

NATIONAL QUALITY FORUM

Creating a Vision for Patient Safety Event Reporting

Annotated Outline

1. Introduction

Peter Angood, MD, welcomed participants to the day-long meeting, “Creating a Vision for Patient Safety Event Reporting,” at the Westin Grand Hotel in Washington, DC. The purpose of the meeting was:

- To convene the healthcare reporting agencies for states with requirements to report adverse events in healthcare;
- To discuss successes, failures, and unintended consequences of patient safety reporting in healthcare, in order to improve current and future efforts; and
- To use this content to develop a summary document which will be made available to meeting participants and the public and become a foundational component for various National Quality Forum (NQF) patient safety initiatives.

Currently 27 states and the District of Columbia have adopted requirements for adverse event reporting in healthcare. Six states use NQF’s list of Serious Reportable Events (SREs) as is, while others use lists that have been independently developed, and some use a hybrid.

The Department of Health and Human Services (HHS) recently recognized the importance of identifying other types of hospital-acquired conditions (HACs) that are neither NQF SREs nor specific HACs related to payment or reimbursement practices. There is also recognition that these new HACs should be relevant and applicable to non-hospital settings.

An internal review by staff of NQF-endorsed measures indicates that NQF has currently endorsed 96 patient safety measures (see Appendix B), out of over 500 total endorsed measures. These measures do not evenly address all SREs, nor do they address them in a planned, systematic way. NQF has therefore recognized the need for additional patient safety measures and has embarked on comprehensive efforts to revamp both its inventory of patient safety measures and the Safe Practices for Better Healthcare in 2010.

With guidance to healthcare organizations about reporting still in the early stages of development, and with validation needed to ensure the success of these programs, NQF felt it was essential to convene this core set of stakeholders from the state level to help chart priorities for the future course of reporting.

2. Issues

Participants heard from six state leaders in healthcare reporting. These states had differing levels of success and experience in reporting, but each acknowledged the importance of reporting to improving the healthcare system. The results are summarized below.

a. Initiatives

- *Detailed Reporting* – Information such as root-cause analysis (including information on staffing levels), corrective actions, location of the event in a healthcare facility, and what best practices were in place can all lead to improved systems.

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- *Training* – Some states provide training on how to conduct root-cause analysis and other key reporting initiatives.
- *State-wide Campaigns* – As prioritization of reporting must remain a focal point for states, campaigns (around issues such as commonly reported adverse events or basic procedures) are used to build awareness and knowledge. Campaign strategies include quarterly reporting, sharing best practices, and using conference calls to discuss common issues.
- *Communication Strategies* – A website (with information for patients and families) or a state-run intranet for patient safety officers can improve state reporting operations by providing data on events or answering commonly asked questions. A web-based interface, connected to the system of a healthcare facility, can allow for streamless reporting within a state. State-wide committees or informed volunteers willing to interact with healthcare facilities can foster understanding about reporting.
- *Subcontracting* – States can use outside agencies to collect, identify, and evaluate reports from healthcare facilities and see trends.
- *Aggregation of Events* – Effectively gathering information on certain adverse events can enable states to review and compare information, and facilitate systematic change; some states have moved to separate their regulation and reporting units to encourage more reports to come in from healthcare facilities.
- *Reporting Mandates* – States can give authority to their respective reporting agencies (such as a department of health) to cite healthcare facilities that do not report an event where harm occurs.

b. Challenges

- *Funding* – Building a comprehensive reporting system without a significant, constant funding stream is an ongoing issue nationwide.
- *Compliance* – How do state agencies know that all adverse events are being fully reported? Although cross-checking and verification systems are in place, and each state does try to maintain a positive relationship with its hospitals, compliance is not guaranteed. In addition, compliance is an issue in terms of the authority given to state agencies to enforce reporting regulations.
- *Reporting Requirements* – Many consider NQF's SREs as too broad and not encompassing the full array of healthcare facilities.
- *Guidance* – Healthcare facilities often have difficulty interpreting state laws, including SREs; state agencies are called upon to provide clinical information to guide reporting by facilities.
- *Barometers for Success* – What does progress in healthcare reporting look like? In addition, a healthcare facility may use data to compare itself to neighboring institutions—but what if their competition is substandard?
- *Public Disclosure of Adverse Events* – How does this impact the different stakeholders within the healthcare community? In addition, the fact that adverse event information is discoverable within the legal system in some states may add to reluctance within healthcare facilities to report.
- *Prioritization* – With the list of initiatives to improve reporting expanding quickly, the concept of “change fatigue” often arises. Healthcare professionals can discuss which initiatives to improve reporting should be a priority for their systems. In addition, states

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have found it challenging to maintain reporting as a priority among legislative leaders; one state noted that its reporting requirement is due to sunset in the coming year.

c. Potential

- *Learning through Detailed Reporting* – Through comprehensive analysis of detailed information, knowledge can be gleaned and information shared with different healthcare facilities. Yet the ability to do comprehensive analysis is hampered by the lack of resources for this effort.
- *Web-Based System for Reporting* – An easy online system would facilitate expanded use.
- *Increased Facility Understanding* – Correctly utilizing data from healthcare event reporting can affect change; but the data must be used correctly.
- *Dedicated Federal Funding Stream* – An annual allocation from Congress would help states prioritize reporting.
- *Defined Roles* – States may benefit from separating their patient safety and regulatory roles.

On the whole, it was noted that existing elements of patient safety reporting lack alignment and coordination. While the health risks and financial burden to patients, families, health systems, states, and the nation remain high, the consensus among participants was that a consistent, dedicated funding source is essential to bend the cost curve on this critical initiative.

There was a growing sense of need for a coherent, aligned approach to addressing healthcare safety issues. While states have and will likely always maintain differing systems for reporting, there was consensus that there is now a national opportunity to develop, test, and learn methods for improvement.

3. Charge to the Group

In his welcome, Dr. Angood emphasized the importance of reporting. Reporting not only improves the care provided to patients, but also the environment in which care is delivered. Participants were convened to communicate issues around healthcare reporting at the state level, to learn from each other, and to provide learnings to guide NQF's efforts in patient safety.

Janet Corrigan, PhD, MBA, President and CEO of NQF, also addressed the event participants. She thanked them for their contributions to the field of patient safety and noted the great advancements in this area over the past ten years since NQF's inception. Despite common use of root cause analysis, standard definitions, and information sharing programs to advance the field, healthcare leaders have not accomplished as much as they would like. Safety events are far too common and harm far too many people. National health reform legislation, through safety initiatives, mandates, or pay-for-performance, will aid in developing the event reporting systems already underway in many states. These state experiences will prove invaluable for charting the future course of reporting nationwide.

4. Considering Patient Safety Events

a. Broadening the Base of Serious Reportable Events or Healthcare Acquired Conditions

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This group, chaired by Anne Jones, RN, BSN, MA, of the Maryland Department of Health and Mental Hygiene, included representatives from Maryland, New Hampshire, Connecticut, New York, Wyoming, and the District of Columbia.

This group was *tasked* with:

- commenting on the criteria for selecting SREs,
- identifying most and least useful SREs with rationale,
- identifying potential new conditions or events and revisions to the list,
- discussing remaining SREs in terms of environments of care to which they apply or should be adapted, and
- commenting on the role of patients and families in identifying and reporting HACs or SREs.

The group felt that the *most useful SREs* were those that report death, surgical errors, or care management events. The *least useful SREs* were those that report criminal activity. Specifically, the group felt that the SRE “intraoperative or immediately post-operative death in an ASA class 1 patient” was not broad enough and should encompass ASA class 2 patients as well.

The group felt these *SREs should be revisited*:

- “Patient death or serious disability associated with contaminated drugs, devices, or biologics provided by the healthcare facility;”
 - This event is rarely reported, but was deemed necessary because it signifies an inappropriate use of preventative maintenance.
- “Patient death or serious disability due to spinal manipulative therapy;”
 - This event is unlikely to occur because chiropractors rarely work in healthcare facilities unless assisting an osteopath in performing spinal manipulation on a patient under anesthesia.
- “Any instance of care ordered by or provided by someone impersonating a physician, nurse, pharmacist, or other licensed healthcare provider”
 - This event is only discovered after a police investigation occurs, and typically happens only in an unlicensed healthcare facility.

The group also discussed potential *new events for NQF to consider* because they occur frequently and can result in serious harm to the patient.

- “perforations associated with open laparoscopic and/or endoscopic procedures resulting in death or disability;”
- “radiological or laboratory results not reported or reported incorrectly, which result in death or disability due to incorrect or missed diagnosis in the emergency department;”
- “death or serious disability associated with airway management,” including all the environments of care believed to be relevant; and
- “death or serious disability associated with delay of treatment.”

This group next conducted a thorough review of existing SREs and addressed the applicable environments of care, as shown in the table below.

SRE	Relevant Environment(s)
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Surgery performed on wrong body part	Inpatient/Ambulatory
Surgery performed on wrong patient	Inpatient/Ambulatory
Wrong surgical procedure performed	Inpatient/Ambulatory
Unintended retention of a foreign object...	Inpatient/Ambulatory
Intra- or immediately post-op death in ASA Class I patient	Inpatient/Ambulatory
Death or serious disability associated with use of contaminated drugs, devices, or biologics	All environments
Death or serious disability associated with use or function of device	All environments
Death or serious disability associated with intravascular air embolism	All environments
Infant discharged to the wrong person	Inpatient hospital
Death or serious disability associated with patient elopement	Inpatient hospital/Skilled nursing
Suicide or attempted suicide resulting in serious disability	All environments
Death or serious disability associated with medication error...	All environments
Death or serious disability associated with hemolytic reaction...	Inpatient/Ambulatory
Maternal death or serious disability associated with labor or delivery in a low-risk pregnancy	Inpatient/Ambulatory
Death or serious disability associated with hypoglycemia...onset...while...in a healthcare facility	All environments
Death or serious disability (kernicterus) associated with failure to identify and treat hyperbilirubinemia in infants	Inpatient
Stage 3 or 4 pressure ulcers acquired after admission to a healthcare facility	All environments
Death or serious disability due to spinal manipulative therapy	All environments
Artificial insemination with the wrong donor sperm or wrong egg	Ambulatory care
Death or serious disability associated with an electric shock...	Ambulatory/Inpatient/Skilled nursing
Any incident in which a line designated for oxygen or other gas...contains the wrong gas or is contaminated...	Inpatient/Ambulatory
Death or serious disability associated with a burn incurred from any source	Inpatient/Ambulatory/Skilled nursing
Death or serious disability associated with a fall...	Inpatient/Ambulatory/Skilled nursing
Death or serious disability associated with use of restraints or bedrails	All environments
Any instance of care ordered by or provided by someone impersonating a physician, nurse, pharmacist, or other licensed healthcare provider.	All environments
Abduction of a patient of any age	All environments

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Sexual assault on a patient within or on the grounds of a healthcare facility	All environments
Death or significant injury of a patient or staff member resulting from physical assault	All environments

The group also discussed the role of *patients and families* in identifying and reporting HACs and SREs. *Patients and families* are already involved in complaint investigations. Given that, at this point, states are not equipped to deal with an increased volume of complaints from patients and families, the group felt that healthcare facilities and insurance companies could play a larger cooperative role with patients and their families.

The group had several additional *suggestions for revisions to the SREs*.

- There should be a grouping of healthcare acquired infections which would encompass catheter-associated urinary tract infections (UTI), surgical-site infections (SSI), and ventilator-associated pneumonia, in order to make the SRE list less ambiguous.
- Fetal death should be included in the “maternal death or serious disability associated with labor or delivery in a low-risk pregnancy while being cared for in the healthcare facility” SRE, as this happens more frequently than maternal death.
 - In addition, the “low-risk” qualifier should be removed, as it excludes patients who do not receive care.
- Deep tissue injury should be reported when “stage 3 or 4 pressure ulcers acquired after admission to a healthcare facility” are reported, as the injury has occurred but has not yet broken the skin.
- Any patient injury associated with a burn should be reported, as the ultimate goal is for these injuries never to occur.

Overall, the group agreed that the NQF SREs were effective in recognizing system and process errors, leading to improved efforts in patient safety. Throughout the discussion, the representatives from each state acknowledged that, due to budgetary restrictions, the group as a whole needed to “do less with less;” consequently, their recommendations aimed to target areas in need of improvement while focusing less on the events that, though harmful, occur rarely and thus affect a small patient population.

b. Identifying a Cycle for Improvement

This group, chaired by Kaliyah Shaheen, MPH, from the Ohio Department of Health, included representatives from Kansas, Maine, Minnesota, Nevada, New Jersey, Pennsylvania, and Ohio.

This group was *tasked* with:

- identifying components (and order) of an effective cycle to reduce incidence of HACs/SREs;
- commenting on whether the cycle should be different for various environments of care;
- commenting on whether near misses and risk identification should receive the same consideration as actual events;
- discussing how the suggested cycle should inform evidence for use or creation of best practices;
- suggesting areas in which safety measures are most needed; and

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- commenting on the role of patients and families in reducing or eliminating HACs/SREs.

The group focused its efforts on *reviewing the cycle for improvement* shown in the chart in Appendix A, offering additions and modifications to the cycle based on participants' suggestions. The group emphasized that this cycle is not necessarily linear—breakdowns can occur, and every component interacts with other components. The group also stressed that the final stage, covering learning and events reduced, is the most important component of the process and should occur at all stages.

Revisions included additions to address the “Preconditions for Safety,” such as: education on best practices and systems necessary to identify events, clear understanding of expectations, leadership buy-in and commitment to safety, and an internal process for verifying that events are being recognized and reported.

Another substantial change made by the group was to split “Event Recognized and Analyzed” into two distinct stages to accurately capture the chain of events. Within these stages, group members identified the following elements:

- Event recognized
 - Notification process initiated (bottom-up or top-down) and
 - Analysis initiated.
- Event analyzed
 - Identify circumstances (where, when, how, etc.),
 - Establish timeline,
 - Perform thorough and credible root cause analysis (risk factors, contributing factors), and
 - Identify prior actions, e.g., risk assessment, preventive measures.

Near-misses were also an important topic of discussion for the group. There was agreement that they should be included in reporting, although the group was skeptical that institutions could handle reporting of near-misses. In addition, the group was undecided as to whether near-misses should receive the same consideration as actual events in the improvement cycle.

The group also discussed *culture*. A question was raised as to when individual accountability is appropriate within the cycle for improvement. The group recommended that there should be an “empowering culture,” stemming from senior management actions, that gives every person the opportunity to bring awareness to safety issues. Although implementation of these cultural changes derives from common state resources, it varies at the local level; nonetheless, it should be measured and continuously evaluated.

Overall, the group agreed on the need for *clarity on best practices*: what they are and how they should be implemented, which events are reportable, and which systems are needed to adequately monitor and report patient safety events.

c. Successes, Barriers, and Unintended Consequences of Patient Safety Event Reporting

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This group, chaired by Terry Whitson, JD, of the Indiana State Department of Health, included representatives from Colorado, Washington, Massachusetts, Pennsylvania, New York, Indiana, and Maryland.

This group was *tasked* with:

- identifying components of current patient safety event reporting strategies that have proven successful,
- identifying barriers to and unintended consequences of patient safety event reporting,
- discussing what the healthcare industry has learned that could enable improvement,
- suggesting strategies to enhance preparation of local and state reporting environments,
- suggesting strategies to incentivize reporting, and
- identifying future patient role in event reporting.

The group identified multiple strategies as factors to the *success* of current state-based reporting efforts: separation of duties (i.e. SREs are the responsibility of a state's department of health and root cause analyses (RCA) are the responsibility of a state's board of medicine); coordination with organizations like The Joint Commission to conduct RCA reviews; increased focus on and attention to patient safety and reporting through electronic dissemination of data; and increased reporting and awareness by all stakeholders to facilitate a culture of patient safety.

The group also identified a number of *barriers* resulting from reporting efforts including: lack of clear definitions and criteria for “events;” lack of resources for reporting and facilitating education around reporting; and lack of trust between states and healthcare facilities, often stemming from the balance between accountability and a punitive environment;

In addition, the *unintended consequences* of reporting were also discussed. The group stressed the importance of prioritization within reporting, as a singular focus on data can often distract from other issues and lead to the perception of lesser quality care. This perception can hamper morale, create distrust, and undermine a culture of safety, as singular events can create overwhelming negative attention on individual physicians and healthcare facilities.

The group's discussion of successes, barriers, and unintended consequences served as a foundation for a dialogue about potential strategies to enhance preparation of local and state environments for reporting. These strategies were based within the context of *lessons learned*, *strategies to enhance reporting environments*, and *strategies to incentivize reporting*.

Lessons learned from reporting stressed the positive impact of this practice. Participants noted that public reporting can improve patient safety if there is a timely and measured response to healthcare facilities about the results of reporting.

The discussion on *strategies to enhance reporting environments* acknowledged funding challenges, and encouraged taking advantage of educational opportunities that are not dependent on funding such as hospital rounds and legislative advocacy. A foundational aspect to this environment is consistent terminology and definitions for reporting, along with organization-wide adherence to the reporting process. Positive feedback, and avoiding negative re-

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enforcement of events, can help create a positive culture for healthcare facilities to report adverse events.

The group acknowledged that *strategies to incentivize reporting* are an integral part of creating this culture of patient safety reporting. Although punitive efforts such as fines for not reporting can be used, the panel focused on a more positive approach including: staff-level incentives for reporting, newsletters or other communications to provide positive feedback about reporting successes, and creating opportunities for states and facilities to encourage a safety culture (i.e., IHA Patient Safety Walk Rounds on all shifts).

Overall, the group expressed optimism about improvements in state-based reporting. The group felt that the collection of data, through clear and consistent terminology, could facilitate meaningful action to improve healthcare. Underlying this effort, however, must be communication with federal and state governments, as well as healthcare facilities and providers, so that a consistent commitment of resources is devoted to this effort.

d. The Elements of Meaningful Reporting

This group, chaired by Dana Selover, MD, MPH, of the Oregon Department of Human Services, included representatives from Massachusetts, Florida, Illinois, Utah, Kansas, Oregon, and Maryland.

This group was *tasked* with:

- identifying the most useful types of measures or measurements for HACs and SREs;
- for current performance reporting, identifying:
 - elements, aspects, and components applicable to patient safety,
 - elements that have no utility, and
 - missing elements.
- considering what is needed for evidence of solutions or strategies to facilitate improved reporting; and
- commenting on the role of patients and families.

The primary issue this group addressed was what a public reporting package for patient safety initiatives should look like. The group discussed eight different categories of HAC and SRE measurement: access, patient experience, population health, availability to use, structure, process, outcome, and composite measures that combine structure, process, and outcome. The results of this review are shown in the table below.

Types of HAC/SRE Measures or Measurement	Value	Rationale for Value Assigned
Access	Low/medium	Limited connections
Patient experience	Low	Subjectivity
Population health	Low	Too indirect

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Availability to use	Low	Too indirect
Structure	Moderate/high	At multiple levels
Process	High	Under individual control
Outcome	High	Process measure integration
Robust composite measures that combine structure/process/outcome	Very high	Relevance for episodes of care—better reflection of reality, also important for healthcare reform

The group stressed the importance of the structure, process, and outcome measures as tools that could be easily and effectively communicated to policymakers and the public. The last category, the composite measures, was added by the group as they felt that this quality comparison is a reflection of all three of these components.

In discussing the elements of reporting that apply to safety, the group stressed the importance of patient safety reporting standards from organizations such as NQF, The Joint Commission, state legislatures, and the Centers for Medicare & Medicaid Services. It is critical to use multiple sources, within a full feedback loop across all areas of care, to effectively capture patient safety events.

The role of patients and families remains a critical component for patient safety reporting. This engagement can be facilitated through:

- *providing English translations* of everything done within the care setting;
- *being more educated consumers*, and using that knowledge to change processes and expectations for care provided; and
- *driving the direction of patient safety reporting* through increased engagement.

5. Conclusion: Impressions and Learning

While state reporting programs are at different stages in their development, the participants coalesced around a range of ideas to improve the current state of public reporting:

Improved SREs – participants noted the widespread use of NQF’s SREs as a baseline to inform reporting policies. There was consensus that the SREs, which are currently amidst an NQF process of review and expansion, would benefit from modifications such as:

- Precise specifications and more definitions, to minimize the amount of interpretation that staff has to do around specific SREs;
- A thorough review, in terms of adding new SREs, categorizing SREs (as opposed to just maintaining a blanket list of 28), retiring SREs that are not commonly used, and adapting SREs to non-hospital environments of care. Participants noted that this review could capture more events, draw attention to other medical errors, and expand the cost savings from SREs.

Reconciliation and Alignment of Reporting Metrics – Incongruity was noted among SREs, HACs, Safe Practices, and other metrics to quantify medical errors (such as The Joint Commission’s Sentinel Events). Harmonization of these standards can facilitate improved reporting of adverse events.

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Expansion of Patient Safety Measures – As previously noted, NQF staff recently reviewed all endorsed measures, and classified 96 as patient safety measures. Despite efforts by NQF and others in the quality measurement field, there is a need for an increased number of patient safety measures to better understand and reduce the medical errors which occur.

Outcomes-Related Successes – There is a value in generating quantifiable data to better understand the successes within patient safety event reporting.

Focus on High Priority Areas for Reporting – There were repeated sentiments about the lack of funding for reporting. In absence of increased funding, states would benefit from, as one participant put it, “doing less with less”—a more focused, prioritized approach toward reporting.

The reporting of medical errors continues to expand. In 1998, New York became the first state to require reporting of adverse events to a state agency. As of October 2003, 21 states had mandatory event reporting systems for hospitals. Currently, 28 states (including the District of Columbia) maintain reporting requirements.

This meeting was the largest gathering ever held of those states, and a clear desire was expressed for continuing discussion on reporting issues from the perspective of stakeholder groups including patients, families, provider organizations, patient safety organizations and pharmaceutical companies. The information gained during the day will vigorously move the common agenda forward, and provide standards for patient safety event reporting.

Appendix A

Original “Cycle for Improvement” Chart

Awareness of Risks	Event Recognized and Analyzed	Event Classified	Practices Evaluated	Known Measures Applied	Learning Occurs Events Reduced
- Healthcare Failure Mode and Events Analysis - HACs and Reportable Events - CMS “Never Events”	- Root Cause Analysis - Event defined/delimited - Prior action; e.g., risk assessment / preventive measures - Circumstances - Risk factors - Contributing factors	- By type - For understanding - For pattern discovery - For learning	- Practice in place evaluated - Practice may: - remain unchanged - be improved - New practice may be identified & put into use	- Measurement occurs - Types of measures are selected - Comparison to Pre-Existing Information	- Learning should be internal and has potential to be external - Similar type events decline in number across the organization - potential to do so nationally

Revised “Cycle for Improvement” Chart

Preconditions for Safety	Awareness of Risks	Event Recognized	Event Analyzed	Pattern Analysis	Practices Evaluated	Process Monitoring	Learning Occurs Events Reduced
- Education on best practices and systems necessary to identify events - Clear understanding of expectations - Leadership buy-in/commitment to safety - Internal process for verifying that events are being recognized and reported	- Healthcare Failure Mode and Effects Analysis - HACs and Reportable Events - CMS “Never Events” - Near misses - Unsafe conditions	- Notification process initiated (bottom-up or top-down) - Initiate analysis	- Identify circumstances (where, when, how, etc.) - Timeline - Thorough and credible Root Cause Analysis (risk factors, contributing factors) - Prior action; e.g., risk assessment, preventive measures	- By type - For understanding - For pattern discovery - For learning - This activity should occur throughout the cycle.	- Practice in place evaluated - Practice may: - remain unchanged - be improved - New practice may be identified & put into use, new evidence base added - Implementation - Monitoring of practices/processes as needed - Continuous process (loop back through as needed)	- Measurement occurs - Types of measures are selected - Comparison with pre-existing information - Known measures applied - Alignment with national standards where possible	- Learning should be internal and has potential to be external - Similar type events decline in number across the organization — potential to do so nationally - This is the central component of the process.

Appendix B

NQF Endorsed Patient Safety Measures

(1) **Safety (S)**: Measures that can be categorized as patient safety measures

(1a) **Safe Practices (SP)**: Measures that correspond to one of the 34 Safe Practices for Better Healthcare

(2a) **Serious Reportable Events (SRE)**: Measures that correspond to one of the 28 Serious Reportable Events

(3) **Quality/Safety (Q/S)**: Quality measures that may also be relevant to patient safety or have notable safety implications

Subsequently, additional categories were added for **mortality** and **readmission** measures. These measures are denoted in the tables below by an asterisk (*). Mortality and readmission measures are not safety measures *per se*, but they measure outcomes that may be indicative of patient safety issues.

Full List of Safety Measures:

General Patient Safety

531	Patient safety for selected indicators	Number of potentially preventable adverse events	S	
532	Pediatric patient safety for selected indicators	Number of potentially preventable adverse events	S	

Medication Management

19	Documentation of medication list in the outpatient record	Percentage of patients having a medication list in the medical record.	S	SP
20	Documentation of allergies and adverse reactions in the outpatient record	Percentage of patients having documentation of allergies and adverse reactions in the medical record.	S	SP
22	Drugs to be avoided in the elderly: a. Patients who receive at least one drug to be avoided, b. Patients who receive at least two different drugs to be avoided.	Percentage of patients ages 65 years and older who received at least one drug to be avoided in the elderly in the measurement year. Percentage of patients 65 years of age and older who received at least two different drugs to be avoided in the elderly in the measurement year.	S	SP
419	Universal documentation and verification of current medications in the medical record	Percentage of patients aged 18 years and older with a list of current medications with dosages (includes prescription, over-the-counter, herbals, vitamin/mineral/dietary [nutritional] supplements) and verified with the patient or authorized representative documented by the provider.	S	SP
486	Adoption of medication e-prescribing	Documents whether provider has adopted a qualified e-Prescribing system and the extent of use in the ambulatory setting.	S	SP
487	Electronic Health Record (EHR) with electronic data interchange (EDI) prescribing used in encounters where a prescribing event	Of all patient encounters within the past month that used an EHR with EDI where a prescribing event occurred, how many used EDI for the prescribing event.	S	SP

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	occurred.			
504	Pediatric weight documented in kilograms	Percentage of emergency department patients < 18 years of age with a current weight in kilograms documented in the ED record	S	
554	Medication reconciliation post-discharge (MRP)	Percentage of discharges from January 1 to December 1 of the measurement year for patients 65 years of age and older for whom medications were reconciled on or within 30 days of discharge.	S	SP
555	Monthly INR monitoring for beneficiaries on warfarin	Average percentage of monthly intervals in which Part D beneficiaries with claims for warfarin do not receive an INR test during the measurement period	S	
556	INR for beneficiaries taking warfarin and interacting anti-infective medications	Percentage of episodes with an INR test performed 3 to 7 days after a newly-started interacting anti-infective medication for Part D beneficiaries receiving warfarin	S	

Falls

35	Fall risk management in older adults: (a) discussing fall risk; (b) managing fall risk	Percentage of patients aged 75 and older who reported that their doctor or other health provider talked with them about falling or problems with balance or walking Percentage of patients aged 75 and older who reported that their doctor or other health provider had done anything to help prevent falls or treat problems with balance or walking	S	SP, SRE
101	Falls: screening for fall risk	Percentage of patients aged 65 years and older who were screened for fall risk (2 or more falls in the past year or any fall with injury in the past year) at least once within 12 months	S	SP, SRE
141	Falls prevalence	Percentage of patients during a certain # of days who fell	S	SP, SRE
202	Falls with injury	Percentage of patients during a certain # of days who fell and acquired an injury	S	SP, SRE
266	Patient fall	Percentage of ASC admissions experiencing a fall in the ASC.	S	SP, SRE
537	Multifactor fall risk assessment conducted in patients 65 and Older	Percentage of home health episodes in which the patient was 65 or older and was assessed for risk of falls (using a standardized and validated multi-factor Fall Risk Assessment) at start or resumption of home health care	S	SP

Pressure Ulcers

181	Increase in number of pressure ulcers	Percentage of patients who had an increase in the number of pressure ulcers	S	SP, SRE
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187	Recently hospitalized residents with pressure ulcers (risk adjusted)	Recently hospitalized residents with pressure ulcers	S	SP, SRE
198	High-risk residents with pressure ulcers	Percentage of residents with a valid target assessment and one of the following inclusion criteria: 1. Impaired in mobility or transfer on the target assessment 2. Comatose on the target assessment 3. Suffer malnutrition on the target assessment who have pressure ulcers	S	SP, SRE
199	Average-risk residents with pressure ulcers	Percentage of residents with a valid target assessment and not qualifying as high risk with pressure ulcers	S	SP, SRE
201	Pressure ulcer prevalence	Percentage of patients with stage II or greater hospital-acquired pressure ulcers	S	SP, SRE
337	Decubitus ulcer (PDI 2)	Percentage of surgical and medical discharges under 18 years with ICD-9-CM code for decubitus ulcer in secondary diagnosis field.	S	SP, SRE
538	Pressure ulcer prevention included in plan of care	Percentage of patients with assessed risk for Pressure Ulcers whose physician-ordered plan of care includes intervention(s) to prevent them	S	SP
539	Pressure ulcer prevention plans implemented	Percentage of patients with assessed risk for Pressure Ulcers for whom interventions for pressure ulcer prevention were implemented during their episode of care	S	SP
540	Pressure ulcer risk assessment conducted	Percentage of patients who were assessed for risk of Pressure Ulcers at start/resumption of home health care	S	SP
553	Care for older adults – medication review (COA)	Percentage of adults 65 years and older who had a medication review	S	SP

Mental Health

104	Major depressive disorder: suicide risk assessment	Percentage of patients who had a suicide risk assessment completed at each visit	S	SRE
111	Bipolar disorder: appraisal for risk of suicide	Percentage of patients with bipolar disorder with evidence of an initial assessment that includes an appraisal for risk of suicide.	S	SRE

Surgery

115	Surgical re-exploration*	Percentage of patients undergoing isolated CABG who require a return to the operating room for bleeding/tamponade, graft occlusion, or other cardiac reason.	Q/S*	
267	Wrong site, wrong side, wrong patient, wrong procedure, wrong implant	Percentage of ASC admissions experiencing a wrong site, wrong side, wrong patient, wrong procedure, or wrong implant.	S	SP, SRE
362	Foreign body left after procedure (PDI 3)	Discharges with foreign body accidentally left in after procedure per 1,000 discharges	S	SRE
363	Foreign body left in during procedure (PSI 5)	Discharges with foreign body accidentally left in during procedure per 1,000 discharges	S	SRE
452	Surgery patients with perioperative temperature management	Surgery patients for whom either active warming was used intraoperatively for the purpose of maintaining normothermia or who had at least one body temperature equal to or greater than 96.8° F/36° C recorded within the 30 minutes immediately prior to or the 15 minutes immediately after Anesthesia End Time.	S	SP

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Hospital-Acquired Infection

304	Late sepsis or meningitis in very low birth weight (VLBW) neonates (risk-adjusted)	Percentage of infants born at the hospital, whose birth weight is between 401 and 1500 grams OR whose gestational age is between 22 weeks 0 days and 29 weeks 6 days, who have late sepsis or meningitis, with one or more of the following criteria: Bacterial Pathogen, Coagulase Negative Staphylococcus, Fungal Infection	S	
344	Accidental puncture or laceration (PDI 1) (risk adjusted)	Percentage of medical and surgical discharges under 18 years of age with ICD-9-CM code denoting accidental cut, puncture, perforation, or laceration in any secondary diagnosis code.	S	HAC (CMS)
431	Influenza vaccination coverage among healthcare personnel	Percentage of healthcare personnel (HCP) who receive the influenza vaccination.	S	SP
478	Nosocomial blood stream infections in neonates (NQI #3)	Percentage of qualifying neonates with selected bacterial blood stream infections	S	HAI
500	Severe sepsis and septic shock: management bundle	Initial steps in the management of the patient presenting with infection (severe sepsis or septic shock)	S	

Surgical Site Infection

125	Timing of antibiotic prophylaxis for cardiac surgery patients	Percentage of patients undergoing cardiac surgery who received prophylactic antibiotics within one hour prior to surgical incision (two hours if receiving vancomycin).	S	SSI
126	Selection of antibiotic prophylaxis for cardiac surgery patients	Percentage of patients undergoing cardiac surgery who received prophylactic antibiotics recommended for the operation.	S	SSI
128	Duration of prophylaxis for cardiac surgery patients	Percentage of patients undergoing cardiac surgery whose prophylactic antibiotics were discontinued within 24 hours after surgery end time.	S	SSI
130	Deep sternal wound infection rate	Percentage of patients undergoing isolated CABG who developed deep sternal wound infection within 30 days post-operatively.	S	SSI
264	Prophylactic intravenous (IV) antibiotic timing	Percentage of ASC patients who received IV antibiotics ordered for surgical site infection prophylaxis on time	S	SP, SSI
269	Timing of prophylactic antibiotics - administering physician	Percentage of surgical patients aged >18 years with indications for prophylactic parenteral antibiotics for whom administration of the antibiotic has been initiated within one hour (if vancomycin, two hours) prior to the surgical incision or start of procedure when no incision is required.	S	SP, SSI

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270	Timing of antibiotic prophylaxis: ordering physician	Percentage of surgical patients aged 18 years and older undergoing procedures with the indications for prophylactic parenteral antibiotics, who have an order for prophylactic antibiotic to be given within one hour (if fluoroquinolone or vancomycin, two hours), prior to the surgical incision (or start of procedure when no incision is required)	S	SP, SSI
299	Surgical site infection rate	Percentage of surgical site infections occurring within thirty days after the operative procedure if no implant is left in place, or within one year if an implant is in place in patients who had an NHSN operative procedure performed during a specified time period and the infection appears to be related to the operative procedure.	S	SP, SSI
300	Cardiac patients with controlled 6:00 a.m. postoperative serum glucose	Percentage of cardiac surgery patients with controlled 6:00 a.m. serum glucose (≤ 200 mg/dl) on postoperative day (POD) 1 and POD 2	S	SP, SSI
301	Surgery patients with appropriate hair removal	Percentage of surgery patients with surgical hair site removal with clippers or depilatory or no surgical site hair removal	S	SP, SSI
434	Deep vein thrombosis (DVT) prophylaxis	Patients with an ischemic stroke or a hemorrhagic stroke and who are non-ambulatory should start receiving DVT prophylaxis by end of hospital day two.	S	SP
450	Postoperative DVT or PE (PSI 12)	Percentage of adult surgical discharges with a secondary diagnosis code of deep vein thrombosis or pulmonary embolism	S	SP
472	Prophylactic antibiotic received within one hour prior to surgical incision or at the time of delivery – cesarean section.	Percentage of patients undergoing cesarean section who receive prophylactic antibiotics within one hour prior to surgical incision or at the time of delivery.	S	SP, SSI
473	Appropriate DVT prophylaxis in women undergoing cesarean delivery	Measure adherence to current ACOG, ACCP recommendations for use of DVT prophylaxis in women undergoing cesarean delivery	S	SP
527	Prophylactic antibiotic received within 1 hour prior to surgical incision SCIP-Inf-2	Surgical patients who received prophylactic antibiotics within 1 hour of surgical incision (2 hours if receiving vancomycin)	S	SP, SSI
528	Prophylactic antibiotic selection for surgical patients	Surgical patients who received recommended prophylactic antibiotics for specific surgical procedures	S	SP, SSI
529	Prophylactic antibiotics discontinued within 24 hours after surgery end time	Surgical patients whose prophylactic antibiotics were discontinued within 24 hours after surgery end time	S	SP, SSI
	Discontinuation of prophylactic antibiotics (non-cardiac procedures)	Percentage of non-cardiac surgical patients aged 18 years and older undergoing procedures with the indications for prophylactic antibiotics AND who received a prophylactic antibiotic, who have an order for discontinuation of prophylactic antibiotics within 24 hours of surgical end time	S	SP

Urinary Tract Infection

138	Urinary catheter-associated urinary tract infection for intensive care unit (ICU) patients	Percentage of intensive care unit patients with urinary catheter-associated urinary tract infections	S	HAI
196	Residents with a urinary tract infection	Percentage of residents on most recent assessment with a urinary tract infection	S	
453	Urinary catheter removed on Postoperative	Surgical patients with urinary catheter removed on Postoperative Day 1 or	S	SP

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	Day 1 (POD1) or Postoperative Day 2 (POD2) with day of surgery being day zero.	Postoperative Day 2 with day of surgery being day zero.		
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Central Line-Related

139	Central line catheter-associated blood stream infection rate for ICU and high-risk nursery (HRN) patients	Percentage of ICU and high-risk nursery patients, who over a certain number of days acquired a central line catheter-associated blood stream infections over a specified number of line-days	S	HAI
298	Central line bundle compliance	Percentage of intensive care patients with central lines for whom all elements of the central line bundle are documented and in place. The central line bundle elements include: •Hand hygiene •Maximal barrier precautions upon insertion •Chlorhexidine skin antisepsis •Optimal catheter site selection, with subclavian vein as the preferred site for non-tunneled catheters in patients 18 years and older •Daily review of line necessity with prompt removal of unnecessary lines	S	SP, SSI
464	Anesthesiology and critical care: prevention of catheter-related bloodstream infections (CRBSI) – central venous catheter (CVC) insertion protocol	Percentage of patients who undergo CVC insertion for whom CVC was inserted with all elements of maximal sterile barrier technique (cap AND mask AND sterile gown AND sterile gloves AND a large sterile sheet AND hand hygiene AND 2% chlorhexidine for cutaneous antisepsis) followed	S	SP

Ventilator-Related

140	Ventilator-associated pneumonia for ICU and high-risk nursery (HRN) patients	Percentage of ICU and HRN patients who over a certain number of days have ventilator-associated pneumonia	S	HAI
302	Ventilator bundle	Percentage of intensive care unit patients on mechanical ventilation at time of survey for whom all four elements of the ventilator bundle are documented and in place. The ventilator bundle elements are: •Head of bed (HOB) elevation 30 degrees or greater (unless medically contraindicated); noted on 2 different shifts within a 24 hour period •Daily “sedation interruption” and daily assessment of readiness to extubate; process includes interrupting sedation until patient follows commands and patient is assessed for discontinuation of mechanical ventilation; Parameters of discontinuation include: resolution of reason for intubation; inspired oxygen content roughly 40%; assessment of patient’s ability to defend airway after extubation due to heavy sedation; minute ventilation less than or equal to 15 liters/minute; and respiratory rate/tidal volume less than or equal to 105/min/L(RR/TV< 105) •SUD (peptic ulcer disease) prophylaxis	S	SP, SSI

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		•DVT (deep venous thrombosis) prophylaxis		
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Venous Thromboembolism (VTE)

217	Surgery Patients with Recommended Venous Thromboembolism (VTE) Prophylaxis Ordered	Percentage of surgery patients with recommended Venous Thromboembolism (VTE) Prophylaxis ordered during admission	S	SP
218	Surgery patients who received appropriate venous thromboembolism (VTE) prophylaxis within 24 hours prior to surgery to 24 hours after surgery end time	Percentage of surgery patients who received appropriate Venous Thromboembolism (VTE) Prophylaxis within 24 hours prior to surgery to 24 hours after surgery end time	S	SP
239	Venous thromboembolism (VTE) prophylaxis	Percentage of patients aged 18 years and older undergoing procedures for which VTE prophylaxis is indicated in all patients, who had an order for Low Molecular Weight Heparin (LMWH), Low-Dose Unfractionated Heparin (LDUH), adjusted-dose warfarin, fondaparinux or mechanical prophylaxis to be given within 24 hours prior to incision time or within 24 hours after surgery end time.	S	SP
371	Venous thromboembolism (VTE) prophylaxis	This measure assesses the number of patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given the day of or the day after hospital admission or surgery end date for surgeries that start the day of or the day after hospital admission.	S	SP
372	Intensive care unit (ICU) VTE prophylaxis	This measure assesses the number of patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given the day of or the day after the initial admission (or transfer) to the Intensive Care Unit (ICU) or surgery end date for surgeries that start the day of or the day after ICU admission (or transfer).	S	SP
375	VTE discharge instructions	This measure assesses the number of patients diagnosed with confirmed VTE that are discharged to home, to home with home health or home hospice on warfarin with written discharge instructions that address all four criteria: compliance issues, dietary advice, follow-up monitoring, and information about the potential for adverse drug reactions/interactions.	S	SP
376	Incidence of potentially preventable VTE	This measure assesses the number of patients diagnosed with confirmed VTE during hospitalization (not present on arrival) who did not receive VTE prophylaxis between hospital admission and the day before the VTE diagnostic testing order date.	S	SP
503	Anticoagulation for acute pulmonary embolus patients	Anticoagulation ordered for acute pulmonary embolus patients.	S	

Workforce

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190	Nurse staffing hours - 4 parts	Percentage of daily work in hours by the entire group of nurses or nursing assistants spent tending to residents	S	SP
204	Skill mix (Registered Nurse [RN], Licensed Vocational/Practical Nurse [LVN/LPN], unlicensed assistive personnel [UAP], and contract)	Percentage of patient care responsibilities covered in productive hours worked by nursing staff (RN, LPN, UAP, and contract)	S	SP
205	Nursing care hours per patient day (RN, LPN, and UAP)	Percentage of nursing care hours per patient day worked by nursing staff (RN, LPN, and UAP)	S	SP

Restraints

193	Residents who were physically restrained daily during the 7-day assessment period	Percentage of residents on most recent assessments who were physically restrained daily during the 7-day assessment period	S	SRE
203	Restraint prevalence (vest and limb only)	Percentage of patients with vest and/or limb restraint on the day of the study	S	SRE

Radiation

382	Oncology: radiation dose limits to normal tissues	Percentage of patients with a diagnosis of cancer receiving 3D conformal radiation therapy with documentation in medical record that normal tissue dose constraints were established within five treatment days for a minimum of one tissue	S	
510	Exposure time reported for procedures using fluoroscopy	Percentage of final reports for procedures using fluoroscopy that include documentation of radiation exposure or exposure time	S	

Miscellaneous

263	Patient burn	Percentage of ASC admissions experiencing a burn prior to discharge	S	SRE
303	Late sepsis or meningitis in neonates (risk-adjusted)	Percentage of infants born at the hospital, whose birth weight is between 401 and 1500 grams OR whose gestational age is between 22 weeks 0 days and 29 weeks 6 days with late sepsis or meningitis with one or more of the following criteria: Bacterial Pathogen, Coagulase Negative Staphylococcus, Fungal Infection	S	
345	Accidental puncture or laceration (PSI 15)	Percentage of medical and surgical discharges, 18 years and older, with ICD-9-CM code denoting accidental cut, puncture, perforation, or laceration in any secondary diagnosis field.	S	
346	Iatrogenic pneumothorax (PSI 6) (risk adjusted)	Percentage of medical and surgical discharges, 18 years and older, with ICD-9-CM code of iatrogenic pneumothorax in any secondary diagnosis field.	S	
348	Iatrogenic pneumothorax in non-neonates (PDI 5) (risk adjusted)	Percentage of medical and surgical discharges, age under 18 years, with ICD-9-CM code of iatrogenic pneumothorax in any secondary diagnosis field.	S	

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349	Transfusion reaction (PSI 16)	Percentage of medical and surgical discharges, 18 years and older, with ICD-9-CM code for transfusion reaction in any secondary diagnosis field.	S	
350	Transfusion reaction (PDI 13)	Percentage of medical and surgical discharges, under 18 years of age, with an ICD-9-CM code for transfusion reaction in any secondary diagnosis field.	S	
451	Call for a measure of glycemic control with intravenous insulin implementation	Intravenous insulin glycemic control protocol implemented for cardiac surgery patients with diabetes or hyperglycemia admitted into an intensive care unit	S	SP
488	Adoption of health information technology	Documents whether provider has adopted and is using health information technology. To qualify, the provider must have adopted and be using a certified/qualified electronic health record (EHR).	S	
491	Tracking of clinical results between visits	Documentation of the extent to which a provider uses a certified/qualified electronic health record (EHR) system to track pending laboratory tests, diagnostic studies (including common preventive screenings) or patient referrals. The Electronic Health Record includes provider reminders when clinical results are not received within a predefined timeframe.	S	SP
501	Confirmation of endotracheal tube placement	Any time an endotracheal tube is placed into an airway in the Emergency Department or an endotracheal tube is placed by an outside provider and that patient arrives already intubated (EMS or hospital transfer) or when an airway is placed after patients arrives at the ED there should be some method attempted to confirm ETT placement	S	
505	Thirty-day all-cause risk standardized readmission rate following acute myocardial infarction (AMI) hospitalization	Hospital-specific 30-day all-cause risk standardized readmission rate following hospitalization for AMI among Medicare beneficiaries aged 65 years or older at the time of index hospitalization.	S	
506	Thirty-day all-cause risk standardized readmission rate following pneumonia hospitalization.	Hospital-specific 30-day all-cause risk standardized readmission rate following hospitalization for pneumonia among Medicare beneficiaries aged 65 years or older at the time of index hospitalization	S	
526	Timely initiation of care	Percentage of patients with timely start or resumption of home health care	S	

Mortality*

119	Risk-adjusted operative mortality for CABG©	Percentage of patients undergoing isolated CABG who die during the hospitalization in which the CABG was performed or within 30 days of the procedure.	M	Mortality
120	Risk-adjusted operative mortality for aortic valve replacement (AVR)©	Percentage of patients undergoing AVR who die, including both 1) all deaths occurring during the hospitalization in which the [procedure] was performed, even if after 30 days, and 2) those deaths occurring after discharge from the hospital, but within 30 days of the procedure.	M	Mortality
121	Risk-adjusted operative mortality for mitral valve replacement/repair (MVR)	Percentage of patients undergoing MVR who die, including both 1) all deaths occurring during the hospitalization in which the [procedures] was performed, even if after 30 days, and 2) those deaths occurring after discharge from the hospital, but within 30 days of the procedure.	M	Mortality

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122	Risk-adjusted operative mortality MVR+CABG surgery	Percentage of patients undergoing MVR and CABG who die, including both 1) all deaths occurring during the hospitalization in which the [procedure] was performed, even if after 30 days, and 2) those deaths occurring after discharge from the hospital, but within 30 days of the procedure.	M	Mortality
123	Risk-adjusted operative mortality for AVR+CABG	Percentage of patients undergoing AVR and CABG who die, including both 1) all deaths occurring during the hospitalization in which the [procedure] was performed, even if after 30 days, and 2) those deaths occurring after discharge from the hospital, but within 30 days of the procedure.	M	Mortality
133	PCI mortality (risk-adjusted)©	Percentage of PCI admissions who expired	M	Mortality
161	AMI inpatient mortality (risk-adjusted)	Percentage of acute myocardial infarction (AMI) patients who expired during hospital stay.	M	Mortality
229	Heart failure 30-day mortality	Percentage of patients with AMI age 65 years and older, with hospital-specific, risk standardized, all-cause 30-day mortality (defined as death from any cause within 30 days after the index admission date) for patients discharged from the hospital with a principal diagnosis of HF.	M	Mortality
230	Acute myocardial infarction 30-day mortality	Percentage of patients with AMI age 65 years and older, with hospital-specific, risk standardized, all-cause 30-day mortality (defined as death from any cause within 30 days after the index admission date) for patients discharged from the hospital with a principal diagnosis of AMI.	M	Mortality
535	30-day all-cause risk-standardized mortality rate following percutaneous coronary intervention (PCI) for patients without ST segment elevation myocardial infarction (STEMI) and without cardiogenic shock	Hospital-specific 30-day all-cause risk-standardized mortality rate following Percutaneous Coronary Intervention (PCI) among patients aged 18 years or older without ST segment elevation myocardial infarction (STEMI) and without cardiogenic shock at the time of procedure.	M	Mortality
536	30-day all-cause risk-standardized mortality rate following percutaneous coronary intervention (PCI) for patients with ST segment elevation myocardial infarction (STEMI) or cardiogenic shock	Hospital-specific 30-day all-cause risk-standardized mortality rate following Percutaneous Coronary Intervention (PCI) among patients aged 18 years or older with ST segment elevation myocardial infarction (STEMI) or cardiogenic shock at the time of procedure.	M	Mortality
358	Congestive heart failure mortality (IQI 16) (risk adjusted)	Percentage of in-hospital death for discharges, 18 years and older, with ICD-9-CM principle diagnosis code of CHF.	M	Mortality
339	Pediatric heart surgery mortality (PDI 6) (risk adjusted)	Number of in-hospital deaths in patients undergoing surgery for congenital heart disease per 1000 patients.	M	Mortality
343	PICU standardized mortality ratio	The ratio of actual deaths over predicted deaths for PICU patients.	M	Mortality
231	Inpatient pneumonia mortality	Percentage of patients with ICD-9-CM code of pneumonia as the principal diagnosis who were cases of in-hospital death among discharges.	M	Mortality

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200	Death among surgical inpatients with treatable serious complications (failure to rescue)	Percentage of surgical inpatients with complications of care whose status is death	M	Mortality
347	Death in low mortality DRGs (PSI 2)	Percentage of in-hospital deaths, age 18 years and older, in DRGs with less than 0.5% mortality rate.	M	Mortality
351	Death among surgical inpatients with serious, treatable complications (PSI 4)	Percentage of in-hospital deaths for surgical discharges, age 18 years and older, with a principal procedure within 2 days of admission or elective, with enumerated complications of care listed in failure to rescue (FTR) definition (e.g., pneumonia, DVT/PE, sepsis, shock/cardiac arrest, or GI hemorrhage/acute ulcer).	M	Mortality
352	Failure to rescue in-hospital mortality (risk adjusted)	Percentage of patients who died with a complications in the hospital.	M	Mortality
353	Failure to rescue 30-Day mortality (risk adjusted)	Percentage of patients who died with a complication within 30 days from admission.	M	Mortality
354	Hip fracture mortality rate (IQI 19) (risk adjusted)	Percentage of in-hospital deaths for discharges, age 18 years and older, with ICD-9-CM principal diagnosis code of hip fracture.	M	Mortality
359	Abdominal aortic artery (AAA) repair mortality rate (IQI 11) (risk adjusted)	Number of deaths per 100 AAA repairs (risk adjusted).	M	Mortality
360	Esophageal resection mortality rate (IQI 8) (risk adjusted)	Number of deaths per 100 esophageal resections for cancer (risk adjusted).	M	Mortality
365	Pancreatic resection mortality rate (IQI 9) (risk adjusted)	Number of deaths per 100 pancreatic resections for cancer (risk adjusted).	M	Mortality
369	Dialysis facility risk-adjusted standardized mortality ratio (32) Level	Risk-adjusted standardized mortality ratio for dialysis facility patients.	M	Mortality
467	Acute stroke mortality rate (IQI 17)	Percentage of in-hospital deaths for discharges, 18 years and older, with ICD-9-CM principal diagnosis code of stroke.	M	Mortality
468	Pneumonia (PN) 30-day mortality rate	Hospital-specific, risk standardized, all-cause 30-day mortality (defined as death from any cause within 30 days after the index admission date) for patients discharged from the hospital with a principal diagnosis of pneumonia.	S	Mortality
530	Mortality for selected conditions	A composite measure of in-hospital mortality indicators for selected conditions.	M	Mortality
534	Hospital specific risk-adjusted measure of mortality or one or more major complications within 30 days of a lower extremity bypass (LEB).	Hospital specific risk-adjusted measure of mortality or one or more of the following major complications (cardiac arrest, myocardial infarction, CVA/stroke, on ventilator >48 hours, acute renal failure (requiring dialysis), bleeding/transfusions, graft/prosthesis/flap failure, septic shock, sepsis, and organ space surgical site infection), within 30 days of a lower extremity bypass (LEB) in patients age 16 and older.	M	Mortality

Readmissions*

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329	All-cause readmission index (risk adjusted)	Overall inpatient 30-day hospital readmission rate.	Q/S	
330	30-day all-cause risk standardized readmission rate following heart failure hospitalization (risk adjusted)	Hospital-specific, risk-standardized, 30-day all-cause readmission rates for Medicare fee-for-service patients discharged from the hospital with a principal diagnosis of heart failure (HF).	Q/S	
335	PICU unplanned readmission rate	The total number of patients requiring unscheduled readmission to the ICU within 24 hours of discharge or transfer.	Q/S	
336	Review of unplanned PICU readmissions	Periodic clinical review of unplanned readmissions to the PICU that occurred within 24 hours of discharge or transfer from the PICU.	Q/S	