

Understanding Practice in Clinical Audit and Registries tool: UPCARE-tool

A protocol to describe the key features of clinical audits and registries

FAQ

Who should complete the tool?

This tool is designed to be completed by individuals and organisations planning and implementing clinical audits and registries. It has been specifically designed for national clinical audits and registries commissioned by the Healthcare Quality Improvement Programme (HQIP; Part of the National Health Service in England) as part of the National Clinical Audit and Patient Outcome Programme (NCAPOP), but can be adapted and used by audits and registries in other settings.

What is the tool for?

The tool is a protocol for audits and registries. It has been designed to provide a “one-stop” summary of the key information about how clinical audits and registries have been designed and carried out. It is expected that this will be published openly for anyone to view, and help users of audit/registry data and audit/registry participants understand the methods, evaluate the quality and robustness of the data, and find information and data that is most relevant to them. For national clinical audits and registries commissioned by HQIP, the intention is that publishing this information openly will reduce the requirement for reporting ad hoc and contract monitoring data and information to HQIP and other national agencies.

What type of information is contained within UPCARE?

It is intended that the responses to the tool are factual and written concisely. Where possible, documents can be embedded and hyperlinks provided if information is published elsewhere. This document is intended to be a complete account of the information for the audit or registry. Please be vigilant about keeping any links included in the document up to date so readers can access full information about the audit or registry.

This tool is not intended to be used to formally “score” the quality of the responses. The design of this tool has been inspired by reporting checklists used for clinical guidelines (e.g. AGREE¹) and in reporting research studies (e.g. STROBE², SQUIRE³).

Who is the intended audience for the tool?

The information contained within the UPCARE tool will enable audit and registry stakeholders to access in one place and in a standard format key information about the audit/registry and evaluate the integrity and robustness of the audit.

Examples of audit/registry stakeholders include:

- Patients / Carers / Public / Patient representative organisations
- Clinicians / Allied health professionals / Healthcare providers / Multi-disciplinary teams / Primary, secondary and tertiary care providers
- National agencies
- Commissioners
- Healthcare regulators

¹ AGREE stands for the Appraisal of Guidelines for Research & Evaluation. See <https://www.agreetrust.org/about-the-agree-enterprise/introduction-to-agree-ii/>, last accessed 24 April 2018.

² STROBE stands for Strengthening the Reporting of Observational Studies in Epidemiology. See <https://www.strobe-statement.org/index.php?id=strobe-home>, last accessed 24 April 2018.

³ SQUIRE stands for Standards for Quality Improvement Reporting Excellence. See <http://www.squire-statement.org/>, last accessed 24 April 2018.

FAQ (cont'd)

How should the responses be written?

Please try and write responses clearly as this will help to make the tool accessible and useful. Some tips and suggestions for writing clearly include:

- avoiding technical jargon where possible
- using short paragraphs and bullet points
- using the “active” voice rather than passive
- keeping sentences short

Where information is published openly elsewhere please provide links and references rather than duplicating information that is already available

When and how often should I complete the tool?

The tool is intended to provide accurate and up to date information about the audit/registry, and so can be updated whenever and however frequently it is relevant to do so. For national clinical audits and registries commissioned by HQIP it is intended that the tool is updated annually, although audits can update the tool more frequently if they wish to.

Each version of the tool should include a date of publication and version number.

Where should the completed UPCARE report be published?

The completed tool should be published online e.g. on the website for the audit or registry.

How was UPCARE designed?

HQIP commission, manage and develop the NCAPOP (National Clinical Audit and Patient Outcomes Programme) under contract from NHS England and devolved nations. The work was led by HQIP who set up a Methodological Advisory Group (MAG) consisting of methodological, statistical and quality improvement experts. Meetings were held on a six monthly basis and the structure and content of the eight quality domains and their key items were agreed by the MAG. The tool was piloted by 5 programmes within the NCAPOP and re-edited in light of comments received. Other comments received by MAG members was also considered as part of the re-editing process. The final version of the UPCARE tool was signed off by the HQIP MAG and will be reviewed annually.

IPR and copyright

© 2018 Healthcare Quality Improvement Partnership Ltd (HQIP)

Contents

Understanding Practice in Clinical Audit and Registries tool: UPCARE-tool	1
FAQ.....	2
Domain 1: Organisational information	6
1.1. The name of the programme	6
1.2. The name of the organisation carrying out the programme	6
1.3. Main website for the programme.....	6
1.4. Date of publication and version number of the tool on your website	6
Domain 2: Aims and objectives.....	7
2.1. Overall aim	7
2.2. Quality improvement objectives.....	8
Domain 3: Governance and programme delivery.....	8
3.1. Organogram	9
3.2. Organisations involved in delivering the programme.....	9
3.3. Governance arrangements	11
3.4. Declarations and Conflicts of interest.....	12
Domain 4: Information security, governance and ethics.....	13
4.1. The legal basis of the data collection.....	13
4.2. Information governance and information security.....	13
Domain 5: Stakeholder engagement	15
5.1. Approaches to involving stakeholders.....	15
Domain 6: Methods	16
6.1. Data flow diagrams	16
6.2. The population sampled for data collection	17
6.3. Geographical coverage of data collection.....	17
6.4. Dataset for data collection.....	17
6.5. Methods of data collection and sources of data	18
6.6. Time period of data collection	18
6.7. Time lag between data collection and feedback	18
6.8. Quality measures included in feedback	18
6.9. Evidence base for quality measures	19
6.10. Case ascertainment.....	19
6.11. Data analysis	19
6.12. Data linkage.....	20
6.13. Validation and data quality.....	20

Domain 7: Outputs.....	21
7.1. The intended users or audience for the outputs	21
7.2. Editorial independence	21
7.3 The modalities of feedback and outputs	21
7.4 Recommendations	22
7.5 Comparators and benchmarking	22
7.6 Motivating and planning quality improvement	23

Domain 1: Organisational information

1.1. The name of the programme

Falls and Fragility Fracture Audit Programme (FFFAP)

1.2. The name of the organisation carrying out the programme

Royal College of Physicians (RCP)

1.3. Main website for the programme

www.fffap.org.uk and www.rcplondon.ac.uk/projects/falls-and-fragility-fracture-audit-programme-fffap

1.4. Date of publication and version number of the tool on your website

V2

Domain 2: Aims and objectives

2.1. Overall aim

Falls and fractures resulting from falls are major public health problems and thus national priorities for action by the NHS. Better outcomes and secondary prevention are included as measures in the public health, social care and commissioning parts of the NHS Outcomes Framework.

The FFFAP provides a source of national data, capturing information required by regulatory bodies and service commissioners, and also provides a tool to support quality improvement. The FFFAP is clinically led and delivered by a team comprising managers and coordinators working closely with information technologists and methodologists, and clinicians delivering care.

The care that patients receive is measured through a number of elements that run in parallel within the three key workstreams:

- The National Hip Fracture Database (NHFD), a continuous national clinical audit of acute hip fracture care
- The Fracture Liaison Service Database (FLSDB), a continuous national clinical audit of secondary fracture and falls prevention
- The National Audit of Inpatient Falls (NAIF), a clinical audit of falls prevention in hospitals. Previously delivered as a spotlight audit, this work will move to a continuous model from 2018/19 capturing data on falls prevention and post falls interventions for patients with fragility hip fractures.

The overall aim of the FFFAP is therefore to deliver a patient-centred, quality improvement focused programme which has four overarching objectives:

- To improve outcomes and efficiency of care after hip fracture
- To improve services in acute and primary care to respond to first fracture and prevent second fracture
- To improve early intervention to restore independence
- To work in partnership to prevent frailty, preserve bone health and prevent accidents in older people.

2.2. Quality improvement objectives

FFFAP has delivered major successes across the range of acute hip fracture care, secondary fracture prevention and primary prevention of falls among hospital inpatients. There remain key areas of variation and poor quality care that we continue to address. The team are currently in the process of finalising a quality improvement strategy which includes the following overarching objectives:

Data collection and feedback

- Providing clinically relevant data to participants
- Providing timely data to participants in a format that is relevant to user's needs
- Providing appropriate regional and national data
- Engaging with national promoters of audit involvement

QI support to local teams

- To support local teams to deliver effective methodologically sound, and successful QI projects through workshop and collaboratives.

QI support to trainees

- To support trainees to understand the use of FFFAP data and how to deliver successful QI projects.

Use of high-level change levers

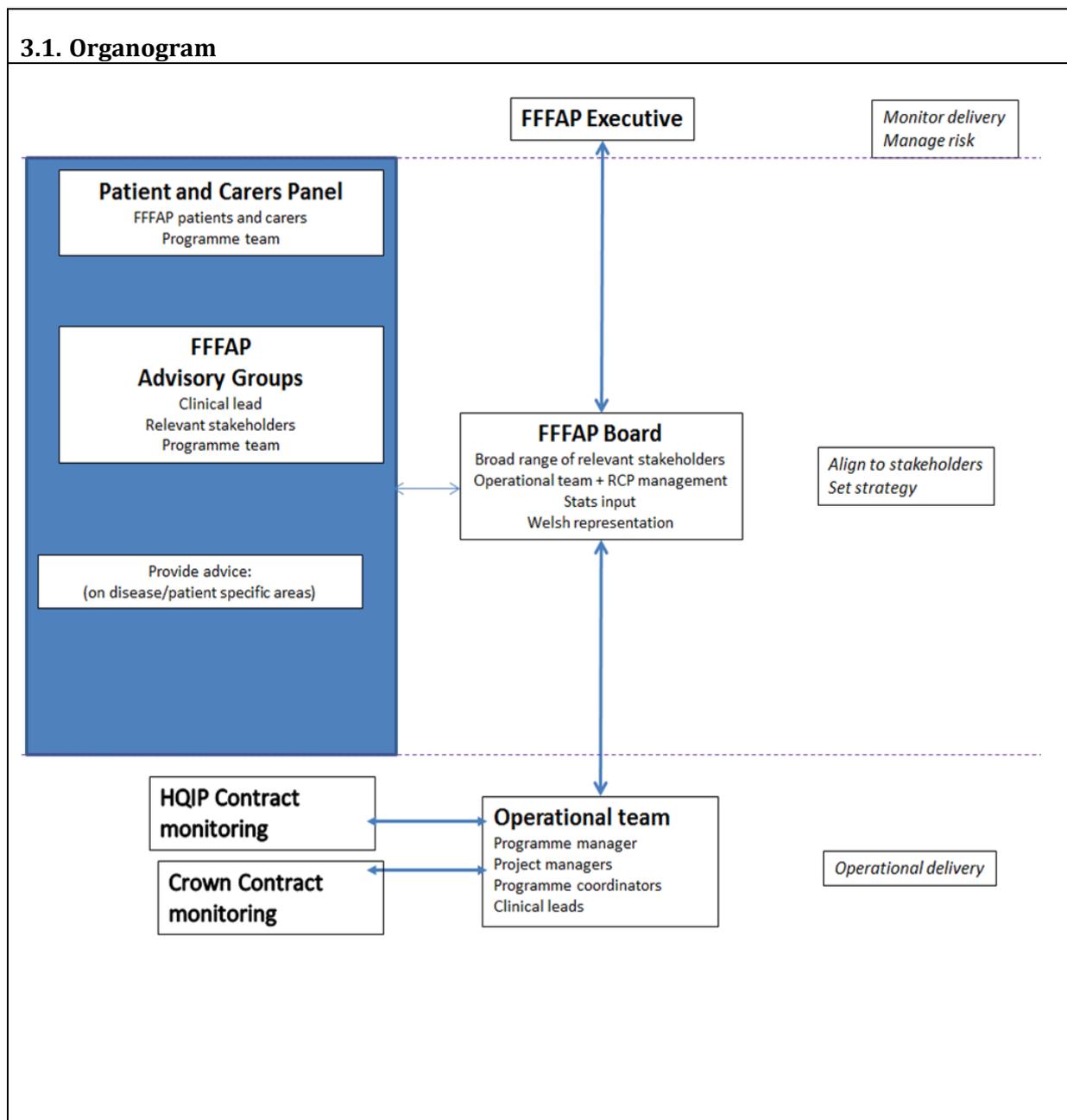
- To influence national bodies to support the health and care system to deliver better falls and fractures care

Patient and public engagement

- To ensure that the views of patients and the public are integrated into the design and delivery of the audit and that they receive information and updates in a way that suits their needs and requirements.

Domain 3: Governance and programme delivery

3.1. Organogram



3.2. Organisations involved in delivering the programme

The RCP holds sub-contracts for the delivery of a number of projects. A standard sub-contractor contract template is used, which clearly outlines the terms and conditions required to align with the headline contract held by HQIP. The sub-contracts are held with:

- University of Oxford, NDORMS (www.ndorms.ox.ac.uk) for statistical and methodological support across the programme
- Crown Informatics (www.crowninformatics.com) for the provision of the bespoke web-tool required for all clinical audits;
- Royal Osteoporosis Society (www.theros.org.uk) for the delivery and management of a

patient panel.

The RCP ensures sub-contractor accountability by holding regular contract review meetings, as well as requesting reports, outlining progress against the contract deliverables, on a quarterly basis.

The following external organisations are represented on the FFFAP Board:

National Quality Improvement and Clinical Audit Network (NQICAN)

Royal Osteoporosis Society

Healthcare Quality Improvement Partnership

British Geriatric Society

British Orthopaedic Association

North West London CLAHRC

Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Science, (NDORMS)

University of Oxford

Public Health England

Welsh Government

The following external organisations are represented on the National Hip Fracture Database Advisory Group:

British Orthopaedic Association

Association of Anaesthetists of Great Britain and Ireland (AAGBI)

The Chartered Society of Physiotherapy

Royal Osteoporosis Society

British Geriatric Society

The National Joint Registry

The following external organisations are represented on the Fracture Liaison Service Database Advisory Group:

Society for Endocrinology

British Orthopaedic Association

Royal College of General Practitioners

Royal College of Nursing

The British Society for Rheumatology

British Geriatric Society

University of Oxford

University of Bristol

Royal Osteoporosis Society

AGILE - The Chartered Society of Physiotherapy

The following external organisations are represented on the National Audit of Inpatients Advisory Group:

Royal College of Nursing

Care Quality Commission

NHS Wales

National Hip Fracture Database Clinical Lead

NDORMS

AGILE – The Chartered Society of Physiotherapy

Royal College of Psychiatrists

British Geriatric Society

Public Health England

Kent Community Trust

Royal College of Emergency Medicine
Imperial College of Healthcare NHS Trust
Independent researcher/consultant
College of Occupational Therapy, Specialist Section Older People
NHS Improvement

3.3. Governance arrangements

A 'Programme executive' oversees the delivery of FFFAP, ensuring the programme meets contract deliverables and manages risk. This is composed of RCP Audit and Accreditation operations and clinical director, FFFAP programme management and the FFFAP senior clinical lead.

A 'Board', chaired by the clinical director of the RCP Audit and Accreditation department meets biannually, to provide challenge to the Executive team, have oversight of risks and issues and ensures alignment of strategic direction. The membership is made up of the following organisations:

- British Orthopaedic Association: www.boa.ac.uk
- British Geriatrics Society: www.bgs.org.uk
- Royal Osteoporosis Society: www.theros.org.uk
- RCP QI hub: www.rcplondon.ac.uk/projects/rcp-quality-improvement-rcpqi
- RCP operational and business management leads
- University of Oxford, NDORMS: www.ndorms.ox.ac.uk
- FFFAP patient panel (hosted by the NOS)
- North West London CLAHRC: <http://clahrc-northwestlondon.nihr.ac.uk/>
- National Quality Improvement and Clinical Audit Network (NQICAN):
www.nqican.org.uk

The Board has an agreed Terms of Reference and decisions are only taken at meetings where meetings are quorate. There is a process for reviewing membership to ensure an active Board, quorate meetings and which leads the direction of the programme.

The National Falls Prevention Coordination Group, hosted by Public Health England acts as a partnership board. It provides input and expertise into the programme's strategic direction. The consensus statement can be found here:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/586382/falls_and_fractures_consensus_statement.pdf

In addition, there are three advisory groups (NHFD, FLS-DB and NAIF), which assist in the operational delivery of each aspect of the programme. More specifically, they provide advice on the planned work and support its implementation and dissemination. These groups are clinically led, and include selected individuals from disciplines and agencies relevant to that particular area. These groups meet biannually, plus via virtual contact modes as required to ensure timely input to the delivery of the programme.

A Scientific and Publications committee to review research applications for FFFAP data meet biannually.

Advisory groups include a range of health care professionals from the following disciplines to ensure breadth of expertise:

- Geriatric medicine
- Orthopaedic surgery
- Anaesthetics and perioperative medicine
- Rheumatology
- Endocrinology
- Acute and emergency medicine
- Primary care
- Rehabilitation
- Trauma and orthopaedic nursing
- Falls prevention and patient safety
- Fracture liaison and osteoporosis nursing
- Pharmacy
- Public health
- Allied health professionals
- Research

An advisory Patient Panel composed of patients and carers with experience of fragility fracture, osteoporosis and falls, is in development and will be hosted by the ROS, in line with HQIP guidance. This group will meet twice a year and will nominate and maintain representation of all governance groups throughout the programme including the FFFAP board.

3.4. Declarations and Conflicts of interest

The RCP has a standard declaration of interest (DOI) form and this is used for the programme.

All DOI are requested for members of the boards and advisory groups. They are collected in advance of meetings and decisions regarding whether a conflict of interest exists and appropriate actions are made by the RCP clinical director. All DOI and COI forms are comprehensively documented by the FFFAP team.



Declaration of
Interests form.pdf

An example form:

If you are unable to view this document please email the FFFAP team who would be happy to send you a copy: fffap@rcplondon.ac.uk

Domain 4: Information security, governance and ethics

4.1. The legal basis of the data collection

The legal basis for all audit workstreams is under General Data Protection Regulation (GDPR):

1. Article 6 (1) (e) processing is necessary for the performance of a task carried out in the public interest or in the exercise of official authority vested in the controller. This is justified through commissioning arrangements which link back to NHS England, Welsh Government and other national bodies with statutory responsibilities to improve quality of health care services.
2. Article 9 (2) (i) processing is necessary for reasons of public interest in the area of public health, such as protecting against serious cross-border threats to health or ensuring high standards of quality and safety of health care and of medicinal products or medical devices, on the basis of Union or Member State law which provides for suitable and specific measures to safeguard the rights and freedoms of the data subject, in particular professional secrecy. This is justified as all projects aim to drive improvements in the quality and safety of care and to improve outcomes for patients.

All audit programmes are responsible for ensuring they are GDPR compliant. The FFFAP team has completed, and regularly updates, an Information Governance (IG) checklist and Data Protection Impact Assessment (DPIA) to ensure its continued GDPR compliance. These documents are submitted to, and reviewed by, the Healthcare Quality Improvement Partnership (HQIP) as and when required under the programme contract. Further information on GDPR can be found at: <https://ico.org.uk/for-organisations/guide-to-the-general-data-protection-regulation-gdpr/>. Our DPIA can be found at <https://www.rcplondon.ac.uk/projects/outputs/fffap-data-processing-statements>

The collection of patient identifiable data (PID) for the NHTD and FLS-DB in England and Wales is covered under 'Section 251' Section 60 of the Health and Social Care Act 2001 re-enacted by Section 251 of the NHS Act 2006 (references: CAG 8-03(PR11) and 15/CAG/0158) and are subject to annual review by the Confidentiality Advisory Group (CAG) of the Health Research Authority. S251 approval has been sought and approved for the new NAIF launch in 2019, as an amendment to the approval for the National Hip Fracture Database (reference CAG 8-03(PR11)/2013).

Data flows to NHS Digital Data Services for Commissioners Regional Offices (DSCROs) to support the payment of hip fracture Best Practice Tariff are managed under a separate legal mechanism (directions issued by the Secretary of State under Section 254 of the Health and Social Care Act 2012).

The fair processing statements for each of the three workstreams can be found online: www.rcplondon.ac.uk/projects/outputs/fffap-data-processing-statements

4.2. Information governance and information security

The RCP's Information Governance Toolkit score achieved on 15 May 2018 was 92% (satisfactory). This indicates that the programme can be trusted to handle personal information securely. The link

is

<https://www.igt.hscic.gov.uk/AssessmentReportCriteria.aspx?tk=432966986019703&cb=4c4ba47d-9689-4630-90f0-83cc3f52db57&sViewOrgId=44511&sDesc=8J008-CSD>

ICO DPA Register details can be found here: <https://ico.org.uk/ESDWebPages/Entry/Z7085833>

Expiry date: 16 September 2019

Planned next submission date: September 2019

Domain 5: Stakeholder engagement

5.1. Approaches to involving stakeholders

Patients and carers are involved in FFFAP by:

- The FFFAP Board has a patient and carer representative member
- The FFFAP Board has representation from the ROS
- Patient panel members are members of the advisory groups
- When patient information resources are developed, we ensure patient and carers' input into the content and design. An example includes:
<https://www.rcplondon.ac.uk/projects/outputs/falls-prevention-hospital-guide-patients-their-families-and-carers>

Clinicians are involved by:

- Leading and designing the programme in the role as appointed clinical leads
- Contributing to data analysis and interpretation
- Disseminating feedback and communications, including annual reports
- Selecting quality metrics
- Presenting key findings from the audit at the professional annual conference.

Domain 6: Methods

6.1. Data flow diagrams

A data flow diagram for NHFD is below and can be found here

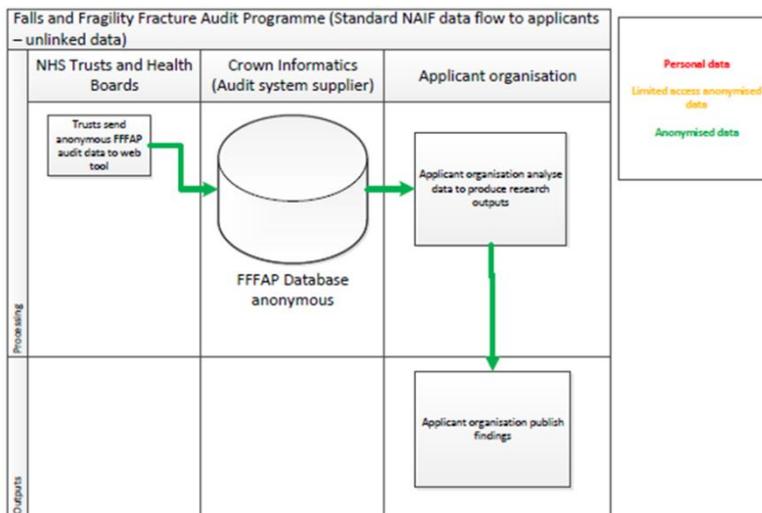
<https://www.rcplondon.ac.uk/projects/outputs/fffap-data-processing-statements>



170510 NHFD data flows 25 Feb 2019.pc

In the most recent NAIF, the following data flow was used is below and can be found here

<https://www.rcplondon.ac.uk/projects/outputs/fffap-data-processing-statements>



A data flow diagram for the FLS-DB is below and can be found here

<https://www.rcplondon.ac.uk/projects/outputs/fffap-data-processing-statements>



FLS-DB Data flow diagram.pdf

6.2. The population sampled for data collection

For NHFD, patients aged 60 years or over admitted to any eligible NHS hospital in England or Wales with a hip fracture.

In addition, in a direct arrangement between RCP and Northern Ireland which does not go through HQIP who only commission NCAPOP in England and Wales, four hospitals in Northern Ireland also contribute to data collection and are included in NHFD reporting.

For NAIF, NHS patients living in England or Wales with a diagnosis of hip fracture which resulted from an inpatient fall. Patient aged ≥ 60 years admitted to hospital in England or Wales as above.

For FLSDB, NHS patients living in England and Wales aged 50 and over who have sustained fragility fracture. Exclusion criteria: Fractures of the face, skull, scaphoid and digits.

6.3. Geographical coverage of data collection

For NHFD, all hospitals in England and Wales admitting hip fracture patients are eligible to contribute to data collection. Between 1 January 2017 and 31 December 2017, 173 (100% of those eligible in England and Wales; 160 England, 13 Wales) submitted data. In addition, four hospitals in Northern Ireland submit data and are included in NHFD reporting bringing the total submitting hospitals to 175.

For NAIF, all acute trusts in England and Wales were eligible to contribute to data collection in the most recent audit. Of the 142 eligible acute hospital trusts and Local Health Boards in England and Wales, 97% (138) submitted data. The participation rate for the clinical audit was 95% (n = 187/197).

All Fracture Liaison Services (FLSs) in England and Wales (whether based in the community or an acute hospital) are eligible to contribute to data collection. Between 1 January 2017 and 31 December 2017, 59 FLSs submitted data.

6.4. Dataset for data collection

For NHFD, the dataset for the time period 1 January 2017 to 31 December 2017 is published on www.data.gov:

<https://data.gov.uk/dataset/3a1f3c15-3789-4299-b24b-cd0a5b1f065b/national-hip-fracture-database-annual-report-2018>

For NAIF, the core dataset for data collection is published on www.data.gov:

<https://data.gov.uk/dataset/41ac117a-a054-4aab-ab35-01753c3d9ae7/national-audit-of-inpatient-falls-2017>

For FLS-DB the dataset for the time period Jan 2017-Dec 2017 is published on www.data.gov:

<https://data.gov.uk/dataset/2a6b498f-518e-433c-82e0-0dca632fbbc3/the-fracture-liaison-service-database-fls-db-jan-to-december-2017>

6.5. Methods of data collection and sources of data

For NHFD, NAIF and FLS-DB, clinical data are collected by clinical teams and entered into the secure online FFFAP webtool. Data can be entered directly for each patient or uploaded from an existing database i.e. Excel.

For NHFD, linkage to HES and ONS data is also performed by NHS digital (see section 6.12).

6.6. Time period of data collection

Data are collected for the NHFD on a continuous basis. The majority of data presented in each annual report is on admissions to hospital between 01 January and 31 December of that calendar year.

For the last NAIF audit, data were collected for patients admitted to hospital between 14/05/2017 and 16/05/2017.

The FLS-DB audit started prospective data collection in 01/01/2016.

6.7. Time lag between data collection and feedback

For NHFD, participants receive real time feedback of data via the audit webtool. Benchmarking runcharts are updated hourly, allowing hospitals to compare their performance with others in each region. Feedback is also via an annual report which is published 9 months after data collection is closed for that report time period. The lag between data collection for patients included in the report ranges from 4 months to 16 months. The time from 2017 report submission to commissioners and funders on 4/7/17, to publication of the report on 14/9/17 was 10 weeks.

For NAIF, feedback is via an annual report which is published 6 months after the end of data collection. The lag between data collection for patient included in the report was 6 months, as the data was collected in May 2017 and the report published in November 2017.

For FLS-DB, participants receive real time (chart data is recalculated every 6 hours) feedback of data via the audit webtool. This includes the national average which the FLS can use for benchmarking. Feedback is via an annual report which is published 6 months after the end of data collection. The lag between data collection for patients included in the report ranges from 12 months to 24 months.

6.8. Quality measures included in feedback

Quality measures reported by NHFD to date include those listed in the 2018 annual report:

<https://www.nhfd.co.uk/>

Quality measures reported are reported as a dataset on data.gov:

<https://data.gov.uk/dataset/3a1f3c15-3789-4299-b24b-cd0a5b1f065b/national-hip-fracture-database-annual-report-2018>

Quality Measures reported by NAIF to date have included those listed in the annual report:

<https://www.rcplondon.ac.uk/projects/outputs/naif-audit-report-2017>

Quality measures reported are reported as a dataset at :

<https://www.rcplondon.ac.uk/projects/outputs/data-national-audit-inpatient-falls-naif>

For the FLS-DB, 11 process measures are provided to participating FLS through online runcharts that are updated daily. These are listed on page 14 of the 2018 annual report:

<https://www.rcplondon.ac.uk/projects/outputs/achieving-effective-service-fls-database-annual-report-2018>

6.9. Evidence base for quality measures

The quality measures for NHFD were defined to measure:

- NICE quality standard QS16
- NICE clinical guideline CG124

The quality measures for the last NAIF were defined to measure:

- NICE clinical guidance CG161
- NICE quality standard QS86

The quality measures for FLS-DB were defined to measure:

- NICE clinical guideline 161
- NICE quality standard 86
- NICE quality standard 149
- NICE Technology Appraisal 204
- NICE Technology Appraisal 161
- ROS QS for osteoporosis and prevention of fragility fractures
- ROS clinical standards for FLSs

Documents mapping the FLS-DB audit standards to the evidence base are available on the RCP website:

www.rcplondon.ac.uk/projects/outputs/fracture-liaison-service-database-fls-db-methodology

6.10. Case ascertainment

The NHFD has 100% eligible hospital compliance.

The NAIF 2017 audit was a snapshot audit and hospitals are asked to audit 15 consecutive patients on two consecutive days. All sites in England and Wales audited 30 patients, unless fewer than 30 patients were eligible. Therefore case ascertainment is not applicable.

For FLS-DB, it is not possible to determine case ascertainment rates (at national and FLS level), as there is no reliable source of external data (such as the Hospital Episode Statistics (HES) or Patient Episode Database for Wales (PEDW)) that can be used to validate how many patients were seen at an FLS.

6.11. Data analysis

For the NHFD, the methods used to clean and analyse the audit are described on pages 86-94 of the

2015 Annual Report at www.nhfd.co.uk/nhfd/nhfd2015reportPR1.pdf

HQIP guidance on outlier in national clinical audit is applied to the FFFAP as far as possible (subject to the quality of the data, adjustment required for over-dispersion, etc.).

Details of the case mix adjustment model and the methodology used to identify outliers are available at: www.nhfd.co.uk/files/2014ReportPDFs/NHFD2014CEUTechnicalReport.pdf

For NAIF, the methods used to analyse the data audit are described on page 12 for the last Annual Report at www.rcplondon.ac.uk/projects/outputs/naif-audit-report-2017

For the FLS-DB, the analysis plan is available on the RCP website:

www.rcplondon.ac.uk/projects/outputs/fracture-liaison-service-database-fls-db-methodology

The estimated annual case load for each FLS is derived from the 'rule of 5' which was developed in the feasibility study for the FLS-DB: www.rcplondon.ac.uk/projects/outputs/fls-db-feasibility-study

6.12. Data linkage

For NHFD, patient level data are linked to ONS death certificate data in order to obtain mortality rates. Linkage is carried out by NHS Digital/NHS Wales Informatics Service who then provided Crown Informatics with linked ONS data added to NHFD data with unique identifiers. Crown Informatics combines validated identifiers and ONS data with NHFD data. Crown Informatics then sends pseudonymised data to Oxford NDORMS to analyse data to produce audit outputs.

For NAIF and FLS-DB, no linkage is performed currently.

6.13. Validation and data quality

For NHFD, NAIF and FLS-DB, the audits are completed by clinical teams using the online webtool.

Crown Informatics complete internal data value and range checks, date/time checks and dataset logic checks on all audits. The webtool validates data at the point of entry by rejecting invalid responses. Data are reviewed by Crown post extract for validity and dataset consistency.

For NHFD, confounding factors used to adjust for patient case-mix in the mortality outlier analysis by Oxford NDORMS and they are: ASA grade, age, source of admission (own home/not own home), gender, mobility (freely mobile outdoors, mobile outdoors with 1 aid or 2 aids or frame, some indoor or no functional mobility), fracture type (intracapsular, extracapsular, including others). These are the confounding factors used for the risk adjustment for mortality funnel plots.

Domain 7: Outputs

7.1. The intended users or audience for the outputs

The NHFD, NAIF and FLS-DB design and produce individual feedback for:

- Patients and carers
- CCGs and Health Boards
- Clinical teams
- Trust or hospital chief executives
- The Care Quality Commission

7.2. Editorial independence

All reports are sent to the patient panel members, advisory groups and board for comment and ratification.

All recommendations and findings produced by the programme are independent and are not overly influenced by any stakeholders. To protect editorial independence the programme takes the following steps:

- There is an independent skilled analysis team
- Reports are written using a team approach, involving clinicians, management staff, RCP editors, methodologists and statisticians
- Reports undergo numerous internal reviews, including via the clinical senior lead and programme manager and quality assured by the Board through the governance processes described in previous sections.

7.3 The modalities of feedback and outputs

The NHFD provides feedback for the following types of participant:

- Patients and carers: An “Easy Access” written annual report; annual set of infographics
- Clinicians: Real time feedback through online benchmarking data and run charts for their hospital/region; comprehensive annual report; national quality improvement/service improvement workshops.

For NAIF, to date the audit has provided feedback for the following types of participant:

- Patients and carers: An “Easy Access” written annual report; annual set of infographics
- Clinicians: slide sets of benchmarking data; comprehensive annual report; national quality improvement/service improvement workshops

The FLS-DB provides feedback for the following types of participant:

- Patients and carers: Written summary report and accompanying animation
- Clinicians: Real time feedback through online run charts for their FLS; comprehensive annual report; presentations at the ROS champions meeting
- CCGs and health boards: Written summary report

The annual reports contain case studies, infographics and examples of best practice. They are quality assured at team level before submission to the Board and workstream advisory group for sign off. Sign off is required before submission of the report to commissioners/HQIP.

The reports are launched with national press releases and the key findings are presented at regional national and international conferences and workshops.

Data is submitted to Data.gov to ensure transparency. It is also sent to the Care Quality Commission to inform hospital inspections. NHFD data is available for patients and clinicians on NHS Choices.

FFFAP also provides up to date feedback to clinicians involved in the programme through a quarterly newsletter.

FFFAP has a strong twitter following of over 1000 followers. FFFAP regularly tweets to provide updates to stakeholders and feedback from audit findings and resultant quality improvement work.

7.4 Recommendations

The NHFD made 6 recommendations for hospitals, clinicians and commissioners in the 2018 annual report. The link to the report is <https://www.nhfd.co.uk/20/hipfractureR.nsf/docs/2018Report>

The last NAIF audit made 15 recommendations for hospitals, clinicians and commissioners in the last annual report. The link to the report is:

<https://www.rcplondon.ac.uk/projects/outputs/naif-audit-report-2017>

The FLS-DB made 11 recommendations for FLSs in the 2017 annual report. The recommendations can be found on page 8 of the report: <https://www.rcplondon.ac.uk/projects/outputs/achieving-effective-service-fls-database-annual-report-2018>

The FLS-DB made 6 recommendations for commissioners in the 2019 commissioners' report: <https://www.rcplondon.ac.uk/projects/outputs/fracture-liaison-service-database-commissioners-report-2019>

7.5 Comparators and benchmarking

The NHFD provides comparative performance data for hospitals. Each hospital has performance measured against:

- Other hospitals in the region
- All hospitals in England
- All hospitals in Wales
- Hospitals in Northern Ireland which submit data (currently four)
- Previous performance data for the hospital showing changes over time (run charts)

To date the NAIF audit has provided comparative performance data for hospitals. Each hospital has performance measured against:

- Other hospitals in the region
- All hospitals in England and Wales
- Previous performance data for the hospital showing changes over time (comparative tables).

The FLS-DB provides comparative performance data for FLSs. Each FLS has performance measured against:

- All FLSs in England and Wales
- Previous performance data for the FLS showing changes over time (run charts).

The annual report contains a RAG table which demonstrates the proportions of FLSs that were

achieving the specified standard: 0–49% (red), 50–79% (amber) and 80–100% (green).

7.6 Motivating and planning quality improvement

FFFAP has been designed with quality improvement embedded through the structure. Individuals with specific experience in quality improvement have been recruited to the FFFAP Board to provide advice, support and challenge.

The NHFD supports participants in QI by:

- Providing online training materials in data interpretation and QI tools
- Highlighting areas of improved performance through the online dashboard
- Linking hospitals into peer networks to share learning and experience
- Providing QI workshops and opportunities for collaboratives.

The NAIF audit supports participations in QI by:

- Providing a bedside vision tool which can be used by clinician to assess the vision of patients over 65 years old, as part of a multifactorial risk assessment. This assessment was is available to NHS sites as a hard copy resource
- Providing lying and standing blood pressure aide memoire lanyard cards and summary guidance. The lanyard card is available online for sites to print and over 20,000 lanyard cards have been distributed across the NHS in England and Wales
- Providing QI workshops and opportunities for collaboratives.

The FLS-DB audit supports participations in QI by:

- The web tool has real-time interactive run charts which allow performance and the impact of changes to be measured over time
- Working with the NOS who provide help with service development
- Providing QI workshops and opportunities for collaboratives.

FFFAP is also running a QI project for trainees in 2018/19 to engage trainees with the use of FFFAP data for improvement in care for patients and to teach trainees about QI tools and techniques.