SHORT PAPER SESSION D2

D2.1 Regional Cardiac Imaging at Scale: A Collaborative Model That Works

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Statement of Purpose
Persistent cardiac imaging backlogs demand system-level redesign, not additional scanner investment. We present a coordinated networked cardiac imaging services model, to overcome system challenges, reduce inequity, and deliver sustainable improvement.
Methods
Single operational model was delivered across eight NHS providers, through partnership between Manchester Uni NHS Foundation Trust and Alliance Medical (Independent Sector imaging provider). Components included: Centralised booking; unified waiting list; protocol standardisation; evening/weekend sessions; shared reporting; radiographer-led adenosine stress testing; interoperable image sharing. Routine operational data and value metrics were reviewed.
Summary of Results
Pre-implementation, lists were fragmented, waits were up to 20 weeks, and national diagnostic standard were not met for six consecutive years. Post implementation, cardiac MRI waiting times reduced by ~15 weeks, cardiac CT by ~14 weeks; most patients now imaged within 5-6 weeks, with sustained achievement of national targets. Over 12 months, pathways absorbed >2,000 additional referrals, delivering ~1,500 more scans than prior year, supported by extended-hours capacity, streamlined referral processes, and improved capacity management. Centralised booking improved equity of access and reduced duplication; protocol standardisation enhanced consistency of image quality and reporting. Radiographer-led stress testing released consultant cardiologist capacity, contributing to recurrent annual savings of circa £250,000. Faster turnaround times reduced inpatient bed delays and supported earlier clinical decision-making. Patient satisfaction survey data demonstrated sustained improvements.
Conclusion
Collaboration, shared governance and workforce redesign delivers faster, more equitable cardiac imaging without additional scanner investment. The pragmatic blueprint is scalable, transferable, and already informing wider rollout.

D2.2 Patient centring in CT: an international survey of current practices and technological developments

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Background
Accurate patient centring in computed tomography (CT) is essential for optimising image quality and radiation dose. Mis-centring can alter radiation exposure, degrade image quality, and affect CT number accuracy, with the direction and magnitude of these effects dependent on patient position relative to the X-ray tube, potentially influencing diagnosis and treatment planning.
Objective
To investigate current CT centring practices, radiologic technologists' knowledge of their clinical implications, and the uptake of advanced positioning technologies.
Methods
An international, cross-sectional survey was conducted among radiologic technologists performing CT. A bespoke 38-item questionnaire covered five domains: demographics, patient positioning practices, CT number variability, radiation dose management, and auto-centring technologies. To enhance accessibility, the survey was translated into 12 languages and distributed via national societies and social media. Responses were anonymous and analysed using descriptive and inferential statistics.
Results
In total, 321 technologists from 43 countries participated. Vertical mis-centring was most commonly reported, with 31.5% indicating that patients were frequently positioned below the gantry isocentre. Knowledge gaps were evident regarding CT number variability and the dose impact of localiser radiograph direction. Although 34.3% reported access to automated centring technologies, only 17.4% used them consistently. Technologists with CT-specific qualifications demonstrated significantly higher centring knowledge scores ($p = 0.038$).

Conclusion

Substantial international variability exists in CT patient-centring practices and knowledge. Targeted education and wider implementation of automated positioning tools are needed to improve dose optimisation and image quality in CT.

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D2.3 Time for change: Management of Metastatic Spinal Cord Compression

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Purpose/Objective

Metastatic spinal cord compression (MSCC) is an oncological emergency NICE guidelines recommend treatment within 24 hours. This national audit, evaluated current service provision, identified barriers to guideline compliance, and explored opportunities for innovation through partnership.

Methods

A structured survey was distributed via consultant radiographers managing MSCC. Questions addressed service organisation, imaging and treatment timelines, application of validated scoring systems (ESCC, Bilsky, SINS), and perceived barriers to achieving national standards. Descriptive and thematic analysis was undertaken to capture both quantitative variation and qualitative insights into opportunities for service improvement.

Results

Results from 20 centres revealed significant variation in service -Key barriers included limited access to out-of-hours MRI, shortages of trained workforce, and restricted radiotherapy machine availability for emergency cases. Importantly, the audit identified areas where greater multidisciplinary collaboration and service redesign could improve performance: expanding cross-cover for MRI reporting, aligning scoring responsibilities across disciplines, and embedding radiographer leadership in service coordination. These findings highlight both the structural constraints and the collaborative opportunities to achieve timely, equitable care.

Conclusion

This national audit demonstrates that many centres remain unable to consistently meet 24-hour MSCC standards, yet it also identifies clear pathways for transformative service innovation through partnership. By strengthening collaboration between radiographers, oncologists, radiologists, and clinical scientists & physicists, services can address bottlenecks, standardise practice, and embed sustainable models for urgent cancer care preparing for tomorrow's service and workforce challenges.

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D2.4 Putting Children's Rights at the Centre of Imaging Procedures: The International iSupport Standards

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Background
Whilst many children have positive experiences of imaging examinations, others have distressing ones which can have both short- and long-term implications for the child. The iSupport collaboration co-developed standards and resources to outline good procedural practice and the rights of children having any clinical procedure.
Methods
The iSupport standards were developed over a two-year period using an iterative, multi-phased, multi-method and multi-stakeholder consensus building approach to hear the views and perspectives of 203 children, 78 parents and 418 multi-disciplinary professionals from 17 countries.
Results
The standards offer evidence-based guidance, to ensure that the short and long-term physical and psychological wellbeing of children are of central importance in decision-making for imaging procedures. The standards include a copy of the standards for professionals, families and children which outline what good procedural practice looks like and preparation sheets for children. The iSupport team co-developed audit tools to monitor practice against the standards and underpin quality improvement plans focused on how procedural care can prioritise the interests and rights of the child. The resources are free to download and use and have been translated into seven different languages.
Conclusion
The iSupport rights-based standards for children having tests, treatments, examinations and interventions are the first to reach international consensus on definitions of supportive and restraining holds. These are also the first international standards to guide procedural practice based on children's rights which have been developed with children.

D2.5 One Stop Sarcoma Service – A comprehensive patient-centred approach

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Background
An increasing number of patients with soft tissue tumours are being referred on Sarcoma cancer pathway. To improve patient care and meet the national Faster Diagnosis Standard(FDS)(NHS England, 2022) we launched our 'One-Stop Sarcoma Clinic' in September 2024. This clinic adopts a patient-centred approach, integrating diagnostic ultrasound by specialist MSK Radiologists and Sonographers, followed by MRI, surgical consultation, core biopsy and staging-CT as required. All within a single-day visit.
Methodology
Efficiency of our first 15 months was retrospectively reviewed using patient records, assessing performance data against 28-day FDS and evaluating patient feedback.
Results
1735 GP referrals to our Sarcoma Service were received between September 2024 and December 2025.
1661 patients were triaged to one-stop ultrasound assessment.
1291(78%) were discharged following Radiologist/Sonographer assessment alone.
370(22%) patients were assessed through one-stop clinic.
49(13%) patients assessed via the 'One-Stop Sarcoma Clinic' had malignancies identified; 25 patients had sarcoma diagnosed and 24 had non-sarcoma malignancies.
FDS compliance improved from 44% to 91% with average diagnostic interval time reduced by 42%.
Mean FDS was 21 days for malignancies, with the shortest 8 days (lymphoma) and 16 days for sarcoma.
Average number of hospital visits reduced from 3.8 to 1.2.
Patient feedback highlighted the value of prompt face-to-face information from the Sarcoma Team with fewer visits.
Conclusion
Our comprehensive 'One-Stop Sarcoma Clinic' model integrates the expertise of specialist clinicians with a multi-disciplinary approach in a single-day visit. This markedly enhanced diagnostic efficiency and patient experience whilst contributing to environmental sustainability by reduced hospital visits.

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D2.6 A National Programme – Breast Cancer Pathways: A digital clinical placement for mammographers

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Background

Level 4 mammography apprentices and Level 7 postgraduate learners must demonstrate capabilities that ensure high quality, person centred care. A crucial aspect of their development is understanding the wider breast cancer pathway; however, consistent access to specialists across this pathway is often limited.

Purpose

To address this challenge, a national three day Digital Clinical Placement (DCP) was co designed by oncology experts, a National Breast Imaging Academy training lead, a Higher Education Institute academic, and a specialist DCP team. The curriculum aligns with apprenticeship standards, HCPC proficiencies, and the National ACCEND framework. Sponsored by NHS England, the programme includes key performance indicators to measure learner experience and development, with continued investment in 2024–25 to support long term sustainability.

Summary

Across four cohorts in England and Jersey, 154 participants have completed the DCP. Evaluation methods included pre and post placement self assessments, reflective journals, interactive learning boards, celebration materials, peer review, and proficiency mapping. Sustainability planning also includes integrating the DCP model into preregistration diagnostic radiography education. Findings show that the DCP broadened learners' understanding of care beyond screening and surveillance, enabling participants to "see the person" and strengthening compassionate communication and holistic practice. Patient and family voices remained central, with structured reflection promoting professional responsibility and career development. Collaborative input from multiple stakeholders enhanced programme quality, and continued refinement reflects evolving cancer pathways and learner feedback. Scaling the DCP model for preregistration radiographers will extend insight into imaging across cancer pathways, supporting professional recognition and a future ready workforce.

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