with COPD, 8(24%) with IPF and 7(37%) with non-IPF ILD. Notably all 7 non-IPF ILD patients with DGE had NSIP (i.e. 70% of

NSIP patients), which was higher than the proportion of COPD (p=0.057) and IPF (p=0.019) patients with DGE. There were no differences in oesophageal reflux exposure between patients with DGE and normal gastric emptying (NGE) for any of the 3 cohorts. Likewise, there were no differences in pulmonary function.

Conclusion: DGE in respiratory disease, irrespective of whether patients have COPD, IPF or non-IPF ILD, does not increase GER or worsen the severity of respiratory disease. Of note, 70% of non-IPF ILD patients with NSIP have DGE. Our data have important clinical implications as to whether patients with NGE should be prioritized over those with DGE for lung transplantation.

Patient experience of participation within the CAIN trial, a phase 1 clinical trial evaluating the effectiveness and safety profile of the HistoSonics Histotripsy System in treating primary solid renal tumours.

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Purpose: The CAIN trial successfully delivered the global-first translation of histotripsy technology in renal cancer treatment (Leeds Teaching Hospitals NHS Trust, 2023). The aim of this patient-focused study was to gather insights into the participants' experience.

Material and Methods: The UK National Institute of Health Research (NIHR) Participant in Research Experience Survey (PRES) was provided to all participants treated between 01/03/2023-01/11/2024. Completion of the survey was voluntary, and responses anonymised. Data were extracted to measure demographics, Likert scale responses of research experience and free-text comments.

Results: All study participants (n=8) responded. Demographics: All white British ethnicity, female/male (2/6), Age groups [60-69 (n=2), 70-79 (n=3), 80-89 (n=1), non-stated (n=2)].

All participants stated this was the first research trial they had participated in. All agreed (n=2) or strongly agreed (n=6) they would take part in research again. All agreed (n=1) or strongly agreed (n=7) they felt well prepared for the trial by the information provided in advance. All agreed (n=2) or strongly agreed (n=6) they felt their participation had been valued. All agreed (n=2) or strongly agreed (n=6) they had been treated with courtesy and respect. Participants' free-text comments identified key themes of altruism, and the desire to contribute to medical science and the development of future treatments and technologies.

Conclusion: Participants were prepared to try novel therapy despite absence of long-term data, with high levels of motivation to help others and future technologies. High levels of satisfaction were reported for participating in this early-phase innovative, novel trial treatment, with willingness to participate in future trials.

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Enhancing Participant Centred Research through the Participant Research Experience Survey (PRES)

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Introduction: Since 2015, the National Institute for Health and Care Research (NIHR) has used the Participant Research Survey (PRES) to prioritise participant experiences in research. PRES forms allow participants to share their insights, highlighting successes and areas for improvement. This feedback ensures research address the real-world issues, fostering trust and leading to higher participation rates and improved data quality.

Method: The Yorkshire Lung Screening Trial (YLST) actively enrolled new participants from November 2018 to October 2024. To gather feedback, participants were given options to ensure convenience and accessibility. They could choose between completing a paper copy at home returning it by mail, or using a tablet provided at the end of their appointment to fill in a digital form. Additionally, a QR code option could be provided, allowing participants to complete the survey at their convenience later.

Results: The following results are from the last three quarters up to February 2025. Data collected from the PRES forms revealed high levels of participant satisfaction and engagement. Out of 140 participants, 137 (97.8%) felt valued by taking part in YLST, and 138 (98.5%) indicated they would consider participating in research again. Notably, 63 (45%) of these participants were taking part in research for the first time. These results underscore the positive impact of YLST on participants experiences and its success.

Conclusion: The PRES feedback has been invaluable for YLST, especially with the inclusion of open-ended questions, which allow participants to give their own opinions. This enables researchers to understand what participants valued in their work and thus good practice can be identified and applied to other studies where applicable. PRES will continue to be a valuable tool for improving participant-centred research, ensuring it addresses the needs and experiences of all participants.

References:

YH RRDN: PRES FY2425 › Quarterly Returns

The ‘Surprise Question’ and heart failure: Can it identify patients with unmet palliative care needs? A Pilot Study Protocol.

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Background: Patients with chronic heart failure live with symptoms such as breathlessness, fatigue, and fluid retention, with a symptom burden comparable to many forms of cancer (1). The purpose of palliative care is to improve the quality of life for patients with life-limiting illness and their families by assessing and treating physical, psychological, social, and spiritual problems (2). The benefits of palliative care take time and its early integration in heart failure is recommended by guidelines (3). Despite this, few heart failure patients are referred to palliative care in a timely manner (4), a finding replicated in a recent audit. Specialist Heart Failure Nurses when asked the ‘Surprise Question’ can predict which patients are approaching the end-of-life (5).

Aims: When posed to Specialist Heart Failure Nurses, does a ‘no’ response to the Surprise Question identify heart failure patients with unmet palliative care needs?

Methods: Patients admitted with heart failure will be invited to participate in the study. The Surprise Question – “Would you be surprised if this patient were to die in the next twelve months?” – will be posed to Specialist Heart Failure Nurses and the response recorded. We will assess the palliative care needs of patients using a validated tool: Needs Assessment Tool: Progressive Disease – Heart Failure (NAT:PD-HF). Data will be analysed to assess the burden of unmet needs in relation to the Surprise Question response.

Results and conclusions: The findings of this study will provide pilot data for further research which aims to test whether routinely posing the Surprise Question improves early assessment of palliative care needs, early referral to specialist palliative care services and additional support for patients and their families. Our aspiration is to improve the quality of life for heart failure patients and their families as they approach the final months of life.

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Mapping activity and perceived capacity, readiness, culture and aspirations

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Background: With increasing healthcare demands, a research-positive culture is needed within community healthcare settings to inform efficient and effective practice.

Aims: To capture current research activity and outputs, research perceptions and aspirations in our community healthcare organisation.

Methods: Four interrelated workstreams included:
1. A review of research databases to identify studies delivered in the Trust 2021-23.
2. A systematic search to identify publications and conference abstracts authored by Trust staff 2021-23.
3. Online surveys, incorporating two validated rating scales, to capture perceptions of research capacity1 (senior leaders and team managers) and of research readiness and aspirations 2 (healthcare staff and senior leaders).
4. Semi-structured interviews with team managers, senior leaders and research-interested staff to further explore survey responses.

Analysis included study and publication counts analysed by service type, survey response frequencies and thematic analysis of interview data.

Results:

- 57% research studies delivered and 76% research authors were from specialist services, where 3 established clinical academics are employed.
- Surveys were completed by senior leaders (48%), team managers (54%) and staff (2.5%): Median scores on a validated research capacity scale¬1 (1-10) were 6.5 (senior leaders) and 4.25 (team managers). Median ratings of research readiness2 (1-5) were 2.0 (senior leaders) and 2.5 (staff). Median level aspired to in the next 5 years was 4 (across all staff). Senior leaders aspired to level 5 for advanced practitioners.
- Themes from interviews completed by senior leaders (72%), team managers (74%) and research-interested staff (12%) focussed on: Research processes (e.g. research reporting); workforce development (clinical academic opportunities); training plan (shared learning): leadership (advanced practice researchers); strategic planning (research priorities, strengths, gaps).

Conclusions: Some community services are more research active than others, especially specialist areas and those with embedded research leaders. Team managers seem less optimistic than senior leaders about research capacity and capability, but future aspirations are high especially for advanced practitioners.

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"I have taken five different kinds of tablets and injections, and I still have foot pain": An international Outcome Measures in Rheumatology (OMERACT) qualitative interview study exploring patient perspectives of foot and ankle disorders

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Background: The foot and ankle are frequently affected in rheumatic and musculoskeletal diseases (RMDs), yet there is a lack of high-quality evidence to determine the effectiveness of treatments (1). Outcome domains in foot and ankle research are often inconsistently measured, impeding evidence synthesis (2, 3). Additionally, clinical decisions are based on research outcomes, but these are not always regarded as important by patients (4).

Aim: This international qualitative study aimed to understand what domains matter to patients with a range of RMDs, who had sought treatment for foot and ankle disorders.

Methods: Patients were recruited through clinical departments and electronic mailing lists, and invited to participate in a single semi-structured interview. Transcripts were analysed using a mixed deductive/inductive approach to the framework method. Patient research partners co-produced the interview schedule and recruitment materials, and interpreted results.

Results: Fifty-six patients (36 female; age range 27-76) in eight countries (UK, Republic of Ireland, Malta, Serbia, Egypt, United States, Canada, Australia) participated. Participants had a variety of RMDs, including rheumatoid arthritis, spondyloarthropathies, juvenile idiopathic arthritis, osteoarthritis, crystal arthropathies and connective tissue diseases. Important domains (Table) included pain, physical function (reduced range of movement, stiffness, muscle weakness, joint instability, balance, altered gait), deformity, fatigue, skin/nail health, activities/participation, psychological impact, sleep, footwear impact and personal expenses. Domains were important to participants regardless of their RMD or geographic location. Most participants expressed dissatisfaction and uncertainty relating to treatments.

Conclusion: Foot and ankle disorders have far-reaching consequences for RMD patients, but are often inadequately treated. This large qualitative study provides a foundation for achieving international consensus on outcomes to be measured in all future clinical trials in this area. Standardising the measurement of outcomes that are meaningful to patients could improve evidence for foot and ankle treatments and facilitate translation of research findings into NHS clinical practice.

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Whole Body-MRI identifies low levels of inflammation in peripheral joints, but higher prevalence of axial involvement in early, treatment-naïve psoriatic arthritis: Data from the GOLMePsA clinical trial

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Introduction: Whole Body magnetic resonance imaging (WB-MRI) provides comprehensive evaluation of musculoskeletal structures in psoriatic arthritis (PsA) complementing clinical examination by identifying subclinical inflammation and assessing treatment response.

The aim is To describe the prevalence and extent of WB-MRI detected disease features and their response to treatment in patients with early, treatment naïve PsA.

Methods: A multi joint MRI protocol was performed using T1-weighted Spin Echo (SE) before and after IV Gadolinium contrast injection and fluid-sensitive sequences, providing coverage for shoulders, spine (cervical, thoracic, lumbar), pelvis, wrists and hands, knees, ankles and feet. Newly diagnosed, treatment-naïve, PsA patients from the GOLMePsA trial (1) were invited to undergo WB-MRI at 3 time points: baseline (pre-treatment); week 24 (primary outcome) and week 36 (3 months post trial intervention).

Images were scored by expert readers, blinded to clinical characteristics, treatment allocation and date of scan. Statistical analysis of these exploratory outcomes was performed using multiple binary logistic or quantile (median) regression according to data type and distribution.

Results: Between November 2015 and January 2018, 35 persons underwent WB-MRI at baseline, of whom 31/35 attended for follow-up scans at weeks 24 and 36. Median joint symptom duration was 10.5 months (IQR 4.2-18.3; absolute range 1.8-197.7); 68% had polyarticular disease. Baseline WB-MRI scores (table 1) showed anatomically widespread, yet fairly low levels of inflammation in peripheral joints and entheses. A quarter of patients had axial inflammatory lesions, though only 1 was clinically classified axial. MRI scores did not differ significantly across treatment groups over time.

Conclusions: This analysis showed relatively low inflammatory burden at baseline. However, over one quarter of patients had axial MRI abnormalities. GOLMePsA first line treatment produced effective disease control at week 24 and was well tolerated.

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Adverse Event (AE) Assessment & Grading for Clinical Research Practitioners (CRPs) and senior Clinical Trial assistants (sCTAs): Ensuring Patient Safety in Clinical Drug Trials

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Background: Patients in Clinical Research are protected through the assessment and reporting of AEs (ONS, 2016). Inaccurate reporting of AEs can lead clinicians making inappropriate decisions (Zhang et al., 2016). Clinical Research Nurses (CRNs) are integral to the AE reporting process within trials (Catania, 2012), yet a recent local training analysis and review of the current literature yielded no results around this area of training and education. CRPs and sCTAs now undertake tasks historically done by CRNs (NIHR, 2025), including assessing AEs, which highlighted an important training need within our organisation, leading to the development of a specific training programme.

Aims: of the taught session:

- Understand AE assessment and terminology
- Understand how to accurately grade AEs
- Increase confidence in using the Common Terminology Criteria for Adverse Events (CTCAE)
- Know when to escalate AEs

Methods: A training programme involving a taught session and competency document, was developed and subsequently piloted. A group of 5 CRPs/sCTA were selected for the taught element of the programme, which was evaluated with pre and post training questionnaires, to determine confidence and understanding linked to the aims and objectives of the programme.

Results: Five staff completed the pre-questionnaire, and 4 completed the post-questionnaire. Prior to the session, none had received formal AE assessment training, 3 had received informal training and 3 had used the CTCAE before. The post training questionnaire showed that there was an increase in confidence using the CTCAE, assessing AEs, and understanding the terminology used, for 3/4 staff.

Conclusion: The training has increased the knowledge and confidence for 3 out of the 4 staff who completed the post-training questionnaire compared to the pre-questionnaire. This will provide a standard approach to AE assessment and grading.

The training will be updated from feedback received and made available to all staff who are delegated AE assessment in their role.

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eRAPID: A feasibility study of online symptom monitoring systemic anti-cancer therapies (SACT) in thoracic cancers in routine care.

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Background: Patient generated data via patient reported outcome measures (PROMs) can support toxicity management in later-stage lung cancer patients. Online PROMs monitoring studies of thoracic patients' have shown improved survival, symptom control, and quality-of-life [1,2]. Outside the research setting, challenges to routine use of PROMs exist [3]; therefore, further investigation of introducing monitoring systems is required.

Aims: Implement eRAPID (Electronic patient self-Reporting of Adverse-events: Patient Information and aDvice) into routine care for symptom-monitoring and disease-related toxicities in thoracic cancer patients during and after SACT.

Methods: Patients were enrolled and monitored for 1 year. They opted to join Cohort 1 (online access, completing ePROMs remotely weekly) or 2 (no online access, reporting in clinic every 4-6 weeks with help from clinical/research team). Recruitment processes, consent rate, and ePROMs symptom data were evaluated using descriptive statistics. Thematic analysis was used to analyse qualitative interview data regarding patient and staff experiences of eRAPID.

Results: Eighty-five eligible patients were approached, 43 consented and 75% chose remote reporting. Patients engaged in symptom-monitoring completing 841 symptom reports, with 56 clinician notifications generated for severe symptoms. Patients were content with regular symptom reporting, felt connected to clinical staff, and appreciated access to validated symptom-management information. Staff valued eRAPID data for tracking symptoms, aiding consultation discussions, and making timelier clinical decisions for patients with worsening toxicities.

Conclusions: Online symptom-monitoring during SACT for lung cancer was feasible and acceptable to patients and clinicians, but extra support is required for standard care. The clinical team support roll out but acknowledged not having capacity to adopt additional tasks associated with implementation (patient registration/consent, aiding Cohort 2 with symptom report completions). Further investment, establishment of digitally supported pathways, and support for clinical staff from hospital stakeholders is needed to ensure viable implementation of ePROMs within standard care.

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Getting creative with trial waste

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Background: Within early phase research, and across other areas of research, the management of sponsor provided laboratory supplies can present numerous issues to the staff co-ordinating the trial supplies, and for the organisation in terms of storage and disposal.

These issues include but are not limited to, finding suitable storage for the large number of kits provided by sponsor, and finding suitable ways to dispose of clinic items within these kits, due to the high volume of clinical items we receive which either expire or are no longer required.

Historically as a department, these excess or expired clinical items were disposed of following the appropriate hospital waste procedures, either into sharps bins or clinical waste bins. Over the last few years, we have been thinking of creative ways to recycle these items and prevent them from becoming “waste”.

Activity: The ways in which we have recycled kits are as follows. Sending items to be used in international aid projects, repurposing clinical items in both training centres at SJUH and Leeds University. Giving trust approved phlebotomy equipment to the phlebotomy team for use. Sending excess and unused laboratory items such as microscope slides and pipettes to local school science departments.

In presenting a poster we would, a) like to share the creative ideas we have regarding how to make better choices in kit destruction, b) find out how much of a problem this is for other teams (QR code link with questions), and c) use this information to develop better ways of working with sponsor allocated labs to reduce the amount of clinical items sent to us.

Waste reduction and sustainability are key priorities for key sponsor allocated laboratory services and for LTHT. Therefore, focussing on waste reduction would go some way to meet these shared sustainability goals.

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Nurses as second victims following adverse clinical events like falls

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Background: Adverse events occur in hospitals causing preventable patient harm, for example patient falls. Such events have significant implications for both patients and healthcare professionals. Nurses often take professional responsibility but may also experience emotional and psychological stress, often becoming ""second victims"" of the incident.
Aims: To explore the experiences of nurses (including student nurses) following an adverse event in hospital wards (excluding intensive care and emergency units).
Method: A scoping review was conducted: research studies were sourced from Google Scholar, PubMed, Springer Link Journals, and Taylor and Francis between 2014 and 2024. Papers were included if they reported nurses' experiences but excluded if they only described survey results or adverse events relating to medicine prescribing or medical record keeping. Identified titles and full texts of papers were assessed against these criteria by two independent reviewers. Included papers were summarised through narrative reporting.
Results: Following abstract review of 198 studies, 43 underwent full text review and 9 studies were included, none were from the UK. Study participants reported physical and primarily psychological effects following an adverse event. This included sleeplessness guilt, anxiety and stress, which impacted their ability to work. Peer support following such an event was appreciated, but pro-active help rarely reported.
Conclusion: The second-victim phenomenon impacts nurses and patient care. Enhancing awareness, implementing structured support systems and fostering a blame-free culture could contribute to improving nurse well-being and maintaining workforce stability.

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Collaborative Solutions for Research Excellence: Implementing a Lab Booking System for Better Patient Care and Improved Outcomes

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Background: Pre-analytical sample processing is a crucial aspect of clinical trials, ensuring samples are prepared for long-term storage or transported to a central lab for analysis. At Leeds Teaching Hospitals Trust (LTHT), the sample processing laboratories support over 200 clinical trials, each with specific requirements. As the final step in a patient’s visit, poor communication or errors in this stage can significantly affect study outcomes and patient care.

Previously, study teams did not notify the lab in advance of participant visits, leading to an unstructured, ad hoc sample delivery process. This lack of coordination made workflow planning difficult and increased the risk of errors.

Method: In 2022, the Research & Innovation (R&I) department adopted SharePoint for file storage, enabling the implementation of a real-time lab booking system. This system captures essential details such as participant visit schedules, sample kits, and transport logistics. Lab staff can now confirm bookings in real time and resolve issues immediately, reducing reliance on email communication.

Outcomes: Observations of the new system revealed that previously, 25% of near misses resulted from labs not being informed of visits. This often led to technicians rushing to prepare sample kits, increasing the likelihood of processing, storage, or shipping errors. The booking system streamlined communication, enabling better workload planning, improved resource allocation, and reducing pre-analytical and documentation errors.

Beyond efficiency, the system also enhanced staff digital proficiency and confidence. It eliminated unnecessary email correspondence, optimized lab resources, and provided valuable productivity data. Additionally, it improved responsiveness to sponsor queries, ensuring higher quality and reliability in sample processing. By standardizing and digitizing appointment management, the lab booking system has transformed lab operations, ultimately benefiting both research teams and trial participants.

Augmented Reality for Parkinson’s Rehabilitation: A Feasibility Study of Remotely Monitored Cueing-based Games

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Focus on:

- Innovative treatments and technologies in healthcare
- Improving patient outcomes and experience
- Prevention of falls
- Analogue to digital
- Hospital to home

Background: Parkinson’s is a neurodegenerative condition that causes severe movement impairments and places people at risk of falls. The number of people with Parkinson’s (PwP) globally is expected to double in the next two decades(1). PwP are advised to exercise regularly to maintain their mobility and balance(2), specifically using sensory cueing, which is a highly beneficial treatment for freezing of gait(3), one of the most difficult aspects of living with Parkinson’s. Maintaining an exercise programme to achieve the effective dose of rehabilitation can be challenging and becomes more difficult over time, leading to reduced function and deteriorating quality of life.

Aim: To investigate the use of RealityDTX®, a novel cueing-based rehabilitation programme for PwP, delivered through augmented reality headsets at home(4).

Methods: Thirty PwP were recruited. Each participant had baseline and follow-up assessments in clinic. Individual game-based rehabilitation was prescribed for home use for 6 weeks with remote monitoring and weekly telephone appointments. Primary outcome measure was the Timed-Up-and-Go (TUG). Secondary outcome measures included the Lindop Parkinson’s Assessment Scale (LPAS)(5). Statistical analysis comprised parametric and non-parametric methods appropriate to the data. (IRAS: 321744; NCT05794542).

Results: 30 participants were recruited; 2 participants withdrew; 1 yet to complete. Interim results on 27 participants: mean TUG improved from 13.4s to10.5s ($p<0.001$) and the LPAS improved from 27 to 29 ($p<0.01$). No falls, near falls or other adverse events were reported.

Conclusion: Novel game-based exercises through augmented reality headsets were successfully used to deliver rehabilitation for PwP in their homes with participants’ mobility improved and no adverse effects reported. A NIHR-funded, multi-site randomised controlled trial (NIHR206530) based on the results of this feasibility trial is planned to start later this year to investigate the clinical- and cost-effectiveness of this technology.

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Incorporating research delivery into the role of the Clinical Nurse Specialist in Tissue Viability. An exploration of the barriers, enablers, and experiences of one team.

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Background: Research is essential for evidence-based practice through the development and evaluation of treatment strategies and optimising healthcare practice. WHiTE 14-PRESSURE 3(1) is a randomised clinical trial which aims to assess whether early use of heel specific devices prevent heel pressure ulcers (PUs). With a recruitment target of over 3000 patients across 30 sites in the UK, this will be the largest PU prevention trial ever conducted. Such trials are usually delivered with the support of dedicated research nurses. However, due to funding limitations, The Tissue Viability Clinical Nurse Specialists at LTHT undertook relevant training to incorporate trial activities into their usual clinical role.

Methods: A survey was sent to all members of the team who have undertaken research training to work on WHiTE14-PRESSURE 3, to explore their personal experiences of incorporating research delivery into their clinical role.

Results: All members of the team responded to the survey allowing trends and themes to be identified. Barriers included: length and relevance of Good Clinical Practice training; difficulty understanding research concepts; time management/balancing clinical workload; and repetition in some documentation. By contrast, respondents reported that their involvement was a good use of their skills and experience. Further benefits identified included: diversity in their clinical role; service development; greater understanding of research and its value in healthcare and how it can inform practice.

Discussion: This is the experiences of one small team, and although there were some difficulties incorporating research into a busy clinical caseload, overall staff found it to be beneficial. Being involved in research is known to improve patient experience, alongside generating additional income for the service. Further research in a larger population is required to determine whether this is a model that could be adopted by other clinical teams with an interested in becoming research active.

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Impact of an extended therapy hours pilot in elective orthopaedics

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Background: Current standards recommend extended therapy service provision until 20:00hrs with elective orthopaedic operating activity to increase same day discharges and reduce length of stay (LOS) 1,2. However in 2023, Leeds Teaching Hospitals Trust's (LTHT) therapy service finished at 16:00hrs, and the daycase rates and average LOS for those undergoing primary hip or knee arthroplasty exceeded national averages.

Aims: This pilot aimed to explore if providing extended therapy cover at LTHT on operating days increased daycase surgery success rates for primary arthroplasty patients whilst also positively impacting patient experience and LOS for other orthopaedic inpatients.

Method: An extended therapy hours service was commenced in April 2024 at Chapel Allerton Orthopaedic Centre (LTHT). Data was collected on: daycase surgery success rates; Day 0 (same day as surgery) review and mobilisation rates; and LOS. Data from the pilot period was compared to available 2023 data. Qualitative staff and patient feedback was also collected.

Results: During the first 8-months of the pilot, 1001 extra treatments were delivered outside of traditional hours. Day 0 patient reviews and mobilisation rates increased by 247% (30% (2023) v 74%

(2024)) and 1100% ((5% (2023) v 55% (2024)) respectively. Significant reductions in average LOS were seen, ranging from 0.3 days (primary total hip replacement) to 6 days (revision total knee replacements). Same day discharge was achieved in 33% of surgeries planned as daycase, alongside qualitative improvements in patient experience and multi-disciplinary team satisfaction.

Conclusion: Extending the LTHT therapy service provision in line with NHS England recommendations has demonstrated improvements in inpatient stays without compromise to patient care or experience. Continuation of this service has potential for further reduced costs, optimisation of theatre utilisation with ring-fenced care, reducing waiting lists and more streamlined services complying with Best Practice Guidance.

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What are the benefits of involvement in health care research, for health care staff?

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Background: Research-active healthcare organisations demonstrate improved care processes (e.g., Boaz et al, 2015), fewer adverse events (Ozdemir et al, 2015), and reduced staff turnover (Harding et al, 2017). However, there's limited evidence about the benefits experienced by health care staff themselves. To address this gap, researchers from the Yorkshire and Humber Applied Research Collaboration (YH ARC) collaborated with several other ARCs to conduct a scoping review, to identify the different types of involvement, and the benefits experienced.

Methods: The team searched four databases (CINAHL, MEDLINE, PsycINFO, Scopus) supplemented by a grey literature search, focused on UK-based records published in English (2003-2023). Extracted data included the type of record (journal article, blog, poster, report), whether it was a reflective piece or gathered direct reports of benefits (via surveys or interviews), type of involvement (from research participation through to more intensive clinical academic roles), and the benefits reported. The benefits were distilled into themes by four research active clinicians.

Findings: There were 49 retained records; they covered a range of types of involvement, most commonly clinical academic roles (n=21) but also covering less intense roles, such as study recruitment and data collection, through to research participation itself. The majority of records were journal articles (n=44) reporting directly on benefits (n=38). Six key benefits were distilled:

1. Personal fulfilment
2. Opportunities to lead practice improvements
3. Building connections and networks
4. Learning opportunities
5. General skills and competency development
6. Effective evidence use

Conclusions: The findings support efforts to engage staff in research at various intensity levels, including lower intensity research participation. Records showed examples of people thriving through research involvement, noting how research activities can buffer against clinical practice stresses while developing valuable skills.

Given current retention challenges in health care, demonstrating this broad range of benefits is crucial for justifying staff time allocation to non-direct care activities. Organizations should promote these diverse benefits as incentives for staff research involvement.

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Exploring the benefits and barriers to developing a Nursing, Midwifery and Allied Health Professionals Clinical Academic Career pathway at LTHT

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Leeds Teaching Hospitals NHS Trust

Background: Nurses, midwives, allied health-professionals(NMAHPs) constitute 38% of NHS workforce(1); less than 0.1% are clinical-academics(2). Developing NMAHP clinical-academic career pathways is essential to enhance patient care, foster innovation, and ensure evidence-based NHS practice.

Aims:

- Explore Clinical-Academic NMAHP career landscape, identifying challenges faced.
- Evaluate impact of these roles on patient outcomes, experiences, and research delivery.
- Identify support mechanisms required to retain these professionals.

Methods: Mixed-methods:

- NHS workforce statistics quantitative data review
- Literature and policy document reviews, including NIHR ICA Programme
- LTHT Clinical-academic NMAHPs case studies

Results: Key challenges:

- Lack of structured career pathways
- Limited workforce understanding of NMAHP clinical-academic roles
- Maintaining protected research time

Case Studies: Dr Clare Greenwood, Clinical Academic Researcher, Tissue Viability. Undertook part-time PhD informed by practice, wanting to improve patient care and discover best evidence-based practice for heel pressure ulcer prevention. The findings successfully informed a HTA Multi-centre RCT “WHiTE14-PRESSURE3”. She is developing a research active Tissue Viability CNS team, recruiting clinical trial participants, presenting at conferences, developing research strategies and promoting a research positive culture within the Chief Nurse CSU.

Dr Sue Hartup, Consultant Nurse Breast Cancer Research. Undertook PhD part-time, building on patient-identified unmet needs, (chronic pain in breast cancer survivors), developing and testing a web-based intervention, integrated with EPR. The intervention provides patients tailored advice based on symptom reporting and allows HCPs to identify those needing support, helping guide clinical consultations. Current RfPB grant extends this with a multi-site intervention RCT, testing transferability to other NHS Trusts.

Conclusion: Clinical-Academic NMAHPs are vital in advancing healthcare research and NHS practice. While progress has been made through NIHR initiatives, further efforts are needed to address identified challenges. Enhancing support structures and promoting a culture that values research within clinical settings are essential to realising the potential of clinical-academic NMAHPs in improving patient care and health outcomes.

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Utilisation of oral photography in urgent suspected oral cancer referral triage

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Introduction: The number of patients referred through the head and neck urgent suspected cancer(USC) pathways has seen a significant increase in recent decades: 2009/10 – 73000(4.2% cancer conversion) to 2022/23-275000(2.6% cancer conversion). These places increasing burden on healthcare resources.

Methods: A multidisciplinary/multi-agency collaborative working group conducted a pilot validation study to utilise oral photographs obtained in primary care to triage oral USC referrals to Leeds Dental Institute. The main objective was to validate the safety and efficacy of the proposed new pathway. In addition, feasibility of implementation was assessed to provide feedback to the clinical and administrative/management teams regarding viability of the process, impact on patient pathway, implications for service agreement and funding with commissioners. This was conducted parallel to clinical service without having any impact on existing patient care/pathways.

Results: The pilot was conducted from 30/9/24-31/1/25, 46%(215/466) of USC oral cancer referrals received had photographs attached, 79% of these photographs were good enough to enable a meaningful triage. 40% of referrals were received from dentists and 60% were from general practitioners(GP). 69% of referrals from dentists had photographs attached compared to 43% from GPs ($p<0.0001$). Overall cancer conversion rate was 2.5%. Dentist referral cancer conversion rate was 1.9% vs. GPs 2.9% ($p=0.75$). Median time from referral to triage: 2 days and 60% of triaged patients were de-escalated to non-urgent/benign pathway with no false negatives (missed cancer diagnosis).

Conclusion: Interim analysis of this initiative supports its safety and efficacy as a valuable adjunct in the triage of oral USC referrals. Potential exists for personalised resource utilisation which can impact on sustainability of resource and workforce, designing a streamlined pathway for patients with diagnosis of cancer and improved experience. Furthermore, this could enable straight to test pathways which can reassure patients that level of urgency is reciprocated and addressed.

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Representative research participant recruitment: does our Theatres and Anaesthesia research study population reflect our peri-operative population? A service evaluation

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Background: Failure to recruit diverse participants limits the impact of research [1]. We aim to recruit equitably to peri-operative (PO) studies but complex barriers to participation exist. Previously, we studied the Index of Multiple Deprivation (IMD) of participants in one study compared to council data. However, the PO population differs from the general population [2].

Aims: We studied the demographics of our research population and compared these to our Trust's PO population. We suggest barriers and describe efforts to address these.

Methods: The PO patient (POP) demographics (age, sex, ethnicity and IMD) were defined for those ≥18 years having an operation in the Trust between 1/1/2022–31/12/2023. Research participants (RPs) included all patients ≥18 years recruited to PO studies between 1/1/2018–1/2/2024. We used EDGE3, Perioperative Quality Improvement Programme and local research databases to define age, sex, ethnicity and postcode (determining IMD).

Results: We identified 25,751 Trust POP and 1184 RP episodes. RPs were from 10 studies; six interventional, four observational. Those with incomplete data were excluded. Of Trust POPs, 12.2% were non-White compared to 5.1% of the RPs. Asian or Asian British accounted for 6.4% of the POPs and 1.8% of the RPs. Those most deprived (IMD 1) represented 22% of the POPs and 14% of the RPs. Of the POPs, 68% were >50 versus 83% of the RPs. 52% of the POPs and 46% of the RPs were women.

Conclusion: Barriers to recruitment of non-White ethnicities, especially Asian and Asian British, may include language and availability of translated information. Deprivation restricts access to healthcare for various reasons. Some studies' inclusion criteria mandate age ≥50 years. Our team has produced an animation to promote PO research to minority ethnic groups and created a diversity patient reference group. We now include these demographics in our database to facilitate future audit.

Acknowledgements:

Thanks to the Patient Level Information Costing System team and T&A research team.

Declarations:

This audit project has previously been presented as an oral presentation at the Association of Anaesthetists Annual Congress in Harrogate, September 2024, and has been published as an abstract in Anaesthesia 2024, 79 (Suppl. 3), 7, doi:10.1111/anae.16417.

This audit had LTHT Caldicott Guardian and audit department approval.

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Cancer Screening Data Integration in the NHS: Challenges and Solutions

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Background: Cancer screening plays a critical role in early detection and reducing mortality rates, yet fragmented NHS data systems create challenges in tracking screening participation and patient outcomes. Data silos between primary care (GPs) and secondary care (hospitals) limit effective monitoring, making it difficult to optimize screening programs and reduce health disparities. Strengthening data integration, interoperability, and governance is essential for improving screening participation and enhancing cancer prevention efforts.

Aims: This study aims to assess the feasibility of integrating cancer screening data within NHS systems, identify barriers to data-sharing, and propose policy-driven and technological solutions to improve data interoperability, research capabilities, and patient outcomes.

Methods: A qualitative and policy analysis approach was used, including:

- Stakeholder engagement with NHS data teams (Leeds Teaching Hospitals NHS Trust, West Yorkshire Integrated Care Board).
- Assessment of NHS IT infrastructure, focusing on interoperability challenges between SystmOne (GPs) and PPM+ (hospitals).
- Review of data governance policies, including IRAS approvals, GDPR compliance, and Caldicott Guardian regulations.
- Comparative analysis of international data integration models (e.g., Germany’s DIFUTURE, Sweden’s eHealth, U.S. Cancer Moonshot Program).

Results: Cancer screening data in NHS is highly fragmented, limiting patient tracking and screening program evaluation.

- Data governance restrictions (e.g., lack of cross-institutional data-sharing agreements) create barriers to research access.
- Interoperability challenges due to the absence of standardized frameworks (HL7 FHIR, SNOMED-CT, DICOM) hinder seamless data exchange.
- AI and digital health solutions (e.g., wearable technologies, cloud-based repositories) present opportunities for improving screening participation and early detection.

Conclusion: The study highlights urgent need for NHS-wide data integration strategies to enhance cancer screening effectiveness, research accessibility, and patient care. Adopting standardized interoperability frameworks, strengthening data-sharing agreements, and leveraging AI-driven analytics could significantly improve screening participation and reduce health disparities. These findings have important implications for public health planning, digital transformation within NHS, and future cancer prevention strategies.

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Exploring Patient Views on the Implementation of Pharmacogenetic (PGx) Testing to Support Tacrolimus Prescribing in Adult Renal Transplant Recipients Using Focus Groups - An Explorative Qualitative Pilot Study

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Background/Aims: Pharmacogenomic (PGx) testing has the potential to personalise medication regimens by considering genetic differences, particularly for renal transplant patients taking tacrolimus, an immunosuppressant with a narrow therapeutic window. Despite its potential benefits, little is known about patients' views on using PGx testing in this clinical setting. This study explores renal transplant patients' understanding, attitudes, preferences, and perceived barriers regarding PGx testing, acting as a pilot to inform future research and assess methodological feasibility.

Methods: Qualitative data were gathered through focus groups with renal transplant patients from a large UK renal transplant unit. Participants were recruited via postal invitations and clinic discussions, with 10 consenting and 8 attending virtual focus groups on Microsoft Teams. Discussions were recorded, transcribed, and analysed using reflexive thematic analysis, guided by the Health Belief Model.

Results: Participants were generally positive about PGx testing, recognising its potential to personalise tacrolimus dosing, reduce side effects, and stabilise drug levels. They acknowledged genetic differences in tacrolimus metabolism and saw PGx as a way to prevent frequent dose adjustments and lower the risk of organ rejection. Emotional stress from fluctuating tacrolimus levels and multiple dose changes was a key concern with current practice. Trust in healthcare professionals, especially doctors and pharmacists, strongly influenced participants' willingness to adopt PGx testing. Concerns about genetic data complexity and privacy posed notable barriers. Patients preferred PGx testing to be integrated into routine care alongside blood tests, avoiding added treatment complexity. The study also highlighted digital exclusion as a challenge for recruiting older patients in future research in this area.

Conclusion: This pilot study reveals both enthusiasm for PGx testing's benefits and concerns about data privacy and communication. It underscores the need for clear guidance from healthcare professionals and seamless integration into care. Findings will inform larger studies, with a focus on improving inclusivity through mixed recruitment methods.

Enhancing Dental Research Quality through Integrated Dental Nursing Expertise: The Role of Research Dental Nurse Coordinators.

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Background: Research Dental Nurse Coordinators (RDNCs) play a critical role in the successful delivery of high-quality dental research. By integrating clinical expertise with research coordination, RDNCs contribute to improved patient engagement, protocol adherence, and data integrity. Their dual competencies in dental nursing and research facilitation enhance both the scientific rigor and participant experience in dental trials.

Aims: To highlight how the integration of dental nursing expertise within the research coordination role enhances the execution, patient adherence, and overall study outcomes in dental research.

Methods: The valuable contributions of RDNCs became evident during the conduct of a clinical trial investigating denture fixatives and subjective patient-reported outcomes. RDNCs leveraged their dental nursing skills to educate participants on proper denture cleaning techniques and the correct application of fixatives. Additionally, their clinical insight enabled real-time monitoring of patient adherence and early identification of potential protocol deviations, ensuring the reliability of collected data.

Results: Participants reported increased confidence in using denture fixatives, attributing this to the tailored guidance provided by RDNCs. The study observed higher adherence rates and reduced protocol deviations, reinforcing the effectiveness of RDNCs in optimising trial execution. Furthermore, the RDNCs' ability to bridge clinical practice with research methodologies fostered a more supportive and patient-centred trial environment.

Conclusion: Embedding dental nursing expertise within research coordination enhances study quality, patient safety, and data reliability. The RDNC role exemplifies the value of interdisciplinary collaboration in health research delivery. By promoting a ""safety culture"" and incorporating human factors into decision-making, RDNCs contribute to more efficient, ethical, and patient-focused dental research. Other centres across the UK should explore the adoption of this model to enhance the quality and outcomes of dental research.

Understanding the prescribing and uptake of self-directed arm and hand exercise after stroke: a realist investigation.

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Background: Current stroke rehabilitation in the UK often falls short of the recommended intensity for arm and hand therapy in in-patient settings (Clark et al. 2023; Newton et al. 2023) . Enhancing exercise prescription and uptake outside of face-to-face therapy may help bridge this gap and improve recovery outcomes (Intercollegiate Stroke Working Party 2023).

Aims: This study aimed to develop a programme theory to understand the processes behind prescribing and performing self-directed arm and hand exercises. This theory then served as the foundation for evidence-based interventions.

Methods: A realist approach was used to tackle this complex issue (Pawson and Tilley 1997). First, a realist review was conducted to develop an initial programme theory, outlining the key contexts for successful self-directed rehabilitation. This theory was refined through qualitative data gathered from therapist and stroke survivor interviews and observations. Finally, a co-production workshop with stakeholders was held to create resources supporting better prescription and uptake of self-directed exercises.

Results: The programme theory highlighted the importance of tailored exercise provision and motivational support in fostering engagement with self-directed exercises. Busy therapists, often working within time constraints, were more likely to prescribe exercises to survivors who displayed clear signs of readiness. It is theorized that in this context, therapists develop a sense of accountability and expectation of positive outcomes, which influences their decision-making on who receives prescribed exercises. To address this, a conversation guide was co-created to facilitate collaborative, individualized rehabilitation planning, ensuring that all survivors, regardless of how they demonstrate readiness, can identify their needs for successful exercise engagement. Additionally, a quality improvement framework was developed to help therapists assess and enhance their exercise prescription practices.

Conclusion: This study offers a deeper understanding of the factors influencing the successful prescription and uptake of self-directed exercises, paving the way for interventions that support stroke survivors in managing their rehabilitation effectively

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Service Evaluation Project (SEP) of a Low-Intensity CBT Based Group for Rehabilitation Inpatients with Brain and Spinal Injuries.

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Background: Depression and anxiety (D&A) rates within an acquired brain injury (ABI) population are expectedly larger than within the general population, with rates being approximately 29% (Al-Kader et al., 2022), compared to 16% of the GP experiencing either anxiety or depression (MCManus et al., 2016). Group CBT based interventions have been found to significantly reduce symptoms of D&A, in people with ABIs (PWABIs) (Bradbury et al., 2008; Hodgson et al., 2012).

Aim: To evaluate the impact that attending a NICE guidelines adapted CBT based emotional wellbeing group has for individuals experiencing D&A, whilst being admitted for inpatient rehabilitation for ABIs.

Method: Completed SEP involving 22 (Mean age= 57.5 years) patients across 7 cohorts, all were admitted to an inpatient rehabilitation ward following an ABI or spinal injury. The Hospital and Anxiety Depression Scale (HADS) was completed pre and post group to assess intervention efficacy. Patients attended 4x60 minute weekly sessions each with a different psychoeducation topic and 'relaxation' strategies. T-tests analysed differences between pre and post-HADS means. Content analysis was carried out on qualitative data gathered from a feedback form.

Results: A t-test revealed a statistically significant difference between the pre-anxiety scores and the post-anxiety scores (t(21)=2.67, p =.006). There was a significant difference between pre-depression scores and post-depression scores (t(21)= 2.81, p=0.005). There was a significant difference between the pre-total scores and the post-total scores (t(21)=3.9, p=.<000). Themes identified from qualitative data include the benefit of peer support and learning of practical strategies.

Conclusion: The findings supported the use of low-level CBT group interventions for PWABIs experiencing D&A. The group faced challenges of attrition, small sample size, ward pressures, and medical stability. Future recommendations are to increase the accessibility of the group to people with varying cognitive abilities, and increased number of services it is available in.

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Novel Antibacterial coatings of Intramedullary Nails use in high risk Tibial fractures: do they make a difference?

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Background: Fracture-related-infections (FRI) represent a complex problem which has grave socio-economic impact to the patient and to the health system. One of the recently emerging prevention strategies of FRI has been the use of antibacterial-coated implants.

Aims: To evaluate for the first time, the clinical effectiveness of the 2 commercially available in the UK, coated tibial nails (PROtect of Depuy-Synthes and Bactiguard of Zimmer-Biomet) in comparison to standard non-coated nails for stabilisation of high risk for FRI tibial fractures.

Methods: Prospective collection of relevant data of patients with minimum follow-up of 12months. High-risk was defined as open injuries, post-fasciotomies, post an external fixator. Statistical analysis was performed using Stata, with a significance level of $p < 0.05$.

Results: A cohort of 234 high-risk tibial fractures treated at Leeds Major Trauma Centre (102 PROtect nail group, 41 Bactiguard nail group & 91 non-coated nail group). There were no statistically significant differences in the epidemiological and comorbidity characteristics, the severity of associated injuries, the fracture types, the severity of soft tissue trauma, or the time to definitive fixation or soft tissue management between the coated nail groups. Overall, the incidence of FRI was 9.4% (22/234 cases). For the PROtect 7.8% (8/102), for the Bactiguard 4.9% (2/41) and 13.2% (12/91) for the non-coated nails (p=0.167). Staphylococcus was the most common species isolated (in 65% of all positive samples) whereas there were 11 (29.7%) polymicrobial and 10.8% multi-resistant species. Uncomplicated fracture-union was recorded in 64.7%vs.65.9%vs.53.8% respectively, and un-planned secondary interventions and readmissions were required in 26.5%vs.22%vs.41.8% respectively (p=0.009).

Conclusions: In high-risk patients both types of coated nails achieved lower incidence of FRI and less readmissions compared with non-coated intramedullary implants. The precise impact of antibacterial-coatings of tibial nails on the prevention of FRI should be investigated in a randomised multicentre trial.

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Introduction of a Dedicated Enhanced recovery Nurse in Pancreatic Cancer Surgery

Alison Kinany

Background: Patients attending for Pancreatic cancer surgery were lacking support pre and post operatively and were not given the tools or support to experience high-quality recovery from surgery.

Aims: To introduce a dedicated Enhanced recovery nurse for this patient group to aid pre and post op support, care and advice.

Methods: Data Analysis with the helps of the costing team at LTHT and the use of PLIC's as allowed us to measure the Length of inpatient stay and Cost of inpatient stay. The data compared surgery undertaken in the year 2023 to the year 2024 when the Enhanced Recovery nurse was implemented. Patient Feedback questionnaire that looked at how they felt about the care and support they received from the Enhanced Recovery Nurse Service.

Results: When comparing 2023 to 2024 the Median Length of stay has decreased by 1.3days this is a saving of 115.7 bed days, the cost per patient has decreased by £866 pound per patient with an efficiency saving of £77,074.

The patient feedback questionnaire has reported 100% positive feedback for the service with patients being very complimentary of the care and support they received from this role. The feedback received has contributed to the Enhanced recovery Nurse receiving a National Patient experience Professional of the year award in October 2024.

Conclusion: The introduction of a dedicated Enhanced Recovery Nurse has given patients the support and understanding that is required to recover from extensive surgery that comes with a high complication rate. This has contributed to positive patient experience and also seen a drop in the median length of stay for this patient group and an efficiency saving for the trust.

British Axial Spondyloarthritis Inception Cohort (BAxSIC): Driving Innovation and Empowering Research Participation in the NHS across the UK

Helena Marzo-Ortega, Sayyora Alieva, Onorina Guerra, Stephanie Harrison and Jake Weddell on behalf of BAxSIC co-investigators
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Background: Axial spondyloarthritis (axSpA) is a chronic, disabling arthritis affecting young people. AxSpA remains underdiagnosed and undertreated, with diagnostic delays of 8.5 years affecting long-term outcomes. BAxSIC was set up in collaboration with BRITSpA and (NASS) [1] to address this unmet need.

Aims: To provide real-world data on the impact of diagnostic delay in disease progression, work participation, and functional outcomes in axSpA.

Methods: Multi-centre, observational, prospective inception cohort study of people with axSpA within 6 months of a confirmed diagnosis. Participants undergo in-person assessments at baseline and 24 months, with remote data collection at 6, 12, 18, 30, and 36 months using an innovative, low-burden virtual follow-up system integrating electronic health records and patient-reported outcomes via a dedicated REDCap platform.

Results: Since June 2023, BAxSIC has expanded to 27 sites, enrolling 260 participants towards its 500 target. First results are expected in 2026, with no interim analysis planned.

Showing remarkable flexibility, BAxSIC engages all size research teams across the UK despite limited funding. Participating patients and sites praise the ease of use of the online platform, convenience of remote consent and short 10-15 min online visits, reducing hospital appointments, whilst providing research teams real time access to clinically relevant data.

Challenges include a 5 year set up delay with loss of funding and slow uptake of innovative and remote methods for clinical research after the COVID-19 pandemic. At LTHT, BAxSIC led to the adoption of REDCap and creation of a dedicated research cloud.

Conclusion: Data from BAxSIC will enhance early detection and optimise long-term management of axSpA. BAxSIC exemplifies LTHT priorities by driving innovation, expanding research participation, and fostering collaboration across NHS Trusts, academic institutions, and patient organisations to address key challenges in axSpA. Its patient-centred approach and digital innovation model leverages NHS infrastructure addressing inequities in research delivery capabilities and setting a precedent for future large-scale NHS research initiatives, ultimately improving patient outcomes and healthcare efficiency.

BAxSIC: British Axial Spondyloarthritis Inception cohort; BRITSpA: British Society for Spondyloarthritis; NASS: National Axial Spondyloarthritis Society.

Ethical approval was obtained from the Wales Research Ethics Committee 7 (22/WA/0311) in 2022. The BAxSIC study is sponsored by the Leeds Teaching Hospitals Trust (RR21/146198) and is adopted on the National Institute Health and Research (NIHR) musculoskeletal study portfolio (54230)

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Implementation and evaluation of the s-G8 patient reported frailty assessment in an oncology outpatient department.

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Background: Recent guidelines advocate for the implementation of frailty assessment in oncology services[1]. Self-Geriatric 8 (S-G8) is a previously described, patient reported screening tool to assess for frailty[2]. S-G8 is scored out of 17 with scores <14 (or <11 in gastrointestinal cancers) suggesting potential frailty. We describe a service development project implementing the S-G8 in the oncology outpatient department.

Aims: Assess the acceptability and feasibility of implementing the S-G8 in an oncology outpatient department. Investigate the relationship between S-G8, other measures of frailty and treatment decisions.

Methods: New patients aged >60 attending either Gastrointestinal or Lung oncology clinics were invited to complete a paper-based S-G8 and feedback survey. Uptake was assessed over the first 3-month phase of the project.

We used a linear regression model to investigate the relationship between S-G8, clinician reported Rockwood Clinical Frailty Scale (CFS), and WHO Performance Status (PS). We compared S-G8 between treatment intent sub-groups. Clinicians involved were surveyed for their opinions and feedback on the tool.

Results: 62% of eligible patients attending clinic returned a completed form. 87% of respondents reported the S-G8 "straightforward" to complete. Clinicians reported that use of the tool fitted easily into their clinical workflow and helped them assess patients' frailty.

109 patients returned S-G8 surveys. S-G8 showed a significant inverse correlation with CFS (R=-0.64, p<0.05) and PS (R=-0.58 p<0.05). The mean S-G8 for the active treatment group was 12.6 compared to 10.1 in the best supportive care group (Student's T p<0.05).

Conclusions: The S-G8 can be implemented in an outpatient setting and is acceptable to patients and clinicians. S-G8 scoring correlated with the clinician assessment of frailty; patients offered best supportive care had lower scores than those actively treated. Further follow up is required to assess whether S-G8 scoring correlates with treatment outcomes.

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How safe is bed-side replacement of a jejunostomy tube? A retrospective data analysis of 201 tube replacement reports.

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Background: There is a lack of national guidance for the replacement of a jejunostomy tube at the bedside and many NHS Trusts call on the assurance of radiological input to carry out these procedures. The clinical nurse specialist team at Leeds Teaching Hospitals carry out this procedure blindly at the bedside.

Aims: To determine the safety profile of the bedside replacement of jejunostomy tubes, undertaken by an Enteral feeding Clinical Nurse Specialist (CNS) team in a hospital setting.

Methods: This retrospective analysis reviewed the jejunostomy tube replacement reports undertaken by the Enteral Feeding Nursing Service at Leeds Teaching Hospital NHS Trust over a 10-year period.

Results: In total, 201 jejunostomy tube replacements at the bedside were carried out since 2015. 97% of tube changes were straightforward and position confirmed by either the presence of jejunal content or the nurse's professional judgement where jejunal content did not flow.

3% of changes required a tubogram to confirm position.
Complications were low with 3 instances of retained bumper, 1 patient reporting pain and swelling post tube change and 1 case of an ‘accidental removal’ where a tube was incorrectly identified as traction removable and removed at the bedside rather than being removed surgically. No serious complications such as intraperitoneal placement of tubes was reported.

Conclusion: The bedside replacement of a jejunostomy tube is safe. The impact of this work will hopefully go some way to improving the patient experience, namely the eradication of exposure to radiation. Some of the beneficial impacts to the wider NHS include, streamlined hospital appointments with nursing teams only, reducing costs with less invasive procedures, freeing up radiologists to undertake other work. The authors hope this work will inform the production of national healthcare policy in standardising the replacement of a jejunostomy tube at the bedside.

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ARthritis InteRcEption with GuSelkumab in Psoriasis Patients in Clinical Transition from Skin to Joint Disease (ARREST): A Randomised Clinical Trial

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Background: Psoriasis patients with arthralgia and subclinical musculoskeletal inflammation detected by imaging (US/MRI) are considered “subclinical psoriatic arthritis (PsA)”, with a ~10% 12-month risk of developing clinical PsA (1). There is evidence that biologic therapies targeting psoriasis may reduce that risk, particularly IL-12/IL-23 inhibitors and IL-23 inhibitors (2–4); however, prospective data remain lacking.

Aims: The ARREST study aims to assess the effectiveness of guselkumab (an IL-23p19 inhibitor) in preventing PsA development in subclinical PsA patients, compared to standard care. The primary outcome is the percentage achieving resolution of arthralgia (VAS pain ≤1/10 and TJC ≤1) at 24 weeks.

Methods: This is an international (Italy and UK), multicentre, open-label, randomized, parallel-group clinical trial involving patients with subclinical PsA. Patients attending Dermatology services will be eligible if they meet the following criteria: no documented PsA, severe psoriasis, peripheral arthralgia, and sonographic findings suspicious for musculoskeletal inflammation. Eligible patients will be randomized into two arms: guselkumab or standard of care (topicals and/or phototherapy with cyclosporin rescue therapy for severe psoriasis) and followed for 52 weeks.

Results (expected): We hypothesize that treatment with guselkumab will lead to control of subclinical PsA, with the percentage of patients achieving resolution of arthralgia and of subclinical inflammation on US expected to be higher in the guselkumab arm.

Conclusions: This study represents an important step in advancing PsA prevention through targeted IL-23 inhibition in high-risk psoriasis patients. By combining clinical and imaging markers to identify subclinical PsA, this trial seeks to validate a pragmatic approach for PsA interception, potentially transforming clinical practice by reducing disease burden and improving patient outcomes. Recruitment is anticipated to commence soon, by an established Dermatology-Rheumatology collaboration, as part of a programme of PsA prevention at the NIHR Leeds BRC.

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Referrals To Dedicated Psoriatic Disease Triage Clinic Result In Similar Rate Of Newly Diagnosed Psoriatic Arthritis, Irrespective Of Referral Route

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Background: Collaboration between general practitioners (GPs), dermatologists, and rheumatologists may facilitate prompt assessment to prevent psoriasis (PsO) progression to psoriatic arthritis (PsA). However, referral prioritization is challenging due to limitations of screening tools like Psoriasis Epidemiology Screening Tool (PEST) and ultrasound. A Psoriatic Disease (PsD) Triage Clinic aims to address this gap.

Aims: To describe the findings from a PsD Triage Clinic, including new PsA diagnosis rates, characteristics of PsO patients referred by GPs versus dermatologists, and the utility of PEST.

Methods: This single-centre cross-sectional study included patients with PsO and arthralgia referred by GPs or dermatologists to the PsD Triage Clinic (2017–2024). Patients underwent clinical, laboratory, and imaging evaluations as appropriate. Data were analyzed using standard statistical methods.

Results: Of 158 patients, 58 (37%) were GP-referred and 100 (63%) were dermatologist-referred. Mean age was 49±14 years and 100 (63%) were female. At first evaluation, 44 (28%) were diagnosed with PsA, 94 (59%) with osteoarthritis, and 7 (4%) with gout. PsA rates were similar across referral routes (28%). GP-referred patients were more likely female [47 (81%) vs 53 (53%), $p<0.01$] and had a family history of PsA, while dermatologist-referred patients had higher PEST scores, more metabolic comorbidities and more exposure to DMARDs ($p<0.05$) (Table 1). PEST sensitivity and specificity for PsA diagnosis were 56.8% and 41.4%, respectively. Patients with PEST≥3 were older, had higher BMI and more entheseal tenderness, while those with PEST≤2 were more likely to present with inflammatory back pain and inflammatory axial MRI ($p<0.05$); PsA diagnoses rate was similar across groups (Table 2).

Conclusions: Nearly one-third of PsO patients with arthralgia referred to the PsD Triage Clinic were diagnosed with PsA. Diagnosis rates were similar across referral routes and PEST classifications. Integrated clinical services enable timely PsA identification and characterization of at-risk PsO patients.

Introducing Routine Safety Enquiry in the West Yorkshire Regional Multiple Sclerosis service

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Background: Disabled people are more likely to experience violence and abuse than non-disabled people. In parallel PhD studies at the Universities of Leeds and Nottingham we have investigated the experiences of victim-survivors with MS and the perspectives of healthcare professionals (HCPs). The research highlighted the prominence of coercive and controlling behaviours as well as other forms of abuse. People with MS (pwMS) are not routinely asked about their safety and MS HCPs lack understanding of different forms of abuse.

Aims:

- To pilot routine safety enquiry in the MS service in outpatient and community settings
- To inform the development of a Toolkit for MS HCPs

Methods: The MS CNS team and Advanced MS Champion established stronger links with the LTHT and LCT Safeguarding Teams. We completed additional safeguarding and DVA training.

The Safeguarding Teams provided us with leaflets, cards and contact details to signpost and onward refer. This included novel methods such a lip balms and trolley tokens.

We looked at other clinical areas at LTHT who have included routine screening in practice. We explored the screening questions and protocols they used to identify at risk patients, and we began to tailor screening questions appropriate to our client group. We explored the acceptability of safety enquiry for pwMS and HCPs.

Results: Challenges were identified in both the hospital and community setting. We amended the screening questions to accommodate our client groups need and the setting.

In the hospital setting the adapted questions were included in the standard clinic structured template. This is now routine practice in our consultations.

Conclusion: We recognise the importance and prevalence of violence and abuse in MS. We understand that this work will evolve and require regular training and updates. Overall, the intervention has been well received by pwMS. We are analysing qualitative feedback from pwMS and HCPs. We have contributed to the new MS-DVA Research initiative

Patient satisfaction and experience of a liquid soluble fibre supplement for reported gastro-intestinal (GI) symptoms in a regional adult CF service: Results from an online survey.

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Background: The relief of common GI symptoms in people with cystic fibrosis (pwCF) is an identified research priority (1). The importance of fibre intake in managing GI symptoms in the general population is well recognised. The recommended daily intake of fibre is 30g; the UK average is 18g/day. Studies have highlighted that many pwCF consume less fibre than healthy controls, possibly due to legacy CF diet (2). Hyfiber® is a low volume fibre supplement (12 g per 30ml) containing 2 sources of soluble fibre: polydextrose and fructooligosaccharides (FOS). Polydextrose increases stool bulk, frequency and improves stool consistency and has prebiotic potential. FOS are indigestible short chain fructans which act as prebiotics and improve stool consistency and frequency.

Objective: Here we assess patient satisfaction with soluble fibre supplements for GI symptoms (March 2023- Oct 2024).

Methods: 38 adults with CF (awCF) with reported GI symptoms at routine dietetic review were sent 14 x 30ml Hyfiber® samples. Online anonymous surveys were sent with questions focussing on diet advice, reported GI symptoms, palatability, treatment duration and perceived efficacy.

Results: 23/38(61%) surveys were returned. Reported GI symptoms included constipation (64%), loose stools (23%), bloating (41%) abdominal pain (27%) and wind (13.6%). 91% reported receiving fibre and fluid dietary advice. 18% made no change, 50% and 41% increased their fruit and vegetable and/or wholegrain intake respectively. Of those prescribed Hyfiber®, 87% completed 1-2 weeks while 65% continued in the longer term. The taste of Hyfiber® was rated as good to excellent by 78%. Eleven subjects reported subjective improvement in constipation, 3 loose stools and 1 bloating. Not all fields were completed.

Conclusion: In this small cohort, soluble fibre supplements provide a convenient, palatable way to support dietary advice and may subjectively improve some GI symptoms, notably constipation.

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Validation and Adoption of Innovative Digital Technologies Within Histopathology, Enhancing Digital QA and Potential for A.I.

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Support from The University of Bradford

Background/Aims: Digital pathology, an exponentially growing aspect of pathology, allowing for digital innovations. Advent of the digital block scanning device is an exciting prospect for fully digitising QC/QA pathways within histopathology with potential for automation with A.I. integration. The aim of this study is to fully validate block scanning device and demonstrate utility within histopathology workflows.

Methods: 3 tissue types were dissected, formalin fixed, and paraffin embedded (FFPE), 3µm sections were taken from 60 blocks (20 per tissue type) at 3 intervals. WSI and block images were captured and processed. Each block image assessed for % completeness against corresponding WSI and % full face at 3 intervals.

Results: Breast, lung and bowel had 57/60, 57/60 and 52/60 block images with ≥90% completeness compared to WSI respectively. ≥95% completeness was seen in 48/60, 40/60 and 21/60 for breast, lung and bowel tissue block images. The majority of block showed upward trends in % full-face showed from intervals 1-3.

Conclusion: Block images assessed to have high levels of % completeness for all tissue types; being slightly higher for breast and lung; fully validating the device for laboratory use. % full-face assessments demonstrated higher % full face at interval 3 than intended at 2, showing utility for QC/QA; with further developmental potential for automation with A.I integration. This digital innovation addresses workload and workforce pressures faced by histopathology laboratories and could have impacts on TATs and cancer waiting times.

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Optimizing ward-based antimicrobial stewardship by empowering pharmacy technicians to complete IV to oral reviews

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Background: At Leeds Teaching Hospitals (LTHT), antimicrobial stewardship (AMS) is essential but challenging due to high patient volumes, limited reviews, and frequent staff turnover. Prolonged intravenous antibiotic (IV) use delays discharge increases costs, heightens infection risks, and demands more nursing time. Embedding AMS principles trust-wide optimizes care.

Methods: Building on a previous project demonstrating the benefits of 48–72 h IV antibiotic reviews, I implemented targeted training for pharmacy technicians across specialties. Most wards at LTHT have pharmacy technician coverage, this presented an opportunity to enhance AMS efforts across the trust. Training pharmacy technicians with the knowledge and skills to support IV-to-oral switches (IVOS), we could significantly amplify the impact of stewardship strategies.

Pharmacy technicians were trained to conduct virtual reviews using an electronic IV antimicrobial review tool. Patients on IV antibiotics for 48–72 h were identified via an Emeds report. Inclusion criteria: inpatients aged 16+ on IV antibiotics for 48–72 h. Exclusion criteria: patients under 16, those on antibiotics for cystic fibrosis, directed antimicrobial therapy, oral antibiotics, or prophylactic antimicrobials. Data collated from December 2022 to March 2023 and analysed using Excel.

Results: 87 patients audited, IVOS recommendations were made for 38, with 30 accepted. Seventeen patients were discharged within 48 h of switching. In cases where IV therapy was necessary, clinicians adhered to recommendations. Overall, 83% of patients had documented care plans aligned with pharmacy technician advice. This intervention reduced unnecessary IV antibiotic use and improved documentation of clinical reviews.

Conclusions: This audit highlights the value of involving pharmacy technicians in AMS to enhance prescribing practices. Their participation in daily reviews increased IVOS transitions and improved patient outcomes. Collaboration with infection prevention teams and pharmacy technicians will be key to optimizing AMS at LTHT, making it a shared responsibility to improve care and reduce antibiotic resistance.

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Developing a toolkit to assess quality of life in cancer patients and survivors across Europe: EUonQOL-kit

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Background/Aim: The EU-funded project “Quality of Life in Oncology: measuring what matters to cancer patients and survivors in Europe (EUonQoL)” aims to develop, validate and disseminate the EUonQoL-Kit, a patient-centred toolkit for the assessment of QoL in cancer patients and survivors.

Methods: The EUonQoL-Kit was developed through an iterative process of several mixed methods steps, with co-researcher involvement throughout. Existing QoL frameworks, and results from two systematic reviews structured the development process. During development, data was collected in six countries (UK, the Netherlands, France, Germany, Italy and Denmark). Patient interviews (n=75), and a Delphi study (n=155, 96 patients/survivors and 59 healthcare professionals) were used to create the EUonQoL conceptual framework and generate content for EUonQoL-Kit v1, which was evaluated via a usability study. Triangulated data and consensus methodology supported decision-making to produce EUonQoL-Kit v2. The psychometric properties of EUonQoL-Kit v2 are currently being assessed in a large scale, multicentre cross-sectional study.

Results: The EUonQoL-Kit consists of six questionnaires specifically designed for three target groups (A, Patients in active treatment; B, Survivors; C, Patients in palliative care), all available in a static and dynamic versions (applying Computer Adaptive Testing). The toolkit covers four conceptual domains relevant to patient reported outcomes(physical, psychological, social and overall health) and one domain relating to patient reported experience (healthcare experience). The total number of items in EUonQoL v2 range from 44 to 50 in the static version and from 78 to 82 in the dynamic version (shorter questionnaires are for patients in palliative care, group C). Presently, over 4000 patients and survivors have tested the EUonQoL-Kit v2 in 27 languages across 45 clinical sites, in 32 countries. Psychometric analysis is ongoing.

Conclusions: The EUonQoL-Kit is a novel toolkit developed to assess QoL across the cancer continuum, which will inform future cancer programs and policies within Europe.

STRONG AYA: Implementing a Core Outcome Set for Adolescents and Young Adults with Cancer Utilising a European Federated Learning Ecosystem. A HORIZON EU and Innovate UK initiative.

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Background: Cancer incidence and survival rates among AYAs aged 15-39 years are rising. AYA face specific challenges, distinct from children or older adult cancer patients. TYA benefit from age-appropriate healthcare services. However, AYA cancer care is fragmented, and the outcomes measured for this group are not harmonised, limiting both research and care.

Aims: The STRONG AYA Consortium aims to create efficient, standardised methods for data collection in research and routine care, improving service planning, delivery, improvements in outcomes and the communication of patient-reported outcomes (PROs) between Adolescents and Young Adults (AYAs) and their healthcare providers. The STRONG AYA project will evaluate the feasibility of a Core Outcome Set (COS) for AYAs diagnosed with cancer during its implementation within a European Federated Learning (FL) ecosystem.

Methods: The STRONG AYA Consortium has developed a COS through a comprehensive literature review and consensus processes with key stakeholders including AYA cancer survivors . The COS includes core clinical and PRO domains, across which AYAs are particularly impacted by cancer and they wish were monitored and addressed. The COS will be evaluated in routine clinical practice across five countries, including England, through:

1. Retrospective Implementation: Estimating COS domains using approved existing data from Electronic Health Records (EHRs).
2. Prospective Implementation: Administering the COS to AYA patients in multiple hospitals.
3. COS Summaries: Integrating COS summaries into EHRs and portals, to enhance access for patients, carers, and healthcare professionals.
4. Engagement: Evaluating patient and clinician engagement with the COS and its summaries.
5. Federated Learning (FL) : Privacy-preserving analysis of COS data, allowing the creation of predictive models for AYAs.

Conclusion: The successful implementation of the COS will establish benchmarking between countries, provide real-world evidence to oncology decision makers, share insights and reduce inequalities by improving the value of services provided to AYAs diagnosed with cancer.

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The use of customised patient reported outcome (PRO) item lists within cancer research: A systematic review.

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Background: Traditionally, within oncology patient-reported outcomes are collected via validated static questionnaires, however a need for greater measurement flexibility has been recognised within certain contexts, such as the impact of novel agents and rare cancers in clinical trials and symptom monitoring within clinical care1,2. Consequently, PRO data collection strategies are evolving. PRO item lists are customised lists of items selected from pre-existing item libraries that facilitate the flexible assessment of patient-reported data. Item lists can be used to assess a range of patient perspectives including tolerability, and disease- or treatment-symptoms. However, there is limited guidance on implementation of customized item lists within cancer research and care2.

Aims: This systematic review evaluates current use of item lists within cancer research. It forms part of a project developing an international consensus on standards for PRO item library and list usage in cancer research and care.

Methods: MEDLINE, Embase, and Cinahl were searched for studies published between October 2021-October 2023 that adopted a flexible PRO measurement strategy via the use of cancer PRO item libraries. Studies were screened and extracted by three independent reviewers following PRISMA Guidelines3. Quality assessment was undertaken. The results were synthesised descriptively.

Results: Of 2414 abstracts, 2100 were screened, 504 full texts reviewed, and 33 studies included (23 observational and 10 trials/feasibility studies). The most frequently used items libraries were PRO-CTCAE4 (21/33) and EORTC5 (8/33), with flexible symptomatic adverse event assessment the commonest objective for item list use. Item lists were implemented across different settings including novel treatments (10/33), rare cancers (7/33), and electronic PRO monitoring in clinical care (4/33).

Conclusion: PRO item libraries contain a wide range of standardised items which can be customised to facilitate flexible PRO measurement across different contexts, particularly assessing patient-reported symptomatic adverse events in clinical trials or symptom monitoring in clinical care research.

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Developing better systems to manage the medical complexities of long-term corticosteroid therapy in a rheumatology clinic.

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Background: Musculoskeletal conditions such as polymyalgia rheumatica (PMR) and giant cell arteritis (GCA) frequently require prolonged corticosteroid therapy, which carries risks including osteoporosis, glaucoma, and dental complications1-3. Current NHS systems lack a centralised method for tracking these patients, often resulting in gaps in monitoring and care.

Aims: This project aims to evaluate the feasibility and acceptability of a novel digital clinical registry designed to monitor rheumatology patients on long-term steroids. It also seeks to identify potential gaps in care provision and explore demographic factors, such as age, sex, and ethnicity that may influence patient management.

Methods: An observational feasibility study will be conducted over one year within rheumatology clinics at Leeds Teaching Hospitals. Approximately 20–30 patients undergoing long-term corticosteroid treatment will be recruited. During routine consultations, clinicians will use a checklist-based approach integrated into a no-code platform developed on a platform called ‘Ledidi’ to collect data on steroid management, screening for side effects (e.g., bone health, eye and dental examinations), and patient demographics. Data will be securely stored on Ledidi and linked to patient records via NHS numbers under an established data sharing agreement.

Results: The study seeks to identify potential care gaps such as delays in recommended optician and dental reviews. This will help inform future initiatives, ensuring patients on long-term steroids are educated about the side effects of their treatment and how to mitigate for this. The study will also assess both patient and clinician satisfaction with the registry process.

Conclusion: This pilot study could pave the way for a scalable digital tool to enhance monitoring and management of long-term corticosteroid use in rheumatology patients. Successful implementation may lead to improved patient outcomes and more efficient NHS practices in caring for this patient group.

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ICU nurses' perceptions of patients with co-morbid mental health disorders: An integrative review.

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Background: The prevalence of patients with a MH disorder in intensive care units (ICU) is roughly twice that of other secondary care areas (King et al., 2020). This patient group can be disenfranchised from the healthcare system due to stigma. Nurses' perceptions of MH patients in the Emergency Department have been studied (Sacre et al., 2022), and were associated with avoidance, misconceptions, and perceived lack of skills to manage this patient group, however, it was unclear if similar issues were present amongst ICU nurses.

Aims: This review aimed to explore how nurses perceive ICU patients with a co-morbid MH disorder.

Methods: An integrative review was undertaken in March 2024 using CINAHL, Medline, Embase, and PsychInfo. Papers were included if they focused on nurses' perceptions of adult ICU patients with a co-morbid mental health disorder. 620 studies identified following duplicate removal. Results: Eight studies were selected for inclusion. Four themes were identified 1) 'Those types of patient', 2) Patients with mental health disorders are all violent and aggressive, 3) 'They' don't belong in ICU, and 4) 'They' need someone with special skills. The themes explored issues of preconceptions, stigma, and 'othering'.

Conclusion: There was a paucity of research on this topic and it was limited in geographical area. The findings suggest that stigma, misconceptions, a lack of support, and a perceived lack of skills, might lead nurses to deliver sub-optimal care to this vulnerable patient group. Education and on-going support are required to reduce misconceptions and bias and increase nurses' confidence when managing patients with co-morbid MH disorders.

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Preventing deaths and harm from misplaced nasogastric tubes: long term results of radiographer-led pathway

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Aims: To evaluate whether radiographer identification and action for misplaced nasogastric (NG) feeding tubes prevent patient harm and deaths in a multisite tertiary centre.

Methods: Healthcare systems cause death and harm from feeding into misplaced nasogastric tubes. Service transformation was triggered by 4 adverse events in a 762-day period in our Trust encompassing 2,500 beds related to NG xray (NGXR) interpretation and miscommunication. Radiographers were trained to provide immediate NGXR interpretation and take action to remove or arrange repositioning for misplaced NG. Continuous surveillance of NG adverse events and radiographer NGXR interpretation accuracy were evaluated for 4,953 days after implementation in a service performing 10,000 NG placements per annum.

Results: Trained radiographer NGXR evaluation and action on misplaced tubes prevented any episodes of harm after pathway implementation (0 events in 4953 days vs 4 events in 762 days). Pathway change reduced NGXR requesting (preintervention 75% vs 9.3% post) with increased first line pH testing of gastric aspirate (pre intervention pH 12% vs 84%). Accuracy of NGXR position compared with radiologist review was 99%.

Conclusion: Radiographer training and empowerment to immediately evaluate and act on NGXR findings produced sustained prevention of patient harm, reduced NGXR requesting and improved pathway compliance. This should serve as a basis for a national patient safety programme. We propose an achievable NGXR accuracy standard over 95% in a large trained radiographer workforce.

Penicillin allergy assessment pathway versus usual clinical care for primary care patients with a penicillin allergy record to assess safety, de-labelling and antibiotic prescribing: The ALABAMA randomised controlled trial.

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Background: Penicillin allergy labels (PAL) are common (affecting 6-8% of people) but most PALs are incorrect.1-3 PALs are associated with increased antibiotic use, worse patient outcomes, and antimicrobial resistant bacteria.

Aims: To determine if a penicillin allergy assessment pathway (PAAP) care safely improve antibiotic prescribing and patient outcomes.

Methods: Open label, multicentre, pragmatic, parallel-group, randomized controlled trial with a nested pilot involving adults with PAL and an antibiotic prescription in the previous two years. Participants were randomly assigned (1:1) to either receive PAAP or usual clinical care (UCC). PAAP participants were risk assessed to receive either a direct oral challenge test (OCT) with a penicillin or skin testing followed by OCT in a hospital outpatient department. The primary endpoint was penicillin prescriptions up to 12 months after randomisation. Secondary endpoints included: treatment response failure, duration of symptoms, antibiotic prescribing, mortality, hospitalisation, meticillin-resistant Staphylococcus aureus, Clostridioides difficile infection and de-labelling at 3 and 12 months. Research ethics approval Ref: 19/LO/0176. Trial registration ISRCTN20579216.

Results: 1616 people expressed interest, 411 were randomized to PAAP and 412 to UCC. The primary analysis included 401 PAAP and 410 UCC participants. PAAP significantly increased prescribing of penicillins (18% in PAAP vs 3.4% in UCC, adjusted relative risk 5.27, 95% confidence interval 3.03-9.18). Total number of prescriptions, total Defined Daily Doses (DDD), and prescriptions of non-penicillin antibiotics were statistically significantly reduced in the PAAP group. 321 (87.9%) PAAP group participants remained de-labelled at 12 months. There were no important differences in safety outcomes. PAAP was associated with an incremental cost effectiveness ratio of £10 938 per quality adjusted life year gained relative to UCC and had a 58% probability of being cost effective.

Conclusions: A penicillin allergy assessment pathway safely and cost-effectively increased use of penicillins, reduced overall antibiotic prescribing, and de-labelling was sustained

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Development of the 'COuld it Be RA' (COBRA) tool to facilitate early identification of people at risk of developing rheumatoid arthritis in primary care

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Background: Rheumatoid arthritis (RA) develops in stages; at-risk individuals develop circulating anticitrullinated protein antibodies (ACPA) before developing synovitis (clinically detectable arthritis)

(1). Targeted anti-CCP testing (for ACPA) provides an opportunity to identify people with musculoskeletal symptoms who are 'at risk of developing RA' and refer them to rheumatology for assessment, monitoring, and early intervention.

Aims: We aimed to develop a new complex intervention, the 'COuld it Be RA' (COBRA) tool, to support the implementation of a clinical prediction model (2) to identify people likely to be anti-CCP positive and at risk of RA in primary care.

Methods: The COBRA tool was developed using the UK Medical Research Council and National Institute for Health and Care Research complex intervention research framework (3). This mixed-method study involved three sequential phases with primary care clinicians: a qualitative descriptive study, clinician consultation engagement workshops, and a think-aloud interview study. Ethical approval was obtained for all three phases.

Results: Sixteen primary care clinicians participated in semi-structured interviews to identify barriers and facilitators. An initial list of nine candidate components for the intervention, including design considerations, was developed. During Phase 2 workshops, four components were prioritised as 'Must have' or 'Should have': the clinical decision support system (CDSS); guidance on using the CDSS/associated actions; evidence for the CDSS; patient education resources. A COBRA tool prototype incorporating these components was developed.

Twelve participants tested the prototype during think-aloud interviews. Key perceived benefits of the COBRA tool included supporting clinicians' decision-making and reducing unnecessary anti-CCP testing. Over 40 changes were made to the COBRA tool.

Conclusion: Our research included the views of clinicians and PPI representatives and was underpinned by a complex intervention research framework. This was critical to understanding barriers and facilitators to implementing the clinical prediction model in primary care and developing the COBRA tool.

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'Stop the clot' - A standardised approach to managing splanchnic vein thrombosis in the acute surgical patient

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Introduction: The incidence and prevalence of splanchnic vein thrombosis (SVT) is rising in acute surgical patients (2.7/100,000). Risk factors include malignancy, surgery, abdominal inflammation/infection and HRT. Management strategies are variable and high-quality data and guidelines limited.

Aims:

- To determine the incidence and current management of SVT's in patients presenting with Emergency General Surgery pathology

•To develop an evidence based, standardized pathway for the management of this condition with a focus on anticoagulation choice, duration and re-imaging options.

Methods: A prospective cohort study was undertaken for 1 year. Patients over 16 presenting to an EGS service with an acute inflammatory abdominal condition and acute SVT were included. Data was collected and analysed in Microsoft Excel.

Results: 25 patients were included. 22 (88%) were provoked and 3 (12%) unprovoked. 21 (84%) received treatment. Primary choice of anticoagulation was LMWH 10 (47%), Warfarin 8 (38%) and DOAC 3 (15%). 7 (33%) of patients had no decision made regarding the duration of anticoagulation treatment. 6 (29%) received follow-up cross-sectional imaging to assess for resolution/vessel. 9 (45%) patients received clinic follow up. 2 (8%) patient demonstrated thrombosis resolution.

Conclusion: Current practice demonstrates wide variation and inconsistencies in the management of acute SVT. Stakeholders include Surgeons, Haematologist's and Radiologists and a subsequent structured iterative collaboration was undertaken to develop a standardised pathway. Management now includes primary DOAC for 6-months, follow up CT to assess for re-canalisation. Patients should be followed up thereafter in clinic to outline ongoing management strategies.

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The impact of age on physical functioning after treatment for breast cancer, as measured by patient-reported outcome measures: A systematic review

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Background: Enhanced knowledge on physical functioning amongst older patients post-breast cancer treatment is important to help inform clinical decision making and improve patient outcomes and experiences post-treatment [1, 2]. The PROMs used and variations in language to refer to 'physical functioning' also need to be addressed to provide conceptual and methodological clarity [3, 4].

Aims: This systematic review aims to explore the impact of age on physical functioning post-treatment for early-stage, locally advanced, or locally recurrent breast cancer, as measured by patient-reported outcome measures (PROMs), identify PROMs used and variations in physical functioning terms/labels [5].

Methods: MEDLINE, EmBase, PsycINFO, CINAHL and AMED were searched, along with relevant key journals and reference lists. Risk of bias (quality) assessment was conducted using a Critical Appraisal Skills Programme checklist. Data was synthesised through tables and narrative.

Results: 28,207 titles were extracted, resulting in 44 studies with age sub-groups, and 120 without age sub-groups. Of those with findings on the impact of age, there was variability in the way findings were reported and 21% found that age did not have a significant impact. However, 66% of the studies found that with older age, physical functioning declined post-treatment. Comorbidities were associated with physical functioning declines. However, findings from sub-groups (breast cancer stage, treatment type and time post-treatment) lacked concordance. Twenty-eight types of PROM were used: the EORTC QLQ-C30 was most common (50.6%), followed by the SF-36 (32.3%). There were 145 terms/labels for physical functioning: 'physical functioning/function' was used most often (82.3%).

Conclusions: Findings point towards an older age and comorbidities being associated with more physical functioning declines. However, it was not possible to determine if stage, treatment type and time since treatment had any influence. More consistent use of the terminology 'physical functioning/function' throughout the NHS would aid future comparisons of study results.

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E-survey to describe the Technology Enabled Care landscape across child health in the United Kingdom and integration into NHS Trusts

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Background: The provision of Technology Enabled Care (TEC) to support the management of patients has been driven by various legislation and policies over the last decade. Children and young people (CYP) are proficient users of all things digital and technology-related (1). Therefore, it would appear logical for TEC to be offered to support CYP in developing self-management skills and to offer flexibility eg. with remote care to support their developing autonomy. However, difficulties remain in the uptake and adoption of TEC (2).

Aims: To investigate innovative technologies being developed for Children and Young People's healthcare to support TEC across the UK.

Methods: An e-survey is open via 'Online Surveys' to: industry partners, child healthcare professionals (‘Med-Tech’ champions), and researchers, who support the development of TEC with CYP. E-survey distribution is via NIHR Healthtech Research Centres (3), NHS Trust Innovation departments, and social media. Descriptive statistics will be performed to describe the sample and content analysis for free text responses (4).

Results: Data collection is underway with a response rate of 68% of the predicted sample. Most participants are industry partners working with tertiary care centres, developing applications (apps), medical devices or communication technologies. Most areas for project development are: mental health, ophthalmology, or cross-cut child health. The majority of projects are Technology Readiness Level 9 (5). Free text responses offer insights into challenges faced, with some solutions offered.

Conclusion: Early responses indicate the challenges of TEC adoption into child health. Successful integration of technologies appears problematic. Findings will assist in understanding the current landscape of developing TEC that may be generalisable to the global population. The main strengths of the study are sustained PPI engagement, willingness of industry partners to share experiences with a clinical academic, and participants indicating their support for future project involvement in subsequent PhD work packages.

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Developing human ewing sarcoma in vitro models to accelerate candidate novel treatments into clinical trials

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Background: Models that more accurately reflect Ewing sarcoma (ES) will enable the prioritisation of new-to-ES targeted agents from the bench to the clinic to improve outcomes for patients. To date, development of an ES mouse model has been unsuccessful [1], engraftment of human ES in mice is variable [2] and current preclinical models do not reliably predict drug activity in clinical trials [3].

Aims: To establish and characterise patient-derived ES cultures (PDES) in vitro that faithfully recapitulate ES.

Methods: PDES were isolated from fresh tumour biopsies (Ethics:IRAS167880 [4]). ES cell lines and PDES were examined using whole genome and RNA sequencing. PDES and cell lines were treated with chemotherapy, radiotherapy, zoledronic acid (ZA) and multi-tyrosine kinase inhibitors (mTKIs). Cell number was quantified by high-content imaging.

Results: Consistent with the paediatric mesenchymal lineage and pathognomonic EWSR1 gene fusion, ES cell lines, PDES and tumours contained the same COSMIC mutational signatures (SBS1 and SBS5). Transcriptome analysis comparing cell lines and PDES revealed differential expression of 15,709 RNAs ($p<0.01$), reflecting enrichment of cell cycle regulatory pathways in cell lines. Consistent with a long doubling time (DT range=55-197h), PDES were more resistant to chemotherapy (EC50>10μM) and radiotherapy (EC50 >8Gy) than ES cell lines (DT range=19-33h, chemotherapy EC50 range=4-180nM, EC50 range=2-8Gy, p<0.05). Cell lines were also more sensitive to mTKIs (cabozantinib EC50 range=0.8-7.8μM, lenvatinib EC50 range=5.9-17.8μM, regorafenib EC50 range=2.6-11.9μM) and ZA (EC50 range=5-5.3μM) than PDES (cabozantinib EC50 range=2.8->50μM, lenvatinib EC50 range=6.4->50μM, regorafenib EC50 range=29.8->50μM and ZA EC50=>50μM, p<0.01).

Conclusion: The transcriptome of ES cell lines is different from that of PDES, reflecting in part differences in cell DTs. The partial response of PDES to chemotherapy and radiotherapy, coupled with resistance to ZA, reflects patient clinical experience. These data suggest PDES are a promising preclinical tool for the evaluation of novel treatments.

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Data usage to inform and improve patient and staff experience

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Background: The What Good Looks Like (WGLL) Framework incorporates seven success measures for digital transformation applicable to all care settings[1]. The Clinical Digital Team (CDT) at Leeds Teaching Hospitals NHS Trust (LTHT) conducted a WGLL audit in April 2023 among all bed-holding areas. Results showed data is underused. A follow-up audit was launched among all LTHT staff to understand how, why and when data and digital solutions are used to improve staff and patient experience through innovation, evaluation and research.

Aims: The aim was to capture staffs' data and technology usage to inform and improve patient and staff experience. A secondary outcome was to see how the CDT can support LTHT departments and further develop the Digital Advocate (DA) community.

Methods: The survey was designed within Microsoft Forms and undertaken at LTHT between November 2024 – January 2025. The survey was developed based on literature related to the WGLL framework and expertise within the CDT. Descriptive statistical analysis was performed using SPSS.

Results: 114 responses were received. Comparisons were made between DAs and non-DAs, clinical and non-clinical staff and banding levels. Most staff indicated using digital solutions (77.2%) and data (64.0%) in everyday practice. Data is mainly used for information purposes (92.1%); less than half of staff use data to identify new practice (43.0%). More than half of staff have been involved in audits or service evaluations in the past 12 months but only 39.5% in research. The main inhibiting factors being time and capacity. IT systems, knowledge and capacity are the main inhibiting factor in undertaking quality improvement projects and research.

Conclusion: Although most staff use data in everyday practice and feel confident in doing so, our survey has highlighted various areas of challenges and opportunities for the development of our workforce and help meet the success measures of WGLL.

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Can 129Xe ventilation MRI guide personalisation of airway clearance regimens in children with Primary ciliary dyskinesia?

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Background: Children with Primary ciliary dyskinesia (PCD) use airway clearance techniques (ACT) to clear airway secretions, but physiotherapists lack sensitive outcome methods to guide ACT regimen personalisation. 129Xe Ventilation MRI (129Xe-MRI) is an imaging method that provides a 3D image of lung ventilation distribution.

Aim: We aimed to establish if providing data from 129Xe-MRI and structural MRI influenced physiotherapists’ decision making.

Methods: Children with a confirmed diagnosis of PCD were assessed with structural and 129Xe-MRI pre-, post- and 4-hours post their usual ACT regimen.

During cognitive task analysis interviews, physiotherapists were asked to “think aloud” their clinical decisions whilst reviewing the data of children with PCD under their care: routine clinical information; baseline structural MRI; 129Xe-MRI data.

Results: Five experienced physiotherapists from four NHS trusts reviewed data from a total of 19 children with PCD (age 5-17years). Minimal ACT changes pertaining to positioning during airway clearance were proposed when physiotherapists reviewed the structural MRI scans. 129Xe-MRI data aligned with the physiotherapists' existing clinical impression for nine cases. In these reviews, the 129Xe-MRI either confirmed the physiotherapists' ACT regimen decision or led them to propose modifications. In ten cases 129Xe-MRI challenged the current clinical impression formed from prior knowledge of the patient, routine clinical information, and structural MRI findings. For these cases, the physiotherapist either: re-evaluated their clinical decisions and proposed ACT regimen modifications or; felt unsure what regimen changes to propose during the review, so planned to reassess the patient in light of the 129Xe-MRI findings.

Conclusion: Clinical review of 129Xe-MRI data led physiotherapists to propose ACT regimen changes in most children with PCD. In some cases, physiotherapists reported clinical re-assessment in light of the 129Xe-MRI findings was warranted. 129Xe-MRI provides an intuitive 3D lung ventilation image, which is sensitive to airways obstruction and can inform clinical ACT regimen personalisation.

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129Xe ventilation MRI to assess regional response to personalised airway clearance techniques in children with Primary ciliary dyskinesia.

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Introduction: Children with Primary ciliary dyskinesia (PCD) use personalised airway clearance techniques (ACT), yet their effects on regional lung ventilation are unknown. 129Xe Ventilation MRI (129Xe-MRI) images lung ventilation distribution. 129Xe-MRI ventilation defect percentage (VDP) is an established whole lung metric but 129Xe-MRI can also provide regional lung ventilation information.

Aim: We aimed to assess the effects of a single personalised ACT regimen on regional ventilation using 129Xe-MRI.

Methods: Children with PCD were imaged with 129Xe-MRI pre-, post- and 4-hours post personalised ACT regimen. Regional ventilation was assessed by categorising each image voxel according to signal intensity. Ventilation was categorised as: high, normal, low, or ventilation defect (VDP). For treatment response we calculated; the proportion of pre-ACT defect that persisted (P-VD) and the proportion of lung volume changing to or from low ventilation or VDP (%change). Data presented as median (IQR) or mean [SD].

Results: 26 children were assessed (14 male, age 7-17years, FEV1 z-score=-1.5 [1.6]). Most had visible defects at baseline pre-ACT VDP= 6.0 (12.8)%. Post-ACT more than 50% of baseline VDP had improved in most individuals (20/26 (76.9)%)), but some individuals had significant persistent defects; P-VD = 23.9 (36.2)%. Widespread ventilation changes were seen %change = 21.3 (15.4)%. Similar changes were seen 4-hours post-ACT: P-VD = 21.4 (36.9)%; %change = 20.8 (13.1)%.

Both the P-VD and %change assessed post-ACT correlated significantly with baseline VDP: ($r=0.8$, $p<0.001$ and $r=0.9$, $p<0.001$ respectively). Similar correlations were seen 4-hours post-ACT; ($r=0.8$, $p<0.001$ and $r=0.9$, $p<0.001$ respectively).

Conclusion: 129Xe-MRI revealed widespread ventilation changes following a single ACT regimen. Children with more advanced disease have higher persistence of ventilation defects following ACT. ACTs are widely used in chronic lung diseases.129Xe-MRI can provide novel regional information on the effects of ACT regimens which may inform both future research and clinical practice.

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Epidemiology of Campylobacter across the United Kingdom and 30 European Economic Area countries.

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Background: Campylobacter is the leading cause of > 160 million gastroenteritis, with > 37,000 deaths worldwide. In the UK, it causes 630,000 cases, accounts for approximately 120,000 general practitioner (GP) consultations, and costs the economy £1 billion annually.

Aims: This study examines Campylobacter incidence and disease burden in the UK (England, Wales, and Scotland) and 30 European Economic Area countries during 2018-2022. It analyses the epidemiology, virulence mechanisms, and antibiotic resistance in major pathogenic strains from various host reservoirs across Scotland.

Methods: The incidence of Campylobacter in the UK was analysed, and compared with the incidence in 30 EEA countries (2018–2022). Whole genome analysis of 3,428 isolates from Scotland, antimicrobial resistance to fluoroquinolones, tetracycline, macrolides, and beta-lactams, and 113 key virulence genes were studied.

Results: Scotland reported a higher average incidence of campylobacteriosis (108.9/100,000) than England and Wales (99.9/100,000). Czechia had the highest average incidence (177/100,000) in this period, exceeding the EU average (146/100,000), reflecting both high disease burden and robust national surveillance. Poland, Cyprus, Greece, Bulgaria, and Romania recorded the lowest incidence (3–4.1/100,000), likely due to underreporting, and lack of harmonised reporting across the EU. Fourteen major strains were identified in Scotland, including C. jejuni ST50, ST21, and C. coli ST827. Poultry (22.6%, n=774) was the primary reservoir. ST5136 was the predominant multi-drug-resistant clone exclusively associated with poultry. Compared to C. jejuni, C. coli ST827 lacked 27 virulence genes involved in toxin production and immune evasion, indicating lower virulence potential. There was 91.7% beta-lactam resistance across all C. jejuni and C. coli strains, and -57 promoter mutation was detected in a third of C. jejuni isolates which is linked with the hyper-production of beta-lactamase.

Conclusion: Strengthening data frameworks is essential to enhance public health strategies and ease burden across the NHS. Whole genome analysis provides insights into new emerging trends of antibiotic resistant and virulent strains of Campylobacter.

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Adult Perspectives and experiences of health status and adherence post CFTR modulator therapy.

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Background: CFTR modulators are a novel pharmacological therapy which have revolutionised the treatment and management of cystic fibrosis (CF). They correct the underlying defect in CF by interacting directly with dysfunctional CFTR protein to enhance or partially restore function, improving symptoms and survival in people with CF1,2,3 . Despite the positive health benefits adherence to treatment is variable and sub-optimal in some cases4,5.

Aim: To explore the perceptions and experiences of CFTR modulators in adults with CF in relation to health status, adherence, and perceived necessity of routinely prescribed medicines.

Method: Semi-structured interviews were conducted with patients on CFTR modulators (>18 years) attending two adult CF centres. Photo elicitation was utilised to generate discussion. Interviews were video and/or audio-recorded, transcribed and thematically analysed.

Results: Nineteen interviews were undertaken. Eleven (58%) patients were female, mean age 34.4 years (range 18-66). Themes relating to adherence include "improving health status and hope for the future provides motivation for adherence", "establishment and maintaining routines is important in modulator adherence", "regular taking of modulator therapy can facilitate adherence to other medicines". The data also indicated "that as health improves patients re-evaluate the necessity of other medicines with or without the support of the CF team, which may lead to rational non-adherence. Themes related to support required to maintain long-term adherence included "acknowledgement of competing time pressures", "an understanding of me and my lifestyle" and "more informal approach to conversations relating to support long-term adherence".

Conclusion: Improvements in health status and the prospect of longevity had a positive impact on adherence to CFTR modulators and other routinely prescribed medicines. Personalised, flexible and inclusive approaches are needed to support long-term adherence to treatments.

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Delivery of Accessible Patient Information Through Accurate Documentation

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Background: Patient Information Leaflets (PIL) are available, among other things, to support with informed consent. Accessible patient information underpins good clinical care and is a requirement of all organisations that provide Health and Social Care (BMA, 2024).

During 2018/19 Leeds Teaching Hospitals NHS Trust (LTHT) had more than 7,400 PIL in circulation, many of them out of date and/or being photocopied from unmonitored sources, potentially impacting on patient care. There was no central monitoring system to ensure accessibility, standardisation or quality. To enable delivery of timely, accessible information, a process was required, to ensure PIL content went through governance and PIL only made available once approved. Authors needed guidance to create content. Edition/version control was required to prevent information being out-of-date. Patients needed accessibility support.

Method: Following initial review of PIL status at LTHT, guidance was provided to authors. Using the existing database, a system was built, containing a robust, auditable record of PIL status. In date PIL were made available on the Trust's website as a central source (with option to provide hard copies). Patients could access relevant, in-date only information, with accessibility support through technology.

Outcome: The database is an invaluable tool for controlling the production of PIL. We can track them back to know what information was offered when. We can remove out-of-date PIL from the central source. Authors are encouraged to revise PIL against a percentage target. Technology on the website enables information to be saved, downloaded and translated at the patient's convenience, including in audio format.

The impact this has had on patients is that they have access to all relevant PIL from a single source. QR codes take them directly to the location on the Resources website page. Patients cannot access out-of-date PIL as they are hidden from view until in date.

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Management of Pancreatic Enzyme Replacement Therapy (PERT) Shortages in a large UK Adult Cystic Fibrosis (CF) Centre: an imPERaTive approach.

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Background: Since May 2024 there has been global supply constraints of PERT(1). Creon®, the UK's largest PERT supplier, limited Creon 25,000 (Cr25k) for community use and directed Creon 10,000 (Cr10K) supplies via hospital pharmacies. People with exocrine pancreatic insufficiency (EPI) were at risk of exhausted PERT supplies, potentially impacting on physical and mental health (2).

Objective: We present our CF centre management of PERT shortages to a cohort of 400 adults with CF (awCF)

Methods: Patient were identified from electronic patient records (June-Nov.2024). CF dietitians led on PERT management, collating data on patient encounters, 'To Take Out' (TTO) prescriptions from hospital pharmacy for PERT brands Creon® (Cr) and Nutrizym® 22 (Nu22) and FP10 outpatient prescriptions (Rx). AwCF on Cr10K were assessed and if suitable guided to switch to Cr25K or co-supplement Cr10K + Cr25K. General Practitioners (GP's) were informed. Dietetic and pharmacy time estimated at 0.5 and 0.25 hours per query respectively. Centre drug cost (June-Nov 2024) was compared to drug cost June-Nov 2023.

Results: 376 awCF with EPI were identified. 48 %, 50%, 1.5%, 0.5% of subjects were on Cr10K, Cr25K, Cr10K +Cr25K or Nu22 respectively. Post shortage, Cr10k +Cr 25K Rx increased 95% (6 v 133), Cr10K Rx decreased 70% (180 vs 53), Cr25K and Nu22 Rx remained unchanged. PERT shortages resulted in 479 extra patient encounters, 404 extra TTOs, with 55,400 Cr10K, 117,100 Cr25K, and 500 Nu22 capsules being prescribed. 127 letters were written to GP's and 44 FP10 prescriptions provided to individuals at risk of exhausted supplies. CF Centre drug cost increased by 440%. An extra 240 and 101 hours of dietetic and pharmacy time was diverted respectively to supporting PERT access and minimising shortages.

Conclusion: The responsive management of PERT, ensuring sustained patient supplies is associated with substantial increases in hospital drug costs and staffing time.

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Utilising qualitative analysis of online forum data to understand the impact of early onset colorectal cancer

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Background: Incidence of early onset colorectal cancer (EOCRC) occurring in patients <50 is rising[1]. By virtue of diagnosis at a different life stage, younger patients may experience differing health-related quality of life (HRQOL) impacts. Understanding these impacts is vital to develop supportive interventions. Online forums offer researchers an unfiltered insight into patient experience, providing a rich source of qualitative data.

Aims: This study utilises qualitative analysis of online forum messages to understand the pertinent HRQOL impacts of EOCRC.

Methods: An online forum specifically for EOCRC was identified. A phenomenological approach was applied. Inductive coding (with 10% dual coding) and thematic analysis of extracted messages were used to describe diagnostic experience and effect on HRQOL.

Results: Eight main themes emerged from 463 forum messages posted over a five-year period: (1) diagnostic pathway and barriers; (2) employment and finances; (3) effect on children and parenthood; (4) stoma implications; (5) early menopause and fertility implications; (6) relationships, support systems and isolation; (7) mental health and (8) sport and exercise. Data extraction and analysis were conducted over a one month period. The themes identified using this time and cost-efficient methodology overlapped with those identified through systematic review[2,3] and additionally offered deeper insight into the considerable impact of isolation amongst younger individuals who do not represent the typical colorectal cancer patient.

Conclusion: Qualitative analysis of online forum messages is an effective and efficient methodology for identifying HRQOL impacts, reflecting those highlighted through systematic review and offering additional insights, particularly into the impact of isolation. This novel methodology could be adapted for use by qualitative researchers across the NHS offering a window into patient lived experience. Understanding the unique HRQOL of EOCRC provides a basis for further research into how NHS colorectal cancer services must adapt to the meet the needs of an expanding younger cohort.

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Assessing the benefit of having a pharmacy technician in an Emergency Department (ED) to maximise current use of resource, reduce prescribing error rate and comply with national recommendations

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Background: The Royal College of Emergency Medicine released a position statement (2023) with the United Kingdom Clinical Pharmacy Association highlighting the need for 1.0 WTE pharmacy technician as a minimum for an Emergency Department (ED). A pilot was started at Leeds Teaching Hospital Trust to assess the benefit of a pharmacy technician completing medication histories (MH) within the ED.

Aims: To complete MH in ED before admission to a ward and determine if this uses additional staff resource. To complete MH prior to medical clerking and prescribing to save time for staff in the ED. To identify and rectify any prescribing errors as early as possible using a pharmacist prescriber based in the ED.

Method: A pharmacy technician identified patients from ED who were likely to be admitted to a ward, prioritising patients on critical medication and with the longest waiting times. The MH would be completed, and prescribing errors would be flagged to the ED pharmacist.

Results: Out of 45 patients who had a MH completed in ED, 93% were admitted to a ward.

After a MH was complete 89% of these patients with no medication prescribed had their regular medications prescribed on eMEDs by a pharmacist, saving time for prescribers and reducing errors. The average time to complete a medication history and prescribe regular medication was 28 minutes. Therefore, saving time for clerking medics.

Out of the 45 patients, 67% of patients had errors on their medication chart if prescribing was completed before the MH. These were then rectified by the pharmacist.

Conclusion: A pharmacy technician within the ED is a cost-effective use of resource as 93% were admitted and would have had a MH later in admission. It saves time for the prescribers within ED and it improves the service by reducing prescribing error rate and ensuring the correct medication is administered.

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Classic: An interactive, collaborative variant classification portal for genetic analysis.

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Background: Diagnostic genetic analysis is essential for identifying the causes of genetic disorders, enabling more precise and personalised treatments for patients. However, classifying genetic variants—determining which impact health and which are harmless—is a complex and time-consuming task. To address this challenge, bioinformatics specialists and genomic scientists developed ClassIC (Classification Information Commons), a user-friendly software tool that facilitates the recording, sharing, and curating of variant classifications. This tool aligns with national guidelines, supporting standardised analysis in NHS labs.

Aims: The primary goals of the software are to improve diagnostic accuracy, speed, and collaboration in genetic analysis through: More Accurate Diagnoses: The standardised classification system reduces misinterpretation, leading to more accurate diagnoses. Improved Collaboration: The platform enhances knowledge sharing among scientists, improving patient care.

Faster Diagnoses: Streamlining the process reduces waiting times, ensuring timely care delivery.

Methods: ClassIC integrates into existing analysis workflows, allowing scientists to classify variants consistently. Deployed in Leeds, Sheffield, and Newcastle, the platform has been used for the classification of thousands of variants. The variant database has been combined with a user-friendly interface to reduce the time taken to analyse variants and allowing teams to share variant analysis data.

Results: ClassIC has been successfully implemented in Leeds and the wider region, with very positive feedback. The platform has enhanced collaboration, helping scientists to compare and refine analysis methods, and staff continue to contribute to the database's ongoing development to maintain its effectiveness.

Conclusion: ClassIC improves genetic analysis by offering a collaborative platform that enhances diagnosis speed and accuracy. This approach enhances the overall quality of genetic analysis, ensuring that patients receive faster, more accurate diagnoses and better overall care.

ClassIC is an example of innovation that provides an effective, user-friendly variant analysis portal, making Leeds one of the very few NHS labs with such an asset.

Reflections from The Inaugural Infection Summit

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Background: The inaugural Infection Summit was held in May 2024 at Leeds Teaching Hospitals Trust to improve knowledge around antimicrobial stewardship with 89 attendees. A range of topics were presented on including point prevalence survey data, infection prevention, blood culture pathway, intravenous access devices, guideline and documentation digital innovations and an AMS global institutional partnership. In the second part of the day, quality improvement workshops were held, focusing on devices, diagnostics and digital AMS.

Aims:

- To establish our first Infection Summit, aiming to engage and educate non infection specialists to improve AMS and to identify QI ideas and AMS interventions, through collaboration.
- To gather feedback and determine any benefits and determine the improvements to be made for future infection summits.

Methods: Post summit, feedback was gathered via an electronic, anonymous survey, consisting of quantitative and qualitative questions. It concentrated on the content and structure of the day, and how attendees felt about their knowledge and practice in AMS. We acquired feedback around barriers to changing behaviour and implementing AMS interventions and how attendees could overcome them.

Results:

- 51% (n=45) of attendees responded to the survey; colleagues felt collaboration, discussion and education were the most effective aspects of the event.
- 65% of attendees were very satisfied, 22% were satisfied and 13% were neutral in their overall experience
- 36 ideas were generated from the QI workshops.

Conclusion: This feedback highlights the success of this trust-wide educational event and the need for future events. It confirms that attendees, felt it was a beneficial to their patients and will lead to improved outcomes. The QI workshops generated, and we will hold a follow up event, to support the development of these workstreams and champion interventions. Additionally, this further promotes interprofessional working and collaborative learning to share best practice in improving AMS at LTHT.

The impact of the NIHR Associate Principal Investigator scheme on trainee development and health research delivery at Leeds Teaching Hospitals NHS Trust

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Background: Leeds Teaching Hospitals NHS Trust (LTHT) is one of the largest UK teaching hospital trusts. We are engaged in research and innovation across multiple specialties with hundreds of ongoing studies.[1] As a specialty, anaesthesia has not always promoted research engagement to its full potential.

Aims: The NIHR Associate Principal Investigator (API) Scheme provides healthcare professionals who are not typically involved in research, opportunities to gain experience delivering NIHR portfolio trials. API trainees work under mentorship of local Principal Investigators (PIs) to develop essential skills for future leadership roles in health research delivery.[2]

Methods: At LTHT, the API scheme is supported by two experienced PIs and the research delivery team, established in 2021. API trainees receive structured mentorship, participate in research delivery, and contribute to NIHR portfolio studies. We evaluated the scheme locally by collecting data on participant numbers, study involvement and survey feedback.

Results: Since the first API trainee in 2022, nine participants have completed the API scheme, with two more currently enrolled. They have trained alongside seven NIHR portfolio studies: VITAL, OPTIMISE-2, SINFONIA, COLO-Pro, POPPY, CAMELOT and SONAR-1. Survey feedback was overwhelmingly positive; 100% of participants would be likely or very likely to recommend the scheme. Participants highlighted the scheme’s impact on career development:

- "Very useful insight and useful for ST4 application.”
- "Useful platform for building further research experience on.”
- “Helped build CV and apply for PhD.""

Conclusion: The NIHR API scheme has strengthened research capacity at LTHT, promoted and enabled trainee involvement and supports the development of future research leaders. Continued input from the research delivery team and Trust leadership is essential for sustaining and expanding this programme. One participant noted, "The research team do a wonderful job and I'm genuinely grateful for their time."

With thanks to the T&A Research Delivery Team and CSU for their ongoing support.

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MyPath – a digital tool to support the delivery of patient-centred care in oncology.

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Background: Research trials have demonstrated the value of embedding patient-reported outcome measures (PROMs) into practice to improve patient-centred cancer care and outcomes. Despite this evidence, and availability of international guidance, few cancer centres have managed to systematically implement PROMs assessments with patient-centred care recommendations into practice.

Aim: MyPath is Horizon Europe funded programme aiming to develop, implement and evaluate digitally supported patient assessments and care pathways for pain, nutrition, physical functioning/fatigue, and emotional/social functioning in 9 European cancer centres.

Methods: The 5-year project began in 2022. Activity is organised through highly interlinked mixed methods work packages (WPs). These include WP1: Creation of content and structure of care pathways (including PROMs, clinical assessment, and care management paths) and WP2: Design of the digital solution/electronic platform. WP3 and WP4 provide social and implementation science expertise to guide the co-creation, implementation, and evaluation of the digital care pathways across participating centres, incorporating ethical/legal/sociocultural requirements.

Results: In WP1 the initial PROMs/patient assessment and pathway content have been developed for pain, nutrition and emotional/social distress pathways. In WP2, a proof-of-concept digital platform has been delivered, guided by information obtained from WP3 and WP4 via clinical observations, interviews and feedback from clinical teams, hospital and IT managers and patients. Participating centres have engaged clinical teams, representing a range of cancer groups and settings. In Leeds, local clinicians (oncologists, clinical nurse specialists, pharmacist) and patient representatives are supporting ongoing refinement of MyPath for implementation in a prostate oncology clinic with patients with metastatic disease.

Conclusion: MyPath is an innovative and multi-faceted implementation project. Co-creation work is ongoing across all centres to engage clinical teams and local IT services to refine the pathways and digital solution. Implementation is scheduled to commence from Summer 2025 with staggered starts across the 9 centres.

Further project information is available from https://mypath-cancercare.eu/.

Get Tested Leeds – Testing in A&E for Blood Borne Viruses

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Background: NHS England funded a programme of opt-out testing for bloodborne viruses (BBV) in emergency departments (EDs) in areas of very high diagnosed HIV prevalence. Leeds has a higher number of people living with HIV and more diagnosed at a later stage of infection compared to national and regional averages.

Method: In September 2024, the two EDs at Leeds Teaching Hospitals Trust were identified to join the 'Fast-Track Cities' national programme, part of a global initiative to end HIV, tuberculosis and viral hepatitis by 2030.

Everyone aged 16+ requiring a Urea and Electrolytes blood test when attending ED will also be tested for HIV, hepatitis B and hepatitis C.

Patients with positive results will then be linked to care with the respective HIV or viral hepatitis clinical nurse specialist teams for treatment and care.

After attending ED, once tested patients with positive results are sent to the respective specialist teams, who then contact them to engage in care.

Where the clinical team have difficulty engaging with the patients, they have a peer with lived experience who will help to trace and engage with the patient in support through the care pathway.

Outcomes: Since the project started, 17,609 people have been tested for the BBVs, and the outcome of the tests are:

- 6 new cases of HIV
- 4 cases of HIV to be engaged
- 35 new cases of Hepatitis B
- 16 active Hepatitis C cases

Finding people with these virus means they can be treated and in the case of HCV cured. ED testing is a proven route to find previously undiagnosed or untreated patients.

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Fast Track Cities

West Yorkshire Liver Care Operational Delivery Network (ODN) Website

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Leeds Teaching Hospitals NHS Trust.

Background: West Yorkshire Liver Care ODN Website was launched in July 2024 to showcase our work in the community and raise awareness of liver care in West Yorkshire. It signposts users to various services, including local NHS hepatology and drug and alcohol services in the area.

The website provides people with high-quality information about hepatitis C, liver conditions, and information about general liver care. It highlights our network, partners and access to services and activities in their local area. We provide an events page for the public where they can find out about liver care events locally.

The website is compliant with accessibility and privacy. It has the functionality to translate all pages into various languages, enabling people, where English is not their first language, to find out the same information.

It was initially populated with information about the ODN, patient information and services in West Yorkshire, this information is reviewed regularly to ensure it is current. To promote the website, we used a business cards for those whose phone don't have the ability to scan a QR code.

Outcomes: Since the launch, the views have increased monthly, with over 10,000 visitors by February 2025. The most popular page is the events page, it advertises mobile clinic unit events allowing members of the public to access free liver scans or testing across West Yorkshire.

This is reflected by the number of people attending events and enquiring about services and helped contributed to over 12,000 people receiving a liver scan or requesting a test for hepatitis C in the vehicle

Having the website has provided a simple way for the ODN to engage with the public and hard to reach communities where English may not be their first language.

References:

https://www.hee.nhs.uk/our-work/primary-care/improving-cancer-diagnosis-earlier-detection

West Yorkshire Liver Care Operational Delivery Network (ODN) Community Liver Health Checks

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Background: As part of an NHS England pilot, community liver health checks were introduced to West Yorkshire. At the start people came to events and mentioned their waiting list experience for a fibroscan at hospital. From this information a delay in secondary care services was identified.

Methods:

- The admin team at St James Hospital identified patients referred from primary care waiting for a fibroscan.

- Appointments were offered to this patients on the mobile clinic at locations in the community
- This reduced the people on the waiting-list at St James' Hospital referred by their GP
- The admin hepatology team identified patients and planned them by the longest wait first.
- A clinic code was set up for the mobile clinic and community locations identified.
- Patients were given a contact number if the location wasn't suitable an alternative could be booked.
- A clear pathway was identified. Positive scans were referred to a consultant in secondary care and those with a negative scan were given lifestyle advise and discharged.
- More information is available for patients at the ODN website.

Results:

- 1938 patients referred by their GP to the mobile clinic.
- 669 patients were referred, 1269 patients discharged without needing an appointment in secondary care.
- GPs received a letter for all patients seen by the service to place on the patients care records.
- In 18 months, the waiting list at St James has reduced from over 800 patients to 204 and from a 20 week-wait to 3 weeks before a patient will then see a consultant
- Changing the patient pathway has saved £291,870 for the NHS using the mobile clinic vehicle.

Outcome:

The initiative's success has enable this pathway to be rolled out to other Trusts.
Using a mobile clinic is an effective way to provide care into the community and reduce secondary care waiting lists.

References:
https://www.hee.nhs.uk/our-work/primary-care/improving-cancer-diagnosis-earlier-detection

Assessment for the risk of malnutrition and nutritional support in older emergency laparotomy patients: a clinical audit

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Background: Malnutrition is a complex diagnosis in older surgical patients, often coexisting with multiple comorbidities alongside a presenting surgical complaint. Addressing nutritional deficiencies may improve surgical outcomes and reduce hospital stay duration and mortality risk (Ashmore et al., 2023). At LTHT, patients undergoing emergency abdominal surgery should be assessed for malnutrition risk upon admission to the surgical department using the Malnutrition Universal Screening Tool (MUST) (NICE, 2017). A high-risk MUST score recorded by registered professionals should trigger the prescribing of nutritional support and/or dietetic referral.

Aim: This clinical audit had two main aims:

1.To determine whether older patients undergoing emergency abdominal surgery were screened for the potential risk of malnutrition using MUST.

2.To assess whether high-risk patients received appropriate nutritional support to address deficiencies in line with NICE (2017) guidelines.

Methods: Patients aged 65 years or older who underwent emergency laparotomy between January 1, 2021, and December 31, 2022, were included. Electronic records were reviewed to confirm MUST score documentation at admission. For high-risk patients, the prescription of nutritional supplementation and/or dietetic referrals were assessed.

Results: Among 300 patients, 98% had a documented MUST score. Of these, 114 (38%) were identified as high-risk; however, 35% did not receive a dietetic review, and 24% were not prescribed any nutritional supplementation.

Conclusions: High-risk MUST scores in older patients are readily available to surgical teams within the electronic patient record but do not consistently lead to interventions addressing nutritional deficiencies via nutritional supplement prescribing or expert dietetic review. While MUST scoring is well-embedded in clinical practice at LTHT, the focus should now shift towards improving the implementation of findings to ensure high-risk patients receive appropriate nutritional interventions.

References:

1. Ashmore, D.L., Rashid, A., Wilson, T., Halliday, V., Lee, M.J. 2023. Identifying malnutrition in emergency general surgery: systematic review, BJS Open, 7 (5)
2. National Institute for Healthcare and Excellence (NICE). 2017. Nutrition support for adults: oral nutritional supplementation, tube feeding and parenteral nutrition (CG32) [Online] [Accessed 18.1.25] Available from: https://www.nice.org.uk/guidance/cg32