



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 #: 0345

Corresponding Measures:

De.2. Measure Title: Unrecognized Abdominopelvic Accidental Puncture or Laceration Rate (PSI15)

Co.1.1. Measure Steward: Agency for Healthcare Research and Quality

De.3. Brief Description of Measure: Accidental punctures or lacerations (secondary diagnosis) per 1,000 discharges for patients ages 18 years and older who have undergone an abdominopelvic procedure; in which a second abdominopelvic procedure follows one or more days after an index abdominopelvic procedure. Excludes cases with accidental puncture or laceration as a principal diagnosis, cases with accidental puncture or laceration as a secondary diagnosis that is present on admission, and obstetric cases.

[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 events per 1,000 hospital discharges.]

1b.1. Developer Rationale: This indicator is intended to flag cases of complications that arise due to unrecognized technical difficulties in abdominal and pelvic operations; specifically those involving an accidental puncture or laceration.

S.4. Numerator Statement: Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with:

- Any secondary ICD-10-CM diagnosis codes for accidental puncture or laceration during a procedure (TECHI15D); and
- A second abdominopelvic procedure (ABDOMI15P) =>1 day after an index abdominopelvic procedure (ABDOMI15P).

S.6. Denominator Statement: Surgical (Appendix E: SURGI2R) and medical discharges (Appendix C: MEDIC2R), for patients ages 18 years and older with any ICD-10-PCS procedure code for an abdominopelvic procedure (ABDOMI15P).

S.8. Denominator Exclusions: Exclude cases:

- with a principal ICD-10-CM diagnosis code for accidental puncture or lacerations during a procedure (TECHNI15D),
- secondary diagnosis present on admission for accidental puncture or laceration during a procedure (TECHNI15D), among patients otherwise qualifying for the numerator
- MDC 14 (pregnancy, childbirth, and puerperium) assigned to the discharge
- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), or principal diagnosis (DX1=missing)

De.1. Measure Type: Outcome

S.17. Data Source: Claims

S.20. Level of Analysis: Facility

IF Endorsement Maintenance – Original Endorsement Date: May 15, 2008 **Most Recent Endorsement Date:** Dec 10, 2015

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? N/A

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

[PSI15_0345_Evidence_150508v02-635701429554509494-635701437833410546.docx](#)

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 indicator is intended to flag cases of complications that arise due to unrecognized technical difficulties in abdominal and pelvic operations; specifically those involving an accidental puncture or laceration.

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.*

This table is also included in the supplemental files packet.

Table 1. Reference Population Rate and Distribution of Hospital Performance of Unrecognized Abdominopelvic Accidental Puncture or Laceration Rate (PSI15)

Overall Reference Population Rate

Year	Number Hospitals	Outcome of Interest
(Numerator) ¹	Population at Risk	
(Denominator) ¹	Observed Rate	
Per 10001		

2012	3,356	1,888	5,809,773	0.325
------	-------	-------	-----------	-------

2011	3,187	2,052	5,726,454	0.358
------	-------	-------	-----------	-------

Distribution of Hospital-level Observed Rates in Reference Population

Year	Number of Hospitals	Distribution of Observed Hospital-level Rates per 1000 (p=percentile) ²						
		Mean	SD	p5	p25	Median	p75	p95
2012	3,028	0.663	3.307	0.000	0.000	0.000	0.000	3.783
2011	2,908	0.674	3.085	0.000	0.000	0.000	0.000	3.433

Source: HCUP State Inpatient Databases (SID). Healthcare Cost and Utilization Project (HCUP). 2011-2012. Agency for Healthcare Research and Quality, Rockville, MD. www.hcup-us.ahrq.gov/sidoverview.jsp. (AHRQ QI Software Version 6.0 alpha)

¹The distribution of hospital rates reports the mean and standard deviation (SD) of the observed rates for all hospitals included in the dataset, as well as the observed rate for hospitals in the 5th, 25th, 50th (median), 75th, and 95th percentile.

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.

Not applicable

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.

This table is also included in the supplemental files packet.

Table 2. Risk-Adjusted Unrecognized Abdominopelvic Accidental Puncture or Laceration Rates per 1,000 Abdominopelvic Surgery Admissions, Age 18 and Over (PSI15), by Patient and Hospital Characteristics, 2012

Patient/hospital characteristic Estimate Std Error p-value
(Ref Grp = *)

Total U.S. 0.773 0.027

Patient Characteristics

Age Groups:

18-44* 0.776 0.066

45-64 0.737 0.044 0.688

65 and over 0.801 0.040 0.372

Gender:

Male* 0.768 0.040

Female 0.777 0.036 0.432

Patient Zip Code Median Income

First quartile (lowest income) 0.793 0.054 0.293

Second quartile 0.845 0.054 0.110

Third quartile 0.705 0.054 0.732

Fourth quartile (highest income)* 0.752 0.054

Location of patient residence (NCHS):

Large central metropolitan 0.833 0.051 0.144

Large fringe metropolitan* 0.755 0.053

Medium metropolitan 0.858 0.061 0.100

Small metropolitan 0.625 0.087 0.900

Micropolitan 0.707 0.086 0.684

Noncore 0.657 0.103 0.802

Expected payment source:

Private insurance* 0.687 0.045

Medicare 0.805 0.039 0.023

Medicaid 0.927 0.095 0.011

Other insurance 0.826 0.152 0.190

Uninsured / self-pay / no charge 0.818 0.129 0.171

Location of Care:

Northeast* 0.711 0.058

Midwest 0.686 0.061 0.614

South 0.756 0.044 0.269

West 0.934 0.056 0.003

Source: HCUP State Inpatient Databases (SID). Healthcare Cost and Utilization Project (HCUP). 2012. Agency for Healthcare Research and Quality, Rockville, MD. www.hcup-us.ahrq.gov/sidoverview.jsp. (AHRQ QI Software Version 6.0 alpha)

*Reference for p-value test statistics.

NCHS - National Center for Health Statistics designation for urban-rural locations.

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):

Surgey

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

Safety, Safety : Complications

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

Populations at Risk : Individuals with multiple chronic conditions

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.qualityindicators.ahrq.gov/Modules/psi_resources.aspx

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)

This is not an eMeasure 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 Attachment: [PSI_15_Accidental_Puncture_or_Laceration_Rate-636801216741875017.xlsx](#)

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.

No, this is not an instrument-based measure 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.

Not an instrument-based measure

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.

Yes

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.

As standard protocol, the AHRQ QI program annually updates all measures with Fiscal Year coding changes, refinements based on stakeholder input, refinements to improve specificity and sensitivity based on additional analyses, and necessary software changes. In addition, approximately every two years, AHRQ updates the risk adjustment parameter estimates and composite weights based on the most recent year of data (i.e., the most current reference population possible). The refined measures are tested and confirmed to be valid and reliable prior to release of the updated software.

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).

Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with:

- Any secondary ICD-10-CM diagnosis codes for accidental puncture or laceration during a procedure (TECHI15D); and
- A second abdominopelvic procedure (ABDOMI15P) =>1 day after an index abdominopelvic procedure (ABDOMI15P).

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).

TECHI15D: Accidental puncture or laceration during a procedure diagnosis codes

ABDOMI15P: Accidental puncture or laceration during a procedure diagnosis codes

(See attached technical specifications for detailed list of codes.)

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

Surgical (Appendix E: SURGI2R) and medical discharges (Appendix C: MEDIC2R), for patients ages 18 years and older with any ICD-10-PCS procedure code for an abdominopelvic procedure (ABDOMI15P).

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).

ABDOMI15P: Accidental puncture or laceration during a procedure diagnosis codes

Appendix C: Medical Discharge MS-DRGs

Appendix E: Surgical Discharge MS-DRGs

(See attached technical specifications, Appendix C, and Appendix E for detailed list of codes.)

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

Exclude cases:

- with a principal ICD-10-CM diagnosis code for accidental puncture or lacerations during a procedure (TECHI15D),
- secondary diagnosis present on admission for accidental puncture or laceration during a procedure (TECHI15D), among patients otherwise qualifying for the numerator
- MDC 14 (pregnancy, childbirth, and puerperium) assigned to the discharge
- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), or principal diagnosis (DX1=missing)

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.)

TECHI15D: Accidental puncture or laceration during a procedure diagnosis codes

(See attached technical specifications for detailed list of codes.)

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.)

Not applicable

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)

Better quality = Lower 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.)

Risk adjustment is not currently included in the ICD-10-CM/PCS v2018 of the AHRQ QI specifications, due to the transition to ICD-10-CM/PCS (October 1, 2015). At least one full year of data coded in ICD-10-CM/PCS is needed in order to develop robust risk adjustment models. A full year of ICD-10-CM/PCS coded all-payer data will not be available until mid-2019. AHRQ will announce an anticipated date as soon as one is known.

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.

Not applicable

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.

Not applicable

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

If other, please describe in S.18.

Claims

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.

While the measure is tested and specified using data from the Healthcare Cost and Utilization Project (HCUP) (see section 1.1 and 1.2 of the measure testing form), the measure specifications and software are specified to be used with any ICD-9-CM-coded administrative billing/claims/discharge dataset with Present on Admission (POA) information. Note that in the forthcoming Version 5.0 (expected release Quarter 1 of 2015), the AHRQ QI software will no longer support prediction of POA status using an embedded prediction module. Users are expected to provide POA data.

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)

No data collection instrument provided

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

Facility

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

Inpatient/Hospital

If other:

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.)

Not applicable

2. Validity – See attached Measure Testing Submission Form

PSI15_0345_Measure_Testing_150511-635701429555601515-635701437835438546.docx

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.

Coded by someone other than person obtaining original information (e.g., DRG, ICD-9 codes on claims)

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**.

ALL data elements are in defined fields in electronic claims

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).

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.

Because the indicator is based on readily available administrative billing and claims data and U.S. Census data, feasibility is not an issue. This version of the indicator requires POA data. Present-on Admission was added as a data element to the uniform bill form (UB-04) effective October 1, 2007, and hospitals incurred a payment penalty for not including POA on Medicare records beginning October 1, 2008. Each of the several diagnoses in a discharge record can be flagged as "present at the time the order for inpatient admission occurs" or not (see http://www.cdc.gov/nchs/icd/icd9cm_addenda_guidelines.htm). The number of states reporting consistent POA has increased dramatically since 2008.

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).

No fees. Software is freely available from the AHRQ Quality Indicators website (<http://www.qualityindicators.ahrq.gov/>). The version 6.0 software will be released in early 2016.

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)
	<p>Public Reporting</p> <p>Connecticut Hospital Association, Hospital Quality Reporting Website http://www.cthosp.org/advocacy/quality-and-patient-safety/hospital-quality-reporting-website/</p> <p>HealthGrades, Quality Center https://d2dcgio3q2u5fb.cloudfront.net/54/98/f79cdfd84640a03792ea092f20a8/2014-patient-safety-methodology.pdf</p> <p>Illinois Department of Public Health, Illinois Hospital Report Card http://healthcarereportcard.illinois.gov/methodology</p> <p>Iowa Healthcare Collaborative, Iowa Report http://www.ihconline.org/UserDocs/Pages/IowaReport_Methods.pdf</p> <p>Kentucky Hospital Association, Kentucky Hospital Association (KHA) Quality Data http://info.kyha.com/QualityData/</p> <p>Maine Health Data Organization (MHDO), Maine Health Data Organization's MONAHRQ Website http://gateway.maine.gov/mhdo/monahrq/index.html</p> <p>Niagara Health Quality Coalition, New York State Hospital Report Card http://www.myhealthfinder.com/newyork13/index.php</p> <p>Nevada Hospital Association, Transparency and Performance http://www.nvha.net/abouthospitalqualitytransparency/</p>

	<p>Norton Healthcare, Norton Healthcare Quality Report http://www.nortonhealthcare.com/QualityIndicatorReference Oklahoma State Department of Health, Oklahoma Hospital Quality Reports 2010 https://www.phin.state.ok.us/ahrq/MONAHQR%202010/Methodology.html State of New Jersey Department of Health, Office of Health Care Quality Assessment http://web.doh.state.nj.us/apps2/hpr/docs/2012/technicalreport_psi.pdf Texas Department of State Health Services, Texas Health Care Information Collection (THCIC) http://www.dshs.state.tx.us/thcic/publications/hospitals/Patient-Safety-Indicators/Patient-Safety-Indicators-2012/ Texas Health Resources, Quality and Safety Report http://www.texashealth.org/workfiles/THR%20System/Quality_Patient_Safety/PDF_Report_Files/09-24-2014_Patient_Safety.pdf The Leapfrog Group, Hospital Safety Score http://www.hospitalsafetyscore.org/media/file/HospitalSafetyScore_ScoringMethodology_October2014_Final.pdf Utah Department of Health, 2012 Utah Hospital Comparison Tool https://health.utah.gov/myhealthcare/monahrq/AboutQualityRatings.html Virginia Health Information, MONAHQR Health Care http://vhi.org/files/pdfs_to_download_from_web/AR&SPU%202014.pdf WHA Information Center (Wisconsin Hospital Association), Wisconsin Inpatient Hospital Quality Indicators Report http://www.whainfocenter.com/uploads/PDFs/Publications/QualityIndicators/2012_WI_IQIReport.pdf</p> <p>Regulatory and Accreditation Programs BlueCross BlueShield, Blue Distinction http://www.bcbs.com/healthcare-partners/blue-distinction-for-providers/cardiacprogramcriteria.pdf Cigna, Centers of Excellence http://www.cigna.com/customer_care/healthcare_professional/newsletters/November2011/General-2.html Washington State Hospital Association, Required Quality Measure Submission http://www.wsha.org/files/82/CurrentReportingRequirementswithPQRS.pdf</p> <p>Quality Improvement (Internal to the specific organization) UHC Performance Intelligence https://www.uhc.edu/docs/49018566_PSI15ConsensusStatement.pdf</p>
--	---

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

Note- all uses noted here are of previous versions of the PSI15 indicator, before the changes noted in this revised version were implemented. We anticipate the revised indicator will be used in similar ways. This version of the indicator will be included in the next release of the AHRQ QI software (anticipated quarter 1 2016).

Public Reporting

Connecticut Hospital Association, Hospital Quality Reporting Website
Hospital quality reporting across Connecticut
<http://www.cthosp.org/advocacy/quality-and-patient-safety/hospital-quality-reporting-website/>

HealthGrades, Quality Center

Healthgrades measures 40 million patient records from 4,500 hospitals nationwide for the most recent three-year period.
<http://www.healthgrades.com/quality>
<https://d2dcgio3q2u5fb.cloudfront.net/54/98/f79cdfd84640a03792ea092f20a8/2014-patient-safety-methodology.pdf>

Illinois Department of Public Health, Illinois Hospital Report Card
Illinois Hospital Report Card
<http://www.healthcarereportcard.illinois.gov/>
<http://healthcarereportcard.illinois.gov/methodology>

Iowa Healthcare Collaborative, Iowa Report
Public report that presents information on national, state, and hospital-specific quality and patient safety performance for hospitals within Iowa.
<http://iowareport.ihonline.org/>
http://www.ihonline.org/UserDocs/Pages/IowaReport_TableofContents.pdf
http://www.ihonline.org/UserDocs/Pages/IowaReport_Methods.pdf

Kentucky Hospital Association, Kentucky Hospital Association (KHA) Quality Data
Publicly reports AHRQ IQIs and PSIs, including PSI15, for hospitals in Kentucky.
<http://info.kyha.com/QualityData/>

Maine Health Data Organization (MHDO), Maine Health Data Organization's MONAHRQ Website
Hospital quality ratings from all hospitals in Maine
<http://gateway.maine.gov/mhdo/monahrq/index.html>

Niagara Health Quality Coalition, New York State Hospital Report Card
New York State Hospital Report Card
<http://www.myhealthfinder.com/newyork13/index.php>

Nevada Hospital Association, Transparency and Performance
Reports quality of care within Nevada hospitals
<http://www.nvha.net/abouthospitalqualitytransparency/>
<http://www.nvhospitalquality.net/index.php>

Oklahoma State Department of Health, Oklahoma Hospital Quality Reports 2010
Hospital quality ratings from most hospitals in Oklahoma
<http://www.ok.gov/health/pub/wrapper/ok2share.html>
<https://www.phin.state.ok.us/ahrq/MONAHRQ%202010/Methodology.html>

State of New Jersey Department of Health, Office of Health Care Quality Assessment
Hospital quality ratings from most hospitals in New Jersey
www.nj.gov/health/healthcarequality/
http://web.doh.state.nj.us/apps2/hpr/docs/2012/technicalreport_psi.pdf

Texas Department of State Health Services, Texas Health Care Information Collection (THCIC)
Hospital quality ratings from most hospitals Texas
<http://www.dshs.state.tx.us/thcic/>
<http://www.dshs.state.tx.us/thcic/publications/hospitals/Patient-Safety-Indicators/Patient-Safety-Indicators-2012/>

Texas Health Resources, Quality and Safety Report
Hospital quality reporting within the Texas Health Resources network, whose primary service area consists of 16 counties in north central Texas
<http://http://texashealth.org/quality-reports>
http://www.texashealth.org/workfiles/THR%20System/Quality_Patient_Safety/PDF_Report_Files/09-24-2014_Patient_Safety.pdf

The Leapfrog Group, Hospital Safety Score

Leapfrog Group Hospital Safety Score program grades hospitals on their overall performance in keeping patients safe from preventable harm and medical errors

<http://www.hospitalsafetyscore.org/>

http://www.hospitalsafetyscore.org/media/file/HospitalSafetyScore_ScoringMethodology_October2014_Final.pdf

Utah Department of Health, 2012 Utah Hospital Comparison Tool

Hospital quality ratings from most hospitals in Utah

<https://health.utah.gov/myhealthcare/monahrq/>

<https://health.utah.gov/myhealthcare/monahrq/AboutQualityRatings.html>

Virginia Health Information, MONAHRQ Health Care

Compares quality ratings on hospitals across Virginia.

<http://www.vhi.org/MONAHRQ/default.asp?yr=2013>

http://vhi.org/files/pdfs_to_download_from_web/AR&SPU%202014.pdf

WHA Information Center (Wisconsin Hospital Association), Wisconsin Inpatient Hospital Quality Indicators Report

Report on quality care in hospitals within Wisconsin, 2011-2012

<http://www.whainfocenter.com/services/publications/>

http://www.whainfocenter.com/uploads/PDFs/Publications/QualityIndicators/2012_WI_IQIReport.pdf

Examples of known regulatory or accreditation uses:

BlueCross BlueShield, Blue Distinction

PSIs, including PSI15, are used as part of the BlueCross, BlueShield Blue Distinction Centers designation, to recognize hospitals that demonstrate expertise in delivering quality specialty care, safely and effectively.

<http://www.bcbs.com/why-bcbs/blue-distinction/>

<http://www.bcbs.com/healthcare-partners/blue-distinction-for-providers/cardiacprogramcriteria.pdf>

Cigna, Centers of Excellence

Cigna uses a variety of quality indicators, including PSI15, to evaluate quality of care for hospitals seeking Center of Excellence recognition.

http://www.cigna.com/customer_care/healthcare_professional/newsletters/November2011/General-2.html

<http://www.cigna.com/pdf/CentersOfExcellence.pdf>

Washington State Hospital Association, Required Quality Measure Submission

Reporting requirement by Washington State Hospital Association

<http://www.wsha.org/>

<http://www.wsha.org/files/82/CurrentReportingRequirementswithPQRS.pdf>

Examples of known quality improvement uses:

Greenville Health System, Quality and Safety Report

All data was collected in 2012 from four hospitals in the Greenville Health system and compared with external benchmarks.

<http://www.ghs.org/reportcard>

<http://www.ghs.org/upload/docs/Reports/2013-April-Quality-Report.pdf>

UHC Performance Intelligence

The UHC PSI Documentation Project focuses on the clinical documentation that drives the reporting of Agency for Healthcare Research and Quality (AHRQ) Patient Safety Indicators (PSIs), including PSI15. This indicator is used as part of UHC evaluation of adverse events.

https://www.uhc.edu/docs/49018566_PSI15ConsensusStatement.pdf

<https://www.uhc.edu/22982>

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?)

Not applicable

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.)

Not applicable

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.

The Agency for Healthcare Research and Quality (AHRQ) provides free software, in both SAS and Windows format, to calculate the AHRQ Quality Indicators. Users may use their own hospital administrative data to calculate the QIs using this software.

In addition, AHRQ provides technical assistance to users through a QI User Support email address, QISupport@ahrq.hhs.gov. AHRQ triages, troubleshoots and responds to technical inquiries related to methodology and rationale behind the indicator and general questions related to the use of the software. During a calendar year, AHRQ typically provides technical support to over 1,000 queries.

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.

The AHRQ QI software is updated annually. Technical support is available on an on-going basis. No data updates are necessary; users apply the AHRQ QIs to their own hospital administrative data.

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.

Feedback is obtained from users through a variety of channels, in particular through a technical assistance support service described above. In addition, AHRQ incorporates input on QI implementation from technical workgroups convened to support QI development and maintenance, stakeholder committees such as NQF standing committees, and peer-reviewed or other research publications.

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

See the response to 4a2.2.1.

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

See the response to 4a2.2.1.

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.

The AHRQ Quality Indicators are updated annually, including updating indicator technical specifications in accordance with the latest coding guidance; suggestions from users and other stakeholders obtained through Technical Assistance, committees, or workgroups; and the latest clinical and scientific research. AHRQ regularly reviews these sources, identifies possible indicator updates, and prioritizes updates for each indicator and software update based on expected impact on users.

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.

Not applicable

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.

One consequence of all quality measurement programs that are used for accountability applications is that health care providers focus their attention on the accuracy of the data and try to minimize both inadvertent underreporting of desired processes of care and inadvertent overreporting of undesired outcomes of care. This is not the intended consequence of quality measurement, but it is certainly an expected consequence. In the case of the NQF-endorsed Patient Safety Indicators, there is anecdotal published evidence of efforts to clarify clinical documentation such that clinically inconsequential events and "incidental" injuries "inherent" to a surgical procedure are no longer coded (and thus no longer reported to payers and state health data organizations). See, for example, the University HealthSystem Consortium's PSI Documentation Project (<https://www.uhc.edu/22982>) and a recent paper based on that project (Utter GH, Vermoch KL, Rogers S. Clinical Documentation Improvement and the Agency for Healthcare Research and Quality Accidental Puncture or Laceration Patient Safety Indicator. JAMA Surg. 2015 Mar 4.[Epub ahead of print]). Several large hospitals, such as New York University Langone Medical Center (<https://www.uhc.edu/22985>) and the University of Washington Medical Center (<http://www.hcpro.com/content/280170.ppt>), have established "prebilling review processes" with "prompt review of documentation and coding to confirm accuracy [of potential PSI diagnoses] and to identify opportunities to improve care quality and safety." NYU reports that "the accurate and consistent identification of PSI events has increased and the number of falsely reported PSI cases has decreased... [which] has enabled the medical center to better recognize, understand, and address opportunities to improve the quality and safety of care" (https://www.uhc.edu/docs/5555-6-14945_ACDISposter_NYU_UHC_PSI.pdf). The AHRQ QI Toolkit offers specific guidance to hospitals and quality improvement leaders about "how to establish an effective coding communication and review process" (http://www.ahrq.gov/professionals/systems/hospital/qitoolkit/b4_documentationcoding.pdf).

The implication of these efforts is that some of the observed decrease in the incidence of this event over the last decade may be due to more accurate clinical documentation and coding, rather than to true improvements in patient outcomes and quality of care. Therefore, users should be cautious about interpreting recently observed changes in the incidence of this event. There is no evidence that more accurate clinical documentation and coding have had any negative consequences for individuals or populations. Any harm from increasing providers' attention to documentation is likely to be counterbalanced by the benefits of more accurate data and more careful reflection on adverse events. In addition, these efforts appear to lead to "one-time corrections" in PSI rates, as hospitals implement processes to prevent overreporting, but do not affect the prior or subsequent trend lines. For example, both the University of Washington Medical Center and Cedars Sinai Medical Center (CSMC) reported that concurrent review of clinical documentation was only the first step toward improving PSI performance (<http://www.ahrq.gov/professionals/systems/hospital/qitoolkit/qicasestudy.html>). CSMC noted that "task forces that include staff from many different departments and disciplines are assigned to carry out a "leave-no-stone-untuned" search for opportunities to prevent harm across the board... all ideas are important..."

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.

No

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.)

Not applicable

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 Attachment: PSI15_Supplemental_Packet_150508-635701429556849539-635701437836842546.pdf](#)

Contact Information

Co.1 Measure Steward (Intellectual Property Owner): Agency for Healthcare Research and Quality

Co.2 Point of Contact: Mamatha, Pancholi, Mamatha.Pancholi@ahrq.hhs.gov, 301-427-1412-

Co.3 Measure Developer if different from Measure Steward: Agency for Healthcare Research and Quality

Co.4 Point of Contact: Mamatha, Pancholi, Mamatha.Pancholi@ahrq.hhs.gov, 301-427-1412-

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: 2003 Ad.3 Month and Year of most recent revision: 04, 2015 Ad.4 What is your frequency for review/update of this measure? Annual Ad.5 When is the next scheduled review/update for this measure? 10, 2016
Ad.6 Copyright statement: The AHRQ QI software is publicly available. We have no copyright disclaimers Ad.7 Disclaimers: None
Ad.8 Additional Information/Comments: None