



SUMMER SCOT 2026 - 28th August 2026
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DO PATIENTS CARE WHO OPERATES ON THEM?

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We aimed to determine whether patients undergoing elective hip and knee arthroplasty consider continuity with a single surgeon important, and to explore patient priorities within a high-volume elective NHS centre.

A prospective survey was conducted of patients undergoing total hip replacement (THR) or total knee replacement (TKR) at the National Treatment Centre Highland between January and March 2026. Anonymous paper questionnaires were distributed on admission. Data collected included demographics, waiting time, and responses to 12 quantitative and qualitative questions assessing perceptions of surgeon continuity, communication, and priorities. Results were analysed using descriptive statistics.

Of 294 eligible patients, 54 responses were obtained (35 THR, 19 TKR; mean age 69 years; 65% female). The median waiting time was 11 months. While 89% of patients reported establishing a good rapport with the listing surgeon, only 54% stated this influenced their decision to proceed with surgery. Overall, 57% recalled being informed that a different surgeon may perform their operation. Patients expressed a preference to meet their surgeon preoperatively in person (mean 3.8/5), but prioritised shorter waiting times over continuity with the same surgeon (mean 3.9/5). A majority were willing to meet their surgeon on the day of surgery if it facilitated earlier treatment (mean 4.1/5). Confidence in the standard of NHS consultants was high (mean 4.5/5).

Patients undergoing elective arthroplasty prioritise timely access to surgery over continuity with a single surgeon. While preoperative interaction is preferred, flexibility regarding surgeon allocation appears acceptable within high-volume elective care pathways.

EARLY CLINICAL AND PATIENT-REPORTED OUTCOMES FOLLOWING REVERSE SHOULDER ARTHROPLASTY WITH PATIENT MATCHED AUGMENTED GLENOID IMPLANTS. A CASE SERIES.

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Glenoid implantation during reverse total shoulder arthroplasty (RSA) is challenging in the presence of complex glenoid bone loss. Custom-made glenoid implants involve three-dimensionally (3D) printed augmented metal baseplates to match the patient's anatomy. This study reports early clinical, radiological and patient-reported outcomes (PROMs) following RSA using patient-matched glenoid implants.

This retrospective case series included 19 patients who underwent RSA using the Comprehensive Vault Reconstruction System (VRS; Zimmer Biomet). All procedures were performed by a single surgeon at a secondary care centre between November 2018 and June 2024. Preoperative Oxford Shoulder Scores (OSS) were collected. Postoperative follow-up included range of motion (ROM) assessment, radiographs, OSS and American Shoulder and Elbow Scores (ASES). Paired t-tests and Wilcoxon signed-rank tests were used to compare pre- and postoperative data.

Nineteen patients (mean age 78.7 years, SD 8.96) underwent RSA, 13 primary and 6 revision cases. No perioperative or early postoperative complications were noted. The mean preoperative OSS was 13.2/48 (SD 1.23). At a mean follow-up of 40 months (SD 23.8, range 10-77 months), active ROM was 109° forward flexion, 95° abduction and 21° external rotation. OSS improved to 39.43 (SD 9.98; $p < 0.001$) and ASES was 74.2 (SD 23.22). No radiological evidence of lucency was observed around the glenoid, while this was noted around the humeral stem in two asymptomatic cases. No revision surgery was required.

RSA using patient-matched augmented glenoid implants provides excellent early functional and clinical outcomes in severe glenoid bone loss, with significant improvement in PROMs and no revisions within early follow-up.



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EXPOSED IN SCOTLAND: A BREAKDOWN OF SCOTTISH DATA FROM THE EVALUATION OF X-RAY PPE FOR ORTHOPAEDIC SURGEONS IN THEATRE STUDY

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Ionising radiation (IR) exposure poses risks, yet suitability of personal protective equipment (PPE) for Trauma and Orthopaedic (T&O) surgeons remains inconsistent. This study reports a sub-group analysis of Scottish data from a wider national survey, evaluating radiation PPE provision and practices.

A 28-question electronic survey was distributed over six weeks via BOA and BOTA mailing lists, Training Programme Directors, subspecialty societies and social media. Responses were analysed descriptively.

Ninety-three responses were received from 22 Scottish hospitals. Respondents were 44% female (n=32) and 56% male (n=61); 50% were consultants, 44% resident doctors, and 6% post-CCT/SAS grades. IR PPE use averaged 6 hours per week. Significant sex difference in required sizes was observed - females need smaller sizes: $\chi^2(10, N=93)=55.3$, $p<0.001$. Only 27% (n=25) reported access to appropriately sized PPE gowns. When raising concerns, 61% were handled poorly, and 65% were unsure who to approach. Mammoshields were unavailable to 94% of female respondents. Overall, 59% had not received mandatory radiation training. Thematic analysis highlighted recurring concerns: limited adequate PPE, lack of education, and inconsistent guidance.

Scottish T&O surgeons report significant deficiencies in occupational radiation protection, raising concerns about compliance with UK Ionising Radiations Regulations 2017 (IRR17). Issues included poor appropriate PPE access, lack of mammoshields, inadequate training, and unclear reporting pathways. These findings require action to address radiation PPE provision throughout Scotland. Suggested improvements include the need for national guidelines, mandatory education, and improved monitoring to ensure surgeon safety.

ANALYSING TRENDS IN DELAYS TO ASSESSMENT AT A TERTIARY DIAGNOSTIC SARCOMA CENTRE

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NICE set out a clear, structured approach for the early recognition and appropriate urgent referral of suspected bone and soft tissue sarcomas. Wide scale, UK based analysis of this structure shows that it results in a significant improvement in the 5-year disease-specific survival of patients.

Despite this, Sarcoma patients are significantly less likely to be referred via the urgent two week waiting programme than other malignancies, with prolonged diagnostic intervals, averaging close to 90 days, remaining the norm.

To evaluate trends in delays along diagnostic pathway for patients referred to a Scottish Tertiary Sarcoma Centre, by analysing the time interval and sequence of events from initial General Practitioner presentation, to review in a specialist Sarcoma Clinic, over a period of 7 years (2015-2022).

A retrospective cohort study was conducted, data extracted from electronic medical records, including dates of first general practitioner presentation, referral pathway used and first specialist sarcoma clinic appointment, along with key intermediate steps in the diagnostic pathway. Time intervals were calculated between defined pathway points.

The mean wait for patients referred urgently via the suspected cancer pathway from primary care fall within accepted timeframes. However significant delays still exist for patients who are referred to peripheral centres or not referred urgently (close to 90 days) or initially referred to another tertiary speciality (up to 240 days).

Overall, variation in referral pathway was a key determinant of time to specialist assessment, with non-urgent and indirect routes associated with substantially increased delays.



THE FRAMEWORK FOR INTRODUCING AN ELECTIVE DAY CASE SHOULDER ARTHROPLASTY PATHWAY IN A PUBLIC HEALTH SERVICE.

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Day case arthroplasty is safe, cost-effective option for appropriately selected patients, and is increasingly used in shoulder replacement surgery. In response to inpatient bed pressures and extended waiting lists following the COVID-19 pandemic, a multidisciplinary day case shoulder arthroplasty pathway was developed at our centre. This study assessed its safety by comparing readmission, reoperation and complication rates between day case(DC) and inpatient(IP) groups. Secondary aims included patient satisfaction, perceived safety and Oxford Shoulder Scores(OSS).

A retrospective review of consecutive elective shoulder arthroplasties over two years at a single centre was performed. Patients were grouped as DC or IP. Demographic, perioperative and post-operative outcome data were collected. A standardised questionnaire was distributed at a minimum of three months post-operatively. Statistical analysis compared outcomes between groups.

Forty-six patients underwent elective shoulder arthroplasty; 28 (61%) were successfully managed as day cases. Nine (20%) pre-selected DC candidates pre-operatively required an overnight admission. There was one readmission(2.2%) in the DC cohort within 3 days of discharge due to a minor wound issue. No reoperations, infections, venous thromboembolisms or mortalities occurred. Patient satisfaction was high in both groups, with all patients reporting confidence in postoperative support. Mean OSS were higher in the DC group(43.9 vs 38.6, $p=0.018$), with similar mean improvement from baseline(+27.7, $p=0.35$).

Day case shoulder arthroplasty can be safely and effectively delivered within a UK public health service. This pathway, supported by clear exclusion criteria and structured counselling, enables broader patient selection with excellent satisfactions and perceived safety.

DOES CHANGE IN SUPPLIER EFFECT THE RATE OF COMPLICATION IN ANKLE FRACTURE FIXATION?

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This study compares the rate of complication experienced after ankle fracture fixation, following a change in supplier of the surgical implants.

We reviewed outcomes of over 400 patients who had ankle fracture fixation at Glasgow Royal Infirmary. Patients had operations between May 2023 and July 2025. Information collected included date of operation, implant supplier, implant type, post-op infection, revision, and re-operation for other reasons.

476 patients were identified. Of those, 426 patients had primary ankle fixation using either Stryker or Synthes plates. 210 patients were fixed with Stryker plates, 216 with Synthes plates. Of the Stryker group, 4 required revision (1.9%). Of the Synthes group, 11 required revision (5.09%). There is no significant difference in the rate of revision for either supplier ($p=0.074$). There was no significant difference in the infection rate for Synthes or Stryker plates ($p=0.292$) and no significant difference in the rate of reoperation ($p=0.213$). In a comparison between patients who had their ankle fixation within the first 8 months of changing supplier (Early), and the patients who had their operation after that (Late), the rate of revision is significantly higher in the Early Group ($p=0.03$).

Findings show the change in supplier initially has a significant effect on rate of revision, but that the rate of revision approaches pre-supplier change rate over time. The change in supplier has no significant effect on rate of infection or rate of reoperation.



CT EVALUATION OF CEMENTLESS GLENOID PROSTHESIS OSSEOINTEGRATION AND STABILITY IN TOTAL SHOULDER ARTHROPLASTY

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In total shoulder arthroplasty a significant measure of long-term survivorship of the implant is rooted in the osseointegration of the glenoid component. The Mathys Affinis short vitamys implant brings similar properties seen in the RM pressfit acetabular cup to the shoulder containing a monobloc porous coated construction with osseointegrative properties.

Using Computerised Tomography in this prospective cohort study, at 12 months we evaluated peri-peg osteolysis, independent peg osseointegration and migration of the glenoid component. As these are normally assessed on plane radiographs, we developed the Computed Tomography Fixation Integrity Score (CT-FIS) as an evaluation framework defining 4 grades of stability: stable fixation (0), "At risk / close review" (1), "Radiographically loose" (2) and grossly unstable (3). These grades are formed using revision arthroplasty definitions from CT based measurements of lucency incorporating Lazarus grading.

Of 29 patients (mean age 67); 17 right, 13 left (1 with bilateral replacements), 20 were available for analysis. At one year, 85% of patients (17) demonstrated Grade 0 and 15% (3) Grade 1 using CT-FIS. No implants were radiographically loose. One patient scan showed osteolysis with cortical breach, but all showed at least partial osseointegration at superior and/or inferior pegs. No component migration was observed.

This implant demonstrates early reliable osseointegration and low rates of lucency. The use of CT allows for volumetric assessment of implant success and development of our grading system will allow for quantifiable longitudinal analysis previously limited to two-dimensional radiographs.

TEMPORAL DETERIORATION IN OUTCOME MEASURES AFTER KNEE ARTHROPLASTY REFLECTS NORMAL AGING

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Patient-reported outcome measures (PROMs) deteriorate over time after total knee arthroplasty (TKA). This study aimed to determine whether this represents joint-specific deterioration or age-related changes in health-related quality of life (HRQoL).

A prospective cohort of 462 patients (68.7 years, 62.8% female) undergoing primary TKA were followed-up at 1- (n=214), 5- (n=317), 10- (n=299) and 15-years (n=116) postoperatively. Oxford Knee Score (OKS) and SF-6D (HRQoL) were completed at all timepoints. Linear mixed models assessed temporal change in OKS and HRQoL compared to matched population norms, and the association between HRQoL and OKS change.

OKS declined from 39 (IQR 31-44) at 1-year to 35 (IQR 26-42) at 10-years postoperatively ($p=0.002$). SF-6D declined from 0.807 (IQR 0.645-0.887) at 1-year to 0.696 (IQR 0.557-0.858) at 10-years ($p<0.001$). However, this deterioration in OKS (-0.2 , $p=0.746$) and SF-6D (-0.021 , $p=0.072$) was comparable to that expected of a matched healthy population. After adjustment for observed postoperative SF-6D, the OKS was greater at 5-years ($+1.4$, $p=0.010$), 10-years ($+0.5$, $p=0.454$) and 15-years ($+0.4$, $p=0.279$) compared to population norms. At 15-year follow-up, 222 patients were deceased (46.8%), and OKS improved to 37 (IQR 27-44, $p=0.002$). Patients lost to follow-up after 10-year assessment had worse 10-year OKS and SF-6D ($p<0.001$).

Temporal deterioration in the OKS after TKA reflects normal age-related HRQoL changes rather than a worsening in knee function. Attrition bias from revision, mortality, and dropout may result in artificially inflated PROMs at 15-year follow-up. These findings question the utility of long-term PROM collection after TKA.



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DOES ROBOTIC ASSISTANCE IMPROVE EARLY FUNCTIONAL OUTCOMES FOLLOWING UNICOMPARTMENTAL KNEE ARTHROPLASTY?

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Robotic assistance is purported to confer benefit in unicompartmental knee arthroplasty (UKA) due to an assumed correlation between higher surgical precision and superior outcomes. Our aim was to compare early patient-reported outcome measures (PROMs) between robotic-assisted and manual UKA in our high-volume arthroplasty centre.

This was a retrospective cohort study comparing robotic-assisted and manual fixed-bearing cemented medial UKA performed between April 2021 and March 2024. PROMS were assessed at six weeks and one year post-operatively using the Oxford Knee Score (OKS), Forgotten Joint Score (FJS) and satisfaction on a 4-point Likert scale.

395 robotic and 170 manual procedures were performed. Groups were comparable for age, gender, and BMI. PROMs at six weeks were similar, with mean OKS 31.4 in robotic and 33.6 in manual UKA ($p = 0.02$) and mean FJS 35.1 and 42.6 respectively ($p = 0.01$). Although statistically significant, these differences were lower than the reported minimal clinically important differences (MCID). At one year the mean OKS were 38.7 for robotic and 41.8 for manual UKA ($p=0.01$), with FJS 57.8 and 73.2 respectively ($p<0.01$), the FJS difference exceeding MCID. Satisfaction for robotic vs. manual was 87.2% vs. 90.6% at six weeks and 87.1% vs. 90% at one year.

In conclusion robotic UKA showed only a small advantage in FJS at one year, which may reflect a subtly higher performing implant. Differing implants and the retrospective, non-randomised nature of this study may limit generalisability of these findings. Longer-term followup may be advantageous to see if this difference is maintained.



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LONG-TERM OUTCOMES OF PRIMARY TOTAL ELBOW REPLACEMENT IN SCOTLAND: A SCOTTISH ARTHROPLASTY PROJECT ANALYSIS OF 1162 ARTHROPLASTIES

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Total elbow arthroplasty (TEA) is an established treatment for inflammatory arthropathy, osteoarthritis and trauma sequelae, but concerns remain regarding longevity and revision risk. This study evaluated revision-free survival, cumulative revision incidence accounting for death, and factors associated with failure.

Primary TEAs recorded in the Scottish Arthroplasty Project from 1 January 2001 to 31 December 2023 were linked to hospital admissions, procedures and mortality. Implant type was confirmed using clinical portal records and PACS imaging. Failure was defined as first revision or removal. Revision-free survivorship was estimated using Kaplan-Meier methods, cumulative revision incidence using competing-risks analysis, and risk factors using multivariable cause-specific Cox and Fine-Gray models.

Of 1491 TEA procedures, 1162 primary TEAs were included. Median age was 67 years (interquartile range 58 to 75), and 891 patients (76.7%) were female. The commonest implants were Coonrad/Morrey (n = 551), Discovery Elbow System (n = 271) and Souter-Strathclyde (n = 154). Overall revision-free survivorship was 87.2% (95% CI 84.3 to 90.1) at 15 years. Fifteen-year survivorship differed by implant: Coonrad/Morrey 88.6% (95% CI 83.8 to 92.1), Discovery 94.7% (95% CI 88.2 to 97.7) and Souter-Strathclyde 78.4% (95% CI 69.8 to 84.8) (log-rank p = 0.0017). Increasing age reduced revision risk (adjusted hazard ratio (aHR) 0.98 per year, 95% CI 0.96 to 0.996; p = 0.018), while Souter-Strathclyde had higher revision risk than Coonrad/Morrey (aHR 2.10, 95% CI 1.21 to 3.64; p = 0.008).

Primary TEA showed good long-term survival in Scotland. Younger age and implant type were associated with revision risk, supporting careful selection and counselling.



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EFFECT OF LAMINAR FLOW ON DEEP INFECTION RATES FOLLOWING CEMENTED HIP HEMIARTHROPLASTY FOR INTRACAPSULAR HIP FRACTURES: A RETROSPECTIVE COHORT STUDY

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Laminar flow (LF) ventilation is widely used in orthopaedic theatres to reduce surgical site infection, yet evidence for its benefit in hip hemiarthroplasty remains limited. This study aimed to determine whether LF theatre use is associated with a reduced rate of deep infection within one year following cemented hip hemiarthroplasty for intracapsular hip fracture.

A retrospective cohort study was performed of all patients undergoing cemented hip hemiarthroplasty for intracapsular hip fracture at Aberdeen Royal Infirmary between June 2020 and June 2024. Patients were stratified by theatre type: LF (Theatre 11, n=941) versus non-LF (n=778). The primary outcome was deep infection within one year. Secondary outcomes included one-year mortality. Chi-square analysis was used for group comparisons.

Groups were well-matched for age (82.2 vs 81.5 years), BMI (24.1 vs 24.3), sex, diabetes, blood transfusion rate, and urinary tract infection (UTI) during admission (all $p > 0.05$). Non-LF patients had significantly longer operative times (82.1 +/- 24.1 vs 73.7 +/- 20.5 minutes). Deep infection within one year occurred in 7 patients (0.7%) in the LF group and 4 (0.5%) in the non-LF group, with no significant difference between groups (chi-square 0.084, $p = 0.77$). One-year mortality was 29.8% versus 28.0% respectively, with no significant difference (chi-square 0.62, $p = 0.43$).

Laminar flow theatre use was not associated with a significant reduction in deep infection or one-year mortality following cemented hip hemiarthroplasty in this cohort of 1,719 patients. The low event rate limits definitive conclusions; multivariable logistic regression adjusting for operative time and other confounders is planned.