



KPI calculations

This document outlines how each key performance indicator (KPI) is calculated.

You can view your trust performance online [here](#). Please note, the data is live however can take up to two months to reflect on the benchmarking tables and run charts.

Contents

KPI 2 – Identification (all fragility fractures)	1
KPI 3 – Identification (spinal fractures).....	1
KPI 4 – Time to FLS assessment	2
KPI 5 – Time to DXA.....	2
KPI 6 – Falls assessment.....	2
KPI 7 – Bone therapy recommended	2
KPI 8 – Strength and balance training.....	3
KPI 9 – Monitoring contact 12-16 weeks post fracture	3
KPI 10 – Commenced bone therapy within 16 weeks of fracture diagnosis	3
KPI 11 – Adherence to prescribed anti- osteoporosis medication at 12 months post fracture	4

KPI 2 – Identification (all fragility fractures)

The percentage of patient records submitted compared with the local estimated caseload.

Numerator: Total of all records entered

Denominator: Estimated fragility fracture caseload from annualised data from National Hip Fracture database (NHFD) in previous 12 months using 'rule of 5'

The rule of 5 is a calculation used to estimate the total number of fragility fractures that an FLS should expect to see, determined by multiplying by 5 the number of hip fractures derived from the National Hip Fracture Database (NHFD) returns from your local hospital in the previous 12 months.

Green	Amber	Red
= or >80%	50-79%	<50%

KPI 3 – Identification (spinal fractures)

The percentage of patients with a spine fracture as their index fracture site compared with local estimated caseload. There is no clear indicator for the expected number of spine fracture an FLS should see and have approximated it to 75% of the number of hip fractures

Numerator: Number of records where Q1.11 'Site of first fracture: bone / joint' = 'Spine'

Denominator: 0.75 times the number of hip fractures from NHFD returns from your local hospital in the previous 12 months.

Green	Amber	Red
= or > 20%	11–19%	<10%

KPI 4 – Time to FLS assessment

The percentage of patients who were assessed by the FLS within 90 days of their fracture.

Numerator: Number of patients where the difference between the two dates below was less than 91 days:

- The date on which the index fracture that led to FLS contact was diagnosed (Q1.09)
- Date of FLS assessment (Q1.07)

Denominator: Total of all records entered

Green	Amber	Red
= or >80%	50-79%	<50%

KPI 5 – Time to DXA

The percentage of patients who had a DXA ordered or recommended and were scanned within 90 days of fracture.

Numerator: Number of records where difference between the two dates below was less than 90 days

- The date on which the index fracture that led to FLS contact was diagnosed (Q1.09)
- Date of DXA (Q3.03)

Denominator: Total number of patients with DXA ordered or recommended (Q3.01)

Green	Amber	Red
= or >80%	50-79%	<50%

KPI 6 – Falls assessment

The percentage of patients who received a falls assessment or were referred or recommended for a falls assessment.

Numerator: Number of records where Q5.01 'Was a falls risk assessment performed' equals any of the following:

- Yes
- Referred for formal medical led falls clinic assessment
- Referred for formal therapy led falls clinic assessment
- Falls assessment recommended in non FLS primary care
- Currently under falls service

Denominator: Total of all records entered

Green	Amber	Red
= or >80%	50-79%	<50%

KPI 7 – Bone therapy recommended

The percentage of patients who were recommended anti-osteoporosis medication

Numerator: Number of records where the Question 'Bone therapy recommended following index fracture' (Q4.01) equals any of the following:

- Referred to GP to decide prescription
- Referred for further clinical opinion

- Any named bone-protection treatment in Q4.01

Denominator: All records submitted

Green	Red
50% and over	<50%

KPI 8 – Strength and balance training

The percentage of non-hip fracture patients over 75 who had started strength and balance training within 16 weeks of their fracture

Numerator: Patients who match the criteria for denominator (below) and where Q6.06 'Started a programme of strength and balance exercise' = 'Yes'

Denominator: Number of records where question 'Bone therapy recommended following index fracture' (Q4.01) equals any of the following:

- Referred to GP to decide prescription
- Referred for further clinical opinion
- Any named bone-protection treatment in Q4.01

AND Q6.01 'follow up' is NOT patient died

AND patient is 65 years old or over (Q1.02)

- Q1.11 'Site of first fracture: bone / joint' - Type of fracture' does NOT equal = "Hip"

Green	Amber	Red
= or >80%	50-79%	<50%

KPI 9 – Monitoring contact 12-16 weeks post fracture

The percentage of patients who were followed up within 16 weeks of their fracture

Numerator: Number of patients followed up post fracture = yes

Denominator: : Number of records where question 'Bone therapy recommended following index fracture' (Q4.01) equals any of the following:

- Referred to GP to decide prescription
- Referred for further clinical opinion
- Any named bone-protection treatment in Q4.01

AND Q6.01 'follow up' is NOT patient died

KPI 10 – Commenced bone therapy within 16 weeks of fracture diagnosis

The percentage of patients who had commenced (or were continuing) antiosteoporosis medication within 16 weeks of their fracture

Numerator: Patient records with:

- Bone protection therapy started = Any named bone-protection treatment in Q6.05
AND

where the difference between the two dates below is between 12 and 20 weeks of:

- The date on which the index fracture that led to FLS contact was diagnosed (Q1.09)
- Date of FLS 16 week assessment (Q6.02)

Denominator: Number of records where Q4.01 'Bone therapy recommended following index fracture' equals any of the following:

- Referred to GP to decide prescription
- Referred for further clinical opinion
- Any named bone-protection treatment in Q4.01

AND Q6.01 'follow up' is NOT patient died

Green	Amber	Red
= or >80%	50-79%	<50%

KPI 11 – Adherence to prescribed anti- osteoporosis medication at 12 months post fracture

The percentage of patients who had confirmed adherence to a prescribed antiosteoporosis medication at 12 months post fracture

Numerator:

Patient records with:

- Bone protection therapy started = Any named bone-protection treatment in Q7.05
AND

where the difference between the two dates below is between is 48 and 56 weeks of:

- The date on which the index fracture that led to FLS contact was diagnosed (Q1.09)
- Date of FLS 52-week assessment (Q7.02)

Denominator: Number of records where

Q4.01 'Bone therapy recommended following index fracture' equals any of the following:

- Referred to GP to decide prescription
- Referred for further clinical opinion
- Any named bone-protection treatment in Q4.01

AND Q7.01 'follow up' is NOT patient died

Green	Amber	Red
= or >80%	50-79%	<50%