

# Hip fracture care clinical care standard indicators: 6a-Proportion of patients with a hip fracture receiving bone protection medicine prior to separation from the hospital at which they underwent surgery

## Identifying and definitional attributes

<b>Metadata item type:</b>	Indicator
<b>Indicator type:</b>	Indicator
<b>Short name:</b>	Indicator 6a-Proportion of patients with a hip fracture receiving bone protection medicine prior to separation from the hospital at which they underwent surgery
<b>METEOR identifier:</b>	696446
<b>Registration status:</b>	<ul style="list-style-type: none"><li>• <a href="#">Health</a>, Standard 12/09/2016</li></ul>
<b>Description:</b>	Proportion of patients with a <a href="#">hip fracture</a> receiving a prescription for, or were administered bone protection medicine prior to separation from the hospital at which they underwent hip fracture surgery.
<b>Rationale:</b>	Hip fractures are most often secondary to a fall and are indicative of underlying osteoporosis. Bone protection medicine has been shown to reduce the risk of another fracture (Metcalf 2008; ACSQHC 2009).
<b>Indicator set:</b>	<a href="#">Clinical care standard indicators: hip fracture 2018</a> <a href="#">Australian Commission on Safety and Quality in Health Care</a> , Standard 15/05/2018
<b>Outcome area:</b>	<a href="#">Minimising risk of another fracture</a> <a href="#">Health</a> , Standard 12/09/2016

## Collection and usage attributes

<b>Computation description:</b>	<p>The numerator includes patients with a hip fracture who receive bone protection medicine prior to separation from the hospital at which they underwent hip fracture surgery. Bone protection medicine can include (ANZHFR Steering Group 2013).</p> <ul style="list-style-type: none"><li>• Bisphosphonates: alendronate (oral), risedronate (oral), zoledronate (intravenous) (with or without vitamin D and/or calcium where indicated).</li><li>• Denosumab (with or without vitamin D and/or calcium where indicated).</li><li>• Strontium ranelate (with or without vitamin D and/or calcium where indicated).</li><li>• Teriparatide (with or without vitamin D and/or calcium where indicated).</li></ul> <p>Both the numerator and the denominator exclude episodes where <a href="#">Episode of admitted patient care—separation mode, code N=8</a> Died.</p> <p>Presented as a percentage.</p>
<b>Computation:</b>	$(\text{Numerator} \div \text{denominator}) \times 100$
<b>Numerator:</b>	Number of patients with a hip fracture who receive a prescription for, or were administered bone protection medicine prior to separation from the hospital at which they underwent surgery for hip fracture.
<b>Denominator:</b>	Number of patients with a hip fracture separated from the hospital at which they underwent surgery for hip fracture.

**Comments:** This indicator measures the proportion of patients receiving bone protection medicine upon separation from hospital, which has evidence of fracture risk reduction in patients with minimal trauma fracture. Many patients will also require vitamin D supplementation to correct vitamin D deficiency and to prevent hypocalcaemia due to the bone protection medicine. Some patients will also require calcium supplements if the recommended calcium intake cannot be achieved through diet (MJA 2013).

The expected result for this indicator is not 100%. Some patients may prefer not to take a bone protection medicine or may have contraindications. Vitamin D deficiency and hypocalcaemia must be corrected before commencing some bone protection medicines.

For hospitals collecting the Australian and New Zealand Hip Fracture Registry (ANZHFR) data set (ANZHFR Steering Group 2013), the variable *Bone protection medication at discharge from acute hospital* can be used for the numerator of this indicator.

## Representational attributes

**Representation class:** Percentage  
**Data type:** Real  
**Unit of measure:** Service event  
**Format:** N[NN]

## Source and reference attributes

**Submitting organisation:** Australian Commission on Safety and Quality in Health Care

**Reference documents:** ACSQHC (Australian Commission on Safety and Quality in Health Care) 2009. Preventing falls and harm from falls in older people: best practice guidelines for Australian hospitals. Sydney: ACSQHC. Viewed 5 May 2016, [www.safetyandquality.gov.au/wp-content/uploads/2012/01/Guidelines-HOSP1.pdf](http://www.safetyandquality.gov.au/wp-content/uploads/2012/01/Guidelines-HOSP1.pdf).

ANZHFR (Australian and New Zealand Hip Fracture Registry) Steering Group 2013. Data dictionary. Sydney: ANZHFR. Viewed 5 May 2016, <http://www.anzhr.org/images/resources/Data%20Dictionary%20v8%20Dec%202013.pdf>.

Metcalfe D 2008. The pathophysiology of osteoporotic hip fracture. *McGill Journal of Medicine*: MJM 11(1):51-7.

MJA (Medical Journal of Australia) 2013. Building healthy bones throughout life. *MJA Open*. Volume 2: Supplement 1, 2013.