

Delirium clinical care standard indicators: 2d-Rate of delirium among acute admitted patients with onset during the hospital stay

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Delirium clinical care standard indicators: 2d-Rate of delirium among acute admitted patients with onset during the hospital stay

Identifying and definitional attributes

Metadata item type:	Indicator
Indicator type:	Indicator
Short name:	Indicator 2d-Rate of delirium among acute admitted patients with onset during the hospital stay
METEOR identifier:	628080
Registration status:	Health , Standard 12/09/2016
Description:	Rate of delirium among acute admitted patients with onset during the hospital stay.
Rationale:	<p>Identifying patients with delirium is the first step in taking action to providing high quality care. Delirium has been reported to be undiagnosed in up to two-thirds of patients (Siddiqi et al. 2006). Underdetection may occur for a number of reasons, such as heterogeneity and the transient nature of delirium symptoms (Siddiqi et al. 2006), or lack of skills to use a validated tool and/or availability of a validated tool (Young & Inouye 2007). It may also be the result of lack of documentation of delirium (Collins et al. 2010) and/or inaccurate clinical coding.</p> <p>Note that this is not an outcome indicator.^[1] The purpose of this indicator is to identify how well a hospital diagnoses patients with delirium. By comparing with the national rate, the hospital can determine whether delirium is potentially under/misdiagnosed and/or underreported. This indicator includes patients with delirium at admission and those who acquire delirium during the hospital stay.</p> <hr/> <p>^[1] For the purposes of the Indicator specification: delirium clinical care standard (ACSQHC 2015), outcome indicators are ones that measure the outcomes of care, such as recovery from a condition, restoration of function or survival of patients.</p>
Indicator set:	Clinical care standard indicators: delirium Health , Standard 12/09/2016
Outcome area:	Assessing for delirium Health , Standard 12/09/2016

Collection and usage attributes

Population group age from:	65 years
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Computation description: Computation of the numerator

To work out the numerator, obtain the number of overnight [1] acute [2] admitted episodes at the hospital for which this indicator is being calculated with one of the following diagnoses codes [3] at discharge AND noted as being onset during the episode of admitted care [4]:

- F05.0 Delirium not superimposed on dementia, so described
- F05.1 Delirium superimposed on dementia
- F05.8 Other delirium (includes delirium of mixed origin)
- F05.9 Delirium, unspecified.

Stratify these by sex and five-year age groups (beginning at 65 years).

Also obtain the number of overnight [1] acute [2] admitted episodes at the hospital for which this indicator is being calculated. Stratify these by sex and five-year age groups (beginning at 65 years).

Calculate age and sex specific hospital rates for delirium by dividing the number of episodes with a delirium diagnosis by the total number of episodes in each five-year age and sex group.

Apply the age and sex specific hospital rates for delirium by five-year age and sex group to the national reference population, which is made up of overnight [1] acute [2] admitted episodes in acute hospitals [5] consistently reporting the condition onset flag. [4]

Then sum each sex and five-year age group combination to derive the total sum of episodes of delirium that would have occurred if the hospital age and sex rates were experienced amongst hospitals in the national population.

Computation of the denominator

To work out the denominator, sum the overnight [1] acute [2] admitted episodes occurring in acute hospitals. [4]

Presented as a percentage.

[1] Where [Episode of admitted patient care—separation date, DDMMYYYY](#) occurs on the next calendar day or any other day subsequent to the [Episode of admitted patient care—admission date, DDMMYYYY](#).

[2] Where [Hospital service—care type, code N\[N\]](#) = (Acute care).

[3] [Episode of care—principal diagnosis, code \(ICD-10-AM 9th edn\) ANN{.N\[N\]}](#) OR [Episode of care—additional diagnosis, code \(ICD-10-AM 9th edn\) ANN{.N\[N\]}](#).

[4] Where [Episode of admitted patient care—condition onset flag, code N - 1](#) (Condition with onset during the episode of admitted patient care).

[5] Includes hospital peer groups A1 to C2, D1 and D3. See AIHW (2014).
(Numerator ÷ denominator) x 100

Computation:**Numerator:**

Sum of episodes that would have occurred if the hospital age and sex specific rates of delirium that was onset during the hospital stay were experienced amongst hospitals in the national reference population.

Denominator:

Sum of episodes from the national reference population.

Comments: Delirium is thought to be under/misdiagnosed and/or underreported amongst hospitals. In the early stages of the implementation of the Delirium clinical care standard (ACSQHC 2015), this indicator can be used to investigate potential under/misdiagnosis and/or underreporting of delirium. Comparison against the national rate can serve as a screen for the hospital as to the level of diagnosis and reporting of delirium. For example, a value lower than the national rate would be used as a marker for investigating potentially ineffective processes for diagnosing and/or reporting delirium. Similarly, a value higher than the national rate could flag effective mechanisms for diagnosing and/or reporting delirium.

This indicator has been sourced from the *Key principles for care of confused hospitalised older persons* (ACI 2014).

Representational attributes

Representation class: Percentage

Data type: Real

Unit of measure: Episode

Format: N[NN]

Source and reference attributes

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

Reference documents: ACI (Agency for Clinical Innovation) 2014. *Key principles for care of confused hospitalised older persons*. Sydney: ACI.

ACSQHC (Australian Commission on Safety and Quality in Health Care) 2015. *Delirium clinical care standard*. Sydney: ACSQHC.

AIHW (Australian Institute of Health and Welfare) 2014. *Australian hospital statistics 2012-13*. Canberra: AIHW.

Collins N, Blanchard MR, Tookman A & Sampson EL 2010. Detection of delirium in the acute hospital. *Age and Ageing* 39(1):131-5.

Siddiqi N, House AO & Holmes JD 2006. Occurrence and outcome of delirium in medical in-patients: a systematic literature review. *Age and Ageing* 35(4):350-64.

Young J & Inouye SK 2007. Delirium in older people. *The BMJ* 334(7598):842-6.