Appendix: Expanding the National Audit of Inpatient Falls (NAIF) to care homes – a feasibility project

In 2021, a task-finish group met twice to discuss the feasibility of collecting falls audit data from care home residents.

The group met to determine feasibility of collecting data on fall prevention activity and post fall management for all femoral fractures registered on the National Hip Fracture Database (NHFD) where it is indicated the patient came from a care home.

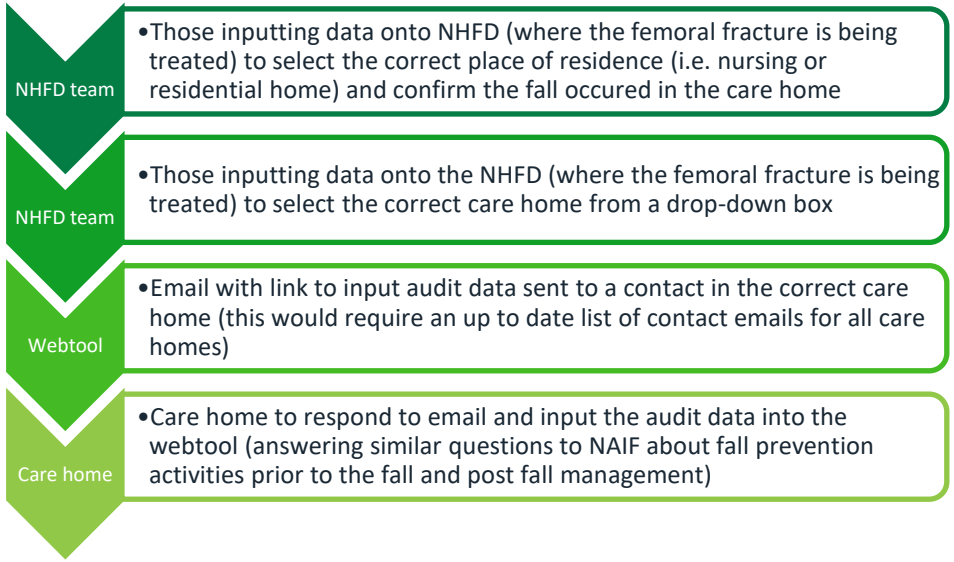
Audit data is collected in this way for hospital inpatient femoral fractures for the National Audit of Inpatient Falls (NAIF). When a patient is registered on the NHFD, an audit question establishes whether the femoral fracture was due to an inpatient fall. In cases of inpatient falls, the NAIF team at the trust where the fall occurred is notified and asked to provide the relevant audit data. The trust where the fall occurs is not always the same as where the femoral fracture is treated, so there is already a process for prompting further audit data collection for some patients registered on the NHFD. For audit data to be collected for care home residents, the same process would need to occur to notify care homes of the requirement to submit data.

The group met with two objectives:

1. To determine the feasibility of collecting NAIF audit data for care home residents who sustain a femoral fracture.
2. To determine the value of collecting and reporting on NAIF audit data for care homes.

Feasibility of collecting NAIF audit data in care homes

For NAIF data to be collected from care home residents who sustain a femoral fracture, the following processes would have to take place:



Discussions on this process concluded:

- It would be possible to create a dropdown list of care home names on the Crown Webtool.
- A system could be set up that doesn't require an individual to be registered with the Webtool but could be sent in an email link. A working email address would still be required for each care home.
- Inputting audit data onto the Crown Webtool does not require a Health and Social Care Network (HSCN) connection, so homes without this would be able to participate.
- NAIF already uses a system to ensure good data governance when requesting audit data collection between organisations. More work would be required to ensure robust processes when expanding this to include care homes.

The group concluded that it would be possible to identify and alert care homes of audit cases using the Crown Webtool. How successful the process would be in translating to completed case data would depend on the correct information being inputted into the NHFD as well as the care home response to the email request.

Value of collecting NAIF audit data in care homes

For audit to be of value, data must support improvement activities. The benefit of this should outweigh the burden of data entry.

Data collected from the NHFD in 2019 for all hip fractures in England and Wales indicated there were 16,000 hip fractures in people whose place of residence was a nursing or residential home. In 2020, there were approximately 15,000 registered care homes in England and Wales. This suggests that there is around 1 femoral fracture per care home per year. This crude calculation would be influenced by the size of the home, with smaller homes having lower rates.

The group concluded that due to the low frequency of femoral fracture events in each home, collected audit data on these would be of limited value. The low frequency of auditable events makes it impossible to ascertain trends that could be used to reflect overall fall prevention practice and to measure the impact of quality improvement activities.

Next steps for fragility fracture audit in care homes

We concluded that replicating NAIF in its current format in care homes would be feasible but the value from participating would be limited. However, the following actions were agreed to explore how the programme might support fall and fragility fracture care in care homes in the future:

1. To use existing FFFAP data from the National Hip Fracture Database (NHFD) and Fracture Liaison Service Database (FLS-DB) to evaluate care provided for people from care homes with fragility fractures at a national level (England and Wales).
2. To encourage the use of NAIF resources in care homes, specifically the hot debrief and after-action review tools.
3. To signpost to useful fall prevention resources specific to care homes
4. To explore providing guidance for local audit of fall prevention activity which could be undertaken at care home, primary care network (PCN) or integrated care service (ICS) level.

Use of existing FFFAP data to evaluate fragility fracture care for care home residents.

In this side paper, we present data on femoral fracture care from the NHFD and on fracture liaison services provision from the FLS-DB, comparing older people who lived in a care home at the time of the fracture to those who did not live in a care home.

The purpose of this side paper is to present data on processes of care and outcomes to determine whether this would be a useful ongoing addition to reporting. If this is deemed to be useful, we could explore analysing and presenting data at ICS level to support improvement activities.

The data presented is from 2020, as the complete 2021 dataset was not available at the time of writing.

Hip fracture care for patients who live in care homes

The following data were collected from the National Hip Fracture Database (NHFD) in 2020 and relate to patients whose usual place of residence at the time of hip fracture was a care home (either residential or nursing).

In 2020, 11,544 people from a care home were treated for hip fracture. Care home residents make up 18% of total hip fractures on the NHFD (11,544/63,713). Of those from a care home, 41% were from nursing and 59% from residential homes. Those admitted from a care home were older (Fig 1) and more likely to be women (Table 1).

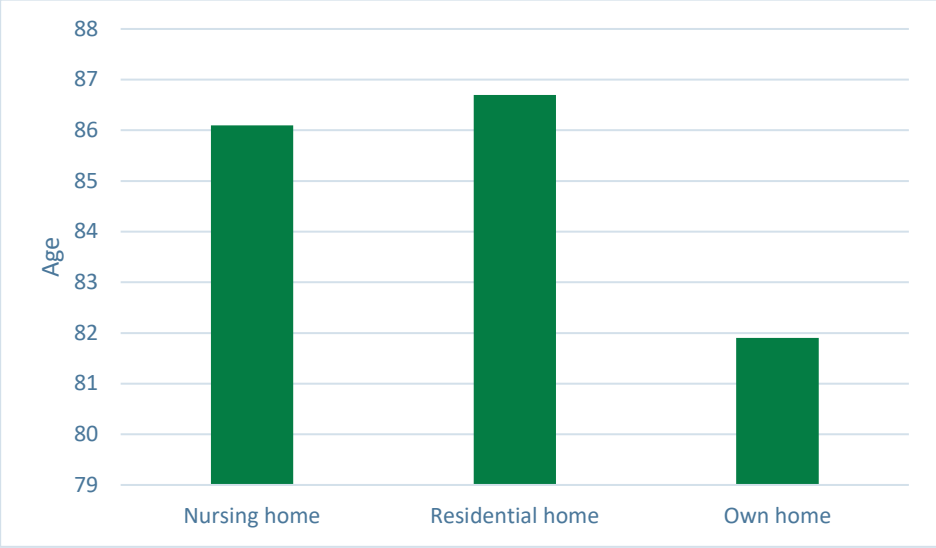


Fig 1. Median age at admission by place of residence at admission

When comparing patients from care homes with those not from a care home, there was no clear difference between the proportion of patients who sustained an inpatient hip fracture or those who tested positive for COVID-19.

Table 1: Characteristics and outcomes for patients by care home status

	Care home	Non-care home
Age (median)	87	82
% women	74%	69%
Hip fracture occurred in hospital	2.4%	3.4%
COVID +ve during hip fracture care	40%	37%
Cognitive impairment (AMTS)	83%	25%
Length of stay (days)	15 days	17 days
30-day mortality	13.7%*	7%

*For care home residents who had an inpatient hip fracture, the 30-day mortality was 17.7%.

There was no difference in time to orthogeriatric review, time to surgery or likelihood of return to residence in those from care homes compared with those not from care homes. Care home residents were more likely to receive NICE (National Institute for Health and Care Excellence) compliant surgery, probably because joint replacement surgery would be less likely to be indicated in the care home cohort. Care home residents were more likely to be delirious after surgery and less likely to get up the next day (Table 2).

Table 2: NHFD KPI achievement

KPI % achievement	Care home	Non-care home
KPI 1: Prompt orthogeriatric review	87%	87%
KPI 2: Prompt surgery	67%	67%
KPI 3: NICE compliant surgery	81%	66%
KPI 4: Prompt mobilisation	67%	81%
KPI 5: Not delirious post op	28%	62%
KPI 6: Return to original residence	72%	71%

Impression: Care home residents are cognitively and physically frailer and have higher mortality. However, prompt surgery and orthogeriatric review is equitable between care home and non-care home residents.

Fracture liaison service care for patients who live in care homes

The following data were collected from the Fracture Liaison Service Database (FLS-DB) in 2020 and relate to patients whose usual place of residence at the time of their fragility fracture was a care home (either residential or nursing).

In 2020, 4,456 people from a care home were added to the FLS-DB. Care home residents made up 7.4% of the cases submitted to the FLS-DB (4,456/60,471). Those admitted from a care home were older (Fig 2 and Table 3).

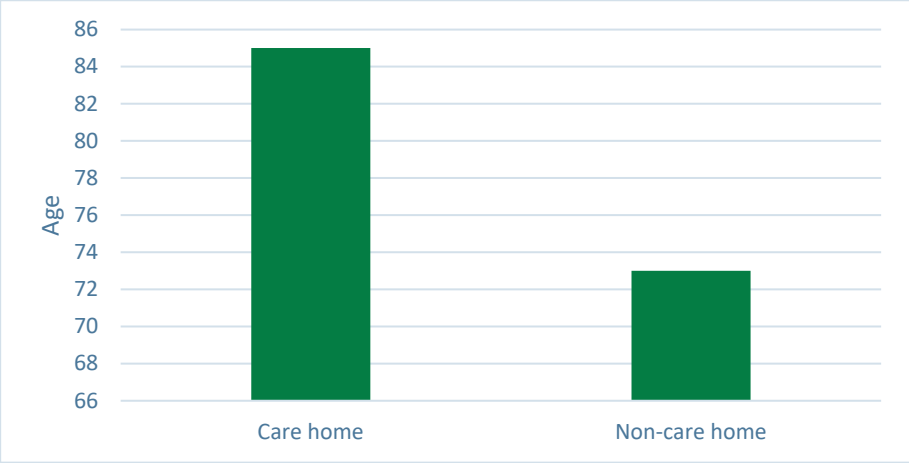


Fig 2: Age at time of entry to FLS-BD

Care home residents receiving care from a fracture liaison service were older and almost twice as likely to be admitted to hospital with the fracture than those not living in a care home. Hip fracture was the most common fragility fracture in care home residents whereas non-hip/spine fractures accounted for 70% of fragility fractures in non-care home residents.

Table 3: Characteristics and outcomes for patients by care home status

	Care home	Non-care home
Age (median)	85	73
% women	77%	77%
Admitted to hospital with fracture	75%	42%
Site of first fracture:		
-Hip	57%	22%
-Spine	5%	9%
-Non-hip or spine	38%	70%

Care home residents had a slightly higher chance of being recommended bone medication. However, they were less likely to be followed up at 4 months, to have started bone therapy at follow-up and to still be on bone therapy at 12 months. Care home residents had a slightly lower chance of having a falls assessment and being referred to strength and balance exercise, although levels were very low for all patients (see Table 4).

Table 4: FLS-DB KPI achievement

KPI % achievement	Care home	Non-care home
Average time to FLS assessment (days)	27.5	51.5
Average time to DEXA (days)	158	150
KPI 6: Falls assessment	55%	60%
KPI 7: Bone medication recommended	37%	34%
KPI 8: Strength and balance ex within 16 weeks	2%	3%
KPI 9: Follow up at 4 months	21%	28%
KPI 10: Commenced bone therapy at follow-up	13%	16%
KPI 11: On bone therapy at 12 months	8%	12%

Impression: Patients from care homes using FLSs are older and more likely to have had a hip fracture. In general, care home residents are slightly less likely to receive care consistent with FLS-DB KPIs than non-care home residents.

National Audit of Inpatient Falls annual report – care home side paper 2022

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Falls and Fragility Fracture Audit Programme
The National Audit of Inpatient Falls (NAIF) is run by the Care Quality Improvement Department (CQID) of the Royal College of Physicians (RCP). It is part of the Falls and Fragility Fracture Audit Programme; one of three workstreams that also include the Fracture Liaison Service Database (FLS-DB) and National Hip Fracture Database (NHFD). The programme is commissioned by the Healthcare Quality Improvement Partnership (HQIP).

Healthcare Quality Improvement Partnership
The National Audit of Inpatient Falls is commissioned by the Healthcare Quality Improvement Partnership (HQIP) as part of the National Clinical Audit and Patient Outcomes Programme (NCAPOP). HQIP 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 in patient outcomes, and to increase the impact of clinical audit, outcome review programmes and registries on healthcare quality in England and Wales. HQIP commissions, manages and develops NCAPOP, comprising around 40 projects covering care provided to people with a wide range of medical, surgical and mental health conditions. The programme is funded by NHS England, the Welsh government and, with some individual projects, other devolved administrations and crown dependencies www.hqip.org.uk/national-programmes

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