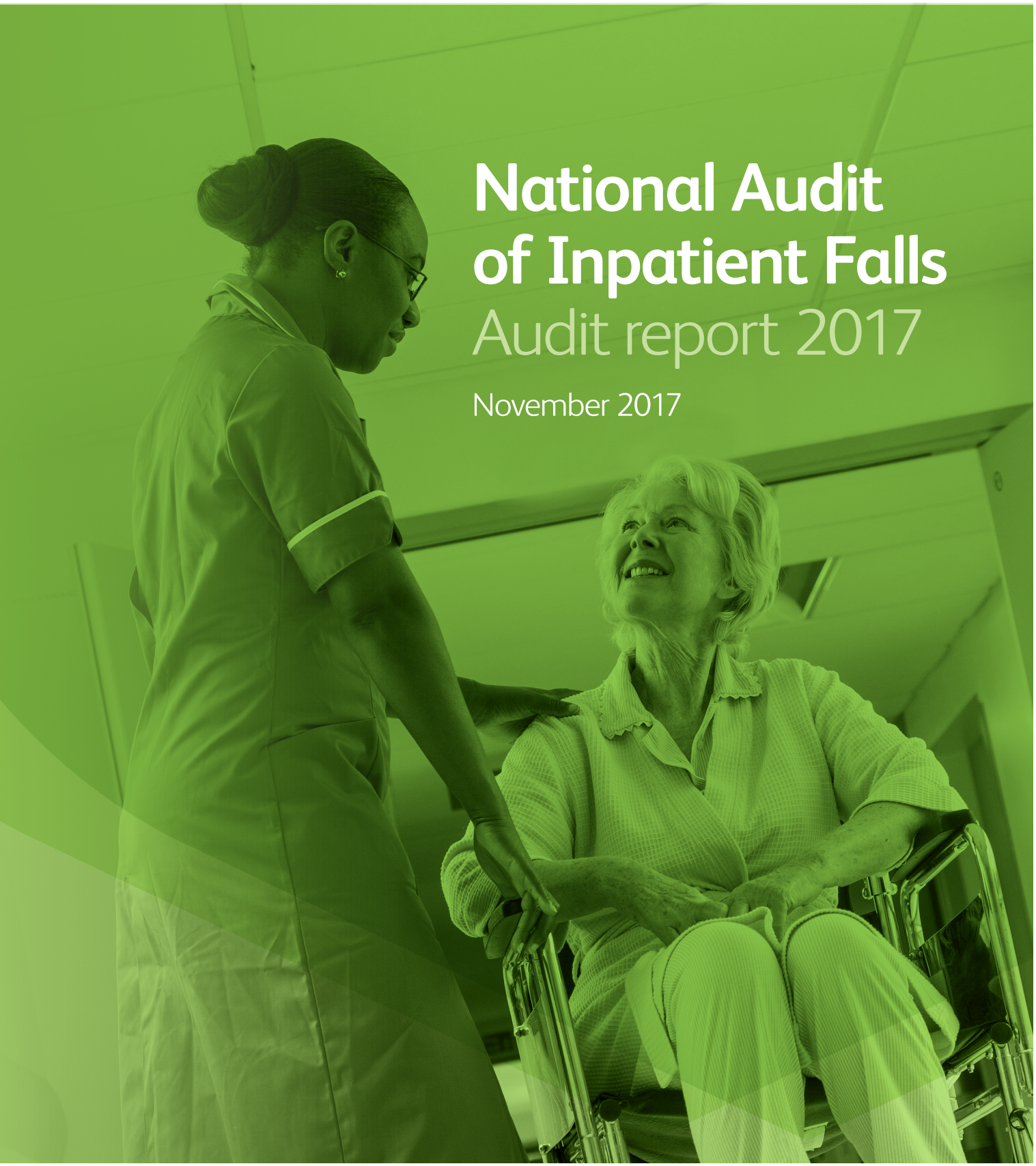
Royal College of Physicians

Falls and Fragility Fracture Audit Programme (FFFAP)



National Audit of Inpatient Falls

Audit report 2017

November 2017

In association with:

British Geriatrics Society
Improving healthcare for older people

British Orthopaedic Association
Caring for Patients; Supporting Surgeons

National Osteoporosis Society

Public Health England

Commissioned by:

HQIP
Healthcare Quality Improvement Partnership

National Audit of Inpatient Falls audit report 2017

This report was prepared by the members of the National Audit of Inpatient Falls workstream project team.

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Falls and Fragility Fracture Audit Programme
The National Audit of Inpatient Falls is commissioned by the Healthcare Quality Improvement Partnership (HQIP) and managed by 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 the National Hip Fracture Database (NHFD). FFFAP aims to improve the delivery of care for patients who have falls or sustain fractures through effective measurement against standards and feedback to providers.

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Key measures for preventing falls in hospital

Inpatient falls are common and can be life-changing for patients. They cost the NHS and social care an estimated £630 million annually. In 2017 approximately 250,000 patients had a fall in hospital.

72% of patients who needed a walking aid could reach it

72%

81% of patients could see and reach their call bell

81%

40% of patients were assessed for delirium

40%

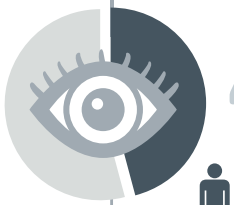
67% of patients who needed a continence care plan had one

67%

An 800-bed hospital will have an average of 1,500 inpatient falls per year costing approximately £2,600 per patient

Falls are associated with increased length of stay additional surgery and unplanned treatment

Multiple interventions by the multidisciplinary team and tailored to the patient can reduce falls by 20–30 %



46%

46% of patients had a vision assessment

48%

48% of patients had their medications assessed to identify drugs that increase risk of falls

19%

19% of patients had their lying and standing blood pressure measured

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Key findings

Organisational audit

1 Many trusts and local health boards (LHBs) have stopped using 'falls risk screening/prediction tools' (a drop from 74% in 2015 to 34% in 2017). These tools do not sufficiently predict who will fall in hospital and are not recommended by the National Institute for Health and Care Excellence (NICE). Where they are in use, it is likely that clinical staff are missing some at-risk patients.

2 Over a quarter of trusts are not reporting all inpatient falls resulting in hip fracture as severe harm. National Reporting and Learning System (NRLS) guidance makes it clear that all hip fractures should be reported as severe and this should not be dependent on the circumstances of the fall.

3 Some trusts (31%) are already identifying the gap between reported falls and the actual number of falls. We recommend that all trusts do this systematically, as it helps with the interpretation of their falls rates and gives an indication of their reporting culture (a smaller gap suggests a better culture).

Clinical audit

1 The average age (nationally) of the patients in this audit was 80 years, and 54% were women.

2 Some trusts are managing to perform highly in all areas of the clinical audit, indicating that it is possible to carry out a multifactorial falls risk assessment and put in place interventions to reduce falls.

3 There were three key indicators that improved significantly, albeit minimally, between the 2015 and 2017 rounds of the audit. These were: measurement of lying and standing blood pressure (from 16% to 19%), delirium assessment (from 37% to 40%) and mobility aid in reach (from 68% to 72%). However, these rates leave considerable room for improvement in most trusts.

4 There was no overall significant change in the results of the other four key indicators – continence care plan (2015 yes = 69%, 2017 yes = 67%), vision assessment (2015 yes = 48%, 2017 yes = 46%), call bell in reach (2015 yes = 82%, 2017 yes = 81%) and assessment of medications that increase falls risk (2015 yes = 46%, 2017 yes = 48%).

5 There was substantial variation in levels of assessments and interventions between hospitals; more than can be explained reasonably by variations in casemix or the range of good clinical practice.

6 While the national averages changed little, there was substantial change for many audit items, including key indicators, in most hospitals. Even allowing for sampling errors, it is likely that there is (i) inconsistency in practice, and (ii) changes – a mix of improvement and decline – since 2015 in most hospitals. This merits detailed scrutiny of the local results to identify where certain areas of practice are improving or slipping.

7 It is feasible to audit community hospitals, and preliminary data suggest that they may perform better than the acute trusts in the key indicators. However, this was a pilot audit of hospitals that volunteered to audit services, so more comprehensive data are needed.

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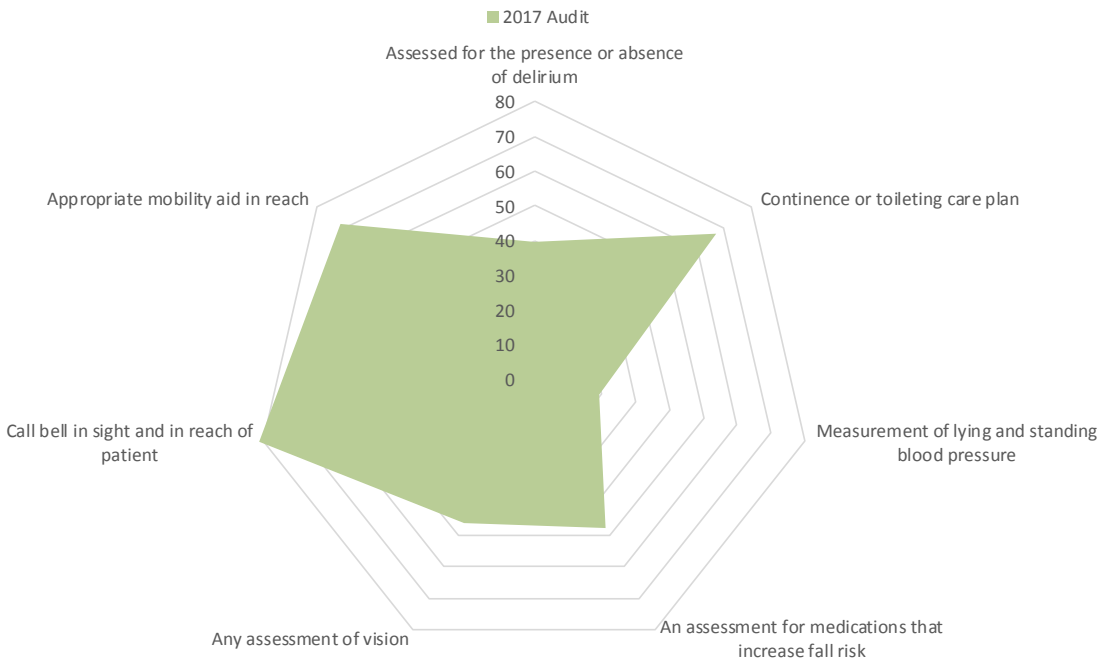
Key indicators

The spidergram in Fig 1 shows the national average adherence to the guidance for each of the seven key clinical indicators, based on all patients for whom analysable data were provided.

Fig 1 Key clinical indicators – national averages



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Key recommendations

Please note that some of these recommendations were made in the 2015 report, denoted by *. Reiteration is needed due to insufficient improvement.

Recommendations for trust boards and executive teams

- **Leadership on patient safety** – We recommend that all trusts and LHBs have a trust- or hospital-wide patient safety group, which includes falls prevention in its remit and reports to the board. This group should regularly review their trust's data on falls and moderate harm, severe harm and deaths per 1,000 occupied bed days (OBDs) and assess the success of their practice against trends in these figures. These groups should be overseen by a member of the executive and non-executive team, and outcomes should be discussed at board level.
- **Assessment of patients** – There has been highly variable progress on falls prevention activities, and nationally overall, minimal progress has been made. We therefore recommend that procedures are put in place for rapid assessment of acutely ill older people to ensure that assessments are timely, and matched to the major clinical risks including falls.
- **Falls resulting in hip fracture** – Ensure that all falls in hospital resulting in hip fractures are reported as severe, as recommended by the NRLS. Do not adjust the level of harm according to the circumstances of the fall.
- **Numbers of falls** – Look to see whether there is a gap between the number of reported falls and actual falls. This is an indicator of a trust's reporting culture and helps interpretation of data on falls per 1,000 OBDs.
- **Dementia and delirium*** – We recommend that trusts and LHBs review their dementia and delirium policies to embed the use of standardised tools and link assessments to related clinical issues such as falls.
- **Walking aids*** – We recommend that trusts and LHBs develop a workable policy to ensure that all patients who need walking aids have access to the most appropriate type from the time of admission, 24/7.

Recommendations for clinical teams

- **Falls multidisciplinary working group** – We recommend that the local and national results of this audit are studied, and that the group reflects on the changes locally since 2015. The group should reflect on its methods of quality improvement in the light of the overall picture.
- **Do not use a falls risk prediction tool*** – Where these are still in use, we suggest that the group reviews the strong evidence and logic underpinning the NICE guidance, reviews the place of falls risk assessment and prevention in the acute care processes, and works with colleagues to remove these where necessary.
- **Audit against NICE QS86 quality statements 4–6** – These statements identify how you manage a patient following a fall and how to audit against these statements. This will identify areas of weakness and improve the care of these vulnerable patients.
- **Lying and standing blood pressure** – If rates are low in the local audit result, consider using the RCP clinical practice tool to standardise practice. **www.rcplondon.ac.uk/bp-measurement**
- **Medication review** – Where rates of documented medication reviews and adjustments are low, we recommend working with colleagues locally, including pharmacy, to review the approach to relevant documentation, ensuring that the reasons for changes are clearly recorded and communicated to the GP on hospital discharge.
- **Visual impairment** – If rates are low in the local audit result, consider using the RCP clinical practice tool to standardise practice. **www.rcplondon.ac.uk/bedsidevisioncheck**
- **Walking aids*** – Regular audits should be undertaken to assess whether the policy is working and whether mobility aids are within the patient's reach, if they are needed.

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- **Continence care plan** – We recommend that for patients with lower urinary tract symptoms such as frequency, urgency, nocturia or incontinence, the implication for falls risk is considered and reflected in the care plan.
- **Call bells** – The highly variable rates for patients having easy access to the call bell suggests that this simple safety measure is receiving scant attention in some hospitals. We recommend a hospital-wide approach to address this.

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Background and introduction

Hospital inpatients in England experienced a quarter of a million falls during the year 2015/16.[1] These were spread across acute, community and mental health hospitals. Falls are commonly reported patient safety incidents and result in:

- over 2,500 hip fractures[2]
- loss of confidence and slower recovery, even when physical harm is minimal
- distress to families and staff
- litigation against hospital trusts
- overall costs to hospitals of £630 million per year.[1]

Acute illness, particularly in frail older people or those recovering from serious injury or surgery, increases the risk of a fall in hospital. Patients are vulnerable to delirium, dehydration and deconditioning, all of which affect balance and mobility, especially in unfamiliar surroundings. The majority of falls occur among medical inpatients during the first few days after admission.

These circumstances mean that not all falls are preventable. However, successful implementation of guidance from NICE may prevent 20–30% of falls.[4] Prevention depends upon prompt assessment to identify potential risk factors, followed by clinical responses to ameliorate their effects. This is a complex task requiring a multidisciplinary team approach. One patient may require several individually tailored interventions. It also requires a patient safety approach throughout the organisation, with practical support such as walking aids being always available, a culture of reliable incident reporting, and clear accountability and commitment from senior leaders.

The National Audit of Inpatient Falls (NAIF) was designed to capture all these elements. It is based on NICE guidance and advice from NHS Improvement (NHSI). In May 2015 NAIF collected data about the leadership responsibilities, policies and procedures from 96% (136) of acute hospital trusts and LHBs in England and Wales, and 90% (179) of hospitals provided clinical data about the assessments and interventions they had recorded within 3 days of admission for a total of 5,174 patients. Of the data submitted, 94% were of suitable quality for analysis.

Overall, the level of relevant policies and procedures was satisfactory, but the clinical audit showed that practical implementation was highly variable between hospitals and also consistently poor for several aspects, including assessments for visual acuity, orthostatic hypotension and delirium. Furthermore, in 2015 73% of trusts and LHBs reported using falls risk prediction tools to target falls reduction activities, despite NICE guidance in 2013 that these were not effective and therefore not recommended.

Results were disseminated to clinical teams, clinical commissioning groups (CCGs), LHBs and hospital trust boards, and a guide for patients and families was distributed to raise awareness of what they should expect. Publicly available information assessed hospitals against guidance standards and was made available on **data.gov** and to the regulator, the Care Quality Commission (CQC).

The RCP NAIF team also prepared and disseminated clinical tools to assist hospital staff to address two particular weaknesses: ward-based assessment of visual acuity, and measurement of lying and standing blood pressure: **www.rcplondon.ac.uk/projects/inpatient-falls-quality-improvement.**

This second round of audit used a similar approach to 2015 with some reduction in data items and clarifications where needed, based on feedback from local clinical auditors. The aim was to identify changes achieved locally since 2015. This time, we also piloted a slightly adapted approach in a sample of community hospitals. This is outlined in Appendix C.

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This report

In this report, we provide:

- aggregated national results for the organisational aspects of leadership responsibilities, policies and procedures, highlighting deficiencies and changes since 2015
- aggregated national averages for the clinical audit items, focusing on change since 2015, particularly where little progress has been made overall, or where there is a large variation in what has been achieved
- detailed results from all individual hospitals, enabling comparison with their own performance in 2015, their performance against the guidance standards and a comparison with other hospitals.

In the 2015 NAIF audit report, we also published the locally reported data on numbers and severity of falls, and reported these in terms of rates per 1,000 OBDs. Following discussions with NHSI and the project's advisory group, we have decided to not report falls rates again.

Guidance from the National Quality Board states that:

> *Data collected through incident reporting systems or as serious incidents should never be presented as though they represented actual incidents or actual harm … to do so is counterproductive to the purpose of incident reporting.*[3]

The purpose of incident reporting is not solely to count the number of falls, but to instead support learning about why patient safety incidents happen and what trusts can do to keep patients safe. Our own triangulation of data with those obtained on hip fractures from the National Hip Fracture Database has suggested that these locally derived numbers are not a reliable source of falls incidence data. Added to this, trusts'/LHBs' falls rates will be affected by the population demographics of the patients they care for, whether they have specialist services (eg services focused on rehabilitation or people with dementia are likely to have higher falls rates), as well as the quality of their falls prevention efforts. We have therefore focused this audit on the reporting practice of hospitals, rather than the numbers that they report.

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Methodology

Dataset development

The audit items were drawn from the NICE clinical guideline *Falls in older people: assessing risk and prevention* (CG161) plus other relevant guidance on delirium, injury prevention, and medication optimisation.[4–9]

The ***organisational audit*** had two sections that were completed at hospital trust or LHB level:

- section 1 – policies, protocols and paperwork
- section 2 – leadership and service provision.

The ***clinical audit*** was a snapshot of the care provided to a sample of up to 30 patients (15 consecutively admitted patients over 2 days) aged over 65, who were in hospital for over 48 hours, after being admitted for a non-elective reason. The clinical audit consisted of two sections:

- section 1 – evidence of assessment and intervention in case notes
- section 2 – observation at bedside / patient environment.

Data entry

As in 2015, all data were collected and entered locally into a secure webtool, which was designed so that each hospital could log in with an individual password and hospital code. The webtool validated the data at the point of entry by rejecting invalid responses. The organisational component was completed per trust or LHB, and each hospital could access the same organisational audit for their trust or LHB so that the data only needed to be entered once.

Audit participation

There was a very high participation rate in the organisational audit – of the 142 eligible acute hospital trusts and LHBs in England and Wales, 97% (138) submitted data. The participation rate for the clinical audit was also very high at 95% (n = 187/197).

In addition, four hospitals in Northern Ireland and one hospital in Jersey also submitted data.

Data completeness

The organisational and clinical audit had high levels of data completeness. In the organisational audit, 9 out of 16 questions had 100% completion, with the remaining 7 questions having over 98.5% data completeness. All the questions in the clinical audit had at least 97.5% data completeness.

Data accuracy

Data collected for this audit were self-reported. We are therefore relying on organisations to report their findings honestly. We do not have data on reliability.

The full methodology can be found in the 2015 NAIF audit report:
www.rcplondon.ac.uk/projects/outputs/naif-audit-report-2015

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Results – organisational audit

Audit participants were asked to complete the organisational audit at trust level. In some instances this was analysed at hospital level, where there were no trust-wide policies or where practice varied between hospitals in the same trust.

Falls reporting

Standard:
The NRLS defines severe harm as 'where the fall resulted in harm causing permanent disability or the person is unlikely to regain their former level of confidence'. Fractured neck of femur is particularly likely to result in long-term disability or loss of independent living.

'Improve the quality of reporting. Consistent and good quality reporting of falls is fundamental to understanding where improvements can be made to reduce harm.' (National Patient Safety Agency. The 'How to' Guide).[5]

Table 1

1.02 Do you have a system for assessing if there is a gap between actual and reported falls?	
Yes	31% (45)
1.03 With regards to the reporting of falls resulting in hip fractures. Do you:	
report all severe harm	73% (106)
depends on patient or circumstances of the fall	27% (40)

Clinical commentary:
Hip fracture is a serious and life-changing injury that carries significant morbidity and mortality. A minority of patients return to their pre-fall mobility over many months. At the time of incident reporting, the injuries should always be regarded as severe.

Official hospital falls rates depend upon the 'real' rate and reporting practice, which may vary throughout the organisation. An open reporting culture will enable greater reliability for valid comparisons over time. It will also encourage honest discussion about explanatory factors. Therefore, comparing 'real' and reported falls rates is a useful exercise. There are various ways of doing this, such as using the *FallSafe under-reporting template* (available from **www.rcplondon.ac.uk/guidelines-policy/fallsafe-resources-original**) or by asking a sample of staff whether they reported the last fall they witnessed. Doing it on a regular basis will help a trust to interpret its reported falls data.

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Leadership and service provision

Standards:
'An executive lead should be appointed and a falls group established' (National Patient Safety Agency. The 'How to' Guide).[5]
'A steering group should be a multi-agency, multidisciplinary environment' (National Patient Safety Agency. The 'How to' Guide).[5]
'The falls steering group is an ideal place to draw up and systematically review action plans to address trends in falls' (National Patient Safety Agency. The 'How to' Guide).[5]

Table 2

	2017	2015
2.01 Does your trust have an executive director who has specific roles/responsibilities for leading falls prevention (can be as part of a wider remit for patient safety)?		
Yes	92% (135)	84% (114)
No	5% (8)	10% (13)
Not known	2% (3)	6% (8)
2.02 Does your trust have a non-executive director (or other board member) who has specific roles/responsibilities for leading falls prevention (can be as part of a wider remit for patient safety)?		
Yes	58% (84)	40% (54)
No	36% (53)	39% (53)
Not known	6% (9)	21% (28)
2.03 Does your trust have a standing multidisciplinary working group or steering group or subgroup specifically for falls prevention which meets at least four times a year? As a minimum, this group must contain a nurse, doctor, AHP and manager as part of its membership.		
Yes	95% (139)	85% (116)
2.03a Is information on the number of falls routinely presented and discussed at most or all meetings of the central falls prevention group?		
Yes	97% (135)	n/a
2.03b Is information on the rates of falls routinely presented and discussed at most or all meetings of the central falls prevention group?		
Yes	87% (121)	79% (103)
2.04 Is information on the rates of falls routinely provided to individual directorates, wards, units or departments at least quarterly?		
Yes	93% (136)	86% (117)
2.05 Is it policy that all inpatient wards/units have access to walking aids for newly admitted patients (or patients whose mobility needs have changed) 7 days per week?		
Yes	71% (104)	65% (88)

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Key findings:
There is a high (and rising), but not yet universally prevalent, use of organisational features to provide accountability for falls prevention activities and reflection on the rates of falls.

Clinical commentary:
This stands in contrast to the rates of appropriate clinical actions reported for several important individual clinical risk factors. An effective falls working group will analyse the time, place and circumstances of falls and serious injuries, looking for common themes, and use proven methods for changing practice to ensure improved falls prevention activities.

Recommendations:
Trust boards should review the activities of their falls group to support the adoption of effective clinical quality improvement approaches.

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Local audit

Standard:
'NHS organisations should plan to undertake regular audits on how bedrails are being used. Audit and evaluation should focus on the appropriateness of the use of bedrails, rather than the number of bedrails in use' (NPSA Safer Practice Notice *Using bedrails safely and effectively*).[8]

Table 3

	Yes 2017	Yes 2015
1.04 Has your trust carried out an audit of the clinical appropriateness of bedrail use for individual patients within the past 12 months?*	58% (85)	51% (68)
1.05 Have you audited at a patient level against NICE QS86 *Falls in older people* and QS4 *Checks for injury* after an inpatient fall?	45% (65)	n/a
1.06 Have you audited at a patient level against NICE QS86 *Falls in older people* and QS5 *Safe manual handling* after a fall in the past 12 months?	28% (41)	n/a
1.07 Have you audited at a patient level against NICE QS86 *Falls in older people* and QS6 *Medical examination after an inpatient fall* in the past 12 months?	42% (61)	n/a

*In 2015 the question stated 'within the past 24 months'

Key findings:
These rates suggest that many trusts, perhaps most, cannot be confident that current clinical practice is in accordance with NICE quality standards.

Clinical commentary:
NICE quality standards on management of patients following a fall are comprehensive and help trusts to ensure that they are managing patients to identify injury and prevent further harm. Local audits will ensure that this guidance is being followed.

22% of patients who fall in hospital do so from their bed.[8] The NRLS recognised that the use of bedrails can be problematic, because individual patient factors will determine whether they are likely to enhance or reduce the patient's liability to injury. Therefore, guidance for their use needs to be clinically led and quality controlled.

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Falls risk screening / prevention tool

Standard:
'Do **not** use fall risk screening (prediction) tools to predict inpatients' risk of falling in hospital' (NICE CG161).[4]

Table 4

	Yes 2017	Yes 2015
1.01 Does your trust use a falls risk screening tool?	34% (49)	74% (98)

Clinical commentary:
No published studies of falls risk prediction tools predicted risk at greater than 70% sensitivity. NICE therefore concluded that all inpatients aged 65 and older 'should have their care managed as if they are at risk of falling' on the basis that these patients 'often have newly acquired risk factors (such as acute illness, delirium, cardiovascular disease, impaired mobility, medication or syncope syndrome) and are exposed to unfamiliar surroundings, which puts them at increased risk of falling during their inpatient stay'.[4]

In 2013, NICE recommended that (a) all inpatients aged 65 years or older and (b) patients aged 50–64 years who are judged by a clinician to be at higher risk of falling because of an underlying condition should be regarded as being at risk of falling in hospital and their care should be managed accordingly.

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Results – clinical audit

The individual audit items were derived from the following statements in national guidance.

Standards:
'Ensure that any multifactorial assessment identifies the patient's individual risk factors for falling in hospital that can be treated, improved or managed during their expected stay. These may include: cognitive impairment; continence problems; falls history, including causes and consequences (such as injury and fear of falling); footwear that is unsuitable or missing; health problems that may increase their risk of falling; medication; postural instability, mobility problems and/or balance problems; syncope syndrome and visual impairment' (NICE CG161).[4]

'Ensure that any multifactorial intervention promptly addresses the patient's identified individual risk factors for falling in hospital' (NICE CG161).[4]

Guidance from the NPSA states that interventions should also include detecting and treating cardiovascular illness and access to walking aids (NPSA Slips, trips and falls in hospital).[7]

'Provide relevant oral and written information and support for patients, and their family members and carers if the patient agrees' (NICE CG161).[4]

'Within 24 hours of admission, assess people at risk for clinical factors contributing to delirium. Based on the results of this assessment, provide a multicomponent intervention' (NICE CG103).[9]

'Carrying out a medication review for people taking multiple drugs, taking into account both the type and number of medications' (NICE CG103).[9]

'The 'How to' guide suggests focusing on one basic assessment and three safety measures that would be relevant to every patient … ask the patient if they have fallen recently … avoid unnecessary hypnotic and sedative medications … ensure patients have appropriate footwear … ensure call bells are within reach' (National Patient Safety Agency. The 'How to' Guide).[5]

We collected data on whether patients had been assessed for all the risk factors of falls identified by NICE CG161 and whether there had been appropriate interventions to prevent falls. However, some risks were felt to be particularly indicative of good practice and achievable aims for quality improvement. These seven key indicators were chosen by our multidisciplinary advisory group, which includes patient representation.

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Table 5 shows the results for all audit questions with the seven key indicators highlighted. For several items, there are questions about assessment and about subsequent interventions for those for whom it would be clinically appropriate. For example, for people assessed for the presence or absence of delirium, an intervention would be indicated only for those for whom it was present. Therefore, the key number in the table is in column 2 labelled 'Yes*', which indicates either that an assessment was feasible and was carried out or that an intervention was required and was carried out. To give an indication of the variation between hospitals, the interquartile range (IQR) is presented for 'yes' answers.

Table 5

	2017							2015
Question (Green = key indicator)	**Total patient records**	**Yes* (n)**	**IQR Yes***	**No* (n)**	**N/A impossible to assess**	**N/A intervention not required**	**Missing**	**Yes* (n)**
Been asked about any history of falls	5,387	79.6% (4,100)	69–96%	20.4% (1,050)	3.8% (204)		0.6% (33)	81.2% (3,757)
Had any assessment of cognitive impairment (eg AMT)	5,387	58.5% (2,898)	41–74%	41.5% (2,054)	6.6% (355)		1.5% (80)	57.9% (2,571)
A care plan to support the patient with cognitive impairment?	2,898	43.7% (572)	17–62%	56.3% (736)		54.2% (1,571)	0.7% (19)	32.6% (381)
Been assessed for the presence or absence of delirium or a documented diagnosis of delirium	5,387	39.7% (1,875)	21–55%	60.3% (2,843)	11.3% (608)		1.1% (61)	36.7% (1,496)
A delirium care plan (tailored to patient, not generic)	1,875	48.7% (326)	0–75%	51.3% (344)		63.4% (1,189)	0.9% (16)	47.1% (252)
Any assessment of urinary continence/frequency/urgency	5,387	85.4% (4,435)	80–96%	14.6% (758)	3.0% (161)		0.6% (33)	84.0% (3,894)
A continence or toileting care plan (tailored to patient, not generic)	4,435	66.9% (1,635)	50–88%	33.1% (808)		44.6% (1,977)	0.3% (15)	69.4% (1,480)
Any assessment of fear of falling	5,387	55.2% (2,742)	25–86%	44.8% (2,227)	7.4% (396)		0.4% (22)	49.4% (2,150)
A record of level of mobility	5,387	94.8% (4,924)	93–100%	5.2% (270)	3.2% (170)		0.4% (23)	94.6% (4,441)
A mobility care plan	4,924	78.8% (3,043)	68–94%	21.2% (819)		21.2% (1,045)	0.3% (17)	78.9% (2,712)

*Calculated using only 'yes' and 'no' answers

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Question (Green = key indicator)	2017							2015
	Total patient records	Yes* (n)	IQR Yes*	No* (n)	N/A impossible to assess	N/A intervention not required	Missing	Yes* (n)
Measurement of lying and standing blood pressure	5,387	19.1% (807)	7–28%	81.0% (3,430)	20.8% (1,118)		0.6% (32)	16.1% (579)
An assessment for medication that increase falls risk	5,387	47.8% (2,268)	25–70%	52.2% (2,476)	11.3% (611)		0.6% (32)	45.9% (1,893)
A medication review (beyond medicine reconciliation) with regard to falls risk	2,268	74.9% (1,362)	59–100%	25.1% (456)		19.0% (431)	0.8% (19)	72.9% (1,079)
Night sedation or other sedative medication administered since admission^	4,917	3.6% (177)	0–7%	96.4% (4,707)			0.7% (33)	3.3% (147)
Any assessment of vision	5,387	46.2% (2,308)	16–75%	53.8% (2,691)	6.0% (323)		1.2% (65)	48.3% (2,210)
A vision care plan	2,308	52.0% (555)	0–90%	48.0% (513)		53.0% (1,223)	0.7% (17)	
Documented evidence that patient and/or family/carer was given ***written*** information about falls risk or falls prevention	5,387	14.9% (705)	0–20%	85.1% (4,026)	11.5% (619)		0.7% (37)	11.4% (479)
Documented evidence that patient and/or family/carer was given ***oral*** information about falls risk or falls prevention	5,387	19.4% (913)	0–26%	80.6% (3,802)	11.7% (630)		0.8% (42)	21.5% (900)
Is call bell in sight and in reach of patient?	5,387	81.3% (3,994)	73–92%	18.7% (920)	6.5% (349)		2.3% (124)	82.3% (3,675)
Is safe footwear on patient's feet?	5,387	87.4% (2,842)	80–97%	12.6% (410)	37.3% (2,011)		2.3% (124)	86.7% (2,594)
Is the immediate environment (including route to nearest toilet) free from clutter/trip/slip hazards?	5,387	88.8% (3,941)	85–100%	11.2% (495)	15.1% (816)		2.5% (135)	88.3% (3,563)
Is the appropriate (based on section 1 or 2) mobility aid in reach?	5,387	71.5% (1,669)	55–90%	28.5% (665)	54.2% (2,922)		2.4% (131)	67.6% (1,569)

*Calculated using only 'yes' and 'no' answers

^This calculation excludes patients who were already on long-term sedatives

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Key findings:
In this round of the audit, the national average results for three of the seven key indicators had improved significantly, albeit marginally, since the previous round of the audit:

- assessment for presence of delirium – 37% to 40% (p=0.003)
- mobility aid in reach for appropriate patients – 68% to 72% (p=0.004)
- measurement of lying and standing blood pressure – 16% to 19% (p=0.001).

For the other key indicators, there was no significant improvement in the national average.

The national average results for four of the other performance indicators had improved significantly since the previous round of the audit: (all $p<0.05$):

- assessed for urinary continence – 84% to 85%
- care plan to support with cognitive impairment (if applicable) – 33% to 44%
- assessed for fear of falling – 49% to 55%
- patients (or their carers) given written information about falls risk prevention – 11% to 15%.

For most of the audit items, the variance was strikingly high, even allowing for the relatively small sample size of 30.

Clinical commentary:

Overall performance

The overall national picture appears little changed from 2015. Several falls risk factors were assessed in only a minority of the patients sampled for the audit. None of the individual risk factors are relevant ONLY for falls prevention, so good clinical practice would be expected to consider them for a variety of reasons in a sample of patients whose average age (nationally) was 80 years. It is not possible to be precise about the proportion of the 30 patients in whom we would expect to find evidence of assessment of the risk factors.

NICE guidance indicates that all patients over 65 and younger patients with some medical conditions be regarded as at risk. However, the guidance then states: 'for patients at risk of falling in hospital, consider a multifactorial assessment and a multifactorial intervention' and 'ensure that any multifactorial assessment identifies the patient's individual risk factors for falling in hospital that can be treated, improved or managed during their expected stay.'[4]

This guidance allows room for clinical judgement and suggests that we would not expect 100% of patients to have a completed multifactorial falls assessment. This ambiguity makes it difficult to specify a target percentage, as it will depend on casemix and clinical judgements.

Some assessments, however, are likely to be nearly always relevant in the acute stage of a patient's admission, eg assessing for evidence of cognitive impairment or delirium. Overall, our judgement is that optimum clinical practice would indicate a much higher rate of assessments than demonstrated in this audit.

For patients in whom an assessment has indicated the need for an intervention, any significant shortfall from 100% in demonstrating evidence of an intervention would suggest deficiencies in clinical practice (or clinical record keeping), although of course there are some exceptions

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where an intervention will be inappropriate in the timescale of the audit.

Variation in performance

The strikingly high variation in assessment and interventions between hospital services is unlikely to be explicable by different casemix or valid differences in clinical judgement about appropriateness. While we therefore cannot provide a gold standard for proportions of the patients who should have been assessed, it is likely that services with lower rates than others are missing opportunities to identify and ameliorate the risks that their patients face.

Not applicable

For some sites, there were very high rates of 'not applicable' (N/A) for various assessments. For example, two sites had determined that an assessment for the presence of delirium was inappropriate for more than half of the patients audited, whereas the overall average was 11%. Similarly, 13 sites had determined that an assessment of blood pressure change on standing was inappropriate or impossible for at least half of the patients audited, compared with the average of 21%. These differences are likely to be explained to some extent by differences in clinical judgement.

Variation by ward

We analysed the rates of assessments and interventions according to the type of ward that the patient was in when audited (approximately 72 hours after admission). There was strong evidence of statistically significant differences for six of the seven key indicators. For example, 72% of patients on a surgical ward had a continence care plan (if applicable) compared with 52% of patients on an admissions ward, and 11% of patients on a surgical ward had a measurement of lying and standing blood pressure compared with 29% of patients on a frailty ward. Due to inevitable casemix differences, the clinical significance of this is uncertain but merits scrutiny locally to ensure that practice is standardised throughout the hospital: patients with similar characteristics should receive similar care.

Comparison by reason for admission

We analysed the seven key indicators to review the difference for patients admitted for a fall compared with those admitted for other reasons. Four of the seven key indicators showed a statistically significant difference ($p<0.01$) when patients were admitted for a fall, and had the assessment completed more often than those admitted for other medical reasons – except in the case of mobility aids, which were more frequently within reach for patients admitted for other reasons.

These four indicators were:

- assessment for delirium (46% compared with 38%)
- assessment of lying and standing blood pressure (31% compared with 15%)
- assessment for medication that increases risk of falls (58% compared with 45%)
- appropriate mobility aid in reach (67% compared with 73%).

Variations in changes from 2015 to 2017

While the national averages changed little, there was substantial change for many audit items, including key indicators, in most hospitals. Changes greater than 20% less (6 patients out of 30 for assessments) or 20% more were seen in about half of hospitals for most indicators.

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Recommendations:

- We recommend that procedures are put in place for **rapid assessment** of acutely ill older people to ensure that assessments are timely, and matched to all the major clinical risks including falls.
- We recommend that **Falls multidisciplinary working groups examine** the local and national results of this audit, and that the group reflects on the changes locally since 2015. The group should reflect on its methods of quality improvement in the light of the overall picture.
- The mix of improvement and decline in most hospitals since 2015 merits detailed scrutiny of the local results to identify where certain areas of practice are improving or slipping.
- If a trust's rates of **blood pressure and vision assessment** are low, they should consider using the RCP clinical practice tools to standardise practice **www.rcplondon.ac.uk/bp-measurement** and **www.rcplondon.ac.uk/bedsidevisioncheck.**
- **Trust boards** should develop a workable policy to ensure that all patients who need walking aids have access to the most appropriate type from the time of admission.

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Case studies – quality improvement

East Surrey Hospital

East Surrey Hospital, part of Surrey and Sussex Healthcare NHS Trust, moved to 100% assessment for the presence or absence of delirium or a documented diagnosis of delirium.

The improvement of assessment and delirium has been a continuous process, driven among various departments by a number of quality-enhancing programmes such as the Kent Surrey Sussex Academic Health Science Network (AHSN) and the Surrey and Sussex Healthcare NHS Trust collaboration with the Virginia Mason Institute. To ensure that all patients who are admitted to the hospital are screened for cognitive decline and delirium, an online 'dementia assessment' (developed for the department CQUIN) must be completed by the admitting doctor. Access to the electronic patient records and results is restricted without completion of the assessment.

In addition to the electronic 'dementia assessment', assessment of the Abbreviated Mental Test Score (AMTS) and delirium screening using the 4AT tool have been incorporated in the admission paperwork for medicine, orthopaedics and orthogeriatrics. Orthogeriatricians in particular have also incorporated 4AT assessments as part of their paperwork for all of their patients at day 1 and day 4 following a neck of femur fracture repair. There is a current workstream to roll this out across the trust, with the aim of ensuring that this good practice continues by embedding delirium assessment into the trust's standard work.

Dr Theodora Giokarini-Royal
Consultant orthogeriatrician
Surrey and Sussex Healthcare NHS Trust

South Tyneside Foundation Trust

Since the publication of first national audit, the falls team at **South Tyneside Foundation Trust** has worked tirelessly to ensure that falls prevention is a priority for our trust. Falls per 1,000 OBDs are reported on a monthly basis through the governance structure from ward to board, recognising that falls are everybody's responsibility.

The multidisciplinary Falls Operational Group was reinstated and re-energised. During 2016 the Falls Team worked to improve multifactorial falls risk assessment, focusing on the measurement of lying and standing blood pressure and the identification of medications known to increase the risk of falls. A 'falls hazard' sticker was developed to highlight medication reviews for medical staff to action. Using the same methodology from the first national audit, we completed three local re-audits. While we initially saw some improvements in falls prevention, these were not sustained or at the standards set in the national report.

A falls specialist nurse was appointed at the end of 2016, which coincided with our participation in NHSI's falls collaborative. Using established quality improvement methodology, we were able to review our practice and identify key areas for improvement. Front-line staff were engaged in re-designing our falls risk assessment tools and Plan Do Study Act (PDSA) cycles were completed to evaluate interventions on two pilot wards. We sought and responded to feedback from staff using a 'you said, we did' methodology.

Assessment tools included those for continence, delirium, vision (adapted from the RCP tool), lying and standing blood pressure, medication, mobility and function. Completion rates were monitored on a weekly basis and performance displayed on the ward. Excellence was celebrated and dips in performance were managed positively by supporting the wards.

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Progress was shared internally by regular email updates, information on the trust intranet page and the local newspaper published an article about our quality improvement work in falls. We have also embraced social media, eg Twitter, to share information.

Education and training has been a vital component for increasing falls awareness and changing culture. It is now mandatory for all foundation doctors to complete the RCP e-learning package 'CareFall'. This complements small-group teaching provided on falls, syncope and vestibular disorders. Regular face-to-face falls training is provided during yearly statutory mandatory training and specifically tailored training is also provided to auxiliary nurses and domestic staff, an often-overlooked staff group.

At the end of the collaborative, falls risk assessment improved across all key indicators on the pilot wards. Measurement of lying and standing blood pressure had risen from a baseline of 7.4% to 100% and assessment of vision from 17.2% to 100% on one ward. Falls with harm across the organisation have fallen by 53% in the first 6 months of this year compared with the same period last year.

The tools developed as part of the collaborative have been combined to produce our new 'Falls Risk Assessment and Care Plan'. This was launched and rolled out across the organisation on 1 August 2017. The emphasis is on ensuring that falls are acknowledged as being a multidisciplinary issue and that the risk can be managed effectively with thorough risk assessment and action.

We are hopeful that, now the foundations have been laid, we will continue to see improvements across the organisation and ultimately a reduction in the number of falls.

Subashini Thirugnanasothy
Consultant physician
South Tyneside Foundation Trust

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Site-level results for key indicators

Results for each of the seven key indicators for each hospital are shown in Tables 6–17.

Colour coding

We chose cut-off values of 0–49% (red), 50–79% (amber) and 80–100% (green), to enable organisations to see where they need to concentrate their interventions and action plans. We also show data comparing organisations using sparkline indicators, so that organisations can compare themselves nationally. The sparkline indicators are calculated using Z scores, which are used to look at the dispersion (spread) of data. They are calculated using the mean and standard deviation values of the dataset. The Z score indicates whether an individual site's performance is above or below the average performance of all sites for each of the seven indicators, and by how much the site's performance is above or below average (described in standard deviations from the mean). The blue blocks indicate areas where patients are receiving better falls prevention approaches than the national average, and the red blocks indicate areas below the national average. The size of the blocks indicates how far an organisation is away from the mean. The full site-level audit results are available to download for all measures from **www.rcplondon.ac.uk/fffap**.

Key to proportion of patients who received assessment/intervention
80–100%
50–79%
0–49%

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Table 6

East Midlands														
	Percentage score							Sparkline indicator						
Site name	Delirium	Continence CP	BP	Medication	Vision	Call bell	Mobility aid	Delirium	Continence CP	BP	Medication	Vision	Call bell	Mobility aid
Chesterfield Royal	44	75	8	29	31	87	55							
Grantham And District General Hospital	45	100	50	29	36	100	67							
Kettering General Hospital	24	38	28	45	57	86	53							
Kings Mill Hospital	48	91	35	23	21	86	83							
Leicester Royal Infirmary	44	25	5	41	7	80	50							
Lincoln County Hospital *	47	86	20*	93	100	85	50							
Northampton General Hospital	42	23	43	48	33	79	71							
Nottingham City Hospital	69	65	52	46	97	68	94							
Pilgrim Hospital	69	100	89	88	0	100	100							
Royal Derby Hospital	24	74	25	37	77	100	93							
University Hospital Queens Medical Centre	89	45	29	87	66	56	88							

*Sites with above 50% of patients as 'not applicable' for the marked key indicator

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Table 7

East of England	Percentage score							Sparkline indicator						
Site name	Delirium	Continence CP	BP	Medication	Vision	Call bell	Mobility aid	Delirium	Continence CP	BP	Medication	Vision	Call bell	Mobility aid
Addenbrooke's Hospital	68	40	0	77	85	92	100							
Basildon Hospital	3	20	14	87	0	97	100							
Bedford Hospital	34	53	11	22	27	88	88							
Broomfield Chelmsford	27	93	37	100	48	100	92							
Colchester General Hospital	48	88	8	29	57	93	81							
James Paget Hospital	14	100	7	28	32	78	77							
Lister Hospital	100	100	41	100	77	100	100							
Luton & Dunstable Hospital	43	86	32	46	76	79	82							
Norfolk and Norwich Hospital	50	63	25	34	60	83	60							
North West Anglia NHS Foundation Trust	16	60	14	61	10	89	67							
Princess Alexandra Hospital	0	6	7	23	48	87	90							
Princess of Wales Hospital	0	100	33	80	40	73	100							
Queen Elizabeth Hospital, King's Lynn	50	36	7	43	74	83	23							
Southend Hospital	0	42	27	46	0	89	100							
The Ipswich Hospital	14	14	25	17	24	86	44							
Watford General Hospital	7	50	0	42	0	89	50							
West Suffolk Hospital	33	60	42	89	3	93	73							

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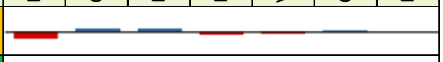
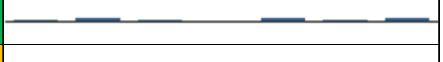
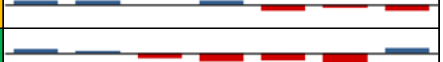
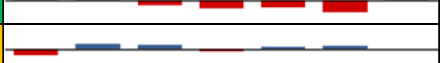
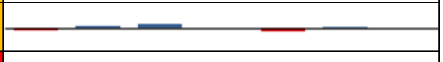
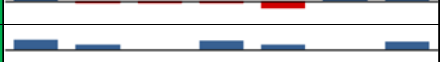
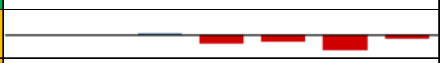
Table 8

London

Site name	Percentage score							Sparkline indicator						
	Delirium	Continence CP	BP	Medication	Vision	Call bell	Mobility aid	Delirium	Continence CP	BP	Medication	Vision	Call bell	Mobility aid
Chelsea & Westminster Hospital	9	78	30	32	35	81	69							
Croydon University Hospital	93	48	50	100	14	89	81							
Ealing Hospital	43	78	21	41	62	81	82							
Epsom Hospital	30	54	17	32	14	64	62							
Hillingdon Hospital	55	80	20	58	32	71	60							
Homerton Hospital	57	82	15	66	15	74	50							
King's College Hospital	57	73	0	11	10	56	90							
Kingston Hospital	13	88	34	38	59	87	68							
Newham General Hospital	54	90	8	53	73	73	50							
North Middlesex Hospital *	47	100	0*	0*	69	47	100							
Northwick Park Hospital	57	50	16	29	27	96	57							
Princess Royal University Hospital (Bromley)	29	73	33	43	31	81	70							
Queen Elizabeth Hospital, Woolwich	19	42	18	100	41	100	17							
Barking, Havering and Redbridge University Hospitals NHS Trust	38	100	55	74	66	82	70							
Royal Free Hospital	18	45	15	71	42	57	33							
St George's Hospital	48	90	4	0	4	81	91							
St Helier Hospital	53	60	13	40	10	90	88							
St Thomas Hospital	83	85	15	93	70	80	100							
University College Hospital	90	100	9	83	46	77	71							
University Hospital Lewisham	40	63	27	97	19	92	89							
West Middlesex Hospital	33	64	22	4	11	48	58							
Whipps Cross Hospital	41	75	12	74	29	59	71							
Whittington Hospital	92	17	17	79	0	81	67							

*Sites with above 50% of patients as 'not applicable' for the marked key indicator

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Table 9

North East	Percentage score							Sparkline indicator						
Site name	Delirium	Continence CP	BP	Medication	Vision	Call bell	Mobility aid	Delirium	Continence CP	BP	Medication	Vision	Call bell	Mobility aid
Darlington Memorial Hospital	88	100	52	88	92	100	100							
Friarage Hospital	13	50	13	7	71	88	100							
James Cook University Hospital	30	40	50	52	89	64	71							
Queen Elizabeth Hospital, Gateshead	40	50	16	59	93	97	94							
The Newcastle Upon Tyne Hospitals NHS Foundation Trust	79	100	8	41	83	96	95							
South Tyneside District Hospital	31	62	57	63	32	93	100							
Sunderland Royal Hospital	79	90	56	97	43	84	85							
University Hospital of North Durham	94	67	65	69	82	100	100							
University Hospital of North Tees *	26	93	23*	72	64	100	100							

*Sites with above 50% of patients as 'not applicable' for the marked key indicator

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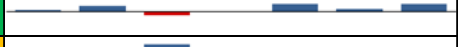
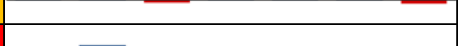
Table 10

North West

Site name	Percentage score							Sparkline indicator						
	Delirium	Continence CP	BP	Medication	Vision	Call bell	Mobility aid	Delirium	Continence CP	BP	Medication	Vision	Call bell	Mobility aid
Arrowe Park Hospital	14	37	38	7	0	71	73							
Blackpool Victoria Hospital	88	93	4	96	95	100	100							
Chorley Hospital	71	100	0	83	44	80	100							
Countess of Chester Hospital	21	30	10	29	17	89	42							
North Cumbria University Hospitals NHS Trust	32	78	17	33	5	83	85							
Cumberland Infirmary	32	78	17	33	5	83	85							
Fairfield General Hospital	63	60	26	59	93	86	100							
Furness General	41	88	4	47	79	86	95							
Leighton Hospital	31	80	83	97	72	76	73							
Macclesfield District General Hospital	0	40	22	14	0	53	55							
Manchester Royal Infirmary	8	100	31	50	25	75	100							
North Manchester General Hospital	29	58	0	52	46	80	90							
Northumbria Healthcare NHS Foundation Trust	64	83	41	77	100	97	60							
Royal Albert Edward Infirmary	59	93	8	64	90	90	57							
Royal Blackburn Hospital	25	86	18	7	48	73	47							
Royal Bolton Hospital	30	23	26	23	33	61	48							
Royal Lancaster Infirmary	5	33	6	10	15	86	100							
Royal Liverpool University Hospital	40	95	30	97	96	100	100							
Royal Oldham Hospital	58	64	12	63	81	85	57							
Royal Preston Hospital	26	57	19	100	0	95	100							
Salford Royal Hospital	48	75	10	22	8	62	78							
Southport and Formby District General	25	44	4	33	31	83	87							
Stepping Hill Hospital	57	73	39	26	72	83	43							
Tameside General Hospital	3	12	0	93	97	70	86							
Trafford General Hospital	22	100	9	0	82	100	89							
University Hospital Aintree	13	89	15	59	100	97	63							
Warrington District General Hospital	23	94	8	27	16	76	55							
Whiston Hospital	7	88	4	100	4	100	92							
Wythenshawe Hospital *	53	67	100	100	93	73	80							

*Sites with above 50% of patients as 'not applicable' for the marked key indicator

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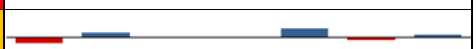
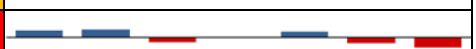
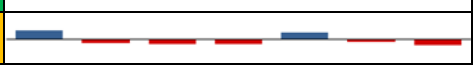
Table 11

South Central	Percentage score							Sparkline indicator						
Site name	Delirium	Continence CP	BP	Medication	Vision	Call bell	Mobility aid	Delirium	Continence CP	BP	Medication	Vision	Call bell	Mobility aid
John Radcliffe Hospital	36	45	22	36	48	79	55							
Milton Keynes General Hospital*	27	93	0*	100	63	93	100							
Queen Alexandra Hospital	81	96	41	58	88	85	93							
Royal Berkshire Hospital	61	67	26	63	82	73	44							
Hampshire Hospitals NHS Foundation Trust*	12	81	14	45	85	75	79							
Southampton General Hospital	66	94	0	46	70	68	38							
St Mary's Hospital, Newport	100	100	50	100	93	100	100							
Stoke Mandeville Hospital	19	80	5	70	42	83	64							
Wexham Park Hospital	80	86	14	70	63	93	80							
Wycombe General Hospital	75	50	0	25	75	75	50							

*Sites with above 50% of patients as 'not applicable' for the site marked key indicator

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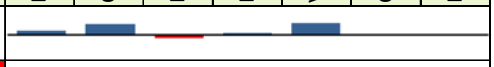
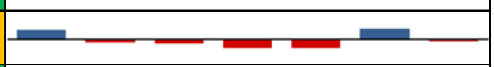
Table 12

South East Coast

Site name	Percentage score							Sparkline indicator						
	Delirium	Continence CP	BP	Medication	Vision	Call bell	Mobility aid	Delirium	Continence CP	BP	Medication	Vision	Call bell	Mobility aid
Conquest Hospital	52	100	7	54	97	N/A	N/A							
Darent Valley Hospital	32	53	12	57	50	56	33							
East Surrey Hospital	100	33	55	97	16	88	90							
Eastbourne DGH	59	73	33	55	76	N/A	N/A							
Frimley Park Hospital	40	50	27	35	52	97	79							
Kent and Canterbury Hospital	100	100	24	95	88	78	92							
Maidstone General Hospital	40	90	0	33	14	100	83							
Medway Maritime Hospital	24	88	17	70	86	81	71							
Princess Royal Hospital (Haywards Heath)	43	10	5	7	20	73	56							
Queen Elizabeth the Queen Mother Hospital *	100	93	40*	100	100	95	86							
Royal Surrey County Hospital	13	78	21	24	87	85	78							
Royal Sussex County Hospital	42	82	30	59	26	83	80							
St Peter's Hospital	52	85	35	55	56	90	86							
St Richards Hospital	55	31	9	62	68	96	83							
Tunbridge Wells Hospital	76	56	5	10	4	100	64							
William Harvey Hospital *	92*	93	38	94	92	93	100							
Worthing Hospital	30	18	23	72	74	86	60							

*Sites with above 50% of patients as 'not applicable' for the marked key indicator

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Table 13

South West	Percentage score							Sparkline indicator						
Site name	Delirium	Continence CP	BP	Medication	Vision	Call bell	Mobility aid	Delirium	Continence CP	BP	Medication	Vision	Call bell	Mobility aid
Bristol Royal Infirmary	48	100	0	28	24	68	67							
Cheltenham General Hospital	40	67	16	41	34	71	31							
Derriford Hospital	7	62	15	40	34	82	50							
Dorset County Hospital *	56	76	0*	68	72	83	91							
Gloucestershire Royal Hospital	17	33	7	36	59	71	56							
Musgrove Park Hospital	50	73	13	58	45	72	61							
North Devon District Hospital *	50	93	7	14*	0	92	87							
Poole General Hospital	50	57	35	50	26	97	75							
Royal Bournemouth General Hospital	36	69	36	70	43	93	75							
Royal Cornwall Hospital	28	63	27	92	100	100	75							
Royal Devon & Exeter Hospital	50	87	4	33	7	76	92							
Royal United Hospital Bath	58	57	0	42	10	72	44							
Salisbury District Hospital	29	36	4	35	83	77	62							
Southmead Hospital	15	86	0	8	57	73	100							
The Great Western Hospital	33	94	35	96	31	97	100							
Torbay Hospital	25	63	24	25	7	81	56							
Weston General Hospital	0	0	0	7	100	90	86							
Yeovil District Hospital	40	58	7	0	3	87	17							

*Sites with above 50% of patients as 'not applicable' for the marked key indicator

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Table 14

Wales	Percentage score							Sparkline indicator						
Site name	Delirium	Continence CP	BP	Medication	Vision	Call bell	Mobility aid	Delirium	Continence CP	BP	Medication	Vision	Call bell	Mobility aid
Bronglais General Hospital	14	50	10	10	29	88	40							
Glan Clwyd DGH Trust	41	60	6	53	56	93	63							
Glangwili General Hospital	0	17	4	0	58	85	50							
Llandough Hospital	12	44	5	10	0	56	100							
Maelor Hospital	36	67	4	30	46	82	50							
Morriston Hospital	31	50	13	35	76	67	62							
Nevill Hall Hospital	41	64	6	29	35	76	44							
Prince Charles Hospital	33	77	11	33	36	78	78							
Prince Philip Hospital *	0	90	0*	14	100	67	80							
Princess Of Wales Hospital	33	62	20	15	19	59	44							
Royal Glamorgan	7	64	0	25	77	71	92							
Royal Gwent Hospital	25	17	4	4	27	71	69							
Singleton Hospital	14	44	0	11	31	67	57							
University Hospital of Wales	24	31	7	40	4	79	64							
Withybush General Hospital	35	27	0	46	90	N/A	N/A							
Ysbyty Gwynedd Hospital	27	11	4	9	73	67	55							
Ysbyty Ystrad Fawr	53	92	56	61	56	94	93							

*Sites with above 50% of patients as 'not applicable' for the marked key indicator

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Table 15

West Midlands	Percentage score							Sparkline indicator						
Site name	Delirium	Continence CP	BP	Medication	Vision	Call bell	Mobility aid	Delirium	Continence CP	BP	Medication	Vision	Call bell	Mobility aid
Birmingham Heartlands Hospital	10	73	13	15	0	83	69							
City Hospital	14	60	0	7	70	73	68							
County Hospital (Stafford)	0	73	24	30	100	93	83							
County Hospital Hereford	48	71	14	23	23	72	50							
George Eliot Hospital	18	93	17	11	39	100	100							
Manor Hospital	63	78	13	3	30	89	100							
New Cross Hospital	35	44	32	20	39	61	78							
Princess Royal Hospital, Telford	36	100	11	87	83	75	72							
Queen Elizabeth Hospital, Edgbaston	32	33	21	83	13	83	92							
Queens Hospital	7	94	54	60	90	82	50							
Royal Shrewsbury Hospital *	81	75	25*	60*	56	90	78							
Royal Stoke University Hospital	7	50	5	19	30	89	38							
Russells Hall Hospital	85	94	4	62	10	86	100							
Sandwell District Hospital	36	69	15	14	20	87	89							
Solihull General Hospital	40	87	12	18	0	96	85							
The Alexandra Hospital	23	59	14	13	7	76	63							
University Hospital Coventry	22	80	20	50	32	96	95							
Warwick Hospital	67	67	19	63	40	86	88							
Worcestershire Royal Hospital	52	38	8	40	89	93	79							

*Sites with above 50% of patients as 'not applicable' for the marked key indicator

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Table 16

Yorkshire and the Humber														
	Percentage score							Sparkline indicator						
Site name	Delirium	Continence CP	BP	Medication	Vision	Call bell	Mobility aid	Delirium	Continence CP	BP	Medication	Vision	Call bell	Mobility aid
Airedale General Hospital	61	0	75	70	93	93	60							
Barnsley District General Hospital	7	87	22	7	55	93	67							
Bassetlaw District General Hospital	80	86	15	73	64	71	0							
Bradford Royal Infirmary	59	56	11	30	7	64	62							
Diana, Princess of Wales Hospital	13	71	0	54	74	86	50							
Doncaster Royal Infirmary	57	79	20	21	37	83	56							
Harrogate District Hospital	68	50	29	42	43	74	67							
Calderdale and Huddersfield NHS Foundation Trust	67	67	8	7	13	50	17							
Hull Royal Infirmary	42	50	11	66	13	67	8							
Leeds Teaching Hospitals NHS Trust	10	82	39	43	56	80	69							
Northern General Hospital	31	67	13	40	7	47	27							
Pinderfields General Hospital	21	17	30	25	0	78	47							
Rotherham General Hospital	33	100	4	11	0	100	60							
Scarborough General Hospital	46	90	14	81	27	90	82							
Scunthorpe General Hospital	59	80	8	26	96	83	100							
York District Hospital	28	50	10	72	4	24	50							

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Table 17

Northern Ireland and Jersey														
	Percentage score							Sparkline indicator						
Site name	Delirium	Continence CP	BP	Medication	Vision	Call bell	Mobility aid	Delirium	Continence CP	BP	Medication	Vision	Call bell	Mobility aid
Antrim Area Hospital	13	8	23	93	100	92	100							
Craigavon Area Hospital	15	71	32	33	7	38	78							
Daisy Hill Hospital	18	13	13	46	0	62	33							
Jersey General Hospital	0	44	0	6	0	67	20							
Ulster Hospital	0	25	8	7	0	67	44							

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Appendices

Appendix A – structure and governance

Inpatient falls subgroup

Shelagh O'Riordan, falls clinical lead, RCP
Khim Horton, independent researcher/consultant
Julie Windsor, patient safety lead older people and falls, NHS Improvement
Julie Whitney, physiotherapist and National Institute for Health Research (NIHR) clinical lecturer, AGILE, clinical interest group of the Chartered Society of Physiotherapy
James Hannaford, FFFAP project coordinator, RCP
Catherine Gallagher, falls workstream and FLS-DB project coordinator, RCP
Naomi Vasilakis, falls workstream and FLS-DB project manager, RCP

Inpatient falls advisory group

Robin Bastin, patient representative PIU
Catherine Gallagher, falls workstream and FLS-DB project coordinator, RCP
Damian Gormley, consultant geriatrician, Northern Ireland
James Hannaford, FFFAP project coordinator, RCP
Khim Horton, independent researcher/consultant
Daniel MacIntyre, population health services manager, Public Health England
Finbarr Martin, FFFAP programme chair and clinical lead, RCP
Catherina Nolan, occupational therapist, College of Occupational Therapy
Shelagh O'Riordan, falls clinical lead, RCP
Michelle Parker, RCN
Chris Peter, consultant in emergency medicine, Royal College of Emergency Medicine
Denise Shanahan, consultant nurse older vulnerable adults, Wales
Chris Boulton, FFFAP programme manager, RCP
Laura Storey, lead clinical pharmacist older peoples medicine and community health, Royal Pharmaceutical Society of Great Britain
Naomi Vasilakis, falls workstream and FLS-DB project manager, RCP
Julie Windsor, patient safety lead older people and falls, NHS Improvement
Julie Whitney, physiotherapist and NIHR clinical lecturer, AGILE, Chartered Society of Physiotherapy

FFFAP board

Chris Boulton, FFFAP programme manager, RCP
Tim Chesser, British Orthopaedic Association
Kassim Javaid, FLS-DB clinical lead
Antony Johansen, NHFD clinical lead, orthogeriatric medicine
Meghan Liddicoat, FFFAP project manager
Finbarr Martin, FFFAP programme chair and clinical lead
Shelagh O'Riordan, falls workstream clinical lead
Naomi Vasilakis, falls workstream and FLS-DB project manager
Rob Wakeman, NHFD clinical lead, orthopaedic surgery
Bill Majrowski, FFFAP project manager
Ann Thurston, National Osteoporosis Society
Ian Woolhouse, clinical director, audit and accreditation
Jane Youde, British Geriatric Society

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Appendix B – Patient demographics (acute hospitals)

Table 18

	National
Patient age	Min: 65 Max: 103 Mean: 80.4

Table 19

Admission date	National
14 May	2,144
15 May	2,158
16 May	397
21 May	348
22 May	269
23 May	45
29 May	12
30 May	14

Table 20

	Male	Female
Gender	46% (2,491)	54% (2,896)

Table 21

Ward type	National
Medical	44% (2,357)
Surgical	21% (1,122)
Admissions unit eg AMU, CDU or equivalent	17% (926)
Older persons/frailty ward	11% (612)
Rehabilitation ward	0.5% (29)
Other	6% (300)

There was a large age range (65–103 years); 54% of audited patients were female. Hospitals were asked to audit patients admitted on Sunday 14 May or Monday 15 May and continue to Tuesday 16 May if they had not reached the required 30 patients. On 12 May, a ransomware cyberattack caused disruption to the NHS IT systems and meant that some hospitals were unable to access their computer systems to identify patients for the audit. Hospitals affected were advised to carry out the audit later in the month, following the same criteria and looking at Sunday and Monday admissions.

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Appendix C – Community hospital results

In the 2015 round of the audit, we collected data from acute hospitals only. Many patients are transferred to community hospitals for rehabilitation following an acute illness or admitted directly from home when unwell. These patients are often the frailest of inpatients and have similar or higher risks for falls, especially those with dementia and delirium. We therefore conducted a pilot audit of those patients in community hospitals to see whether they could be audited in a similar way to those in acute hospitals.

The main purpose was to investigate whether it is possible to deliver a national audit of inpatient falls prevention in a non-acute setting.

To assess this feasibility, we aimed to answer the following questions:

1 Can we recruit community trusts to participate in NAIF?
2 Can community hospitals identify a sufficient volume of patients using a modified sampling criteria?
3 Can community hospitals submit a sufficient volume and completeness of patient-level data?
4 Is feedback from community hospitals on the data collection positive?
5 Is feedback from community hospitals on the data reporting positive?
6 Can FFFAP analyse and present findings on data submitted from community hospitals in a suitable way?
7 Are the data suitable for driving quality improvement in community trusts?

Overall this proved a successful pilot, with 1,371 patients being audited. As this was a pilot and we did not systematically include all community hospitals, we have not included the results in the main body of this report. However, we have given the national results below and will send local results with national comparators to each community trust that entered data.

Recruitment and participation

123 hospitals from 38 trusts and LHBs registered to take part in the audit. Of these, 80% of the hospitals that registered to take part in the pilot submitted audit data.

Patient sample and completeness of patient-level data

As the number of admissions per day is far smaller in community than acute hospitals, we asked the teams to identify up to 30 inpatients and then audit falls prevention activity that occurred in the first 72 hours of their care.

The mean number of patients meeting the patient criteria was 14 per site (median 10, range 2–30). For 34 hospitals, with less than 20 patients meeting the sampling criteria, the local auditors requested (and we agreed) that their results to be combined with other local community hospitals and be reported at trust level.

The organisational and clinical audit had high levels of data completeness. In the clinical audit, all data items had at least 97.9% data completeness. In the organisational audit 14 of 16 items had 100% completion with the remaining two items at 95% data completeness.

Feedback from audit participants

Of the 100 hospitals that participated in the pilot, 21 (21%) completed an evaluation form. Headline findings were:

- 70% reported that information for the organisational audit component was easy to collect
- 78% reported that information for the clinical case note reviews was easy to collect
- 91% reported that the bedside reviews were easy to complete

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- 95% reported that it was easy to enter the information onto the webtool.

Conclusion

Further work needs to be undertaken to ensure that the inclusion criteria allows community hospitals to identify a sufficient volume of patients. However, we believe that this pilot has shown that there is a high level or willingness and commitment from community hospitals to participate in an audit of this nature. Further work is also needed to evaluate whether the data are suitable for driving quality improvement.

Organisational audit results

Table 22

1.01 Does your trust use a falls risk screening tool?	
Yes	45% (9)

Table 23

1.02 Do you have a system for assessing if there is a gap between actual and reported falls?	
Yes	30% (6)
1.03 With regard to the reporting of falls resulting in hip fractures. Do you:	
report all severe harm?	85% (17)
report depending on patient or circumstances of the fall?	10% (2)

Table 24

	Yes
1.04 Has your trust carried out an audit of the clinical appropriateness of bedrail use for individual patients within the past 12 months?*	45% (9)
1.05 Have you audited at a patient level against NICE QS86 *Falls in older people* and quality statement 4 'Checks for injury after an inpatient fall'?	60% (12)
1.06 Have you audited at a patient level against NICE QS86 *Falls in older people* and quality statement 5 'Safe manual handling after an inpatient fall' in the past 12 months?	40% (8)
1.07 Have you audited at a patient level against NICE QS86 *Falls in older people* and quality statement 6 'Medical examination after an inpatient fall' in the past 12 months?	45% (9)

*In 2015 the question stated 'within the past 24 months'

Table 25

2.01 Does your trust have an executive director who has specific roles/responsibilities for leading falls prevention (can be as part of a wider remit for patient safety)?	
Yes	70% (14)
No	15% (3)
Not known	15% (3)
2.02 Does your trust have a non-executive director (or other board member) who has specific roles/responsibilities for leading falls prevention (can be as part of a wider remit for patient safety)?	
Yes	20% (4)

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No	55% (11)
Not known	25% (5)
2.03 Does your trust have a standing multidisciplinary working group or steering group or subgroup specifically for falls prevention which meets at least four times a year? As a minimum, this group must contain a nurse, doctor, AHP and manager as part of its membership?	
Yes	65% (13)
2.03a Is information on the number of falls routinely presented and discussed at most or all meetings of the central falls prevention group?	
Yes	85% (11)
2.03b Is information on the rates of falls routinely presented and discussed at most or all meetings of the central falls prevention group?	
Yes	85% (11)
2.04 Is information on the rates of falls routinely provided to individual directorates, wards, units or departments at least quarterly?	
Yes	80% (16)
2.05 Is it policy that all inpatient wards/units have access to walking aids for newly admitted patients (or patients whose mobility needs have changed) 7 days per week?	
Yes	70% (14)

Clinical audit results

Table 26

	National
Patient age	Min: 65 Max: 103 Mean: 83.5

Table 27

	Male	Female
Gender	38% (517)	62% (854)

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Table 28

Is it documented that the patient has:	Total patient records	Yes*	No*	N/A	Missing
been asked about any history of falls?	1,371	91% (1,182)	9% (117)	5% (66)	0% (6)
had any assessment of cognitive impairment (eg AMT)?	1,371	81% (1,019)	19% (232)	7% (97)	2% (23)
a care plan to support the patient with cognitive impairment?	1,019	65% (294)	35% (157)	55% (561)	1% (7)
been assessed for the presence or absence of delirium or a documented diagnosis of delirium?	1,371	54% (600)	46% (515)	17% (234)	2% (22)
a delirium care plan (tailored to patient, not generic)?	600	52% (103)	48% (96)	67% (399)	0% (2)
any assessment of urinary continence/frequency/urgency?	1,371	94% (1,235)	6% (79)	4% (51)	0% (6)
a continence or toileting care plan (tailored to patient, not generic)?	1,235	85% (724)	15% (132)	31% (377)	0% (2)
any assessment of fear of falling?	1,371	67% (801)	33% (389)	11% (153)	2% (28)
a record of level of mobility?	1,371	99% (1,312)	1% (19)	2% (29)	1% (11)
a mobility care plan (tailored to patient, not generic)?	1,312	94% (1,178)	6% (69)	5% (60)	0% (5)
measurement of lying and standing blood pressure?	1,371	34% (347)	66% (667)	25% (342)	1% (15)
an assessment for medications that increase falls risk?	1,371	70% (858)	30% (376)	9% (126)	1% (11)
a medication review (beyond medicine reconciliation) with regard to falls risk?	858	91% (600)	9% (61)	22% (192)	1% (5)
any assessment of vision and/or need for visual aids, including spectacles?	1,230	56% (694)	44% (550)	0% (0)	1% (11)
a vision care plan?	1,371	57% (156)	43% (118)	8% (116)	1% (7)
Is there evidence that the patient and/or their family/carer was given ***written*** information about falls risk or falls prevention?	694	33% (420)	67% (840)	60% (413)	1% (12)
Is there evidence that the patient and/or their family/carer was given ***verbal*** information about falls risk or falls prevention?	1,371	50% (627)	50% (630)	7% (99)	1% (13)

*Calculated using yes and no answers

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Table 29

Is it documented that the patient has:	Total patient records	Yes*	No night sedation given*	Missing
new night sedation or other sedative medication?	1,230	5% (58)	95% (1,164)	1% (8)

*This calculation excludes patients who were already on long-term sedatives

Table 30

Is it documented that the patient has:	Total patient records	Yes*	No*	N/A impossible or inappropriate to assess	Missing
a call bell in sight and in reach?	1,371	95% (1,205)	5% (65)	6% (88)	1% (13)
safe footwear on their feet?	1,371	96% (1,082)	4% (40)	17% (235)	1% (14)
the immediate environment (including route to nearest toilet) free from clutter/trip/slip hazards?	1,371	96% (1,159)	4% (48)	11% (146)	1% (18)
the appropriate (based on Section 1 or 2) mobility aid in reach?	1,371	83% (875)	17% (178)	22% (302)	1% (16)

*Calculated using yes and no answers

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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)**