



# National Hip Fracture Database (NHFD) annual report 2015



In association with:

Commissioned by:





Royal College  
of Physicians

FFFAP

# Falls and Fragility Fracture Audit Programme (FFFAP)

National Hip Fracture Database  
(NHFD) annual report 2015

In association with:



British  
Orthopaedic  
Association



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Healthcare Quality  
Improvement Partnership

Commissioned by:

## National Hip Fracture Database annual report 2015

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### Falls and Fragility Fracture Audit Programme

The NHFD is commissioned by the Healthcare Quality Improvement Partnership (HQIP) and managed by the Clinical Effectiveness and Evaluation Unit (CEEU) of the Royal College of Physicians (RCP) as part of the Falls and Fragility Fracture Audit Programme (FFFAP) alongside the Fracture Liaison Service Database (FLS-DB) and Falls Pathway workstream. FFFAP aims to improve the delivery of care for patients having falls or sustaining fractures through effective measurement against standards and feedback to providers.

### Healthcare Quality Improvement Partnership

The Healthcare Quality Improvement Partnership is led by a consortium of the Academy of Medical Royal Colleges, the Royal College of Nursing and National Voices. Its aim is to promote quality improvement, and in particular to increase the impact that clinical audit has on healthcare quality in England and Wales. HQIP hosts the contract to manage and develop the National Clinical Audit and Patient Outcomes Programme (NCAPOP). Its purpose is to engage clinicians across England and Wales in systematic evaluation of their clinical practice against standards and to support and encourage improvement in the quality of treatment and care. The programme comprises more than 30 clinical audits that cover care provided to people with a wide range of medical, surgical and mental health conditions.

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The Royal College of Physicians (RCP) is a registered charity that aims to ensure high-quality care for patients by promoting the highest standards of medical practice. It provides and sets standards in clinical practice, education and training, conducts assessments and examinations, quality assures external audit programmes, supports doctors in their practice of medicine, and advises the government, the public and the profession on healthcare issues.

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# Introduction

This report considers the care of patients with hip fracture, but it also has much wider implications. Hip fracture is an ideal marker condition with which to examine and challenge the quality and outcome of the care offered to frail and older patients by the modern NHS.

- Hip fracture is a clearly defined diagnosis, generally made very soon after a patient presents to accident and emergency (A&E) or the hospital trauma team. This makes it suitable for direct comparisons between hospitals that provide care.
- Hip fracture is common, with 65,000 such injuries each year leading to the occupation of over 4,000 inpatient beds at any one time across England, Wales and Northern Ireland.
- Hip fracture management takes a frail patient through a complex clinical pathway involving a wide range of specialists, clinical teams, departments and agencies.
- Hip fracture patients face a significant risk of dying or of losing their independence, and prognosis is dependent on how well hospital and community services work together.

The National Hip Fracture Database (NHFD) is managed by the Clinical Effectiveness and Evaluation Unit (CEEU) of the Royal College of Physicians (RCP) and grew out of the 2007 collaboration between the British Orthopaedic Association and the British Geriatrics Society. Its development has been described in annual reports which, with additional reports on anaesthetic care, casemix-adjusted outcome and length of hospital stay, can be found on the NHFD website: [www.nhfd.co.uk](http://www.nhfd.co.uk).

In these reports the NHFD has described and challenged variation in practice around the country, supporting the development of a consensus about the best way to care for the frail older people who typically suffer this injury. Every hospital in England, Wales and Northern Ireland that provides care for patients following a hip fracture is invited to participate in this audit, and during 2014 they all submitted data.

This sixth national report is more focused on supporting the needs of clinical teams, and is designed to work alongside the interactive graphs on the NHFD website, providing a wealth of tabulated data to support clinical governance meetings in individual hospitals.

## Key findings

The NHFD is a clinically led, web-based audit of hip fracture care and secondary prevention (treating patients after their first fragility fracture to prevent them having another). All 180 eligible hospitals in England, Wales and Northern Ireland are now regularly uploading data. This report describes the process and outcome of care provided to 64,102 people who presented with a hip fracture in 2014: nearly 95% of all cases in England, Wales and Northern Ireland.

## Audit cycles

Individual patients' care is audited against standards defined in the National Institute for Health and Care Excellence (NICE) quality standard 16.

The national picture is one of improvement for every standard where it has been possible to directly compare this year's results with those from 2013. However, a number of concerns remain.

- More patients (72.1%) now receive surgery on their first or second day in hospital but there remains unacceptable variation: different units report figures ranging from 14.7% to 95.3%.
- More patients are now offered total hip replacement (THR), but this was still only performed in 26.1% of the 11,722 patients who met the clinical criteria for this procedure.
- Three-quarters (73.3%) of patients were mobilised from bed on the day after surgery, but 21 hospitals (11.7%) achieved this in fewer than half of cases.
- More patients (85.3%) received orthogeriatric assessment in the perioperative period, but seven units (4%) reported that they still had no orthogeriatric service.
- Hip fracture teams may lack influence over post-acute rehabilitation, and only six (3%) hospitals reported that their local community rehabilitation team was represented at their monthly hip fracture programme clinical governance meetings.

## Local performance

The NHFD's most exciting development has been the establishment of online graphs that now provide individual hospital teams with live data on performance, time to theatre, mortality, length of stay (LOS), best practice and patient safety. Such charts are key to monthly clinical governance for hip fracture programmes. It is surprising that 16% of units are not holding such meetings on a regular basis, and that some units with particularly poor performance have yet to engage with the data that they are providing to us.

Our comprehensive summary tables provide detailed hospital-level data on a number of measures of performance and safety. Key findings include the following.

- In total, 93.3% of patients received care on a trauma or orthogeriatric ward, but slightly fewer were admitted there within 4 hours of presentation (46.1% in 2014, *cf* 47.4% in 2013).
- More people admitted from their own home were successfully returned there within 30 days (53.7% in 2014, *cf* 52.9% in 2013).
- Some units are still reporting no pressure ulcers (4 hospitals: 2%), or no reoperations (47 hospitals: 26%), suggesting a failure to monitor these patient safety concerns.
- In total, 4.3% of all hip fractures occurred in hospital, a figure that represents 1,859 inpatient hip fractures: five such events each day across England, Wales, and Northern Ireland.

## **National performance**

This year we have placed a particular focus on ‘super-spell’ – the overall length of NHS care following hip fracture – since this is the main determinant of the overall cost of this injury. We initially compared NHFD data with independent hospital administrative data for 2013, and showed close agreement between these sources of data. This serves to validate more recent LOS data presented in our online charts. These ‘live’ charts are particularly useful because hospital episode statistics are not yet available for 2014 and 2015.

Between 2013 and 2014 our data showed hospital LOS to have been reduced by half a day in all three countries: to 19.3 days in England, 35.2 days in Wales and 22.4 days in Northern Ireland. However, we have shown that hospital episode statistics are providing a very incomplete picture of care in intermediate care beds: in community hospitals and NHS-funded care home beds.

The economic modelling underpinning NICE’s guideline CG124 cautioned against the development of intermediate care services that were separate from local hip fracture programmes. Such beds are increasingly being used for rehabilitation as an alternative to more acute hospital beds. It is a concern that there is currently no reliable way for individual trauma units, hip fracture programme staff, clinical commissioning groups (CCGs) or NHS England to profile the impact of such beds on success in returning people home after hip fracture, on the overall LOS and on the overall cost of hip fracture. This finding has implications for the development of services for frail and older patients across the NHS and is an issue that the NHFD will explore with prospective data collection next year.

## Key recommendations

Patients, their families and their carers should welcome this picture of progressive improvement in the quality and outcome of multidisciplinary hip fracture care.

- *They should also look to our annual patient-focused report My hip fracture care ([www.nhfd.co.uk](http://www.nhfd.co.uk)), which is designed to help them understand the care they might expect to receive.*

Staff in hip fracture programmes should use the findings of this report alongside our 'live' online charts of performance and outcome as a basis for the monthly clinical governance meetings that are central to improving care in individual units.

- *Why are 16% of units still not having regular meetings to look at these sources of information about the services they provide?*
- *Why are community rehabilitation services represented at clinical governance meetings for only 3% of hospitals?*

Hospital managers should challenge areas of poor performance identified in this report's regional tables, and in the accompanying 'dash-board' summary designed for chief executives.

- *Why does success in providing prompt surgery vary between 14.7% and 95.3% around the country?*
- *Why are only 26.1% of patients meeting the clinical eligibility criteria for a THR having this operation?*

Commissioners should use this report alongside the annual *NHFD commissioners' report* that will be released later in the year, to understand areas of weakness in provider hospitals.

- *How well integrated can hospital and community health services be if hip fracture programme staff have no understanding of what happens to patients after they leave the acute hospital?*

NHS management should consider the weaknesses we have identified in our understanding of the care provided to frail and older people following their initial hospital care.

- *How confident can we be that care provided in community hospital beds and NHS-funded care homes is both effective and cost-effective?*

The NHFD should further develop its profiling of 'super-spell' and the care provided in intermediate care settings.

- *How will our improved follow-up from 2016 succeed in describing units' success and efficiency in getting people back to their usual mobility, independence and homes?*



## Participating hospitals

Hospital	Code	Region
Addenbrooke's Hospital, Cambridge	ADD	East of England
Airedale General Hospital	AIR	Yorks & the Humber
Alexandra Hospital, Redditch	RED	West Midlands
Altnagelvin Area Hospital	ALT	Northern Ireland
Arrowe Park Hospital, Wirral	WIR	North West
Barnet Hospital	BNT	London
Barnsley Hospital	BAR	Yorks & the Humber
Basildon and Thurrock University Hospital	BAS	East of England
Basingstoke and North Hampshire Hospital	NHH	South Central
Bassetlaw Hospital	BSL	Yorks & the Humber
Bedford Hospital	BED	East of England
Birmingham Heartlands Hospital	EBH	West Midlands
Bradford Royal Infirmary	BRD	Yorks & the Humber
Bristol Royal Infirmary	BRI	South West
Bronglais Hospital, Aberystwyth	BRG	Wales
Broomfield Hospital, Chelmsford	BFH	East of England
Chelsea and Westminster Hospital	WES	London
Cheltenham General Hospital	CHG	South West
Chesterfield Royal Hospital	CHE	East Midlands
Colchester General Hospital	COL	East of England
Conquest Hospital, Hastings	CGH	South East
Countess of Chester Hospital	COC	North West
County Hospital, Hereford	HCH	West Midlands
County Hospital, Stafford	SDG	West Midlands
Craigavon Hospital, Portadown	CRG	Northern Ireland
Croydon University Hospital	MAY	London
Cumberland Infirmary, Carlisle	CMI	North West
Darent Valley Hospital, Dartford	DVH	South East
Darlington Memorial Hospital	DAR	North East
Derbyshire Royal Infirmary, Derby	DER	East Midlands
Derriford Hospital, Plymouth	PLY	South West
Diana Princess of Wales Hospital, Grimsby	GGH	Yorks & the Humber
Doncaster Royal Infirmary	DID	Yorks & the Humber
Dorset County Hospital, Dorchester	WDH	South West
Ealing Hospital	EAL	London
East and North Herts Hospital	ENH	East of England
East Surrey Hospital, Redhill	ESU	South East
Eastbourne Hospital	DGE	South East
Frimley Park Hospital, Camberley	FRM	South East
Furness General Hospital, Barrow-in-Furness	FGH	North West
George Eliot Hospital, Nuneaton	NUN	West Midlands
Glan Clwyd Hospital, Rhyl	CLW	Wales
Gloucestershire Royal Hospital, Gloucester	GLO	South West
Good Hope Hospital, Birmingham	GHS	West Midlands
Grantham and District Hospital	GRA	East Midlands
Gwynedd Ysbyty, Bangor	GWY	Wales

Hospital	Code	Region
Harrogate District Hospital	HAR	Yorks & the Humber
Hillingdon Hospital	HIL	London
Hinchingbrooke Hospital	HIN	East of England
Homerton Hospital, London	HOM	London
Horton Hospital, Banbury	HOR	South Central
Huddersfield Royal Infirmary	HUD	Yorks & the Humber
Hull Royal Infirmary	HRI	Yorks & the Humber
Ipswich Hospital	IPS	East of England
James Cook University Hospital, Middlesbrough	SCM	North East
James Paget University Hospital, Great Yarmouth	JPH	East of England
John Radcliffe Hospital, Oxford	RAD	South Central
Kettering General Hospital	KGH	East Midlands
King's College Hospital, London	KCH	London
King's Mill Hospital, Sutton in Ashfield	KMH	East Midlands
Kingston Hospital	KTH	London
Leeds General Infirmary	LGI	Yorks & the Humber
Leicester Royal Infirmary	LER	East Midlands
Leighton Hospital, Crewe	LGH	North West
Lincoln County Hospital	LIN	East Midlands
Luton and Dunstable Hospital	LDH	East of England
Macclesfield General Hospital	MAC	North West
Maidstone and Tunbridge Wells Hospital	TUN	South East
Manchester Royal Infirmary	MRI	North West
Manor Hospital, Walsall	WMH	West Midlands
Medway Maritime Hospital	MDW	South East
Milton Keynes General Hospital	MKH	South Central
Morrison Hospital, Swansea	MOR	Wales
Musgrove Park Hospital, Taunton	MPH	South West
Nevill Hall Hospital, Abergavenny	NEV	Wales
New Cross Hospital, Wolverhampton	NCR	West Midlands
Newham General Hospital, London	NWG	London
Noble's Hospital, Isle of Man	NOB	North West
Norfolk and Norwich University Hospital	NOR	East of England
North Devon District Hospital, Barnstaple	NDD	South West
North Manchester General Hospital	NMG	North West
North Middlesex University Hospital	NMH	London
North Tyneside General Hospital, North Shields	NTY	North East
Northampton General Hospital	NTH	East Midlands
Northern General Hospital, Sheffield	NGS	Yorks & the Humber
Northwick Park Hospital, London	NPH	London
Peterborough City Hospital	PET	East of England
Pilgrim Hospital, Boston	PIL	East Midlands
Pinderfields General Hospital, Wakefield	PIN	Yorks & the Humber
Poole General Hospital	PGH	South West
Prince Charles Hospital, Merthyr Tydfil	PCH	Wales
Princess of Wales Hospital, Bridgend	POW	Wales

Hospital	Code	Region
Princess Royal Hospital, Telford	TLF	West Midlands
Princess Royal University Hospital, Bromley	BRO	London
Queen Alexandra Hospital, Portsmouth	QAP	South Central
Queen Elizabeth Hospital, Edgbaston	QEB	West Midlands
Queen Elizabeth Hospital, Gateshead	QEG	North East
Queen Elizabeth Hospital, King's Lynn	QKL	East of England
Queen Elizabeth Hospital, Woolwich	GWH	London
Queen Elizabeth the Queen Mother Hospital, Margate	QEQ	South East
Queen's Hospital, Burton upon Trent	BRT	West Midlands
Queen's Hospital, Romford	OLD	London
Rotherham District General Hospital	ROT	Yorks & the Humber
Royal Albert Edward Infirmary, Wigan	AEI	North West
Royal Berkshire Hospital, Reading	RBE	South Central
Royal Blackburn Hospital	BLA	North West
Royal Bolton Hospital	BOL	North West
Royal Devon & Exeter Hospital, Exeter	RDE	South West
Royal Free Hospital, London	RFH	London
Royal Glamorgan Hospital, Llantrisant	RGH	Wales
Royal Gwent Hospital, Newport	GWE	Wales
Royal Hampshire County Hospital, Winchester	RHC	South Central
Royal Lancaster Infirmary	RLI	North West
Royal Liverpool University Hospital	RLU	North West
Royal Oldham Hospital	OHM	North West
Royal Preston Hospital	RPH	North West
Royal Shrewsbury Hospital	RSS	West Midlands
Royal Stoke University Hospital	STO	West Midlands
Royal Surrey County Hospital, Guildford	RSU	South East
Royal Sussex County Hospital, Brighton	RSC	South East
Royal United Hospital, Bath	BAT	South West
Royal Victoria Hospital, Belfast	RVB	Northern Ireland
Royal Victoria Hospital, Newcastle	RVN	North East
Russells Hall Hospital, Dudley	RUS	West Midlands
Salford Royal Hospital	SLF	North West
Salisbury District Hospital	SAL	South West
Sandwell General Hospital	SAN	West Midlands
Scarborough General Hospital	SCA	Yorks & the Humber
Scunthorpe General Hospital	SCU	Yorks & the Humber
South Tyneside District Hospital, South Shields	STD	North East
Southampton General Hospital	SGH	South Central
Southend University Hospital	SEH	East of England
Southmead Hospital, Bristol	FRY	South West
Southport District General Hospital	SOU	North West
St George's Hospital, London	GEO	London
St Helier Hospital, Carshalton	SHC	London

Hospital	Code	Region
St Mary's Hospital, Isle of Wight	IOW	South Central
St Mary's Hospital, Paddington	STM	London
St Peter's Hospital, Chertsey	SPH	South East
St Richard's Hospital, Chichester	STR	South
St Thomas' Hospital, London	STH	London
Stepping Hill Hospital, Stockport	SHH	North West
Stoke Mandeville Hospital, Aylesbury	SMV	South Central
Sunderland Royal Hospital	SUN	North East
Tameside General Hospital, Manchester	TGA	North West
The Great Western Hospital, Swindon	PMS	South West
The Princess Alexandra Hospital, Harlow	PAH	East of England
The Royal Cornwall Hospital, Trillick	RCH	South West
The Royal London Hospital	LON	London
Torbay District General Hospital	TOR	South West
Ulster Hospital, Belfast	NUH	Northern Ireland
University College Hospital London	UCL	London
University Hospital Aintree	FAZ	North West
University Hospital Coventry	UHC	West Midlands
University Hospital Nottingham	UHN	East Midlands
University Hospital Of North Durham, Darlington	DRY	North East
University Hospital of North Tees, Stockton on Tees	NTG	North East
University Hospital of Wales, Cardiff	UHW	Wales
University Hospital, Lewisham	LEW	London
Victoria Hospital, Blackpool	VIC	North West
Wansbeck Hospital	ASH	North East
Warrington Hospital	WDG	North West
Warwick Hospital	WAR	West Midlands
Watford General Hospital	WAT	East of England
West Middlesex University Hospital, Isleworth	WMU	London
West Suffolk Hospital, Bury St Edmunds	WSH	East of England
West Wales General Hospital, Carmarthen	WWG	Wales
Weston General Hospital, Weston-super-Mare	WGH	South West
Wexham Park Hospital, Slough	WEX	South Central
Whipps Cross University Hospital	WHC	London
Whiston Hospital, Prescot	WHI	North West
Whittington Hospital, London	WHT	London
William Harvey Hospital, Ashford	WHH	South East
Withybush Hospital, Haverfordwest	WYB	Wales
Worcestershire Royal Hospital, Worcester	WRC	West Midlands
Worthing and Southlands Hospital	WRG	South East
Wrexham Maelor Hospital	WRX	Wales
Wythenshawe Hospital, Manchester	WYT	North West
Yeovil District Hospital	YEO	South West
York Hospital	YDH	Yorks & the Humber

## The national perspective

# 1 Improving our performance

### a Annual audit cycles

NICE published its clinical guideline *The management of hip fracture in adults* (CG124)<sup>1</sup> in 2011, and released 12 quality standards (QS16)<sup>2</sup> in 2012. The NHFD bases its audit of patient care quality on the QS16 standards. Annual cycles of audit provide a useful summary of how the quality has changed across England, Wales and Northern Ireland.

#### NICE quality standards for hip fracture (QS16)

*1 People with hip fracture are offered a formal hip fracture programme (HFP) from admission*

Many units might claim to have an HFP, but it is important to seek objective evidence that patients actually receive the elements that make up this model of care. The NHFD has developed a composite measure of best clinical practice as an outcome indicator for the NHS Outcomes Framework: this is central to the annual report for commissioners that we publish each autumn.

*2 The hip fracture programme team retains a comprehensive and continuing clinical and service governance lead for all stages of the pathway of care, including the policies and criteria for both intermediate care and early supported discharge*

In this year's NHFD facilities survey, only six (3%) hospitals reported that their local community rehabilitation team was represented at their monthly hip fracture clinical governance meetings. A further two mentioned a social worker attending.

*3 People with hip fracture have their cognitive status assessed, measured and recorded from admission*

The proportion of patients whose care met this standard improved markedly when it became a requirement for best practice tariff (BPT) in 2012. The mean figure of 93% in 2013 has improved further this year, to a figure of 94.5%.

*4 People with hip fracture receive prompt and effective pain management, in a manner that takes into account the hierarchy of pain management drugs, throughout their hospital stay*

This year's facilities survey indicated that over half of hospitals (55%) offered nerve blocks as part of pain management. These were usually administered by A&E staff or anaesthetists but we do not know how many patients received a nerve block as pain relief while waiting for their operation. Over one-third (37%) of hospitals enrolled patients in an enhanced recovery programme, which included pain management. Three-quarters of hospitals (76%) routinely used a pain score tool as part of postoperative pain management.

*5 People with hip fracture have surgery on the day of, or the day after, admission*

The proportion of patients whose care meets this standard has improved progressively over the years since the first NHFD annual report. This year's mean figure of 72.1% shows further improvement from 71.7% in 2013. However, there remains unacceptable variation in performance around the country, with different units reporting figures that range from 14.7% to 95.3%. Eight centres reported operating on fewer than half of cases on the day of, or the day following, admission.

*6 People with hip fracture have their surgery scheduled on a planned trauma list, with consultant or senior staff supervision*

Out-of-hours operating is now rare, and in 2014 we found that 97.1% of patients undergo surgery between 8am and 8pm. Our 2014 Anaesthetic Sprint Audit of Practice (ASAP) reported that a consultant or senior surgeon and anaesthetist were present in theatre in 91.7% of reported cases. From 2016 we will be prospectively collecting data on theatre staff seniority for all patients.

*7 People with displaced intracapsular fracture receive cemented arthroplasty, with the offer of total hip replacement (THR) if clinically eligible*

Cementing of arthroplasties has increased in line with this NICE recommendation, up from 80.2% in 2013 to 82.3% in 2014. Nationally, 11,722 patients (18.2% of all cases) met the clinical criteria to be offered a THR, but only 26.1% of these people had this procedure. This is a further improvement on the baseline figure of 14.9% when NICE CG124 first recommended this procedure in 2011. Later in 2015 we will be launching an online run chart that will allow units to monitor this aspect of their practice on a month-by-month basis.

*8 People with trochanteric fractures above and including the lesser trochanter receive extramedullary implants such as a sliding hip screw (SHS) in preference to an intramedullary (IM) nail*

This annual report includes a new table of surgical performance (see pages 42–51). On average 81.7% of patients with an intertrochanteric fracture receive an SHS, but there is startling variation in this, with some units reporting just 20.1% and others 100%. These data should encourage all units to examine their practice and/or the quality of their coding. Detailed audit of this practice would depend on correct X-ray interpretation, and we plan to launch a downloadable local audit tool to facilitate local clinical governance work. From 2016 we will be collecting more detailed data classifying trochanteric fractures so that we can better assess adherence to QS16.

*9 People with hip fracture are offered a physiotherapist assessment the day after surgery and mobilisation at least once a day unless contraindicated*

The dataset introduced in April 2014 includes a new field recording whether patients were mobilised out of bed on the day after surgery. This prompt mobilisation was achieved for 73.3% of patients. In 93.8% of cases they were recorded as being mobilised with a physiotherapist. We need to question why prompt mobilisation was not possible in the remaining quarter of patients, and in particular to challenge the 21 units where fewer than half of patients were mobilised. This performance measure reflects a number of factors, including approaches to postoperative analgesia, fluid resuscitation and transfusion. In 2016 we plan to widen our dataset to specifically define the provision of early postoperative physiotherapy assessment.

*10 People with hip fracture are offered early supported discharge (if they are eligible), led by the hip fracture programme team*

In the 2014 report, 48% of hospitals reported having an early supported discharge programme. However, as above, this year's facilities survey suggests that hip fracture programme teams still have a very limited role in monitoring or influencing their patients' post-discharge care, with only six hospitals (3%) having community team representation at clinical governance meetings.

*11 People with hip fracture are offered a multifactorial risk assessment to identify and address future falls risk, and are offered individualised intervention if appropriate*

This year we recorded that 96.1% of patients received such assessment, similar to the 94.6% figure reported in 2013. This very high level of reported compliance will conceal substantial variation in the quality of such assessments and intervention. For 2016 we have adapted the dataset, so that we can examine the proportion of patients who are referred for a formal programme of strength and balance training after discharge from hospital.

*12 People with hip fracture are offered a bone health assessment to identify future fracture risk and offered pharmacological intervention as needed before discharge from hospital*

In 2014 we found that 80.1% of patients had been started on bone protection treatment, or were referred for dual X-ray absorptiometry (DXA) scan or bone clinic assessment. A further 16.0% of patients were recorded as having been assessed but not considered appropriate for treatment. This figure had fallen slightly from 16.7% in 2013. There was considerable variation between hospitals in both of these figures, with some still labelling more than half of patients as inappropriate for treatment. Although patient choice is to be encouraged, the amount of variation is more likely to be explained by unjustifiable differences between hospitals in clinical judgements about the benefits of treatment. There is clearly a need for greater consistency if the potential reductions in the rates of further fractures are to be achieved nationally.

### **Early supported discharge at Wirral University Teaching Hospital NHS Trust**

Here at Wirral University Teaching Hospital NHS Trust we have successfully introduced an early supported discharge service for our hip fracture patients. This was commenced in September 2014 and we have now had well over 100 patients through the service. The early supported discharge team assess the hip fracture patients on the ward and then facilitate their transition home. Patients are seen initially twice a day in their own homes by the team, and then daily as they return to normal function. The team particularly work on individual patient-centred goals such as mobilising to the local shops, stairs practise to enable upstairs living, car transfers so that they can go out with family, progression in mobility to allow attendance at family events and even practising golf swings.

Length of stay for this group of patients (people admitted from their own home, with a mental test score of 9/10 or 10/10) has improved from 22.9 days to approximately 10 days. This has made a big impact on the overall LOS for all the hip fracture patients. Feedback from both patients and their carers has been 100% positive.

We estimate that we will be able to accept 200 of our 450 hip fracture patients into the early supported discharge service each year and to expand this to include all suitable patients with frailty fractures.

## **b Length of stay**

The economic impact of hip fracture is hugely dependent on hospital LOS, and previous years' NHFD reports have all suggested an encouraging downwards trend in LOS.

### **NHFD data**

The NHFD collects data for LOS in the acute ward. We also collect data on post-acute ward LOS to capture additional time spent in subsequent wards. This may include time spent in a rehabilitation ward, but the precise nature of this element of stay will differ between units. We report these two elements of LOS separately, as this helps participating hospitals to monitor their own performance and to profile local systems.

We combine acute ward and post-acute ward figures to calculate overall hospital LOS, and this permits calculation of the overall number of inpatient beds occupied by patients with hip fracture.

The following figures are not directly comparable with those from previous NHFD reports. We have now adopted an improved, more inclusive methodology that allows all of the LOS figures for 2013 and 2014 in this report to be based on a more complete cohort of patients.

- In Wales the NHFD figures of 19.6 days and 15.6 days for acute and post-acute stay respectively combined to give an overall LOS of 35.2 days in 2014, compared with 35.8 days in 2013.
- In Northern Ireland the figures of 12.1 days and 10.3 days for acute and post-acute stay respectively gave an overall LOS figure of 22.4 days in 2014, again slightly improved from 22.9 days in 2013.
- The 2014 figures for England showed an average acute LOS of 15.5 days which, when combined with 3.8 days of post-acute stay, gave an overall LOS of 19.3 days. This is slightly improved from 19.8 days in 2013.

Across the whole of the NHFD, the figure for average overall LOS in 2014 was 20.3 days.

### **Super-spell**

Different participating hospitals may transfer differing proportions of their patients for postoperative care or rehabilitation in other hospitals or trusts. Such rehabilitation beds might include hospitals closer to the patients' homes, specialist rehabilitation units, community trusts and NHS-funded care home beds.

We need to capture this additional LOS if we wish to define 'NHS super-spell': the total time spent in any NHS-funded bed.<sup>3</sup> This can be challenging for the hospital staff responsible for NHFD data collection, and many participating units are only capturing data on this element of LOS for a minority of patients.

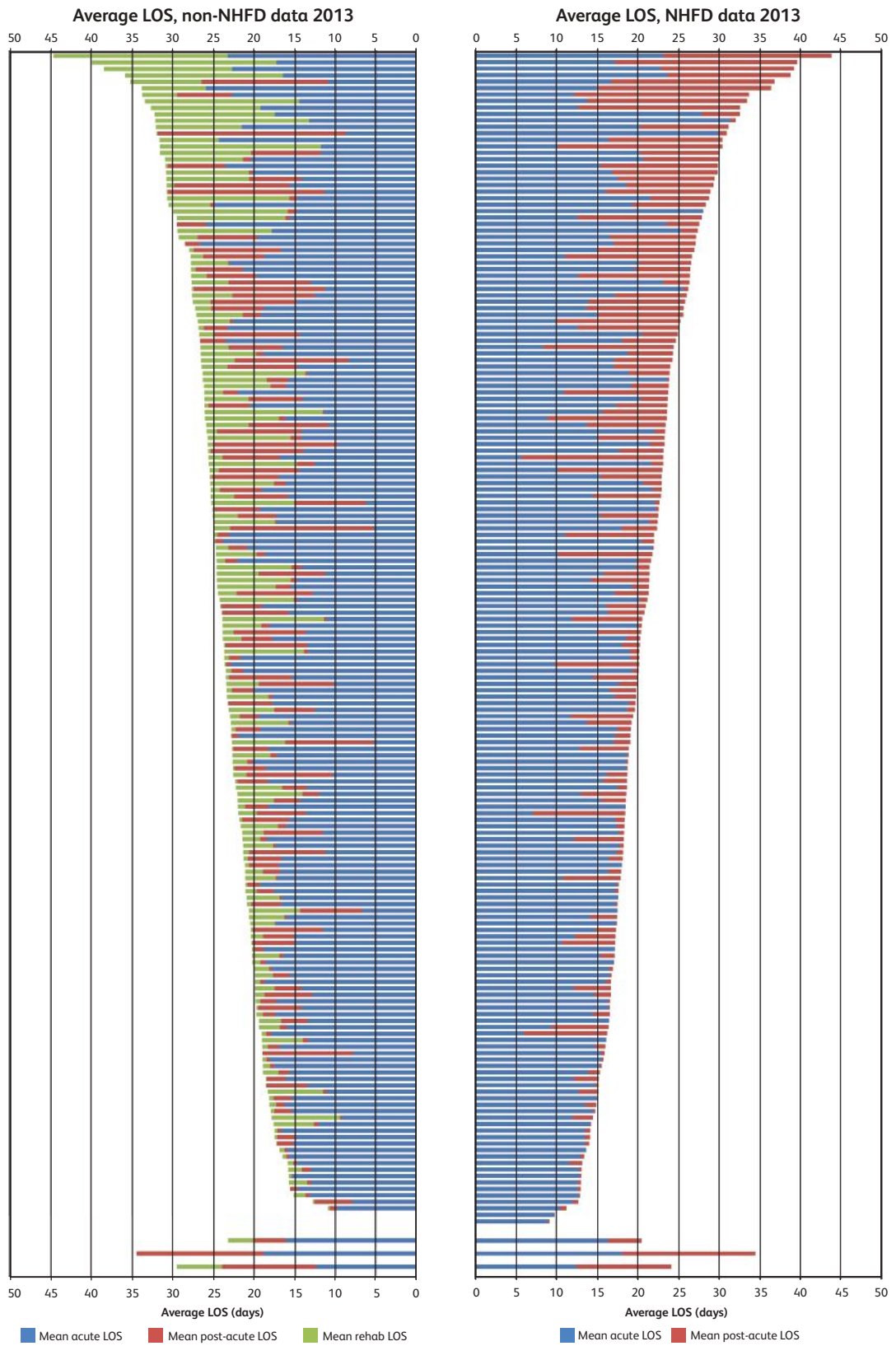


Fig 1 Comparison of NHFD and independent HES and PEDW LOS data for 2013

To capture additional LOS beyond the acute hospital or trust, we compared NHFD estimates by accessing independent data sources. We used the Patient Episode Database for Wales (PEDW) and Health Episode Statistics (HES) figures for England. Although PEDW data for 2014 are available, the most recent available HES figures are those for 2013, so the analysis looks at that year's data. All patients with hip fracture were identified by searching each database for appropriate diagnostic codes, and these independent LOS data were analysed alongside our own data for 2013 (Fig 1).

The remarkable degree of agreement between NHFD data for 2013 and independent figures derived from PEDW and HES appears to validate our own estimates of acute and post-acute LOS. However, the purpose of this analysis was to quantify additional elements of super-spell, given that we know the NHFD is not yet able to capture the entirety of NHS care following a hip fracture.

In seeking to understand super-spell estimates, we should consider each country separately.

**Table 1 Comparison of NHFD, HES, Fracture Outcomes Research Database (FORD) and PEDW LOS data for 2013**

2013	NHFD figures			PEDW, FORD and HES figures				
	Acute	Post	Total	Acute	Post	Total	Rehab	Super-spell
Wales	18.3	17.5	<b>35.8</b>	19.1	15.8	<b>34.9</b>	N/A	<b>34.9</b>
Northern Ireland	12.4	10.5	<b>22.9</b>	12.4	10.5	<b>22.9</b>	7.2	<b>30.2</b>
England	15.8	4	<b>19.8</b>	15.8	4	<b>19.8</b>	3.3	<b>23.1</b>

### *Wales*

The PEDW does not need to distinguish between post-acute and rehabilitation LOS; health services are arranged in local health boards, with no division into acute and community services. Patients usually receive all of their care in the health board to which they originally present, and there is little or no provision for NHS-funded care home rehabilitation. Relatively few patients (fewer than 5%) move between health boards: usually only if they need to return closer to home if they suffered their hip fracture while away from home.

As a result, the 2013 NHFD figure for overall LOS of 35.8 days was remarkably similar to the figure of 34.9 days indicated by the PEDW dataset (Table 1), and we believe that both provide a reliable estimate of super-spell in Wales.

### *Northern Ireland*

In Northern Ireland there is not an independent data source that is the equivalent of the PEDW or HES. However, an additional 7.2 days of rehabilitation was identified using data from the Fracture Outcomes Research Database (FORD).

The NHFD dataset recorded that approximately a quarter (26.0%) of patients in Northern Ireland were transferred to a rehabilitation unit after their acute or post-acute stay. The figure of 7.2 days equates with an average LOS of 26.6 days for this 26.0% of patients who were transferred for rehabilitation. When combined with a 22.9-day acute and post-acute LOS figure, this additional 7.2 days gives a super-spell of 30.2 days in Northern Ireland.



## *England*

In England the picture is more complicated, given that trauma units in acute trusts often refer a substantial proportion of their patients to community trusts for rehabilitation in community hospital beds or in NHS-funded care homes.

In 2013 HES indicated 15.8 days for acute stay and 4.0 days for post-acute stay, giving a total of 19.8 days (Table 1). This exactly corresponds with the LOS figure that we obtained from NHFD data. When we used HES to describe subsequent rehabilitation, we identified an additional average LOS of 3.3 days, which would suggest an average super-spell of 23.1 days.

This super-spell estimate is over a week shorter than the figures we have described for very comparable patient populations in Wales and Northern Ireland, and a number of considerations lead us to believe that this figure significantly underestimates the rehabilitation component of LOS in England.

- We know that incomplete follow-up by trauma teams in acute hospitals means that many are not capturing data for community trusts, community hospitals and NHS-funded care homes in NHFD data submissions. In 2014 the NHFD recorded 19.7% of all English patients (including 23.2% of all those admitted from their own home) as being transferred to rehabilitation beds: this is in line with the 19.1% found in the equivalent HES cohort.
- An overall figure of 3.3 days would imply that the 19.1% of patients who were actually transferred to rehabilitation averaged just 16.7 days in such beds. This is lower than would be expected because patients are usually selected for transfer if they are anticipated to need longer-term rehabilitation than is appropriate in an acute ward.
- In total, 11,098 patients were recorded as being discharged from hospital to a rehabilitation bed, but HES could only provide rehabilitation LOS data for half (50.8%) of these cases. These patients averaged 28.4 days LOS in rehabilitation, casting further doubt on the apparent average of 16.7 days derived using the whole HES dataset (as above).
- This effect is more pronounced for patients being rehabilitated in an NHS-funded care home bed. LOS data are available within HES for only 8.5% of such patients. However, even in a community hospital setting, HES is failing to capture spell data for nearly two-thirds (65.4%) of patients.
- Finally, we have used NHFD data to create a ranked chart of individual units' success in returning people to their own home. This shows enormous variation between hospitals (Fig 2). Units that record low rates of home discharges tend to be those that transfer large numbers of patients to rehabilitation units. This picture seems to be inconsistent with such units providing only very short-term additional rehabilitation.

It is difficult to be certain about how much rehabilitation LOS is not being captured by HES. It also remains unclear whether this is being provided in other hospitals or in NHS-funded care home beds, although most units referring over half of patients for rehabilitation reported that the facility was in an NHS community hospital.

It is also not possible to monitor individual hospitals' success in returning patients home (as we have attempted in casemix-adjusted analyses in previous years' reports) until the outcome of this additional phase of rehabilitation can be examined.

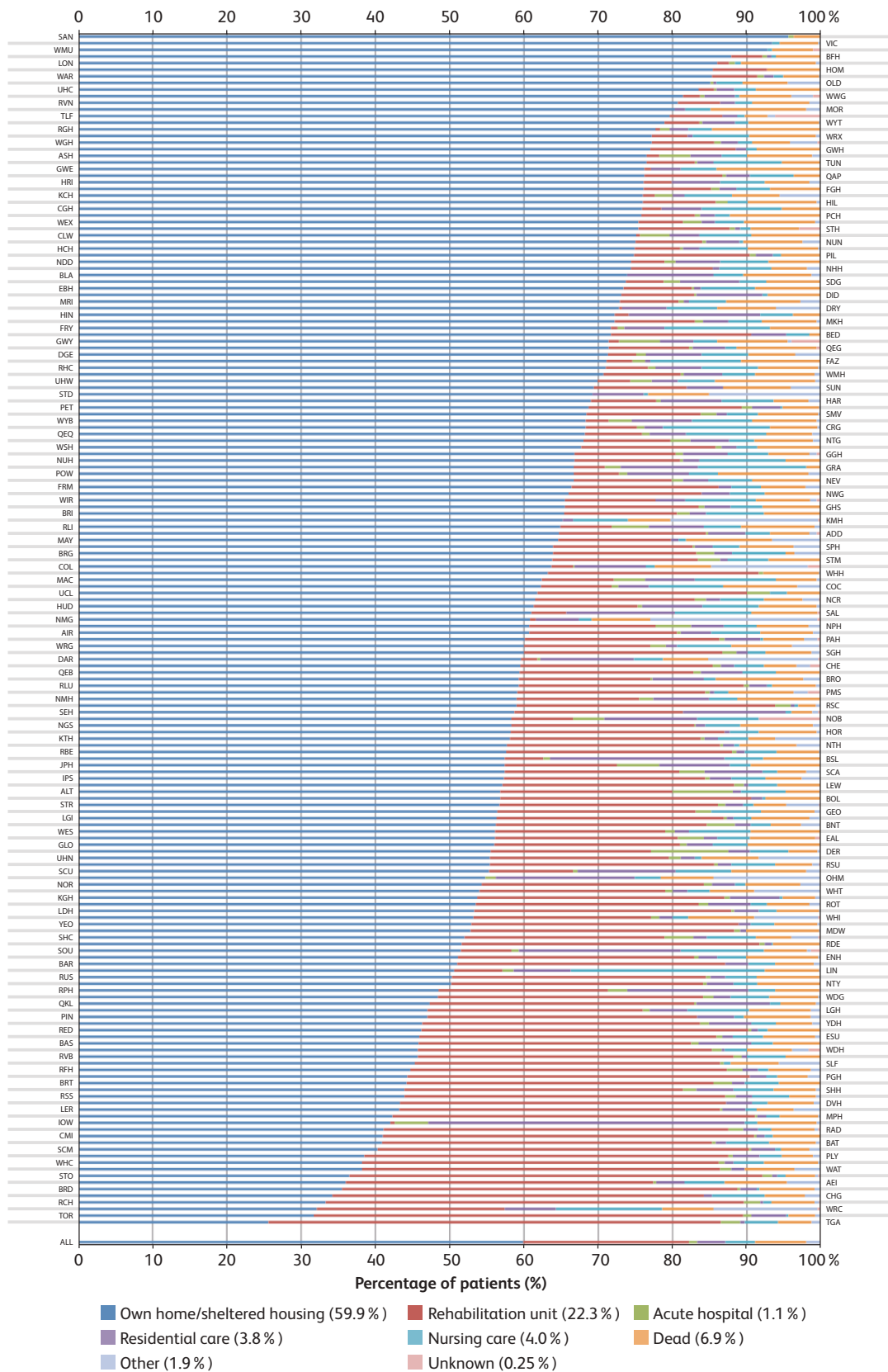


Fig 2 Discharge destination of patients admitted from their own home/sheltered housing

The importance of this uncertainty is perhaps demonstrated by recent LOS trends in England. In 2014 our figure for overall LOS was 19.3 days (a very small reduction from the equivalent figure of 19.8 days in 2013). Across a total of 58,532 admissions this would be equivalent to a saving of 29,266 bed days, and implies the release of 80 beds across NHS England. This gives an impression of improved efficiency. However, if administrative data do not capture LOS for patients in different types of rehabilitation bed, they cannot define the overall effect on super-spell, bed occupancy and the total cost of hip fracture.

Ongoing development of intermediate care<sup>4</sup> has led to the commissioning of a great many additional beds in community hospitals and care homes across the country, but the implications of this drift to increasing use of community rehabilitation beds is not easy to examine. It is likely that many of these new beds will be occupied by patients rehabilitating after hip fracture, although such a model of care runs contrary to the cost-effectiveness argument made by the economic model for NICE's recommendation of hip fracture programmes in CG124.

The hip fracture population offers an ideal model with which to examine the consequences for outcomes, bed occupancy and overall cost of such developments. Future NHFD work on super-spell in this patient group will have major implications for those planning services for frail and older inpatients in all specialties.

From 2016 our revised dataset will prospectively collect specific data on rehabilitation transfers for individual patients so that we can formally examine these issues. We will also be improving our collection of 120-day follow-up data, so that we can examine the outcome for patients who receive their care in different settings. However, it will only be possible to satisfactorily address these questions when the Health and Social Care Information Centre (HSCIC) is able to provide us with linked NHFD–HES data for individual cases, so that we can follow patients through the different episodes of care defined in HES and so reconstruct a real picture of super-spell.

## **c Mortality**

Many hospitals participating in the NHFD do not actively follow up their patients after discharge, so to calculate 30-day mortality we rely on obtaining validated, third-party mortality data from the Office for National Statistics (ONS). We then use a casemix-adjustment model to ensure that our reported mortality figures are appropriate to the demographics of the local patient population.

We obtain ONS data via the HSCIC. We normally submit a cohort of NHFD data for matching against central sources, and are supplied with a date of death by the HSCIC. Since January 2015 we, along with a number of other national clinical audits within the National Clinical Audit and Patient Outcomes Programme (NCAPOP), have been unable to access ONS data because the HSCIC has been refining these processes.

The consequence of this is that we have not yet been able to perform our usual 'outlier' analysis of casemix-adjusted, independently verified mortality data. However, we did not feel it was appropriate to further delay publication of this report, as our performance tables (pages 29–65) provide a wealth of information, including unadjusted mortality figures for individual hospitals. We hope to receive mortality data from the HSCIC later this year, and to publish a mortality supplement as soon as these have been analysed and appropriate outlier management processes followed. We hope to be in a position to report on mortality by the end of 2015.

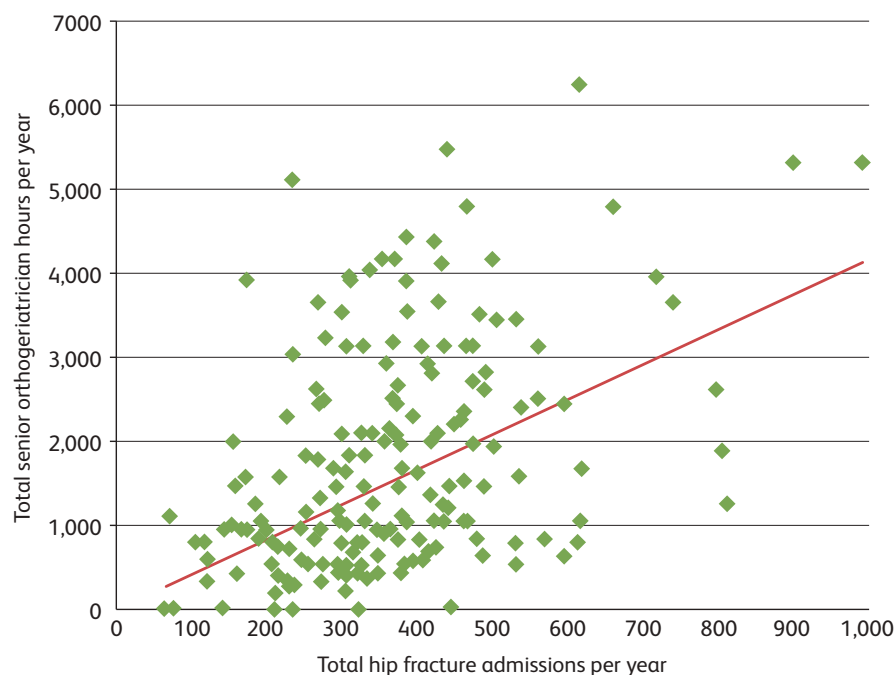
## 2 Improving our understanding

Fifteen research groups around the country have now applied for, and been granted access to, specific elements of the NHFD dataset to support research and quality improvement projects. These include studies of the influence of the weekday of admission, the side of fracture, the surgical procedure, anaesthetic techniques, orthogeriatric models of care, integration of care for older people, the impact of standards and guidelines, reoperation rates and perioperative mortality. Several such projects are being presented at academic meetings this autumn.

### a Understanding services in participating hospitals

Each year, the NHFD conducts a survey of facilities and service provision in participating hospitals. With a 100% response rate, this provides a unique perspective on service provision around the country. The detailed results of this survey are described later in this annual report, but one finding is of particular interest to those responsible for commissioning and providing services, and for ensuring that patients receive the benefits of the hip fracture programmes that were the key recommendation of NICE CG124: *The management of hip fracture in adults* (2011).

When we questioned the provision of orthogeriatric support, seven units (4%) reported that they still had no orthogeriatric service. This is an improvement from the figure of 14% we reported in 2011. On average, hospitals were providing 4 hours of senior orthogeriatrician (grade ST3 and above) time for each patient admitted with hip fracture, but there was enormous variation in this provision. The red trend line of Fig 3 represents a provision of two clinical sessions per 100 hip fracture admissions.



**Fig 3 Senior orthogeriatric hours per hip fracture patient**

Part of this variation will reflect the fact that in some units orthogeriatrician work is limited to patients with hip fracture, while in others the orthogeriatrician also cares for older patients with other injuries, or for elective orthopaedic patients.

A further 32 units provide 1–2 hours of senior orthogeriatrician time per patient: less than half the national average. We would question how realistic it is to claim that patients have received orthogeriatrician-led assessment and multidisciplinary care with only an hour or two of senior orthogeriatrician time per patient.

## **b Validating the NHFD's casemix-adjustment model**

The Clinical Effectiveness Unit of the Royal College of Surgeons of England (RCS) has refined the NHFD model<sup>5</sup> using key elements of the dataset to support an annual casemix adjustment of 30-day mortality. The RCS and the NHFD have compared this approach with the most widely used model in the literature: the Nottingham Hip Fracture Score.<sup>6</sup>

The Nottingham score was calculated using the expanded dataset collected for the NHFD's 2013 Anaesthetic Sprint Audit of Practice (ASAP):<sup>7</sup> data for 7,906 patients aged 60 and over, who had surgery for hip fracture in May, June or July 2013. Linkage to ONS death data identified which patients had died by 30 days after admission. The NHFD's dataset includes sufficient assessment data for outcome predictions that were as valid as those of the Nottingham score.

Both models achieved moderate predictive performance, but both overestimated mortality risk for patients in the highest risk groups. Some variables (abbreviated mental test score (AMTS), fracture type, certain individual comorbidities) were not significant predictors, but after adjusting for other patient characteristics we found that age, sex (in both models), American Society of Anesthesiologists (ASA) grade (NHFD–RCS model) and number of comorbidities (Nottingham score) were the strongest predictors of mortality at 30 days.

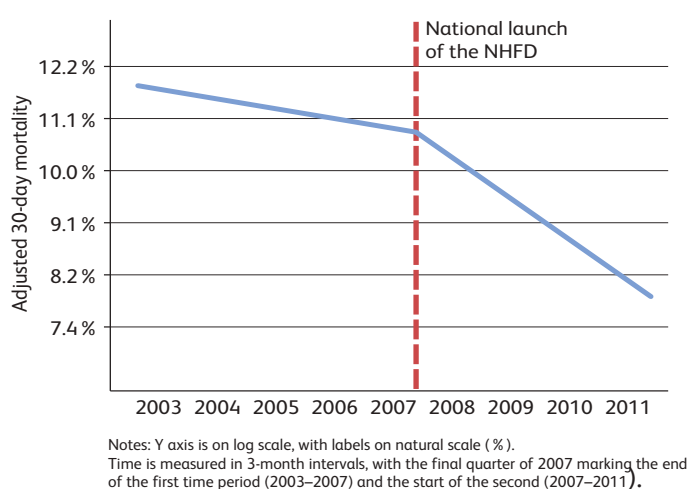
Further work using NHFD data will explore the scope for additional NHFD fields (eg social deprivation, derived from postcode) to improve the NHFD–RCS model's predictive performance: for use with individual patients and in hospital benchmarking.

## **c Demonstrating the impact of the NHFD**

A collaboration between the London School of Hygiene and Tropical Medicine and the Clinical Effectiveness Unit of the RCS<sup>8</sup> has performed an evaluation of the impact of the introduction of the NHFD on care and mortality after hip fracture in England. This examines data for 471,590 older people who were admitted between 2003 and 2011, comparing trends before and after the launch of the NHFD in 2007.

Hospital participation in the NHFD increased from 11 in 2007 to 175 in 2011. Over this period, rates of early surgery increased from 54.5% to 71.3% nationally, having been stable previously. Thirty-day mortality fell from 10.9% to 8.5%, compared with a smaller reduction from 11.5% to 10.9% before 2007. Annual relative reduction in adjusted 30-day mortality was just 1.8% from 2003 to 2007, but 7.6% over 2007–11 ( $p < 0.001$ ).

The study results suggest that by 2011 around 1,000 fewer people a year died within 30 days of hospital admission for hip fracture than would be expected had pre-2007 time trends continued as before. Some of this additional improvement could be due to other policies, as well as the introduction of the NHFD.



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**Fig 4 30-day mortality post hip fracture 2003–2011**

## d Contributing to debate over hip fracture care

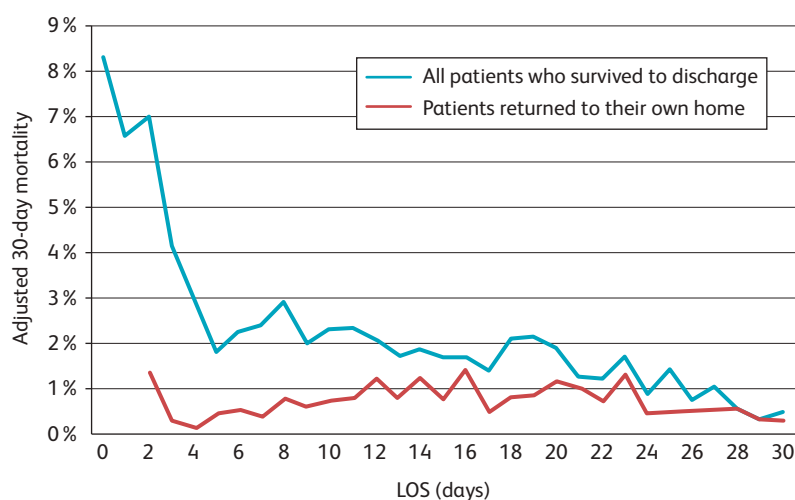
### Early discharge

In February 2015 the *British Medical Journal* published a paper from Sweden<sup>9</sup> that suggested there was an increased risk of death within 30 days of discharge among patients who were discharged within 10 days of hip fracture. This was a potential concern, given our recent success in reducing LOS after hip fracture.

The NHFD immediately used 2013 data for 65,535 people to challenge this paper’s relevance to NHS patients in England, Wales and Northern Ireland. There was an appearance of higher 30-day mortality (2.7% *cf* 1.4%) and of 104 ‘excess deaths’ among those discharged before 10 days, but our approach allowed us to address confounding factors. We examined mortality among people admitted from their own home who returned there, and those sent home before 10 days actually showed lower mortality (0.4% *cf* 0.6%).

An initial appearance of 104 ‘excess deaths’ among early discharges was entirely accounted for by other patient subgroups. One-third (32) were people admitted from home and discharged to care in an acute hospital, rehabilitation unit or hospice. Half (51) were people admitted from care homes who returned there within 10 days. The rest were people admitted from home but discharged to care homes.

People discharged to care homes before 10 days appeared to be at increased risk, but this is a complex group of frail individuals, and the fact of the early discharge is very unlikely to be a causative factor in their death. The reverse is more likely to be true. In any case, the small absolute number of deaths does not justify cautioning against returning people to their care home when the patient, their family and the multidisciplinary team agree this is appropriate.



**Fig 5 Mortality for patients with different LOS**

This analysis allowed us to respond<sup>10</sup> to the *British Medical Journal* in a publication which, with others,<sup>11 12</sup> served to reassure NHS England that there was no justification for a change in attitudes to prompt discharge after hip fracture.

### Seven-day working

As the NHS considers moving towards 7-day working, it is notable that our survey of facilities in December 2014 indicated that routine weekend orthogeriatric or geriatric cover for hip fracture patients is only available in 24 (13%) of participating hospitals. NICE guideline CG124 argues that patients should be offered early surgery, as this appeared to lead to reduced LOS. Pressures on theatre capacity across the working week cause variation in delay to theatre, so we have examined whether this translates into effects on LOS.

During 2013 we found that the mean interval between presentation and surgery was 32.7 hours. Differences in staffing for theatre lists, and perhaps limited access to orthogeriatrician support on the morning following presentation, meant that this figure varied from 31.2 hours on a Sunday or Monday, up to 34.4 hours for presentation on a Friday and 34.7 hours on a Saturday. Patients presenting on a Friday or Saturday experienced an additional wait of 3 hours before surgery. This was statistically significant, but was not associated with any variation in acute ward or overall hospital LOS.

### e Informing other healthcare agencies

The NHFD occupies an increasingly central position in supporting other agencies to monitor and evaluate the quality of healthcare delivered to frail older people.

#### The Care Quality Commission

We work with the Care Quality Commission (CQC) in a number of ways. Each year, following our analysis, we notify the CQC of centres where there may be patient safety concerns. NHFD data are also used by the CQC's intelligent monitoring team to prioritise inspection programmes.

In addition, a package of NHFD metrics are provided to inspection teams to support local inspections. Following discussion with the CQC, we have proposed that the following metrics be included as standard measures of hip fracture care:

- the proportion of patients having prompt surgery
- the proportion of patients seeing an orthogeriatrician in the perioperative period
- thirty-day mortality
- pressure ulcer incidence, and the proportion where pressure ulcer incidence was not recorded
- LOS (acute and post-acute).

### Clinical commissioning groups

In 2014 we published our first commissioners' report,<sup>13</sup> to support the HSCIC's publication of its set of Clinical Commissioning Group Outcome Indicators (CCG OIS) to complement the NHS Outcomes Framework.<sup>14</sup>

We continue to work to support these indicator sets. We have been working with HSCIC colleagues to have misleading or redundant indicators retired from the package and we have proposed the introduction of a compound quality metric based on the component parts of the best practice tariff (BPT). We will be publishing our second annual commissioners' report in late 2015.

### Monitor

We have been working with Monitor and NHS England to help build on the success of BPT since 2011, by suggesting new metrics that might be introduced to further improve care quality.

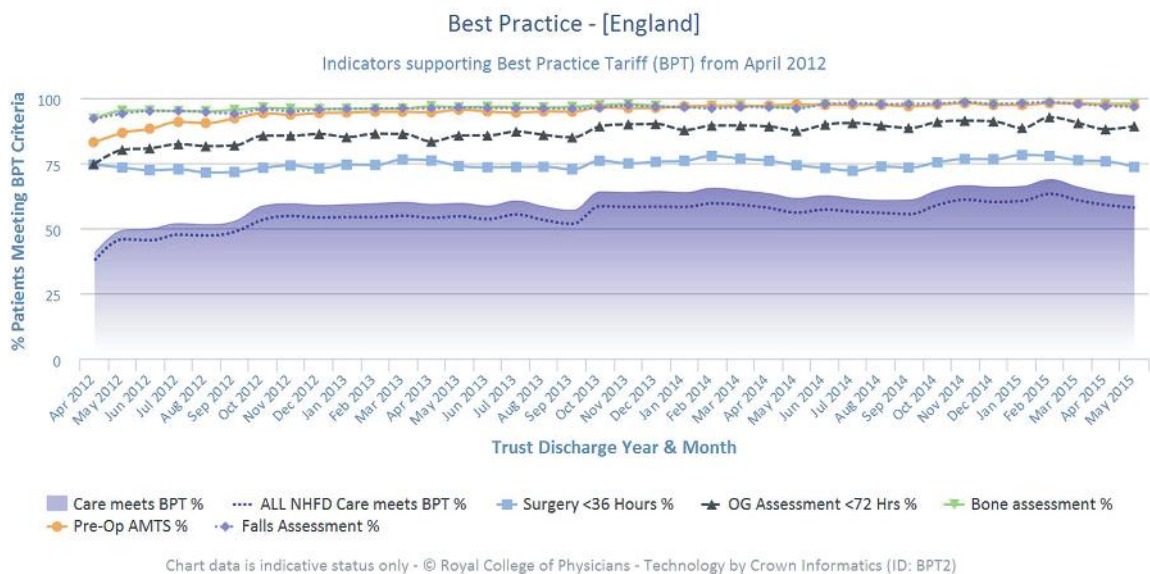


Fig 6 England BPT run chart



The proportion of patients meeting all of the criteria of BPT has steadily increased since its introduction. However, over the past year, ten hospitals have seen their BPT attainment fall by more than 25%. Our online BPT run chart is specifically designed to provide live data, so managers and clinical staff can promptly identify failings that will compromise the quality of care they are providing, as well as their income from BPT. Nationally, delivery of best practice care continues to be largely limited by availability of operating capacity.

## The local perspective

### 1 Continuous feedback: online run charts

In 2013 the NHFD commissioned Crown Informatics as its web provider and this has enabled the development of a more interactive, user-friendly website. This is continuously being upgraded to provide graphical 'real-time' information to support the monthly clinical governance meetings that are key to the hip fracture programmes that were recommended in NICE CG124.

The NHFD website has always provided summary data for local teams to use: admission numbers, time to an orthopaedic ward, time to surgery, casemix, performance against NICE standards, and BPT attainment. These are set against reference lines derived from national average figures. These reference lines are showing a continuous trend of improvement for most measures: an increasingly challenging benchmark that will encourage further improvement in individual hospitals.

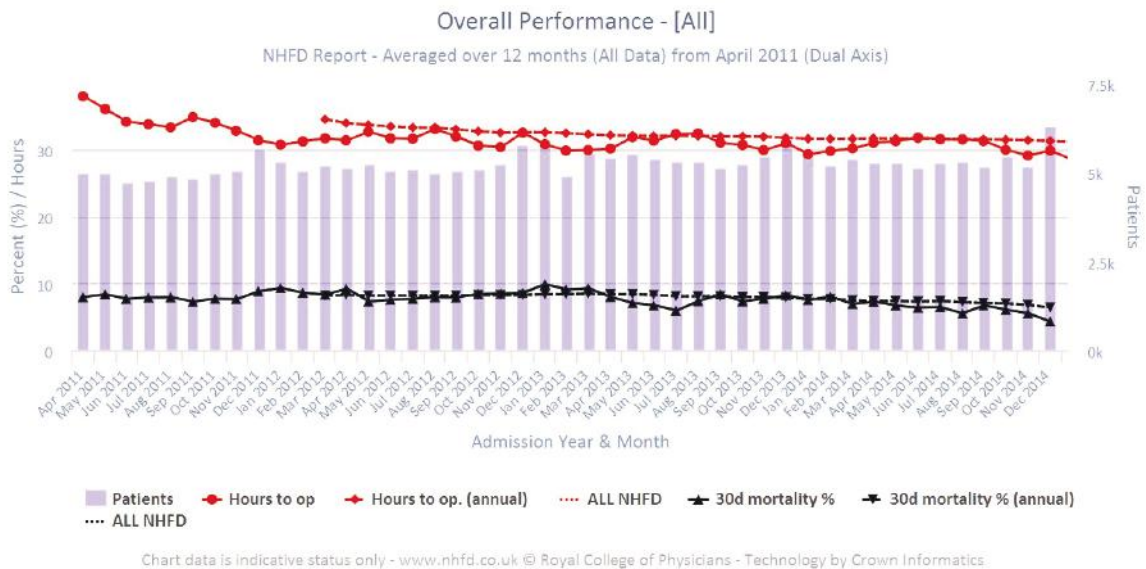


Fig 7 All NHFD overall performance run chart

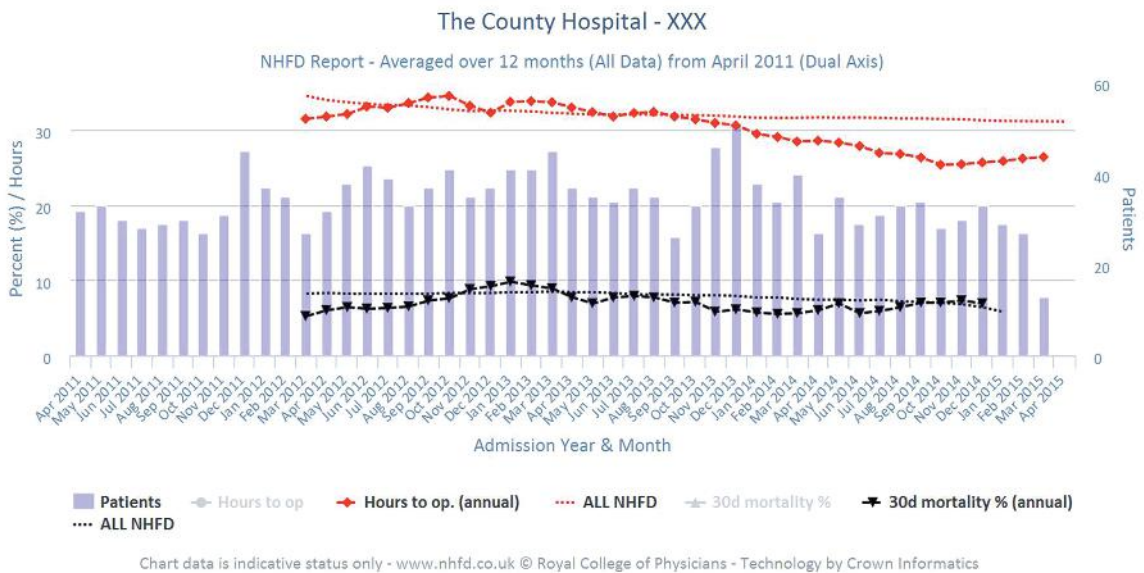
The gradient of these reference lines is a powerful indication of just how much performance has improved around the country over the years since the NHFD first established a complete picture across all trauma units.

These website charts will be made available to healthcare staff and we plan to make them available to the public as part of our commitment to the transparency of NHFD clinical audit data.

## Overall performance

The overall performance chart provides monthly data on how long patients wait for surgery, and on 30-day mortality. The annualised line means that hospitals can review their crude 30-day mortality figures for the past year on a continuous basis, without waiting for the annual report. These figures do not just rely on local data entry but are cross-checked with the ONS on a quarterly basis; hence the absence of data for the most recent months (see 'Mortality' on page 15).

Each year these crude, unadjusted mortality data are complemented by a figure that has been adjusted for local casemix using the model developed by the Clinical Effectiveness Unit at the RCS. It is this quality-checked casemix-adjusted figure, based on external data sources, that is used in the NHFD's process of outlier management.



**Fig 8 Overall performance run chart**

## Length of stay (LOS)

We provide information on hospital LOS in the acute and post-acute wards, updated on a monthly basis, and with an annualised line that smooths out seasonal variation.

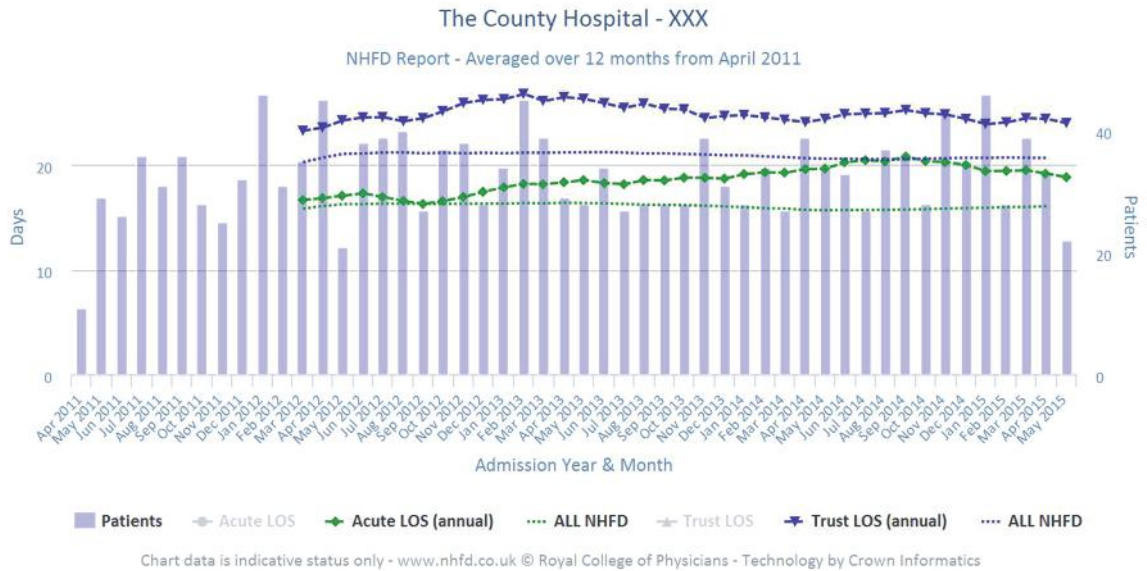


Fig 9 LOS run chart

## Best practice

The BPT run chart allows hospitals to see what proportion of their patients are receiving key elements of best clinical care, and in England these plots are used to derive a monthly bar chart showing overall BPT attainment.

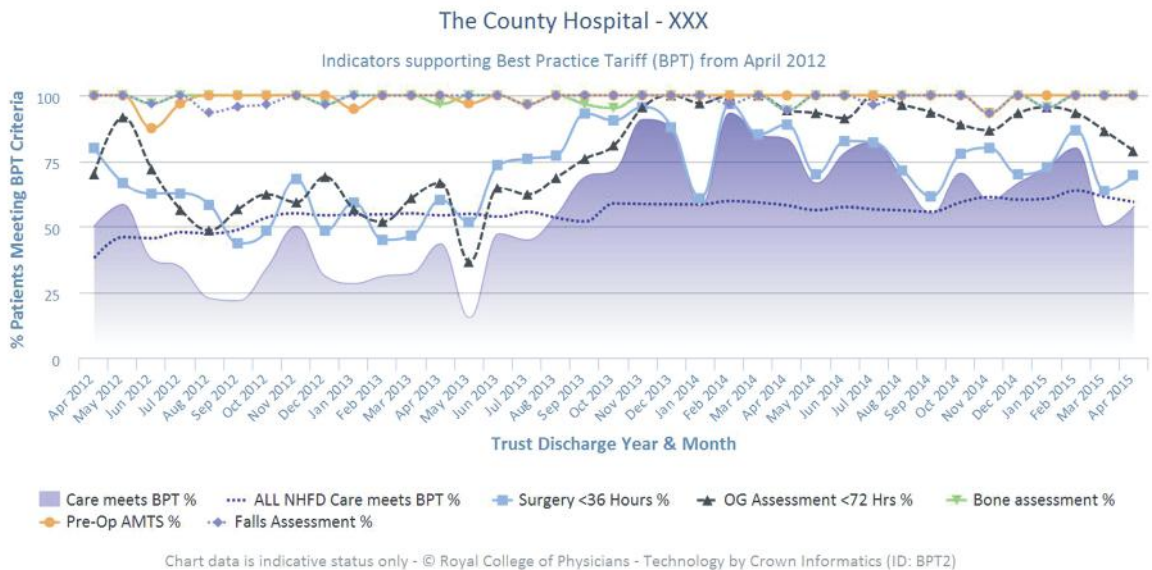
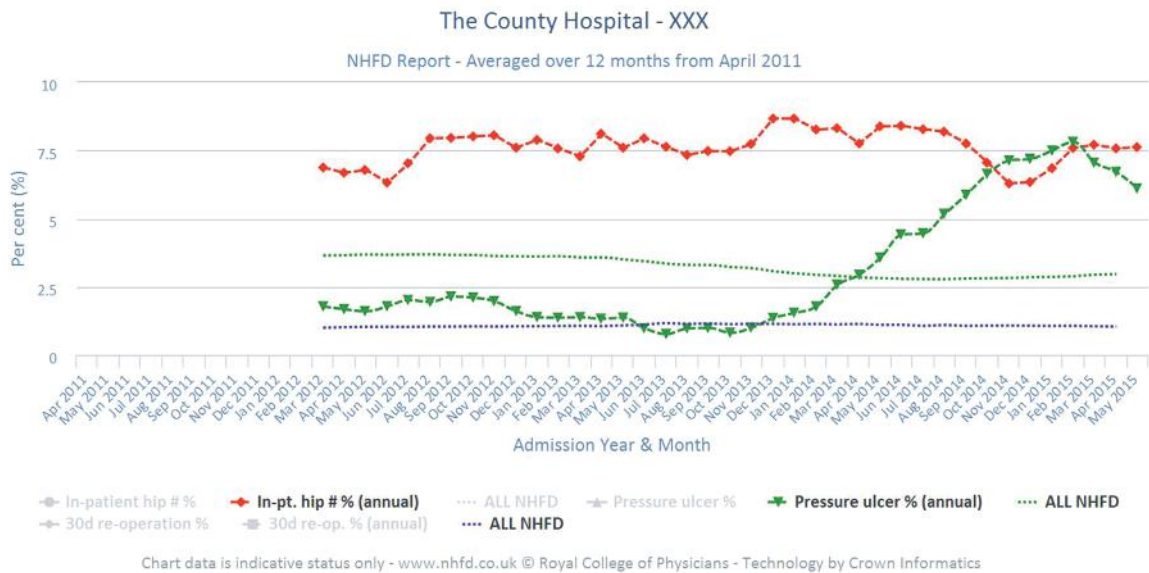


Fig 10 BPT run chart

## Patient safety

A fourth run chart has been introduced this year. This is designed to support clinical governance. Rates of new pressure ulcers in patients with hip fracture are set against national averages. The chart shows hip fracture reoperation rates, but at present there is no national reference line because the quality of recording for such data remains poor in some units.

The chart also indicates the proportion of hip fracture admissions that result from inpatient falls. This figure is very dependent on the configuration of hospitals within the trauma service's catchment area, so the chart's purpose is to permit monitoring of local trends. For this reason, a national average reference line would be inappropriate.



**Fig 11 Patient safety run chart**

Our approach to describing performance is continuously evolving in response to the increasing sophistication of clinical governance for hip fracture services around the country.

In the past we were forced to exclude a significant number of patients from analyses such as LOS because too much of their data was incomplete. However, in the face of the very high rates of data completion at participating hospitals, we are now moving to adopt a more inclusive approach to analysis. We have now moved to a policy of only excluding a patient from analyses that prove impossible due to specific deficiencies in their dataset, but still including them in any other analyses for which relevant dataset fields are complete.

In part, this reflects increasing confidence in our data, and in part our desire that the figures described in our annual report should mirror those provided to individual hospitals in the run charts and tables on our website. This will allow hospitals to track their own performance in monthly clinical governance meetings, and so anticipate issues in respect of mortality or patient safety that will be identified in the annual report.

We also plan to add two additional run charts in 2015. One will look at provision of NICE-compliant surgery: where surgery is consistent with the recommendations of CG124. The second run chart will describe anaesthetic care, giving rates of spinal anaesthesia and of nerve block provision.

### Improving BPT attainment at York District Hospital

At York District Hospital we have worked over the last few years to increase our BPT attainment and improve the care of hip fracture patients.

We identified that our main barrier to achieving BPT was a delay to patients undergoing surgery within 36 hours and a lack of senior medical review. It became apparent that the day of admission had a significant impact on the likelihood of delay to surgery.

We used this data to submit a business case, and in autumn 2014 we were successful in securing additional dedicated theatre time at weekends: a Sunday trauma list with priority given to hip fracture patients. As a consequence, the proportion of our patients receiving BPT-eligible care rose from 66.6% in 2013 to 74.2% in 2014.

Over the past 2 years, we have strengthened our team with the addition of a hip fracture specialist nurse and an advanced clinical practitioner. Our specialist nurse integrates patient care from admission in A&E, links with theatre and ward teams, ensures regular patient and family updates and coordinates discharge plans with the ward team. She also ensures completion of cognition assessments and offers counselling for future bone health treatment for all patients, in keeping with NICE guidelines.

Until 3 years ago, only around 75% of patients were admitted directly to our dedicated hip fracture ward, but this is now over 95%. Our team has introduced a daily ward round that links with the detailed multidisciplinary team meeting, which is also attended by our ward dietician. With this cohesive approach, we ensure that discharges are planned in advance and discussed with the pharmacy to ensure that discharge medications are available on time.

Regular review of NHFD data has been pivotal to developing local services and improving patient care throughout their time in hospital. We now have one of the best rates of return home from home within 30 days among NHFD sites, and our service was highly commended at the Patient Safety Awards 2015.

## 2 Audit findings

### Annual summary tables

In this year's report we have replaced the usual ranked charts with tables specifically designed to help staff understand their own unit's performance. Each table compares local figures with benchmarking performance data for hospitals in that region, and for all hospitals in the NHFD. As in last year's report, we have continued to display hospitals in regional areas (equivalent to historic strategic health authorities (SHAs)) for ease of reference.

Quartile (national)	Colour grading
Top 25 %	Dark green
2nd quartile	Light green
3rd quartile	Light red
Lowest 25 %	Dark red

Colour coding and grading allows readers to ascertain how their hospital is performing and in which quartile their practice lies when compared with national performance.

We have colour coded the table whenever performance figures can be measured against clear definitions of best clinical practice or against NICE quality standards. This approach highlights hospitals that are in the 'top performing quarter of hospitals' (dark green), and those in the 'worst performing quarter of hospitals' (dark red).

In some columns the performance figures are so uniformly good that such colour coding is superfluous, and we have left the column white: for instance in respect of falls assessment.

In other columns we have elected not to colour code data if we believe that a 'top performing quarter of hospitals' label would falsely reassure and reward units that have reported inadequate data, for instance as a result of poor surveillance of local pressure ulcer rates or poor follow-up of reoperation rates.

### Ward management

#### Hip fracture programme

Standard: All patients presenting with a fragility hip fracture are offered a formal hip fracture programme from admission that includes continued orthogeriatric and multidisciplinary review

Source: NICE CG124 (2011)

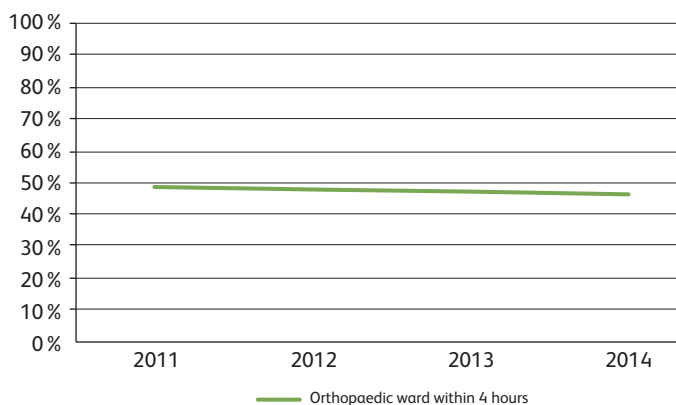
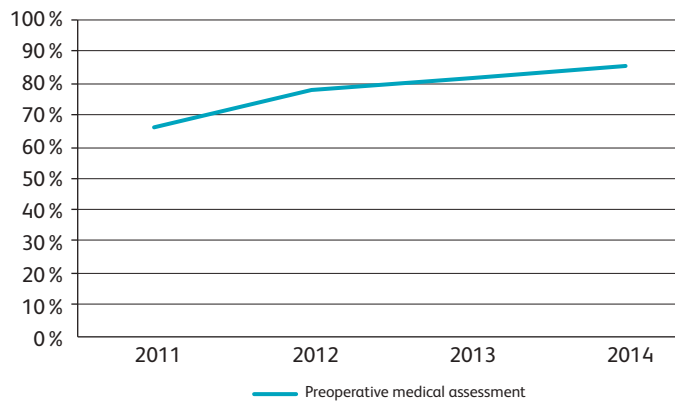


Fig 12 Percentage of patients admitted to orthopaedic ward in 4 hours



**Fig 13 Percentage of patients having perioperative medical assessment**

Although 93.3% of hip fracture patients are treated on an orthopaedic or orthogeriatric ward, only 46.1% are transferred to the ward within 4 hours of their presentation to A&E. This continuing deterioration may be indicative of the bed pressures that many trusts are experiencing. This effect is more pronounced in hospitals in London, South Central and South East areas.

There is huge variation in performance between hospitals: from less than 1% to 90%. This suggests scope for many hospitals to improve fast-track transfer to ring-fenced beds, so that vulnerable patients have rapid access to a ward environment that is suitable for their complex needs.

Assessment and appropriate intervention is important in minimising the physiological impact of the injury and surgery, but orthogeriatric involvement must be continued in the postoperative period for patients to get the full benefit of a hip fracture programme.

Abbreviated mental test scores (AMTSs) continue to be recorded for 94.5% of patients. In total, 96.1% of patients receive falls assessment, and 96.6% receive bone health assessment. All of these figures are excellent and have been maintained since 2013.

Last year we identified a number of units that were labelling a high proportion of patients as unsuitable for any form of bone strengthening treatment. Six of these units now report approaches more in keeping with national figures, but two (GHS and PGH) continue to view over half of their patients as unsuitable for treatment this year, as do two other units (NTG and BRG).

Increasing use of antiresorptive therapies for the prevention of hip fracture means that 10.0% of admitted patients were recorded as already being on bone protection therapies. Such therapies are not without risk. This year a substantial number of 'atypical' fractures were reported. However, there were inconsistencies in the distribution of such reports, and improved definition and coding of this diagnosis is needed before such data can be interpreted reliably.

Since April 2014 we have been collecting new data that questions the proportion of patients who are successfully mobilised out of bed by the day after surgery. This was achieved in 73.3% of cases. A patient's failure to mobilise may reflect a wide range of factors. Some patients were bed bound before their fracture; others will be too mentally or physically unwell to get up.



However, there is enormous variation between hospitals in respect of this measure. Figures range between 11.2% and 100%, with 21 units reporting that they mobilise fewer than half of their patients by the day following their surgery. These units (BAT, BNT, BRT, CHE, DER, EAL, GLO, HOM, JPH, LGI, LON, MOR, NUH, PIN, QEQ, RAD, RCH, SHH, STM, WES, YEO) will wish to question whether this delay in the start of rehabilitation reflects problems such as management of pain, transfusion or fluid management in the perioperative period, or difficulties in providing appropriate physiotherapist assessment or nursing help to patients who are well enough to get up.

## Ward management

### East Midlands

	Hospital code	Number of cases submitted	Admitted to orthopaedic ward within 4 hours (%)	Mental test score recorded on admission (%)	Perioperative medical assessment (%)	Mobilised out of bed on the day after surgery (QS16-9) (%)	Received falls assessment (QS 16-11) (%)	Received bone health assessment (QS16-12) (%)	Met all the criteria for best practice tariff (%)
Chesterfield Royal Hospital	CHE	375	51.9	95.7	92.3	38.7	100.0	99.1	59.0
Derbyshire Royal Infirmary, Derby	DER	572	63.1	98.6	95.5	43.5	99.4	99.1	81.6
Grantham and District Hospital	GRA	58	55.2	87.9	34.5	81.6	59.6	63.2	29.7
Kettering General Hospital	KGH	370	84.9	94.6	68.4	57.4	91.4	96.0	50.6
King's Mill Hospital, Sutton in Ashfield	KMH	396	69.1	96.7	60.9	96.9	86.1	91.6	19.6
Leicester Royal Infirmary	LER	775	23.6	93.5	82.1	73.5	90.6	90.3	39.6
Lincoln County Hospital	LIN	355	43.5	100.0	92.4	66.1	99.7	99.7	82.9
Northampton General Hospital	NTH	365	19.9	97.8	93.7	57.6	97.9	99.1	64.1
Pilgrim Hospital, Boston	PIL	342	84.6	100.0	98.2	63.3	100.0	100.0	92.5
University Hospital Nottingham	UHN	800	61.5	98.1	92.3	65.7	98.4	98.2	68.0
East Midlands (Average)		4,408	55.7	96.3	81.0	64.4	92.3	93.6	58.8
Overall (Average)		64,102	46.1	94.5	85.3	73.3	96.1	96.5	63.3

## East of England

	Hospital code	Number of cases submitted	Admitted to orthopaedic ward within 4 hours (%)	Mental test score recorded on admission (%)	Perioperative medical assessment (%)	Mobilised out of bed on the day after surgery (Q516-9) (%)	Received falls assessment (Q5-16-11) (%)	Received bone health assessment (Q516-12) (%)	Met all the criteria for best practice tariff (%)
Addenbrooke's Hospital, Cambridge	ADD	376	58.2	99.7	97.9	96.2	99.7	99.7	80.5
Basildon and Thurrock University Hospital	BAS	403	16.5	99.5	91.8	95.6	100.0	100.0	58.5
Bedford Hospital	BED	164	40.9	98.2	78.0	71.7	96.3	96.9	61.1
Broomfield Hospital, Chelmsford	BFH	482	67.5	85.1	93.6	96.6	100.0	97.3	9.6
Colchester General Hospital	COL	526	57.9	95.8	74.1	73.0	93.3	93.7	48.0
East and North Herts Hospital	ENH	460	69.0	100.0	97.0	84.8	99.8	99.8	74.7
Hinchingbrooke Hospital	HIN	192	50.0	98.4	90.6	78.9	100.0	100.0	75.0
Ipswich Hospital	IPS	456	79.3	98.7	90.4	95.0	100.0	99.5	66.4
James Paget University Hospital, Great Yarmouth	JPH	410	25.4	98.0	94.1	43.2	99.5	99.5	56.1
Luton and Dunstable Hospital	LDH	309	27.8	100.0	98.7	60.2	100.0	100.0	77.5
Norfolk and Norwich University Hospital	NOR	795	35.1	99.2	94.0	95.6	98.9	99.2	57.5
The Princess Alexandra Hospital, Harlow	PAH	354	23.5	99.4	92.9	96.9	99.7	98.2	71.6
Peterborough City Hospital	PET	436	59.9	99.3	87.2	96.0	100.0	99.5	67.7
Queen Elizabeth Hospital, King's Lynn	QKL	372	59.0	99.2	71.0	76.1	87.3	90.1	54.5
Southend University Hospital	SEH	323	53.4	90.1	88.9	85.5	100.0	94.9	42.4
Watford General Hospital	WAT	433	46.3	99.8	96.3	74.5	100.0	100.0	78.9
West Suffolk Hospital, Bury St Edmunds	WSH	326	61.4	98.5	98.5	81.7	100.0	100.0	84.6
East of England (Average)		6,817	48.9	97.6	90.3	82.4	98.5	98.1	62.6
Overall (Average)		64,102	46.1	94.5	85.3	73.3	96.1	96.5	63.3

## London

	Hospital code	Number of cases submitted	Admitted to orthopaedic ward within 4 hours (%)	Mental test score recorded on admission (%)	Perioperative medical assessment (%)	Mobilised out of bed on the day after surgery (QS16-9) (%)	Received falls assessment (QS 16-11) (%)	Received bone health assessment (QS16-12) (%)	Met all the criteria for best practice tariff (%)
Barnet Hospital	BNT	381	27.8	99.7	95.8	49.1	100.0	100.0	79.5
Princess Royal University Hospital, Bromley	BRO	383	2.3	97.7	81.7	62.1	100.0	99.7	38.4
Ealing Hospital	EAL	159	10.5	96.9	93.7	34.4	95.8	98.6	59.0
St George's Hospital	GEO	245	35.1	75.1	71.8	63.6	100.0	96.9	27.4
Queen Elizabeth Hospital, Woolwich	GWH	270	33.1	98.5	89.3	92.6	100.0	100.0	71.5
Hillingdon Hospital	HIL	216	48.6	95.8	90.7	87.0	91.9	97.0	66.4
Homerton Hospital	HOM	69	4.6	92.8	79.7	33.3	96.9	80.0	54.9
King's College Hospital	KCH	146	30.4	69.2	93.8	57.3	100.0	98.5	35.2
Kingston Hospital	KTH	296	35.6	97.6	97.6	83.1	100.0	100.0	84.8
University Hospital, Lewisham	LEW	188	35.0	98.4	94.7	68.6	100.0	99.4	64.8
The Royal London Hospital	LON	154	10.1	92.2	94.8	46.8	100.0	100.0	58.1
Croydon University Hospital	MAY	263	7.2	98.1	95.4	53.6	98.7	97.5	73.4
North Middlesex University Hospital	NMH	252	46.6	99.6	98.4	94.0	100.0	100.0	75.4
Northwick Park Hospital	NPH	283	47.4	99.6	93.6	50.0	97.3	97.3	74.7
Newham General Hospital	NWG	119	17.9	98.3	89.9	90.8	100.0	100.0	67.8
Queen's Hospital, Romford	OLD	585	43.4	99.7	87.2	95.1	99.3	97.8	60.7
Royal Free Hospital	RFH	169	46.3	94.1	98.2	74.8	99.4	98.1	61.8
St Helier Hospital, Carshalton	SHC	431	22.8	99.5	99.1	83.6	100.0	100.0	87.6
St Thomas' Hospital	STH	166	74.7	92.2	88.6	95.9	98.7	100.0	54.1
St Mary's Hospital, Paddington	STM	231	11.2	81.8	84.0	41.0	98.6	98.6	46.3
University College Hospital	UCL	139	73.5	95.0	92.8	84.1	99.2	99.2	72.3
Chelsea and Westminster Hospital	WES	187	0.6	100.0	87.2	46.7	100.0	100.0	61.1
Whipps Cross University Hospital	WHC	317	3.7	97.8	96.2	76.2	100.0	98.6	58.2
Whittington Hospital	WHT	115	18.3	86.1	93.9	86.0	100.0	100.0	69.5
West Middlesex University Hospital, Isleworth	WMU	210	38.9	91.9	62.4	84.8	99.0	100.0	15.6
London (Average)		5,974	29.0	93.9	90.0	69.4	99.0	98.3	60.7
Overall (Average)		64,102	46.1	94.5	85.3	73.3	96.1	96.5	63.3

## North East

	Hospital code	Number of cases submitted	Admitted to orthopaedic ward within 4 hours (%)	Mental test score recorded on admission (%)	Perioperative medical assessment (%)	Mobilised out of bed on the day after surgery (Q516-9) (%)	Received falls assessment (Q5-16-11) (%)	Received bone health assessment (Q516-12) (%)	Met all the criteria for best practice tariff (%)
Wansbeck Hospital	ASH	362	52.9	100.0	98.9	93.0	100.0	100.0	89.4
Darlington Memorial Hospital	DAR	322	55.8	96.6	78.9	70.5	98.7	98.3	55.5
University Hospital Of North Durham	DRY	360	44.2	96.4	70.8	60.2	97.0	97.9	42.2
University Hospital of North Tees, Stockton-on-Tees	NTG	410	79.4	99.3	89.3	97.0	100.0	99.5	74.7
North Tyneside General Hospital, North Shields	NTY	306	48.2	98.4	96.4	93.0	100.0	100.0	81.2
Queen Elizabeth Hospital, Gateshead	QEG	291	78.1	96.2	92.8	88.0	99.6	99.2	72.7
Royal Victoria Hospital, Newcastle	RVN	428	31.9	97.4	92.3	69.1	99.7	100.0	68.5
James Cook University Hospital, Middlesbrough	SCM	470	87.7	98.9	92.1	94.2	100.0	100.0	70.9
South Tyneside District Hospital, South Shields	STD	206	67.9	96.1	94.7	60.7	99.5	98.9	66.8
Sunderland Royal Hospital	SUN	391	66.7	97.2	85.4	79.4	99.7	99.4	69.5
North East (Average)		3,546	61.3	97.6	89.2	80.5	99.4	99.3	69.1
Overall (Average)		64,102	46.1	94.5	85.3	73.3	96.1	96.5	63.3

## North West

	Hospital code	Number of cases submitted	Admitted to orthopaedic ward within 4 hours (%)	Mental test score recorded on admission (%)	Perioperative medical assessment (%)	Mobilised out of bed on the day after surgery (Q516-9) (%)	Received falls assessment (Q516-11) (%)	Received bone health assessment (Q516-12) (%)	Met all the criteria for best practice tariff (%)
Royal Albert Edward Infirmary, Wigan	AEI	320	32.8	99.4	94.1	93.8	99.7	99.3	70.0
Royal Blackburn Hospital	BLA	439	77.9	98.9	91.3	74.5	100.0	99.7	63.7
Royal Bolton Hospital	BOL	334	81.7	98.5	94.6	84.6	100.0	100.0	66.2
Cumberland Infirmary, Carlisle	CMI	457	47.4	95.6	62.4	82.9	70.0	76.3	44.7
Countess of Chester Hospital	COC	306	31.8	99.0	83.3	51.3	98.9	99.3	60.2
University Hospital Aintree	FAZ	381	45.9	97.6	91.3	56.0	97.7	98.6	75.3
Furness General Hospital, Barrow-in-Furness	FGH	121	49.6	94.2	41.3	52.7	98.2	98.2	29.8
Leighton Hospital, Crewe	LGH	299	67.3	96.7	49.5	54.7	96.7	88.3	27.9
Macclesfield General Hospital	MAC	232	79.8	98.7	94.8	73.1	99.5	99.5	69.0
Manchester Royal Infirmary	MRI	193	47.4	92.2	72.0	82.0	100.0	99.4	47.4
North Manchester General Hospital	NMG	333	55.6	97.9	81.4	54.3	87.8	86.8	50.1
Noble's Hospital, Isle of Man	NOB	73	78.3	68.5	1.4	96.2	98.5	66.2	NA
Royal Oldham Hospital	OHM	361	46.8	95.8	93.4	96.2	98.5	98.5	50.9
Royal Lancaster Infirmary	RLI	271	64.6	99.3	87.1	83.1	99.2	95.0	49.7
Royal Liverpool University Hospital	RLU	374	39.6	100.0	97.1	78.1	100.0	100.0	76.6
Royal Preston Hospital	RPH	449	56.4	100.0	85.5	98.9	100.0	100.0	60.5
Stepping Hill Hospital, Stockport	SHH	389	56.2	97.7	84.1	45.3	98.1	96.9	62.7
Salford Royal Hospital	SLF	294	58.5	97.6	95.6	52.0	99.6	98.9	69.7
Southport District General Hospital	SOU	288	53.7	87.2	35.1	94.0	94.0	75.0	25.7
Tameside General Hospital, Manchester	TGA	240	68.3	100.0	81.7	90.3	99.1	99.6	41.2
Victoria Hospital, Blackpool	VIC	408	67.2	100.0	25.5	100.0	99.7	99.5	17.1
Warrington Hospital	WDG	304	61.7	98.7	96.1	57.3	100.0	100.0	70.1
Whiston Hospital, Prescot	WHI	401	29.5	99.5	85.5	65.2	95.9	97.0	54.8
Arrove Park Hospital, Wirral	WIR	466	42.5	98.5	96.4	62.3	98.8	96.7	81.6
Wythenshawe Hospital, Manchester	WYT	339	36.0	100.0	95.9	62.7	100.0	100.0	79.3
North West (Average)		8,072	55.1	96.5	76.7	73.7	97.2	94.7	56.0
Overall (Average)		64,102	46.1	94.5	85.3	73.3	96.1	96.5	63.3

## Northern Ireland

	Hospital code	Number of cases submitted	Admitted to orthopaedic ward within 4 hours (%)	Mental test score recorded on admission (%)	Perioperative medical assessment (%)	Mobilised out of bed on the day after surgery (Q516-9) (%)	Received falls assessment (Q516-11) (%)	Received bone health assessment (Q516-12) (%)
Altnagelvin Area Hospital	ALT	363	46.6	71.6	57.3	92.1	75.1	97.7
Craigavon Hospital, Portadown	CRG	258	48.8	91.5	79.5	95.4	98.3	96.2
Ulster Hospital, Belfast	NUH	357	53.0	73.1	76.5	29.5	90.6	97.9
Royal Victoria Hospital, Belfast	RVB	887	47.7	60.8	86.7	96.6	96.4	61.1
Northern Ireland (Average)		1,865	49.0	74.2	75.0	78.4	90.1	88.2
Overall (Average)		64,102	46.3	94.5	85.3	73.3	96.1	96.5

## South Central

	Hospital code	Number of cases submitted	Admitted to orthopaedic ward within 4 hours (%)	Mental test score recorded on admission (%)	Perioperative medical assessment (%)	Mobilised out of bed on the day after surgery (Q516-9) (%)	Received falls assessment (Q516-11) (%)	Received bone health assessment (Q516-12) (%)	Met all the criteria for best practice tariff (%)
Horton Hospital, Banbury	HOR	183	47.1	100.0	97.8	56.5	100.0	100.0	88.0
St Mary's Hospital, Isle of Wight	IOW	229	50.7	99.1	44.5	91.5	47.6	99.0	18.3
Milton Keynes General Hospital	MKH	230	24.5	97.8	87.8	86.4	100.0	99.5	65.8
Basingstoke and N Hants Hospital	NHH	286	49.5	97.6	95.8	74.9	98.1	97.4	72.1
Queen Alexandra Hospital, Portsmouth	QAP	737	70.9	100.0	99.2	92.5	100.0	100.0	85.6
John Radcliffe Hospital, Oxford	RAD	531	22.2	98.3	96.6	37.0	98.8	99.4	64.4
Royal Berkshire Hospital, Reading	RBE	422	17.9	99.5	98.1	54.3	100.0	100.0	76.0
Royal Hampshire County Hospital, Winchester	RHC	281	38.8	100.0	92.9	73.4	100.0	100.0	73.2
Southampton General Hospital	SGH	605	37.4	96.0	95.2	90.3	98.9	99.3	61.3
Stoke Mandeville Hospital, Aylesbury	SMV	370	26.4	98.9	93.0	88.0	99.4	99.7	65.0
Wexham Park Hospital, Slough	WEX	365	10.3	98.4	93.7	80.4	99.7	99.7	69.6
South Central (Average)		4,239	36.0	98.7	90.4	75.0	94.8	99.5	67.2
Overall (Average)		64,102	46.1	94.5	85.3	73.3	96.1	96.5	63.3

## South East

	Hospital code	Number of cases submitted	Admitted to orthopaedic ward within 4 hours (%)	Mental test score recorded on admission (%)	Perioperative medical assessment (%)	Mobilised out of bed on the day after surgery (Q516-9) (%)	Received falls assessment (Q516-11) (%)	Received bone health assessment (Q516-12) (%)	Met all the criteria for best practice tariff (%)
Conquest Hospital, Hastings	CGH	464	35.7	99.6	96.8	58.0	100.0	98.2	81.2
Eastbourne Hospital	DGE	128	41.0	100.0	98.4	61.8	99.2	99.2	94.1
Darent Valley Hospital, Dartford	DVH	362	28.5	96.1	82.6	76.6	100.0	99.7	65.4
East Surrey Hospital, Redhill	ESU	500	43.4	98.6	93.6	93.4	99.8	99.1	74.9
Frimley Park Hospital, Camberley	FRM	422	34.8	98.1	84.8	96.0	99.7	99.7	69.4
Medway Maritime Hospital	MDW	343	30.3	99.1	83.1	91.7	96.8	96.8	66.3
Queen Elizabeth the Queen Mother Hospital, Margate	QEQ	480	50.3	98.8	89.4	48.9	99.8	97.5	53.4
Royal Sussex County Hospital, Brighton	RSC	530	26.6	99.8	88.9	84.4	97.5	97.8	78.5
Royal Surrey County Hospital, Guildford	RSU	296	26.0	100.0	97.3	64.4	100.0	100.0	85.4
St Peter's Hospital, Chertsey	SPH	412	66.2	99.8	99.3	69.6	100.0	100.0	83.4
St Richard's Hospital, Chichester	STR	393	3.4	96.2	94.4	64.9	97.0	97.3	65.7
Maidstone and Tunbridge Wells Hospital	TUN	498	56.5	99.8	94.6	59.2	98.7	99.4	74.2
William Harvey Hospital, Ashford	WHH	487	22.8	98.4	98.6	76.7	100.0	100.0	70.3
Worthing and Southlands Hospital	WRG	470	75.2	99.8	98.9	71.7	100.0	100.0	77.8
South East (Average)		5,785	38.6	98.9	92.9	72.7	99.2	98.9	74.3
Overall (Average)		64,102	46.1	94.5	85.3	73.3	96.1	96.5	63.3

## South West

	Hospital code	Number of cases submitted	Admitted to orthopaedic ward within 4 hours (%)	Mental test score recorded on admission (%)	Perioperative medical assessment (%)	Mobilised out of bed on the day after surgery (Q516-9) (%)	Received falls assessment (Q516-11) (%)	Received bone health assessment (Q516-12) (%)	Met all the criteria for best practice tariff (%)
Royal United Hospital, Bath	BAT	535	54.0	100.0	99.4	19.9	99.8	99.8	74.0
Bristol Royal Infirmary	BRI	306	23.3	99.7	94.1	80.6	99.6	99.6	71.3
Cheltenham General Hospital	CHG	225	72.0	99.6	93.3	72.8	99.5	99.5	54.8
Southmead Hospital, Bristol	FRY	440	20.1	99.3	92.3	92.0	100.0	100.0	83.4
Gloucestershire Royal Hospital, Gloucester	GLO	417	50.2	97.8	90.9	46.6	99.2	98.6	55.4
Musgrove Park Hospital, Taunton	MPH	426	83.0	94.4	93.0	64.5	99.7	99.5	67.0
North Devon District Hospital, Barnstaple	NDD	261	76.7	81.2	62.5	75.8	98.3	99.2	44.1
Poolle General Hospital	PGH	963	57.4	99.5	99.8	98.6	100.0	99.5	81.4
Derriford Hospital, Plymouth	PLY	484	53.4	99.2	97.9	90.6	99.6	99.6	77.5
The Great Western Hospital, Swindon	PMS	418	33.7	97.8	95.5	81.3	99.7	100.0	76.1
The Royal Cornwall Hospital, Triliske	RCH	606	68.6	98.5	95.4	48.0	99.8	99.3	66.1
Royal Devon & Exeter Hospital, Exeter	RDE	606	58.0	99.0	98.0	82.9	99.8	99.6	72.3
Salisbury District Hospital	SAL	274	64.0	99.6	96.0	98.6	99.6	98.8	81.1
Torbay District General Hospital	TOR	471	17.7	98.9	98.3	82.5	99.8	99.8	67.2
Dorset County Hospital, Dorchester	WDH	303	71.9	99.0	89.8	99.1	100.0	98.6	77.3
Weston General Hospital, Weston-super-Mare	WGH	304	39.5	98.7	74.3	69.4	89.6	94.2	49.2
Yeovil District Hospital	YEO	264	38.8	98.5	65.9	45.5	90.1	94.6	40.5
South West (Average)		7,303	51.9	97.7	90.4	73.5	98.5	98.8	67.0
Overall (Average)		64,102	46.1	94.5	85.3	73.3	96.1	96.5	63.3

## Wales

	Hospital code	Number of cases submitted	Admitted to orthopaedic ward within 4 hours (%)	Mental test score recorded on admission (%)	Perioperative medical assessment (%)	Mobilised out of bed on the day after surgery (Q516-9) (%)	Received falls assessment (Q516-11) (%)	Received bone health assessment (Q516-12) (%)
Bronglais Hospital, Aberystwyth	BRG	104	37.6	78.8	72.1	63.4	3.0	99.0
Glan Clwyd Hospital, Rhyl	CLW	304	14.4	77.6	0.0	62.0	0.4	95.9
Royal Gwent Hospital, Newport	GWE	298	12.0	50.7	18.1	65.1	86.5	80.6
Gwynedd Ysbyty, Bangor	GWY	318	51.4	39.3	54.4	66.5	89.9	99.3
Morrison Hospital, Swansea	MOR	527	24.1	86.0	60.7	16.0	92.5	92.1
Nevill Hall Hospital, Abergavenny	NEV	288	21.3	43.8	73.6	55.8	90.6	98.4
Prince Charles Hospital, Merthyr Tydfil	PCH	214	75.2	28.0	7.5	79.6	48.1	43.4
Princess Of Wales Hospital, Bridgend	POW	227	14.4	55.1	9.3	56.3	88.8	97.5
Royal Glamorgan Hospital, Llantrisant	RGH	224	74.8	51.3	14.3	74.7	51.8	73.3
University Hospital of Wales, Cardiff	UHW	453	9.5	80.4	56.3	52.0	92.4	97.2
Maelor Hospital, Wrexham	WRX	216	53.1	64.8	28.2	81.3	95.3	23.3
West Wales General Hospital, Carmarthen	WWG	253	41.7	85.4	7.5	72.9	84.9	93.7
Withybush Hospital, Haverfordwest	WYB	206	33.0	39.3	0.0	61.1	0.0	59.5
Wales (Average)		3,632	35.6	60.0	30.9	62.1	63.4	81.0
Overall (Average)		64,102	46.1	94.5	85.3	73.3	96.1	96.5

## West Midlands

	Hospital code	Number of cases submitted	Admitted to orthopaedic ward within 4 hours (%)	Mental test score recorded on admission (%)	Perioperative medical assessment (%)	Mobilised out of bed on the day after surgery (Q516-9) (%)	Received falls assessment (Q516-11) (%)	Received bone health assessment (Q516-12) (%)	Met all the criteria for best practice tariff (%)
Queen's Hospital, Burton upon Trent	BRT	328	42.0	93.9	83.5	44.5	99.3	99.7	63.6
Birmingham Heartlands Hospital	EBH	382	50.3	91.4	96.9	99.7	99.7	99.7	49.9
Good Hope General Hospital	GHS	304	54.8	79.6	82.9	99.6	99.6	99.3	46.6
County Hospital Hereford	HCH	290	42.9	97.2	76.6	81.7	97.7	97.7	53.0
New Cross Hospital	NCR	375	24.4	89.1	86.9	75.6	82.9	94.6	47.5
George Eliot Hospital	NUN	275	24.1	99.3	94.9	85.3	100.0	100.0	65.5
Queen Elizabeth Hospital, Edgbaston	QEB	433	56.4	93.8	94.9	53.3	100.0	100.0	58.4
The Alexandra Hospital	RED	291	61.8	99.0	91.1	75.6	98.9	99.2	51.0
Royal Shrewsbury Hospital	RSS	369	54.6	97.6	94.9	84.3	98.3	98.3	47.3
Russells Hall Hospital	RUS	487	28.5	97.9	91.0	74.4	99.3	99.5	70.1
Sandwell District Hospital	SAN	348	63.7	98.6	95.4	78.9	99.7	99.4	67.7
County Hospital, Stafford	SDG	169	32.9	98.8	86.4	56.3	96.8	99.4	66.5
Royal Stoke University Hospital	STO	602	32.7	97.3	92.7	89.3	99.6	100.0	68.0
Princess Royal Hospital, Telford	TLF	137	59.2	83.2	0.0	72.8	62.6	76.3	0.0
University Hospital Coventry	UHC	518	35.4	99.4	80.5	95.5	98.9	97.2	60.8
Warwick Hospital	WAR	326	70.1	97.9	93.6	84.8	99.0	98.4	63.2
Manor Hospital	WMH	337	22.1	95.8	78.3	69.8	99.7	97.4	45.0
Worcestershire Royal Hospital	WRC	458	24.8	92.8	90.0	69.6	100.0	99.3	56.2
West Midlands (Average)		6,429	43.4	94.6	83.9	77.3	96.2	97.5	54.5
Overall (Average)		64,102	46.1	94.5	85.3	73.3	96.1	96.5	63.3



## Yorks and the Humber

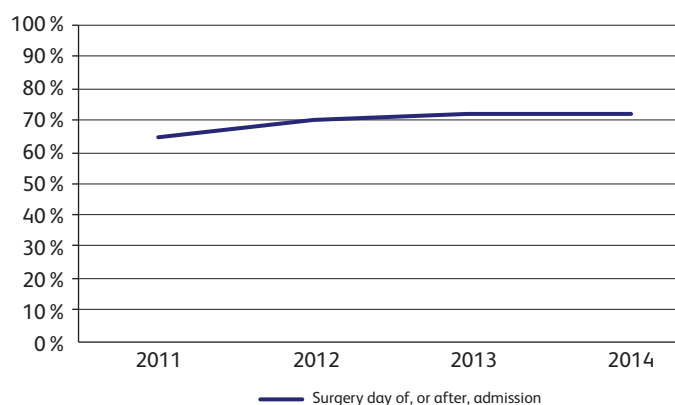
	Hospital code	Number of cases submitted	Admitted to orthopaedic ward within 4 hours (%)	Mental test score recorded on admission (%)	Perioperative medical assessment (%)	Mobilised out of bed on the day after surgery (Q516-9) (%)	Received falls assessment (Q5-16-11) (%)	Received bone health assessment (Q516-12) (%)	Met all the criteria for best practice tariff (%)
Airedale General Hospital	AIR	272	40.8	98.2	86.4	88.6	100.0	98.4	63.7
Barnsley District General Hospital	BAR	251	65.0	100.0	95.6	92.4	100.0	100.0	77.2
Bradford Royal Infirmary	BRD	325	72.2	100.0	98.2	96.4	100.0	100.0	80.5
Bassetlaw District General Hospital	BSL	156	38.9	100.0	94.9	95.5	100.0	100.0	80.5
Doncaster Royal Infirmary	DID	431	30.3	98.4	86.1	71.8	100.0	99.5	43.2
Diana, Princess of Wales Hospital	GGH	269	59.1	91.4	90.3	50.7	100.0	99.2	58.0
Harrogate District Hospital	HAR	247	90.4	97.6	69.2	82.1	96.1	97.0	58.1
Hull Royal Infirmary	HRI	566	56.3	96.8	83.6	83.2	94.0	93.2	44.4
Huddersfield Royal Infirmary	HUD	480	52.7	92.5	73.8	74.9	67.5	86.3	27.9
Leeds General Infirmary	LGI	702	49.0	94.4	91.7	11.2	98.3	82.1	56.5
Northern General Hospital	NGS	638	43.9	99.5	91.1	52.6	98.6	99.3	68.0
Pinderfields General Hospital	PIN	559	21.9	98.9	92.5	42.6	100.0	100.0	59.4
Rotherham General Hospital	ROT	296	74.9	96.3	92.2	51.1	100.0	98.6	69.9
Scarborough General Hospital	SCA	297	43.6	99.7	94.9	86.5	99.3	99.3	74.3
Scunthorpe General Hospital	SCU	210	64.0	99.5	87.6	91.8	100.0	98.4	48.1
York District Hospital	YDH	333	84.8	97.9	98.2	72.8	100.0	100.0	74.4
Yorks & the Humber (Average)		6,032	55.5	97.6	89.1	71.5	97.1	97.0	61.5
Overall (Average)		64,102	46.1	94.5	85.3	73.3	96.1	96.5	63.3

## Surgery

### Time to operation

Standard: People with hip fracture have surgery on the day of, or the day after, admission

Source: NICE QS16 (2012)



**Fig 14 Percentage of patients having surgery on the day of, or after, admission**

Time to theatre also features in BPT, and the percentage of patients having their surgery on the day of, or the day after, admission has risen from 65.3% to 72.1% over the past 3 years. The curve is levelling off, but there remains a striking variation in performance between hospitals, from 14.7% to 95.3%. In some cases (RVB, NUH, CRG ALT – the four hospitals in Northern Ireland), this is a consequence of ‘hub and spoke’ models of hip fracture care. In four other hospitals (HRI, POW, TGA and WMU) there is no indication of why fewer than 50% of patients receive this standard of care.

The number of patients who are treated without surgery continues to fall, and now represents 2.2% of cases. The worst performing hospital for the last 2 years is actively addressing this issue and is seeing non-operative rates fall.

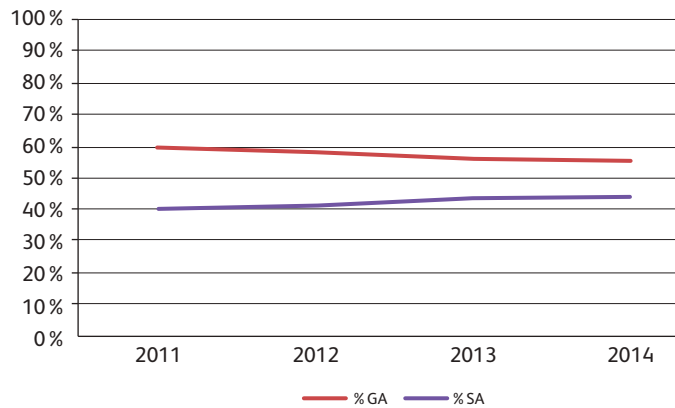
### Type of anaesthetic

Standard: Offer patients a choice of spinal anaesthesia (SA) or general anaesthesia (GA) after discussing the risks and benefits

Source: NICE CG124 (2011)

General anaesthesia remains more common than spinal anaesthesia (48.1% vs 42.2%). In 4.5% of patients both approaches are recorded, either because of a failure of a planned spinal anaesthetic, or possibly because of coding errors. Data was missing for another 5.2% of patients.

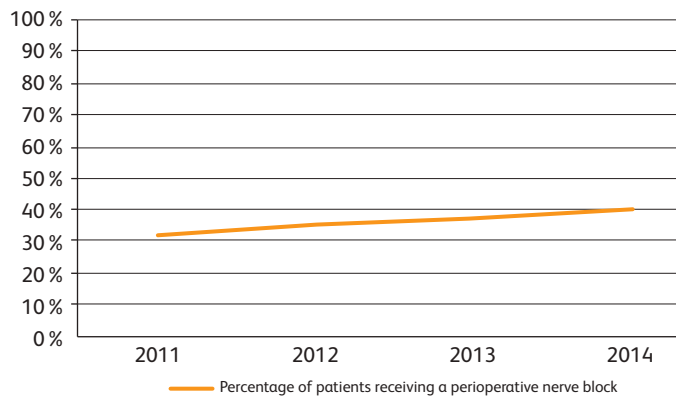
The optimal approach to anaesthesia clearly remains a contentious issue. Variation in practice around the country reflects this, but is perhaps less of a concern than inconsistency in department approaches and policies that is evident within individual hospitals in these tables.



**Fig 15 Percentage of anaesthetic technique**

Standard: People with hip fracture receive prompt and effective pain management, in a manner that takes into account the hierarchy of pain management drugs, throughout their hospital stay

Source: NICE QS16 (2012)



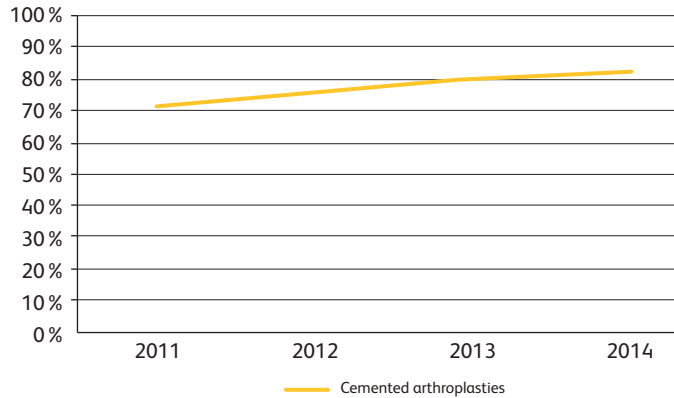
**Fig 16 Percentage of perioperative nerve block use**

One measure of effective pain management is the use of perioperative nerve blocks. The use of additional epidural and nerve blocks remains limited, with 53.9% of those having a general anaesthetic receiving a block and 26.4% of patients having spinals also having a nerve block performed.

Over the past 3 years there has been a sustained improvement in the provision of perioperative blocks. The national figure has increased from 32% to 40% of known anaesthetic types, but there remains an unacceptable level of variation, from 0% to 90% of patients. This intervention is simple, effective and inexpensive. Local hip fracture programme teams should also look at ways of maximising the provision of blocks in A&E and wards to reduce the pain experienced during investigation of the fracture and bed transfers.

Standard: People with displaced intracapsular fracture receive cemented arthroplasty, with the offer of total hip replacement (THR) if clinically eligible\*

Source: NICE QS16 (2012)



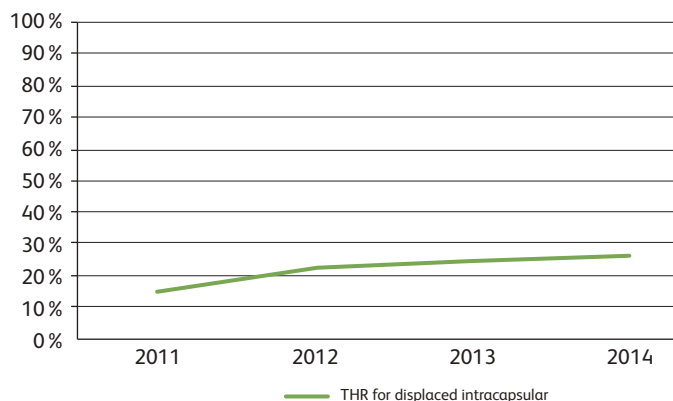
\*Eligible is defined as patients with displaced intracapsular fracture, who were ASA 1–3, with an AMTS of 7 or more and who were previously able to walk outside using no more than a stick.

**Fig 17 Percentage of cementing of arthroplasties**

In total, 90.7% of displaced intracapsular fractures are treated with arthroplasties, 82.3% of which are cemented. Overall, the use of cemented arthroplasties for all fracture types has increased from 71.4% in 2011 to 82.3%, with a range of 0% to 100%.

Five hospitals now report more than 90% uncemented prostheses. The majority of these sites report using modern hydroxyapatite-coated implants rather than a Thompson or Austin Moore type prosthesis.

The percentage of ‘eligible’ patients receiving a THR has increased this year. Last year we suggested a figure of 19.1% for 2013, but that figure was an underestimate. We have now reviewed data for the 4 years since NICE CG124 first recommended THR in 2011. These figures confirm an encouraging trend from the base line of 14.9% in 2011, to 22.0% in 2012, 24.6% in 2013 and 26.1% in 2014 (Fig 18). There remains considerable variation around the country, with units reporting figures that range

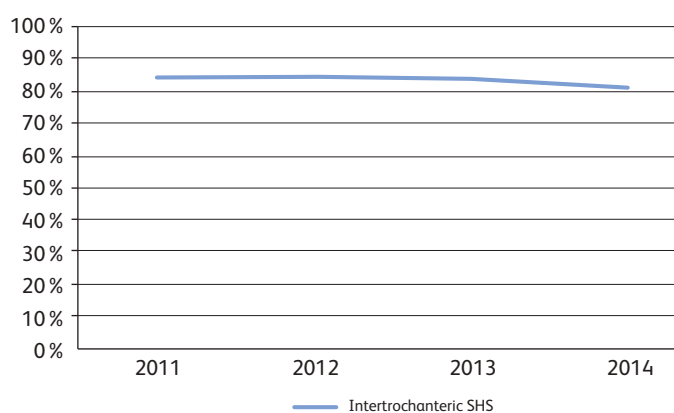


**Fig 18 Percentage use of THR for eligible displaced intracapsular**

from 0% to 63.9% of eligible patients. Some hospitals may record small numbers of THR because they transfer eligible patients to elective hip units, but in other cases it is clear that local preferences for care are restricting the number of patients who receive treatment that is consistent with the NICE guidance.

Standard: People with trochanteric fractures above and including the lesser trochanter (AO classification types A1 and A2) receive extramedullary implants such as a sliding hip screw (SHS) in preference to an intramedullary (IM) nail

Source: NICE QS16 (2012)

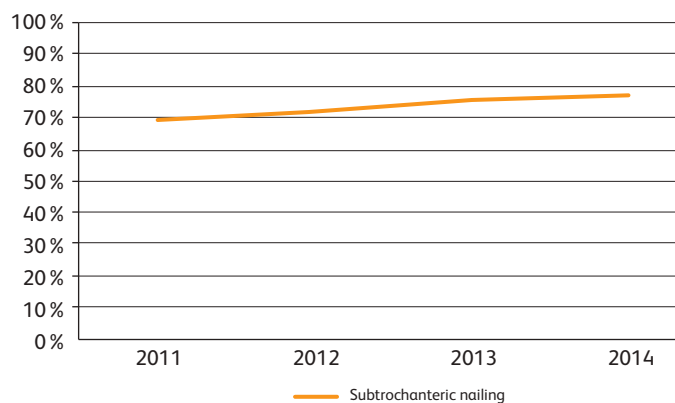


**Fig 19 Percentage SHS for trochanteric fractures**

The current NHFD dataset does not distinguish between the different subtypes of inter-trochanteric fracture, so we cannot be certain as to whether the level of NICE compliance is falling. However, the next dataset revision will see the introduction of a split between A1/A2 and A3 fractures, and this should permit better scrutiny of compliance.

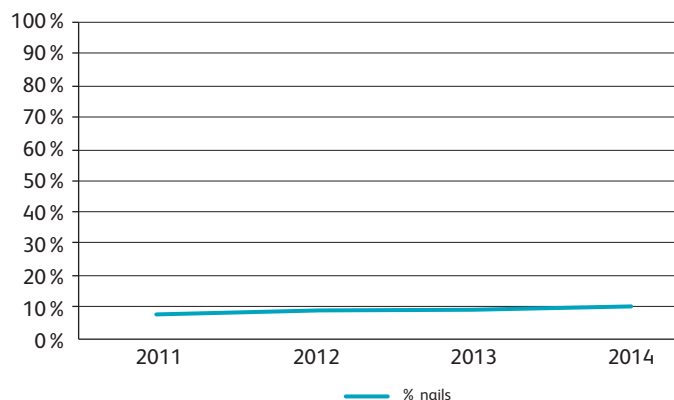
Standard: Use an IM nail to treat patients with a subtrochanteric fracture

Source: NICE CG124 (2011)



**Fig 20 Percentage IM nailing for subtrochanteric fractures**

Nailing may be precluded by pre-existent joint disease, or made undesirable by the presence of a subtrochanteric tumour, but it is usually the best management for a subtrochanteric fracture, where the increasing use of nails is a positive trend.



**Fig 21 IM nails as a percentage of all operations**

The combined effect of these changes is a 47% increase in the number of IM nailings performed from 2011 to 2014. The reason for this is unclear but the new dataset from 2016 will collect data on A1/A2 and A3 hip fracture subtypes to see whether they are being treated according to NICE guidelines.

### East Midlands

	Hospital code	Number of cases submitted	Surgery on day of, or day after, admission (%)	General anaesthetic (%)	General anaesthetic and nerve block (%)	Spinal anaesthetic (%)	Spinal anaesthetic and nerve block (%)	Proportion of arthroplasties which are cemented (%)	Eligible displaced intracapsular fractures treated with THR (%)	Intertrochanteric fractures treated with SHS (%)	Subtrochanteric fractures treated with an IM nail (%)
Chesterfield Royal Hospital	CHE	375	72.0	41.1	52.6	56.8	73.2	81.3	23.1	99.3	93.3
Derbyshire Royal Infirmary, Derby	DER	572	86.5	9.3	45.2	86.7	22.6	99.3	22.9	96.2	55.6
Grantham and District Hospital	GRA	58	93.1	37.9	77.3	53.5	74.2	87.0	40.0	95.7	0.0
Kettering General Hospital	KGH	370	74.6	68.9	83.9	16.3	58.3	73.9	21.1	96.4	56.5
King's Mill Hospital, Sutton in Ashfield	KMH	396	71.2	31.6	80.1	42.7	61.6	8.5	8.8	83.5	60.9
Leicester Royal Infirmary	LER	775	60.3	58.9	71.8	38.2	36.9	98.5	8.0	71.8	76.7
Lincoln County Hospital	LIN	355	85.1	55.5	69.5	36.4	31.0	53.8	27.0	78.6	83.3
Northampton General Hospital	NTH	365	69.3	38.1	12.9	57.3	66.5	94.3	36.7	93.0	60.0
Pilgrim Hospital, Boston	PIL	342	94.7	32.2	59.9	61.1	13.9	94.9	15.9	91.6	100.0
University Hospital Nottingham	UHN	800	75.3	53.5	87.7	45.1	79.4	85.5	14.8	84.2	86.8
EAST MIDLANDS (Average)		4,408	78.2	42.7	64.1	49.4	51.8	77.7	21.8	89.0	67.3
OVERALL (Average)		64,102	72.1	48.1	53.9	42.2	26.4	82.3	26.1	81.7	77.6

## East of England

	Hospital code	Number of cases submitted	Surgery on day of, or day after, admission (%)	General anaesthetic (%)	General anaesthetic and nerve block (%)	Spinal anaesthetic (%)	Spinal anaesthetic and nerve block (%)	Proportion of arthroplasties which are cemented (%)	Eligible displaced intracapsular fractures treated with THR (%)	Intertrochanteric fractures treated with SHS (%)	Subtrochanteric fractures treated with an IM nail (%)
Addenbrooke's Hospital, Cambridge	ADD	376	80.9	75.3	23.6	18.1	6.1	100.0	25.6	95.1	92.0
Basildon and Thurrock University Hospital	BAS	403	61.0	48.9	21.9	49.2	32.3	64.3	35.3	92.1	95.2
Bedford Hospital	BED	164	73.8	67.1	84.5	25.0	53.6	92.4	9.7	84.4	81.8
Broomfield Hospital, Chelmsford	BFH	482	77.9	0.0	0.0	0.0	0.0	90.3	23.1	70.3	100.0
Colchester General Hospital	COL	526	68.3	74.6	49.5	22.1	19.9	95.0	21.1	74.3	84.0
East and North Herts Hospital	ENH	460	75.7	29.5	39.7	65.9	18.5	84.4	36.5	98.9	86.7
Hinchingbrooke Hospital	HIN	192	83.9	46.8	92.3	51.5	83.9	24.7	18.8	93.3	100.0
Ipswich Hospital	IPS	456	74.3	59.9	79.5	36.4	24.2	99.5	0.0	90.7	94.4
James Paget University Hospital, Great Yarmouth	JPH	410	61.7	45.1	17.3	51.7	4.3	94.2	24.6	82.2	93.8
Luton and Dunstable Hospital	LDH	309	75.1	44.4	88.3	52.4	1.1	95.2	24.2	90.0	100.0
Norfolk and Norwich University Hospital	NOR	795	73.2	64.4	55.4	29.1	17.2	76.0	16.9	68.0	76.1
The Princess Alexandra Hospital, Harlow	PAH	354	76.8	41.0	20.0	53.9	1.5	60.9	20.9	97.9	94.4
Peterborough City Hospital	PET	436	83.0	46.1	72.2	52.8	87.3	62.1	8.8	64.7	82.4
Queen Elizabeth Hospital, King's Lynn	QKL	372	80.4	39.8	93.2	59.1	76.8	97.2	33.3	100.0	78.6
Southend University Hospital	SEH	323	67.2	70.9	80.0	25.1	37.1	92.9	16.1	70.8	73.3
Watford General Hospital	WAT	433	81.5	31.4	58.0	62.4	24.8	81.5	14.0	58.9	91.7
West Suffolk Hospital, Bury St Edmunds	WSH	326	89.9	85.0	75.4	12.3	60.2	96.3	35.2	89.0	81.0
East of England (Average)		6,817	75.6	51.2	55.9	39.2	32.3	82.8	21.4	83.6	88.6
Overall (Average)		64,102	72.1	48.1	53.9	42.2	26.4	82.3	26.1	81.7	77.6

## London

	Hospital code	Number of cases submitted	Surgery on day of, or day after, admission (%)	General anaesthetic (%)	General anaesthetic and nerve block (%)	Spinal anaesthetic (%)	Spinal anaesthetic and nerve block (%)	Proportion of arthroplasties which are cemented (%)	Eligible displaced intracapsular fractures treated with THR (%)	Intertrochanteric fractures treated with SHS (%)	Subtrochanteric fractures treated with an IM nail (%)
Barnet Hospital	BNT	381	81.1	86.4	90.3	11.2	27.7	5.0	19.7	69.7	90.0
Princess Royal University Hospital, Bromley	BRO	383	70.5	40.7	76.9	48.6	4.3	34.5	24.5	87.6	85.7
Ealing Hospital	EAL	159	63.5	27.0	32.6	68.6	7.3	38.6	26.7	84.8	30.0
St George's Hospital	GEO	245	73.0	69.0	77.5	23.3	38.6	99.0	18.2	62.8	76.9
Queen Elizabeth Hospital, Woolwich	GWH	270	81.1	41.1	84.7	47.0	39.4	95.3	5.4	64.8	66.7
Hillingdon Hospital	HIL	216	83.3	17.1	43.3	77.3	27.6	86.1	7.9	75.8	78.9
Homerton Hospital	HOM	69	69.6	56.5	53.8	28.9	14.9	100.0	16.7	64.5	100.0
King's College Hospital	KCH	146	73.3	63.0	54.3	19.2	17.7	85.7	12.9	68.8	72.7
Kingston Hospital	KTH	296	87.5	30.4	71.1	58.5	36.4	96.6	10.8	87.7	75.0
University Hospital, Lewisham	LEW	188	75.0	61.7	84.4	28.7	59.2	88.9	5.9	81.8	52.6
The Royal London Hospital	LON	154	64.3	85.1	58.8	10.3	31.1	87.5	40.9	66.1	100.0
Croydon University Hospital	MAY	263	79.1	54.4	70.6	43.4	1.8	88.7	10.8	88.5	95.5
North Middlesex University Hospital	NMH	252	81.3	69.8	28.4	27.8	18.7	0.0	41.7	74.1	76.9
Northwick Park Hospital	NPH	283	77.0	66.1	0.6	27.2	1.5	100.0	9.8	85.9	75.7
Newham General Hospital	NWG	119	77.3	58.0	20.3	28.6	23.4	84.6	40.0	62.5	83.3
Queen's Hospital, Romford	OLD	585	67.2	26.1	77.8	12.8	3.9	63.9	12.4	72.7	73.3
Royal Free Hospital	RFH	169	67.5	65.7	56.8	31.4	16.9	93.8	31.8	98.7	100.0
St Helier Hospital, Carshalton	SHC	431	91.2	62.2	15.3	33.2	7.8	80.8	24.0	80.6	85.7
St Thomas' Hospital	STH	166	68.7	51.2	49.4	21.7	19.4	46.7	36.7	88.3	80.0
St Mary's Hospital, Paddington	STM	231	68.8	61.5	55.0	27.2	20.6	95.8	21.4	82.9	68.0
University College Hospital	UCL	139	79.1	58.3	82.7	33.0	50.0	98.0	54.8	68.8	92.9
Chelsea and Westminster Hospital	WES	187	73.3	25.1	49.0	65.8	16.3	100.0	35.4	75.0	91.7
Whipps Cross University Hospital	WHC	317	69.7	74.7	68.8	19.2	3.1	94.7	16.7	96.6	57.1
Whittington Hospital	WHT	115	90.4	47.8	65.5	39.1	33.2	10.0	8.3	59.2	100.0
West Middlesex University Hospital, Isleworth	WMU	210	29.0	87.6	0.6	8.6	72.1	87.4	7.1	94.9	40.0
London (Average)		5,974	73.7	55.5	54.7	33.6	23.7	74.5	21.6	77.7	77.9
Overall (Average)		64,102	72.1	48.1	53.9	42.2	26.4	82.3	26.1	81.7	77.6



## North East

	Hospital code	Number of cases submitted	Surgery on day of, or day after, admission (%)	General anaesthetic (%)	General anaesthetic and nerve block (%)	Spinal anaesthetic (%)	Spinal anaesthetic and nerve block (%)	Proportion of arthroplasties which are cemented (%)	Eligible displaced intracapsular fractures treated with THR (%)	Intertrochanteric fractures treated with SHS (%)	Subtrochanteric fractures treated with an IM nail (%)
Wansbeck Hospital	ASH	362	89.8	51.1	9.2	36.5	3.0	99.5	23.3	91.7	82.4
Darlington Memorial Hospital	DAR	322	69.6	36.3	80.4	58.1	70.1	87.7	17.0	65.5	80.0
University Hospital Of North Durham	DRY	360	65.7	59.8	63.2	37.2	36.6	96.2	12.9	87.8	100.0
University Hospital of North Tees, Stockton-on-Tees	NTG	410	79.5	16.8	46.4	79.0	21.9	73.6	13.6	88.3	88.4
North Tyneside General Hospital, North Shields	NTY	306	85.0	33.3	37.2	52.9	0.6	98.7	18.5	88.7	92.9
Queen Elizabeth Hospital, Gateshead	QEG	291	79.7	52.9	90.9	44.0	75.7	97.2	22.9	50.0	91.7
Royal Victoria Hospital, Newcastle	RVN	428	76.6	86.6	97.3	6.1	80.3	96.2	41.5	89.7	80.0
James Cook University Hospital, Middlesbrough	SCM	470	76.0	73.9	1.5	21.5	8.8	97.7	16.1	79.9	76.9
South Tyneside District Hospital, South Shields	STD	206	76.7	18.4	87.0	78.6	66.7	95.3	28.2	76.3	85.7
Sunderland Royal Hospital	SUN	391	81.3	24.0	52.1	68.5	35.0	95.9	33.3	96.3	79.2
North East (Average)		3,546	78.0	45.3	56.5	48.2	39.9	93.8	22.7	81.4	85.7
Overall (Average)		64,102	72.1	48.1	53.9	42.2	26.4	82.3	26.1	81.7	77.6

## North West

	Hospital code	Number of cases submitted	Surgery on day of, or day after, admission (%)	General anaesthetic (%)	General anaesthetic and nerve block (%)	Spinal anaesthetic (%)	Spinal anaesthetic and nerve block (%)	Proportion of arthroplasties which are cemented (%)	Eligible displaced intracapsular fractures treated with THR (%)	Intertrochanteric fractures treated with SHS (%)	Subtrochanteric fractures treated with an IM nail (%)
Royal Albert Edward Infirmary, Wigan	AEI	320	75.9	63.1	11.9	33.5	5.7	92.6	19.0	87.1	83.3
Royal Blackburn Hospital	BLA	439	68.3	5.5	45.5	82.7	47.4	95.3	21.4	89.7	60.9
Royal Bolton Hospital	BOL	334	70.4	45.2	8.0	46.1	9.1	99.2	1.6	79.6	87.2
Cumberland Infirmary, Carlisle	CMI	457	75.1	54.9	32.2	40.5	4.4	97.4	14.8	94.6	78.9
Countess of Chester Hospital	COC	306	80.7	22.5	10.2	64.4	3.1	98.6	29.5	84.4	85.7
University Hospital Aintree	FAZ	381	87.1	85.1	94.1	10.8	34.3	87.7	41.0	87.5	90.9
Furness General Hospital, Barrow-in-Furness	FGH	121	76.9	44.6	48.2	47.1	21.0	35.6	21.4	74.3	9.1
Leighton Hospital, Crewe	LGH	299	65.2	79.2	78.5	13.4	29.9	79.2	27.3	74.5	85.7
Macclesfield General Hospital	MAC	232	80.2	26.7	83.9	69.8	16.0	97.5	21.4	69.4	61.5
Manchester Royal Infirmary	MRI	193	73.1	39.4	59.1	50.3	34.0	94.9	19.4	80.6	80.0
North Manchester General Hospital	NMG	333	58.6	25.2	53.6	69.3	58.9	51.1	48.8	83.9	88.5
Noble's Hospital, Isle of Man	NOB	73	86.3	69.8	43.1	5.5	25.5	85.2	13.3	56.0	11.1
Royal Oldham Hospital	OHM	361	66.2	46.8	33.1	47.6	24.4	90.7	28.2	73.3	82.4
Royal Lancaster Infirmary	RLI	271	60.5	66.8	55.8	17.4	21.3	56.4	36.0	89.8	25.0
Royal Liverpool University Hospital	RLU	374	78.1	90.6	84.1	6.4	4.7	90.1	42.1	59.7	97.1
Royal Preston Hospital	RPH	449	73.3	17.6	21.6	77.5	2.6	99.5	47.3	97.8	95.2
Stepping Hill Hospital, Stockport	SHH	389	80.9	59.1	49.1	31.9	30.7	89.6	32.4	94.1	54.2
Salford Royal Hospital	SLF	294	74.5	43.2	60.0	50.6	67.2	94.3	36.4	69.1	65.0
Southport District General Hospital	SOU	288	69.4	25.0	69.6	46.2	14.3	52.0	40.4	85.5	39.0
Tameside General Hospital, Manchester	TGA	240	49.2	2.1	38.1	92.5	0.9	100.0	2.7	71.7	77.8
Victoria Hospital, Blackpool	VIC	408	59.3	5.4	13.0	87.2	0.2	100.0	0.0	93.5	100.0
Warrington Hospital	WDG	304	76.0	75.0	31.2	17.8	12.9	95.9	26.7	84.8	53.6
Whiston Hospital, Prescot	WHI	401	71.8	74.6	79.6	18.5	48.6	71.1	33.3	81.4	88.9
Arrove Park Hospital, Wirral	WIR	466	88.0	63.3	92.6	29.4	15.3	99.2	35.9	85.6	93.8
Wythenshawe Hospital, Manchester	WYT	339	77.6	64.3	45.4	28.3	20.8	93.2	19.0	84.0	68.8
North West (Average)		8,072	72.9	47.8	49.7	43.4	22.1	85.9	26.4	81.3	70.5
Overall (Average)		64,102	72.1	48.1	53.9	42.2	26.4	82.3	26.1	81.7	77.6

## Northern Ireland

	Hospital code	Number of cases submitted	Surgery on day of, or day after, admission (%)	General anaesthetic (%)	General anaesthetic and nerve block (%)	Spinal anaesthetic (%)	Spinal anaesthetic and nerve block (%)	Proportion of arthroplasties which are cemented (%)	Eligible displaced intracapsular fractures treated with THR (%)	Intertrochanteric fractures treated with SHS (%)	Subtrochanteric fractures treated with an IM nail (%)
Altnagelvin Area Hospital	ALT	363	31.4	14.0	15.7	66.1	0.0	96.2	25.0	63.4	70.8
Craigavon Hospital, Portadown	CRG	258	26.4	37.2	66.7	45.0	0.0	94.3	24.2	54.5	92.3
Ulster Hospital, Belfast	NUH	357	23.1	75.6	87.0	10.4	0.0	98.6	35.5	90.1	86.4
Royal Victoria Hospital, Belfast	RVB	887	14.7	30.7	84.0	4.5	0.0	96.8	25.2	62.5	66.7
Northern Ireland (Average)		1,865	23.9	39.4	63.4	31.5	0.0	96.5	27.5	67.6	79.1
Overall (Average)		64,102	72.1	48.1	53.9	42.2	26.4	82.3	26.1	81.7	77.6

## South Central

	Hospital code	Number of cases submitted	Surgery on day of, or day after, admission (%)	General anaesthetic (%)	General anaesthetic and nerve block (%)	Spinal anaesthetic (%)	Spinal anaesthetic and nerve block (%)	Proportion of arthroplasties which are cemented (%)	Eligible displaced intracapsular fractures treated with THR (%)	Intertrochanteric fractures treated with SHS (%)	Subtrochanteric fractures treated with an IM nail (%)
Horton Hospital, Banbury	HOR	183	91.3	76.5	31.4	21.8	2.3	98.8	25.0	97.0	0.0
St Mary's Hospital, Isle of Wight	IOW	229	65.5	24.0	41.7	65.5	19.4	97.4	21.7	100.0	75.0
Milton Keynes General Hospital	MKH	230	77.8	68.7	69.6	24.8	24.6	100.0	36.4	81.5	92.0
Basingstoke and N Hants Hospital	NHH	286	81.1	33.2	45.2	63.3	32.1	82.0	52.5	82.4	85.0
Queen Alexandra Hospital, Portsmouth	QAP	737	85.6	39.5	68.4	56.0	46.1	33.7	26.7	98.5	88.2
John Radcliffe Hospital, Oxford	RAD	531	67.2	48.9	61.1	42.4	5.4	99.1	39.6	91.2	76.0
Royal Berkshire Hospital, Reading	RBE	422	76.8	90.9	37.0	5.9	20.3	1.5	27.4	73.9	73.3
Royal Hampshire County Hospital, Winchester	RHC	281	82.2	49.8	59.2	42.3	6.6	69.0	15.8	97.7	100.0
Southampton General Hospital	SGH	605	73.7	40.9	30.8	39.3	7.6	95.8	59.7	20.1	100.0
Stoke Mandeville Hospital, Aylesbury	SMV	370	71.4	65.7	96.7	27.0	48.9	84.5	44.9	71.8	100.0
Wexham Park Hospital, Slough	WEX	365	77.8	45.5	19.3	43.1	15.3	54.5	41.5	96.6	83.9
South Central (Average)		4,239	77.3	53.1	50.9	39.2	20.8	74.2	35.6	82.8	79.4
Overall (Average)		64,102	72.1	48.1	53.9	42.2	26.4	82.3	26.1	81.7	77.6

## South East

	Hospital code	Number of cases submitted	Surgery on day of, or day after, admission (%)	General anaesthetic (%)	General anaesthetic and nerve block (%)	Spinal anaesthetic (%)	Spinal anaesthetic and nerve block (%)	Proportion of arthroplasties which are cemented (%)	Eligible displaced intracapsular fractures treated with THR (%)	Intertrochanteric fractures treated with SHS (%)	Subtrochanteric fractures treated with an IM nail (%)
Conquest Hospital, Hastings	CGH	464	85.6	42.9	83.4	38.2	9.7	95.2	25.9	93.0	38.5
Eastbourne Hospital	DGE	128	95.3	29.8	76.2	64.8	22.8	86.1	43.5	97.7	66.7
Darent Valley Hospital, Dartford	DVH	362	82.3	29.8	18.5	65.5	3.8	92.8	21.3	88.2	34.6
East Surrey Hospital, Redhill	ESU	500	81.6	76.8	60.2	17.6	10.2	89.3	13.5	88.0	62.5
Frimley Park Hospital, Camberley	FRM	422	82.0	17.3	30.1	77.2	7.6	88.1	29.2	76.8	77.8
Medway Maritime Hospital	MDW	343	76.4	22.5	83.1	70.3	14.5	69.1	17.5	94.7	52.0
Queen Elizabeth the Queen Mother Hospital, Margate	QEQ	480	65.2	49.2	86.4	42.9	5.8	75.5	11.1	78.3	50.0
Royal Sussex County Hospital, Brighton	RSC	530	87.9	14.5	57.2	80.7	31.1	96.2	41.7	52.8	100.0
Royal Surrey County Hospital, Guildford	RSU	296	86.5	40.9	84.4	45.2	10.4	93.2	27.0	88.8	88.9
St Peter's Hospital, Chertsey	SPH	412	83.5	73.7	65.8	15.5	7.7	11.7	31.1	43.8	100.0
St Richard's Hospital, Chichester	STR	393	77.6	33.0	41.5	60.5	8.8	90.8	48.8	85.2	91.7
Maidstone and Tunbridge Wells Hospital	TUN	498	80.5	13.6	45.6	81.7	3.2	95.6	17.7	88.5	75.0
William Harvey Hospital, Ashford	WHH	487	74.5	18.8	50.0	72.0	11.9	62.1	16.8	94.2	93.1
Worthing and Southlands Hospital	WRG	470	78.1	57.6	32.5	38.9	9.3	89.0	29.3	97.5	73.1
South East (Average)		5,785	81.2	37.2	58.2	55.1	11.2	81.1	26.7	83.4	71.7
Overall (Average)		64,102	72.1	48.1	53.9	42.2	26.4	82.3	26.1	81.7	77.6

## South West

	Hospital code	Number of cases submitted	Surgery on day of, or day after, admission (%)	General anaesthetic (%)	General anaesthetic and nerve block (%)	Spinal anaesthetic (%)	Spinal anaesthetic and nerve block (%)	Proportion of arthroplasties which are cemented (%)	Eligible displaced intracapsular fractures treated with THR (%)	Intertrochanteric fractures treated with SHS (%)	Subtrochanteric fractures treated with an IM nail (%)
Royal United Hospital, Bath	BAT	535	71.0	32.3	50.8	63.2	32.6	89.4	26.0	93.4	69.7
Bristol Royal Infirmary	BRI	306	73.5	85.0	88.5	8.1	19.8	100.0	49.0	68.0	92.9
Cheltenham General Hospital	CHG	225	55.6	62.2	62.2	29.3	1.4	99.0	37.5	90.7	50.0
Southmead Hospital, Bristol	FRY	440	85.0	88.2	93.5	7.1	22.5	99.6	31.6	77.2	85.0
Gloucestershire Royal Hospital, Gloucester	GLO	417	80.6	38.1	15.2	60.1	2.3	96.9	34.8	40.5	50.0
Musgrove Park Hospital, Taunton	MPH	426	80.8	69.5	15.8	19.4	11.9	87.8	47.4	97.7	87.9
North Devon District Hospital, Barnstaple	NDD	261	75.1	62.0	79.0	15.0	46.0	84.6	14.6	97.0	92.9
Poole General Hospital	PGH	963	79.6	90.4	15.0	6.8	29.4	87.9	12.3	89.0	97.1
Derriford Hospital, Plymouth	PLY	484	76.4	45.3	87.2	37.1	12.1	92.5	35.5	89.9	70.4
The Great Western Hospital, Swindon	PMS	418	83.5	26.3	43.7	67.2	34.5	98.5	37.0	90.6	96.8
The Royal Cornwall Hospital, Triliske	RCH	606	70.0	48.8	86.9	37.2	33.3	90.8	32.8	84.8	72.0
Royal Devon & Exeter Hospital, Exeter	RDE	606	74.1	46.5	83.0	29.5	12.9	98.7	36.4	85.7	89.8
Salisbury District Hospital	SAL	274	82.8	64.6	85.3	26.6	23.3	99.3	19.4	80.9	55.6
Torbay District General Hospital	TOR	471	66.5	20.6	57.8	61.8	19.6	98.2	29.9	74.9	94.1
Dorset County Hospital, Dorchester	WDH	303	88.1	54.2	43.9	39.3	10.2	87.4	18.5	95.3	66.7
Weston General Hospital, Weston-super-Mare	WGH	304	66.4	50.0	26.4	45.4	15.2	95.9	25.0	92.2	84.6
Yeovil District Hospital	YEO	264	73.5	60.6	88.8	31.5	2.5	93.6	22.6	90.6	100.0
South West (Average)		7,303	75.4	55.6	60.2	34.4	19.4	94.1	30.0	84.6	79.7
Overall (Average)		64,102	72.1	48.1	53.9	42.2	26.4	82.3	26.1	81.7	77.6

## Wales

	Hospital code	Number of cases submitted	Surgery on day of, or day after, admission (%)	General anaesthetic (%)	General anaesthetic and nerve block (%)	Spinal anaesthetic (%)	Spinal anaesthetic and nerve block (%)	Proportion of arthroplasties which are cemented (%)	Eligible displaced intracapsular fractures treated with THR (%)	Intertrochanteric fractures treated with SHS (%)	Subtrochanteric fractures treated with an IM nail (%)
Bronglais Hospital, Aberystwyth	BRG	104	51.0	41.3	30.3	48.1	26.0	96.1	42.1	83.7	100.0
Glan Clwyd Hospital, Rhyl	CLW	304	57.6	45.0	86.9	41.2	43.2	68.2	2.2	80.9	71.4
Royal Gwent Hospital, Newport	GWE	298	61.3	32.5	61.8	61.1	51.1	90.0	15.6	73.3	71.4
Gwynedd Ysbyty, Bangor	GWY	318	67.6	72.0	11.8	22.6	11.1	72.0	36.8	78.3	92.9
Morriston Hospital, Swansea	MOR	527	61.0	84.8	70.3	10.6	48.1	83.5	33.3	78.7	87.0
Nevill Hall Hospital, Abergavenny	NEV	288	79.9	52.1	53.9	43.4	52.1	62.0	18.2	89.5	43.8
Prince Charles Hospital, Merthyr Tydfil	PCH	214	63.6	32.7	55.7	56.6	30.6	24.3	0.0	74.5	94.4
Princess Of Wales Hospital, Bridgend	POW	227	46.3	86.3	93.4	9.2	95.7	97.1	0.0	93.5	60.0
Royal Glamorgan Hospital, Llantrisant	RGH	224	55.4	65.6	67.4	29.4	30.3	64.6	30.4	82.8	88.2
University Hospital of Wales, Cardiff	UHW	453	60.0	49.5	47.3	45.9	44.7	95.6	36.8	74.8	90.9
Maelor Hospital, Wrexham	WRX	216	69.0	51.0	3.7	41.7	3.4	80.9	19.6	88.6	83.3
West Wales General Hospital, Carmarthen	WWG	253	62.8	14.2	38.7	81.0	6.8	67.0	30.0	90.0	80.0
Withybush Hospital, Haverfordwest	WYB	206	60.2	51.0	61.0	43.2	28.0	87.4	18.2	92.6	33.3
Wales (Average)		3,632	61.2	52.2	52.5	41.1	36.2	76.1	21.8	83.2	76.7
Overall (Average)		64,102	72.1	48.1	53.9	42.2	26.4	82.3	26.1	81.7	77.6

## West Midlands

	Hospital code	Number of cases submitted	Surgery on day of, or day after, admission (%)	General anaesthetic (%)	General anaesthetic and nerve block (%)	Spinal anaesthetic (%)	Spinal anaesthetic and nerve block (%)	Proportion of arthroplasties which are cemented (%)	Eligible displaced intracapsular fractures treated with THR (%)	Intertrochanteric fractures treated with SHS (%)	Subtrochanteric fractures treated with an IM nail (%)
Queens Hospital, Burton upon Trent	BRT	328	77.4	62.8	67.5	11.6	71.1	98.6	13.7	85.8	37.5
Birmingham Heartlands Hospital	EBH	382	62.2	81.2	13.9	18.8	41.7	45.7	16.7	78.6	80.0
Good Hope General Hospital	GHS	304	68.8	76.0	22.9	23.0	30.0	35.3	11.4	94.8	53.3
County Hospital Hereford	HCH	290	74.1	3.4	20.0	80.7	18.4	100.0	21.5	92.7	58.8
New Cross Hospital	NCR	375	83.5	75.2	41.8	20.0	8.0	30.4	24.5	86.9	94.7
George Eliot Hospital	NUN	275	68.4	30.5	70.2	68.7	20.6	99.4	4.7	97.7	75.0
Queen Elizabeth Hospital, Edgbaston	QEB	433	65.6	66.3	48.8	24.9	18.5	98.9	39.6	60.2	69.6
The Alexandra Hospital	RED	291	58.4	50.9	41.9	43.0	7.2	43.5	41.2	90.0	78.6
Royal Shrewsbury Hospital	RSS	369	54.5	55.3	14.2	30.4	0.9	44.9	21.3	74.0	57.1
Russells Hall Hospital	RUS	487	76.6	22.6	34.5	72.5	12.7	86.9	8.2	80.8	61.5
Sandwell District Hospital	SAN	348	69.8	13.5	61.7	80.7	47.0	76.3	34.9	72.3	64.3
County Hospital, Stafford	SDG	169	79.9	50.3	17.6	26.0	22.7	94.0	37.1	96.2	66.7
Royal Stoke University Hospital	STO	602	74.1	75.2	71.3	20.8	9.6	56.1	46.3	98.2	58.6
Princess Royal Hospital, Telford	TLF	137	59.9	65.0	18.0	19.7	11.1	41.9	33.3	97.0	22.2
University Hospital Coventry	UHC	518	70.3	55.8	91.3	36.9	84.3	98.2	38.7	94.0	77.6
Warwick Hospital	WAR	326	78.8	55.2	16.7	32.5	18.9	0.0	27.5	65.6	71.4
Manor Hospital	WMH	337	56.4	58.2	77.6	39.2	19.7	86.4	23.7	94.6	80.0
Worcestershire Royal Hospital	WRC	458	60.5	31.0	78.2	57.2	18.7	77.3	15.6	93.1	50.0
West Midlands (Average)		6,429	68.8	51.6	44.9	39.3	25.6	67.4	25.6	86.3	64.3
Overall (Average)		64,102	72.1	48.1	53.9	42.2	26.4	82.3	26.1	81.7	77.6

## Yorks and the Humber

	Hospital code	Number of cases submitted	Surgery on day of, or day after, admission (%)	General anaesthetic (%)	General anaesthetic and nerve block (%)	Spinal anaesthetic (%)	Spinal anaesthetic and nerve block (%)	Proportion of arthroplasties which are cemented (%)	Eligible displaced intracapsular fractures treated with THR (%)	Intertrochanteric fractures treated with SHS (%)	Subtrochanteric fractures treated with an IM nail (%)
Airedale General Hospital	AIR	272	75.0	40.4	56.4	54.8	22.8	95.9	43.9	78.0	94.1
Barnsley District General Hospital	BAR	251	78.5	43.4	47.7	52.2	44.3	83.0	22.9	85.9	61.5
Bradford Royal Infirmary	BRD	325	82.8	32.3	76.2	61.8	61.2	99.1	63.9	91.3	92.7
Bassetlaw District General Hospital	BSL	156	79.5	19.8	0.0	75.0	0.0	100.0	14.3	90.5	66.7
Doncaster Royal Infirmary	DID	431	63.1	45.8	4.1	49.4	1.8	88.0	7.5	93.4	28.6
Diana, Princess of Wales Hospital	GGH	269	69.9	67.6	63.8	28.6	50.7	72.8	40.7	85.7	91.7
Harrogate District Hospital	HAR	247	83.0	34.4	73.0	57.4	20.4	87.2	46.8	91.3	94.4
Hull Royal Infirmary	HRI	566	49.6	50.2	25.7	37.9	36.9	84.9	34.3	68.8	60.0
Huddersfield Royal Infirmary	HUD	480	58.5	23.8	48.3	69.3	25.8	91.2	25.3	63.5	100.0
Leeds General Infirmary	LGI	702	67.7	38.9	57.8	37.5	38.4	98.9	22.3	74.0	70.8
Northern General Hospital	NGS	638	79.2	17.6	75.0	78.7	61.0	80.2	51.4	92.8	76.0
Pinderfields General Hospital	PIN	559	61.2	33.7	82.8	63.0	64.1	66.5	31.6	47.2	94.5
Rotherham General Hospital	ROT	296	78.7	16.9	63.9	78.0	12.6	85.0	34.0	63.2	100.0
Scarborough General Hospital	SCA	297	74.7	46.5	39.1	48.5	13.8	84.7	48.4	79.6	83.3
Scunthorpe General Hospital	SCU	210	58.1	22.4	36.2	75.7	20.7	72.5	3.1	50.7	100.0
York District Hospital	YDH	333	76.6	45.6	23.7	47.1	14.6	67.7	16.7	84.5	87.5
Yorks & the Humber (Average)		6,032	71.0	36.2	48.4	57.2	30.6	84.9	31.7	77.5	81.4
Overall (Average)		64,102	72.1	48.1	53.9	42.2	26.4	82.3	26.1	81.7	77.6

## Outcomes

Figures for LOS in individual hospitals are reported (and colour coded) and should be reviewed alongside the discussion in the previous section on LOS and super-spell (pages 10–15), and figures for success in return home alongside the chart on this topic (Fig 2).

These LOS figures are all slightly improved from last year. For people admitted from their own home, success in returning them home within 30 days has improved from 52.9% in 2013 to 53.7% in 2014.

Data on reoperation rates and on pressure ulcer incidence are given in the table (from page 54), but these are not colour coded. We are concerned that some units are still reporting no pressure ulcers (4/180: 2%) or no reoperations (47/180: 26%), suggesting that they have no mechanism to monitor these patient safety concerns. We felt it was inappropriate to give a 'green light' to hospitals reporting no events, while 'red flagging' other hospitals where the reporting of high rates of reoperation or pressure ulcers may reflect the development of reliable surveillance for these patient safety questions.

### Good practice in pressure ulcer surveillance

When providing data relating to pressure ulcer incidence, there is a risk of inaccuracy due to difficulties in pressure ulcer classification by clinical staff at ward level. Tissue damage may be inappropriately identified as a pressure ulcer when other aetiologies, such as moisture-associated skin damage or trauma, may be the causative factor of the wound.

As a point of best practice, it is recommended that any identified pressure ulcer is subsequently validated internally by a member of a specialist team with responsibility for pressure ulcer surveillance (eg tissue viability, pressure ulcer prevention). This will help to ensure that the data submitted to the database are an accurate representation of the incidence of pressure ulcers in this patient group.

(Mike Ellis, tissue viability clinical nurse specialist, Royal Devon and Exeter NHS Foundation Trust)

We have introduced our live patient safety run chart (Fig 11) to support all hospitals to develop effective surveillance. For pressure ulcers, we have included a column giving the proportion of cases in which each hospital records 'unknown', a measure of how much that unit needs to improve their surveillance of pressure ulcer incidence. One hospital (TLF) was missing pressure ulcer data for all patients. Two other hospitals (HCH and LON) were missing pressure ulcer data for over 90% of patients.

Our new approach, prospectively coding whether a hip fracture was sustained as an inpatient, indicates that 4.3% of all hip fractures occurred in a hospital. This is a smaller figure than the 4.9% suggested by our previous approach to recording this data, but it remains a huge concern. This figure still represents 2,761 inpatient hip fractures: seven such events each day across England, Wales, and Northern Ireland.

Benchmarking comparisons between hospitals are difficult, as different trauma units have very differing hospitals in their catchment area. For this reason we have developed a run chart that allows individual hospitals to benchmark their performance against their own previous figures, and to monitor the effectiveness of local initiatives to avoid inpatient falls.



## Falls prevention in Peterborough and Stamford Hospitals NHS Foundation Trust

The trust's falls prevention campaign gathered pace with the move to a new-build hospital with 57% single rooms. Following an immediate rise in the number of falls and those who fell more than once, the early campaign, supported by the medical and nurse directors, saw the introduction of a process called 'intentional rounding'. This process uses local data to drive improvements, ensuring the provision of appropriate mobility aids and an ambitious training programme.

The annual falls strategy is driven by a clinician-led multidisciplinary steering group, which incorporates the falls scrutiny panel where all falls resulting in serious injury are reviewed so that learning can be shared. Learning has included improved root cause analysis and feedback to frontline staff. A falls report with at-a-glance charts and key messages is disseminated monthly and regular updates are provided to the trust board.

More recent workstreams included the use of motion sensor kits, updating the falls risk assessment tool, promoting individualised falls prevention plans, provision of footwear and post falls management. The focus at the end of last year was on providing cohort nursing in a bay and improved one-to-one care that encompasses all the needs of the patient. The therapy team implemented an additional detailed falls risk assessment for all patients who are admitted following a fall or have an inpatient fall. Outcomes showed a reduction in the overall number of falls and recurrent falls by 8.5% and 11% respectively in 2014/15.

The current initiative is to provide a lime-green wristband for all patients who have fallen before, either at home or in hospital, which states: 'I have fallen before. Please help me stay safe.' This will support immediate recognition of those patients most at risk of falling. The campaigns continue, with dementia-friendly wards and wellbeing apprentices next on the agenda.

## East Midlands

	Hospital code	Number of cases submitted	Case ascertainment (%)	Acute LOS (days)	Overall hospital LOS (days)	Return to original residence within 30 days (%)	Reoperation within 30 days (%)	Developed a pressure ulcer after presenting with hip fracture (%)	Unknown pressure ulcers (%)	Hip fractures which were sustained as an inpatient (%)
Chesterfield Royal Hospital	CHE	375	85.6	19.8	20.2	51.3	0.0	3.2	0.3	4.0
Derbyshire Royal Infirmary, Derby	DER	572	99.5	11.8	16.6	45.4	1.7	1.9	2.6	9.4
Grantham and District Hospital	GRA	58	36.0	14.5	14.5	64.6	0.0	0.0	20.7	0.0
Kettering General Hospital	KGH	370	97.4	20.9	22.4	46.2	0.3	5.1	0.3	6.2
King's Mill Hospital, Sutton in Ashfield	KMH	396	112.2	17.5	26.4	36.6	0.0	1.4	0.0	5.6
Leicester Royal Infirmary	LER	775	95.7	12.4	13.7	41.4	0.0	3.0	9.0	9.3
Lincoln County Hospital	LIN	355	102.3	18.9	19.1	51.7	1.5	4.9	0.0	5.4
Northampton General Hospital	NTH	365	100.0	18.8	21.4	54.0	3.4	8.0	8.5	5.8
Pilgrim Hospital, Boston	PIL	342	97.4	13.7	13.8	75.2	1.3	1.2	0.0	7.0
University Hospital Nottingham	UHN	800	113.5	16.7	18.1	49.8	0.8	1.5	0.1	0.3
East Midlands (Average)		4,408	94.0	16.5	18.6	51.6	0.9	3.0	4.2	5.3
Overall (Average)		64,102	93.5	15.7	20.3	53.7	1.1	2.8	3.3	4.3

## East of England

	Hospital code	Number of cases submitted	Case ascertainment (%)	Acute LOS (days)	Overall hospital LOS (days)	Return to original residence within 30 days (%)	Reoperation within 30 days (%)	Developed a pressure ulcer after presenting with hip fracture (%)	Unknown pressure ulcers (%)	Hip fractures which were sustained as an inpatient (%)
Addenbrooke's Hospital, Cambridge	ADD	376	74.6	14.4	14.5	59.9	0.3	3.9	0.0	1.3
Basildon and Thurrock University Hospital	BAS	403	94.8	16.7	17.3	51.5	2.1	0.5	0.0	4.5
Bedford Hospital	BED	164	63.1	16.1	16.1	60.3	0.0	1.2	0.0	2.4
Broomfield Hospital, Chelmsford	BFH	482	101.3	5.9	16.0	80.2	0.0	2.0	0.0	5.4
Colchester General Hospital	COL	526	90.7	14.6	16.0	59.1	0.4	4.2	0.0	3.0
East and North Herts Hospital	ENH	460	109.5	16.3	16.5	48.9	2.1	1.2	0.0	1.3
Hinchingbrooke Hospital	HIN	192	85.0	23.2	24.2	58.2	0.6	2.2	0.0	3.1
Ipswich Hospital	IPS	456	93.1	15.5	15.9	65.4	0.5	0.5	0.0	3.5
James Paget University Hospital, Great Yarmouth	JPH	410	114.2	17.8	21.0	52.2	1.4	4.6	0.1	2.2
Luton and Dunstable Hospital	LDH	309	91.4	13.5	13.8	54.9	1.1	0.0	0.0	3.6
Norfolk and Norwich University Hospital	NOR	795	95.6	15.1	15.1	52.2	0.0	2.0	0.1	2.3
The Princess Alexandra Hospital, Harlow	PAH	354	97.0	18.3	18.7	56.5	2.4	3.3	0.0	3.4
Peterborough City Hospital	PET	436	96.0	12.1	12.8	67.2	0.0	0.5	0.0	2.8
Queen Elizabeth Hospital, King's Lynn	QKL	372	95.9	11.7	12.2	45.9	0.3	1.1	0.0	1.9
Southend University Hospital	SEH	323	62.0	12.4	12.5	57.5	0.3	7.3	0.3	2.5
Watford General Hospital	WAT	433	91.7	13.2	13.8	37.8	1.2	1.3	0.0	2.3
West Suffolk Hospital, Bury St Edmunds	WSH	326	108.7	11.4	15.9	77.3	0.7	2.7	1.8	5.2
East of England (Average)		6,817	92.0	14.6	16.0	57.9	0.8	2.3	0.1	3.0
Overall (Average)		64,102	93.5	15.7	20.3	53.7	1.1	2.8	3.3	4.3

## London

	Hospital code	Number of cases submitted	Case ascertainment (%)	Acute LOS (days)	Overall hospital LOS (days)	Return to original residence within 30 days (%)	Reoperation within 30 days (%)	Developed a pressure ulcer after presenting with hip fracture (%)	Unknown pressure ulcers (%)	Hip fractures which were sustained as an inpatient (%)
Barnet Hospital	BNT	381	122.9	14.2	24.9	63.8	2.3	1.4	0.0	2.1
Princess Royal University Hospital, Bromley	BRO	383	171.0	21.5	21.8	52.1	0.0	2.7	0.0	8.4
Ealing Hospital	EAL	159	100.0	26.1	27.3	40.9	1.4	2.8	0.0	2.5
St George's Hospital	GEO	245	80.3	9.2	21.2	47.7	0.0	1.8	2.0	3.7
Queen Elizabeth Hospital, Woolwich	GWH	270	150.0	21.0	23.5	74.4	0.0	0.8	0.0	3.0
Hillingdon Hospital	HIL	216	106.4	14.9	21.9	67.6	1.5	9.6	0.0	3.2
Homerton Hospital	HOM	69	73.4	22.1	24.0	50.8	0.0	3.1	2.2	4.3
King's College Hospital	KCH	146	74.5	17.6	27.2	63.2	1.4	0.8	0.0	4.1
Kingston Hospital	KTH	296	76.7	14.6	14.7	54.5	0.0	0.4	0.0	4.4
University Hospital, Lewisham	LEW	188	98.9	22.5	24.3	47.1	0.6	2.3	1.1	2.1
The Royal London Hospital	LON	154	83.7	16.3	26.4	67.2	0.7	0.0	93.4	9.1
Croydon University Hospital	MAY	263	86.2	20.7	21.0	56.8	1.2	16.1	2.7	4.6
North Middlesex University Hospital	NMH	252	165.8	18.2	18.7	54.2	0.9	2.8	0.4	4.8
Northwick Park Hospital	NPH	283	81.6	9.5	23.0	47.4	0.0	1.9	10.6	6.0
Newham General Hospital	NWG	119	102.6	13.7	17.8	60.7	1.9	3.6	0.0	3.4
Queen's Hospital, Romford	OLD	585	95.1	10.0	26.8	64.6	0.4	2.7	0.2	2.9
Royal Free Hospital	RFH	169	88.9	18.5	18.7	37.6	0.0	5.1	0.6	1.8
St Helier Hospital, Carshalton	SHC	431	91.7	18.7	20.2	51.7	1.0	3.2	0.2	5.8
St Thomas' Hospital	STH	166	76.5	13.4	14.7	72.5	0.0	2.6	0.0	7.9
St Mary's Hospital, Paddington	STM	231	63.5	9.4	18.3	59.3	0.5	1.9	0.0	6.9
University College Hospital	UCL	139	96.5	17.0	18.7	57.6	0.8	1.5	0.0	2.9
Chelsea and Westminster Hospital	WES	187	94.4	22.2	23.7	47.2	0.6	5.3	0.0	4.3
Whipps Cross University Hospital	WHC	317	98.8	21.2	25.7	32.4	1.4	5.5	0.0	6.9
Whittington Hospital	WHT	115	111.7	16.2	16.2	53.0	1.8	1.9	0.0	3.5
West Middlesex University Hospital, Isleworth	WMU	210	94.6	17.1	18.0	84.5	0.0	1.5	0.0	0.5
London (Average)		5,974	99.4	17.0	21.5	56.4	0.7	3.3	4.5	4.4
Overall (Average)		64,102	93.5	15.7	20.3	53.7	1.1	2.8	3.3	4.3

## North East

	Hospital code	Number of cases submitted	Case ascertainment (%)	Acute LOS (days)	Overall hospital LOS (days)	Return to original residence within 30 days (%)	Reoperation within 30 days (%)	Developed a pressure ulcer after presenting with hip fracture (%)	Unknown pressure ulcers (%)	Hip fractures which were sustained as an inpatient (%)
Wansbeck Hospital	ASH	362	111.0	9.7	27.7	59.8	2.2	2.8	0.0	6.1
Darlington Memorial Hospital	DAR	322	145.0	11.7	22.1	46.6	1.7	2.6	1.2	4.3
University Hospital Of North Durham	DRY	360	137.9	12.2	24.1	52.8	1.8	1.2	0.3	4.7
University Hospital of North Tees, Stockton-on-Tees	NTG	410	101.5	17.0	21.5	60.6	1.8	6.5	10.1	1.5
North Tyneside General Hospital, North Shields	NTY	306	98.7	11.7	22.2	46.0	2.2	3.6	0.0	8.5
Queen Elizabeth Hospital, Gateshead	QEG	291	89.5	17.5	18.9	62.3	0.7	10.8	0.0	4.8
Royal Victoria Hospital, Newcastle	RVN	428	98.8	11.5	26.0	53.6	2.2	6.9	0.0	8.9
James Cook University Hospital, Middlesbrough	SCM	470	94.8	14.2	14.7	38.6	0.2	4.2	0.0	4.0
South Tyneside District Hospital, South Shields	STD	206	87.7	14.3	27.6	47.5	1.1	5.9	0.5	7.3
Sunderland Royal Hospital	SUN	391	95.4	20.7	21.8	59.2	0.8	4.5	0.0	7.9
North East (Average)		3,546	106.0	14.1	22.7	52.7	1.5	4.9	1.2	5.8
Overall (Average)		64,102	93.5	15.7	20.3	53.7	1.1	2.8	3.3	4.3

## North West

	Hospital code	Number of cases submitted	Case ascertainment (%)	Acute LOS (days)	Overall hospital LOS (days)	Return to original residence within 30 days (%)	Reoperation within 30 days (%)	Developed a pressure ulcer after presenting with hip fracture (%)	Unknown pressure ulcers (%)	Hip fractures which were sustained as an inpatient (%)
Royal Albert Edward Infirmary, Wigan	AEI	320	95.8	15.5	15.8	51.7	2.4	0.3	0.9	5.3
Royal Blackburn Hospital	BLA	439	90.9	14.9	22.1	53.6	0.8	3.6	0.0	6.2
Royal Bolton Hospital	BOL	334	90.8	16.1	16.2	64.7	1.7	1.0	0.0	6.3
Cumberland Infirmary, Carlisle	CMI	457	98.1	11.7	15.1	52.8	1.7	2.3	0.0	3.1
Countess of Chester Hospital	COC	306	86.0	16.3	28.1	58.9	1.5	3.7	0.0	3.9
University Hospital Aintree	FAZ	381	94.8	15.1	21.2	53.0	0.0	1.4	0.5	2.1
Furness General Hospital, Barrow-in-Furness	FGH	121	71.2	25.6	26.1	50.0	0.0	11.5	0.0	2.5
Leighton Hospital, Crewe	LGH	299	85.2	16.1	18.7	42.2	0.0	5.1	0.7	3.3
Macclesfield General Hospital	MAC	232	85.0	18.0	28.1	39.3	0.5	2.3	0.4	6.9
Manchester Royal Infirmary	MRI	193	105.5	16.4	34.3	48.7	1.3	2.4	0.5	10.4
North Manchester General Hospital	NMG	333	84.7	14.9	20.2	52.1	1.9	3.6	0.3	5.1
Noble's Hospital, Isle of Man	NOB	73	72.3	13.3	47.9	41.5	6.9	4.4	0.0	5.5
Royal Oldham Hospital	OHM	361	90.7	15.3	19.0	55.2	2.4	2.1	0.3	0.8
Royal Lancaster Infirmary	RLI	271	83.4	11.6	25.4	48.5	0.0	1.7	0.0	2.6
Royal Liverpool University Hospital	RLU	374	90.8	14.9	18.3	63.1	2.4	0.6	0.0	5.1
Royal Preston Hospital	RPH	449	106.9	17.9	18.7	49.8	1.4	4.3	0.0	5.6
Stepping Hill Hospital, Stockport	SHH	389	100.0	22.2	23.2	39.5	0.0	3.9	0.0	6.4
Salford Royal Hospital	SLF	294	104.6	15.2	16.5	43.3	1.5	3.0	0.0	8.8
Southport District General Hospital	SOU	288	83.5	16.5	18.2	51.9	1.6	0.7	0.0	2.8
Tameside General Hospital, Manchester	TGA	240	77.9	17.5	17.6	21.2	0.0	0.4	0.0	5.0
Victoria Hospital, Blackpool	VIC	408	82.4	17.6	26.5	53.7	0.0	1.6	0.0	0.0
Warrington Hospital	WDG	304	75.2	11.7	22.9	39.4	0.7	4.3	2.0	5.6
Whiston Hospital, Prescot	WHI	401	91.6	19.4	23.4	36.8	0.0	1.9	0.0	6.0
Arrove Park Hospital, Wirral	WIR	466	95.9	16.9	21.0	53.2	3.2	3.7	2.0	4.9
Wythenshawe Hospital, Manchester	WYT	339	110.1	21.9	28.4	52.2	0.0	2.6	0.3	3.5
North West (Average)		8,072	90.1	16.5	22.9	48.7	1.3	2.9	0.3	4.7
Overall (Average)		64,102	93.5	15.7	20.3	53.7	1.1	2.8	3.3	4.3

## Northern Ireland

	Hospital code	Number of cases submitted	Case ascertainment (%)	Acute LOS (days)	Overall hospital LOS (days)	Return to original residence within 30 days (%)	Reoperation within 30 days (%)	Developed a pressure ulcer after presenting with hip fracture (%)	Unknown pressure ulcers (%)	Hip fractures which were sustained as an inpatient (%)
Altnagelvin Area Hospital	ALT	363	96.0	11.8	24.6	59.2	0.0	2.3	0.0	1.4
Craigavon Hospital, Portadown	CRG	258	103.2	10.2	24.2	59.7	0.4	0.0	0.0	3.9
Ulster Hospital, Belfast	NUH	357	93.9	15.8	23.1	53.5	0.3	4.7	0.0	1.7
Royal Victoria Hospital, Belfast	RVB	887	93.7	11.2	19.1	51.6	1.9	1.5	0.2	1.0
Northern Ireland (Average)		1,865	96.7	12.2	22.7	56.0	0.7	2.1	0.1	2.0
Overall (Average)		64,102	93.5	15.7	20.3	53.7	1.1	2.8	3.3	4.3

## South Central

	Hospital code	Number of cases submitted	Case ascertainment (%)	Acute LOS (days)	Overall hospital LOS (days)	Return to original residence within 30 days (%)	Reoperation within 30 days (%)	Developed a pressure ulcer after presenting with hip fracture (%)	Unknown pressure ulcers (%)	Hip fractures which were sustained as an inpatient (%)
Horton Hospital, Banbury	HOR	183	86.7	16.7	17.7	50.6	0.0	0.0	0.0	1.6
St Mary's Hospital, Isle of Wight	IOW	229	84.2	12.8	17.6	38.1	0.0	0.0	0.4	2.6
Milton Keynes General Hospital	MKH	230	87.5	16.3	23.8	56.7	0.5	3.3	0.0	5.7
Basingstoke and N Hants Hospital	NHH	286	102.9	18.1	21.4	60.3	2.7	7.8	0.0	2.4
Queen Alexandra Hospital, Portsmouth	QAP	737	89.8	14.7	17.4	78.4	2.1	1.6	0.0	2.4
John Radcliffe Hospital, Oxford	RAD	531	92.5	14.1	14.9	37.3	2.7	2.0	6.4	4.5
Royal Berkshire Hospital, Reading	RBE	422	92.3	13.5	18.7	57.3	1.0	0.8	0.0	2.8
Royal Hampshire County Hospital, Winchester	RHC	281	109.8	17.3	23.7	59.9	1.6	3.1	0.4	5.3
Southampton General Hospital	SGH	605	96.3	18.8	20.7	49.6	0.0	2.7	33.7	5.3
Stoke Mandeville Hospital, Aylesbury	SMV	370	86.7	15.9	20.3	63.8	1.2	3.2	1.6	3.5
Wexham Park Hospital, Slough	WEX	365	88.8	18.1	23.4	63.0	0.3	0.6	1.1	4.1
South Central (Average)		4,239	92.5	16.0	20.0	55.9	1.1	2.3	4.0	3.7
Overall (Average)		64,102	93.5	15.7	20.3	53.7	1.1	2.8	3.3	4.3



## South East

	Hospital code	Number of cases submitted	Case ascertainment (%)	Acute LOS (days)	Overall hospital LOS (days)	Return to original residence within 30 days (%)	Reoperation within 30 days (%)	Developed a pressure ulcer after presenting with hip fracture (%)	Unknown pressure ulcers (%)	Hip fractures which were sustained as an inpatient (%)
Conquest Hospital, Hastings	CGH	464	125.7	16.8	18.5	65.7	0.5	3.9	0.0	3.4
Eastbourne Hospital	DGE	128	29.5	16.1	16.9	58.4	2.5	3.3	0.0	4.7
Darent Valley Hospital, Dartford	DVH	362	102.0	15.6	19.1	48.6	0.3	2.4	0.0	5.2
East Surrey Hospital, Redhill	ESU	500	92.4	20.4	20.4	42.3	0.0	1.3	0.0	2.0
Frimley Park Hospital, Camberley	FRM	422	92.1	15.8	17.4	61.8	1.6	11.2	0.0	1.2
Medway Maritime Hospital	MDW	343	87.3	17.1	17.3	54.3	0.9	1.0	0.0	3.5
Queen Elizabeth the Queen Mother Hospital, Margate	QEQ	480	101.5	16.1	16.2	63.8	0.0	3.8	18.1	2.3
Royal Sussex County Hospital, Brighton	RSC	530	93.8	7.5	17.6	49.4	1.4	1.4	0.0	0.8
Royal Surrey County Hospital, Guildford	RSU	296	80.4	17.2	17.4	50.5	0.0	0.7	0.0	2.7
St Peter's Hospital, Chertsey	SPH	412	103.0	11.7	18.2	53.5	1.3	3.1	2.0	1.5
St Richard's Hospital, Chichester	STR	393	93.6	15.0	15.2	65.8	1.4	0.8	0.3	3.6
Maidstone and Tunbridge Wells Hospital	TUN	498	82.3	10.9	23.2	61.9	1.1	4.3	0.0	2.8
William Harvey Hospital, Ashford	WHH	487	100.0	16.1	16.2	54.4	0.0	0.4	0.0	3.3
Worthing and Southlands Hospital	WRG	470	93.1	4.7	18.6	57.0	1.0	2.2	0.0	6.0
South East (Average)		5785	91.2	14.4	18.0	56.2	0.9	2.8	1.5	3.1
Overall (Average)		64102	93.5	15.7	20.3	53.7	1.1	2.8	3.3	4.3

## South West

	Hospital code	Number of cases submitted	Case ascertainment (%)	Acute LOS (days)	Overall hospital LOS (days)	Return to original residence within 30 days (%)	Reoperation within 30 days (%)	Developed a pressure ulcer after presenting with hip fracture (%)	Unknown pressure ulcers (%)	Hip fractures which were sustained as an inpatient (%)
Royal United Hospital, Bath	BAT	535	88.7	14.7	14.9	60.3	2.1	0.2	0.0	2.1
Bristol Royal Infirmary	BRI	306	81.6	19.1	25.5	48.1	4.9	2.6	0.0	6.5
Cheltenham General Hospital	CHG	225	76.3	13.2	13.6	42.4	0.0	0.9	0.0	5.3
Southmead Hospital, Bristol	FRY	440	90.7	19.4	23.4	58.6	2.3	5.9	0.2	7.0
Gloucestershire Royal Hospital, Gloucester	GLO	417	91.0	17.5	17.6	55.5	0.5	1.9	0.0	3.6
Musgrove Park Hospital, Taunton	MPH	426	100.5	13.5	13.8	62.4	1.7	0.8	56.5	3.3
North Devon District Hospital, Barnstaple	NDD	261	87.0	10.3	19.1	64.0	2.2	2.9	0.8	5.0
Poole General Hospital	PGH	963	112.2	11.9	11.9	53.5	1.1	1.8	0.0	2.8
Derriford Hospital, Plymouth	PLY	484	78.1	12.7	13.1	46.9	0.4	0.4	3.5	7.6
The Great Western Hospital, Swindon	PMS	418	94.8	12.8	15.7	63.2	1.8	1.9	0.5	2.2
The Royal Cornwall Hospital, Triliske	RCH	606	92.4	10.8	12.4	32.3	0.0	1.4	0.0	3.6
Royal Devon & Exeter Hospital, Exeter	RDE	606	100.8	11.7	13.8	54.1	2.8	1.4	0.2	4.0
Salisbury District Hospital	SAL	274	92.3	19.9	20.8	63.9	2.4	1.6	0.4	4.0
Torbay District General Hospital	TOR	471	104.0	8.4	8.6	40.8	0.4	1.8	5.1	2.5
Dorset County Hospital, Dorchester	WDH	303	101.0	12.2	12.8	44.3	1.4	0.0	0.0	3.6
Weston General Hospital, Weston-super-Mare	WGH	304	91.0	15.6	19.9	58.3	0.0	2.5	0.0	1.6
Yeovil District Hospital	YEO	264	83.8	16.8	18.0	50.5	0.0	3.7	0.0	3.0
South West (Average)		7,303	92.1	14.2	16.2	52.9	1.4	1.9	3.9	4.0
Overall (Average)		64,102	93.5	15.7	20.3	53.7	1.1	2.8	3.3	4.3

## Wales

	Hospital code	Number of cases submitted	Case ascertainment (%)	Acute LOS (days)	Overall hospital LOS (days)	Return to original residence within 30 days (%)	Reoperation within 30 days (%)	Developed a pressure ulcer after presenting with hip fracture (%)	Unknown pressure ulcers (%)	Hip fractures which were sustained as an inpatient (%)
Bronglais Hospital, Aberystwyth	BRG	104	97.2	18.2	23.9	55.4	0.0	5.0	0.0	2.9
Glan Clwyd Hospital, Rhyl	CLW	304	87.9	14.6	34.5	44.8	0.8	2.6	0.0	5.9
Royal Gwent Hospital, Newport	GWE	298	74.5	25.1	39.4	50.6	3.3	4.0	6.6	10.7
Gwynedd Ysbyty, Bangor	GWY	318	91.4	13.9	33.7	45.5	2.2	2.8	0.3	7.9
Morrison Hospital, Swansea	MOR	527	100.6	16.7	35.0	44.3	2.1	0.2	0.0	8.9
Nevill Hall Hospital, Abergavenny	NEV	288	95.0	17.6	35.9	39.5	1.6	0.4	11.1	10.8
Prince Charles Hospital, Merthyr Tydfil	PCH	214	87.0	20.3	32.4	55.3	1.6	4.2	0.5	7.5
Princess Of Wales Hospital, Bridgend	POW	227	81.4	20.3	33.3	60.3	3.5	1.0	0.9	5.7
Royal Glamorgan Hospital, Llantrisant	RGH	224	125.1	13.2	35.2	47.6	1.0	7.9	0.4	8.5
University Hospital of Wales, Cardiff	UHW	453	97.8	29.6	38.1	49.2	2.0	4.6	3.3	7.1
Maelor Hospital, Wrexham	WRX	216	83.1	16.7	31.0	41.3	1.1	5.2	3.7	2.3
West Wales General Hospital, Carmarthen	WWG	253	68.2	19.2	26.3	47.1	0.5	2.1	9.5	3.6
Withybush Hospital, Haverfordwest	WYB	206	106.2	16.2	31.4	52.4	1.1	0.5	0.0	2.4
Wales (Average)		3,632	91.9	18.6	33.1	48.7	1.6	3.1	2.8	6.5
Overall (Average)		64,102	93.5	15.7	20.3	53.7	1.1	2.8	3.3	4.3

## West Midlands

	Hospital code	Number of cases submitted	Case ascertainment (%)	Acute LOS (days)	Overall hospital LOS (days)	Return to original residence within 30 days (%)	Reoperation within 30 days (%)	Developed a pressure ulcer after presenting with hip fracture (%)	Unknown pressure ulcers (%)	Hip fractures which were sustained as an inpatient (%)
Queens' Hospital, Burton upon Trent	BRT	328	106.8	16.8	18.1	38.8	0.0	3.9	0.3	4.9
Birmingham Heartlands Hospital	EBH	382	72.5	22.6	22.8	61.5	0.0	0.9	0.0	0.0
Good Hope General Hospital	GHS	304	77.4	19.7	19.8	57.6	0.0	0.4	0.0	1.0
County Hospital Hereford	HCH	290	90.6	10.3	21.7	66.7	1.9	0.0	92.1	4.1
New Cross Hospital	NCR	375	89.3	15.6	19.3	49.6	0.3	10.0	7.2	5.3
George Eliot Hospital	NUN	275	90.2	17.8	18.5	70.6	1.2	7.8	0.0	2.9
Queen Elizabeth Hospital, Edgbaston	QEB	433	86.9	23.1	26.6	40.0	0.0	1.5	0.0	7.6
The Alexandra Hospital	RED	291	105.8	18.9	18.9	42.7	0.4	1.9	0.0	2.7
Royal Shrewsbury Hospital	RSS	369	94.6	8.8	15.1	50.2	3.4	0.6	0.0	3.8
Russells Hall Hospital	RUS	487	93.5	18.0	18.0	45.6	1.1	3.7	0.0	6.2
Sandwell District Hospital	SAN	348	95.9	14.7	16.2	86.6	0.0	1.2	2.6	2.0
County Hospital, Stafford	SDG	169	69.5	19.1	20.3	65.9	1.3	0.6	17.4	4.1
Royal Stoke University Hospital	STO	602	92.5	9.8	9.9	36.5	0.5	3.5	0.0	4.7
Princess Royal Hospital, Telford	TLF	137	48.2	12.5	13.3	74.5	0.0	0.0	100.0	2.9
University Hospital Coventry	UHC	518	98.3	16.7	23.3	66.7	2.1	2.8	0.4	9.1
Warwick Hospital	WAR	326	111.3	12.7	20.0	69.8	2.3	1.0	0.6	8.9
Manor Hospital	WMH	337	97.4	14.3	21.3	54.2	0.0	0.6	0.0	3.9
Worcestershire Royal Hospital	WRC	458	97.4	10.5	14.5	28.7	0.5	1.6	0.9	2.0
West Midlands (Average)		6,429	89.9	15.7	18.8	55.9	0.8	2.3	12.3	4.2
Overall (Average)		64,102	93.5	15.7	20.3	53.7	1.1	2.8	3.3	4.3

## Yorks and the Humber

	Hospital code	Number of cases submitted	Case ascertainment (%)	Acute LOS (days)	Overall hospital LOS (days)	Return to original residence within 30 days (%)	Reoperation within 30 days (%)	Developed a pressure ulcer after presenting with hip fracture (%)	Unknown pressure ulcers (%)	Hip fractures which were sustained as an inpatient (%)
Airedale General Hospital	AIR	272	99.6	17.5	18.0	56.1	0.4	2.0	0.0	4.8
Barnsley District General Hospital	BAR	251	86.3	15.6	15.6	49.5	0.9	1.7	1.6	3.6
Bradford Royal Infirmary	BRD	325	94.8	12.6	12.7	57.1	4.6	0.7	0.0	8.0
Bassetlaw District General Hospital	BSL	156	76.5	14.7	15.4	61.7	0.0	5.6	0.0	1.3
Doncaster Royal Infirmary	DID	431	98.4	17.3	24.2	55.4	0.0	1.3	0.2	5.8
Diana, Princess of Wales Hospital	GGH	269	86.2	14.7	15.1	68.2	2.1	8.9	0.4	2.2
Harrogate District Hospital	HAR	247	85.5	15.4	18.1	61.0	2.2	2.2	1.2	4.5
Hull Royal Infirmary	HRI	566	95.0	17.5	17.7	69.1	0.2	0.6	2.4	3.9
Huddersfield Royal Infirmary	HUD	480	100.6	17.7	24.7	42.9	0.5	3.0	0.0	5.2
Leeds General Infirmary	LGI	702	106.7	19.3	20.0	51.3	1.6	4.2	9.1	3.6
Northern General Hospital	NGS	638	105.6	8.6	22.5	50.6	0.7	5.5	6.1	8.5
Pinderfields General Hospital	PIN	559	93.5	20.6	21.6	47.9	0.6	9.6	0.0	5.4
Rotherham General Hospital	ROT	296	88.1	19.3	20.4	47.9	1.5	1.4	0.0	2.7
Scarborough General Hospital	SCA	297	95.8	10.0	16.6	49.3	0.0	1.0	0.0	6.1
Scunthorpe General Hospital	SCU	210	84.3	9.5	12.5	55.3	1.5	0.5	0.0	2.9
York District Hospital	YDH	333	73.5	13.7	16.5	50.4	0.6	2.3	0.0	2.4
Yorks & the Humber (Average)		6,032	91.9	15.2	18.2	54.6	1.1	3.2	1.3	4.4
Overall (Average)		64,102	93.5	15.7	20.3	53.7	1.1	2.8	3.3	4.3

## 3 Facilities survey 2014

There is great variation in the organisation and structure in different participating hospitals. Clarity about the services available helps us to understand the picture of process and outcome that we develop for each unit. For this reason, a survey of facilities has always been part of the NHFD's annual reporting process. This year, we made substantial changes in the facilities survey, in particular so that we could better understand the governance of hip fracture services.

### Clinical governance

The NICE quality standard (QS16) states that:

*The Hip Fracture Programme team retains a comprehensive and continuing clinical and service governance lead for all stages of the pathway of care, including the policies and criteria for both intermediate care and early supported discharge.*

A crucial part of that governance process is a regular meeting of the team, but 29 hospitals (16%) state that they have no routine governance meetings for their hip fracture service. Where such meetings were reported, these were scheduled monthly in 80 hospitals (44%) or quarterly in 52 hospitals (29%). Of the hospitals that have governance meetings, 145 (81%) have an orthopaedic clinical lead in attendance, while 121 (67%) have an orthogeriatric lead present.

More than two-thirds (69%) of hospitals reported between four and seven disciplines as being represented at each meeting. One hospital (MKH) reported the attendance of clinical leads from orthopaedics, orthogeriatrics and anaesthetics, along with nursing staff, physiotherapists, occupational therapists, representatives from the community rehabilitation team and A&E, a dietician and an orthopaedic manager, representing an impressive cross-section of individuals involved with managing the patient pathway.

The most common matters addressed by these meetings are delays to surgery, mortality and morbidity, patient safety, LOS, critical incidents and local quality initiatives. The prominence of delays to surgery among these reflects the profound effect that failing to meet the 'surgery within 36 hours' criterion has on BPT attainment for organisations in England.

### Secondary prevention

Nearly two-thirds (65.1%) of bone health assessments are performed by orthogeriatricians, with the remainder of inpatient assessments being performed by specialist nurses. In total, 13% of patients are referred on to a bone health clinic or to their GP for subsequent bone assessment.

The audit records that fracture liaison services are provided in 47% of hospitals, usually for inpatients and outpatients, with 23 (13%) having a solely outpatient service and six (3%) only providing services for inpatients. These services are evenly distributed between rheumatology, geriatric medicine and 'other' providers, including a small number of endocrinologists. One-third of the fracture liaison services also lead on falls prevention, a model of care that maximises the potential for reducing the incidence of future fragility fractures.

Strength and balance training may have an important role in reducing the rate of further falls and fractures, and should be available as part of inpatient rehabilitation as well as post-discharge care.<sup>15</sup> Our dataset will prospectively record information on this area from 2016.

In total, 80% of hospitals report that they can easily refer patients for strength and balance training after discharge, most commonly through a community rehabilitation team or a falls prevention clinic, with 6% having access to services in the voluntary sector. This is a question that we will examine for individual patients with a new question on strength and balance training in the 2016 dataset.

### Key for facilities audit tables

<b>AD</b>	Administration staff	<b>NA</b>	Not routinely available
<b>AED</b>	A&E doctor	<b>ND</b>	Nurses or doctors
<b>AEN</b>	A&E nurse	<b>NS</b>	Nursing staff
<b>AES</b>	A&E staff	<b>O</b>	Other
<b>AN</b>	Anaesthetist	<b>OC</b>	Occupational therapist
<b>ANC</b>	Anaesthetic clinical lead	<b>OCR</b>	Osteoporosis clinical referral
<b>AP</b>	Ambulance personnel	<b>OG</b>	Orthogeriatrician
<b>CA</b>	Care assistants or nursing auxiliaries	<b>OGC</b>	Orthogeriatric clinical lead
<b>CI</b>	Clinical incidents	<b>ORC</b>	Orthopaedic clinical lead
<b>CN</b>	Complaints	<b>OS</b>	Orthopaedic surgeon
<b>CR</b>	Community rehabilitation team	<b>PH</b>	Physiotherapist
<b>DI</b>	Dietitian	<b>PSf</b>	Patient safety
<b>DS</b>	Delayed discharges	<b>PS</b>	Psychiatry/psychology staff
<b>DS</b>	Delays to surgery	<b>RH</b>	Rheumatology
<b>END</b>	Endocrinology	<b>SIT</b>	Other site in this trust
<b>FPC</b>	Falls prevention clinic	<b>SN</b>	Specialist nurse
<b>GEM</b>	Geriatric medicine	<b>SW</b>	Social worker
<b>GP</b>	Referred back to GP	<b>TA</b>	Trained audit staff
<b>HOS</b>	This hospital site	<b>TO</b>	Trauma and orthopaedic managers
<b>LOS</b>	Length of stay	<b>TRU</b>	Another trust
<b>LQ</b>	Local quality initiatives	<b>VS</b>	Voluntary sector
<b>MM</b>	Mortality and morbidity		

Hospital code	No. OG consultant hrs	No. OG middle grade hrs	No. OG ward rounds/week	No. nurse practitioners	OG weekend cover?	Who collects data?	Who enters data?	Routine nerve blocks administered?	Who administers nerve blocks?	Enhanced recovery programme?	Pain tool used?	Clinical governance meetings?	Who attends?
ADD	75	0	5	1	No	ND	ND	Yes	AED;AN	No	Yes	Monthly	ORC;OGC;ANC;TO
AEI	20	0	5	0	No	ND	ND	No	Unknown	No	Yes	Monthly	ORC;OGC;ANC;NS;PH;OC;TO
AIR	10	0	3	0	Yes	ND	TA	Yes	AED;AN;SN;OS	Yes	Yes	Not routinely	N/A
ALT	37.5	0	5	3	No	ND	ND;AD	No	AED;AN;OS	Yes	Yes	Monthly	ORC;OGC;ANC;NS;PH;OC;SW;AES;TO
ASH	8	40	5	1	No	ND	ND	Yes	AED;OS	Yes	Yes	Monthly	ORC;OGC;ANC;NS;PH;OC;AES;TO
BAR	22	0	5	2.9	No	ND	TA	Yes	AED;A&E ND	No	Yes	Monthly	ORC;OGC;ANC;PH;AES
BAS	24	36	5	1.4	No	ND	ND	No	AED;AN	No	Yes	Monthly	ORC;OGC;ANC;NS;PH;OC;DI;TO
BAT	32	14	7	0	Yes	ND	ND;AD	Yes	AED;AN	Yes	Yes	Quarterly	ORC;OGC;ANC;NS;PH;OC
BED	37.5	37.5	5	0	No	CA	CA	Yes	AED;AN;O	No	Yes	Monthly	ORC;NS;TO
BFH	12	0	10	2	No	ND	ND	Yes	AED;AN;SN	No	Yes	Quarterly	ORC;TO
BLA	17	6	5	0	No	ND	ND	Yes	AED	Yes	Yes	Quarterly	ORC;OGC;ANC;NS;PH;OC;AES;TO
BNT	28	40	5	1	No	ND	ND	Yes	AED;AN;OS	Yes	Yes	Monthly	ORC;OGC;ANC;NS;PH;TO
BOL	40	0	6	1	No	ND	ND	Yes	AED;AN	No	Yes	Monthly	ORC;OGC;ANC;TO
BRD	35	0	5	0	Yes	ND	ND;TA	No	AED;AN	Yes	No	Monthly	ORC;OGC;ANC;NS
BRG	15	0	5	1	No	ND	ND	No	AED;OS	No	Yes	Not routinely	ORC;OGC;NS
BRI	40	0	5.5	1.75	No	ND;TA	ND;TA	Yes	AED;AN	Yes	Yes	Quarterly	ORC;OGC;ANC;NS;PH;OC;AES;TO
BRO	45	40	5	0	No	ND	ND	No	AED	No	No	Monthly	ORC;OGC;NS;PH;OC;TO
BRT	7	Unknown	5	Unknown	No	AD	AD	Yes	AN;OS	Yes	Yes	Quarterly	ORC;OGC;NS;PH;OC;TO
BSL	10	18	5	1	No	ND	AD	Yes	AED;AN;SN	No	Yes	Monthly	ORC;NS;PH;OC;TO
CGH	16	4	6	0	No	AD	AD	No	SN;O	No	No	Quarterly	ORC;NS;PH;OC;CR;TO
CHE	18	3	4	0.58	No	AD	AD	Yes	AED	No	No	Not routinely	N/A/N/A
CHG	8	36	5	0.5	No	ND	ND	No	Unknown	No	No	Quarterly	ORC;OGC;ANC;NS;PH;OC;AES;TO
CLW	0	0	0	0	No	ND	ND	Yes	AED;SN;O	No	Yes	Not routinely	N/A/N/A
CMI	7.5	37.5	1	1	No	ND	ND;TA	No	AN	No	Yes	Quarterly	ORC;OGC;NS;PH;OC;TO
COC	10	2.5	5	3	No	ND;CA	ND;CA	Yes	AED;AN;SN	No	Yes	Monthly	ORC;OGC;ANC;NS;PH;OC;AES;TO
COL	8	2	2	Unknown	No	ND	ND	No	Unknown	Yes	Yes	Not routinely	ORC;OGC;NS
CRG	20	30	5	0	No	ND	ND	No	AN	No	Yes	Quarterly	ORC;NS
DAR	10	0	5	2.5	No	ND;AD	ND;AD	No	AED;AN	No	Yes	Quarterly	ORC;OGC;ANC;NS;PH;AES;TO
DER	12	0	5	1	No	ND	TA	Yes	AED	No	Yes	Quarterly	ORC;OGC;ANC;NS;PH;TO
DGE	20	0	5	1	Yes	ND	ND	No	O	Yes	No	Quarterly	ORC;NS;PH;OC;TO
DID	20	8	7	5	No	ND	AD	No	AED	No	Yes	Monthly	ORC;NS;PH;TO
DRY	18	0	5	0	No	ND	ND;TA	No	AED;AN	No	Yes	Not routinely	ORC;OGC;ANC;NS;PH;AES;TO
DVH	40	40	5	1	No	ND	AD	No	AEN;AN	No	No	Monthly	ORC;OGC;ANC;NS;AES;TO
EAL	8	0	2	1	No	ND	ND	Yes	AED;AN	Yes	Yes	Not routinely	N/A
EBH	32	24	7	0	No	AD	AD	No	AED;OS	No	Yes	Monthly	ORC;OGC;TO
ENH	12	40	5	1	No	ND	ND;AD	Yes	AN;SN;OS;O	No	Yes	Weekly	ORC;OGC;ANC;NS;PH;OC
ESU	34	32	5	0.92	Yes	ND	ND	Yes	AN	Yes	Yes	Quarterly	ORC;OGC;ANC;NS;PH;OC;AES;TO
FAZ	20	0	5	1	No	ND;TA	TA	Yes	AED;AN	No	Yes	Not routinely	ORC;OGC;ANC;NS;PH;OC;AES;CR;TO
FGH	6	0	3	0	No	TA;AD	TA	Yes	AED;AN	No	Yes	Quarterly	ORC;NS;TO
FRM	0	40	5	0	No	ND	ND	Yes	AEN;SN	Yes	Yes	Monthly	ORC;OGC;ANC;NS;PH;OC;AES;TO
FRY	42	0	9	1.4	No	ND	TA	Yes	AED	Yes	No	Monthly	ORC;OGC;ANC;NS;PH;OC;TO
GEO	18	0	3	1	No	ND	ND	Yes	AED;AN	Yes	Yes	Not routinely	N/A
GGH	9	9	3	1	No	ND	AD	No	AN;OS	No	Yes	Quarterly	ORC;OGC;ANC;NS;PH;TO
GHS	8	0	5	0	No	AD	AD	No	AED;AN	No	Yes	Monthly	ORC;OGC
GLO	18	8	5	1	No	ND	ND;AD	Yes	AED	No	No	Quarterly	ORC;OGC;ANC;NS;PH;OC;AES;TO
GRA	0	0	0	0	No	ND	AD	No	AN	No	No	Monthly	ORC;ANC



Hospital code	What is discussed?	Who does bone health assessment?	Fracture Liaison Service?	FLS run by?	Does FLS lead on falls?	Single room accommodation in attachment	Can you refer to strength and balance training?	Do you use Nottingham Score?
ADD	MM;DS;LOS;PSf;CI;CN	OG	Outpatients	RH	No	Unknown	FPC	No
AEI	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG	Outpatients	O	No	Unknown	FPC;CR	routinely
AIR	MM;DS;PSf;CI	OG	Inpatients	GEM	Yes	Unknown	FPC;CR	No
ALT	MM;DS;PSf;CI;CN;LQ	OG;SN;OCR;GP	Both	RH	Yes	SIT	CR;VS	No
ASH	MM;DS;PSf;CI;CN;LQ	OG;SN	No	Unknown	Unknown	Unknown	CR	routinely
BAR	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG;SN	No	Unknown	No	Unknown	FPC;CR	routinely
BAS	DS;LOS;DS;PSf;LQ	OG	Both	GEM	Yes	TRU	NA	occasionally
BAT	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG	Both	RH	No	Unknown	FPC;CR	occasionally
BED	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG	No	Unknown	Unknown	Unknown	Unknown	occasionally
BFH	MM;PSf;CN	SN	Both	RH	No	Unknown	NA	occasionally
BLA	MM;DS;LOS;DS;PSf;LQ	OG	Both	GEM	No	Unknown	FPC;CR	No
BNT	MM;DS;LOS;DS;PSf	OG	Outpatients	GEM	Yes	TRU	FPC;CR	No
BOL	MM;DS;CI	OG	No	Unknown	No	Unknown	FPC;CR	Unknown
BRD	MM;DS;PSf;CI;LQ	OG	No	Unknown	Unknown	Unknown	CR	occasionally
BRG	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG;SN	Both	GEM	No	Unknown	CR	No
BRI	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG;SN	Outpatients	GEM	No	Unknown	FPC;CR	occasionally
BRO	MM	OG	Outpatients	O	No	Unknown	Unknown	No
BRT	MM;DS;LOS;DS;PSf;CI	OG	Outpatients	O	Yes	Unknown	FPC	occasionally
BSL	MM;DS;CI;CN;LQ	OG;SN	Both	RH	Yes	Unknown	FPC;CR	routinely
CGH	MM;DS;LOS;DS;PSf	OG	No	Unknown	No	SIT	NA	No
CHE	N/A	OG;SN	Both	RH	No	Unknown	CR	occasionally
CHG	MM;LOS;PSf;LQ	OG;SN	Both	O	Yes	TRU	CR	No
CLW	N/A	SN	No	Unknown	No	Unknown	NA	occasionally
CMI	MM;DS;LOS;CI	OG;SN	No	Unknown	No	SIT	FPC;CR	No
COC	MM;DS;LOS;PSf;CI;CN;LQ	OG;SN	Inpatients	GEM;END;O	Yes	Unknown	FPC;CR	occasionally
COL	DS;LOS;PSf;CI	OG	No	Unknown	Unknown	Unknown	FPC;CR	No
CRG	MM;CI;CN	OG	Both	GEM	Yes	Unknown	CR	occasionally
DAR	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG	Outpatients	RH;O	No	HOS	FPC	occasionally
DER	MM;DS;LOS;PSf;CI;LQ	OG	Both	RH	Yes	Unknown	FPC;CR	No
DGE	MM;DS;LOS;DS;CI;CN;LQ	OG	No	GEM	Unknown	Unknown	Unknown	No
DID	MM;PSf;CI;CN;LQ	OG;SN	No	Unknown	Unknown	Unknown	FPC;CR	occasionally
DRY	DS;PSf	OG	Outpatients	O	Yes	Unknown	FPC;CR	occasionally
DVH	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG;SN	No	Unknown	Unknown	Unknown	NA	routinely
EAL	DS;DS;PSf;CI;LQ	OG	No	Unknown	Unknown	Unknown	FPC;CR	No
EBH	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG	No	Unknown	Unknown	Unknown	FPC;CR	No
ENH	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG	No	Unknown	No	Unknown	FPC	occasionally
ESU	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG	Both	RH;GEM	No	Unknown	FPC;CR	routinely
FAZ	DS;LOS;PSf;CI;LQ	OG;SN;OCR	Both	GEM	Yes	Unknown	FPC;CR	No
FGH	MM;DS;LOS;DS;PSf;CN;LQ	OG	No	Unknown	Unknown	Unknown	FPC;CR	No
FRM	MM;DS;PSf;LQ	OG	No	Unknown	No	Unknown	CR	occasionally
FRY	MM;DS;LOS;PSf	OG	Both	GEM	No	Unknown	CR	occasionally
GEO	N/A	OG;SN;OCR;GP	Both	RH	Yes	Unknown	FPC;CR	No
GGH	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG	Both	GEM;O	No	HOS	FPC;CR	routinely
GHS	MM;DS;CI;CN;LQ	OG	No	Unknown	Unknown	Unknown	CR;VS	No
GLO	MM;LOS;CI;CN;LQ	OG	Both	O	No	HOS	FPC;CR	occasionally
GRA	MM;PSf;CI;CN	GP	No	Unknown	Unknown	Unknown	Unknown	No

Hospital code	No. OG consultant hrs	No. OG middle grade hrs	No. OG ward rounds/week	No. nurse practitioners	OG weekend cover?	Who collects data?	Who enters data?	Routine nerve blocks administered?	Who administers nerve blocks?	Enhanced recovery programme?	Pain tool used?	Clinical governance meetings?	Who attends?
GWE	4	0	2	0	No	ND	ND	Yes	AED;SN	No	Yes	Monthly	OGC;ANC;NS;PH;OC;TO
GWH	17	8	5	1	No	ND	ND	No	AED;AN	No	No	Monthly	ORC;OGC;PH;TO
GWY	8	0	2	0.2	No	ND	TA	No	AED;AEN;AN	No	No	Quarterly	OGC;ANC;PH;OC;DI;TO
HAR	35	0	4	0.8	No	ND	ND;AD	Yes	AN;SN	No	Yes	Not routinely	OGC;ANC;NS
HCH	5	5	5	1.3	No	ND	ND;AD	No	AN	No	Yes	Monthly	ORC;OGC;ANC;NS;PH;OC
HIL	14	16	2.5	1	No	ND;TA	ND;TA	No	AED;AN;SN;OS	No	Yes	Monthly	ORC;OGC;NS;AES;TO
HIN	10	10	5	1	No	ND	ND	Yes	AED	No	Yes	Quarterly	ORC;OGC;ANC;NS;PH;TO
HOM	15	6	5	1	No	ND	ND	Yes	AED	No	Yes	Quarterly	ORC;OGC;ANC;NS;PH;OC;AES;CR;TO
HOR	24	0	3	0.2	No	ND;AD	ND;AD	Yes	AED;AN;OS	Yes	Yes	Monthly	ORC;OGC;ANC;NS;PH;AES;TO
HRI	16	0	5	1	No	ND;TA	ND;TA	No	SN	Yes	Yes	Monthly	ORC;OGC;NS;PH;OC;DI;AES
HUD	8	20	5	0	No	ND	TA	Yes	AED;AN	No	Yes	Monthly	ORC;OGC;ANC;NS;PH;OC;AES;TO
IOW	0	5	5	0	No	ND	ND	No	AED	No	Yes	Quarterly	ORC;NS
IPS	20	0	2	1	No	ND	ND	No	Unknown	Yes	Yes	Quarterly	ORC;OGC;NS;PH;OC;TO
JPH	6	7	4	0	No	ND	ND	Yes	AED;O	Yes	Yes	Not routinely	N/A/N/A
KCH	8	30	5	1	No	ND;CA;AD	ND;AD	Yes	AED;AN	Yes	Yes	Quarterly	ORC;OGC;ANC;NS;PH;OC;TO
KGH	16	0	5	0	No	ND	ND	No	AED;AN;OS	No	Yes	Quarterly	ORC;OGC;ANC;NS;PH;OC;TO
KMH	11	0	5	1.5	No	ND	ND;AD	No	AED	Yes	Yes	Not routinely	N/A
KTH	40	0	5	0	No	ND	ND	No	AED;AN;OS	No	Yes	Not routinely	ORC;OGC;NS;PH
LDH	36	40	5	0	No	ND;TA	ND;TA	Yes	AED;AEN;SN;OS	Yes	No	Monthly	ORC;OGC;ANC;NS;PH;OC;AES
LER	36	0	5	0	No	ND;TA	ND;TA	No	AED	Yes	Yes	Not routinely	N/A/N/A
LEW	8	8	5	0.25	No	ND	ND	Yes	AED;AN	Yes	Yes	Monthly	ORC;OGC;ANC;NS;PH;AES
LGH	7	0	3	1	No	ND;TA	ND;TA	No	AN;OS	No	Yes	Quarterly	ORC;OGC;NS;PH;OC;TO
LGI	36	40	8	1	No	ND;AD	ND;AD	No	AED	No	Yes	Monthly	ORC;OGC;ANC;NS;PH;OC;PS;TO
LIN	17	0	3	0	No	ND	ND	No	AN	No	Yes	Monthly	ORC;OGC;NS;TO
LON	19	0	4	0	Yes	ND	ND	Yes	AED;AN	No	No	Quarterly	ORC;OGC;NS;TO
MAC	10	48	5	0	No	TA	TA	Yes	AN	Yes	Yes	Monthly	ORC;OGC;ANC;NS;TO
MAY	24	10	6	1	Yes	ND	ND	Yes	AED;AN	No	No	Not routinely	N/A/N/A
MDW	40	40	2	3	No	ND	AD	Yes	AN	Yes	Yes	Monthly	ORC;OGC;ANC;NS;PH;OC;DI;AES;TO
MKH	13.5	0	5	1	No	ND	ND	Yes	AED;AN;SN;OS	Yes	Yes	Quarterly	ORC;OGC;ANC;NS;PH;OC;DI;AES;CR;TO
MOR	20	40	4	0	No	ND;TA	ND;TA	Yes	SN	No	No	Not routinely	ORC;NS;TO
MPH	14	65	2	0	No	ND	ND	Yes	AED;AN	Yes	Yes	Monthly	ORC;OGC;ANC;NS;PH;OC
MRI	18	0	5	1.8	No	ND	ND;TA	Yes	AED;AN	No	No	Not routinely	N/A
NCR	0	10	1	37.5	Yes	ND	ND	No	AED	No	Yes	Monthly	ORC;OGC;NS;PH;TO
NDD	16	0	5	0	No	ND	ND	Yes	AN	Yes	Yes	Not routinely	ORC;OGC;ANC;NS;PH;OC;AES
NEV	7.5	24	2	0	No	ND	ND	Yes	AED	No	No	Monthly	ORC;OGC;NS;TO
NGS	52	40	8	1	No	ND	ND;AD	Yes	AED;AN	No	No	Quarterly	ORC;OGC;NS;PH;OC;DI;TO
NHH	8	24	5	0	No	ND	ND	Yes	AED	No	No	Monthly	ORC;OGC;NS;PH;OC;AES
NMG	40	37.5	0	0	No	ND	ND	No	AED;AN	No	No	Monthly	ORC;OGC;ANC;NS;PH;OC;TO
NMH	40	30	2	0	No	ND	ND	Yes	AED;AN	No	No	Monthly	ORC;OGC;ANC;PH;AES
NOB	0	0	0	0	No	ND	ND	Yes	AN	No	Yes	Quarterly	ORC;NS;PH;TO
NOR	30	20	2	0.6	Yes	ND;AD	ND;AD	No	AED;AN	Yes	No	Not routinely	N/A/N/A
NPH	28	4	2	0	Yes	AD	AD	Yes	AN	Yes	Yes	Monthly	ORC;NS;TO
NTG	26	28	5	0.5	No	ND;AD	AD	Yes	SN	No	Yes	Not routinely	N/A
NTH	20	20	5	0	No	ND	ND	No	AED;AN	Yes	No	Not routinely	N/A/N/A
NTY	3	32	2	1	No	ND	ND	Yes	AED;OS	Yes	Yes	Monthly	ORC;OGC;ANC;NS;PH;OC;AES;TO

Hospital code	What is discussed?	Who does bone health assessment?	Fracture Liaison Service?	FLS run by?	Does FLS lead on falls?	Single room accommodation in catchment	Can you refer to strength and balance training?	Do you use Nottingham Score?
GWE	DS;LOS;DS;PSf	OG;SN;GP	No	Unknown	No	SIT	Unknown	No
GWH	MM;DS;LOS;PSf;CI;CN;LQ	OG	Both	RH	No	Unknown	FPC;CR	No
GWY	MM;DS;LOS;DS;PSf;CI	OG;SN;OCR;GP	Both	RH;GEM	No	TRU	FPC;CR;VS	occasionally
HAR	DS;LOS;DS;PSf;CI;LQ	OG;SN	No	Unknown	Unknown	Unknown	CR	No
HCH	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG;SN	Both	GEM	Yes	SIT	FPC	No
HIL	DS;PSf	OG	No	Unknown	No	Unknown	FPC;CR;VS	No
HIN	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG	Both	O	No	SIT	CR	routinely
HOM	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG;GP	No	Unknown	No	SIT	FPC;CR;VS	occasionally
HOR	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG;SN	Both	RH	Yes	Unknown	FPC	routinely
HRI	MM;DS;LOS;DS;PSf;LQ	OG	Inpatients	GEM	Yes	Unknown	FPC	No
HUD	MM;DS;LOS;PSf;LQ	OG;GP	No	Unknown	Unknown	Unknown	FPC;CR	No
IOW	DS	OCR	Outpatients	RH	No	Unknown	FPC	No
IPS	DS;LOS;DS;PSf;CI;CN;LQ	OG	Both	RH	Yes	Unknown	FPC;CR	No
JPH	N/A	OG;GP	No	Unknown	Unknown	Unknown	FPC;CR	No
KCH	DS;LOS;DS;LQ	OG;SN;OCR	Both	RH	Yes	Unknown	FPC;CR	No
KGH	MM;DS;LOS;DS;PSf;LQ	OG	No	Unknown	Unknown	Unknown	FPC;CR	No
KMH	N/A	OG	Both	END	No	HOS	FPC	No
KTH	MM;DS;PSf;CI;CN;LQ	OG	No	Unknown	Unknown	Unknown	FPC;CR	No
LDH	MM;DS;LOS;DS;PSf;CI;CN	OG	No	Unknown	No	Unknown	CR	routinely
LER	N/A	OG	No	Unknown	No	Unknown	FPC	occasionally
LEW	MM;DS;LOS;LQ	OG	Outpatients	GEM	Yes	Unknown	FPC	occasionally
LGH	MM;LOS;PSf;LQ	OG;SN	No	Unknown	Unknown	SIT;TRU	NA	routinely
LGI	MM;DS;LOS;DS;PSf;LQ	OG	No	Unknown	Unknown	Unknown	FPC;CR	occasionally
LIN	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG	Outpatients	O	No	SIT	CR	No
LON	DS;LOS;DS;PSf;CI	OG	No	Unknown	No	Unknown	Unknown	routinely
MAC	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG	No	Unknown	No	Unknown	Unknown	routinely
MAY	N/A	OG	Outpatients	GEM	No	Unknown	FPC;CR	occasionally
MDW	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG	Both	O	Yes	TRU	CR	No
MKH	DS;LOS;PSf;LQ	OG;SN;OCR	No	Unknown	Unknown	Unknown	FPC	No
MOR	MM;DS;LOS;PSf	OG;SN	Inpatients	O	No	Unknown	FPC	No
MPH	MM;DS;LOS;DS;LQ	OG	No	Unknown	Unknown	HOS	FPC	No
MRI	N/A	OG	No	Unknown	Unknown	Unknown	FPC;CR	routinely
NCR	MM;DS;LOS;PSf;CI;CN;LQ	OG;SN;OCR	Both	O	No	Unknown	FPC	No
NDD	MM;DS;LOS;DS;PSf	OG	No	Unknown	Unknown	Unknown	NA	No
NEV	MM;DS;LOS;DS;PSf;LQ	OG	Both	RH	No	SIT	FPC	No
NGS	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG;OCR	No	Unknown	Unknown	Unknown	CR	routinely
NHH	MM;DS;LOS;DS;PSf;CI;LQ	OG	No	Unknown	No	Unknown	NA	No
NMG	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG	No	Unknown	Unknown	Unknown	NA	routinely
NMH	MM;DS;LOS;PSf;CI;LQ	OG	Unknown	Unknown	No	Unknown	NA	No
NOB	MM;LOS;DS	SN	No	Unknown	Yes	Unknown	FPC;CR	No
NOR	N/A	OG	No	Unknown	No	Unknown	CR	No
NPH	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG	No	Unknown	Unknown	HOS;SIT;TRU	Unknown	No
NTG	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG;SN;GP	Both	O	No	Unknown	FPC	No
NTH	N/A	OG	No	Unknown	Unknown	Unknown	FPC;CR	No
NTY	MM;DS;LOS;PSf;CI;CN;LQ	OG;SN	No	Unknown	Unknown	Unknown	CR	routinely

Hospital code	No. OG consultant hrs	No. OG middle grade hrs	No. OG ward rounds/week	No. nurse practitioners	OG weekend cover?	Who collects data?	Who enters data?	Routine nerve blocks administered?	Who administers nerve blocks?	Enhanced recovery programme?	Pain tool used?	Clinical governance meetings?	Who attends?
NUH	1	40	5	0.5	No	ND	ND	No	AED;AN	No	No	Not routinely	ORC;NS;SW;TO
NUN	8	40	5	0	No	TA	TA	No	AN	Yes	No	Monthly	ORC;OGC;NS;PH;OC;TO
NWG	11.25	0	2	0	No	ND	ND	No	AN	No	No	Quarterly	ORC;OGC;NS
OHM	19	32	2	0	No	ND	ND	No	Unknown	No	No	Monthly	ORC;OGC;NS
OLD	4	43	7	1	Yes	ND	CA	No	AN	No	Yes	Monthly	ORC;OGC;NS;PH;TO
PAH	24	32	5	0	No	ND	ND	No	AED;AN	No	Yes	Monthly	ORC;OGC;ANC;NS;PH;OC;AES
PCH	7.5	0	3.5	0	No	ND;TA	ND;TA	No	AED;AN	No	Yes	Quarterly	ORC;OGC;ANC;NS;PH;OC;TO
PET	0	0	0	Unknown	No	ND	ND	No	AED;AN;OS	No	Yes	Not routinely	N/A
PGH	64	38	22	0	Yes	ND	ND;AD	Yes	AED;SN	Yes	Yes	Quarterly	ORC;OGC;ANC;NS;PH;CR;TO
PIL	8	0	5	0	No	ND	ND;AD	No	AED;AN	No	Yes	Quarterly	ORC;OGC;ANC;NS;PH;OC;AES
PIN	44	4	5	0	Yes	CA	CA	No	AN;OS	Yes	Yes	Monthly	ORC;OGC;ANC;NS;TO
PLY	20	34	5	0	No	CA	CA	No	OS;O	No	Yes	Weekly	ORC;OGC;ANC;NS
PMS	12	72	5	0	No	ND	ND	Yes	AED;AN	No	No	Not routinely	N/A
POW	4	2	2	1	No	TA	TA	Yes	AED;SN;OS	Yes	Yes	Not routinely	ORC;NS;TO
QAP	30.5	39.5	5	1.8	Yes	ND	ND	Yes	AN	No	Yes	Quarterly	ORC;OGC;ANC
QEB	16	4	4	2	No	ND;TA	TA	Yes	AED;AN	No	Yes	Not routinely	N/A
QEG	14	8	5	1	No	ND;TA	TA	Yes	AED;AN;OS	No	Yes	Monthly	ORC;NS;TO
QEQ	40	27.2	5	0	No	TA	TA	Yes	AED;AN;O	Yes	Yes	Monthly	ORC;OGC;ANC;NS;PH;OC
QKL	8	0	2	0	No	ND	ND	Yes	AN	No	Yes	Monthly	OGC;ANC;NS;PH;AES
RAD	30	36	5	0	Yes	TA	TA	Yes	AED;AN	No	Yes	Monthly	ORC;OGC;ANC;NS;PH;OC;AES;TO
RBE	30	40	5	2	No	ND	ND;AD	No	AED;AN	Yes	Yes	Not routinely	ORC;OGC;NS;PH;OC;TO
RCH	20	0	5	0	No	ND	ND	Yes	AED;AN;OS	No	No	Not routinely	N/A/N/A
RDE	22	10	5	0	No	ND;AD	ND;AD	Yes	AED;AN	No	Yes	Quarterly	ORC;OGC;NS;PH;OC;AES;TO
RED	10	10	5	0	No	ND	ND	No	Unknown	No	Yes	Quarterly	ORC;OGC;ANC;NS;TO
RFH	20	10	5	0.5	Yes	ND	ND	Yes	AED	No	No	Monthly	ORC;OGC;NS;PH;TO
RGH	5	0	2	0	No	TA	TA	No	AN	No	Yes	Quarterly	ORC;OGC;ANC;NS;PH;OC;TO
RHC	28	0	6	1	Yes	ND	ND	Yes	AED;AN	Yes	Yes	Monthly	ORC;OGC;ANC;NS;PH;OC
RLI	6	0	4	0	No	ND;TA	TA	Yes	AED;AN	No	Yes	Quarterly	ORC;NS;TO
RLU	28	4	5	1.25	No	ND	TA	Yes	AED	Yes	Yes	Monthly	OGC;NS;PH;OC;AES
ROT	8	0	1	0	No	ND	AD	Yes	AED;AN;O	Yes	Yes	Not routinely	ORC;NS;PH
RPH	37.5	6	7	1	No	ND	ND	Yes	AED	Yes	Yes	Quarterly	ORC;OGC;ANC;NS;PH
RSC	30	0	5	0	No	TA	TA	Yes	AN	No	Yes	Monthly	ORC;OGC;NS
RSS	7	40	5	1	No	ND	ND	Yes	AED;AN;OS;O	Yes	Yes	Quarterly	ORC;OGC;ANC;NS;PH;OC;TO
RSU	20	40	4	2	No	ND	ND	Yes	AED;O	Yes	Yes	Monthly	ORC;OGC;ANC;NS;PH;OC;AES;TO
RUS	16	64	3	2.8	Yes	ND	ND;AD	No	Unknown	Yes	Yes	Quarterly	ORC;ANC;NS;PH;OC;TO
RVB	26	76	7	0	No	TA	AD	No	AN	No	Yes	Monthly	ORC;OGC;NS;PH
RVN	14	10	5	1.16	Yes	ND	ND;AD	Yes	AN	Yes	Yes	Monthly	ORC;NS;PH;TO
SAL	20	42	6	1	No	ND;AD	AD	Yes	AED;AN;O	Yes	Yes	Quarterly	ORC;OGC;NS;PH
SAN	22	16	5	1.5	No	ND	TA	No	Unknown	No	Yes	Weekly	ORC;OGC;ANC;NS;PH
SCA	15	0	5	0	No	AD	AD	Yes	AED	No	No	Monthly	ORC;OGC;ANC;NS;PH;OC
SCM	37.5	0	6	1	No	ND;AD	ND;AD	No	Unknown	Yes	Yes	Quarterly	ORC;OGC;ANC;NS;PH
SCU	3.5	0	5	0	No	ND	ND;AD	No	AN	No	Yes	Quarterly	ORC;OGC;ANC;NS;PH;TO
SDG	18	0	5	1	No	ND	ND	No	AN	No	Yes	Not routinely	ORC;OGC;NS;TOMM;DS;CI;CN
SEH	15	0	5	1	No	ND	ND	No	Unknown	Yes	Yes	Not routinely	N/A
SGH	40	80	5	0	No	ND	AD	No	Unknown	No	Yes	Quarterly	ORC;OGC;NS;PH;OC
SHC	34	26	5	1	No	ND	TA	No	AED	Yes	Yes	Monthly	ORC;OGC;ANC;NS;TO

Hospital code	What is discussed?	Who does bone health assessment?	Fracture Liaison Service?	FLS run by?	Does FLS lead on falls?	Single room accommodation in catchment	Can you refer to strength and balance training?	Do you use Nottingham Score?
NUH	MM;DS;CI;CN	OG	Outpatients	O	No	Unknown	NA	occasionally
NUN	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG	No	Unknown	Yes	HOS	FPC;CR	No
NWG	MM;DS;CI	OG;GP	No	Unknown	No	TRU	FPC;CR	routinely
OHM	MM;DS;LOS;DS;PSf	OG	No	Unknown	Unknown	Unknown	FPC;CR;VS	occasionally
OLD	DS;LOS;PSf;CI;LQ	OG	Both	O	No	Unknown	FPC	No
PAH	DS;LOS;DS;PSf;CI;CN;LQ	OG	No	Unknown	No	Unknown	CR	occasionally
PCH	MM;PSf;CI;CN;LQ	Unknown	No	Unknown	No	TRU	Unknown	occasionally
PET	N/A	Orthopaedics	Both	O	Yes	Unknown	NA	No
PGH	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG	Both	RH	No	Unknown	FPC;CR	No
PIL	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG	No	Unknown	Unknown	Unknown	FPC	No
PIN	DS;PSf;LQ	OG	No	Unknown	Unknown	SIT	CR	occasionally
PLY	MM;DS;PSf;CI;LQ	OG	No	Unknown	No	HOS	NA	No
PMS	N/A	OG	No	Unknown	Unknown	Unknown	FPC;CR	routinely
POW	MM;DS;LOS;PSf;CI;CN;LQ	OG;SN;OCR	Both	RH	Yes	Unknown	FPC;CR	No
QAP	DS;PSf;CI	OG;SN	Outpatients	RH	No	Unknown	FPC;CR	routinely
QEB	N/A	OG;SN	Both	END	No	Unknown	CR	routinely
QEG	MM;CI;CN	OG	Both	GEM	No	Unknown	FPC;CR	No
QEQ	MM;DS;LOS;DS	OG;SN	Both	GEM	Yes	Unknown	FPC	routinely
QKL	MM;DS;LOS;PSf;CI	OG	No	Unknown	Unknown	Unknown	CR	routinely
RAD	MM;DS;PSf;CI;LQ	OG;SN	Both	RH	Yes	Unknown	FPC;CR	occasionally
RBE	MM;DS;PSf;CI;CN;LQ	OG	Outpatients	RH	No	TRU	CR	No
RCH	N/A	OG	No	Unknown	No	Unknown	FPC;CR;VS	occasionally
RDE	MM;DS;LOS;LQ	OG	No	Unknown	No	HOS;SIT;TRU	CR	No
RED	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG	No	Unknown	Unknown	Unknown	FPC;CR	No
RFH	MM;DS;PSf;CI	OG	No	Unknown	Yes	TRU	CR	No
RGH	MM;PSf;CI;CN;LQ	OG	No	Unknown	No	Unknown	NA	No
RHC	MM;DS;LOS;CI;LQ	OG	Outpatients	O	No	Unknown	FPC;CR	No
RLI	MM;DS;LOS;DS;PSf;CN;LQ	OG	No	Unknown	Unknown	Unknown	FPC;CR	No
RLU	DS;LOS;DS;PSf;CI;CN;LQ	OG;SN	No	Unknown	No	Unknown	CR	occasionally
ROT	MM;DS;PSf;CI;CN;LQ	OG	Outpatients	GEM	Yes	HOS	FPC;CR;VS	routinely
RPH	MM;DS;LOS;PSf	SN	No	Unknown	Unknown	Unknown	FPC	routinely
RSC	MM;DS;CI	OG	No	Unknown	Unknown	Unknown	FPC	occasionally
RSS	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG;OCR;GP	Inpatients	GEM	Yes	Unknown	FPC	occasionally
RSU	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG;GP	Both	RH;GEM	Yes	TRU	FPC;CR	occasionally
RUS	MM;DS;CI	OG	No	Unknown	Unknown	Unknown	FPC;CR	No
RVB	DS;LQ	OG	Both	GEM	No	Unknown	CR	No
RVN	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG;SN;OCR	Both	RH	No	Unknown	FPC	routinely
SAL	MM;CI;CN	OG	No	Unknown	No	Unknown	VS	routinely
SAN	MM;DS;LOS;DS;PSf	OG	Outpatients	O	No	SIT	CR	No
SCA	MM;DS;LOS;PSf;CI;CN;LQ	OG	No	Unknown	Unknown	Unknown	CR	occasionally
SCM	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG;SN	Outpatients	O	Yes	SIT	FPC;CR	routinely
SCU	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG	No	Unknown	No	HOS	NA	No
SDG	MM;DS;CI;CN	OG;SN	Both	RH	No	Unknown	FPC	No
SEH	N/A	OG	Both	RH	No	Unknown	NA	No
SGH	MM;DS;LOS;DS;PSf;CI;CN;LQ	OG	No	Unknown	Unknown	Unknown	FPC;CR	No
SHC	MM;DS;PSf;CI;LQ	OG	Outpatients	GEM	No	Unknown	CR	No

Hospital code	No. OG consultant hrs	No. OG middle grade hrs	No. OG ward rounds/week	No. nurse practitioners	OG weekend cover?	Who collects data?	Who enters data?	Routine nerve blocks administered?	Who administers nerve blocks?	Enhanced recovery programme?	Pain tool used?	Clinical governance meetings?	Who attends?
SHH	20	24	4	1	No	ND;TA	TA	No	AN	No	No	Quarterly	ORC;OGC;ANC;NS;PH;OC;SW;AES;TO
SLF	68	0	5	1	No	ND	ND	Yes	AED;AEN;AN	Yes	Yes	Monthly	ORC;OGC;ANC;NS;PH;AES
SMV	20	8	3	1	No	ND	ND	Yes	AED;AN;SN	No	Yes	Monthly	ORC;NS;PH;OC;TO
SOU	4	4	5	2	No	ND	ND	No	Unknown	No	Yes	Not routinely	ORC;NS;PH;OC
SPH	18	20	4.5	1.5	No	ND	ND	Yes	AED;AN	Yes	Yes	Monthly	ORC;OGC;ANC;NS;PH;OC;AES;TO
STD	5	10	2	0	No	ND	ND	Yes	AED;AN	Yes	Yes	Quarterly	OGC;ANC;NS;TO
STH	12	6	4	0	No	ND	TA	Yes	AED	No	No	Monthly	ORC;OGC;ANC;NS;PH;OC;AES
STM	58	40	5	0	No	TA	TA	No	AED	No	No	Weekly	ORC
STO	15	0	3	2	No	ND	ND	No	AED;AN	No	Yes	Monthly	ORC;OGC;ANC;NS
STR	10	1	5	0	No	ND;TA	TA	Yes	AED	No	Yes	Quarterly	ORC;OGC;ANC;NS;PH;OC;TO
SUN	28	3	5	3.85	Yes	ND	ND	No	AED;AN	No	Yes	Monthly	ORC;OGC;ANC;NS
TGA	6	5	5	0	No	ND	ND	Yes	AN	Yes	Yes	Monthly	ORC;NS;TO
TLF	0	0	0	1	No	ND	ND	No	AN;OS	No	Yes	Quarterly	ORC;TO
TOR	20	40	5	2	No	ND	ND	Yes	AN;SN;O	Yes	No	Not routinely	N/A
TUN	37	0	2	0	No	TA	TA	No	Unknown	No	Yes	Not routinely	N/A
UCL	10	8	2	1	Yes	ND	ND	Yes	AN	No	Yes	Not routinely	ORC;OGC;ANC;NS;PH;AES;TO
UHC	15	0	5	0	No	ND	AD	Yes	AN	Yes	Yes	Quarterly	ORC;OGC;ANC;NS;PH;OC
UHN	20	4	5	1.4	No	TA	TA	Yes	AN	Yes	Yes	Not routinely	N/A CI;CN
UHW	64	28	12	3	No	ND	AD	No	AED;AN;OS	No	No	Not routinely	N/A N/A
VIC	14	0	2	2	No	AD	AD	No	AED	Yes	Yes	Monthly	ORC;NS;PH;TO
WAR	20	40	5	6.34	No	ND	ND	No	AN	No	No	Not routinely	N/A
WAT	25	80	5	1	No	ND	ND	Yes	AED;AEN;AN;OS	No	No	Monthly	ORC;OGC;ANC;NS;PH;TO
WDG	37.5	37.5	5	0	No	ND	ND	Yes	AN	No	Yes	Monthly	ORC;OGC;NS;TO
WDH	12	7	2	0	No	ND;TA	ND;TA	Yes	AED;AN;O	No	Yes	Monthly	ORC;NS;TO
WES	7	3	3	1	No	ND	ND	Yes	AED;AN	No	Yes	Quarterly	ORC;NS;PH;OC;TO
WEX	16	45	5	0	No	ND	ND;AD	No	AEN;AN;SN	Yes	No	Monthly	ORC;OGC;ANC;NS;AES;TO
WGH	5	5	5	0.4	No	ND;TA	ND;TA	Yes	AED;AN;OS	No	Yes	Monthly	ORC;OGC;ANC;NS;PH
WHC	15	0	2	0	Yes	ND	ND	No	AED;AN	No	Yes	Not routinely	Unknown
WHH	10	40	4	4	No	ND;CA;TA;AD	ND;CA;TA;AD	Yes	AED;AN	Yes	Yes	Monthly	ORC;OGC;ANC;NS;PH;OC
WHI	8	8	3	0	No	ND;TA	TA;AD	No	Unknown	No	Yes	Monthly	ORC;OGC;ANC;NS;OC
WHT	15	0	5	0	No	ND	ND	Yes	AED;AN;SN	Yes	Yes	Not routinely	N/A
WIR	20	40	7	1	Yes	TA	TA	Yes	AED	Yes	Yes	Monthly	ORC;OGC;ANC;NS;PH;OC;CR
WMH	12	0	5	0	No	ND	ND	Yes	AN	No	Yes	Monthly	ORC;OGC;NS;PH;TO
WMU	6	8	3	0	No	ND	ND	Yes	AED;AN	Yes	Yes	Monthly	ORC;ANC;NS;PH;TO
WRC	24	5	5	0	No	ND	ND	No	AED;AN	No	Yes	Quarterly	ORC;OGC;ANC;NS;TO
WRG	12	4	5	0	No	ND;AD	AD	No	AED;AN;OS;O	No	No	Monthly	ORC;OGC;ANC
WRX	0	0	0	0	No	ND	ND	No	SN;O	Yes	Yes	Not routinely	NS;PH;OC;DI
WSH	12	16	3	2	No	ND;TA	TA	No	AN;O	No	Yes	Monthly	ORC;OGC;ANC;NS
WWG	6	4	1	0	No	ND	TA	Yes	AED;AN	No	No	Not routinely	N/A
WYB	0	0	0	0	No	AD	TA	No	AN	No	Yes	Monthly	ORC;NS;PH;OC;TO
WYT	20	4	5	1	No	ND	ND	No	Unknown	Yes	Yes	Not routinely	N/A
YDH	18	0	4	1	Yes	TA	TA	No	AED;AN	Yes	No	Quarterly	ORC;OGC;ANC;NS;PH;OC
YEO	7	40	3	0.2	No	ND;AD	ND;AD	Yes	AED	No	Yes	Not routinely	N/A N/A

Hospital code	What is discussed?	Who does bone health assessment?	Fracture Liaison Service?	FLS run by?	Does FLS lead on falls?	Single room accommodation in catchment	Can you refer to strength and balance training?	Do you use Nottingham Score?
SHH	DS;LOS;PSF;CI;LQ	OG	No	Unknown	Unknown	HOS	FPC;CR	occasionally
SLF	MM;DS;LOS;LQ	OG;SN;OCR	Both	RH	No	SIT	FPC;CR	occasionally
SMV	MM;DS;LOS;DS;PSF;CI;CN;LQ	SN;OCR	Inpatients	RH;O	Yes	HOS	FPC;CR	No
SOU	MM;DS;LOS;DS;PSF;CI;LQ	OG	Both	RH	Yes	HOS	FPC;CR	No
SPH	MM;DS;LOS;DS;PSf	OG	Both	GEM	No	Unknown	FPC;CR	routinely
STD	MM;DS;LOS;LQ	OG	No	Unknown	No	Unknown	FPC	routinely
STH	MM;DS;LOS;DS;PSF;CI;CN;LQ	OG	Outpatients	GEM	Yes	Unknown	FPC;CR	No
STM	MM;DS;LOS;DS;PSF;CI;CN;LQ	OG	No	Unknown	Unknown	Unknown	FPC;CR	No
STO	MM;DS;LOS;DS;CI	OG;SN;OCR;GP	Both	RH	Yes	Unknown	FPC;CR	No
STR	MM;DS;LOS;DS;PSF;CI;CN	OG	No	Unknown	Unknown	Unknown	FPC;CR	routinely
SUN	MM;DS;CI	OG;SN	Both	O	Yes	Unknown	FPC;CR	occasionally
TGA	DS;LOS;PSF;CI;CN	OG	No	Unknown	No	Unknown	FPC;CR	No
TLF	MM;DS;LOS;DS;PSF;CN;LQ	SN;OCR	Both	GEM	Yes	Unknown	FPC	routinely
TOR	N/A	OG;SN	Both	RH	No	Unknown	CR	No
TUN	N/A	OG	No	Unknown	Unknown	HOS	FPC;CR	occasionally
UCL	MM;DS;LOS;PSF;LQ	OG	No	Unknown	Unknown	Unknown	CR	routinely
UHC	MM;DS;LOS;DS;PSF;CI;CN;LQ	OG	No	Unknown	Unknown	Unknown	CR	No
UHN	CI;CN	SN	Both	GEM	Yes	Unknown	FPC;CR	routinely
UHW	N/A	OG	Both	GEM	No	Unknown	NA	No
VIC	MM;DS;LOS;DS;PSF;CI;CN;LQ	OG;SN	No	Unknown	Unknown	Unknown	Unknown	occasionally
WAR	MM	OG	No	Unknown	No	Unknown	FPC	No
WAT	MM;DS;PSF;CI;CN;LQ	OG	No	Unknown	Unknown	Unknown	FPC;CR	routinely
WDG	DS;LOS	OG	No	Unknown	Unknown	Unknown	NA	routinely
WDH	MM;CN	OG	Both	RH	No	Unknown	NA	occasionally
WES	MM;DS;DS;PSF;CI;CN;LQ	SN;OCR	Both	RH;O	No	Unknown	CR	No
WEX	MM;DS;LOS;CI;CN;LQ	OG	No	Unknown	No	Unknown	NA	No
WGH	MM;DS;LQ	OG	Outpatients	RH	No	Unknown	FPC;CR	occasionally
WHC	N/A	OG	No	Unknown	Yes	Unknown	FPC;CR;VS	routinely
WHH	MM;DS;LOS;DS;PSF;CI;CN;LQ	OG;SN	Both	GEM	Yes	Unknown	FPC	routinely
WHI	MM;LOS;LQ	OG	No	Unknown	Unknown	Unknown	FPC;CR	routinely
WHT	N/A	OG	No	Unknown	Unknown	Unknown	Unknown	routinely
WIR	MM;DS;LOS;DS;PSF;CI;CN;LQ	OG	No	Unknown	Unknown	Unknown	NA	routinely
WMH	MM;DS;LOS;DS;PSF;CI;CN;LQ	OG;OCR	No	Unknown	Unknown	HOS	FPC	routinely
WMU	MM;DS;LOS;DS;CI;CN;LQ	OG;OCR;GP	No	Unknown	Unknown	HOS	FPC	routinely
WRC	MM;DS;LOS;DS;PSF;CI;CN;LQ	OG	Outpatients	RH;GEM;O	Yes	Unknown	FPC;CR	occasionally
WRG	MM	OG	No	Unknown	Unknown	Unknown	NA	routinely
WRX	MM;CI	Unknown	No	Unknown	No	Unknown	FPC;CR	routinely
WSH	MM;DS;LOS;DS;PSF;CI;CN	OG;SN	No	Unknown	No	Unknown	CR	routinely
WWG	N/A	OG	Both	GEM	No	Unknown	NA	No
WYB	DS;LOS;PSF;LQ	Unknown	No	Unknown	No	Unknown	NA	occasionally
WYT	MM;PSF;CI;CN;LQ	OG;SN;GP	No	Unknown	Unknown	Unknown	FPC;CR	routinely
YDH	DS;LOS;LQ	OG;SN	No	Unknown	No	Unknown	FPC;CR	routinely
YEO	N/A	OG;SN	Both	RH	No	Unknown	CR	No

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# Appendix A

## A note about information governance

Secure access for staff involved in the treatment of patients with hip fracture to the NHFD database is requested by the NHFD lead clinician for each organisation that uploads data. Once the request is validated, secure access is provided by the NHFD administration team to facilitate data entry to the audit. The data are entered via a secure website, and access to this is via a secure login name and password.

Personal confidential data items for this audit were processed by Crown Informatics under section 251 (of the NHS Act 2006) approval, prior to anonymisation. Data are anonymised and securely transferred to the Royal College of Surgeons of England for analysis. Reported data and data files released under government transparency guidance<sup>16</sup> are managed in line with UK statistics authority guidance on the handling of small numbers<sup>17</sup> to prevent the identification of individuals. Data for English hospitals included in all provider-level charts and tables in this report can be found at [www.data.gov.uk/](http://www.data.gov.uk/).

Data were collected and processed with specific approval of the secretary of state for health on the recommendation of the Health Research Authority (HRA) Confidentiality Advisory Group (CAG) under the Health Service (Control of Patient Information) Regulations 2002. This is more commonly referred to as section 251 approval, and references to 'section 251 support or approval' actually refer to approval given under the authority of these regulations.

Section 251 was established to enable the common law duty of confidentiality to be overridden to enable disclosure of confidential patient information for medical purposes, where it was not possible to use anonymised information and where seeking consent was not practical, having regard to the cost and technology available.

The process is different for Northern Ireland, with the data being provided by the Fracture Outcomes Research Database (FORD) system. In line with Northern Ireland legislation, no identifiable information is submitted to the NHFD.

# Appendix B

## Structure and governance

### FFFAP Board

Chris Boulton, NHFD project manager  
Rhona Buckingham, Clinical Effectiveness and Evaluation Unit (CEEU) operations director, RCP  
Tim Chesser, British Orthopaedic Association  
David Cromwell, Royal College of Surgeons of England, Clinical Effectiveness Unit  
Kassim Javaid, FLS-DB clinical lead  
Antony Johansen, NHFD clinical lead, orthogeriatric medicine  
Finbarr Martin, FFFAP programme chair and clinical lead  
Shelagh O’Riordan, falls workstream clinical lead  
Roz Stanley, FFFAP programme manager  
Kevin Stewart, CEEU clinical director, RCP  
Naomi Vasilakis, falls workstream and FLS-DB project manager  
Rob Wakeman, NHFD clinical lead, orthopaedic surgery  
Helen Wilson, British Geriatrics Society

### NHFD Workstream Delivery Team

Chris Boulton, NHFD project manager  
Tim Bunning, Crown Informatics  
Viv Burgon, NHFD project coordinator  
David Cromwell, Royal College of Surgeons of England, Clinical Effectiveness Unit  
Antony Johansen, NHFD clinical lead, orthogeriatric medicine  
Sunil Rai, FFFAP data coordinator  
Roz Stanley, FFFAP programme manager  
Carmen Tsang, Royal College of Surgeons of England, Clinical Effectiveness Unit  
Rob Wakeman, NHFD clinical lead, orthopaedic surgery

### NHFD Advisory Group

John Barr, consultant orthopaedic surgeon, Royal Victoria Hospital, Belfast  
Chris Boulton, NHFD project manager  
Tim Bunning, Crown Informatics  
Viv Burgon, NHFD project coordinator  
Tim Chesser, British Orthopaedic Association  
Gary Cook, consultant in public health medicine, Stockport  
Matt Costa, associate clinical professor, University of Oxford  
David Cromwell, Royal College of Surgeons of England, Clinical Effectiveness Unit  
Mike Ellis, tissue viability clinical nurse specialist, Royal Devon and Exeter NHS Trust

Richard Griffiths, consultant anaesthetist, Peterborough Hospital  
Karen Hertz, advanced nurse practitioner, Royal Stoke University Hospital  
Antony Johansen, NHFD clinical lead, orthogeriatric medicine  
Finbarr Martin, FFFAP programme chair and clinical lead  
Jenny Neuburger, London School of Hygiene and Tropical Medicine  
Neil Pendleton, senior lecturer in geriatric medicine, University of Manchester  
Iona Price, Patient and Carer Network, RCP  
Sunil Rai, FFFAP data coordinator  
Nivi Singh, consultant orthogeriatrician, St Helier Hospital  
Roz Stanley, FFFAP programme manager  
Cameron Swift, King's College London  
Ruth Ten Hove, Chartered Society of Physiotherapists  
Philippa Thorpe, consultant orthopaedic surgeon, Arrows Park Hospital  
Anne Thurston, National Osteoporosis Society  
Carmen Tsang, Royal College of Surgeons of England, Clinical Effectiveness Unit  
Philippa Turner, commissioning manager, NHS South Worcestershire CCG  
Rob Wakeman, NHFD clinical lead, orthopaedic surgery  
Helen Wilson, British Geriatrics Society

#### **NHFD Scientific and Publications Committee**

Chris Boulton, NHFD project manager  
Viv Burgon, NHFD project coordinator  
Matt Costa, associate clinical professor, University of Oxford  
Celia Gregson, consultant senior lecturer, University of Bristol  
Karen Harding, consultant orthogeriatrician, North Bristol NHS Trust  
Antony Johansen, NHFD clinical lead, orthogeriatric medicine  
Janet Lippett, consultant in elderly care, Royal Berkshire NHS Foundation Trust  
Jenny Neuburger, London School of Hygiene and Tropical Medicine  
Neil Pendleton, senior lecturer in geriatric medicine, University of Manchester  
Sunil Rai, FFFAP data coordinator  
Roz Stanley, FFFAP programme manager  
Carmen Tsang, Royal College of Surgeons of England, Clinical Effectiveness Unit  
Rob Wakeman, NHFD clinical lead, orthopaedic surgery  
Stuart White, consultant anaesthetist, Brighton and Sussex Hospitals NHS Trust

# Appendix C

## Facilities audit questions

### Staffing

Number of hours per week worked by orthogeriatric consultants in orthopaedic department

Number of hours per week orthogeriatric staff grades/associate specialists/SpRs work in orthopaedic department

Number of orthogeriatric ward rounds a week

Number of clinical nurse practitioner whole-time equivalent (WTE) specialising in fragility fracture patients

Do you have routine orthogeriatric cover (ST3 and above) at weekends?  
*(This includes geriatric cover but not general medical on call)*

### Data collection

Who predominantly collects data?

Who predominantly enters data?

### Pain management

Are nerve blocks routinely offered to patients with a hip fracture?

Who would usually administer the nerve blocks?

Do you have an Enhanced Recovery Programme for hip fracture patients which includes improved management of postoperative pain? (Other than intraoperative local anaesthetic infiltration)

Do you routinely use a pain score tool to assess perioperative pain?

### Clinical governance

How often does your hip fracture team hold clinical governance meetings?  
*(As distinct from general trauma and orthopaedic (T&O) audit meetings)*

Who attends clinical governance meetings for the hip fracture pathway  
*(This refers to people who attend these meetings regularly)*

What do you routinely discuss at these meetings?  
*(Separate mortality and morbidity meetings should be referred to at clinical governance meetings)*

### Bone health assessment

Who usually assesses patients' bone health after hip fracture?

Is there a 'fracture liaison service' (FLS) in your hospital?

Who runs the FLS?

## **Falls**

If you have an FLS, does it routinely take a lead on falls prevention as well as bone health?

Inpatient falls: is there a hospital with exclusively single room accommodation in your catchment area?

Can you easily refer patients for strength and balance training after discharge?

# Appendix D

## Clinical dataset v8

**K = key fields.** If missing or invalid data entered, the record will be rejected.

**M = mandatory fields.** If missing or invalid data entered, the record will remain in **draft** form.

**B = required for BPT.** If missing or invalid data entered, BPT will not be available.

### Patient information

First name	Surname	NHS / CHI number	B M
Date of birth	M	Gender	M
___/___/_____		<input type="checkbox"/> Male <input type="checkbox"/> Female	Patient's postcode
			M
Patient ID / hospital number	K		

### Admission

Hospital in which fracture is first identified	Residence at time of fracture	M
	<input type="checkbox"/> Own home/sheltered housing <input type="checkbox"/> Residential care <input type="checkbox"/> Nursing care <input type="checkbox"/> Inpatient – on this hospital site <input type="checkbox"/> Inpatient – other hospital site of this trust <input type="checkbox"/> Inpatient – another trust	
Admission with hip fracture via A&E	Date and time of admission to A&E	B M
<input type="checkbox"/> Yes <input type="checkbox"/> No	___/___/_____ :__ hrs Note: use presentation to trauma team if not admitted via A&E	
Date/time of admission to orthopaedic/orthogeriatric ward	Admitted using jointly agreed assessment protocol	B
___/___/_____ :__ hrs <input type="checkbox"/> Never admitted to orthopaedic/orthogeriatric ward	<input type="checkbox"/> Yes – assessment protocol in the notes <input type="checkbox"/> No – assessment protocol not in the notes	
Orthopaedic GMC number/name	Geriatrician GMC number/name	B M

## Assessment

<b>Pre-fracture mobility</b>	
<input type="checkbox"/> Freely mobile without aids <input type="checkbox"/> Mobile outdoors with one aid <input type="checkbox"/> Mobile outdoors with two aids or frame <input type="checkbox"/> Some indoor mobility but never goes outside without help <input type="checkbox"/> No functional mobility (using lower limbs) <input type="checkbox"/> Unknown	
<b>Abbreviated mental test scores (AMTS) pre-op</b> B	<b>Abbreviated mental test scores (AMTS) post-op (in acute stay)</b> B
1st AMTS ..... /10 <input type="checkbox"/> Not done/patient refused	2nd AMTS..... /10 <input type="checkbox"/> Not done/patient refused
<b>Pathological</b>	<b>Side of fracture</b> K
<input type="checkbox"/> Atypical <input type="checkbox"/> Malignancy <input type="checkbox"/> No <input type="checkbox"/> Unknown	<input type="checkbox"/> Left <input type="checkbox"/> Right
<b>Type of fracture</b>	<b>Pre-op medical assessment</b> M
<input type="checkbox"/> Intracapsular – displaced <input type="checkbox"/> Intracapsular – undisplaced <input type="checkbox"/> Intertrochanteric <input type="checkbox"/> Subtrochanteric	<input type="checkbox"/> Specialist assessment by orthogeriatrician (grade ST3+) <input type="checkbox"/> Specialist orthogeriatric assessment by specialist nurse <input type="checkbox"/> Medical review following request (grade ST3+) <input type="checkbox"/> None

## Treatment

<b>ASA grade</b>	<b>Date and time of primary surgery</b> B
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Unknown	___ / ___ / _____    __:__:__ hrs
<b>Operation performed</b> M	<b>Type of anaesthesia</b>
<input type="checkbox"/> Internal fixation – sliding hip screws <input type="checkbox"/> Internal fixation – cannulated screws <input type="checkbox"/> Internal fixation – IM nail (long) <input type="checkbox"/> Internal fixation – IM nail (short) <input type="checkbox"/> Arthroplasty – unipolar hemi (uncemented – uncoated) <input type="checkbox"/> Arthroplasty – unipolar hemi (uncemented – HA coated) <input type="checkbox"/> Arthroplasty – unipolar hemi (cemented) <input type="checkbox"/> Arthroplasty – bipolar hemi (uncemented – uncoated) <input type="checkbox"/> Arthroplasty – bipolar hemi (uncemented – HA coated) <input type="checkbox"/> Arthroplasty – bipolar hemi (cemented) <input type="checkbox"/> Arthroplasty – THR (uncemented – uncoated) <input type="checkbox"/> Arthroplasty – THR (uncemented – HA coated) <input type="checkbox"/> Arthroplasty – THR (cemented) <input type="checkbox"/> Arthroplasty – THR hybrid <input type="checkbox"/> Other <input type="checkbox"/> No operation performed	<input type="checkbox"/> GA only <input type="checkbox"/> GA and nerve block <input type="checkbox"/> GA and spinal anaesthesia <input type="checkbox"/> GA and epidural anaesthesia <input type="checkbox"/> SA only <input type="checkbox"/> SA and nerve block <input type="checkbox"/> SA and epidural (CSE) <input type="checkbox"/> Other

<b>Reason if delay &gt;36 hours</b>	<b>M</b>	<b>Pressure ulcers</b>	<b>M</b>
<input type="checkbox"/> No delay – surgery <36 hrs <input type="checkbox"/> Awaiting orthopaedic diagnosis/investigation <input type="checkbox"/> Awaiting medical review/investigation or stabilisation <input type="checkbox"/> Administrative/logistic – awaiting inpatient or high dependency bed <input type="checkbox"/> Administrative/logistic – awaiting space on theatre list <input type="checkbox"/> Administrative/logistic – problem with theatre/equipment <input type="checkbox"/> Administrative/logistic – problem with theatre/surgical/ anaesthetic staff cover <input type="checkbox"/> Administrative/logistic – cancelled due to theatre over-run <input type="checkbox"/> Other <input type="checkbox"/> Unknown		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
<b>Date and time assessed by geriatrician</b>	<b>B M</b>	<b>Geriatrician grade</b>	<b>B M</b>
____/____/______    ____:____hrs		<input type="checkbox"/> Consultant <input type="checkbox"/> SAS <input type="checkbox"/> ST3+ <input type="checkbox"/> Unknown <input type="checkbox"/> Not seen	
<b>Specialist falls assessment</b>	<b>B M</b>	<b>Multidisciplinary rehabilitation team assessment</b>	<b>B M</b>
<input type="checkbox"/> No <input type="checkbox"/> Yes – performed on this admission <input type="checkbox"/> Yes – awaits falls clinic assessment <input type="checkbox"/> Yes – further intervention not appropriate		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
<b>Bone protection medication</b>	<b>B M</b>	<b>Mobilised on day of or day following surgery</b>	
<input type="checkbox"/> Started on this admission <input type="checkbox"/> Continued from pre-admission <input type="checkbox"/> Awaits DXA scan <input type="checkbox"/> Awaits bone clinic assessment <input type="checkbox"/> Assessed – no bone protection medication needed/ appropriate <input type="checkbox"/> No assessment or action taken		<input type="checkbox"/> Yes – physiotherapist <input type="checkbox"/> Yes – other <input type="checkbox"/> No	

## Discharge

<b>Date and time of discharge from acute orthopaedic ward</b>	<b>M</b>	<b>Discharge destination from acute orthopaedic ward</b>	<b>M</b>
____/____/______    ____:____hrs		<input type="checkbox"/> Own home/sheltered housing <input type="checkbox"/> Residential care <input type="checkbox"/> Nursing care <input type="checkbox"/> Rehabilitation unit <input type="checkbox"/> Acute hospital <input type="checkbox"/> Dead <input type="checkbox"/> Other	



Date and time of final discharge from trust	M	Discharge destination from trust	M
___/___/_____ :__hrs		<input type="checkbox"/> Own home/sheltered housing <input type="checkbox"/> Residential care <input type="checkbox"/> Nursing care <input type="checkbox"/> Rehabilitation unit <input type="checkbox"/> Acute hospital <input type="checkbox"/> Dead <input type="checkbox"/> Other <input type="checkbox"/> Unknown	
Discharge date/time of final discharge from NHS care		Discharge destination from NHS care	
___/___/_____ :__hrs		<input type="checkbox"/> Own home/sheltered housing <input type="checkbox"/> Residential care <input type="checkbox"/> Nursing care <input type="checkbox"/> Rehabilitation unit <input type="checkbox"/> Acute hospital <input type="checkbox"/> Dead <input type="checkbox"/> Other <input type="checkbox"/> Unknown	

### Follow-up

	30 days	120 days	1 year
	Date.....	Date.....	Date.....
<b>Residential status</b>	<input type="checkbox"/> Own home/sheltered housing <input type="checkbox"/> Residential care <input type="checkbox"/> Nursing care <input type="checkbox"/> Rehabilitation unit <input type="checkbox"/> Acute hospital <input type="checkbox"/> Dead <input type="checkbox"/> Other <input type="checkbox"/> Unknown	<input type="checkbox"/> Own home/sheltered housing <input type="checkbox"/> Residential care <input type="checkbox"/> Nursing care <input type="checkbox"/> Rehabilitation unit <input type="checkbox"/> Acute hospital <input type="checkbox"/> Dead <input type="checkbox"/> Other <input type="checkbox"/> Unknown	<input type="checkbox"/> Own home/sheltered housing <input type="checkbox"/> Residential care <input type="checkbox"/> Nursing care <input type="checkbox"/> Rehabilitation unit <input type="checkbox"/> Acute hospital <input type="checkbox"/> Dead <input type="checkbox"/> Other <input type="checkbox"/> Unknown
<b>Mobility</b>	<input type="checkbox"/> Freely mobile without aids <input type="checkbox"/> Mobile outdoors with one aid <input type="checkbox"/> Mobile outdoors with one aid or frame <input type="checkbox"/> Some indoor mobility but never goes outside without help <input type="checkbox"/> No functional mobility (using lower limbs) <input type="checkbox"/> Unknown	<input type="checkbox"/> Freely mobile without aids <input type="checkbox"/> Mobile outdoors with one aid <input type="checkbox"/> Mobile outdoors with one aid or frame <input type="checkbox"/> Some indoor mobility but never goes outside without help <input type="checkbox"/> No functional mobility (using lower limbs) <input type="checkbox"/> Unknown	<input type="checkbox"/> Freely mobile without aids <input type="checkbox"/> Mobile outdoors with one aid <input type="checkbox"/> Mobile outdoors with one aid or frame <input type="checkbox"/> Some indoor mobility but never goes outside without help <input type="checkbox"/> No functional mobility (using lower limbs) <input type="checkbox"/> Unknown
<b>Bone protection medication</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
<b>Re-operation within 30 days of admission to A&amp;E</b>	<input type="checkbox"/> Reduction of dislocated prosthesis <input type="checkbox"/> Washout or debridement <input type="checkbox"/> Implant removal <input type="checkbox"/> Revision of internal fixation <input type="checkbox"/> Conversion to hemiarthroplasty <input type="checkbox"/> Conversion to THR <input type="checkbox"/> Girdlestone/excision arthroplasty <input type="checkbox"/> Surgery for periprosthetic fracture <input type="checkbox"/> None <input type="checkbox"/> Unknown Note: select the most significant procedure only		

# Appendix E

## Analysis specification

### Table: Ward management

#### Field: Admitted to orthopaedic ward in 4 hours

Data: 2014 calendar year (admission date)

Description: Based on NICE CG124 – From admission, offer patients a formal, acute, orthogeriatric or orthopaedic ward-based hip fracture programme.

Fields: Date/time of admission to A&E, Date/time of admission to Orthopaedic ward (OW), Ward type

Denominator: All cases less exclusions

Numerator: Interval between time of admission to A&E and time of admission to OW  $\leq 4.0$  hours AND ward type = orthopaedic/orthogeriatric ward.

Exclusions: n=3,891 Not admitted via A&E, n=25 No admission date/time, n=145 Date of admission to A&E after date of admission to OW.

Cases: 60,129 Hospitals: 180

#### Field: Recorded admission AMTS

Data: 2014 calendar year (admission date)

Description: Based on NICE QS16 – People with hip fracture have their cognitive status assessed, measured and recorded from admission.

Fields: Date/time of admission to A&E; AMTS (pre-op)

Denominator: All cases

Numerator: AMTS is a valid integer in the range 0–10

Exclusions: None

Cases: 64,102 Hospitals: 180

#### Field: Perioperative orthogeriatric assessment

Data: 2014 calendar year (admission date)

Description: Based on NICE CG124 – All patients presenting with a fragility hip fracture are offered a

formal hip fracture programme from admission that includes continued coordinated orthogeriatric and multidisciplinary review.

Fields: Geriatrician grade, Date/time assessed by geriatrician, Date/time of admission to A&E or Date/time seen by trauma team

Denominator: All cases

Numerator: Cases where the interval between time of admission to A&E or time seen by trauma team and time assessed by geriatrician  $\leq 72.0$  hours AND geriatrician grade = Consultant or SAS or ST3+

Exclusions: None

Cases: 64,102 Hospitals: 180

**Field: Mobilised out of bed on the day or day after surgery**

Data: 2014 calendar year (admission date)

Description: Based on NICE QS16 – People with hip fracture are offered a physiotherapist assessment the day after surgery and mobilisation at least once a day unless contraindicated.

Fields: Date/time of admission to A&E; Mobilised post surgery

Denominator: All cases less exclusions

Numerator: Cases where mobilised post surgery does not equal 'No' and does not equal 'Unknown'

Exclusions: n=16,172 admitted between January and March 2014

Cases: 47,930 Hospitals: 180

**Field: Received falls assessment**

Data: 2014 calendar year (admission date)

Description: Based on NICE QS16 – People with hip fracture are offered a multifactorial risk assessment to identify and address future falls risk, and are offered individualised intervention if appropriate.

Fields: Date/time of admission to A&E; Falls assessment, Discharge ward destination, Discharge trust destination

Denominator: All cases less exclusions

Numerator: Cases where falls assessment does not equal 'No' and does not equal 'Unknown'

Exclusions: n=4,980 died in hospital

Cases: 59,122 Hospitals: 180

**Field: Received bone health assessment**

Data: 2014 calendar year (admission date)

Description: Based on NICE QS16 – People with hip fracture are offered a bone health assessment to identify future fracture risk and offered pharmacological intervention as needed before discharge from hospital.

Fields: Date/time of admission to A&E; Antiresorptive therapy, Discharge ward destination, Discharge trust destination

Denominator: All cases less exclusions

Numerator: Cases where falls assessment does not equal 'No assessment or action taken' and does not equal 'Unknown'

Exclusions: n=4,980 died in hospital

Cases: 59,122 Hospitals: 180

**Field: Met all the criteria for best practice tariff (BPT)**

Data: 2014 calendar year (discharge date)

Description: Hospital compliance with BPT criteria

Fields: NHS number, Date/time of admission to A&E, Date/time of admission to orthopaedic ward, Date/time of surgery, Orthopaedic GMC number, Geriatrician GMC number, Admitted using jointly agreed assessment protocol, Geriatrician assessment time, Geriatrician grade, MDT assessment, Bone therapy medication, Falls assessment, AMT scores (pre-op and post-op).

Denominator: All cases less exclusions

Numerator: NHS number is not missing AND Orthopaedic GMC number and geriatrician GMC number are not missing AND Admitted Using Jointly Agreed Assessment Protocol is equal to 'Yes' AND Time to surgery is in the range greater than 0 hours and less than or equal to 36 hours AND Time to geriatrician assessment is between 0 and 72 hours AND Geriatrician Grade is equal to 'Consultant', 'SAS' or 'ST3' AND MDT Assessment is equal to 'Yes' AND Bone therapy medication response indicates patient received any form of assessment/action AND Falls assessment response indicates patient received any form of assessment/action AND Valid preoperative AMT score AND Valid postoperative AMT score.

Exclusions: 5,496 cases from non-English hospitals

Cases: 58,521 Hospitals: 162

## **Table: Surgery**

### **Field: Surgery on day of, or day after admission**

Data: 2014 calendar year (admission date)

Description: Based on NICE QS16 – People with hip fracture have surgery on the day of, or the day after, admission.

Fields: Date/time of admission to A&E, Date/time of surgery, operation type

Denominator: All cases less exclusions

Numerator: Cases where date of admission to A&E = date of surgery OR date of admission to A&E = date of surgery + 1 day

Exclusions: n=19 Date/time of admission to A&E after date/time of surgery.

Cases: 64,083 Hospitals: 180

### **Field: General anaesthetic**

Data: 2014 calendar year (admission date)

Description: Percentage of cases having a general anaesthetic

Fields: Anaesthesia type

Denominator: All cases

Numerator: Cases where anaesthetic type = GA only OR GA + nerve block OR GA + epidural anaesthesia

Exclusions: None

Cases: 30,857 Hospitals: 180

### **Field: General anaesthetic + nerve block**

Data: 2014 calendar year (admission date)

Description: Percentage of cases having a general anaesthetic that have a nerve block

Fields: Anaesthesia type

Denominator: Cases where anaesthetic type = GA only OR GA + nerve block OR GA + epidural anaesthesia

Numerator: Cases where anaesthetic type = GA + nerve block

Exclusions: None

Cases: 17,280 Hospitals: 180

**Field: Spinal anaesthetic**

Data: 2014 calendar year (admission date)

Description: Percentage of cases having a spinal anaesthetic

Fields: Anaesthesia type

Denominator: All cases

Numerator: Cases where anaesthetic type = SA only OR SA + nerve block OR SA + epidural (CSE)

Exclusions: None

Cases: 27,042 Hospitals: 180

**Field: Spinal anaesthetic + nerve block**

Data: 2014 calendar year (admission date)

Description: Percentage of cases having a spinal anaesthetic that have a nerve block

Fields: Anaesthesia type

Denominator: Cases where anaesthetic type = SA only OR SA + nerve block OR SA + epidural (CSE)

Numerator: Cases where anaesthetic type = SA + nerve block

Exclusions: None

Cases: 7,192 Hospitals: 180

**Field: Proportion of arthroplasties which are cemented**

Data: 2014 calendar year (admission date)

Description: Based on NICE QS16 – People with displaced intracapsular fracture receive cemented arthroplasty, with the offer of total hip replacement if clinically eligible.

Fields: Fracture type, Operation type

Denominator: All cases less exclusions

Numerator: Cases where operation performed = Arthroplasty – Unipolar hemi (cemented) OR Arthroplasty – Bipolar hemi (cemented) OR Arthroplasty – THR (cemented) OR Arthroplasty – THR Hybrid

Exclusions: n=32,445 fracture type does not equal ‘displaced intracapsular fracture’; n=32,328 operation performed = not arthroplasty

Cases: 28,705 Hospitals: 180

**Field: Eligible displaced intracapsular fractures treated with THR**

Data: 2014 calendar year (admission date)

Description: Based on NICE QS16 – People with displaced intracapsular fracture receive cemented arthroplasty, with the offer of total hip replacement if clinically eligible.

Fields: Fracture type, Operation type, Mobility, ASA grade, Pre-op AMTS

Denominator: All cases less exclusions

Numerator: Cases where operation performed = Arthroplasty – THR (uncemented – uncoated) OR Arthroplasty – THR (uncemented – HA coated) OR Arthroplasty – THR (cemented) OR Arthroplasty – THR Hybrid

Exclusions: n=32,445 fracture type does not equal ‘displaced intracapsular’; n=28,930 mobility not 1 or 2; n=11,356 ASA not 1–3; n=26,741 pre-op AMTS <8 or missing; n=1,401 no operation; n=129 missing operation type.

Cases: 11,722 Hospitals: 180

**Field: Intertrochanteric fractures treated with SHS**

Data: 2014 calendar year (admission date)

Description: Based on NICE QS16 – People with trochanteric fractures above and including the lesser trochanter (AO classification types A1 and A2) receive extramedullary implants such as a sliding hip screw in preference to an intramedullary nail.

Fields: Fracture Type, Operation type

Denominator: All cases less exclusions

Numerator: Cases where operation performed = Internal fixation – Sliding hip screws

Exclusions: n=41,961 not intertrochanteric fractures

Cases: 22,141 Hospitals: 180

**Field: Subtrochanteric fractures treated with an IM nail**

Data: 2014 calendar year (admission date)

Description: Based on NICE CG124 – Use an intramedullary nail to treat patients with a subtrochanteric fracture

Fields: Fracture type, Operation type

Denominator: All cases less exclusions

Numerator: Cases where operation performed = Internal fixation – IM nail (long) OR Internal fixation – IM nail (short)

Exclusions: n=60,303 non-subtrochanteric fractures

Cases: 3,799 Hospitals: 180

### **Table: Outcomes**

#### **Field: Case ascertainment**

Data: 2014 calendar year (admission date)

Description: Estimated proportion of hip fracture cases submitted to NHFD.

Fields: Date/time of admission to A&E

Denominator: Estimate of number of hip fractures treated based on HES data (2013) (England); PEDW data (2013) (Wales); Previous annual NHFD submissions (Northern Ireland and Isle of Man, 2013)

Numerator: Number of cases admitted to NHFD

Exclusions: None

Cases: 64,102 Hospitals: 180

#### **Field: Acute length of stay (days)**

Data: 2014 calendar year (admission date)

Description: Time spent in NHS care in an acute ward or unit in the admitting hospital

Fields: Date/time of admission to A&E; Date/time of admission to orthopaedic ward; Date/time of discharge from ward; Date/time of discharge from trust

Calculation: Interval between time of admission to A&E and time of discharge from ward

Exclusions: n=2,149 missing date/time of discharge from ward; n=770 missing date/time of discharge from trust; n=23 acute LOS<0 days; n=28 acute LOS >365 days; n=30 post-acute LOS <0 days.

Cases: 61,442 Hospitals: 180

#### **Field: Overall hospital length of stay (days)**

Data: 2014 calendar year (admission date)

Description: Time spent in NHS care in the admitting hospital (including rehabilitation stay)



Fields: Date/time of admission to A&E; Date/time of admission to orthopaedic ward; Date/time of discharge from ward; Date/time of discharge from trust

Calculation: Interval between time of admission to A&E and time of discharge from trust

Exclusions: n=2,149 missing date/time of discharge from ward; n=770 missing date/time of discharge from trust; n=23 acute LOS<0 days; n=28 acute LOS >365 days; n=30 post-acute LOS <0 days.

Cases: 61,442 Hospitals: 180

### **Return to original residence within 30 days**

Data: 2014 calendar year (admission date)

Description: Proportion of patients returning to their own home within 30 days

Fields: Date/time of admission to A&E; Admitted from; Discharge from orthopaedic ward destination; Date/time of discharge from orthopaedic ward; Discharge from trust destination; Date/time of discharge from trust

Denominator: All cases less exclusions

Numerator: All cases where interval between date of discharge from trust and date of admission to A&E is  $\leq 30$  days AND discharge destination from trust = Own home/sheltered housing

Exclusions: n=15,023 not admitted from own home/sheltered housing; n=862 missing discharge from trust destination.

Cases: 48,399 Hospitals: 180

### **Re-operation within 30 days**

Data: 2014 calendar year (admission date)

Description: Proportion of patients having a reoperation within 30 days

Fields: Date/time of admission to A&E; Date/time of discharge from trust; 30-day reoperation; operation type

Denominator: All cases less exclusions

Numerator: All cases where re-operation does not equal 'None' AND does not equal 'Unknown'

Exclusions: n=770 missing discharge from trust date; n=1,401 no operation.

Cases: 61,948 Hospitals: 180

### **Developed pressure ulcer after presenting with hip fracture**

Data: 2014 calendar year (admission date)

Description: Proportion of patients developing a pressure ulcer during their hospital admission.

Fields: Date/time of admission to A&E; Pressure ulcers, Discharge from ward destination, Discharge from trust destination

Denominator: All cases less exclusions

Numerator: All cases where pressure ulcer = Yes

Exclusions: n=4,980 died in hospital

Cases: 1,630 Hospitals: 180

### **Unknown pressure ulcers**

Data: 2014 calendar year (admission date)

Description: Proportion of patients with pressure ulcer status unrecorded.

Fields: Date/time of admission to A&E; Pressure ulcers, Discharge from ward destination, Discharge from trust destination

Denominator: All cases less exclusions

Numerator: All cases where pressure ulcer = Unknown

Exclusions: n=4,980 died in hospital

Cases: 1,851 Hospitals: 180

### **Hip fractures that were sustained as an inpatient**

Data: 2014 calendar year (admission date)

Description: Proportion of patients who sustained their hip fracture in a hospital facility

Fields: Admitted from

Denominator: All cases

Numerator: All cases where admitted from = Inpatient – on this hospital site OR Inpatient – other hospital site of this trust OR Inpatient – another trust

Exclusions: None

Cases: 2,761 Hospitals: 180

# Falls and Fragility Fracture Audit Programme (FFFAP)

A suite of linked national clinical audits, driving improvements in care; managed by the Royal College of Physicians

- > **Falls Pathway Workstream**
- > **Fracture Liaison Service Database (FLS-DB)**
- > **National Hip Fracture Database (NHFD)**

