

Scottish Hip Fracture Audit

Annual report 2020 (2019 data)

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Foreword

It was a surprise – and a great privilege – to be asked to write a foreword to the latest annual report from the twice-resurrected Scottish Hip Fracture Audit (SHFA).

As you probably know, in its first manifestation Scotland's was the world's second national hip fracture audit, following – and greatly helped by – the first: the pioneering 'Rikshoft' in Sweden, initiated by Professor Karl-Goran Thorngren in the 1980s.

I was interested in hip fracture rehabilitation, and aware of good literature coming out of Scandinavia, and especially Lund in southern Sweden. In 1988 I wrote to Prof. Thorngren about a rehabilitation-oriented programme including acute and post-acute rehabilitation, and even links with general practice. In the course of a visit I learned a bit about Rikshoft, and I asked if I might try to set up something similar in Scotland. His response? "Lots of visitors say that... none of them bring back any data."

I thought Scotland might be different, and contacted a senior civil servant in charge of the Clinical Research and Audit Group. Happily, the civil servant was a great fan of the way healthcare was organised there, so he immediately supported the idea of a Scottish version of Rikshoft.

Audits are essentially coalitions, and an orthopaedic colleague volunteered, management was made aware, was content, but not invited to manage; and – given that hip fracture patients see more of nurses than they do of any health professional group – a nurse with a research background was recruited.

Four pilot sites got going and thrived on the availability of local data that allowed them to make clinical and service changes with marked improvements in care.

The Swedish team assisted with producing the first detailed analysis of data from all the centres. A first meeting to discuss these was arranged. Our little committee had agreed that, since we were beginners, anonymized data would be presented. That went wrong and the four teams began to mutter amongst themselves, and worked out from the case numbers signified by 'n' of each slide exactly which centre was which.

Thereafter a friendly rivalry at a series of 'HipFest' meetings proved that audit really did actually improve care. It wasn't quite a competition, but in the end there was something like one.

All of which brings me to the main point of this foreword: to commend wholeheartedly all those involved in today's SHFA – light-years ahead of the primordial technologies and challenges outlined above, which leaves my generation at risk of seeming naïve if persistent. But we did what we could at the time, and at times enjoyed it quite a lot too, and it fell to us to make a start in the circumstances in which we found ourselves.

The SHFA of today (despite all the pressures on health services, and in a challenging year) is, to its enormous credit, a world leader.

Its achievements, including its research outputs, are truly astonishing: in particular, in demonstrating how the impact of COVID-19 on trauma services – now a worldwide problem – can be researched, not just endured, with findings that have worldwide influence too.

I have one minor concern (perhaps not one that can be addressed immediately, but isn't going to go away)– the importance of the economic evaluation of the impact of audit. Money talks, and only a health economist can document in detail how the cost of hip fracture care: which, beyond roughly 10 days following admission, is dominated by length of stay – whether in health or social care.

I worried a lot about this when involved in the UK National Hip Fracture Database, and often had to give a talk entitled '*After the metalwork, the long road home*'. Showing that what the audit does not only improves the quality of care, while also improving its cost-effectiveness, is a real double whammy: popular with patients, their carers, service managers, finance directors.

Meanwhile, what the audit has achieved, and how fast it has achieved it, is a mighty achievement in itself. So when circumstances permit, and with the talents the audit has in abundance, I'm sure it can be done – and so saving money and ensuring continuing political support.

Colin Currie CBE

Introduction

The Scottish Hip Fracture Audit (SHFA) has the purpose of improving the care of people with hip fracture. The SHFA is run by an interdisciplinary team with healthcare, statistics and other relevant backgrounds.

Hip fracture care is complex and challenging and good care requires the contributions of many healthcare disciplines. The SHFA sets [standards of care](#) and continuously measures adherence to these standards in virtually all acute hip fracture patients treated in NHS Scotland. We look for any significant variation in adherence to the standards, and provide support to Health Boards when standards fall below agreed limits. The audit methodology and results are openly available for public scrutiny.

The audit presented in this report covers data from 2019, and is the 7th year of the audit. The data involves 7364 patients, 99.9% of acute hip fracture patients in NHS Scotland. Considering Scotland as a whole, the results indicate improvements in nearly all of the standards. As before, there is some variability among hospitals. Recording and understanding the variability is a key function of this audit and is discussed in detail in this report.

One area of reduced performance is the percentage of people with hip fracture transferred from the Emergency Department to a ward within a 4-hour time limit. This fell from 86% in 2018 to 81% in 2019. This reflects the national increase in waiting times in the Emergency Department and is not specific to hip fracture.

Delirium occurs in at least 25% of people with hip fracture¹. Detection is important because this can improve outcomes and reduce patient and carer distress. Last year we saw a substantial improvement in delirium assessments in the Emergency Department using the 4AT, the recommended assessment tool, from 49% in 2018 to 64% in 2019. Whilst this is a welcome improvement, there is still some way to go and ongoing considerable variation among units.

Assessment by a geriatrics team within 72 hours showed a slight overall increase, but some units show very low levels. This relates partly to staffing availability. We are working towards improving access to geriatric assessment in the units concerned.

There were some other areas in which there remains significant variation in adherence to the standards. These include rates of mobilisation on the day after surgery, osteoporosis risk assessments, the length of time between admission and operation, and use of cemented arthroplasty.

Mortality rates at 30 days increased from 6.9% to 7.7%. This may represent natural fluctuation rather than a drop in standards and is likely to represent normal variation. None of the participating hospitals had results which were statistically different from the Scottish average rate. The SHFA will continue to monitor this closely.

In the coming months we will work closely with Health Boards to help identify ways to improve adherence to the standards, using the Scottish National Audit Programme (SNAP) Governance Policy. Significant deviations in performance requires Boards to review their processes and performance and then to provide a report to SNAP and the Steering Group of how these deviations will be addressed. Further details of this can be found later in the report. The SNAP Governance process includes an escalation policy and if necessary may include a formal review by Healthcare Improvement Scotland. The Steering Group also work with staff in hospitals to continually improve on achievement of national standards by sharing practice and promoting ownership of the results. We are also planning on expanding the educational resources available to Health Boards in support of the standards. The Scottish Standards of Care for Hip Fracture patients are regularly reviewed and updated according to the best scientific evidence and clinical practice. The latest version of the standards is available on the SHFA website [here](#).

I write this introduction as the new chair of the SHFA Steering Group. I am very privileged to be taking on this role, and am excited about working with all my colleagues in further improving hip fracture care in Scotland. I thank the outgoing chair Mr Graeme Holt who over the last six years has guided the group and overseen multiple improvements in performance. The ongoing leadership and support of the Steering Group in combination with our team of local audit coordinators has also been critical to the progress seen in this time. I would also like to thank all the staff in the orthopaedics units and associated services around Scotland for all the ongoing work in providing hip fracture care.

Prof. Alasdair MacLulich, Chair Scottish Hip Fracture Audit Steering Group.

Achieving the Scottish Standards of Care for Hip Fracture Patients 2019

Achieving the Scottish Standards of Care for Hip Fracture Patients and reducing variation is one of the key outcome measures of the Scottish Hip Fracture Audit. Standardising care for every person who suffers a hip fracture in Scotland is paramount to improving the overall quality of care provided as well as providing equity of care nationally. Over the course of 2019, there was an increased focus on empowering clinical staff to improve achievement of these standards at a local level which included closer working with audit staff to ensure the quality and accuracy of the data collected.

Whilst the following results may not demonstrate huge changes in rates of compliance, the small incremental improvements indicate the continued growing momentum of clinical staff to make local manageable changes to improve care of patients with a hip fracture.

The following standards were in place in 2019 and are used as the basis of this report:

- Standard 1: Patients with a hip fracture should be transferred from the Emergency Department to the orthopaedic ward within 4 hours.
- Standard 2: Patients who have a clinical suspicion or confirmation of a hip fracture have the 'Big Six' interventions/treatments before leaving the Emergency Department.
- Standard 3: Every patient with a hip fracture should receive the 'inpatient bundle of care' within 24 hours of admission.
- Standard 4: Patients must undergo surgical repair of their hip fracture within 36 hours of admission.
- Standard 5: No patients should be repeatedly fasted in preparation for surgery. In addition, oral fluids should be encouraged up to 2 hours prior to surgery.
- Standard 6: Cemented hemi-arthroplasty implants should be standard unless clinically indicated otherwise.
- Standard 7: Every patient who is identified locally as being frail should receive comprehensive geriatric assessment within 3 days of admission.
- Standard 8.1: Mobilisation should have begun by the end of the first day after surgery.
- Standard 8.2: Every patient should have a physiotherapy assessment by the end of day 2 after surgery.
- Standard 9: Patients with a hip fracture should have an Occupational Therapy (OT) assessment by the end of day 3 post-operatively.
- Standard 10: Every patient who has a hip fracture should have an assessment of their bone health prior to leaving the acute orthopaedic ward.
- Standard 11: Every patient's recovery should be optimised by a multi-disciplinary team approach such that they are discharged safely back to their original place of residence within 30 days of admission.

The latest version of the standards document is available on the SHFA website [here](#).

Main Points

Scottish Standards of Care for Hip Fracture Patients

There was an improvement in almost every standard across Scotland in 2019 and although variation continued to exist between hospitals, the gap had narrowed and reasons for these variations are now more clearly understood.

- The number of people discharged from an Emergency Department (ED) (and admitted to a ward) within 4 hours, fell in 2019 to 81% (2018 86%). This was in line with national performance figures in the ED waiting times in 2019 and not specific to those with Hip Fractures.
- There was an increase in rates of delirium screening in both ED (49% in 2018 v 64% in 2019) and within the first 24 hours of admission to the ward (78% in 2018 v 79% in 2019).
- There was an increase in rates of nutritional screening within 24 hours of admission to the ward (78% in 2018 v 82% in 2019).
- Both University Hospital Crosshouse and Victoria Hospital Kirkcaldy again fell below the Scottish average for the numbers of patients having their hip fracture repaired within the 36 hours' time to theatre standard for the second year and both hospitals appear as significant outliers. Slightly more than three out of every 10 patients waited longer than the recommend 36 hours.
- There continued to be wide variation in the numbers of patients who had a Comprehensive Geriatric Assessment (CGA) of their needs within three days of admission. Across Scotland this assessment was carried out in 85% of eligible cases, however there continued to be 4 hospitals who had significantly different results; University Hospital Crosshouse, University Hospital Ayr, Western Isles Hospital and Dr Gray's Hospital. In previous years the reasons for these differences cited by the Health Boards involved were lack of available resources and staff vacancy. Nine out of every 10 patients cared for at University Hospital Crosshouse and Western Isles Hospital didn't have a CGA within 3 days, 7 out of 10 in Ayr and 3 out of 10 in Dr Gray's.
- There continued to be wide variation in the numbers of patients who were mobilised by the end of the first day after their operation. This ranged from 52% in Dumfries and Galloway Royal Infirmary to 89% in Raigmore Hospital, the national average rate of 68% in 2019 remained similar to last year. Reasons for not attaining the standard in many cases was reported by physiotherapists as being due to issues such as pain or dizziness. These reasons must be explored further to better understand if pre-emptive interventions can be developed to enable early mobilisation.
- The variation between hospitals in rates of Osteoporosis risk assessments narrowed in 2019. The change was most notable in the hospitals where attainment was lowest.
- The proportion of those who were back home (to original residence) didn't change in 2019 and remained at 60%. There was no overall rise in readmission rates within 14 days of discharge suggesting that those individuals were ready to go home.
- The proportion of patients who died within 30 days of admission to hospital increased in 2019 to 7.7% from 6.9% in 2018 and no hospitals were outliers (either statistically better

or worse than the Scottish average). This change is not thought to be significant and represents normal variation in outcomes.

Standard 1: Patients with a hip fracture are transferred from the emergency department to the orthopaedic ward within 4 hours

Rationale: Following clinical confirmation or diagnosis of a hip fracture, local protocols should ensure the efficient and safe transfer of the patient to an orthopaedic ward. This transfer should not be delayed by a requirement that the patient is reviewed by the receiving orthopaedic team in the Emergency Department (ED) unless diagnostic uncertainty exists. If not indicated for essential medical interventions, these frail elderly patients should not have an extended stay in an ED as this represents a delay to an area of definitive care.

Figure 1.1 The percentage attainment of standard 1 by site for 2019 and 2018

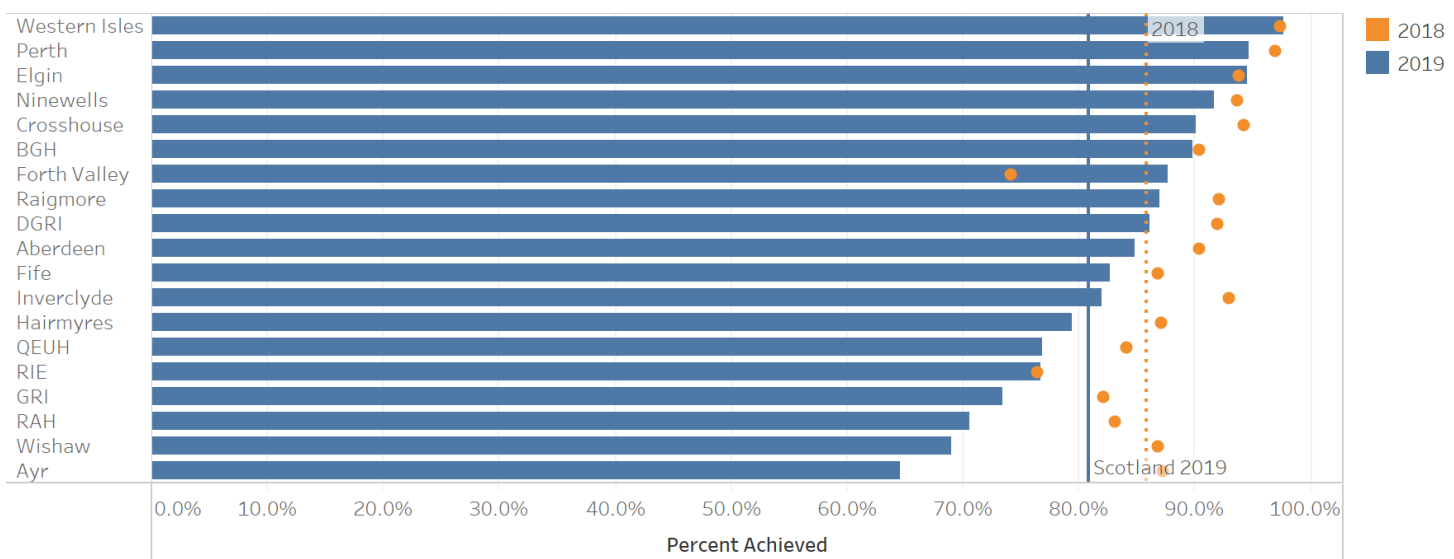


Figure 1.2 The percentage attainment of standard 1 for Scotland by month

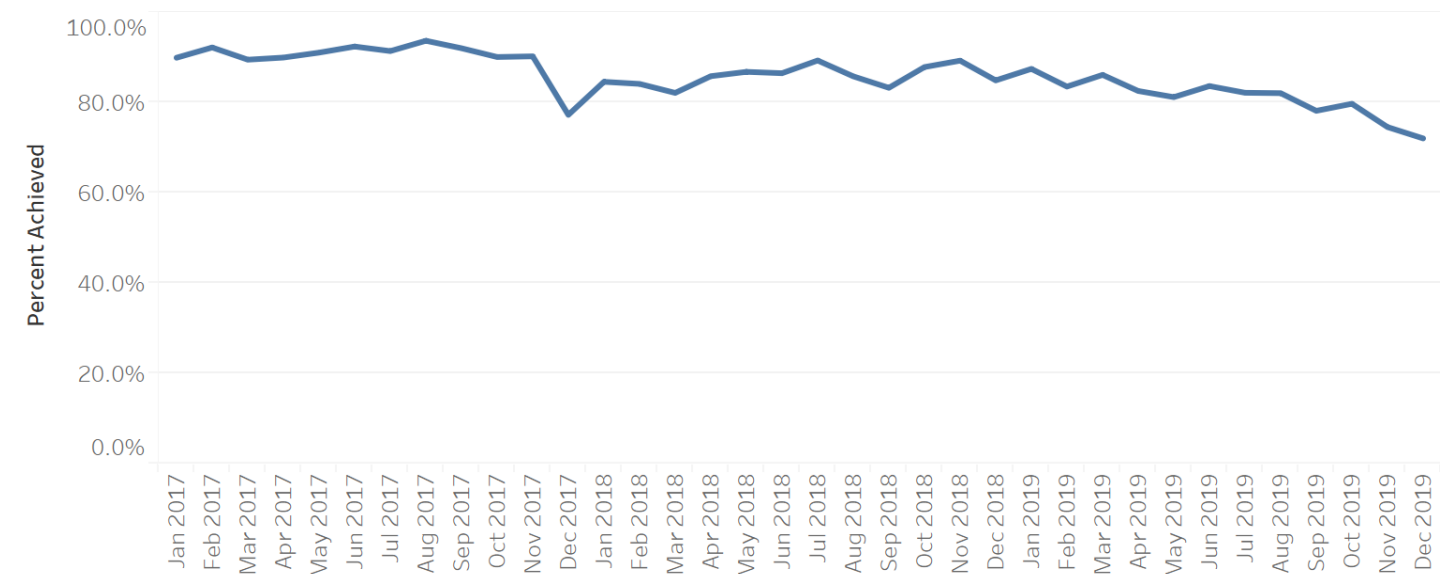
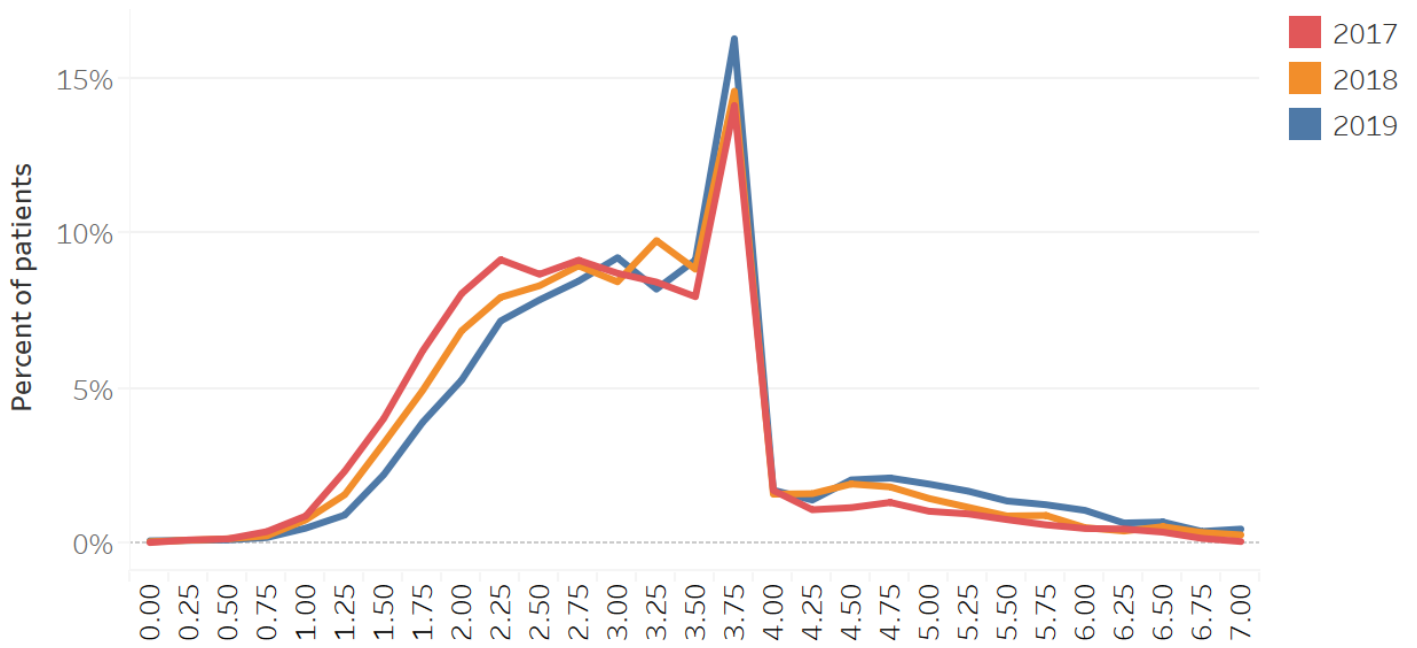


Figure 1.3 The percentage of patients in ED by hours, shown at 15 minute intervals



Standard 2: Patients who have a clinical suspicion or confirmation of a hip fracture have the “Big Six” interventions/treatments before leaving the Emergency Department

Rationale: Every patient who has a clinical suspicion or confirmation of a hip fracture has the following “Big Six” interventions/ treatments in the ED (or earlier if an inter-hospital transfer), as part of a local protocol: (1) provision of pain relief, (2) screening for delirium, (3) early warning score (EWS) system, (4) full blood investigation and electrocardiogram (ECG), (5) intravenous fluids therapy, (6) pressure area care.

Figure 2.1 The percentage attainment of standard 2 by site for 2019 and 2018

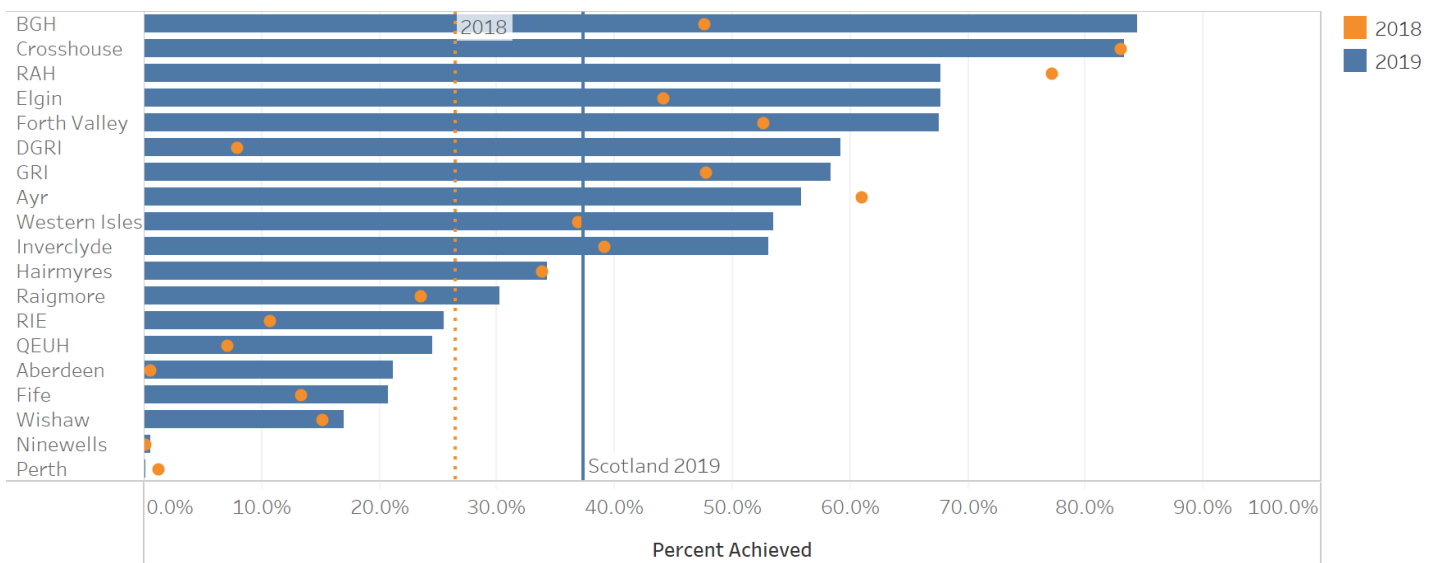


Figure 2.2 The percentage attainment of the six individual aspects of standard 2 for Scotland by month

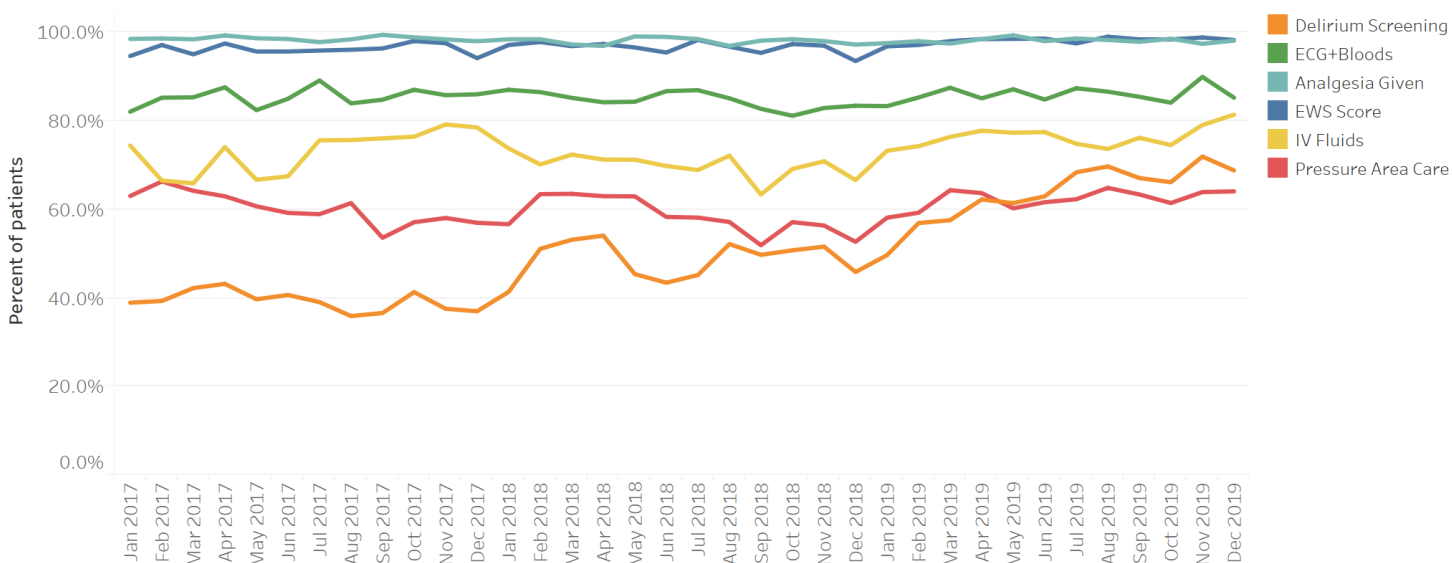
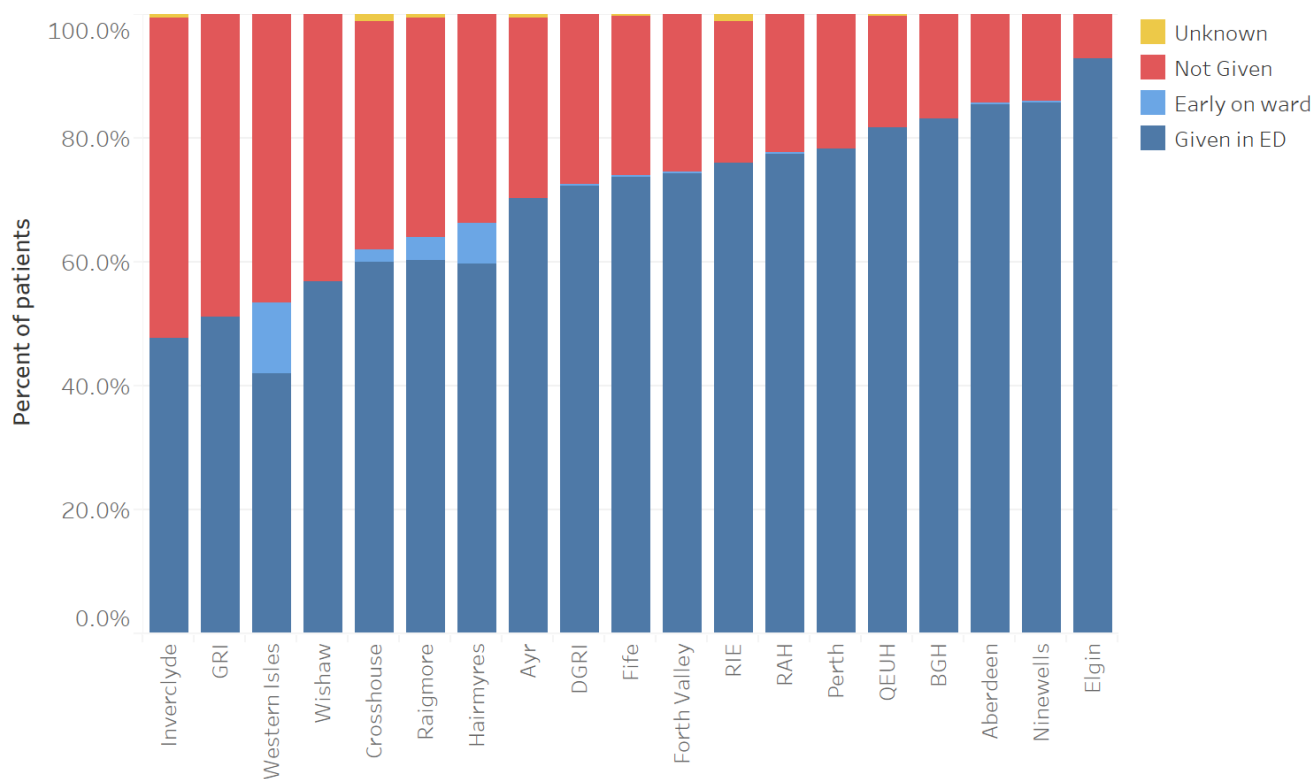


Figure 2.3 The percentage of patients receiving a fascia illiac nerve block in ED or early on ward by site for 2019



Standard 3: Every patient with a hip fracture receives the “inpatient bundle of care” within 24 hours of admission

Rationale: An ‘inpatient care bundle’ has been developed which must be completed and documented within 24 hours of admission to the orthopaedic/ receiving ward: (1) screening for delirium, (2) falls risk assessment, (3) nutritional risk assessment, (4) pressure area assessment. In the case of people who have suffered a hip fracture as the result of an inpatient fall, these assessments must be carried out within 24 hours of the fall and or orthopaedic involvement in the person’s care. These assessments, as well as the subsequent interventions, are essential to maximise the quality of care and overall patient outcome through a multi-disciplinary approach to patient care. Involvement with patients and relatives/ carers is essential.

Figure 3.1 The percentage attainment of standard 3 by site for 2019 and 2018

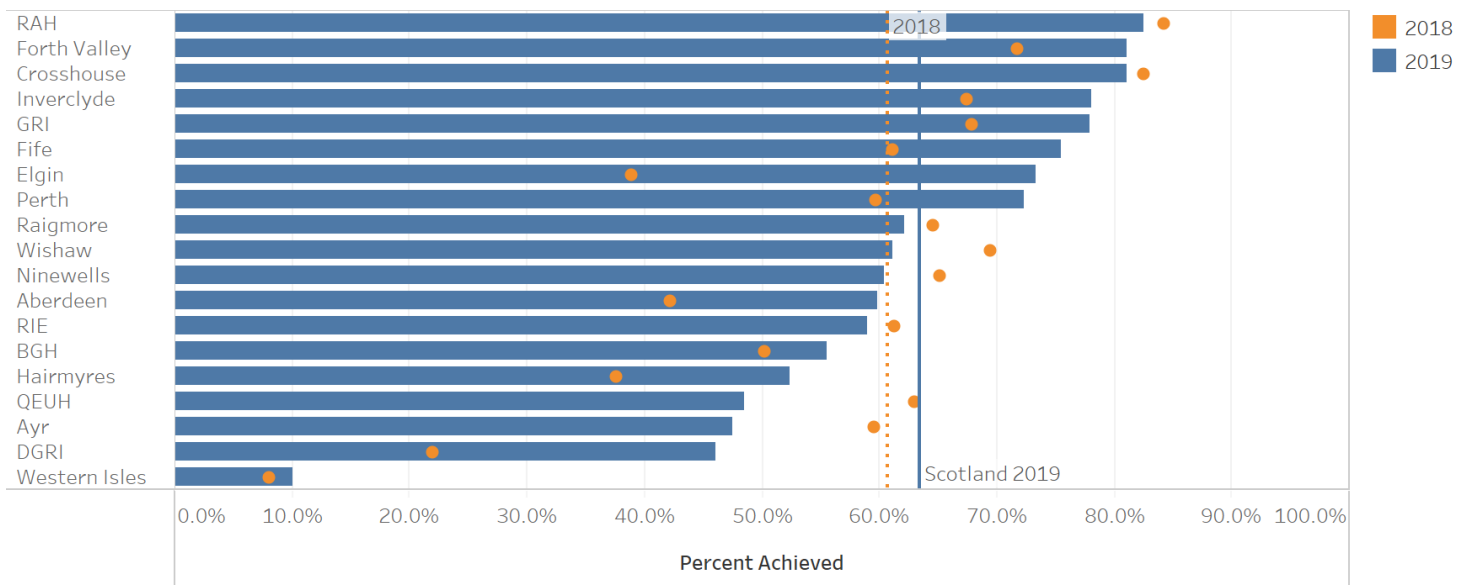
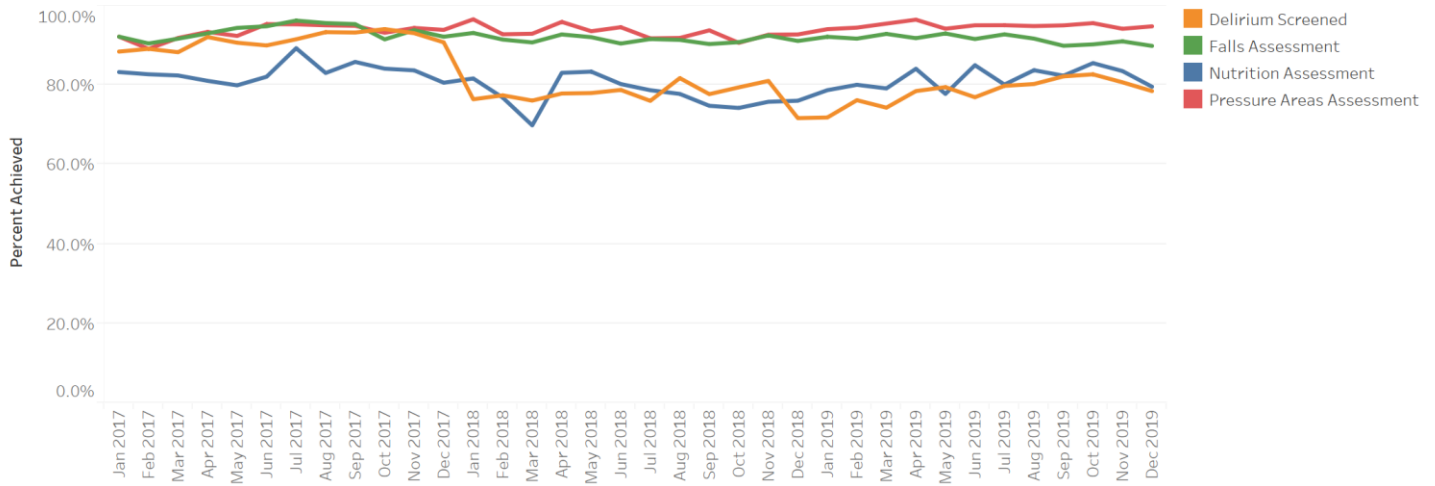


Figure 3.2 The percentage attainment of the four individual aspects of standard 3 by month for Scotland



Standard 4: Patients undergo surgical repair of their hip fracture within 36 hours of admission

Rationale: It is essential that surgical fixation of a hip fracture is expedited. Delayed fixation correlates with increased mortality at one year, increased complications and increased hospital stay. Hospitals must therefore be organised in such a way that facilitates timely and planned surgery without delays, meaning not only adequate theatre capacity for trauma surgery and availability of anaesthetists and surgeons, but also a means of rapidly assessing and optimising frail, elderly patients with multiple co-morbidities.

Figure 4.1 The percentage attainment of standard 4 by site for 2019 and 2018

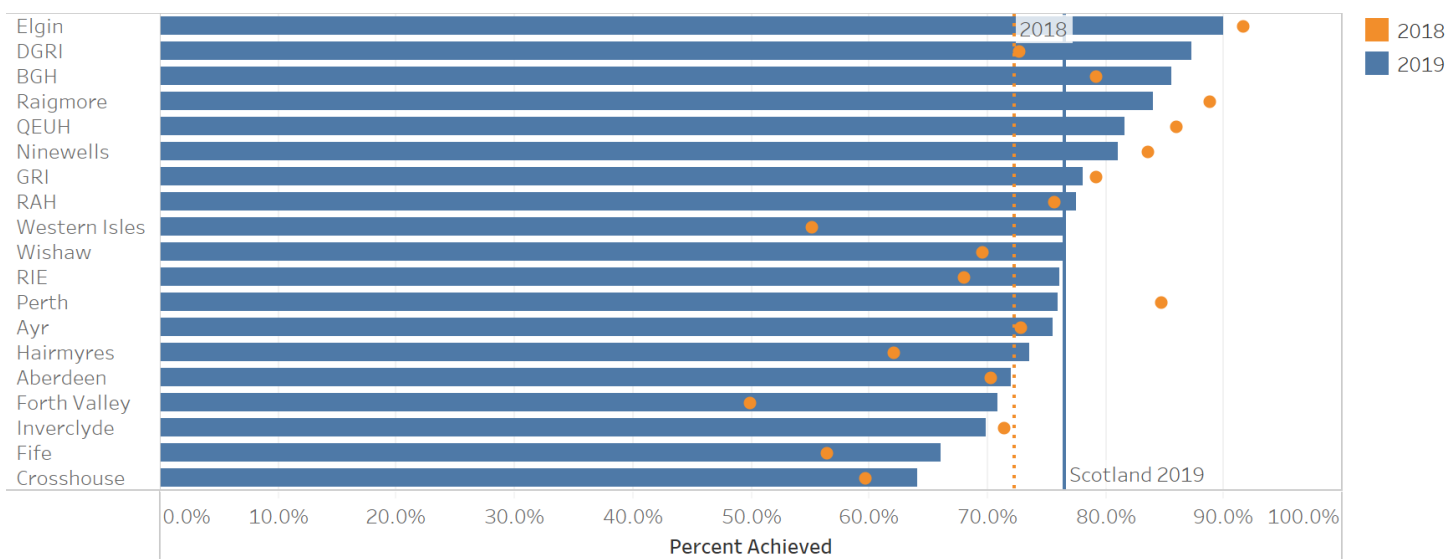


Figure 4.2 The percentage attainment of standard 4 by month for Scotland

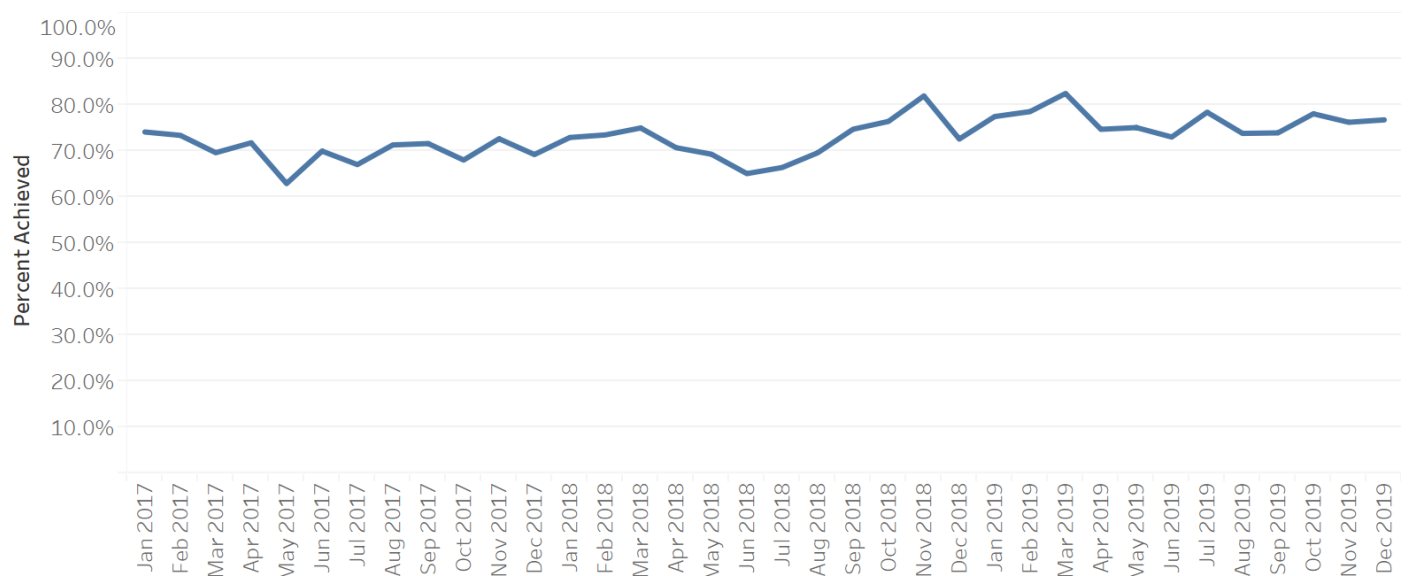
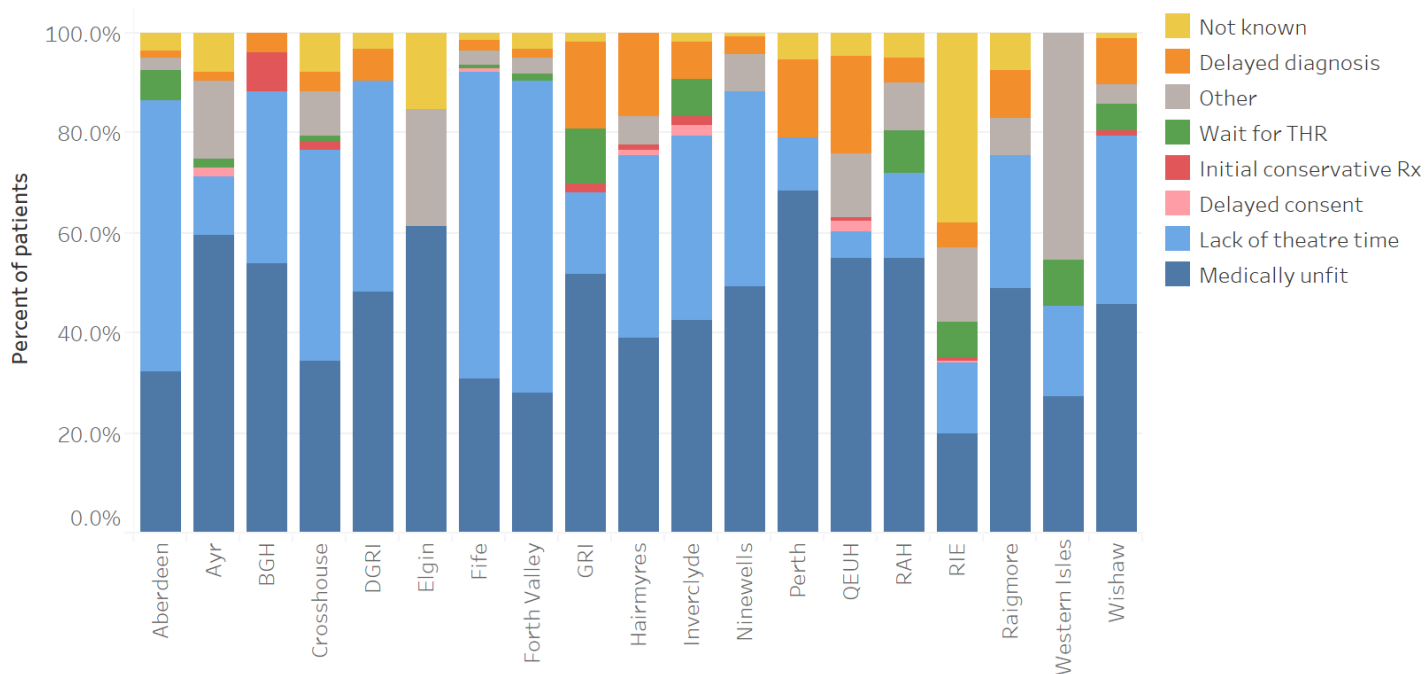


Table 4.1 Reasons for delay for 2019 and 2018

	2019	2018
No delay	76.56%	72.26%
Medically unfit	9.30%	11.19%
Lack of theatre time	7.71%	11.39%
Delayed diagnosis	1.63%	1.87%
Not known	1.97%	1.35%
Other	1.69%	0.47%
Wait for THR	0.87%	0.88%
Delayed consent	0.11%	0.37%
Initial conservative Rx	0.17%	0.22%

Figure 4.3 The percentage of patients not operated on within 36 hours by reason of delay per site



Standard 5: No patients are repeatedly fasted in preparation for surgery. In addition, clear oral fluids are offered up to two hours prior to surgery

Rationale: Maintaining adequate caloric intake is important to attenuate peri-operative nitrogen loss and loss of muscle mass. Repeated fasting cycles occur when patients are fasted for surgery and then cancelled and results in limited oral intake over a number of days. This can be avoided with careful and realistic planning of theatre lists and ensuring adequate theatre capacity. Communication between the theatre/ ward teams and the patient (including relatives/ carers) is essential. This collaborative approach can be facilitated through an identified trauma liaison nurse-led service.

Figure 5.1 The percentage attainment of standard 5 by site for 2019 and 2018

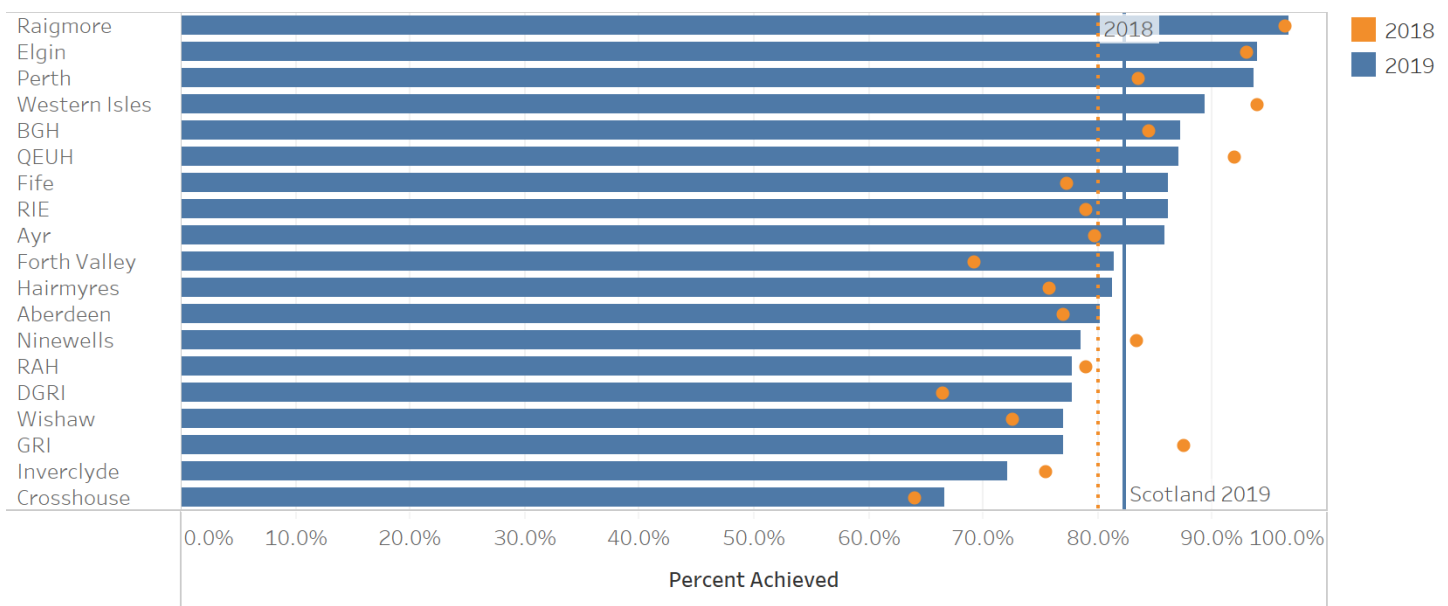
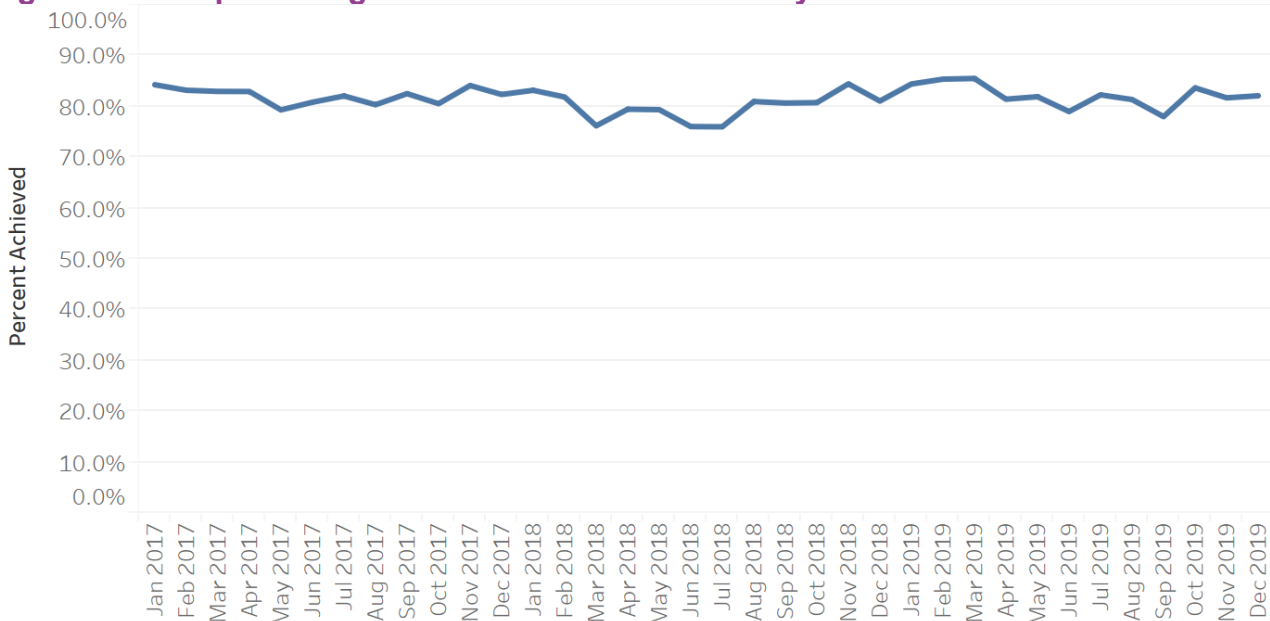


Figure 5.2 The percentage attainment of standard 5 by month for Scotland



Standard 6: Cemented hemi-arthroplasty implants are standard unless clinically indicated otherwise

Rationale: The use of cemented hemi-arthroplasty implants should be standard as recommended by ‘Hip Fracture Management’ by National Institute for Health and Care Excellence (NICE CG124)² unless specifically contra-indicated by significant operative risk. The patient’s pre-existing ambulatory status should be a consideration when selecting the type of implant. Replacement arthroplasty (total hip replacement or hemi-arthroplasty) should be the standard procedure of choice for patients with a displaced intra-capsular hip fracture.

Figure 6.1 The percentage attainment of standard 6 by site for 2019 and 2018

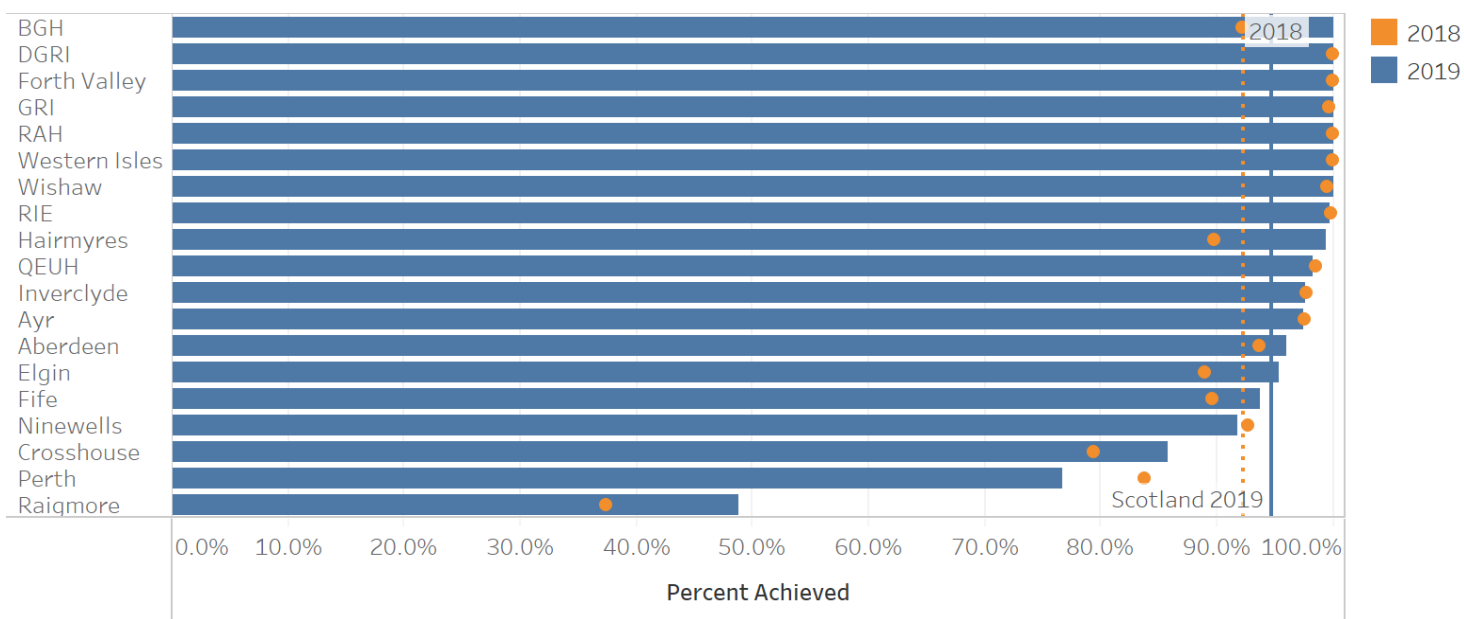


Figure 6.2 The percentage attainment of standard 6 by month for Scotland

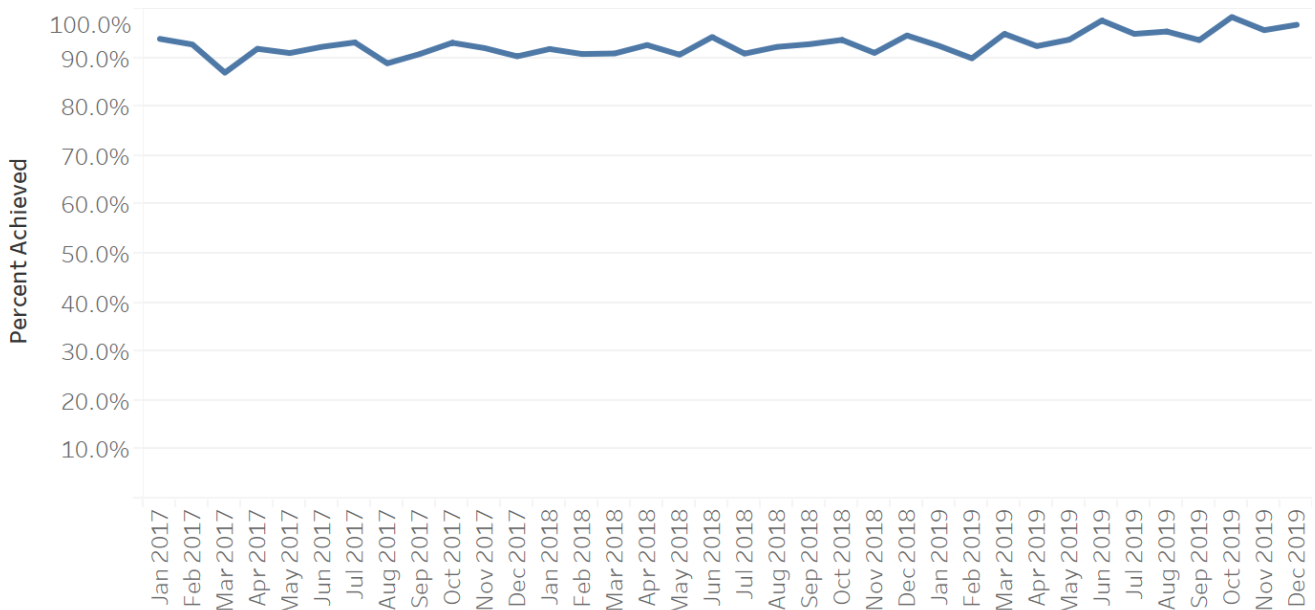
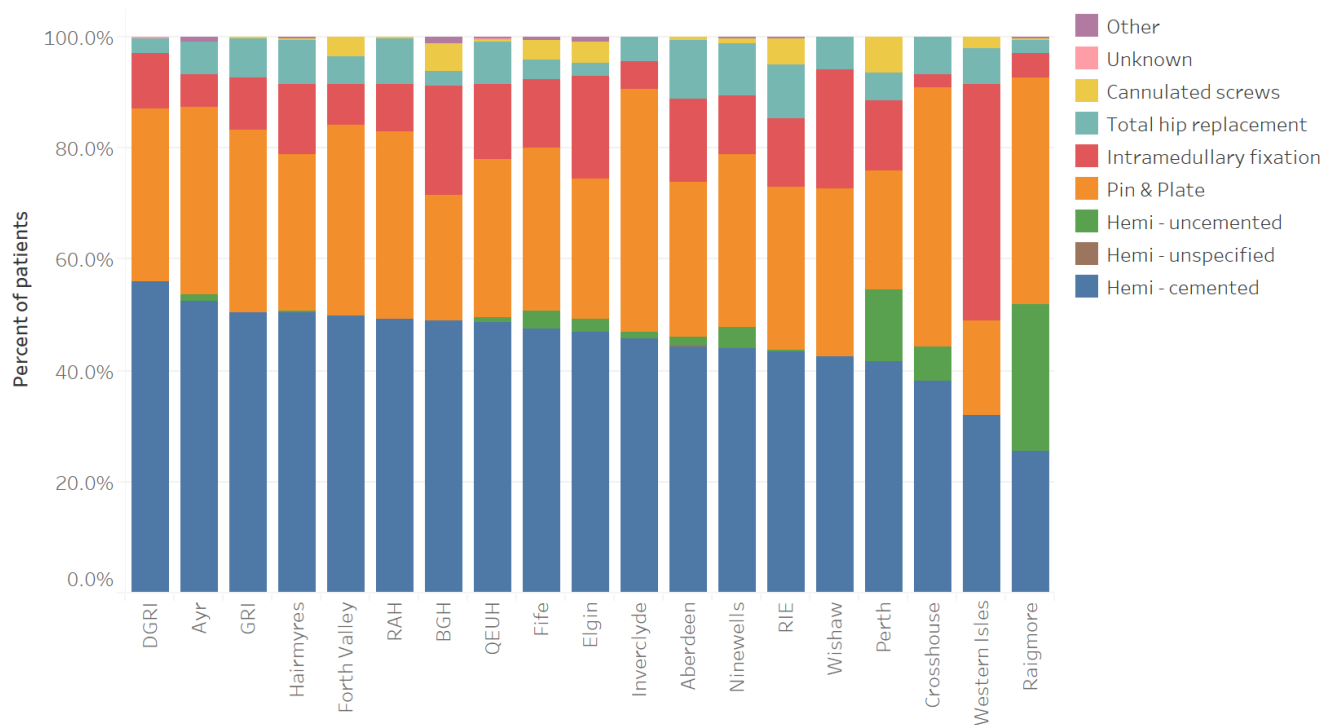


Figure 6.3 The percentage of patients by operation type per site for 2019



Standard 7: Every patient who is identified locally as being frail, receives comprehensive geriatric assessment within three days of admission

Rationale: Many patients presenting with hip fractures are frail and have complex medical problems. Collaborative working with Geriatricians has been shown to improve the standards of medical care in this frail group. The benefits include reduction in delay to surgery caused by medical problems, improved management of perioperative medical complications, better coordination of multidisciplinary team work, improved communication with patients/ relatives and reduction in adverse events including delirium and falls. There is also a trend towards reduced length of stay and lower in-hospital mortality.

Figure 7.1 The percentage attainment of standard 7 by site for 2019 and 2018

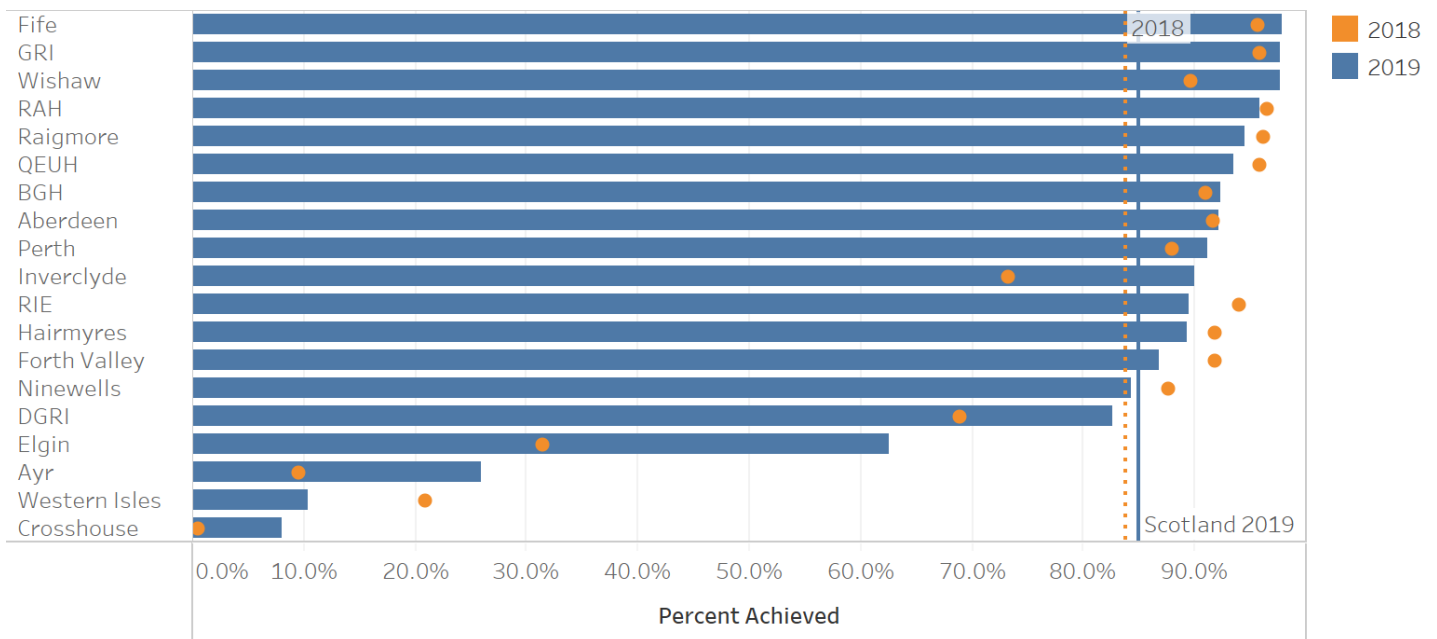


Figure 7.2 The percentage attainment of standard 7 by month for Scotland

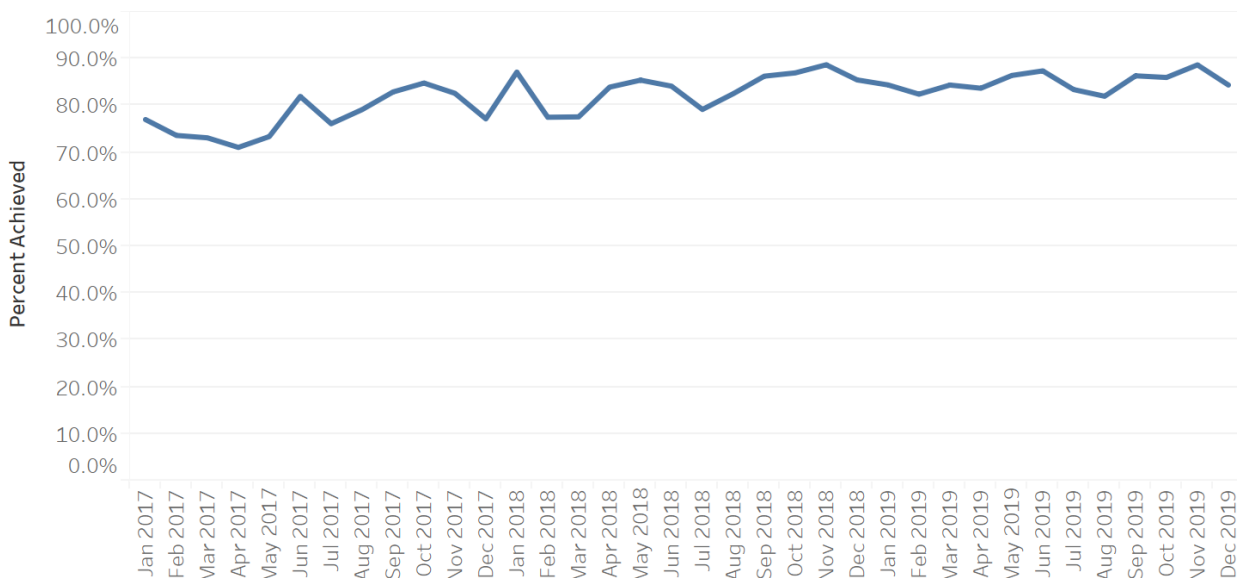
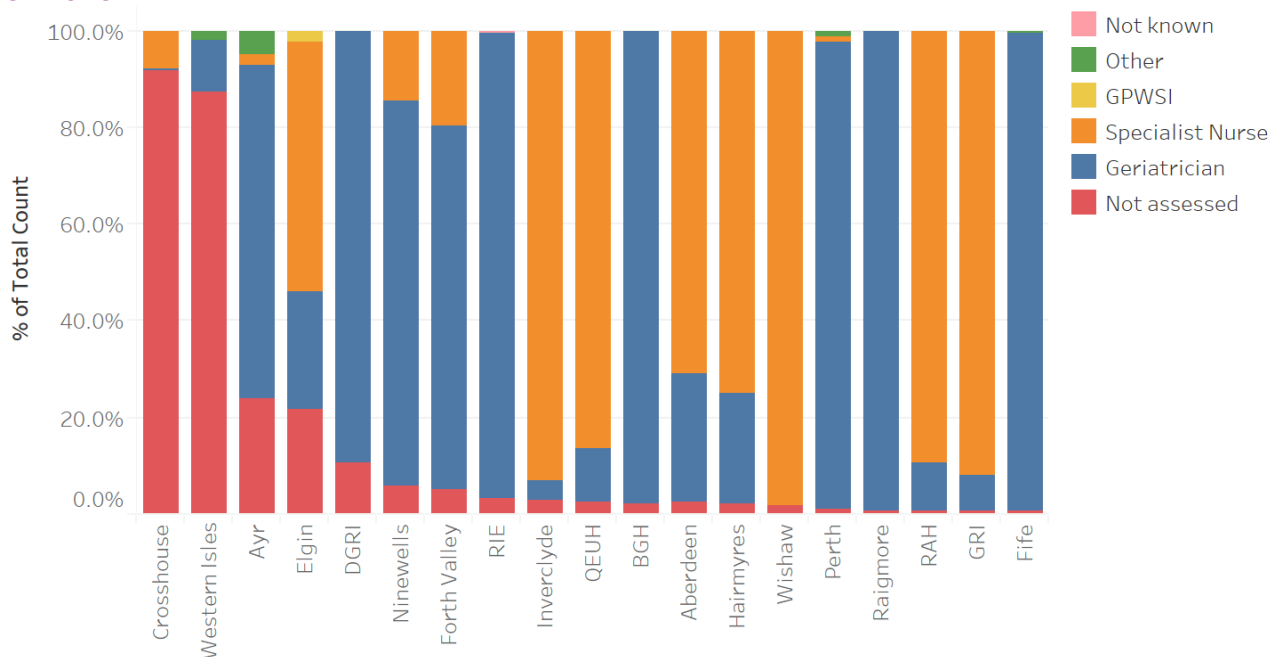


Figure 7.3 The percentage of patients by member of staff completing the assessment for 2019



Standard 8.1: Mobilisation has begun by the end of the first day after surgery

Rationale: Early mobilisation in combination with post-operative physiotherapy is of value in reducing pulmonary complications, optimising early recovery and reducing falls. If the patient’s overall medical condition allows, mobilisation and multidisciplinary rehabilitation should begin within 24 hours post-operatively.

Figure 8.1 The percentage attainment of standard 8.1 by site for 2019 and 2018

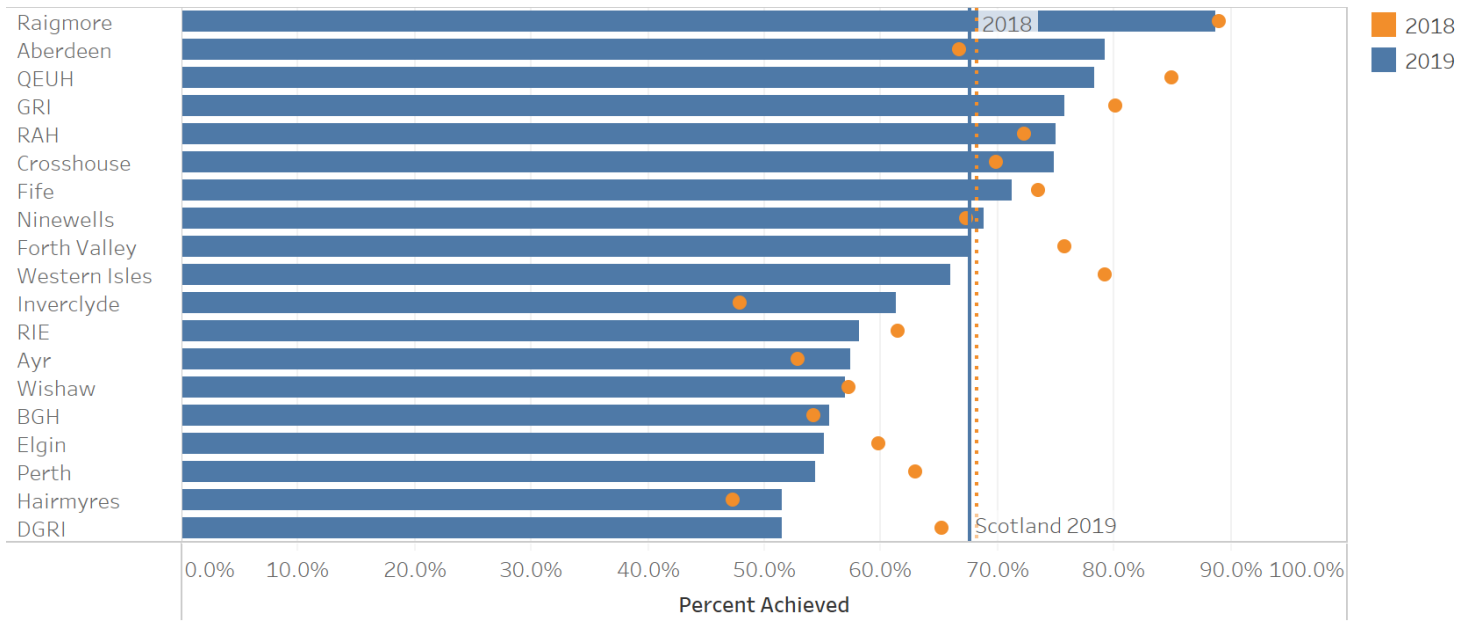
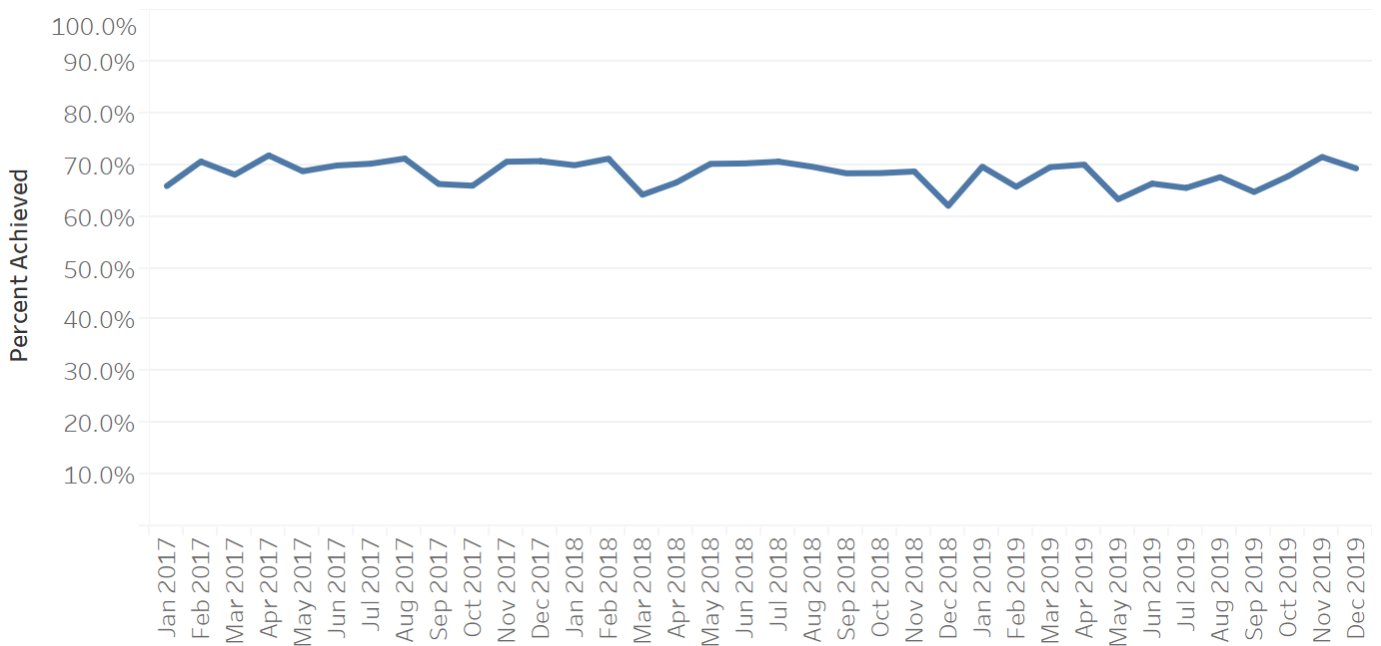


Figure 8.2 The percentage attainment of standard 8.1 by month for Scotland



Standard 8.2: Every patient has a physiotherapy assessment by end of day two after surgery

Rationale: Early mobilisation in combination with post-operative physiotherapy is of value in reducing pulmonary complications, optimising early recovery and reducing falls. If the patient’s overall medical condition allows, mobilisation and multidisciplinary rehabilitation should begin within 24 hours post-operatively.

Figure 8.3 The percentage attainment of standard 8.2 by site for 2019 and 2018

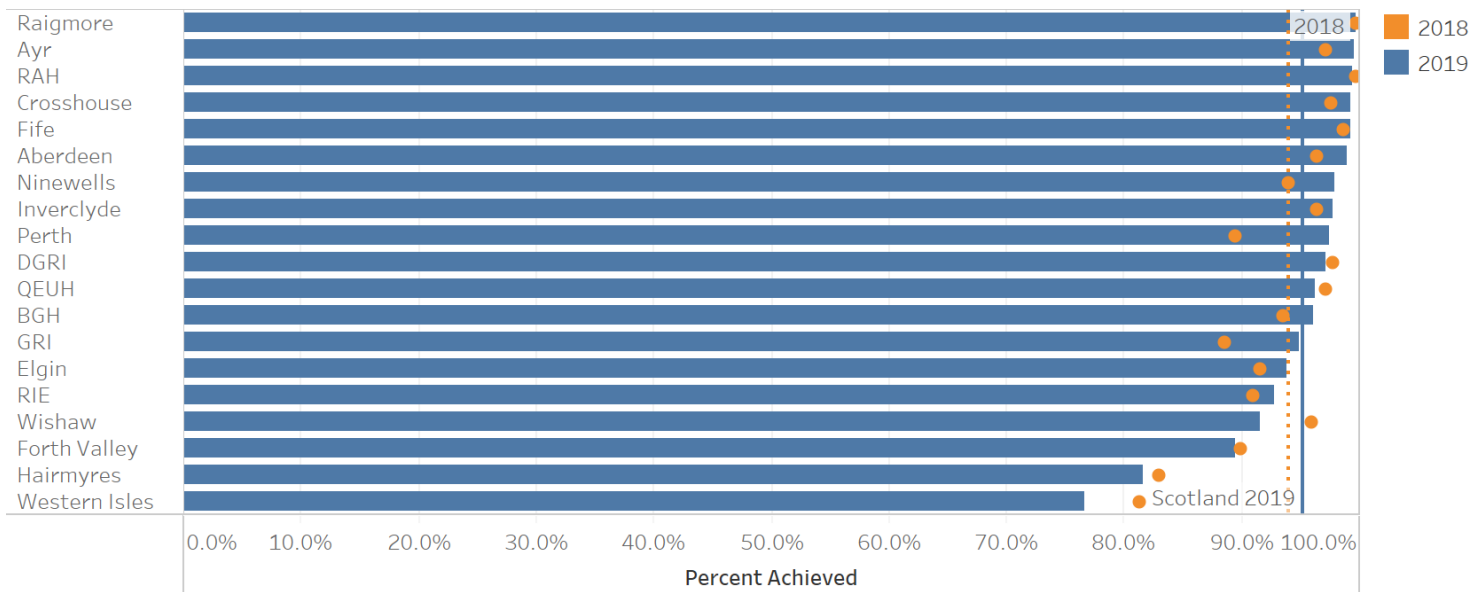
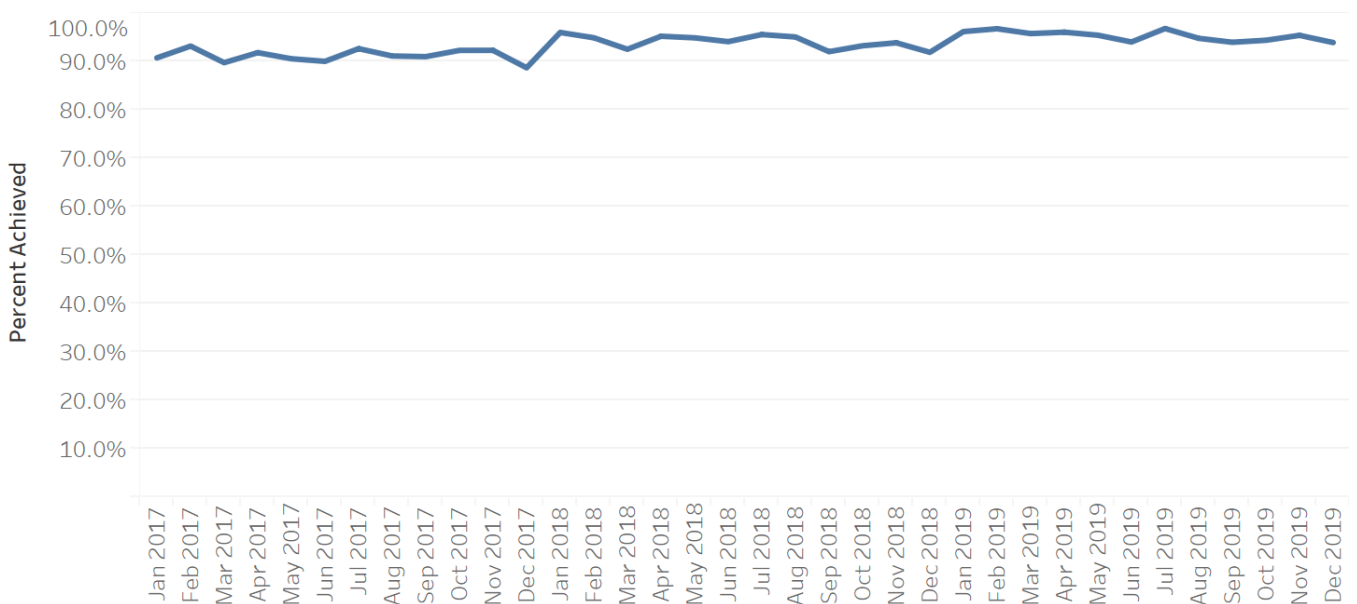


Figure 8.4 The percentage attainment of standard 8.2 by month for Scotland



Standard 9: Every patient has a documented Occupational Therapy Assessment commenced by the end of day three post admission

Rationale: Occupational Therapy (OT) contributes to both enabling patients to regain function post operatively and assessing the need for support following discharge. All patients must be screened and considered for OT assessment. Any patient deemed not appropriate for OT intervention should have written documentation to support this decision.

Figure 9.1 The percentage attainment of standard 9 by site for 2019 and 2018

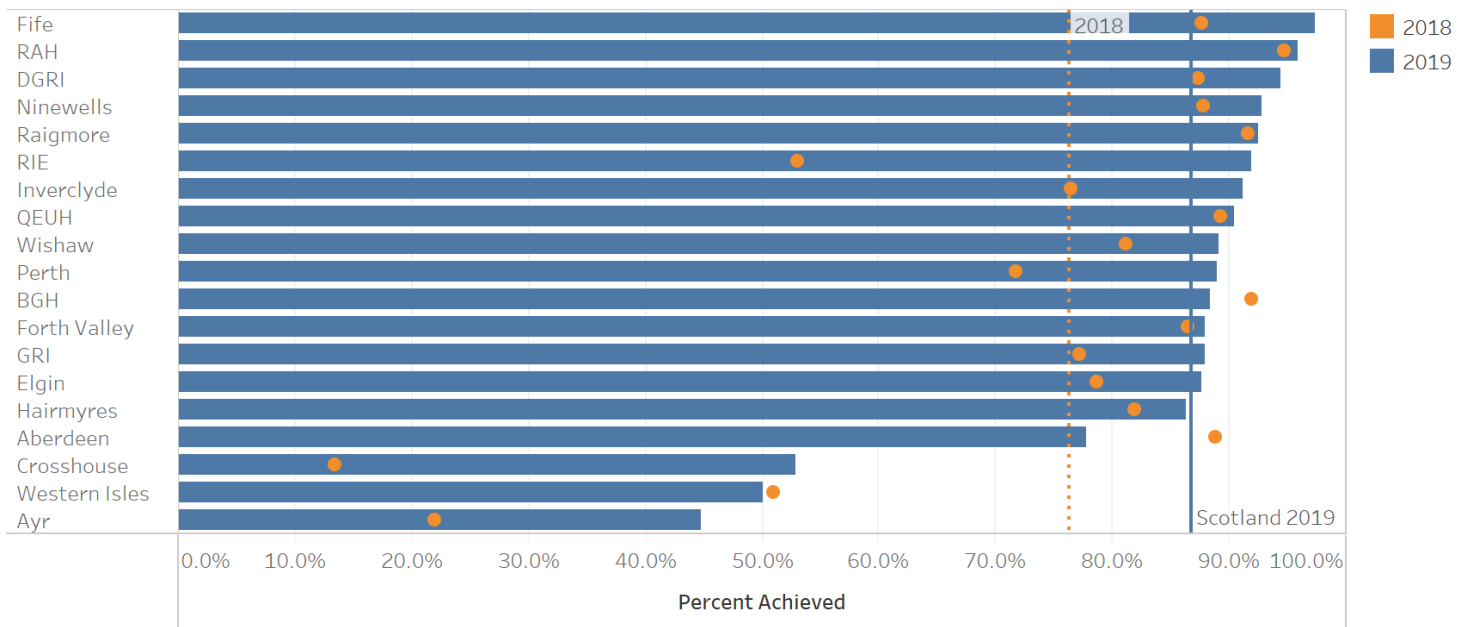
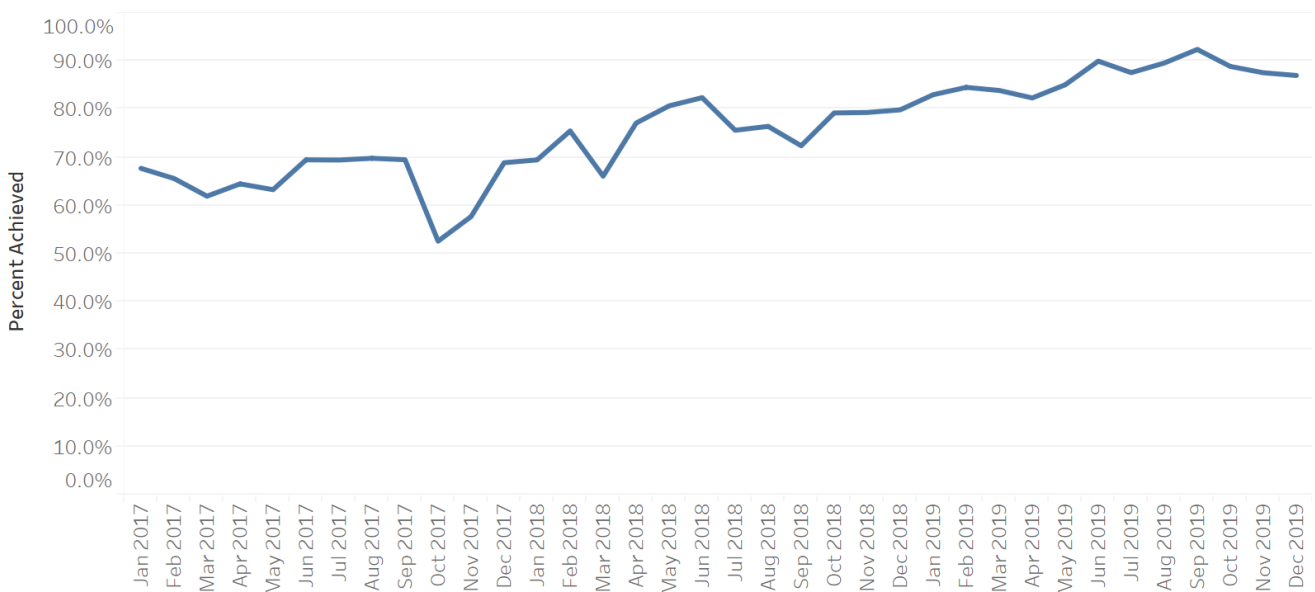


Figure 9.2 The percentage attainment of standard 9 by month for Scotland



Note: as of January 2018, this standard changed to having an OT assessment carried out by day three post-admission, rather than day three post-operatively as had been done previously. This change was made following a review of practice and definitions in order to exclude confounding factors such as delays to theatre.

Standard 10: Every patient who has been admitted and diagnosed with a hip fracture has an assessment or a referral for their bone health within 60 days

Rationale: Osteoporosis risk assessment and treatment is integral to the prevention of further fractures alongside falls prevention strategies. Fracture begets fracture: a previous fracture will approximately double the risk of a subsequent fracture with the greatest risk occurring in the first year following the initial fracture³. There is extensive evidence showing the effectiveness of bisphosphonate and other osteoporosis treatments, demonstrating up to a 50% relative reduction in fracture risk⁴. Hence admission with hip fracture offers a prime opportunity to assess and instigate osteoporosis medication, as appropriate. Some units have a Fracture Liaison Service in operation which has been recognised internationally as an effective model of delivering care⁵. Most patients are commenced directly onto treatment whilst in hospital whereas others have treatment deferred until after they have their bone densitometry assessment. Significant variation in practice across Scotland is evident in terms of osteoporosis treatment and diagnostic interventions. The aim should be that all patients who have been admitted and diagnosed with hip fracture should receive a bone health assessment or referral for this within 60 days of admission to hospital in order to reduce future fracture risk.

Figure 10.1 The percentage attainment of standard 10 by site for 2019 and 2018

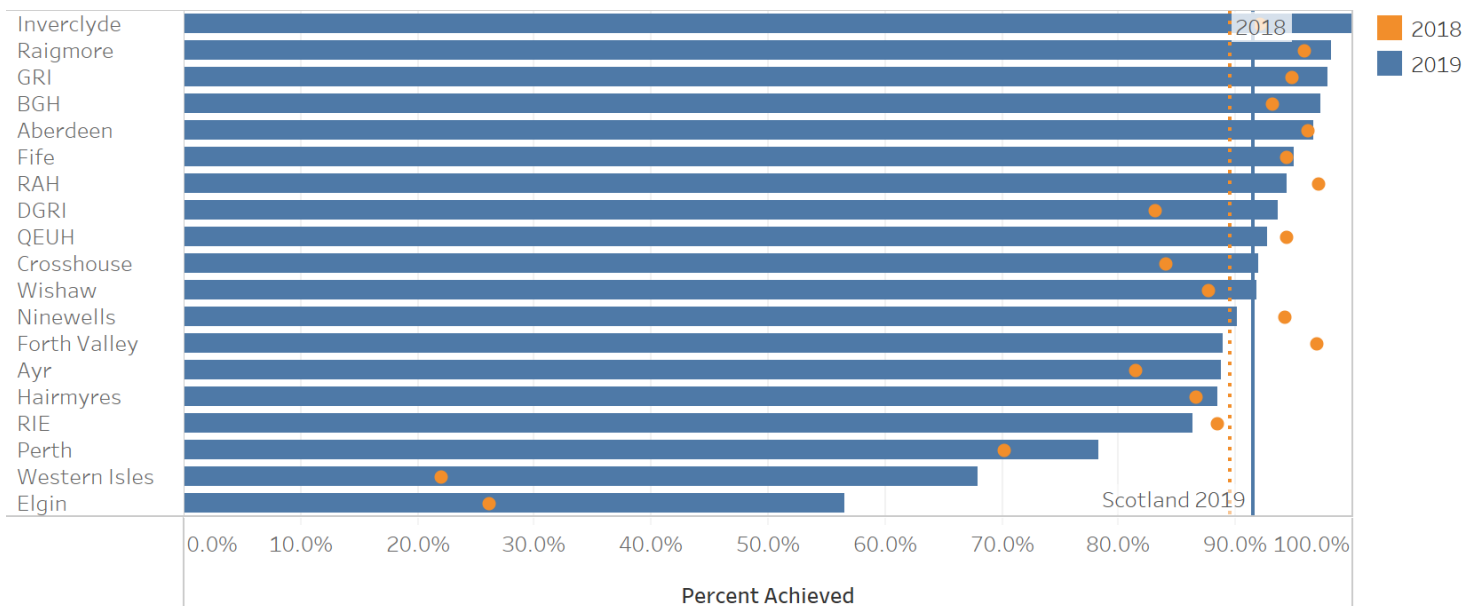
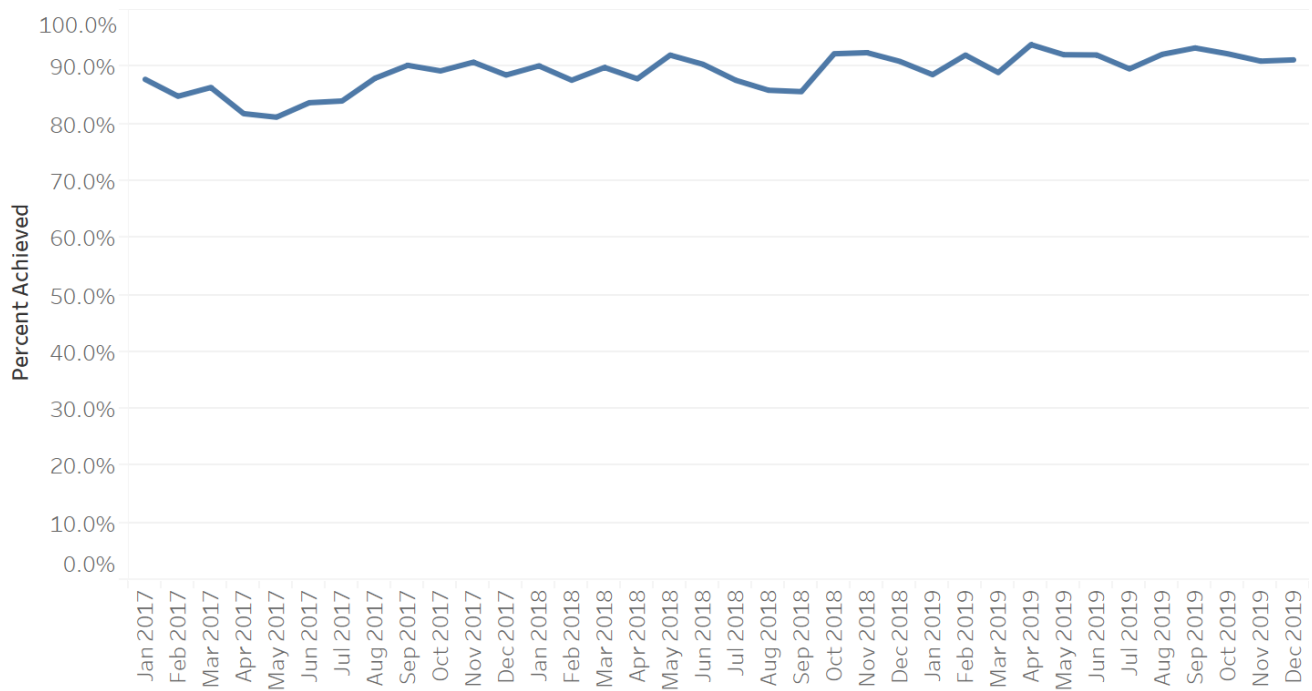


Figure 10.2 The percentage attainment of standard 10 by month for Scotland



Standard 11: Every patient’s recovery is optimised by a multidisciplinary team approach such that they are discharged back to their original place of residence within 30 days from the date of admission

Rationale: The main aim of the improvement work is “getting patients back to their original place of residence as rapidly as possible, whilst optimising their ability to retain their independence”. This should be achieved by optimising the pathway of care during their acute hospital stay and a seamless and supported transition back to the original place of residence within 30 days from date of admission. Where possible, rehabilitation should be in the patient’s original place of residence rather than the traditional rehabilitation unit.

Figure 11.1 The percentage attainment of standard 11 by site for 2019 and 2018

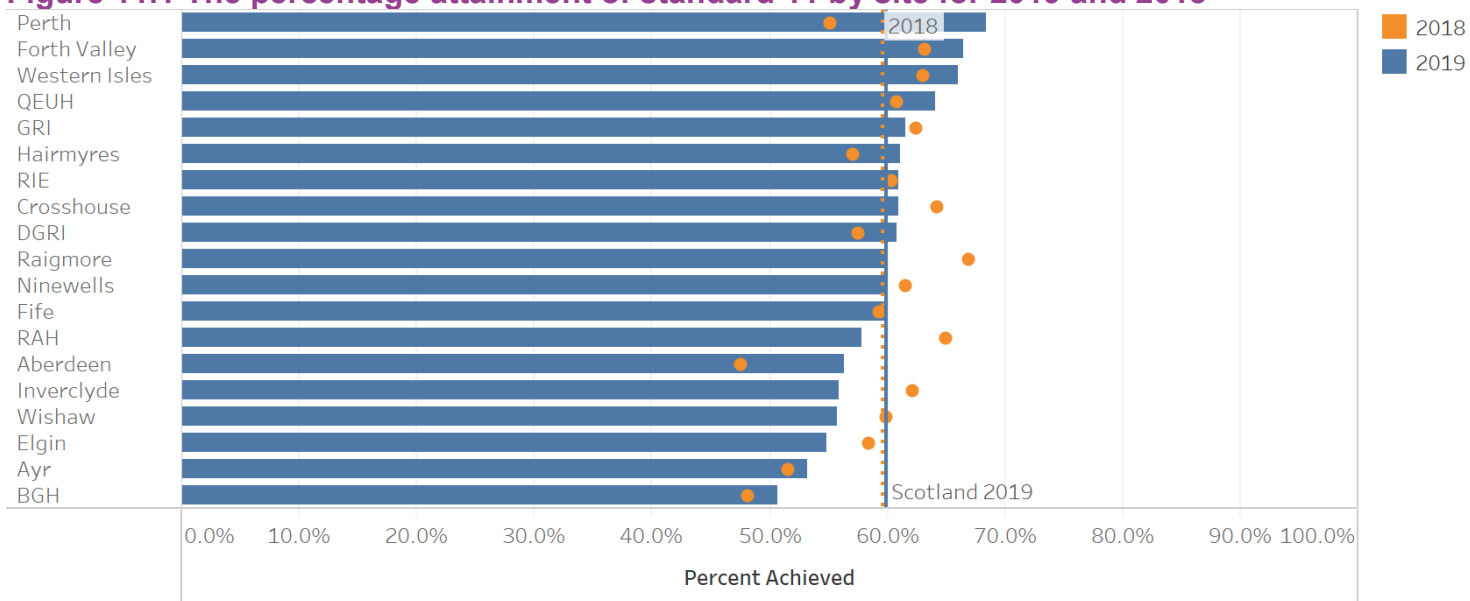
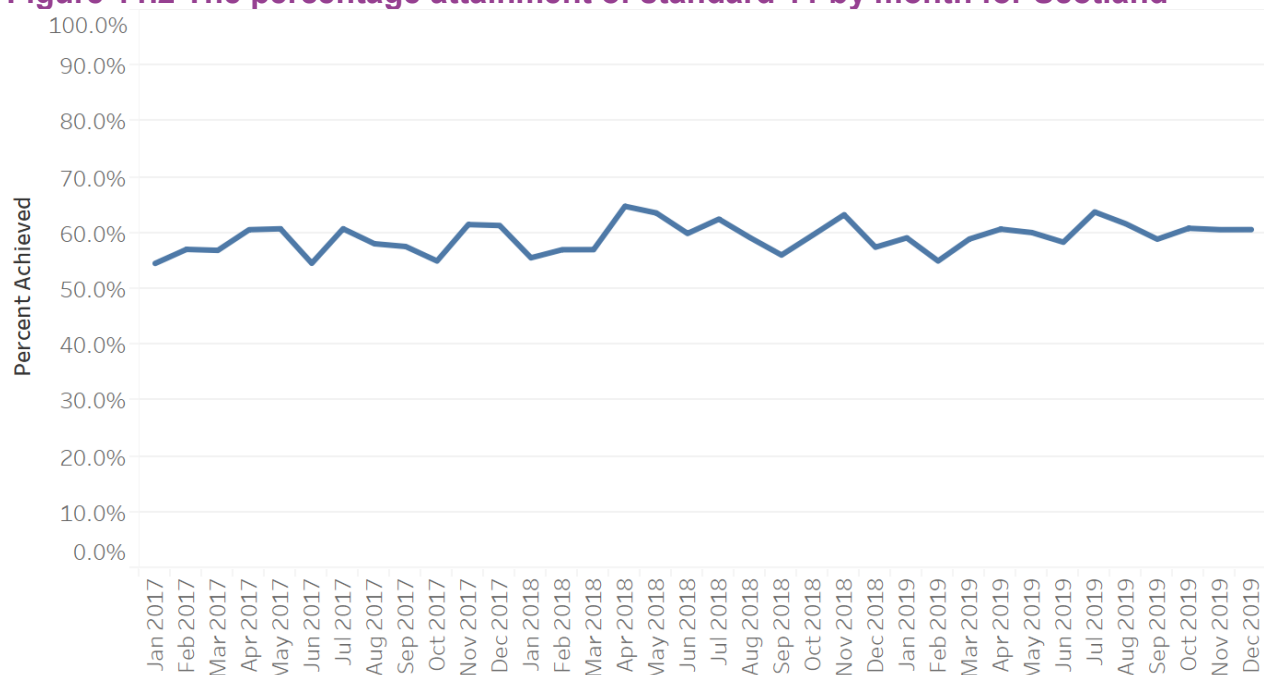


Figure 11.2 The percentage attainment of standard 11 by month for Scotland



Discharge destination and readmissions within 14 days of discharge

Figure 12.1 The percentage of patients by discharge destination and site for 2019

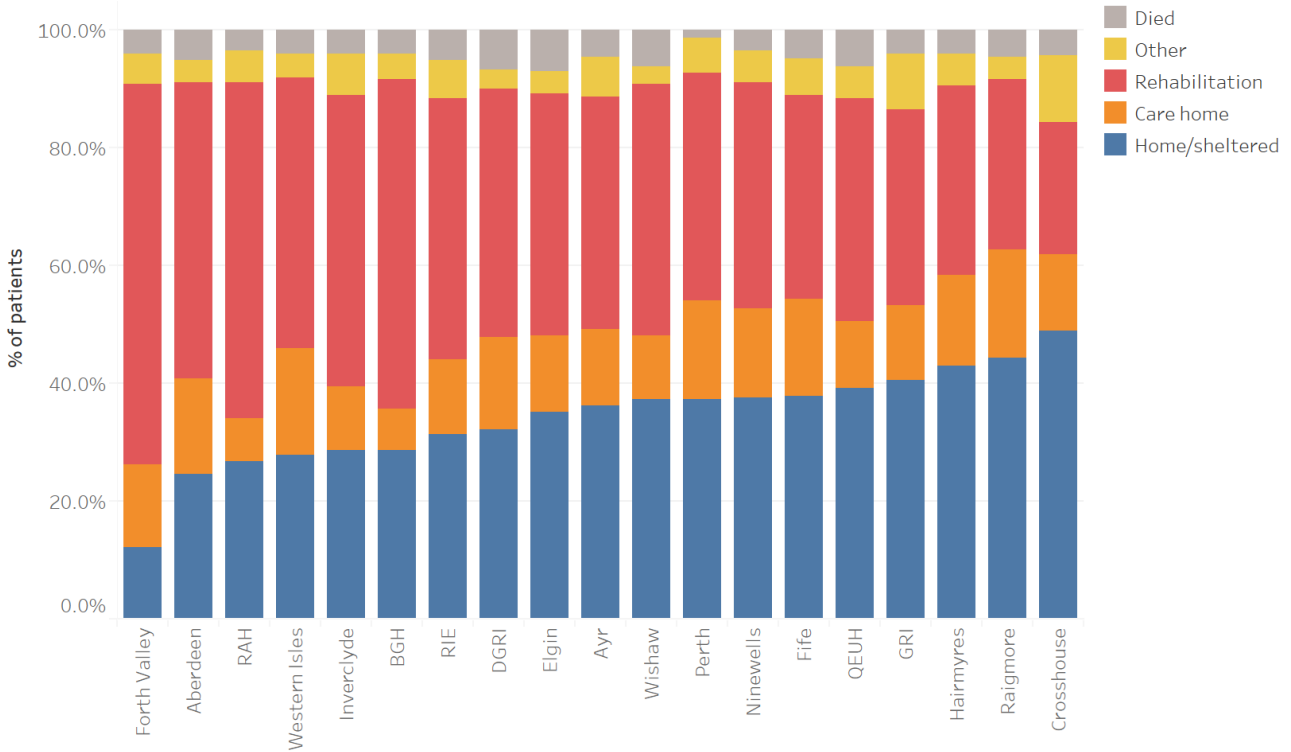
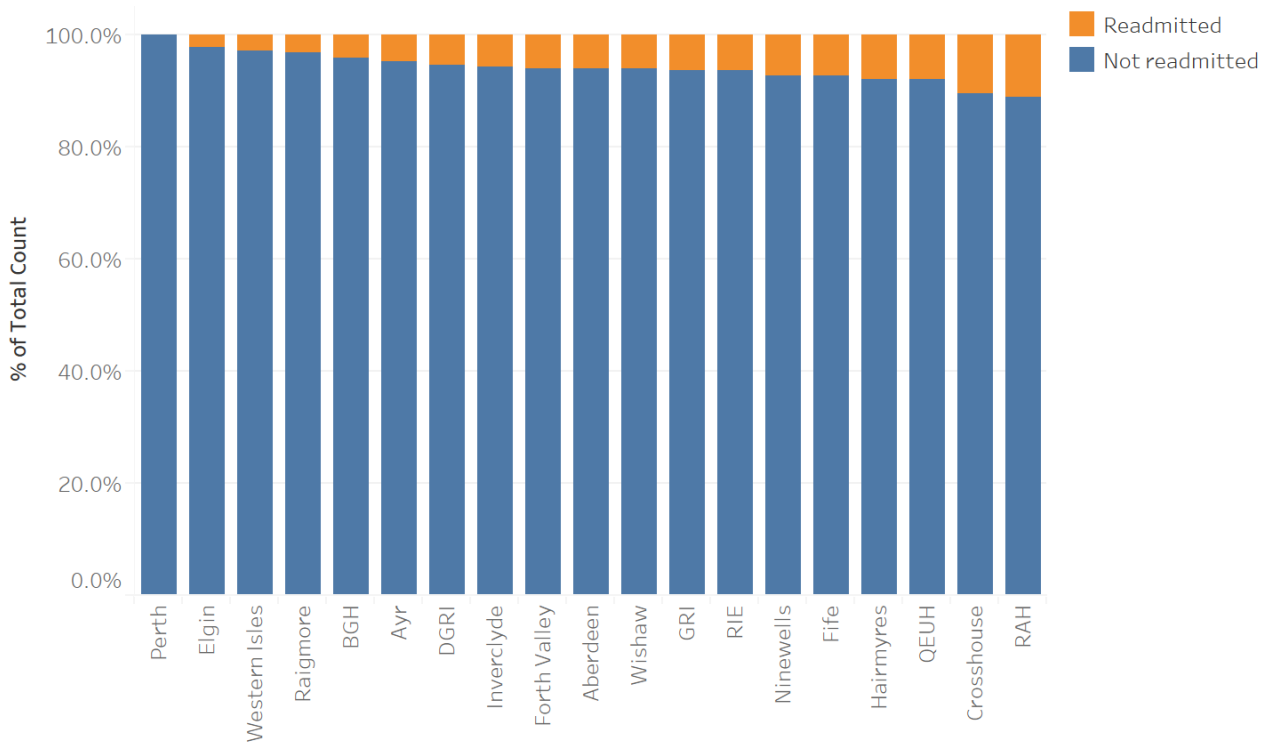


Figure 12.2 The percentage of patients readmitted within 14 days of discharge by site for 2019



Length of stay

Figure 13.1 The median length of acute inpatient stay in days by discharge destination and for 2019 and 2018

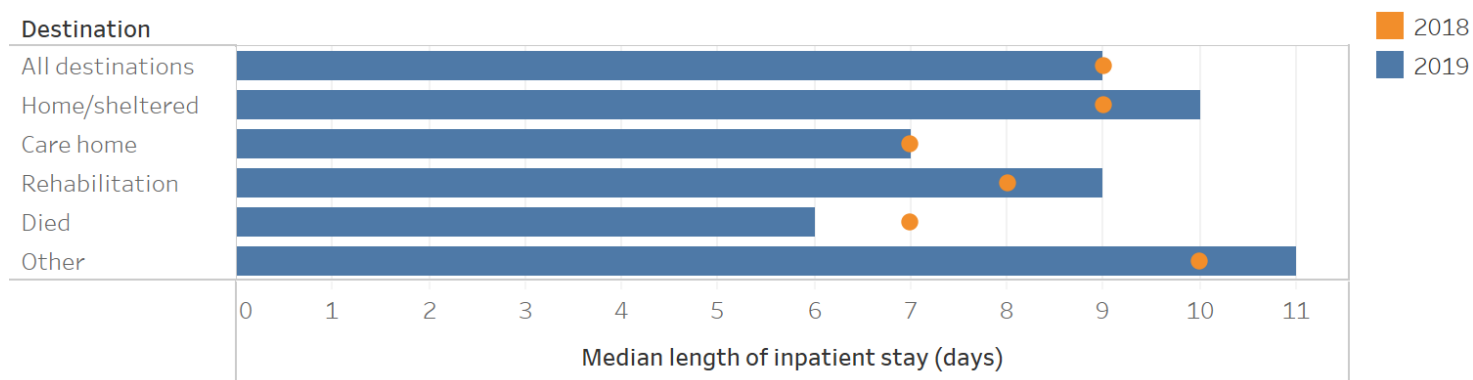
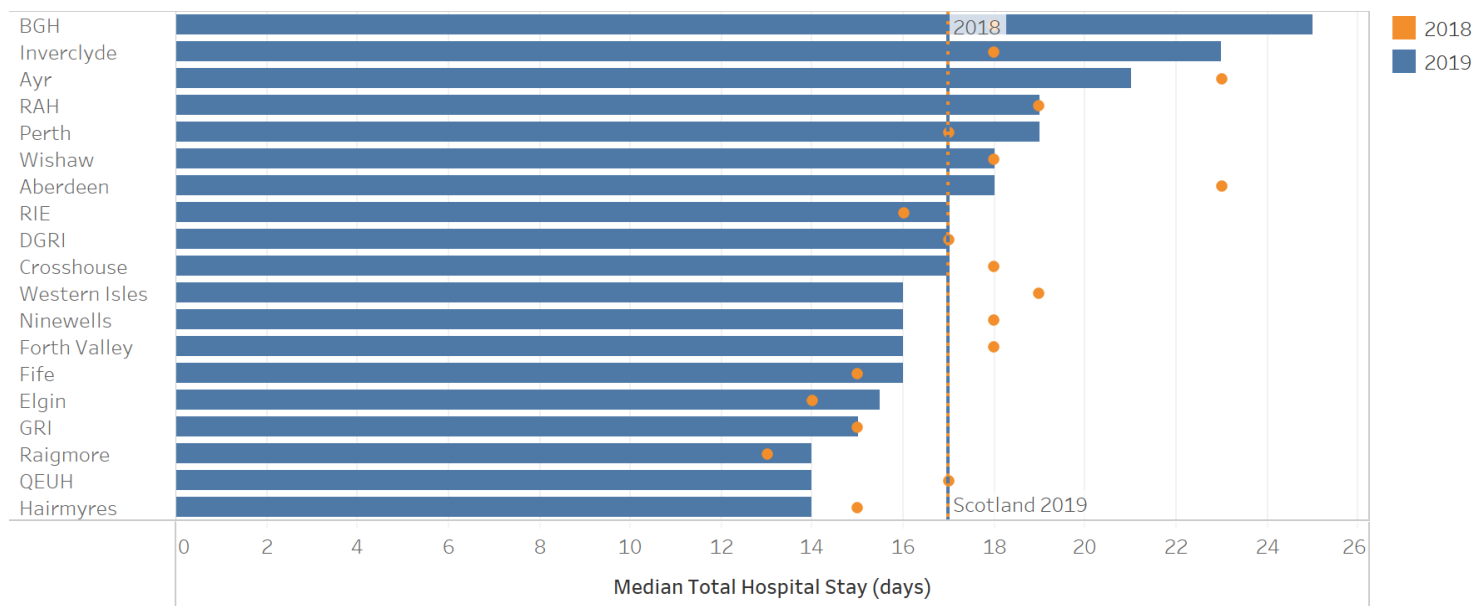


Figure 13.2 The median length of total hospital stay by site for 2019 and 2018



Governance

The Scottish National Audit Programme (SNAP) governance process provides a framework for identifying where patient outcomes may be significantly different in individual hospitals and mandates investigation to better understand why this may be the case. The Scottish Hip Fracture Audit (SHFA) Steering Group chose 6 key performance indicators (KPIs) to focus on in 2019.

- Time to theatre greater than 36 hours; the percentage of patients who **did not** have their hip fracture repaired within the 36-hour standard.
- Cemented Hemiarthroplasty; the percentage of patients who had a cemented hemiarthroplasty operation to repair the fracture.
- CGA within 3 days; the percentage of patients, over the age of 60, who **did not** have a comprehensive geriatric assessment (CGA) within the three-day standard.
- Returned home within 30 days; the percentage of patients who returned back to their original place of residence within 30 days of admission.
- Readmission after 14 days; the percentage of patients who were readmitted to hospital (for any reason) following discharge from hip fracture care.
- 30-day mortality; the percentage of patients who died within 30 days of admission.

The results which follow are presented in funnel plots, a method of determining where any hospitals results are significantly different to the national results. More information to explain this type of graph is available on the SHFA website [here](#).

The SNAP governance process requires that Health Boards provide a formal response to attainment of the SHFA standards of care as well as details of a full investigation where they are identified as an outlier in any of the KPIs. These responses would have normally been included in this publication, however, because of the extraordinary circumstances that the country has faced over the past few months, the usual timelines for these formal responses have been disrupted and are therefore not included in this report. In order to avoid further delay to the publication these will instead be available on the SHFA website by early November 2020.

For further information regarding the SNAP Governance process please email the SNAP mailbox - p hs.snap@nhs.net

Figure 14.1 Funnel plot of patients not going to surgery within 36 hours of admission

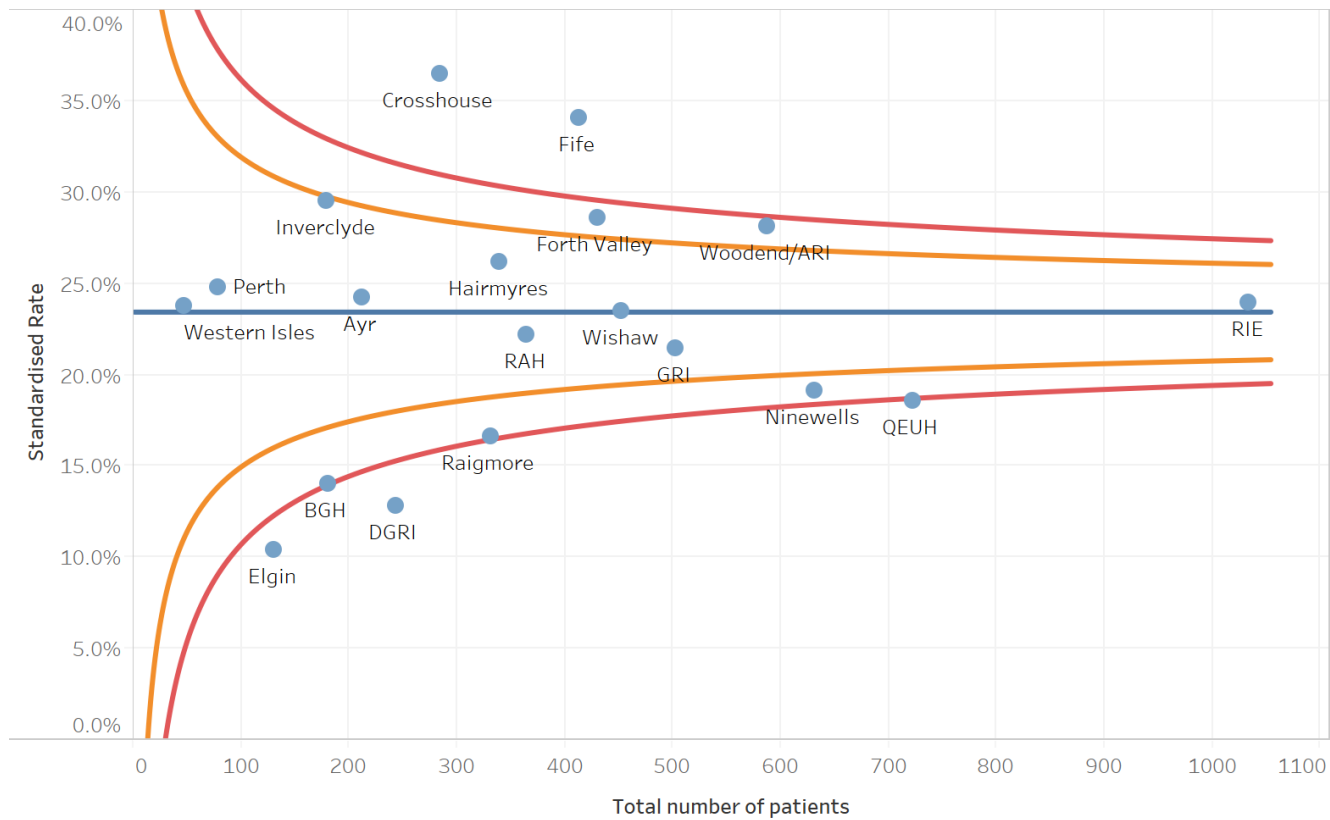


Figure 14.2 Funnel plot of the use of uncemented hemi-arthroplasty

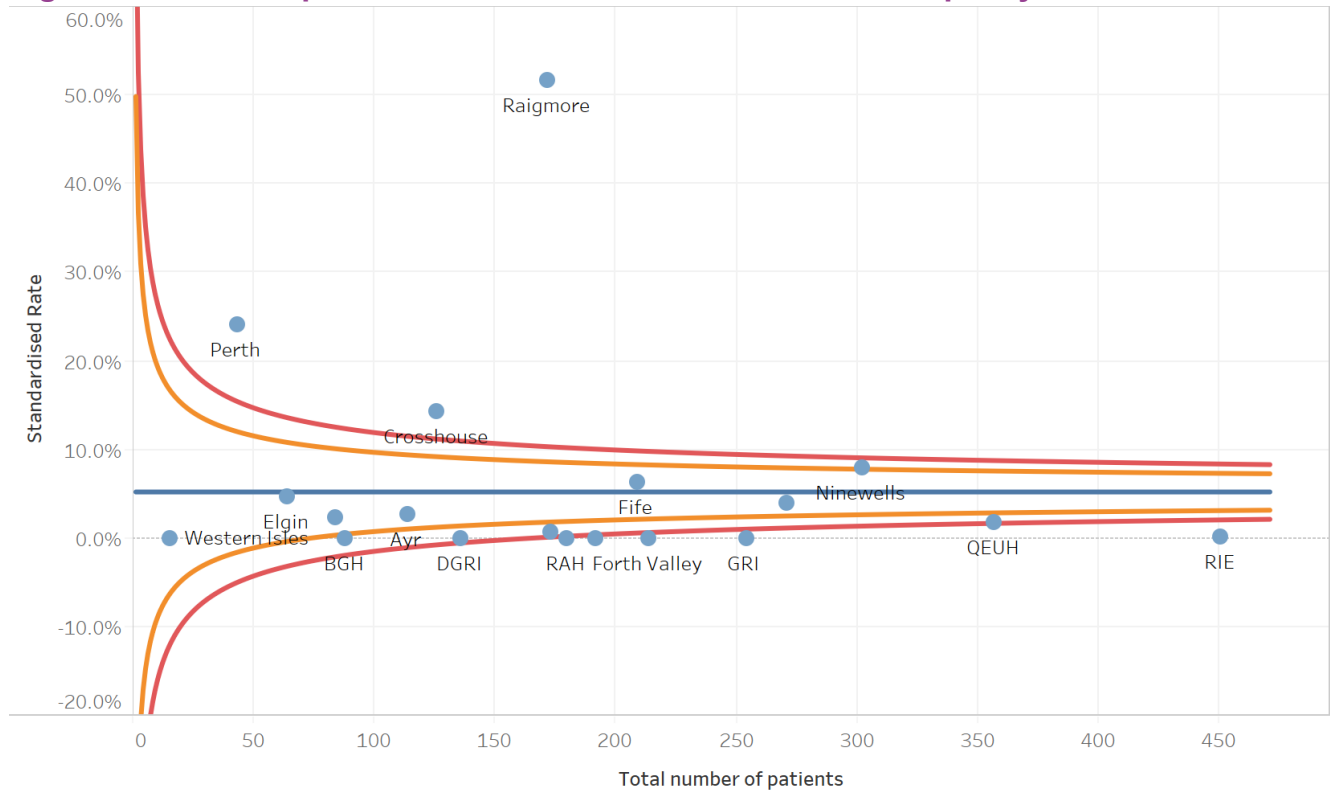


Figure 14.3 Funnel plot of eligible patients not receiving a CGA within three days of admission

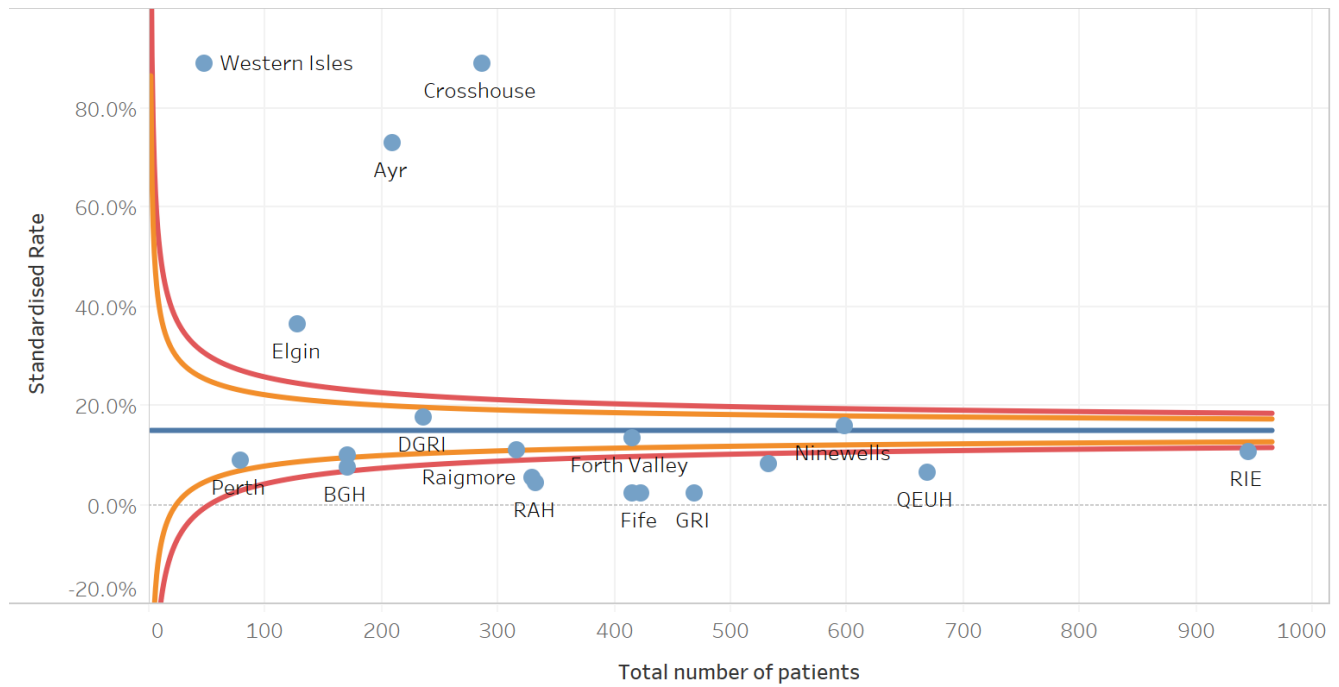


Figure 14.4 Funnel plot of patients not returned home/care home within 30 days of admission

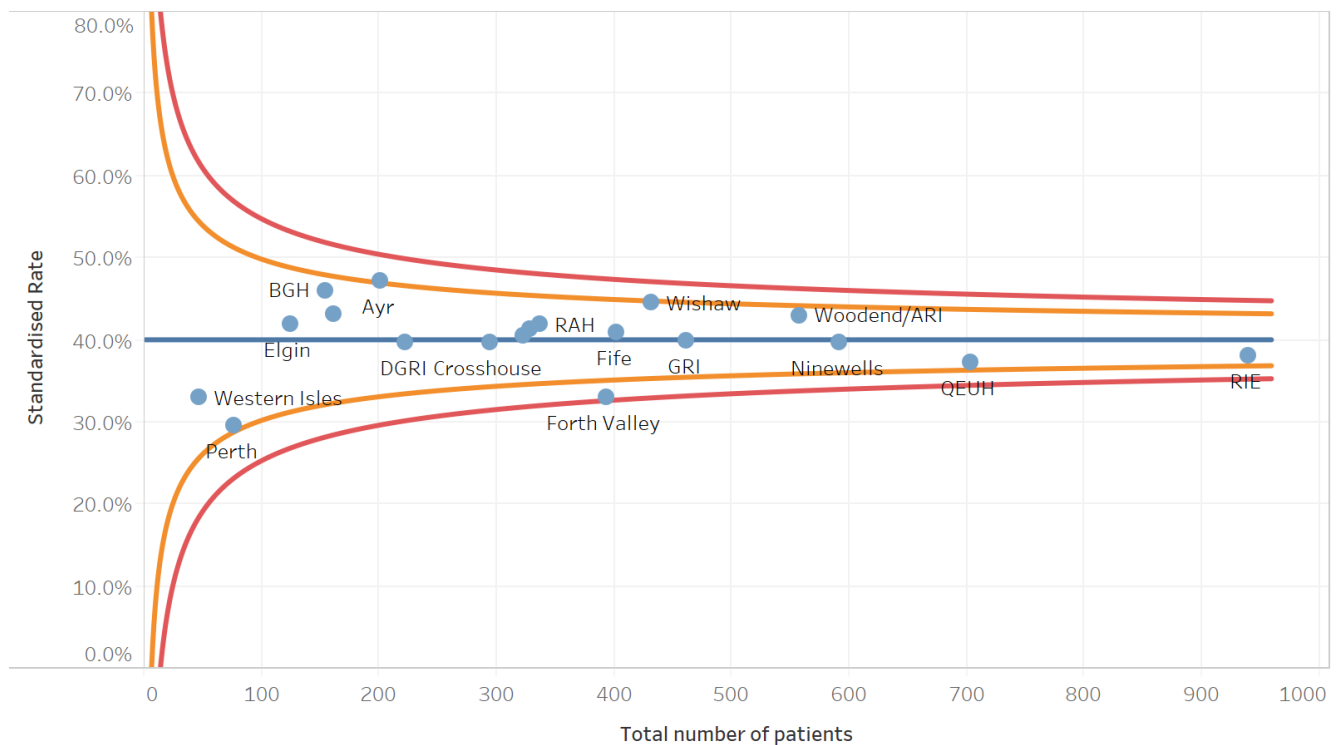


Figure 14.5 Funnel plot of patients readmitted to hospital within 14 days of discharge

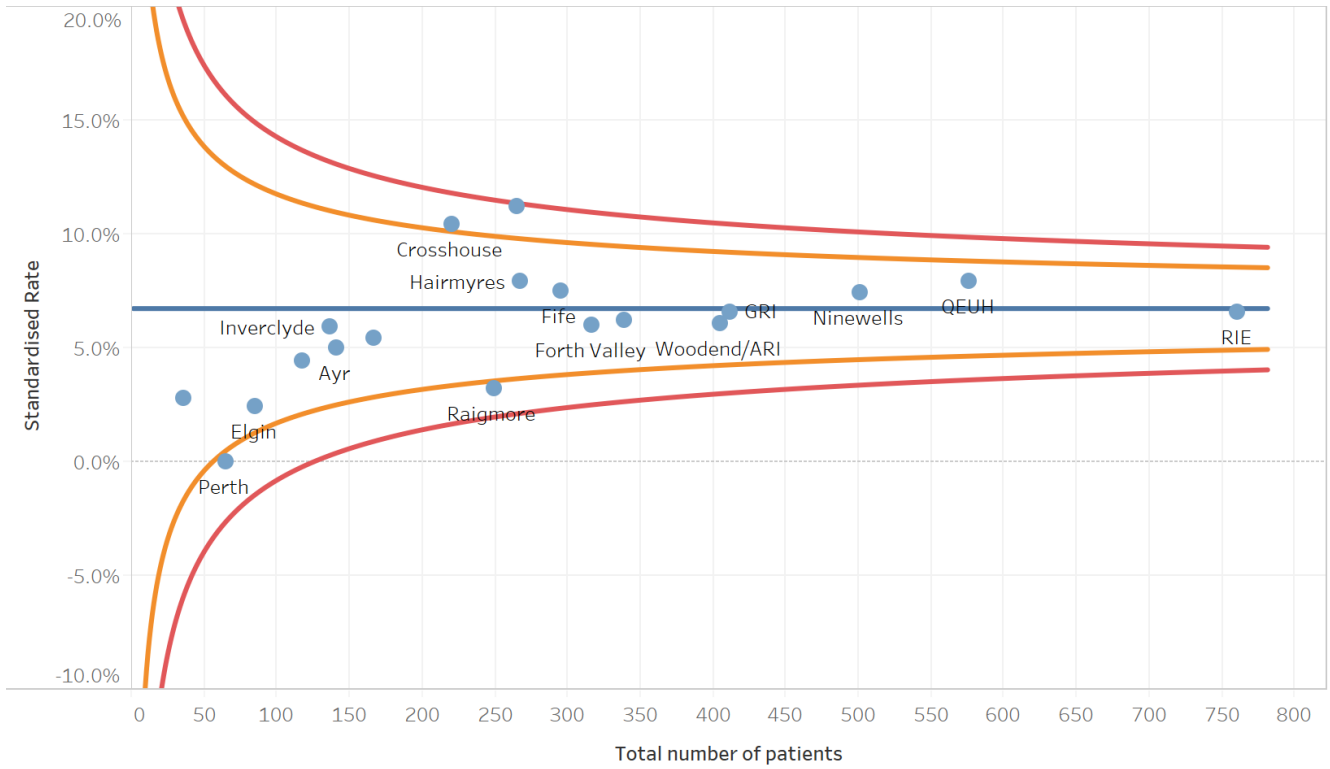
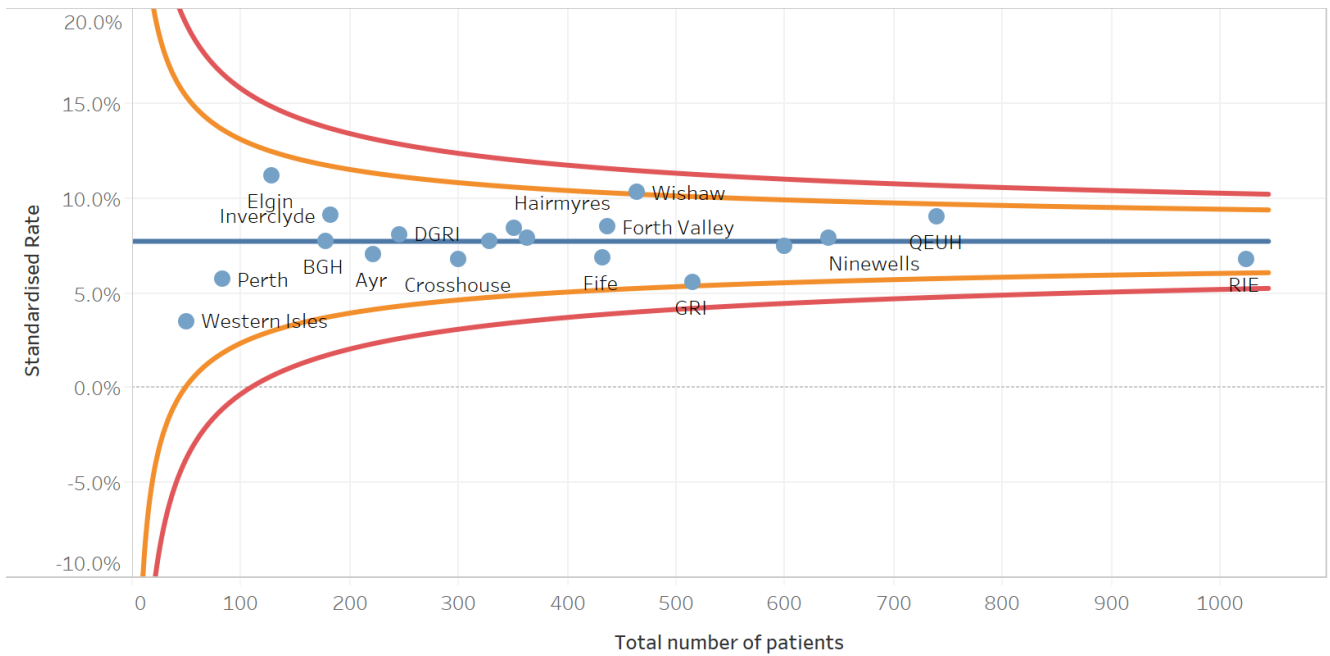


Figure 14.6 Funnel plot of 30 day post admission mortality for 2019



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Further Information

Further information and data for this publication are available from the publication page on our website.

The next release of this publication will be Autumn 2021.

Rate this publication

Let us know what you think about this publication via the link at the bottom of this [publication](#) page on the PHS website.

Appendices

Appendix 1 Background Information

All health boards (with the exception of NHS Orkney and NHS Shetland) in Scotland contribute to the Scottish Hip Fracture Audit and, where possible, data is collected for all eligible patients. To be included in the audit patients must have sustained a hip fracture and be 50 years or older at the time of fracture.

Data was collected by a locally employed 'Local Audit Coordinator' who is responsible for ensuring the accuracy and robustness of the data as well as raising awareness of results to support a continuous improvement process. Data in 2019 were 99.9% complete and full details per hospital can be viewed in the table in appendix 2

Further details on audit eligibility criteria, data collection methods and tools used as well as further audit definitions can be accessed on the SHFA website www.shfa.scot.nhs.uk/About/index.html.

Audit data is updated on a monthly basis, before or soon after the 15th of each month. Anyone who is employed by the NHS or Scottish Government, subject to local approval, can request access to the data which is held on the Trauma & Orthopaedic Portal, for further details please email the audit team psh.isdmskaudit@nhs.net.

In order to facilitate the monthly review of progress in achieving the national standards of care, hospitals are provided with an 'exceptions list' containing details of all patients who did not receive the particular standard of care specified. Where a small number of cases have not received the standard of care, this may require individual case review, however, where this applies to multiple patients usually indicates an issue with a process. Hospitals are expected to review this information on a regular basis to identify and agree actions and improvements with the local multidisciplinary team.

Appendix 2 Hospital Abbreviations and Data Completeness

The table below reports the number of patients audited from January to December 2019 and included in this report and the number of known hip fracture admissions not audited during the same period.

		Acute stay			60 day Follow up		
		Total known hip fractures as reported by LACs (n)	Hip fractures audited and submitted to ISD (n)	Percent audited (%)	Follow up Reviewed by LAC (n)	Of those reviewed - patients lost to follow up (n)	
Aberdeen	Aberdeen Royal Infirmary	608	608	100	608	8	
Ayr	University Hospital Ayr	221	221	100	221	0	
BGH	Borders General Hospital	182	182	100	182	5	
Crosshouse	University Hospital Crosshouse	303	300	99	300	0	
DGRI	Dumfries & Galloway Royal Infirmary	252	252	100	252	6	
Elgin	Dr Gray's Hospital	133	131	98	128	0	
Fife	Victoria Hospital, Kirkcaldy	434	433	100	433	1	
Forth Valley	Forth Valley Royal Hospital	439	439	100	439	2	
GRI	Glasgow Royal Infirmary	519	519	100	519	4	
Hairmyres	University Hospital Hairmyres	355	353	99	353	2	
Inverclyde	Inverclyde Royal Hospital	182	182	100	182	0	
Ninewells	Ninewells Hospital	646	644	100	644	4	
Perth	Perth Royal Infirmary	83	83	100	83	0	
QEUH	Queen Elizabeth University Hospital	746	743	100	743	3	
RAH	Royal Alexandra Hospital	371	371	100	371	8	
Raigmore	Raigmore Hospital	346	341	99	341	12	
RIE	Royal Infirmary of Edinburgh	1047	1047	100	1047	23	
Western Isles	Western Isles Hospital	50	50	100	50	0	
Wishaw	University Hospital Wishaw	465	465	100	464	0	
Total		7382	7364	100	7360	78	

Appendix 3 – Early access details

Pre-Release Access

Under terms of the "Pre-Release Access to Official Statistics (Scotland) Order 2008", PHS is obliged to publish information on those receiving Pre-Release Access ("Pre-Release Access" refers to statistics in their final form prior to publication). The standard maximum Pre-Release Access is five working days. Shown below are details of those receiving standard Pre-Release Access.

Standard Pre-Release Access:

Scottish Government Health Department

NHS Board Chief Executives

NHS Board Communication leads

Early Access for Management Information

These statistics will also have been made available to those who needed access to 'management information', i.e. as part of the delivery of health and care: authorised users of the Specialty Information Portal.

Early Access for Quality Assurance

These statistics will also have been made available to those who needed access to help quality assure the publication: Local Audit Coordinators and Hip Fracture/Trauma Leads in each contributing hospital.

Appendix 4 – PHS and Official Statistics

About Public Health Scotland (PHS)

PHS is a knowledge-based and intelligence driven organisation with a critical reliance on data and information to enable it to be an independent voice for the public's health, leading collaboratively and effectively across the Scottish public health system, accountable at local and national levels, and providing leadership and focus for achieving better health and wellbeing outcomes for the population. Our statistics comply with the [Code of Practice for Statistics](#) in terms of trustworthiness, high quality and public value. This also means that we keep data secure at all stages, through collection, processing, analysis and output production, and adhere to the ['five safes'](#).