



## Measure Information

This document contains the information submitted by measure developers/stewards, but is organized according to NQF's measure evaluation criteria and process. The item numbers refer to those in the submission form but may be in a slightly different order here. In general, the item numbers also reference the related criteria (e.g., item 1b.1 relates to sub criterion 1b).

### Brief Measure Information

**NQF #: 0755**

**Corresponding Measures:**

**De.2. Measure Title:** Appropriate Cervical Spine Radiography and CT Imaging in Trauma

**Co.1.1. Measure Steward:** American College of Emergency Physicians

**De.3. Brief Description of Measure:** Percent of adult patients undergoing cervical spine radiography or CT imaging for trauma who have a documented evidence-based indication prior to imaging (Canadian C-Spine Rule or the NEXUS Low-Risk Criteria).

**1b.1. Developer Rationale:** This measure aims to improve quality by improving appropriateness of cervical spine imaging for emergency department patients with trauma by increasing adherence to validated clinical decision rules. Studies have shown that a decrease in cervical spine imaging of up to can be safely achieved through the implementation of clinical decision rules for cervical spine trauma (1). Through reductions in unnecessary imaging, several benefits are anticipated including decreasing costs to the health care system, and decreasing radiation exposure (2).

(1) Stiell IG, Clement CM, Grimshaw J, Brison RJ, Rowe BH, Schull MJ, Lee JS, Brehaut J, McKnight RD, Eisenhauer MA, Dreyer J, Letovsky E, Rutledge T, MacPhail I, Ross S, Shah A, Perry JJ, Holroyd BR, Ip U, Lesiuk H, Wells GA. Implementation of the Canadian C-Spine Rule: prospective 12 centre cluster randomised trial. *BMJ*. 2009;339: b4146

(2) Brenner DJ, Hall EJ. Computed tomography—an increasing source of radiation exposure. *N Engl J Med*. 2007;357:2277-2284.

**S.4. Numerator Statement:** Number of denominator patients who have a documented evidence-based indication prior to imaging.

**S.6. Denominator Statement:** Number of adult patients undergoing cervical spine radiography or CT for trauma (as initial imaging of C-spine)

**S.8. Denominator Exclusions:** Patients who have not experienced trauma

<16 years of age or >65 years of age

Patients with a reduced ability to communicate (verbal or cognitive dysfunction)

Underwent prior cervical spine radiograph (3 view or more) that is interpreted as inadequate to fully assess fracture

Underwent prior imaging concerning or diagnostic for injury of the cervical spine requiring further imaging

**De.1. Measure Type:** Efficiency

**S.17. Data Source:** Electronic administrative data/claims, Electronic Health Records, Paper medical record/flow-sheet

**S.20. Level of Analysis:** Facility/Agency, Other, Population : Regional and State, Population : Regional/network

**IF Endorsement Maintenance – Original Endorsement Date:** Apr 25, 2012 **Most Recent Endorsement Date:** Dec 19, 2011

**IF this measure is included in a composite, NQF Composite#/title:**

**IF this measure is paired/grouped, NQF#/title:**

**De.4. IF PAIRED/GROUPED, what is the reason this measure must be reported with other measures to appropriately interpret results?**

### 1. Evidence, Performance Gap, Priority – Importance to Measure and Report

Extent to which the specific measure focus is evidence-based, important to making significant gains in healthcare quality, and

improving health outcomes for a specific high-priority (high-impact) aspect of healthcare where there is variation in or overall less-than-optimal performance. **Measures must be judged to meet all sub criteria to pass this criterion and be evaluated against the remaining criteria.**

**1a. Evidence to Support the Measure Focus – See attached Evidence Submission Form**

[0755\\_Evidence\\_MSF5.0\\_Data-635804989095859693.doc](#)

**1a.1 For Maintenance of Endorsement: Is there new evidence about the measure since the last update/submission?**

Do not remove any existing information. If there have been any changes to evidence, the Committee will consider the new evidence. Please use the most current version of the evidence attachment (v7.1). Please use red font to indicate updated evidence.

**1b. Performance Gap**

Demonstration of quality problems and opportunity for improvement, i.e., data demonstrating:

- considerable variation, or overall less-than-optimal performance, in the quality of care across providers; and/or
- Disparities in care across population groups.

**1b.1. Briefly explain the rationale for this measure** (e.g., how the measure will improve the quality of care, the benefits or improvements in quality envisioned by use of this measure)

*If a COMPOSITE (e.g., combination of component measure scores, all-or-none, any-or-none), SKIP this question and answer the composite questions.*

This measure aims to improve quality by improving appropriateness of cervical spine imaging for emergency department patients with trauma by increasing adherence to validated clinical decision rules. Studies have shown that a decrease in cervical spine imaging of up to can be safely achieved through the implementation of clinical decision rules for cervical spine trauma (1). Through reductions in unnecessary imaging, several benefits are anticipated including decreasing costs to the health care system, and decreasing radiation exposure (2).

(1) Stiell IG, Clement CM, Grimshaw J, Brison RJ, Rowe BH, Schull MJ, Lee JS, Brehaut J, McKnight RD, Eisenhauer MA, Dreyer J, Letovsky E, Rutledge T, MacPhail I, Ross S, Shah A, Perry JJ, Holroyd BR, Ip U, Lesiuk H, Wells GA. Implementation of the Canadian C-Spine Rule: prospective 12 centre cluster randomised trial. *BMJ*. 2009;339: b4146

(2) Brenner DJ, Hall EJ. Computed tomography—an increasing source of radiation exposure. *N Engl J Med*. 2007;357:2277-2284.

**1b.2. Provide performance scores on the measure as specified (current and over time) at the specified level of analysis.** *(This is required for maintenance of endorsement. Include mean, std dev, min, max, interquartile range, scores by decile. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities include.) This information also will be used to address the sub-criterion on improvement (4b1) under Usability and Use.*

Studies have shown that the overall yield of cervical spine imaging in trauma is very low, with over 98% of cervical spine radiographs being negative for fracture, and that there is significant variability in imaging rates among providers (1, 2).

**1b.3. If no or limited performance data on the measure as specified is reported in 1b2, then provide a summary of data from the literature that indicates opportunity for improvement or overall less than optimal performance on the specific focus of measurement.**

(1) Stiell IG, Wells GA, Vandemheem K, et al. Variation in emergency department use of cervical spine radiography for alert, stable trauma patients. *Can Med Assoc J*. 1997; 156: 1537-1544.

(2) Stiell IG, Clement CM, Grimshaw J. Implementation of the Canadian C-Spine Rule: prospective 12 centre cluster randomised trial. *BMJ* 2009;339: b4146.

**1b.4. Provide disparities data from the measure as specified (current and over time) by population group, e.g., by race/ethnicity, gender, age, insurance status, socioeconomic status, and/or disability.** *(This is required for maintenance of endorsement. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included.) For measures that show high levels of performance, i.e., “topped out”, disparities data may demonstrate an opportunity for improvement/gap in care for certain sub-populations. This information also will be used to address the sub-criterion on improvement (4b1) under Usability and Use.*

We know of no data demonstrating significant disparities in cervical spine imaging among population group.

**1b.5.** If no or limited data on disparities from the measure as specified is reported in 1b.4, then provide a summary of data from the literature that addresses disparities in care on the specific focus of measurement. Include citations. Not necessary if performance data provided in 1b.4

Not applicable.

## 2. Reliability and Validity—Scientific Acceptability of Measure Properties

Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. **Measures must be judged to meet the sub criteria for both reliability and validity to pass this criterion and be evaluated against the remaining criteria.**

**2a.1. Specifications** The measure is well defined and precisely specified so it can be implemented consistently within and across organizations and allows for comparability. eMeasures should be specified in the Health Quality Measures Format (HQMF) and the Quality Data Model (QDM).

**De.5. Subject/Topic Area** (check all the areas that apply):

**De.6. Non-Condition Specific**(check all the areas that apply):

**De.7. Target Population Category** (Check all the populations for which the measure is specified and tested if any):

**S.1. Measure-specific Web Page** (Provide a URL link to a web page specific for this measure that contains current detailed specifications including code lists, risk model details, and supplemental materials. Do not enter a URL linking to a home page or to general information.)

<http://www.brighamandwomens.org/emergencymedicine/>

**S.2a. If this is an eMeasure**, HQMF specifications must be attached. Attach the zipped output from the eMeasure authoring tool (MAT) - if the MAT was not used, contact staff. (Use the specification fields in this online form for the plain-language description of the specifications)

**Attachment:**

**S.2b. Data Dictionary, Code Table, or Value Sets** (and risk model codes and coefficients when applicable) must be attached. (Excel or csv file in the suggested format preferred - if not, contact staff)

**Attachment:**

**S.2c.** Is this an instrument-based measure (i.e., data collected via instruments, surveys, tools, questionnaires, scales, etc.)? Attach copy of instrument if available.

**Attachment:**

**S.2d.** Is this an instrument-based measure (i.e., data collected via instruments, surveys, tools, questionnaires, scales, etc.)? Attach copy of instrument if available.

**S.3.1. For maintenance of endorsement:** Are there changes to the specifications since the last updates/submission. If yes, update the specifications for S1-2 and S4-22 and explain reasons for the changes in S3.2.

**S.3.2. For maintenance of endorsement**, please briefly describe any important changes to the measure specifications since last measure update and explain the reasons.

**S.4. Numerator Statement** (Brief, narrative description of the measure focus or what is being measured about the target population,

*i.e., cases from the target population with the target process, condition, event, or outcome) DO NOT include the rationale for the measure.*

*IF an OUTCOME MEASURE, state the outcome being measured. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).*

Number of denominator patients who have a documented evidence-based indication prior to imaging.

**S.5. Numerator Details** *(All information required to identify and calculate the cases from the target population with the target process, condition, event, or outcome such as definitions, time period for data collection, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)*

*IF an OUTCOME MEASURE, describe how the observed outcome is identified/counted. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).*

Number of patients who receive cervical spine imaging who either:

1. Fulfill any of the following NEXUS Low-Risk Criteria\* for cervical spine injury:

- posterior mid-line cervical spine tenderness
- painful distracting injury
- neurological deficits
- reduced level of consciousness or intoxication

OR

2. Fulfill the Canadian Cervical Spine Rule Criteria\* for cervical spine radiography by having

- a. Any of the following high risk factors that mandates radiography
  - Dangerous Mechanism\*\*
  - Paresthesias in the extremities

or (b&c)

b. None of the following low-risk factors that allows safe assessment of range of motion. (If there is not a low-risk factor which permits safe assessment of the range of motion then radiography should be performed).

- i. Simple rear-end collision (excluding rollover, collision with bus, large truck, vehicle traveling at high speeds or being pushed into oncoming traffic), or
- ii. Patient found sitting in the Emergency Department, or
- iii. Ambulatory after the incident, or
- iv. Delayed onset of neck pain, or
- v. Absence of any midline cervical spine tenderness.

and

c. inability to adequately “range of motion” their neck.

- Is the patient able to actively rotate the neck 45 degrees to the left and right? (If the patient is unable, radiography should be performed; otherwise radiography should not be performed).

\*The clinical decision rules were developed for plain radiography, but are appropriate for similarly selected patients in whom CT scanning is the initial imaging modality

\*\*Dangerous mechanisms include a fall from an elevation of 3 feet or 5 stairs, an axial load to the head (e.g., diving); a motor vehicle collision at high speed (>100 kph or 60 mph), or with rollover or ejection; a collision involving a motorized recreational vehicle, or a bike collision.

**S.6. Denominator Statement** *(Brief, narrative description of the target population being measured)*

Number of adult patients undergoing cervical spine radiography or CT for trauma (as initial imaging of C-spine)

**S.7. Denominator Details** *(All information required to identify and calculate the target population/denominator such as definitions,*

time period for data collection, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b.)  
 IF an OUTCOME MEASURE, describe how the target population is identified. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).

Age 16 - 65 years of age

Underwent cervical spine imaging as initial full imaging test of the cervical spine

Traumatic indication for imaging

**S.8. Denominator Exclusions** (Brief narrative description of exclusions from the target population)

Patients who have not experienced trauma

<16 years of age or >65 years of age

Patients with a reduced ability to communicate (verbal or cognitive dysfunction)

Underwent prior cervical spine radiograph (3 view or more) that is interpreted as inadequate to fully assess fracture

Underwent prior imaging concerning or diagnostic for injury of the cervical spine requiring further imaging

**S.9. Denominator Exclusion Details** (All information required to identify and calculate exclusions from the denominator such as definitions, time period for data collection, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b.)

**S.10. Stratification Information** (Provide all information required to stratify the measure results, if necessary, including the stratification variables, definitions, specific data collection items/responses, code/value sets, and the risk-model covariates and coefficients for the clinically-adjusted version of the measure when appropriate – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format with at S.2b.)

**S.11. Risk Adjustment Type** (Select type. Provide specifications for risk stratification in measure testing attachment)

No risk adjustment or risk stratification

If other:

**S.12. Type of score:**

Rate/proportion

If other:

**S.13. Interpretation of Score** (Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score)

**S.14. Calculation Algorithm/Measure Logic** (Diagram or describe the calculation of the measure score as an ordered sequence of steps including identifying the target population; exclusions; cases meeting the target process, condition, event, or outcome; time period for data, aggregating data; risk adjustment; etc.)

Please see diagram with measure specifications.

**S.15. Sampling** (If measure is based on a sample, provide instructions for obtaining the sample and guidance on minimum sample size.)

IF an instrument-based performance measure (e.g., PRO-PM), identify whether (and how) proxy responses are allowed.

**S.16. Survey/Patient-reported data** (If measure is based on a survey or instrument, provide instructions for data collection and guidance on minimum response rate.)

Specify calculation of response rates to be reported with performance measure results.

**S.17. Data Source** (Check ONLY the sources for which the measure is SPECIFIED AND TESTED).

If other, please describe in S.18.

Electronic administrative data/claims, Electronic Health Records, Paper medical record/flow-sheet

**S.18. Data Source or Collection Instrument** (*Identify the specific data source/data collection instrument (e.g. name of database, clinical registry, collection instrument, etc., and describe how data are collected.)*)

IF instrument-based, identify the specific instrument(s) and standard methods, modes, and languages of administration.

Data will be collected from the medical record. No specific data collection instrument need be used since the determination of guideline adherence will be made solely on the criteria mentioned in the guideline. These can be easily recorded either electronically or on paper using institution-specific instruments.

**S.19. Data Source or Collection Instrument** (*available at measure-specific Web page URL identified in S.1 OR in attached appendix at A.1)*

**S.20. Level of Analysis** (*Check ONLY the levels of analysis for which the measure is SPECIFIED AND TESTED*)

Facility/Agency, Other, Population : Regional and State, Population : Regional/network

**S.21. Care Setting** (*Check ONLY the settings for which the measure is SPECIFIED AND TESTED*)

Ambulatory Care : Emergency Dept, Other

If other: This measure was developed for use in the ED, but the guideline upon which it is based is not specific for the ED. It would be reasonable to consider the measure for the following additional care settings: Office, Clinic, and Hospital Outpatient

**S.22. COMPOSITE Performance Measure** - Additional Specifications (*Use this section as needed for aggregation and weighting rules, or calculation of individual performance measures if not individually endorsed.*)

## 2. Validity – See attached Measure Testing Submission Form

[0755\\_MeasureTesting\\_MSF5.0\\_Data-635804989101475765.doc](#)

### 2.1 For maintenance of endorsement

*Reliability testing: If testing of reliability of the measure score was not presented in prior submission(s), has reliability testing of the measure score been conducted? If yes, please provide results in the Testing attachment. Please use the most current version of the testing attachment (v7.1). Include information on all testing conducted (prior testing as well as any new testing); use red font to indicate updated testing.*

### 2.2 For maintenance of endorsement

*Has additional empirical validity testing of the measure score been conducted? If yes, please provide results in the Testing attachment. Please use the most current version of the testing attachment (v7.1). Include information on all testing conducted (prior testing as well as any new testing); use red font to indicate updated testing.*

### 2.3 For maintenance of endorsement

*Risk adjustment: For outcome, resource use, cost, and some process measures, risk-adjustment that includes social risk factors is not prohibited at present. Please update sections 1.8, 2a2, 2b1,2b4.3 and 2b5 in the Testing attachment and S.140 and S.11 in the online submission form. NOTE: These sections must be updated even if social risk factors are not included in the risk-adjustment strategy. You MUST use the most current version of the Testing Attachment (v7.1) -- older versions of the form will not have all required questions.*

## 3. Feasibility

Extent to which the specifications including measure logic, require data that are readily available or could be captured without undue burden and can be implemented for performance measurement.

### 3a. Byproduct of Care Processes

For clinical measures, the required data elements are routinely generated and used during care delivery (e.g., blood pressure, lab test, diagnosis, medication order).

**3a.1. Data Elements Generated as Byproduct of Care Processes.**

generated by and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition  
If other:

**3b. Electronic Sources**

The required data elements are available in electronic health records or other electronic sources. If the required data are not in electronic health records or existing electronic sources, a credible, near-term path to electronic collection is specified.

**3b.1. To what extent are the specified data elements available electronically in defined fields (i.e., data elements that are needed to compute the performance measure score are in defined, computer-readable fields)** Update this field for **maintenance of endorsement**.

No

**3b.2. If ALL the data elements needed to compute the performance measure score are not from electronic sources, specify a credible, near-term path to electronic capture, OR provide a rationale for using other than electronic sources.** For **maintenance of endorsement**, if this measure is not an eMeasure (eCQM), please describe any efforts to develop an eMeasure (eCQM).

All data elements are not likely to be available electronically to most providers currently. Although many electronic health records include computerized physician order entry (CPOE) for radiologic tests, most are not currently programmed to have guideline-based decision support. At Brigham and Women's Hospital, the Center for Evidence Based Imaging has developed a CPOE interface that can collect specific clinical information at the time of ordering and offer interactive decision support. This measure is one of several for which there is ongoing quality improvement work utilizing this interface. Although most electronic health records do not currently have the exact specifications for this measure in their CPOE, it is technically feasible for them to be reprogrammed to include such data. The measure specifications provided include all information needed for any EHR to be reprogrammed to collect the needed data elements.

Providers who do not have CPOE could implement a templated paper order entry form that included all data fields. Alternatively they could conduct chart review to identify if the data fields were present at the time of test ordering, but this would likely have a low yield as most clinical charts do not have time to data entry and many are completed at the end of the patient visit. If approved by the NQF, we would produce a model templated paper order entry form for this measure. Ultimately, this and other measures will be significantly aided by the transition to electronic health records.

**3b.3. If this is an eMeasure, provide a summary of the feasibility assessment in an attached file or make available at a measure-specific URL. Please also complete and attach the NQF Feasibility Score Card.**

Attachment:

**3c. Data Collection Strategy**

Demonstration that the data collection strategy (e.g., source, timing, frequency, sampling, patient confidentiality, costs associated with fees/licensing of proprietary measures) can be implemented (e.g., already in operational use, or testing demonstrates that it is ready to put into operational use). For eMeasures, a feasibility assessment addresses the data elements and measure logic and demonstrates the eMeasure can be implemented or feasibility concerns can be adequately addressed.

**3c.1. Required for maintenance of endorsement.** Describe difficulties (as a result of testing and/or operational use of the measure) regarding data collection, availability of data, missing data, timing and frequency of data collection, sampling, patient confidentiality, time and cost of data collection, other feasibility/implementation issues.

**IF instrument-based,** consider implications for both individuals providing data (patients, service recipients, respondents) and those whose performance is being measured.

Successful data collection using an electronic order entry system is dependent on designing an explicit order form with a method of categorizing indications for CT imaging. If these indications are categorized correctly, the inclusion and exclusion criteria can effectively sort the CT images obtained into those to which the guideline should apply and those to which it should not.

**3c.2. Describe any fees, licensing, or other requirements to use any aspect of the measure as specified (e.g., value/code set, risk model, programming code, algorithm).**

**4. Usability and Use**



Extent to which potential audiences (e.g., consumers, purchasers, providers, policy makers) are using or could use performance results for both accountability and performance improvement to achieve the goal of high-quality, efficient healthcare for individuals or populations.

#### 4a. Accountability and Transparency

Performance results are used in at least one accountability application within three years after initial endorsement and are publicly reported within six years after initial endorsement (or the data on performance results are available). If not in use at the time of initial endorsement, then a credible plan for implementation within the specified timeframes is provided.

##### 4.1. Current and Planned Use

*NQF-endorsed measures are expected to be used in at least one accountability application within 3 years and publicly reported within 6 years of initial endorsement in addition to performance improvement.*

Specific Plan for Use	Current Use (for current use provide URL)

##### 4a1.1 For each CURRENT use, checked above (update for maintenance of endorsement), provide:

- Name of program and sponsor
- Purpose
- Geographic area and number and percentage of accountable entities and patients included
- Level of measurement and setting

**4a1.2. If not currently publicly reported OR used in at least one other accountability application (e.g., payment program, certification, licensing) what are the reasons?** (e.g., Do policies or actions of the developer/steward or accountable entities restrict access to performance results or impede implementation?)

**4a1.3. If not currently publicly reported OR used in at least one other accountability application, provide a credible plan for implementation within the expected timeframes -- any accountability application within 3 years and publicly reported within 6 years of initial endorsement.** (Credible plan includes the specific program, purpose, intended audience, and timeline for implementing the measure within the specified timeframes. A plan for accountability applications addresses mechanisms for data aggregation and reporting.)

**4a2.1.1. Describe how performance results, data, and assistance with interpretation have been provided to those being measured or other users during development or implementation.**

**How many and which types of measured entities and/or others were included? If only a sample of measured entities were included, describe the full population and how the sample was selected.**

**4a2.1.2. Describe the process(es) involved, including when/how often results were provided, what data were provided, what educational/explanatory efforts were made, etc.**

**4a2.2.1. Summarize the feedback on measure performance and implementation from the measured entities and others described in 4d.1.**

**Describe how feedback was obtained.**

**4a2.2.2. Summarize the feedback obtained from those being measured.**

**4a2.2.3. Summarize the feedback obtained from other users**



**4a2.3. Describe how the feedback described in 4a2.2.1 has been considered when developing or revising the measure specifications or implementation, including whether the measure was modified and why or why not.**

**Improvement**

Progress toward achieving the goal of high-quality, efficient healthcare for individuals or populations is demonstrated. If not in use for performance improvement at the time of initial endorsement, then a credible rationale describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.

**4b1. Refer to data provided in 1b but do not repeat here. Discuss any progress on improvement (trends in performance results, number and percentage of people receiving high-quality healthcare; Geographic area and number and percentage of accountable entities and patients included.)**

**If no improvement was demonstrated, what are the reasons? If not in use for performance improvement at the time of initial endorsement, provide a credible rationale that describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.**

**4b2. Unintended Consequences**

The benefits of the performance measure in facilitating progress toward achieving high-quality, efficient healthcare for individuals or populations outweigh evidence of unintended negative consequences to individuals or populations (if such evidence exists).

**4b2.1. Please explain any unexpected findings (positive or negative) during implementation of this measure including unintended impacts on patients.**

As with any NQF measure based on guideline recommendations, the major source of inaccuracy or error will be incomplete medical records. This measure is based on a set of specific clinical criteria outlined by the guideline and will require physicians to document the presence or absence of these criteria in patients undergoing CT imaging.

The main unintended consequence of this measure is that CT images ordered by emergency physicians at the request of consultants may be attributed to the emergency physicians themselves. However, by analyzing this measure at the Group or Facility level, organizations can develop measure-specific policies that will apply to all physicians, including emergency physicians and consultants.

**4b2.2. Please explain any unexpected benefits from implementation of this measure.**

## 5. Comparison to Related or Competing Measures

If a measure meets the above criteria and there are endorsed or new related measures (either the same measure focus or the same target population) or competing measures (both the same measure focus and the same target population), the measures are compared to address harmonization and/or selection of the best measure.

**5. Relation to Other NQF-endorsed Measures**

Are there related measures (conceptually, either same measure focus or target population) or competing measures (conceptually both the same measure focus and same target population)? If yes, list the NQF # and title of all related and/or competing measures.

**5.1a. List of related or competing measures (selected from NQF-endorsed measures)**

**5.1b. If related or competing measures are not NQF endorsed please indicate measure title and steward.**

**5a. Harmonization of Related Measures**

The measure specifications are harmonized with related measures;  
**OR**

The differences in specifications are justified

**5a.1. If this measure conceptually addresses EITHER the same measure focus OR the same target population as NQF-endorsed measure(s):**

**Are the measure specifications harmonized to the extent possible?**

**5a.2. If the measure specifications are not completely harmonized, identify the differences, rationale, and impact on interpretability and data collection burden.**

#### **5b. Competing Measures**

The measure is superior to competing measures (e.g., is a more valid or efficient way to measure);

**OR**

Multiple measures are justified.

**5b.1. If this measure conceptually addresses both the same measure focus and the same target population as NQF-endorsed measure(s):**

**Describe why this measure is superior to competing measures (e.g., a more valid or efficient way to measure quality); OR provide a rationale for the additive value of endorsing an additional measure. (Provide analyses when possible.)**

The newly proposed measure is meant to expand upon the existing measure by including both CT and plain radiography.

Related Measures: NQF# 0512: Percentage of patients undergoing cervical spine radiographs in trauma who do not have neck pain, distracting pain, neurological deficits, reduced level of consciousness or intoxication.

## **Appendix**

**A.1 Supplemental materials may be provided in an appendix.** All supplemental materials (such as data collection instrument or methodology reports) should be organized in one file with a table of contents or bookmarks. If material pertains to a specific submission form number, that should be indicated. Requested information should be provided in the submission form and required attachments. There is no guarantee that supplemental materials will be reviewed.

**Attachment:**

## **Contact Information**

**Co.1 Measure Steward (Intellectual Property Owner):** American College of Emergency Physicians

**Co.2 Point of Contact:** Stacie, Jones, sjones@acep.org, 202-728-0610-3040

**Co.3 Measure Developer if different from Measure Steward:** American College of Emergency Physicians

**Co.4 Point of Contact:** Diana, Crowley, dcrowley@acep.org, 202-728-0610-325

## **Additional Information**

**Ad.1 Workgroup/Expert Panel involved in measure development**

**Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.**

**Measure Developer/Steward Updates and Ongoing Maintenance**

**Ad.2 Year the measure was first released:** 2009

**Ad.3 Month and Year of most recent revision:** 2009

**Ad.4 What is your frequency for review/update of this measure?** Every 2 years.

**Ad.5 When is the next scheduled review/update for this measure?** 2011

**Ad.6 Copyright statement:**

**Ad.7 Disclaimers:**

**Ad.8 Additional Information/Comments:**

