



Inpatient Quality Indicator 19 (IQI 19) Hip Fracture Mortality Rate

July 2020

Hospital-Level Indicator

Type of Score: Rate

Prepared by:

Agency for Healthcare Research and Quality

U.S. Department of Health and Human Services

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DESCRIPTION

In-hospital deaths per 1,000 hospital discharges with hip fracture as a principal diagnosis for patients ages 65 years and older. Excludes periprosthetic fracture discharges, obstetric discharges, cases in hospice care at admission, and transfers to another hospital.

[NOTE: The software provides the rate per hospital discharge. However, common practice reports the measure as per 1,000 discharges. The user must multiply the rate obtained from the software by 1,000 to report in-hospital deaths per 1,000 hospital discharges.]

NUMERATOR

Number of deaths (DISP=20) among cases meeting the inclusion and exclusion rules for the denominator.

DENOMINATOR

Discharges, for patients ages 65 years and older, with a principal ICD-10-CM diagnosis code for hip fracture (*MTHIPFD* *).

DENOMINATOR EXCLUSIONS

Exclude cases:

- with any-listed ICD-10-CM diagnosis codes for periprosthetic fracture (***MTHIP2D*** *)
- transferring to another short-term hospital (DISP=2)
- cases in hospice care at admission (PointOfOriginUB04=F)
- MDC 14 (pregnancy, childbirth, and puerperium)
- with an ungroupable DRG (DRG=999)
- with missing discharge disposition (DISP=missing), gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing) or principal diagnosis (DX1=missing)

* See below for code list

Hip fracture diagnosis codes: (MTHIPFD)

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| M80051A | Age-Related osteoporosis with current pathological fracture, right femur, initial encounter for fracture | S72101C | Unspecified trochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| M80052A | Age-Related osteoporosis with current pathological fracture, left femur, initial encounter for fracture | S72102A | Unspecified trochanteric fracture of left femur, initial encounter for closed fracture |
| M80059A | Age-Related osteoporosis with current pathological fracture, unspecified femur, initial encounter for fracture | S72102B | Unspecified trochanteric fracture of left femur, initial encounter for open fracture type I or II |
| M80851A | Other osteoporosis with current pathological fracture, right femur, initial encounter for fracture | S72102C | Unspecified trochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| M80852A | Other osteoporosis with current pathological fracture, left femur, initial encounter for fracture | S72109A | Unspecified trochanteric fracture of unspecified femur, initial encounter for closed fracture |
| M80859A | Other osteoporosis with current pathological fracture, unspecified femur, initial encounter for fracture | S72109B | Unspecified trochanteric fracture of unspecified femur, initial encounter for open fracture type I or II |
| S72001A | Fracture of unspecified part of neck of right femur, initial encounter for closed fracture | S72109C | Unspecified trochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72001B | Fracture of unspecified part of neck of right femur, initial encounter for open fracture type I or II | S72111A | Displaced fracture of greater trochanter of right femur, initial encounter for closed fracture |
| S72001C | Fracture of unspecified part of neck of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S72111B | Displaced fracture of greater trochanter of right femur, initial encounter for open fracture type I or II |
| S72002A | Fracture of unspecified part of neck of left femur, initial encounter for closed fracture | S72111C | Displaced fracture of greater trochanter of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72002B | Fracture of unspecified part of neck of left femur, initial encounter for open fracture type I or II | S72112A | Displaced fracture of greater trochanter of left femur, initial encounter for closed fracture |
| S72002C | Fracture of unspecified part of neck of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S72112B | Displaced fracture of greater trochanter of left femur, initial encounter for open fracture type I or II |
| S72009A | Fracture of unspecified part of neck of unspecified femur, initial encounter for closed fracture | S72112C | Displaced fracture of greater trochanter of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |

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| S72009B | Fracture of unspecified part of neck of unspecified femur, initial encounter for open fracture type I or II | S72113A | Displaced fracture of greater trochanter of unspecified femur, initial encounter for closed fracture |
| S72009C | Fracture of unspecified part of neck of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S72113B | Displaced fracture of greater trochanter of unspecified femur, initial encounter for open fracture type I or II |
| S72011A | Unspecified intracapsular fracture of right femur, initial encounter for closed fracture | S72113C | Displaced fracture of greater trochanter of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72011B | Unspecified intracapsular fracture of right femur, initial encounter for open fracture type I or II | S72114A | Nondisplaced fracture of greater trochanter of right femur, initial encounter for closed fracture |
| S72011C | Unspecified intracapsular fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S72114B | Nondisplaced fracture of greater trochanter of right femur, initial encounter for open fracture type I or II |
| S72012A | Unspecified intracapsular fracture of left femur, initial encounter for closed fracture | S72114C | Nondisplaced fracture of greater trochanter of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72012B | Unspecified intracapsular fracture of left femur, initial encounter for open fracture type I or II | S72115A | Nondisplaced fracture of greater trochanter of left femur, initial encounter for closed fracture |
| S72012C | Unspecified intracapsular fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S72115B | Nondisplaced fracture of greater trochanter of left femur, initial encounter for open fracture type I or II |
| S72019A | Unspecified intracapsular fracture of unspecified femur, initial encounter for closed fracture | S72115C | Nondisplaced fracture of greater trochanter of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72019B | Unspecified intracapsular fracture of unspecified femur, initial encounter for open fracture type I or II | S72116A | Nondisplaced fracture of greater trochanter of unspecified femur, initial encounter for closed fracture |
| S72019C | Unspecified intracapsular fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S72116B | Nondisplaced fracture of greater trochanter of unspecified femur, initial encounter for open fracture type I or II |
| S72031A | Displaced midcervical fracture of right femur, initial encounter for closed fracture | S72116C | Nondisplaced fracture of greater trochanter of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72031B | Displaced midcervical fracture of right femur, initial encounter for open fracture type I or II | S72121A | Displaced fracture of lesser trochanter of right femur, initial encounter for closed fracture |

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| S72031C | Displaced midcervical fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S72121B | Displaced fracture of lesser trochanter of right femur, initial encounter for open fracture type I or II |
| S72032A | Displaced midcervical fracture of left femur, initial encounter for closed fracture | S72121C | Displaced fracture of lesser trochanter of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72032B | Displaced midcervical fracture of left femur, initial encounter for open fracture type I or II | S72122A | Displaced fracture of lesser trochanter of left femur, initial encounter for closed fracture |
| S72032C | Displaced midcervical fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S72122B | Displaced fracture of lesser trochanter of left femur, initial encounter for open fracture type I or II |
| S72033A | Displaced midcervical fracture of unspecified femur, initial encounter for closed fracture | S72122C | Displaced fracture of lesser trochanter of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72033B | Displaced midcervical fracture of unspecified femur, initial encounter for open fracture type I or II | S72123A | Displaced fracture of lesser trochanter of unspecified femur, initial encounter for closed fracture |
| S72033C | Displaced midcervical fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S72123B | Displaced fracture of lesser trochanter of unspecified femur, initial encounter for open fracture type I or II |
| S72034A | Nondisplaced midcervical fracture of right femur, initial encounter for closed fracture | S72123C | Displaced fracture of lesser trochanter of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72034B | Nondisplaced midcervical fracture of right femur, initial encounter for open fracture type I or II | S72124A | Nondisplaced fracture of lesser trochanter of right femur, initial encounter for closed fracture |
| S72034C | Nondisplaced midcervical fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S72124B | Nondisplaced fracture of lesser trochanter of right femur, initial encounter for open fracture type I or II |
| S72035A | Nondisplaced midcervical fracture of left femur, initial encounter for closed fracture | S72124C | Nondisplaced fracture of lesser trochanter of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72035B | Nondisplaced midcervical fracture of left femur, initial encounter for open fracture type I or II | S72125A | Nondisplaced fracture of lesser trochanter of left femur, initial encounter for closed fracture |
| S72035C | Nondisplaced midcervical fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S72125B | Nondisplaced fracture of lesser trochanter of left femur, initial encounter for open fracture type I or II |

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| S72036A | Nondisplaced midcervical fracture of unspecified femur, initial encounter for closed fracture | S72125C | Nondisplaced fracture of lesser trochanter of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72036B | Nondisplaced midcervical fracture of unspecified femur, initial encounter for open fracture type I or II | S72126A | Nondisplaced fracture of lesser trochanter of unspecified femur, initial encounter for closed fracture |
| S72036C | Nondisplaced midcervical fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S72126B | Nondisplaced fracture of lesser trochanter of unspecified femur, initial encounter for open fracture type I or II |
| S72041A | Displaced fracture of base of neck of right femur, initial encounter for closed fracture | S72126C | Nondisplaced fracture of lesser trochanter of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72041B | Displaced fracture of base of neck of right femur, initial encounter for open fracture type I or II | S72131A | Displaced apophyseal fracture of right femur, initial encounter for closed fracture |
| S72041C | Displaced fracture of base of neck of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S72131B | Displaced apophyseal fracture of right femur, initial encounter for open fracture type I or II |
| S72042A | Displaced fracture of base of neck of left femur, initial encounter for closed fracture | S72131C | Displaced apophyseal fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72042B | Displaced fracture of base of neck of left femur, initial encounter for open fracture type I or II | S72132A | Displaced apophyseal fracture of left femur, initial encounter for closed fracture |
| S72042C | Displaced fracture of base of neck of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S72132B | Displaced apophyseal fracture of left femur, initial encounter for open fracture type I or II |
| S72043A | Displaced fracture of base of neck of unspecified femur, initial encounter for closed fracture | S72132C | Displaced apophyseal fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72043B | Displaced fracture of base of neck of unspecified femur, initial encounter for open fracture type I or II | S72133A | Displaced apophyseal fracture of unspecified femur, initial encounter for closed fracture |
| S72043C | Displaced fracture of base of neck of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S72133B | Displaced apophyseal fracture of unspecified femur, initial encounter for open fracture type I or II |
| S72044A | Nondisplaced fracture of base of neck of right femur, initial encounter for closed fracture | S72133C | Displaced apophyseal fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72044B | Nondisplaced fracture of base of neck of right femur, initial encounter for open fracture type I or II | S72134A | Nondisplaced apophyseal fracture of right femur, initial encounter for closed fracture |

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| S72044C | Nondisplaced fracture of base of neck of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S72134B | Nondisplaced apophyseal fracture of right femur, initial encounter for open fracture type I or II |
| S72045A | Nondisplaced fracture of base of neck of left femur, initial encounter for closed fracture | S72134C | Nondisplaced apophyseal fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72045B | Nondisplaced fracture of base of neck of left femur, initial encounter for open fracture type I or II | S72135A | Nondisplaced apophyseal fracture of left femur, initial encounter for closed fracture |
| S72045C | Nondisplaced fracture of base of neck of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S72135B | Nondisplaced apophyseal fracture of left femur, initial encounter for open fracture type I or II |
| S72046A | Nondisplaced fracture of base of neck of unspecified femur, initial encounter for closed fracture | S72135C | Nondisplaced apophyseal fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72046B | Nondisplaced fracture of base of neck of unspecified femur, initial encounter for open fracture type I or II | S72136A | Nondisplaced apophyseal fracture of unspecified femur, initial encounter for closed fracture |
| S72046C | Nondisplaced fracture of base of neck of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S72136B | Nondisplaced apophyseal fracture of unspecified femur, initial encounter for open fracture type I or II |
| S72051A | Unspecified fracture of head of right femur, initial encounter for closed fracture | S72136C | Nondisplaced apophyseal fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72051B | Unspecified fracture of head of right femur, initial encounter for open fracture type I or II | S72141A | Displaced intertrochanteric fracture of right femur, initial encounter for closed fracture |
| S72051C | Unspecified fracture of head of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S72141B | Displaced intertrochanteric fracture of right femur, initial encounter for open fracture type I or II |
| S72052A | Unspecified fracture of head of left femur, initial encounter for closed fracture | S72141C | Displaced intertrochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72052B | Unspecified fracture of head of left femur, initial encounter for open fracture type I or II | S72142A | Displaced intertrochanteric fracture of left femur, initial encounter for closed fracture |
| S72052C | Unspecified fracture of head of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S72142B | Displaced intertrochanteric fracture of left femur, initial encounter for open fracture type I or II |
| S72059A | Unspecified fracture of head of unspecified femur, initial encounter for closed fracture | S72142C | Displaced intertrochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72059B | Unspecified fracture of head of unspecified femur, initial encounter for open fracture type I or II | S72143A | Displaced intertrochanteric fracture of unspecified femur, initial encounter for closed fracture |

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| S72059C | Unspecified fracture of head of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S72143B | Displaced intertrochanteric fracture of unspecified femur, initial encounter for open fracture type I or II |
| S72061A | Displaced articular fracture of head of right femur, initial encounter for closed fracture | S72143C | Displaced intertrochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72061B | Displaced articular fracture of head of right femur, initial encounter for open fracture type I or II | S72144A | Nondisplaced intertrochanteric fracture of right femur, initial encounter for closed fracture |
| S72061C | Displaced articular fracture of head of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S72144B | Nondisplaced intertrochanteric fracture of right femur, initial encounter for open fracture type I or II |
| S72062A | Displaced articular fracture of head of left femur, initial encounter for closed fracture | S72144C | Nondisplaced intertrochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72062B | Displaced articular fracture of head of left femur, initial encounter for open fracture type I or II | S72145A | Nondisplaced intertrochanteric fracture of left femur, initial encounter for closed fracture |
| S72062C | Displaced articular fracture of head of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S72145B | Nondisplaced intertrochanteric fracture of left femur, initial encounter for open fracture type I or II |
| S72063A | Displaced articular fracture of head of unspecified femur, initial encounter for closed fracture | S72145C | Nondisplaced intertrochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72063B | Displaced articular fracture of head of unspecified femur, initial encounter for open fracture type I or II | S72146A | Nondisplaced intertrochanteric fracture of unspecified femur, initial encounter for closed fracture |
| S72063C | Displaced articular fracture of head of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S72146B | Nondisplaced intertrochanteric fracture of unspecified femur, initial encounter for open fracture type I or II |
| S72064A | Nondisplaced articular fracture of head of right femur, initial encounter for closed fracture | S72146C | Nondisplaced intertrochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72064B | Nondisplaced articular fracture of head of right femur, initial encounter for open fracture type I or II | S7221XA | Displaced subtrochanteric fracture of right femur, initial encounter for closed fracture |
| S72064C | Nondisplaced articular fracture of head of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S7221XB | Displaced subtrochanteric fracture of right femur, initial encounter for open fracture type I or II |
| S72065A | Nondisplaced articular fracture of head of left femur, initial encounter for closed fracture | S7221XC | Displaced subtrochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |

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| S72065B | Nondisplaced articular fracture of head of left femur, initial encounter for open fracture type I or II | S7222XA | Displaced subtrochanteric fracture of left femur, initial encounter for closed fracture |
| S72065C | Nondisplaced articular fracture of head of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S7222XB | Displaced subtrochanteric fracture of left femur, initial encounter for open fracture type I or II |
| S72066A | Nondisplaced articular fracture of head of unspecified femur, initial encounter for closed fracture | S7222XC | Displaced subtrochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72066B | Nondisplaced articular fracture of head of unspecified femur, initial encounter for open fracture type I or II | S7223XA | Displaced subtrochanteric fracture of unspecified femur, initial encounter for closed fracture |
| S72066C | Nondisplaced articular fracture of head of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S7223XB | Displaced subtrochanteric fracture of unspecified femur, initial encounter for open fracture type I or II |
| S72091A | Other fracture of head and neck of right femur, initial encounter for closed fracture | S7223XC | Displaced subtrochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72091B | Other fracture of head and neck of right femur, initial encounter for open fracture type I or II | S7224XA | Nondisplaced subtrochanteric fracture of right femur, initial encounter for closed fracture |
| S72091C | Other fracture of head and neck of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S7224XB | Nondisplaced subtrochanteric fracture of right femur, initial encounter for open fracture type I or II |
| S72092A | Other fracture of head and neck of left femur, initial encounter for closed fracture | S7224XC | Nondisplaced subtrochanteric fracture of right femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72092B | Other fracture of head and neck of left femur, initial encounter for open fracture type I or II | S7225XA | Nondisplaced subtrochanteric fracture of left femur, initial encounter for closed fracture |
| S72092C | Other fracture of head and neck of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S7225XB | Nondisplaced subtrochanteric fracture of left femur, initial encounter for open fracture type I or II |
| S72099A | Other fracture of head and neck of unspecified femur, initial encounter for closed fracture | S7225XC | Nondisplaced subtrochanteric fracture of left femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |
| S72099B | Other fracture of head and neck of unspecified femur, initial encounter for open fracture type I or II | S7226XA | Nondisplaced subtrochanteric fracture of unspecified femur, initial encounter for closed fracture |
| S72099C | Other fracture of head and neck of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC | S7226XB | Nondisplaced subtrochanteric fracture of unspecified femur, initial encounter for open fracture type I or II |
| S72101A | Unspecified trochanteric fracture of right femur, initial encounter for closed fracture | S7226XC | Nondisplaced subtrochanteric fracture of unspecified femur, initial encounter for open fracture type IIIA, IIIB, or IIIC |

S72101B Unspecified trochanteric fracture of right femur, initial encounter for open fracture type I or II

Periprosthetic fracture diagnosis code: (MTHIP2D)

M9701XA Periprosthetic fracture around internal
prosthetic right hip joint, initial encounter

M9702XA Periprosthetic fracture around internal
prosthetic left hip joint, initial encounter

T84040A Periprosthetic fracture around internal
prosthetic right hip joint, initial
encounter

T84041A Periprosthetic fracture around internal
prosthetic left hip joint, initial encounter