Six key performance indicators were used to compare the average rate of performance across Scotland as well as that for individual hospitals. The Scottish National Audit Programme (SNAP) governance process requires that any hospital identified as an outlier, submit details of a full investigation where results are different from the mean by 3 standard deviations. This is not required if results are 2 standard deviations but is advised and some hospitals did do this.

Results of investigations are submitted on a standard template, however some units used a different format, hence the various formats included; for subsequent reports use of this template will be mandatory.

The table below shows the results from 2019 data presented in the 2020 SHFA annual National Report and summarised versions of the reports received from health boards, that received a 3 standard deviation alert, follow;

Key performance indicators	2SD – report receiv	ed	3SD – report received	
Patients who did not have surgery within 36 hours of admission	Forth Valley	\checkmark	University Hospital Crosshouse	✓
	Aberdeen Royal Infirmary	NA	Victoria Hospital	✓
Patients who did not have a comprehensive geriatric assessment commenced with 3 days of admission Cemented hemiarthroplasty	Nil Nil		University Hospital Crosshouse University Hospital Ayr Dr Grays Hospital Western Isles Hospital Raigmore Hospital	✓ ✓ ✓ ✓
as standard			University Hospital Crosshouse	✓
Patients readmitted within 14 days of discharge	University Hospital Crosshouse	✓	Nil	
	Royal Alexandra Hospital	NA		
Patients who did not return to their original residence within 30 days of admission	University Hospital Ayr	✓	Nil	
Patients who died with 30 days of admission	Wishaw Hospital	✓	Nil	

NHS Ayrshire and Arran

Submission from Hip fracture lead(s), consultant orthopaedic surgeon.

University Hospital Crosshouse

Patients who did not have surgery within 36 hours of admission.

Time to theatre is a longstanding pressure at Crosshouse with a higher than desirable level of delay and historically a significant level of medically unfit as the cause of delay though lack of theatre time remains an issue as well. This was despite several initiatives to improve theatre efficiency and also a move away from automatically prioritising young children for trauma procedures. Despite these the level of delay remains the worst in Scotland.

Patients who did not have a Comprehensive Geriatric Assessment (CGA) within 3 days of admission.

CGA assessment is another long standing concern with there being no Orthogeriatric input to the unit for years now. CGA provision was offered by the ANPs with suitable experience from November which resulted in the slight improvement. There remains a significant challenge with still no recruitment to Care of the Elderly posts at this site and as a result there remains no input to orthopaedics on the Crosshouse site. Towards the end of 2019 (November) the advanced nurse practitioner group who work between Ayr and Crosshouse agreed to skill up colleagues and undertake as much of the CGAs as they could while continuing their other duties. Covid proved a challenge to the delivery of this and continues to do so.

Cemented hemiarthroplasty as standard.

Cemented hemiarthroplasty usage was the third KPI where we are above 3SD from the mean. I looked at the clinician mix for those cases not having a cemented prosthesis. There are 3 hip specialists within the 10 consultants at Crosshouse and the cases were spread evenly amongst all clinicians. The decision to undertake an uncemented procedure is usually due to a discussion between the surgeon and the anaesthetist balancing the requirements for the patient's functional level and risk that the anaesthetist anticipates from the procedure itself. I could not identify any other factors influencing this.

Conclusion

The creation of a trauma unit at the Crosshouse site where all hip fracture management will be centralised will help to address some of the recurring issues highlighted by the hip fracture audit particularly time to theatre with the increase in theatre resource though this may not be realised until after the impact of Covid has diminished. The trauma unit will however not address the lack of Orthogeriatric input and this remains a significant challenge for the Board to address going forward.

University Hospital Ayr

Patients who did not have a CGA commenced within 3 days of admission.

Considering the CGA assessment within 3 days has been a long standing issue in A&A health board we have in fact made improvements compared with previous years. In Ayr Hospital issues identified were a combination of the limited availability of Orthogeriatric assessment and how the assessment had been recorded. We have a single Orthogeriatrician who undertook twice weekly ward rounds. As this was a limited resource only patients appropriate for Orthogeriatric rehabilitation with no other surgical issues would be physically seen by the Orthogeriatrician. Other patients would be discussed as a 'board round' but this would not be documented and therefore did not qualify as CGA assessment. Furthermore, as the first ward round is on a Tuesday any patients presenting on a Thursday/Friday would technically be seen out with 3 days.

We have now recruited Advanced Nurse Practitioners qualified in Orthogeriatric review and rehabilitation to provide a CGA between reviews by the Orthogeriatric consultant. This permits all patients to undergo CGA within 3 days, with specific review of patients that require Orthogeriatric Consultant input. Monthly data shows a significant improvement in CGA and we would anticipate being within 2SD of the Scottish mean in the current year. Orthogeriatric medical staffing however, does remain challenging, with recruitment to vacant posts unsuccessful.

NHS Fife

Submission from Hip fracture lead, consultant orthopaedic surgeon.

Victoria Hospital

Patients who did not have surgery within 36 hours of admission.

Summary

We have improved with some additional theatre lists.

We still need to improve our time to theatre for all reasons.

Need to improve this for 33 patients per year to theatre within target to 2SD of Scottish average.

Scottish average improving every year so need to keep ahead of the game.

Need to improve education around what is acceptable medical reasons for delay – anaesthetic and surgical side.

Need to be cognisant of target time to theatre.

Hip36 now noted on trauma theatre list.

COVID is not acceptable reason for delay either as it is shown that mortality is even higher.

Improvement plan

Improve delay for medical reasons:

Education for surgeons and anaesthetists on appropriate medical causes for delay.

Improve delay for lack of theatre time.

Assess if particular days of week worst for lack of theatre time – focused extra theatre time.

Continue Hip36 on trauma theatre list to raise awareness - show target time for theatre.

Improve other trauma pathways to allow streamlining in all fractures.

NHS Grampian

Submission from Hip fracture lead(s), orthopaedic surgeon.

Dr Grays Hospital (DGH)

Patients who did not have a CGA commenced within 3 days of admission.

In 2019, 62% of hip fracture patients received a CGA within 3 days of being admitted to the ward at DGH. As previously mentioned, this falls more than 3SD below the national average of 85%.

Historically, Orthogeriatric Service has been provided by a single-handed practitioner resulting in variable service provision.

The service was developed by the current team of a Consultant Geriatrician and 2-part time Advanced Nurse Practitioners following their retirement in June, 2019.

We now have a much better understanding of the underlying issues resulting in the outlying standards. Some of these are related to workforce issues, and will be explored in ongoing redesign and recruitment efforts. Well-attended multidisciplinary meetings analysing up to date SHFA data are now a regular feature, promoting awareness and providing a platform to discuss "real-time" actions.

NHS Highland

Raigmore Hospital

Submission from Hip fracture lead, consultant orthopaedic surgeon.

Cemented hemiarthroplasty as standard.

The current evidence base for or against the use of uncemented Thompson's hemiarthroplasties is poor.

The National Institute for Health and Care Excellence (NICE) assertion that the Thompson's prosthesis is not a proven design has also been challenged in the contemporary published peer reviewed literature.

The planned change in practice at Raigmore will allow the existing audit process (SHFA) to look for changes in outcome following this change. Unfortunately, this process will struggle to take account of other factors that will be at play.

It should also be possible to separately look at its effects on length of procedure and cost of procedure. If outcomes are seen to significantly worsen then the audit (SHFA) process should allow for this change in practice to be formerly reviewed and potentially reversed.

The existing data within the audit/ NHS Scotland would also allow for a retrospective cohort study comparing outcomes between matched patients at Raigmore who received a Thompson's hemiarthroplasty with patients from elsewhere in Scotland who received a Thompson's hemiarthroplasty to see if significant differences exist in terms of outcome. This if done using multiple years of data could make a genuine contribution to the literature on this subject.

NHS Western Isles

Western Isles Hospital

Submission from Health Board medical director.

Patients who did not have a CGA commenced within 3 days of admission.

Completion of the CGA ensure the assessment of frail older patients will be multidimensional and multiprofessional. Evidence supports that by employing the CGA, mortality rates are reduced, independence after an acute hospital admission is improved and indeed the risks of hospital admission are reduced.

The CGA can be completed during an acute admission or at a patient's normal place of residence. It should not be viewed as a medical document, as it requires input from the Health and Social Care Team associated with the patient.

The CGA is not widely used within the Health and Social Care teams on the Western Isles. The reasons behind this are multifunctional; including lack of understanding and the absence of a clear champion for frail older people.

Patients presenting with a hip fracture on the Western Isles have surgery in a timely fashion with a low mortality rate, with a very low completion rate for CGA documentation. This has been highlighted previously, and work to encourage deployment of CGA for hip fracture and indeed all frail elderly patients has not been successful.

Completion, and more importantly, the use of the CGA will require involvement of the broader group of health and social care workers on the Islands. In the current circumstances; COVID, vacant Chief Officer (Integration Joint Board), vacant older persons nurse consultant and a reliance on locums for cover in General Medicine it is difficult to say when the environment will be supportive of introducing CGA. I will ensure this remains within the 6EA and Unplanned Care work streams to ensure its proved advantages are shared.