General

Title

Adult trauma care: does the hospital have regular, structured and multidisciplinary peer review of the quality of care provided to injured patients age 18 years and older that includes review of adverse events and deaths AND reporting of resultant quality improvement actions?

Source(s)

Guide to quality indicators in adult trauma care. Version 3. Calgary (AB): Quality of Trauma in Adult Care, University of Calgary; 2013 Jan 29. 129 p. [111 references]

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Structure

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess whether the hospital has regular, structured and multidisciplinary peer review of the quality of care provided to injured patients age 18 years and older that includes review of adverse events and deaths AND reporting of resultant quality improvement actions.

Rationale

Each year, injuries affect 700 million people worldwide and result in more than five million deaths. In many countries, injuries are the leading cause of death among those under the age of 45 years. The human and societal burden is even greater with many survivors never returning to school, work or their "regular" lives.

Health care services provide patients with treatment for what is a major cause of morbidity and death. Yet medical errors and substandard care threaten trauma care. Half of all patients with major traumatic injuries do not receive recommended care, medical errors are common in critically ill trauma patients and preventable trauma deaths in hospital are widely reported. The World Health Organization (WHO), professional trauma organizations (e.g., American College of Surgeons [ACS], Trauma Association of Canada and Royal Australasian College of Surgeons) and accreditation bodies have promoted efforts to improve the quality of care delivered to injured patients. However, before the quality of injury care
can be improved, it needs to be measured using reliable and valid measures of health care quality.

These indicators can be used to assess patient safety, and to evaluate and improve quality of care by incorporating these measures into local, regional or national quality improvement efforts. Implementing a consistent approach to measurement (same indicators, same definitions, same data elements, same reporting format) would provide institutions with reliable performance data that is necessary for surveillance (e.g., tertiary survey completion), to track local problems (e.g., adverse events – specifically missed injuries), evaluate the effects of interventions or program changes (e.g., tertiary survey protocol) and provide comparisons across centers (e.g., benchmarking adverse events using programs such as the ACS’s Trauma Quality Improvement Program). Well-designed, carefully evaluated and appropriately implemented quality indicators (QIs) may be essential tools for guiding efforts to improve health and healthcare.

This indicator is intended to identify trauma centers with regular, structured and multidisciplinary peer review and reporting of the quality of care provided to patients with injuries.

Evidence for Rationale

Guide to quality indicators in adult trauma care. Version 3. Calgary (AB): Quality of Trauma in Adult Care, University of Calgary; 2013 Jan 29. 129 p. [111 references]

Primary Health Components

Trauma care; injury; multidisciplinary peer review; adverse events; death; quality improvement actions; reporting

Denominator Description

This measure applies to hospitals (one hospital at a time).

Numerator Description

Hospitals with regular, structured and multidisciplinary peer review of the quality of care provided to injured patients age 18 years and older that includes review of adverse events and deaths AND reporting of resultant quality improvement actions (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Additional Information Supporting Need for the Measure

One study demonstrated good agreement between peer review for preventable deaths and autopsy review (West, 1982). One study demonstrated that implementation of a trauma quality improvement program that included this quality indicator was associated with reduced hospital mortality (Chadbunchachai et al., 2001). Eight studies demonstrated good intra-rater and inter-rater reliability for peer review of medical errors and preventable death (Demetriades et al., 2001; Draaisma, de Haan, & Goris, 1989; Esposito et al., 1995; Hill et al., 1992; Karmy-Jones et al., 1992; Kelly, Nicholl, & Turner, 2002; McDermott, Cordner, & Tremayne, 1997; Pories et al., 1989). One study demonstrated poor agreement between peer-review and Trauma Score – Injury Severity Score (TRISS) (mortality prediction model) (Fallon et al., 1997).
Evidence for Additional Information Supporting Need for the Measure


Extent of Measure Testing

Using a modification of the RAND/University of California, Los Angeles (UCLA) Appropriateness Methodology, a panel of 19 injury and quality of care experts serially rated and revised quality indicators identified from a systematic review of the literature and international audit of trauma center quality improvement practices. The quality indicators developed by the panel were sent to 133 verified trauma centers in the United States, Canada, Australia, and New Zealand for evaluation.

A total of 84 quality indicators were rated and revised by the expert panel over 4 rounds of review producing 31 quality indicators of structure (n=5), process (n=21), and outcome (n=5), designed to assess the safety (n=8), effectiveness (n=17), efficiency (n=6), timeliness (n=16), equity (n=2), and patient-centeredness (n=1) of injury care spanning prehospital (n=8), hospital (n=19), and posthospital (n=2) care and secondary injury prevention (n=1). A total of 101 trauma centers (76% response rate) rated the indicators (1=strong disagreement, 9=strong agreement) as targeting important health improvements (median score 9, interquartile range [IQR] 8 to 9), easy to interpret (median score 8, IQR 8 to 9), easy to implement (median score 8, IQR 7 to 8), and globally good indicators (median score 8, IQR 8 to 9).
Thirty-one evidence-informed quality indicators of adult injury care were developed, shown to have content validity, and can be used as performance measures to guide injury care quality improvement practices.

Trauma centers rated the indicator "does the hospital have regular, structured and multidisciplinary peer review of the quality of care provided to injured patients age 18 years and older that includes review of adverse events and deaths AND reporting of resultant quality improvement actions?" as targeting important health improvements (median score 9, IQR 8 to 9), easy to interpret (median score 8.5, IQR 7 to 9), easy to implement (median score 8, IQR 7 to 9), and globally a good indicator (median score 9, IQR 8 to 9).

Evidence for Extent of Measure Testing


State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Hospital Inpatient

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

Statement of Acceptable Minimum Sample Size

Does not apply to this measure

Target Population Age

Does not apply to this measure
Target Population Gender

Does not apply to this measure

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Not within an IOM Care Need

IOM Domain

Not within an IOM Domain

Data Collection for the Measure

Case Finding Period

Unspecified

Denominator Sampling Frame

Health care or public health organization

Denominator (Index) Event or Characteristic

Does not apply to this measure

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

This measure applies to hospitals (one hospital at a time).
Exclusions
Unspecified

Exclusions/Exceptions
not defined yet

Numerator Inclusions/Exclusions

Inclusions
Hospitals with regular, structured and multidisciplinary peer review of the quality of care provided to injured patients age 18 years and older that includes review of adverse events and deaths AND reporting of resultant quality improvement actions

Note:
- Regular indicates scheduled recurrent meetings more than once a year (e.g., monthly).
- Structured indicates an organized and systematic process that is standardized (i.e., same process each meeting).
- Multidisciplinary indicates participation of experts from the multiple patient care domains pertinent to injury management.
- Reporting indicates that results of the multidisciplinary peer review process are summarized and resulting quality improvement actions documented and periodically reported (e.g., annual peer review report outlining improvement opportunities identified and actions taken).

Exclusions
Unspecified

Numerator Search Strategy

Fixed time period or point in time

Data Source

Health professional survey

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Dichotomous

Interpretation of Score
Desired value is presence of a characteristic

Allowance for Patient or Population Factors
not defined yet

Standard of Comparison
not defined yet

Identifying Information

Original Title
Protocol for peer review & reporting of quality of injury care.

Measure Collection Name
Quality Indicators in Adult Trauma Care

Measure Set Name
Hospital Indicators

Submitter
Quality of Trauma in Adult Care (QTAC) Team, University of Calgary - Academic Institution

Developer
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Funding Source(s)
The project was supported by a Partnerships in Health System Improvement Grant (PHE-91429) from the Canadian Institutes of Health Research and Alberta Innovates Health Solutions. Funding sources had no role in the design, conduct, or reporting of this study.

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Financial Disclosures/Other Potential Conflicts of Interest

The project was supported by a Partnerships in Health System Improvement Grant (PHE-91429) from the Canadian Institutes of Health Research and Alberta Innovates Health Solutions. Dr Stelfox was supported by a New Investigator Award from the Canadian Institutes of Health Research and a Population Health Investigator Award from Alberta Innovates Health Solutions. Funding sources had no role in the design, conduct, or reporting of this study. The authors declare no conflicts of interest.

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2013 Jan

Measure Maintenance

Unspecified

Date of Next Anticipated Revision

Unspecified
Measure Status
This is the current release of the measure.

Measure Availability
Source available from the Quality of Trauma in Adult Care (QTAC) Web site.
For more information, contact QTAC at the University of Calgary, Teaching Research & Wellness (TRW) Building, 3rd Floor, 3280 Hospital Drive NW, Calgary, AB, Canada, T2N 4Z6; Phone: 403-944-2334; Fax: 403-283-9994; E-mail: qtac@qualitytraumacare.com; Web site: www.qualitytraumacare.com.

NQMC Status
This NQMC summary was completed by ECRI Institute on May 11, 2015. The information was verified by the measure developer on July 13, 2015.

Copyright Statement
This NQMC summary is based on the original measure, which is subject to the measure developer's copyright restrictions.
The individual measures from the "Guide to Quality Indicators in Adult Trauma Care," are available from the Quality of Trauma in Adult Care (QTAC) Web site.
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Production
Source(s)
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