# Patient Safety 2016

DRAFT REPORT FOR COMMENT

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# Patient Safety 2016

## DRAFT REPORT

# **Executive Summary**

Errors and adverse events associated with healthcare cause hundreds of thousands of preventable deaths each year in the United States. Patient safety-related events occur across healthcare settings from hospitals to clinics to nursing homes, and include healthcare-associated infections (HAIs), medication errors, falls, and other potentially avoidable occurrences. The societal costs are tremendous. These costs include higher use of hospital and other services, higher insurance premiums, higher taxes, lost work time and wages, and reduced quality of life.

The National Quality Forum's (NQF) portfolio of safety measures spans various topic areas. Public accountability and quality improvement programs use many measures from the NQF portfolio. However, significant gaps in measurement remain, and unsafe care is still common in the U.S. In recent years, safety measures have expanded beyond hospitals to ambulatory surgical centers, home health, outpatient, and other settings. Given recent increases in medical care delivered outside of hospitals, further expanding safety measures outside of hospitals is vital. In addition, the expansion of safety metrics across settings creates a need to harmonize the way care is measured.

The Patient Safety Standing Committee oversees the NQF patient safety measure portfolio, evaluates newly submitted and previously endorsed measures against NQF's measure evaluation criteria, identifies gaps in the portfolio, provides feedback on gaps in measurement, and conducts *ad hoc* reviews. On July 27-28, 2016, the Patient Safety Standing Committee evaluated 13 newly submitted measures and 2 measures undergoing maintenance review against NQF's standard evaluation criteria. Nine measures were recommended for endorsement; 1 eMeasure was recommended for trial use; consensus was not reached on 1 measure; and 2 measures were not recommended. The Committee deferred a decision on 1 measure to allow the developer to submit revisions and clarifications requested by the Committee; the Committee will reconsider that measure on a call following the public comment period for this report.

The Standing Committee recommended the following measures for endorsement:

- 0022: Use of High-Risk Medications in the Elderly (DAE) (National Committee on Quality Assurance)
- 2950: Use of Opioids from Multiple Providers in Persons without Cancer (Pharmacy Quality Alliance)
- 0450: Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate (PSI 12) (Agency for Healthcare Research and Quality)
- 2940: Use of Opioids at High Dosage in Persons without Cancer (Pharmacy Quality Alliance)
- 2951: Use of Opioids from Multiple Providers and at High Dosage in Persons without Cancer (Pharmacy Quality Alliance)

- 2988: Medication Reconciliation for Patients Receiving Care at Dialysis Facilities (Kidney Care Quality Alliance)
- 2993: Potentially Harmful Drug-Disease Interactions in the Elderly (DDE) (National Committee on Quality Assurance)
- 3001: PACE-Participant Fall Rate (Econometrica, Inc.)
- 3003: PACE-Participants Falls with Injury (Econometrica, Inc.)

2909: Perioperative Hemorrhage or Hematoma Rate (PSI 09) (Agency for Healthcare Research and Quality)The Committee recommended the following eMeasure for trial use approval:

• 2983: Potassium Sample Hemolysis in the Emergency Department (Cleveland Clinic)

The Committee did not reach consensus on the following measures:

• 3025: Ambulatory Breast Procedure Surgical Site Infection (SSI) Outcome Measure (Centers for Disease Control)

The Committee did not recommend the following measures for endorsement:

- 3005: Initial Risk Assessment for Immobility-Related Pressure Ulcer within 24 Hours of PICU Admission (Pediatric Consultants, LLC)
- 3006: Initial Baseline Screen of Nutritional Status for Every Patient within 24 Hours of PICU Admission (Pediatric Consultants, LLC)

The Committee deferred the review of the following measure:

• 3000: PACE-Acquired Pressure Ulcer-Injury Prevalence Rate (Econometrica, Inc.)

See brief summaries of the measures currently under review in the body of the report. <u>Appendix A</u> has detailed summaries of the Committee's discussion and ratings of the criteria for each measure.

# Introduction

The Institute of Medicine (IOM) defines patient safety as "freedom from accidental injury due to medical care or medical errors."<sup>1</sup> Patient safety problems cause hundreds of thousands of preventable deaths each year—a recent analysis estimated that up to 440,000 Americans die annually from medical errors in U.S. hospitals.<sup>2</sup> A 2010 study by the Department of Health and Human Services (HHS) Office of Inspector General (OIG) estimated that over a quarter of hospitalized Medicare beneficiaries experience an adverse event during their hospital stay; subsequent studies in other care settings estimated that the adverse event rates among Medicare patients in Skilled Nursing Facilities (SNFs) and rehabilitation hospitals are 33 percent and 29 percent, respectively.<sup>3,4,5</sup> Adverse events can take many forms, including healthcare-associated infections (HAI), medication errors, falls, pressure ulcers, and other potentially avoidable occurrences.

According to the Centers for Disease Control and Prevention (CDC), on any given day, about 1 out of every 20 hospitalized patients has an HAI, costing up to \$33 billion annually.<sup>6</sup> The Institute of Medicine report, *Preventing Medication Errors,* identified error rates across a variety of settings and types, estimating that about 400,000 preventable adverse drug events (ADEs) occur each year in U.S. hospitals, another 800,000 in long-term care, and more than 500,000 among Medicare patients in outpatient settings. The report also noted that costs associated with preventable medication errors have not been well researched but conservatively estimated that the annual cost to hospitals of the 400,000 ADEs was \$3.5 billion in 2006 dollars.<sup>7</sup>

HAIs and preventable medication errors, while occurring in relatively high numbers, are only 2 of the many types of patient safety-related events that occur in healthcare settings. The costs of these events are high and are passed on in a number of ways—higher insurance premiums, taxes, lost work time and wages, and lower quality of life, to name a few. Proactively addressing patient safety will protect patients from harm and lead to more affordable, effective, and equitable care.

NQF has a 15-year history of focusing on patient safety. Through various projects, NQF has previously endorsed over 100 consensus standards related to patient safety. In addition, NQF endorsed 34 safe practices in the 2010 update of the Safe Practices for Better Healthcare,<sup>8</sup> and 29 Serious Reportable Events (SRE).<sup>9</sup> The Safe Practices, SREs, and NQF-endorsed patient safety measures are important tools for tracking and improving patient safety performance in American healthcare. However, significant gaps remain in the measurement of patient safety. There is a need to further expand available patient safety measures across settings and ensure measures are harmonized.

# **Trends and Performance**

Through efforts like the Partnership for Patients and other national and regional initiatives, measurement activities have helped to drive substantial improvements in patient safety. According to the 2015 National Healthcare Quality and Disparities Report, there was an estimated 17 percent reduction in the overall rate of hospital-acquired conditions, including catheter-associated urinary tract infections, pressure ulcers, and adverse drug events, between 2010 and 2014.<sup>10</sup> In addition, efforts to reduce central line bloodstream infections (CLABSI) continue to progress; the high-profile Michigan

Health & Hospital Association (MHA) Keystone initiative has succeeded in achieving a sustained reduction in CLABSI rates for over 10 years.<sup>11</sup>

# NQF Portfolio of Performance Measures for Patient Safety

The Patient Safety Standing Committee (see <u>Appendix D</u>) oversees NQF's portfolio of safety-related measures, including measures of medication safety, healthcare-associated infection, falls, pressure ulcers, and other safety concerns (see <u>Appendix B</u>). This portfolio contains 52 measures: 17 process measures, 30 outcome and resource use measures, 2 structural measures, and 3 composite measures (see table below).

	Process	Outcome/Resource Use	Structure	Composite
Falls	2	4	-	-
Healthcare-				
Associated				
Infections (HAI)	1	7	-	-
Medication				
Safety	10	-	-	-
Mortality	-	4	-	-
Perioperative				
Safety	-	6	-	-
Pressure Ulcers	1	3	-	-
VTE	1	1	-	-
Workforce	-	-	2	1
General	2	5	-	2
TOTAL	17	30	2	3

#### Table 1. NQF Patient Safety Portfolio of Measures

Additional measures that could be considered related to patient safety are sometimes assigned to other projects. These include various diabetes assessment and screening measures (Health and Well-being/Behavioral Health project), eye care measures (HEENT project), ACEI/ARB medication measures (Cardiovascular project), complications and outcomes measures (Health and Well-being/Surgery projects), and 1 cost and resource use measure (Resource Use project).

# National Quality Strategy

NQF-endorsed measures for patient safety support the <u>National Quality Strategy (NQS)</u>. The NQS serves as the overarching framework for guiding and aligning public and private efforts across all levels (local, state, and national) to improve the quality of healthcare in the U.S.<sup>12</sup> The NQS establishes the "triple aim" of better care, affordable care, and healthy people/communities, focusing on 6 priorities to achieve those aims: *Safety, Person and Family Centered Care, Communication and Care Coordination, Effective Prevention and Treatment of Illness, Best Practices for Healthy Living,* and *Affordable Care.*<sup>13</sup>

As one of the 6 priorities of the NQS, safety is clearly an important focus for the nation's healthcare system. In pursuit of the NQS goal of improving patient safety, HHS formed the Partnership for Patients initiative in 2011.<sup>14</sup> The Partnership for Patients focuses on specific areas that closely align with topics addressed in NQF's patient safety measure portfolio, including adverse drug events, catheter-associated urinary tract infections (CAUTI), central line-associated bloodstream infections (CLABSI), falls, pressure ulcers, venous thromboembolism (VTE), and other subjects. The HHS Action Plan to Prevent Healthcare-Associated Infections is also a major nationwide safety initiative associated with the NQS goals.<sup>15</sup>

## Use of Measures in the Portfolio

NQF's patient safety portfolio includes some the longest-standing endorsed measures, several of which have been endorsed since 2004. Many of the measures in this portfolio are in use in at least one federal program, with some individual measures being used in up to 7 different programs. Federal programs using measures from NQF's patient safety portfolio include CMS's Physician Quality Reporting System (PQRS), Hospital Inpatient Quality Reporting (IQR), Hospital Value-Based Purchasing, and Hospital-Acquired Condition Reduction programs (for additional details, see <u>Appendix C)</u>.

# Improving NQF's Patient Safety Portfolio

During the meeting, the Committee discussed how to improve the patient safety portfolio, specifically describing gaps in measurement and where measure developers should consider focusing efforts in the future. During the Committee's discussion, it was noted that several of these topics are the focus of prior, active, and future NQF work. Suggestions from the Committee included:

- Interoperability of health information technology. Interoperability of health information technology was identified by the Committee as an area for future measure development, particularly given the ubiquity of electronic health records (EHRs) and the fact that many EHRs do not currently have the functionality to share patient information.<sup>16</sup> Poor interoperability of electronic medical records has been associated with increased rates of medical errors, duplication of services, and higher costs of care.<sup>17</sup> NQF recently completed a project that identified measure concepts for patient safety issues with health information technology, and the interoperability of health information technology was identified as a key concept for future measure development.
- <u>Transitions in care</u>. Transitions in care were identified as an important area for active measure development given their importance in the care continuum. Transitions in care refer to the movement of patients and their data between providers and settings.<sup>18</sup> Poor transitions in care are associated with worse outcomes, especially when communication problems occur, information is missing, or there is a misunderstanding of important patient information between providers. A recent report described studies on transitions in care, reporting that several interventions are associated with improved outcomes, particularly hospital readmissions.<sup>19</sup>
   Transitions in care have been the focus of several prior NQF projects and will likely be an area of focus in future work.

- <u>Safety in ambulatory surgical centers</u>. Several Committee members were concerned that there were insufficient measures of patient safety in ambulatory surgical centers. Ambulatory surgical centers (ASCs) are facilities that provide same day surgery, but do not perform procedures that require an overnight stay. While the patient safety <u>portfolio</u> does have several measures that specifically focus on ASCs, there was concern that measure gaps still remain in the area of wrong-site surgeries and post-operative infection rates.
- <u>Focus on episodes of care</u>. With the movement to new payment models that will pay for care across settings, several Committee members agreed that there should be a greater focus on quality measurement across episodes of care, specifically focusing on care not only within settings but also across settings.<sup>20</sup>
- <u>Medical errors</u>. The current patient safety portfolio has several metrics related to medical errors, particularly complications in hospitals. <u>PSI-90</u>, which is a composite measure of inpatient complications, is an example of one such measure. The Committee agreed that expanding the portfolio to include not just measures of complications but additional measures of medical errors would be useful to motivate organizations to reduce errors.
- <u>Accuracy of administrative data</u>. The accuracy of the data used to calculate a measure is a primary consideration when determining its validity. This can be of particular concern when measures are specified using administrative data which were not originally collected to assess quality. The Committee agreed that directly focusing metrics on the quality of administrative claims data may be a useful area for measurement, particularly if the quality of coding and billing could be compared to another validated standard. They agreed that measures in this area may focus efforts on improving the quality of claims data, and in doing so, increase the validity of measures across the NQF portfolio.
- <u>Greater focus by measure developers on use and usability, and linking process measures to outcomes</u>. The Committee expressed concerns about the use of measures in accountability and quality improvement programs. Developers should be more explicit in describing how measures will be used once endorsed. In addition, as part of maintenance review, the Committee agreed that it would be useful to assess how safety measures have affected patient safety outcomes, such as inpatient complication rates or mortality rates.
- Expanding focus on ambulatory, outpatient, and post-acute measures. Much of the current patient safety portfolio focuses on hospital-based measures. However, in recent years, there has been a push to move healthcare out of hospitals and into ambulatory care and outpatient settings. Given this trend, measure developers should focus their efforts on developing measures that assess the quality of care received in these settings. In addition, there is a need for more measures that apply to post-acute settings, particularly skilled nursing facilities, rehabilitation facilities, and home health.

- <u>Increasing workforce measures.</u> The patient safety portfolio currently includes several workforce measures; however, additional work is needed to expand the focus on workforce measures, particularly those that apply to nursing.
- <u>Critical portfolio assessment; patient safety balanced scorecard or "harm composite"</u>. Several Committee members were concerned that the number of measures in quality measurement programs was expanding and placing increasing burdens on providers and facilities. The Committee called for a careful review of the impact of specific measures, and an assessment of whether continuing to collect the large volume of measures is still useful in improving patient safety. To that end, the Committee described the utility of looking for opportunities to create composite measures using existing measures. In addition, the concept of a "harm composite" was introduced which may be easier for consumers to understand and may also focus quality improvement efforts.
- <u>Patient-reported outcomes</u>. The Committee agreed that additional patient-reported outcome measures would be useful in patient safety. Most of the patient safety measures are calculated using data from administrative data or electronic health records, and few focus on what patients report. Several ideas were raised, including an expansion of HCAHPS questions to include patient safety questions like how a provider or facility has responded to a medical error, whether there was communication and an apology, and whether the news was delivered in an empathic manner.
- More guidance on how to assess reliability and validity. There was concern by the Committee
  about insufficient guidance on how to assess measure reliability and validity. Specifically, some
  Committee members suggest that more guidance be provided on how to interpret testing
  results when assessing the positive predictive value of measures that rely on using claims data
  to identify complications.
- <u>Greater focus on risk stratification</u>. There was a concern that some measures could be improved through additional risk stratification, particularly by age.
- <u>Novel measure concepts</u>. The Committee suggested that developers should consider creating measures around the concept of "early mobilization" in hospitals, which has been associated with improved outcomes.<sup>21</sup> In addition, the Committee suggested that measures could be developed around the concept of safe patient handling, particularly having programs in place to reduce injuries in the workplace while moving patients.

# **Patient Safety Measure Evaluation**

On July 27-28, 2016, the Patient Safety Standing Committee evaluated 13 new measures and 2 measures undergoing maintenance review against <u>NQF's standard evaluation criteria</u>.

	Maintenance	New	Total
Measures under consideration	2	13	15
Measures recommended for endorsement	2	8	10
Measures approved for trial use	0	1	1
Measures where consensus is not yet reached	0	1	1
Measures not recommended for endorsement	0	2	2
Measure recommendation deferred	0	1	1
Reasons for not recommending	Importance – X Scientific Acceptability – X Overall – X Competing Measure – X	Importance – 1 Scientific Acceptability – 1 Overall – X Competing Measure – X	

**Table 2. Patient Safety Measure Evaluation Summary** 

# Evaluation of eMeasures for Trial Use

The Standing Committee also evaluated one new eMeasure (2983: Potassium Sample Hemolysis in the Emergency Department) for NQF Approval for Trial Use. NQF Approval for Trial Use is intended for eMeasures that are ready for implementation but cannot yet be adequately tested to meet NQF endorsement criteria. eMeasures may be evaluated and approved for trial use if they address important areas for performance measurement and quality improvement and are assessed to be technically acceptable for implementation. The goal for approving eMeasures for trial use is to promote implementation and the ability to conduct more robust reliability and validity testing that can take advantage of clinical data in EHRs. Trial use approval expires after 3 years; measures approved for trial use must be re-submitted with testing results to receive full endorsement.

# **Comments Received Prior to Committee Evaluation**

NQF solicits comments on endorsed measures on an ongoing basis through the <u>Quality Positioning</u> <u>System (QPS)</u>. In addition, NQF solicits comments prior to the evaluation of measures via an online tool located on the project webpage. For this evaluation cycle, the pre-evaluation comment period was open from July 11 to July 25, 2016, for 13 of the 15 measures under review.<sup>1</sup> A total of 10 preevaluation comments were received. Some did not pertain to the measures under review in this project and instead made general recommendations related to advance care planning. To view submitted premeeting comments, please see <u>Appendix G</u>. All submitted comments were provided to the Committee prior to its initial deliberations during the in-person meeting.

<sup>&</sup>lt;sup>1</sup>Comments on 2 eMeasures under consideration were not requested because measure submission materials could not be posted during this period.

## **Overarching Issues**

During the Standing Committee's discussion of the measures, several overarching issues emerged that were factored into the Committee's ratings and recommendations for multiple measures and are not repeated in detail with each individual measure.

## Linking Process with Outcome

During the discussion of the 2 measures that assess the quality of care in pediatric intensive care units (PICU), there were concerns that despite 2 actions that seemed like good clinical practice—assessing for nutritional status and pressure ulcers—the lack of a link to objective outcomes made it difficult for the Committee to support the measures. In addition, the Committee reiterated its preference for outcome measures over process measures, particularly in the patient safety portfolio.

## High-Quality Data Are Vital to Measure Patient Safety

The Committee repeatedly stressed the importance of having high-quality data to underlie measure concepts in the patient safety portfolio. Data quality is becoming increasingly important as providers and institutions are not only held accountable for quality through public reporting, but also through value-based payments. Committee members had concerns about whether measures generated with claims or billing date actually reflect clinical events and/or quality problems. Specifically, the Committee stressed the importance of high positive predictive value for events in claims, such as post-operative hematomas and venous thromboembolism. In response to these concerns, developers have continuously revised measure specifications to address this weakness. For example, AHRQ has been highly responsive to the Committee's concerns about measure specifications and about whether events identified as complications actually reflect real clinical events. The result has been improved measures of in-hospital complications with its PSI metrics. In addition, both the Committee and the developers agreed that as the healthcare system transitions from using ICD-9 codes to ICD-10 codes, measures should be specified and tested using ICD-10 data.

## Re-evaluation of the Portfolio for Impact on Patient Safety

The Committee agreed that it should ensure through the maintenance process and in cooperation with developers that measures are actually improving patient safety. This is particularly important as the number of quality measures in the patient safety portfolio, and the number of measures in general, increases because of the burden on providers to measure and report data.

## Harmonization of Clinical Definitions

Several of the measures in the patient safety portfolio capture similar clinical events, such as the incidence of pressure ulcers and falls, but there is wide variation in how these measures are specified. For example, the PACE pressure ulcer measures focus on ulcers of any stage, and also on stage 3 to 4, whereas other measures in the portfolio focus on stage 2, 3, and 4. Similarly, measures in the portfolio measure falls in different ways, with variable exclusions for different types of falls, such as those that are assisted (i.e., the patient did not actually strike the floor). Given the expanding number of quality measures that cover similar clinical topics and concepts, harmonization of clinical definitions is

important. It was suggested that measure developers carefully review definitions and specifications of related measures when developing and maintaining measures.

## Response to National Health Trends

Quality measurement can be instrumental in addressing national health trends and public health emergencies. The Committee was excited to see several measures in this cycle focused on ensuring that providers and organizations are held accountable for high use of opioid pain relievers, which have been tied to national trends in opioid overdoses. This was a great example of how quality measurement can respond to national health trends.

Opioid overuse and overdose are an epidemic in the United States. CMS has issued guidelines for monitoring overuse, which has led to reduction in the use of opioids in the Medicare population. Several measures under review assess the overprescription of opioid pain relievers, which may lead to overuse and overdose. These measures have the potential to increase accountability amongst providers.

## Summary of Measure Evaluation

The following brief summaries of the measure evaluation highlight the major issues that the Committee considered. Details of the Committee's discussion and ratings of the criteria for each measure appear in Appendix A.

#### Medication Safety

## 0022 Use of High-Risk Medications in the Elderly (DAE) (National Committee for Quality Assurance): Recommended

**Description**: There are two rates for this measure: The percentage of patients 65 years of age and older who received at least one high-risk medication. The percentage of patients 65 years of age and older who received at least two different high-risk medications. For both rates, a lower rate represents better performance; **Measure Type**: Process; **Level of Analysis**: Health Plan, Integrated Delivery System; **Setting of Care**: Ambulatory Care: Clinician Office/Clinic, Pharmacy; **Data Source**: Administrative claims, Electronic Clinical Data, Electronic Clinical Data: Pharmacy

This measure was initially endorsed in 2009 and re-endorsed in 2012. The measure assesses whether or not older adults were dispensed a high-risk mediation. The developers shared extensive evidence showing that certain medications can be harmful in older adults. Adverse drug events, falls, confusion, hospitalization, and even death can result. This measure is a part of the Healthcare Effectiveness Data and Information Set (HEDIS) and was recently updated to match the most recent American Geriatric Society Beers Criteria, which is a list of medications that are potentially inappropriate for older adults. The Committee expressed that this is an important safety issue, and noted that performance on the measure has improved since it was initially endorsed. The Committee discussed whether sociodemographic factors might have an impact on measure results. The developer noted that sociodemographic (SDS) factors are not reported at the health plan level, but suggested that it was looking for better ways to report this type of data in the future. The developer also noted that health plans may have some ways of reducing disparities within their control, and that adjusting measures for SDS factors could reduce the incentive of health plans to do so. One Committee member stated that it

will be important to review this measure for demographic issues, health disparities issues, and patient population issues when it comes back to the Committee for future evaluations. Overall, the Committee agreed that the measure meets the criteria for NQF endorsement.

# 2940 Use of Opioids at High Dosage in Persons without Cancer (Pharmacy Quality Alliance): Recommended

**Description**: The proportion (XX out of 1,000) of individuals without cancer receiving prescriptions for opioids with a daily dosage greater than 120mg morphine equivalent dose (MED) for 90 consecutive days or longer; **Measure Type**: Process ; **Level of Analysis**: Health Plan, Population: National, Population: State; **Setting of Care**: Ambulatory, skilled nursing facility, pharmacy; **Data Source**: Administrative claims

This new measure is 1 of 3 similar measures (i.e., 2940, 2950, and 2951). The developers provided a systematic review that is specific to the prescription of opioids at high doses and for a long duration. One Committee member questioned whether the 90-day duration was evidence-based. The developer shared that this duration is most commonly used in the literature, but there is no "right" number of days to define "long-term". There was also a question of why the measure isn't specified at the facility level. The developer noted that the measure is a part of CMS' patient safety reporting system; scores are provided to health plans and then relayed to prescribers. The developers plan to develop a patient/prescriber-level measure in the future. The Committee agreed that the performance gap is significant, given the current epidemic and the performance data provided by the developers. Some Committee members had concerns that trauma centers might be unfairly penalized by this measure because many patients seen in trauma centers require more than 2 prescriptions (even in a 30-day period). Most trauma centers provide care for low-income populations and have many disabled patients on longstanding opioids. There were also concerns about certain populations with chronic conditions and chronic pain syndromes related to their illness that were not excluded (e.g., HIV, sickle cell, and cystic fibrosis). The developer shared that its technical expert panel had an extensive discussion on which populations to exclude and decided to exclude only patients with cancer and/or patients in hospice care. . Overall, the Committee agreed that the measure meets the criteria for NQF endorsement.

# 2950 Use of Opioids from Multiple Providers in Persons without Cancer (Pharmacy Quality Alliance): Recommended

**Description**: The proportion (XX out of 1,000) of individuals without cancer receiving prescriptions for opioids from four (4) or more prescribers AND four (4) or more pharmacies; **Measure Type**: Process; **Level of Analysis**: Health Plan, Population: National, Population: State; **Setting of Care**: Ambulatory, skilled nursing facility, pharmacy **Data Source**: Administrative claims

This new measure is 1 of 3 similar measures (i.e., 2940, 2950, and 2951). The measure assesses the proportion of individuals without cancer receiving prescriptions from 4 or more prescribers and 4 or more pharmacies during the measurement period. The Committee agreed that there is moderate evidence suggesting that patients who access opioid medications from multiple prescribers or pharmacies have poorer outcomes (e.g., drug overdose and higher mortality). They also agreed that there is a performance gap in this area. One Committee member questioned whether patients with certain chronic diseases (e.g., sickle cell, HIV, and cystic fibrosis) should be included in the measure. As

with measure 2940, the Committee ultimately accepted the measure developer's decision to exclude only patients with cancer and/or patients in hospice care. Overall, the Committee agreed that the measure meets the criteria for NQF endorsement.

# 2951 Use of Opioids from Multiple Providers and at High Dosage in Persons without Cancer (Pharmacy Quality Alliance): Recommended

**Description**: The proportion (XX out of 1,000) of individuals without cancer receiving prescriptions for opioids with a daily dosage greater than 120mg morphine equivalent dose (MED) for 90 consecutive days or longer, AND who received opioid prescriptions from four (4) or more prescribers AND four (4) or more pharmacies; **Measure Type**: Process; **Level of Analysis**: Health Plan, Population: National, Population: State; **Setting of Care**: Ambulatory, skilled nursing facility, pharmacy; **Data Source**: Administrative claims

This new measure is 1 of 3 similar measures (i.e., 2940, 2950, and 2951). Whereas measure 2940 addresses the level at which patients are prescribed opioids at high doses, and measure 2950 addresses patients accessing opioids from multiple sources, this measure addresses patients who meet both of these scenarios. Several Committee members raised the concern that it may be better to assess the performance of measures 2940 and 2950 for a few more years before implementing this measure. The Committee members discussed the benefits and potential unintended consequences of implementing this measure and similar measures. They agreed that they want to see these kinds of measures used to allow providers to become more proactive in reducing the overuse of opioids rather than penalize providers. One Committee member suggested changing the name of the measure because it appears to reflect negatively on providers. While discussing the potential to improve performance, one Committee member raised the issue of the measure's identification of significant disparities between Low Income Subsidy (LIS) patients (62.41 per 1,000 patients) in Medicare and non-LIS patients (28.09 per 1,000). It was noted that there should be a moral obligation to further study a disparity when it is so significant. The Committee agreed that the reliability and validity of the measure are high. The developer and the Committee expressed that the measure could be highly useful for identifying patients and their prescribers that are, together, leading to high doses of medications for prolonged periods of time from multiple prescribers. They also agreed that the measure is feasible to implement because it is generated through claims data. Overall, the Committee agreed that the measure meets the criteria for NQF endorsement.

# 2993 Potentially Harmful Drug-Disease Interactions in the Elderly (National Committee for Quality Assurance): Recommended

**Description**: The percentage of patients 65 years of age and older who have evidence of an underlying disease, condition or health concern and who are dispensed an ambulatory prescription for a potentially harmful medication, concurrent with or after the diagnosis. Four rates are reported for this measure: Rate 1: The percentage of those with a history of falls that received a potentially harmful medication; Rate 2: The percentage of those with dementia that received a potentially harmful medication; Rate 3: The percentage of those with chronic kidney disease that received a potentially harmful medication; Rate 4: Total rate. A lower rate represents better performance for all rates; **Measure Type**: Process; **Level of Analysis**: Health Plan, Integrated Delivery System; **Setting of Care**: Ambulatory Care: Clinician

Office/Clinic; **Data Source**: Administrative Claims, Electronic Clinical Data, Electronic Clinical Data: Pharmacy.

This is a new measure that has specifications similar to measure 0022. It is also based on the American Geriatric Society's Beers Criteria and is a longstanding HEDIS measure. The main difference between this measure and 0022 is that it focuses on several specific conditions and medications that are known to be potentially harmful for people with those conditions. The developers highlighted that the rates for this measure show a large gap in performance and a need for improvement. A Committee member noted that the gap is more significant for people with a history of falls and fracture or dementia and less for those with chronic kidney disease. Several Committee members expressed concerns that the measure does not capture everyone who has a fall over the age of 65 although it is specified to capture the full group. There was also a concern about the ability of claims data to assess the history of falls for patients. One Committee member noted that the construct validity done at the performance score level was less than ideal but acceptable. Another Committee member stated that the feasibility was high as it is generated using administrative data and it is currently used in several programs. However, it was also stated that this measure would be more precise if it focused on more vulnerable populations as recommended by the United States Preventative Task Force. Overall, the Committee agreed that the measure meets the criteria for NQF endorsement.

# 2988 Medication Reconciliation for Patients Receiving Care at Dialysis Facilities (Kidney Care Quality Alliance): Recommended

**Description**: Percentage of patient-months for which medication reconciliation\* was performed and documented by an eligible professional. "Medication reconciliation" is defined as the process of creating the most accurate list of all home medications that the patient is taking, including name, indication, dosage, frequency, and route, by comparing the most recent medication list in the dialysis medical record to one or more external list(s) of medications obtained from a patient or caregiver (including patient-/caregiver-provided "brown bag" information), pharmacotherapy information network (e.g., Surescripts), hospital, or other provider. For the purposes of medication reconciliation, "eligible professional" is defined as: physician, RN, ARNP, PA, pharmacist, or pharmacy technician; **Measure Type**: Process; **Level of Analysis**: Facility; **Setting of Care**: Ambulatory care; **Data Source**: Electronic Clinical Data, Electronic Clinical Data: Electronic Health Record

This is a new measure. It assesses whether dialysis facilities are performing and documenting medication reconciliation for their patients. The developer noted that medication reconciliation—the identification of all medications that a patient is taking—is a critical safety issue for all patients, but particularly patients with end-stage renal disease (ESRD). Individuals with ESRD frequently require 10 or more medications and take an average of 17-25 doses per day. Prior to the Patient Safety July 27-28, 2016, meeting, the NQF Renal Standing Committee reviewed this measure to provide input to the Patient Safety Standing Committee. The Renal Standing Committee did not vote on the measure but provided comments to share with the Patient Safety Standing Committee. The Renal Standing Committee was very supportive of the measure, affirming the importance of medication reconciliation for ESRD patients. However, there were concerns that this measure only assesses attestation that medical reconciliation occurred, rather than actual medication reconciliation. The developer responded

by sharing that this measure is a first step and there are more comprehensive medication-review measures under development that would better assess actual reconciliation. One Committee member had concerns that the evidence submitted by the developer only supports medication reconciliation as performed by pharmacists, not other health professionals. The developer responded by noting that in the CMS Part D Medication Management Program, medication reconciliation can be performed by pharmacists or "other qualified professionals". Another Committee member (a pharmacist) supported the developer by stating that other professionals would be qualified to perform reconciliation because it doesn't involve making a value judgment. Overall, the Committee agreed that the measure meets the criteria for NQF endorsement.

#### Falls

#### 3001 PACE Participant Fall Rate (Econometrica, Inc): Recommended

**Description**: The quarterly incidence rate of falls amongst PACE participants per 1,000 participant days. **Measure Type**: Outcome; **Level of Analysis**: Facility; **Setting of Care**: PACE organizations; **Data Source**: Electronic Clinical Data: Electronic Health Record, Management Data, Paper Medical Records

This is a new measure focused on Programs of All-Inclusive Care for the Elderly (PACE), which provide comprehensive medical and social services to certain frail, community-dwelling elderly individuals. This measure assesses the rate of falls in PACE participants, represented as the number of falls per 1,000 participant days. The Committee recognized the importance of falls as a measure of quality, but was concerned that the evidence presented for this measure did not include the literature describing fall prevention in the home, instead focusing on fall prevention in hospitals. Notably, this measure includes not only falls where the patient reaches the floor but also falls that are assisted. Certain types of falls are excluded from this measure, including falling into a chair, toilet, or bed. Some members of the Committee noted that these falls were also clinically significant and suggested that they should be included. There was also some concern about the precision of measuring falls, particularly in the home setting where monitoring may vary, leading to concerns about under-reporting. The Committee discussed the impact of public reporting of this measure in the future and potential issues that may arise regarding its usability and feasibility in practice. The Committee stated that future efforts should focus on ensuring that fall definitions are harmonized across measures in the patient safety portfolio. Overall, the Committee agreed that the measure meets the criteria for NQF endorsement.

#### 3003 PACE Participant Falls with Injury Rate (Econometrica, Inc): Recommended

**Description**: The quarterly incidence rate of falls with injury amongst PACE participants per 1,000 participant days. **Measure Type**: Outcome **Level of Analysis**: Facility **Setting of Care**: PACE organizations **Data Source**: Electronic Clinical Data: Electronic Health Record, Management Data, Paper Medical Records

This new measure is similar to 3001, except that it counts only falls where an injury occurred. There was concern by the Committee that the literature provided by the developer solely includes evidence from inpatient studies, particularly when it comes to preventing falls with injury. In addition, there was concern that this measure overlaps with measure 3001 and other measures of falls with injury in the NQF portfolio. However, the Committee also noted the importance of measuring and publicly reporting

falls with injury, given the morbidity and mortality associated with falls. The Committee agreed that there remains an opportunity for improvement in this area, and was satisfied with the reliability and validity of the measure. Overall, the Committee agreed that the measure meets the criteria for NQF endorsement.

#### Pressure Ulcer

# **3000** PACE-Acquired Pressure Ulcer Injury Prevalence Rate (Econometrica, Inc): Measure Review Deferred

**Description**: Prevalence of PACE participants on the PACE organization census with pressure ulcers/injuries in a quarter, expressed as persons with 1 or more pressure ulcers/injuries divided by the number of participants on the PACE organization's census for at least one day during the quarter. This is a rate-based measure of skin breakdown due to pressure or pressure combined with sheer. The rate will be calculated quarterly. The target population is participants on a PACE organizations census for at least one day during the quarter. **Measure Type**: Outcome; **Level of Analysis**: Facility; **Setting of Care**: PACE organizations; **Data Source**: Electronic Clinical Data, Management Data, Paper Medical Records

This is a new measure. It assesses the prevalence of pressure ulcers for individuals who participate in PACE. There was some concern that a prevalence measure may be less useful than an incidence measure, as this measure is less about whether new ulcers were prevented—it assesses instead the frequency of ulcers in the population. However, the Committee agreed that there are ways to prevent pressure ulcers, as an outcome, in this population of frail older adults who are cared for in PACE organizations. Despite the opportunity for improvement in performance demonstrated by the developer, the Committee did not reach consensus on whether or not there is a performance gap. The Committee also had concerns with the validity of the assessment used to identify pressure ulcers, particularly because a high percentage of them were "unknown" states. The measure also appears to be less reliable for lower stage ulcers, particularly stage 1 and 2 than stage 3 and 4 (deeper ulcers). The Committee identified a number of issues with the specifications of the measure that were somewhat confusing, including the nature of the measure's exclusions. The developer informed the Committee that it would be feasible to make several clarifications and revisions during the public comment period to address Committee members' questions; the Committee therefore decided to defer a final recommendation on this measure until its post-comment conference call to allow the developer to make these revisions.

# **3005** Initial Risk Assessment for Immobility-Related Pressure Ulcer within 24 Hours of PICU Admission (Pediatric Consultants, LLC): Not Recommended

**Description**: This measure determines the proportion of Pediatric Intensive Care Unit (PICU) patients for whom an initial risk assessment for development of an immobility-related pressure ulcer is performed. The assessment is to be performed within the first 24 hours of admission to the PICU with the use of a standardized, validated pressure ulcer risk assessment tool designated as appropriate by the institution. The results of the assessment must be documented in the patient's chart upon completion. **Measure Type**: Process; **Level of Analysis**: Facility, Integrated Delivery System; **Setting of Care**: Pediatric Intensive Care Unit; **Data Source**: Electronic Clinical Data: Electronic Health Record, Other, Paper Medical Records

This is a new measure proposed by the developer as an eMeasure. It measures whether patients have been assessed for immobility-related pressure ulcers within 24 hours of admission to a PICU. The Committee expressed that, despite this being an important issue, there was insufficient evidence to demonstrate a link between the measured process (assessment) and the relevant outcome (reduced pressure ulcers). The developer did not provide a systematic review of the evidence, nor did it grade the evidence provided. However, the Committee noted that studies in pediatric populations are harder to conduct, and high-grade evidence is more difficult to attain than for other populations. One Committee member acknowledged that although the evidence provided is insufficient, there is a significant performance gap, and not conducting an assessment may expose children to risk. However, the Committee felt that the assessment required to implement this—the Braden Q scale—may overburden providers given that there are 28 questions. This may be a threat to the feasibility of implementing the measure. The Committee did not find that sufficient evidence had been provided, so the measure was not recommended for endorsement.

#### Healthcare Associated Infection

# **3025** Ambulatory Breast Procedure Surgical Site Infection (SSI) Outcome Measure (Centers for Disease Control and Prevention): Consensus Not Reached

**Description** This measure is for the risk-adjusted Standardized Infection Ratio (SIR) for all Surgical Site Infections (SSI) following breast procedures conducted at ambulatory surgery centers (ASCs) among adult patients (ages 18 - 108 years) and reported to the Centers for Disease Control and Prevention (CDC) National Healthcare Safety Network (NHSN). The measure compares the reported number of surgical site infections observed at an ASC with a predicted value based on nationally aggregated data. The measure was developed collaboratively by the CDC, the Ambulatory Surgery Center Quality Collaboration (ASC QC), and the Colorado Department of Public Health and Environment. CDC is the measure steward; **Measure Type**: Outcome; **Level of Analysis**: Facility; **Setting of Care**: Ambulatory; **Data Source**: Electronic Clinical Data, Electronic Clinical Data: Electronic Health Record, Paper Medical Records

This new measure was developed by the Ambulatory Surgery Center Quality Collaboration and the Colorado Department of Public Health, and is stewarded by the Centers for Disease Control and Prevention (CDC). It is a risk-adjusted measure that uses the CDC's standardized infection ratio (SIR) methodology to compare each Ambulatory Surgery Center's (ASC) observed SSI rate following breast cancer surgeries to the rate that would be expected for that facility given its size, patient mix, and other factors. The breast SSI rate was selected because breast procedures are the highest-volume surgical procedures reported to the CDC's National Healthcare Safety Network (NHSN). ASCs have been shown to have the highest risk of surgical site infection. One Committee member asked whether the actual rate of SSI would be higher than the observed mean reported rate of 0.25 given that is more difficult to identify superficial than deep organ infections. The developer shared that there are many reasons why the actual rate could be higher. One of the most challenging tasks of SSI surveillance is capturing them in outpatient settings. The developer conceded that the observed mean rate of 0.25 is probably a low estimate. One Committee member asked whether or not states mandate ASCs to report to the NHSN. The developer shared that only 6 states, including Colorado, have this kind of mandate. Several Committee members stated that the measure has great significance because the quality of care is

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largely unknown in many of the ASCs throughout the country. The Committee's vote on reliability did not meet the threshold for consensus; as a result, the Committee did not render a final recommendation on this measure and will revisit and revote on the reliability criterion after the public comment period.

### Deep Vein Thrombosis

# 0450 Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate (PSI 12) (Agency for Healthcare Research and Quality): Recommended

**Description**: Perioperative pulmonary embolism or proximal deep vein thrombosis (secondary diagnosis) per 1,000 surgical discharges for patients ages 18 years and older. Excludes cases with principal diagnosis for pulmonary embolism or proximal deep vein thrombosis; cases with secondary diagnosis for pulmonary embolism or proximal deep vein thrombosis present on admission; cases in which interruption of vena cava occurs before or on the same day as the first operating room procedure; and obstetric discharges. **Measure Type**: Outcome; **Level of Analysis**: Facility; **Setting of Care**: Hospital **Data Source**: Administrative Claims

This is a maintenance measure that assesses post-operative proximal deep-vein thrombosis or pulmonary emboli per 1,000 surgical discharges. The developer attempted to increase the precision of the measure by excluding less clinically significant deep vein thromboses, specifically those in the calf, and by updating the risk-adjustment methodology. Several Committee members questioned the developer's use of ICD-9 data rather than ICD-10; however, the developer noted that there was not enough history with ICD-10 to update the measure. In addition, NQF added that testing using ICD-10 codes is not required yet, but the developer is required to submit ICD-10 along with the ICD-9 codes used in the measure's specifications (which the developer provided). The Committee also expressed concern that the positive predictive value of the measure was less than 80%. Several Committee members questioned the measure's exclusions. For example, there are some hospitals that receive patients that already have an inferior vena cava filter in place prior to their arrival but would be inappropriately included in this measure. Despite these concerns, the Committee agreed that the measure is scientifically acceptable and raised no concerns about feasibility or usability. Overall, the Committee agreed that the measure meets the criteria for NQF endorsement.

#### Nutrition

# **3006** Initial Baseline Screen of Nutritional Status for Every Patient within 24 Hours of PICU Admission (Pediatric Consultants, LLC): Not Recommended

**Description**: The measure will determine the percentage of pediatric intensive care unit (PICU) patients for whom an initial nutritional status screening was performed. The screening is to be performed within the first 24 hours of admission to the PICU with the use of a standardized nutrition-screening tool. The results of the screening must be documented in the patient's chart upon completion. **Measure Type**: Process; **Level of Analysis**: Facility, Integrated Delivery System; **Setting of Care**: Pediatric Intensive Care Units; **Data Source**: Electronic Clinical Data: Electronic Health Record, Other

This is a new measure proposed by the developer as an eMeasure. This measure assesses whether there is an initial baseline screening for nutritional status when patients are admitted to the PICU. Similar to

the discussion on measure 3005, there was concern that while nutritional status assessment in PICUs may be important, there was insufficient evidence linking this process (screening) to the relevant outcome (nutritional status). In addition, there was concern that there is no commonly used tool across institutions, and no validated instrument for this process. There was also concern that this was already required to some degree by The Joint Commission. The Committee was not able to reach consensus on the adequacy of the evidence or the potential for performance improvement. The measure was only tested for reliability at the data element level in a single facility. The Committee did not find the reliability testing sufficient, so the measure was not recommended for endorsement.

# 2909 Perioperative Hemorrhage or Hematoma Rate (PSI 09) (Agency for Healthcare Research and Quality): Recommended

**Description**: Perioperative hemorrhage or hematoma cases involving a procedure to treat the hemorrhage or hematoma, following surgery per 1,000 surgical discharges for patients ages 18 years and older. Excludes cases with a diagnosis of coagulation disorder; cases with a principal diagnosis of perioperative hemorrhage or hematoma; cases with a secondary diagnosis of perioperative hemorrhage or hematoma; cases where the only operating room procedure is for treatment of perioperative hemorrhage or hematoma; obstetric cases. **Measure Type**: Outcome; **Level of Analysis**: Facility; **Setting of Care**: Hospital; **Data Source**: Administrative Claims

This is a maintenance measure. While the Committee agreed that there is evidence to demonstrate that one or more actions can affect this outcome, there was concern about balancing the risk of post-operative hemorrhage and the risk of other outcomes. For example, in acute myocardial infarction, the use of medications such as clopidogrel may be indicated. The developer clarified the exclusions by noting that the measure does exclude people with congenital clotting problems—such as factor deficiencies—but does not exclude people on medications that affect clotting. Despite these concerns, the Committee agreed that the evidence provided was adequate. Overall, the Committee agreed that the the measure meets the criteria for NQF endorsement.

# 2983 Potassium Sample Hemolysis in the Emergency Department (Cleveland Clinic): Approved for Trial Use

**Description**: Percentage of laboratory potassium samples drawn in the emergency department (ED) with hemolysis; **Measure Type**: Intermediate Clinical Outcome; **Level of Analysis**: Facility; **Setting of Care**: Emergency Department; **Data Source**: Electronic Clinical Data: Laboratory

This is a new eMeasure that was submitted for trial use approval. The measure assesses the percentage of potassium samples drawn in the emergency department that are hemolyzed. The developer found a significant variation in performance within the literature (from 6.8 to 30%) and within the Cleveland Clinic (13%), where it was tested. Hemolyzed blood samples cause interference in over 39 lab tests. When blood samples are drawn poorly, it results in a potential for misdiagnosis, delays in the initiation of care, and prolonged emergency department stays and wait times. The developer noted that reducing hemolyzed lab samples is a priority for the Center for Disease Control and Prevention. There is wide variation in practice, and hemolysis is very preventable because there are many techniques in the literature that demonstrate best practices. One Committee member questioned the potential harm to patients. The developer added that when a hemolyzed sample reports a potassium level of 6 or 6.5, a

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physician would likely have to take a number of immediate steps until another sample is drawn and analyzed to confirm whether or not the level is accurate. For example, a physician may have conducted an electrocardiogram and begin treatment with insulin and glucose which have repercussions. A physician can also begin treating with other medications like Kayexalate which can cause serious diarrhea. However, the main cause of harm to patients is the delay in care. One Committee member raised the question of how it is determined whether or not a sample has been hemolyzed. The developer responded that the lab provides a hemolysis index. If the index score is between 30 and 80%, the sample is not compromised due to hemolysis. If the index score is between 80 and 300, it is moderately hemolyzed, and if the score is over 300, there is no result (grossly hemolyzed). This measure describes a hemolyzed sample as a sample with an index score above 80. Overall, the Committee agreed that the eMeasure meets the NQF criteria for trial use approval.

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# **Appendix A: Details of Measure Evaluation**

## Rating Scale: H=High; M=Moderate; L=Low; I=Insufficient; NA=Not Applicable; Y=Yes; N=No

## Measures Recommended

### 0022: Use of High-Risk Medications in the Elderly (DAE)

#### Submission | Specifications

**Description**: There are two rates for this measure: the percentage of patients 65 years of age and older who received at least one high-risk medication. The percentage of patients 65 years of age and older who received at least two prescriptions for the same high-risk medication. For both rates a lower rate represents better performance.

**Numerator Statement**: Numerator 1: Patients who received at least one high-risk medication during the measurement year. Numerator 2: Patients who received at least two prescriptions for the same high-risk medication during the measurement year.

**Denominator Statement**: All patients 65 years of age and older.

Exclusions: Patients who were enrolled in hospice care at any time during the measurement year.

#### Adjustment/Stratification: N/A

Level of Analysis: Health Plan, Integrated Delivery System

Setting of Care: Ambulatory Care: Clinician Office/Clinic, Pharmacy

Type of Measure: Process

Data Source: Administrative claims, Electronic Clinical Data, Electronic Clinical Data: Pharmacy

Measure Steward: National Committee for Quality Assurance

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#### 1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: H-X; M-X; L-X; 1-X; 1b. Performance Gap: H-12; M-7; L-0; I-0;

#### Rationale:

- The Committee chose not to vote on the evidence because there had not been any significant changes in the evidence since the last time the measure was endorsed. The measure is based on the American Geriatrics Society's 2015 Beers Criteria.
- The average performance for the first rate (at least one high-risk medication) has decreased from 21.0% in 2012 to 13.2%.
- The average performance for the second rate (dispensing two different high-risk medications) has decreased from 6.5% in 2012 to 2.1% in 2014. In 2014, for both populations the eligible population was 22,043.
- The gap in performance seems to be closing over time but there is still room for improvement.

## 2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: H-15; M-4; L-0; I-0 2b. Validity: H-X; M-X; L-X; I-X

Rationale:

- The Committee reviewed the revised measure specifications which now include multiple prescribing events for the same high-risk medication. The measures reliability was tested at the measure score level with a signal to noise analysis using a beta binomial method.
- Using 2014 HEDIS Health Plan performance data, reliability for this measure was calculated as 0.99814 for receipt of one or more high-risk prescriptions and 0.99594 for receipt of two or more high-risk prescriptions

## 0022: Use of High-Risk Medications in the Elderly (DAE)

#### 3. Feasibility: H-19; M-0; L-0; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c Susceptibility to inaccuracies/ unintended consequences identified 3d. Data collection strategy can be implemented) Rationale:

- The required data elements are routinely generated and used during care delivery.
- All data elements are in defined fields in a combination of electronic sources.

#### 4. Usability and Use: H-9; M-11; L-0; I-0

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

Rationale:

- The measure is currently used in several accountability programs. There were no identified unintended consequences for this measure during testing or since implementation.
- If this measure were to be implemented poorly, there is concern that it could lead to reduced access to medications.

#### 5. Related and Competing Measures

• Measure 2993 and NQF 0022 have a similar focus (measuring potentially inappropriate medication use in the elderly) and reporting level (health plan), however they have different target populations. Measure 2993 targets patients with a specific condition or disease that can experience adverse effects when combined with certain medications that are recommended to be avoided for that condition. This measure (NQF 0022) targets a larger population of all older adults and assesses use of high-risk medications that have been recommended to be avoided in all older adults.

Steering Committee Recommendation for Endorsement: Y-19; N-0

### 6. Public and Member Comment

#### 7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X

8. Board of Directors Vote: Y-X; N-X

9. Appeals

## 0450: Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate (PSI 12)

#### Submission | Specifications

**Description**: Perioperative pulmonary embolism or proximal deep vein thrombosis (secondary diagnosis) per 1,000 surgical discharges for patients ages 18 years and older. Excludes cases with principal diagnosis for pulmonary embolism or proximal deep vein thrombosis; cases with secondary diagnosis for pulmonary embolism or proximal deep vein thrombosis present on admission; cases in which interruption of vena cava occurs before or on the same day as the first operating room procedure; and obstetric discharges.

**Numerator Statement**: Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with a secondary ICD-9-CM or ICD-10-CM diagnosis code for proximal deep vein thrombosis or a secondary ICD-9-CM or ICD-10-CM diagnosis code for pulmonary embolism.

**Denominator Statement**: Surgical discharges, for patients ages 18 years and older, with any-listed ICD-9-CM or ICD-10-PCS procedure codes for an operating room procedure. Surgical discharges are defined by specific MS-DRG codes.

Exclusions:

• with a principal ICD-9-CM or ICD-10-CM diagnosis code (or secondary diagnosis present on admission) for proximal deep vein thrombosis

0450	: Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate (PSI 12)
	• with a principal ICD-9-CM or ICD-10-CM diagnosis code (or secondary diagnosis present on admission) for pulmonary embolism
	• where a procedure for interruption of vena cava occurs before or on the same day as the first operating room procedure*
	• any-listed ICD-9-CM or ICD-10-PCS procedure code for extracorporeal membrane oxygenation (ECMO)
	• any-listed ICD-9-CM or ICD-10-CM diagnosis code for acute brain or spinal injury present on admission
	MDC 14 (pregnancy, childbirth, and puerperium)     with missing condex (SEX-missing) are (ACE-missing) guarter (DOTR-missing) was (VEAR-missing)
	<ul> <li>with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), or principal diagnosis (DX1=missing)</li> </ul>
	y of procedure is not available in the input data file, the rate may be slightly lower than if the information vailable
Adjus	tment/Stratification: N/A
Level	of Analysis: Facility
Settir	ng of Care: Hospital/Acute Care Facility
	of Measure: Process
Data	Source: Administrative claims
Meas	ure Steward: Agency for Healthcare Research and Quality
	RING COMMITTEE MEETING 07/27-07/28/2016
	portance to Measure and Report: The measure meets the Importance criteria
	vidence, 1b. Performance Gap)
•	vidence: H-X; M-X; L-X; I-X; 1b. Performance Gap: H-7; M-11; L-0; I-0;
Ratio	·
•	
•	the evidence since the measure was last endorsed.
•	
	perioperative pulmonary embolism and deep vein thrombosis.
•	The developer provided a summary of performance data from 2011-2013 populated from the Healthcare Cost and Utilization Project database from a very large sample. The mean rate was 3.437 per 1000 surgical discharges in for 2011-2012 and 3.620 per 1000 surgical discharges in 2012-2013.
2 Sci	entific Acceptability of Measure Properties: <u>The measure meets the Scientific Acceptability criteria</u>
	eliability - precise specifications, testing; 2b. Validity - testing, threats to validity)
-	eliability: <b>2-H; 14-M; 2-L; 0-I</b> 2b. Validity: <b>3-H; 13-M; 1-L; 0-I</b>
Ratio	
•	The developer in this version of the measure had further refined the measure to exclude less clinical significant deep vein thrombosis, specifically those in the calf and had also updated the risk-adjustment methodology.
•	
	result of 0.74, which was deemed adequate by the Committee.
•	
-	PPVs in the 40% range, however, studies that were more recent had much higher rates (80-90%).
•	Given the variation in PPV, the committee mentioned that some hospitals have the resources to adjudicate reporting of some of these measures and that some quality therefore, may be adjudication rather than actual variation in important patient outcomes.
•	
•	however, the developer mentioned that there was not enough history with ICD-10 to update the PSI
	measures. In addition, it was mentioned by NQF staff that other metrics had not been held to similar

## 0450: Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate (PSI 12)

• There was also some concern by the committee about bias in terms of the exclusions for the metrics, specifically if there is an IVC filter in place. In some hospitals this may occur prior to the patient's arrival rather than during the hospitalization so there was concern that some patients may be inappropriately included.

#### 3. Feasibility: 13-H; M-4; L-0; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/ unintended consequences identified 3d. Data collection strategy can be implemented)

#### Rationale:

- This measure is generated or collected by someone other than person obtaining original information (e.g., DRG, ICD-9 codes on claims)
- The required data elements are largely available in electronic health records or other electronic sources or existing electronic sources, a credible, near-term path to electronic collection is specified.
- ALL data elements are in defined fields in electronic claims.
- The indicator is based on readily available administrative billing and claims data.
- This version of the indicator requires present-on-admission (POA) data for risk-adjustment and for specification of the numerator and denominator.
- In 2007 POA indicators were added as data elements to the uniform bill form. A payment penalty was initiated on hospitals who did not include POA status on Medicare records beginning October 1, 2008.
- The developers' QI software has been publicly available at no cost since 2001; Users have over ten years of experience using the developers' QI software in SAS and Windows.
- There are no fees associated with this measure. Software is freely available from the developers Quality Indicators website.
- There were no concerns about the feasibility of this measure.

#### 4. Usability and Use: 12-H; 5-M; 0-L; 0-I

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

Rationale:

• There were no concerns about the usability and use of this measure. The measure is used in several accountability programs.

#### 5. Related and Competing Measures

• This measure directly competes with [NQF # and Title] [Description]. [Summarize the related/competing measure issue here, and the disposition of it]

#### OR

• No related or competing measures noted.

Steering Committee Recommendation for Endorsement: 17-Y; 0-N

## 6. Public and Member Comment

## 7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X

## 8. Board of Directors Vote: Y-X; N-X

9. Appeals

#### 2909: Perioperative Hemorrhage or Hematoma Rate

Submission | Specifications

## 2909: Perioperative Hemorrhage or Hematoma Rate

**Description**: Perioperative hemorrhage or hematoma cases involving a procedure to treat the hemorrhage or hematoma, following surgery per 1,000 surgical discharges for patients ages 18 years and older. Excludes cases with a diagnosis of coagulation disorder; cases with a principal diagnosis of perioperative hemorrhage or hematoma; cases with a secondary diagnosis of perioperative hemorrhage or hematoma present on admission; cases where the only operating room procedure is for treatment of perioperative hemorrhage or hematoma; obstetric cases.

**Numerator Statement**: Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with any secondary ICD-9-CM or ICD-10-CM diagnosis codes for perioperative hemorrhage or hematoma and anylisted ICD-9-CM or ICD-10-PCS procedure codes for treatment of hemorrhage or hematoma

Note that the ICD-10-CM specification is limited to postoperative hemorrhage or hematoma, whereas the ICD-9-CM specification captures both intraoperative and postoperative hemorrhage or hematoma (due to diagnosis codes that are less specific).

**Denominator Statement**: Surgical discharges, for patients ages 18 years and older, with any-listed ICD-9-CM or ICD-10-PCS procedure codes for an operating room procedure. Surgical discharges are defined by specific MS-DRG codes.

Exclusions:

- with a principal ICD-9-CM or ICD-10-CM diagnosis code (or secondary diagnosis present on admission (1) for perioperative hemorrhage or postoperative hematoma
- where the only operating room procedure is for treatment of perioperative hemorrhage or hematoma
- with any secondary ICD-9-CM or ICD-10-CM diagnosis codes for perioperative hemorrhage or hematoma and any-listed ICD-9-CM or ICD-10-PCS procedure codes for treatment of perioperative hemorrhage or hematoma occurring before the first operating room procedure (2)
- with any-listed ICD-9-CM or ICD-10-CM diagnosis codes for coagulation disorder
- MDC 14 (pregnancy, childbirth, and puerperium)
- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), or principal diagnosis (DX1=missing)

1. Only for cases that otherwise qualify for the numerator.

2. If day of procedure is not available in the input data file, the rate may be slightly lower than if the information were available.

Adjustment/Stratification: N/A

Level of Analysis: Facility

Setting of Care: Hospital/Acute Care Facility

Type of Measure: Outcome

Data Source: Administrative claims

**Measure Steward**: Agency for Healthcare Research and Quality

#### STEERING COMMITTEE MEETING 07/27-07/28/2016

#### 1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: 16-Y; 0-N; 1b. Performance Gap: 6-H; 9-M; 0-L; 0-I

Rationale:

- The developers conducted an environmental scan to identify studies relevant to the outcome of interest. Several studies have examined the scientific acceptability of the PSI09 measure. These studies have demonstrated moderate to high positive and negative predicative values. They also present results from several studies that demonstrate that perioperative hemorrhage is preventable.
- Between 2011-2012 the mean rate per 1000 surgical discharges was 3.432 (n=11,0043,343) and between 2012-2013 the mean rate was 3.613 per 1000 surgical discharges (n=10,780,407).

## **2909: Perioperative Hemorrhage or Hematoma Rate**

- While the committee agreed that there was evidence to demonstrate that one or more actions could impact this outcome measure, there was concern about the balance of post-operative hemorrhage and risk of other outcomes, particularly where there may be a balance such as in acute myocardial infarction where the use of medications such as clopidogrel may be indicated. The developer did describe that the measure does exclude people with congenital clotting problems such as factor deficiencies that it does not exclude people on medications that impact clotting. Despite these concerns, the committee passed the measure on evidence.
- The committee agreed that there were ways that providers could impact this outcome metric.

#### 2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

#### 2a. Reliability: 6-H; 9-M; 0-L;0-I 2b. Validity: 5-H; 10-M; 0-L; 0-I

Rationale:

- The committee agreed that the specifications for this metric were clear.
- A signal to noise analysis was performed with an overall result of 0.63, which was found to be adequate by the committee.
- The developer conducted face validity assessments with an expert panel who agreed this was a valid metric of quality.
- The committee did not have concerns about the scientific acceptability of this metric.

#### 3. Feasibility: 12-H; 3-M; 0-L; 0-I

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/ unintended consequences identified 3d. Data collection strategy can be implemented)

Rationale:

- This measure is generated or collected by someone other than person obtaining original information (e.g., DRG, ICD-9 codes on claims)
- ALL data elements are in defined fields in electronic claims.
- Because the indicator is based on readily available administrative billing and claims data, feasibility is not an issue.
- This version of the indicator requires present-on-admission (POA) data for risk-adjustment and for specification of the numerator and denominator.
- POA indicators were added as data elements to the uniform bill form (UB-04) effective October 1, 2007. Hospitals incurred a payment penalty for not including POA status on Medicare records beginning October 1, 2008. Each of the secondary diagnoses in a discharge record can be flagged as "present at the time the order for inpatient admission occurs" or not.
- The committee was not concerned about the feasibility of this measure.

#### 4. Usability and Use: 13-H; 2-M; 0-L; 0-I

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

Rationale:

• There were no concerns about the usability and use of this measure. The measure is used in several accountability programs.

#### 5. Related and Competing Measures

• There are no related or competing measures.

Steering Committee Recommendation for Endorsement: 15-Y; 0-N

6. Public and Member Comment

#### 7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X

8. Board of Directors Vote: Y-X; N-X

## 2909: Perioperative Hemorrhage or Hematoma Rate

#### 9. Appeals

### 2940: Use of Opioids at high Dosage in Persons without Cancer

#### Submission | Specifications

**Description**: The proportion (XX out of 1,000) of individuals without cancer receiving prescriptions for opioids with a daily dosage greater than 120mg morphine equivalent dose (MED) for 90 consecutive days or longer.

#### Numerator Statement:

Any member in the denominator with opioid prescription claims where the MED is greater than 120mg for 90 consecutive days or longer\* MED calculation is included in S.6 Numerator Details

**Denominator Statement**: Any member with two or more prescription claims for opioids filled on at least two separate days, for which the sum of the days supply is greater than or equal to 15.

**Exclusions**: Any member with a diagnosis for Cancer or a Prescription Drug Hierarchical Condition Category (RxHCC) 8, 9, 10, or 11 for Payment Year 2015; or RxHCC 15, 16, 17, 18, or 19 for Payment Year 2016 (see list in S.11 and S.2b); or a hospice indicator (Medicare Part D) from the enrollment database.

#### Adjustment/Stratification: N/A

Level of Analysis: Health Plan, Population: National, Population: State

Setting of Care: Other, Pharmacy

Type of Measure: Process

Data Source: Administrative claims

Measure Steward: Pharmacy Quality Alliance

#### STEERING COMMITTEE MEETING 07/27-07/28/2016

#### 1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: 16-H; 3-M; 0-L; 0-I; 1b. Performance Gap: 13-H; 7-M; 0-L; 0-I

Rationale:

- The developer provided a systematic review of the evidence demonstrating the benefits of high-dose opioids for chronic pain are not established and the risks for serious harm related to opioid therapy increases at higher doses.
- Lower dosages of opioids reduce the risk for overdose, but a single dosage threshold for safe opioid use has not been identified.
- The measure was tested in three different health plan data sources the Medicare population (mean rate=39.27 per 1,000), one commercial heath plan (mean rate= 32.003 per 1,000), and the Medicaid population (mean rate = 34.04 per 1,000). The Committee noted that these rates demonstrate a significant performance gap.
- The Committee noted this is highly important to measure given the current national opioid overuse problem.

#### 2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity) 2a. Reliability: **13-H**; **7-M**; **0-L**; **0-I** 2b. Validity: **14-M**; **7-L**; **0-I** <u>Rationale</u>:

- The developer used several data sets for reliability testing:
  - For Medicare testing, the analysis included a convenience sample of over 700 Medicare Part D prescription drug plans (comprising a total of 7,067,445 individuals aged 18 and older)
  - Testing was also conducted in one Commercial health plan (comprising a total of 209,191

## 2940: Use of Opioids at high Dosage in Persons without Cancer

- individuals age 18 and older)
- For Medicaid testing, the analysis included 8 state-based prescription drug plans covering 6 states (comprising a total of 1,437,410 individuals age 18 and older)
- The mean reliability score across all plans is 0.9938.
- The developer assessed the face validity (only) of the measure using a technical expert panel from the Pharmacy Quality Alliance (PQA). 67 percent strongly agreed that the measure results reflected quality of care. Five PQA member organizations also tested the measure using their own data, and all strongly agreed that the measure reflected the quality of care provided for their populations.

#### 3. Feasibility: 13-H; 8-M; 0-L; 0-I

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/ unintended consequences identified 3d. Data collection strategy can be implemented)

Rationale:

- Pilot test sites indicated the measure was feasible and results were able to be reported efficiently and accurately.
- All the data elements are in defined fields in electronic claims

#### 4. Usability and Use: 11-H; 9-M; 1-L; 0-I

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

Rationale:

- The measure is currently being used in the Medicare Part D Overutilization Monitoring System to monitor the utilization of opioids for members with the Medicare drug benefit.
- Although no unintended negative consequences to individuals or populations were identified during testing, concerns have been raised that prescribing changes such as dose reduction (without offering or arranging evidence-based treatment for patients with opioid use disorder) might be associated with unintended negative consequences, such as patients seeking heroin or other illicitly obtained opioids (1,2) or interference with appropriate pain treatment.

#### 5. Related and Competing Measures

#### **Related measures:**

- Measure 2950: Use of Opioids from Multiple Providers in Persons without Cancer- The proportion (XX out of 1,000) of individuals without cancer receiving prescriptions for opioids from four (4) or more prescribers AND four (4) or more pharmacies.
- Measure 2951: Use of Opioids from Multiple Providers and at High Dosage in Persons without Cancer-The proportion (XX out of 1,000) of individuals without cancer receiving prescriptions for opioids with a daily dosage greater than 120mg morphine equivalent dose (MED) for 90 consecutive days or longer, AND who received opioid prescriptions from four (4) or more prescribers AND four (4) or more pharmacies.
- These measures are also being considered for endorsement. The Committee determined that they are related but not competing.

Steering Committee Recommendation for Endorsement: 21-Y; 0-N

#### 6. Public and Member Comment

## 7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X

#### 8. Board of Directors Vote: Y-X; N-X

9. Appeals

.

## 2950: Use of Opioids from Multiple Providers in Persons without Cancer

#### Submission | Specifications

**Description**: The proportion (XX out of 1,000) of individuals without cancer receiving prescriptions for opioids from four (4) or more prescribers AND four (4) or more pharmacies.

**Numerator Statement**: Any member in the denominator who received opioid prescription claims from 4 or more prescribers AND 4 or more pharmacies.

**Denominator Statement**: Any member with two or more prescription claims for opioids filled on at least two separate days, for which the sum of the days supply is greater than or equal to 15.

**Exclusions**: Any member with a diagnosis for Cancer or a Prescription Drug Hierarchical Condition Category (RxHCC) 8, 9, 10, or 11 for Payment Year 2015; or RxHCC 15, 16, 17, 18, or 19 for Payment Year 2016; (see list in S.11 and S.2b); or a hospice indicator from the enrollment database.

Adjustment/Stratification: N/A

Level of Analysis: Health Plan, Population: National, Population: State

Setting of Care: Other, Pharmacy

Type of Measure: Process

Data Source: Administrative claims

Measure Steward: Pharmacy Quality Alliance

#### STEERING COMMITTEE MEETING 07/27-07/28/2016

#### 1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: 0-H; 20-M; 0-L; 0-I 1b. Performance Gap: 13-H; 7-M; 0-L; 0-I

Rationale:

- The evidence suggests that prescriptions for opioids from multiple prescribers and pharmacies correlate with undesired health outcomes. The use of multiple prescribers and pharmacies are associated with increased risks for opioid overdose. The Committee noted this is highly important to measure given the current national opioid overuse problem.
- The measure was tested in three different health plan data sources the Medicare population (mean was 23.31 per 1,000 and the median was 26.12 per 1,000), one commercial heath plan (rate for this plan was 20.57 per 1,000), and the Medicaid population (mean was 72.28 per 1,000 and the median was 69.93 per 1,000). The Committee noted that these rates demonstrate a significant performance gap.

2. Scientific Acceptability of Measure Properties: <u>The measure meets the Scientific Acceptability criteria</u>

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)
2a. Reliability: 9-H; 11-M; 0-L;0-I 2b. Validity: 19-M; 0-L; 1-I

Rationale:

- The developer tested the measure at the score level using several data sets for reliability testing:
  - For Medicare testing, the analysis included a convenience sample of over 700 Medicare Part D prescription drug plans (comprising a total of 7,067,445 individuals aged 18 and older)
  - Testing was also conducted in one Commercial health plan (comprising a total of 209,191 individuals age 18 and older)
  - For Medicaid testing, the analysis included 8 state-based prescription drug plans covering 6 states (comprising a total of 1,437,410 individuals age 18 and older)
- To demonstrate reliability, the developer conducted a signal-to-noise analysis of the computed measure score using a beta-binomial model.
- The mean reliability score across all plans is 0.9355.
- The developer assessed the face validity (only) of the measure using a technical expert panel from the Pharmacy Quality Alliance (PQA). 67 percent strongly agreed that the measure results reflected quality of care. Five PQA member organizations also tested the measure using their own data, and all strongly agreed that the measure reflected the quality of care provided for their populations.

## 2950: Use of Opioids from Multiple Providers in Persons without Cancer

#### 3. Feasibility: 18-H; 2-M; 0-L; 0-I

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/ unintended consequences identified 3d. Data collection strategy can be implemented) Rationale:

- All data elements are in defined field in electronic claims.
- Pilot test sites indicated the measure was feasible and results were able to be reported efficiently and accurately.

## 4. Usability and Use: 10-H; 9-M; 1-L; 0-I

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

#### Rationale:

- The measure is currently being used in the Medicare Part D Overutilization Monitoring System to monitor the utilization of opioids for members with the Medicare drug benefit.
- Although no unintended negative consequences to individuals or populations were identified during testing, , concerns have been raised that prescribing changes such as dose reduction (without offering or arranging evidence-based treatment for patients with opioid use disorder) might be associated with unintended negative consequences, such as patients seeking heroin or other illicitly obtained opioids (1,2) or interference with appropriate pain treatment

#### 5. Related and Competing Measures

- Measure 2940: Use of Opioids at high Dosage in Persons without Cancer- The proportion (XX out of 1,000) of individuals without cancer receiving prescriptions for opioids with a daily dosage greater than 120mg morphine equivalent dose (MED) for 90 consecutive days or longer.
- Measure 2951: Use of Opioids from Multiple Providers and at High Dosage in Persons without Cancer-The proportion (XX out of 1,000) of individuals without cancer receiving prescriptions for opioids with a daily dosage greater than 120mg morphine equivalent dose (MED) for 90 consecutive days or longer, AND who received opioid prescriptions from four (4) or more prescribers AND four (4) or more pharmacies.
- These measures are also being considered for endorsement. The Committee determined that they are related but not competing.

Steering Committee Recommendation for Endorsement: 20-Y; 0-N

#### 6. Public and Member Comment

7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X

#### 8. Board of Directors Vote: Y-X; N-X

9. Appeals

## 2951: Use of Opioids from Multiple Providers and at High Dosage in Persons without Cancer

#### Submission | Specifications

**Description**: The proportion (XX out of 1,000) of individuals without cancer receiving prescriptions for opioids with a daily dosage greater than 120mg morphine equivalent dose (MED) for 90 consecutive days or longer, AND who received opioid prescriptions from four (4) or more prescribers AND four (4) or more pharmacies.

**Numerator Statement**: Any member in the denominator with opioid prescription claims where the MED is greater than 120mg for 90 consecutive days or longer\* AND who received opioid prescriptions from 4 or more prescribers AND 4 or more pharmacies.

\*MED calculation is included in S.6 Numerator Details

Denominator Statement: Any member with two or more prescription claims for opioids filled on at least two

2951: Use of Opioids from Multiple Providers and at High Dosage in Persons without Cancer

separate days, for which the sum of the days supply is greater than or equal to 15.

**Exclusions**: Any member with a diagnosis for Cancer or a Prescription Drug Hierarchical Condition Category (RxHCC) 8, 9, 10, or 11 for Payment Year 2015; or RxHCC 15, 16, 17, 18, or 19 for Payment Year 2016 (see list in S.11 and S.2b); or a hospice indicator (Medicare Part D) from the enrollment database.

#### Adjustment/Stratification: N/A

Level of Analysis: Health Plan, Population: National, Population: State

Setting of Care: Other, Pharmacy

Type of Measure: Process

Data Source: Administrative claims

Measure Steward: Pharmacy Quality Alliance

#### STEERING COMMITTEE MEETING 07/27-07/28/2016

#### 1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **0-H;17-M; 1-L; 0-I**; 1b. Performance Gap: **10-H; 6-M; 0-L; 0-I** Rationale:

- The bond
  - The benefits for high dose opioids for chronic pain are not established and the risks for serious harms related to opioid therapy increase at higher opioid dosage. The use of multiple prescribers and pharmacies are associated with increased risks for opioid overdose. The risk for overdose increases with the number of prescribers and pharmacies.
  - The measure's performance was tested in three different health plan data sources the Medicare population (mean was 3.03 per 1,000 and the median was 2.89 per 1,000), one commercial heath plan (mean rate 1.45 per 1,000), and the Medicaid population (mean was 2.68 per 1,000 and the median was 2.38 per 1,000).

#### 2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

#### 2a. Reliability: 11-H; 5-M; 0-L;0-I 2b. Validity: 16-M; 2-L; 0-I

Rationale:

- The measure was tested at the score level. The developer used several data sets for reliability testing:
- For Medicare testing, the analysis included a convenience sample of over 700 Medicare Part D
  prescription drug plans (comprising a total of 7,067,445 individuals aged 18 and older)
- Testing was also conducted in one Commercial health plan (comprising a total of 209,191 individuals age 18 and older)
- For Medicaid testing, the analysis included 8 state-based prescription drug plans covering 6 states (comprising a total of 1,437,410 individuals age 18 and older)
- The mean reliability score across all plans is 0.9208.
- The developer assessed the face validity (only) of the measure using a technical expert panel from the Pharmacy Quality Alliance (PQA). 83.3 percent strongly agreed that the measure results reflected quality of care. Five PQA member organizations also tested the measure using their own data, and all strongly agreed that the measure reflected the quality of care provided for their populations.

#### 3. Feasibility: 15-H; 2-M; 0-L; 0-I

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/ unintended consequences identified 3d. Data collection strategy can be implemented) Rationale:

- All data elements are defined in field in electronic claims
- Pilot test sites indicated the measure was feasible and results were able to be reported efficiently and accurately.

4. Usability and Use: 10-H; 9-M; 1-L; 0-I

## 2951: Use of Opioids from Multiple Providers and at High Dosage in Persons without Cancer

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

Rationale:

- The measure is currently being used in the Medicare Part D Overutilization Monitoring System to monitor the utilization of opioids for members with the Medicare drug benefit.
- Although no unintended negative consequences to individuals or populations were identified during
  testing, , concerns have been raised that prescribing changes such as dose reduction (without offering or
  arranging evidence-based treatment for patients with opioid use disorder) might be associated with
  unintended negative consequences, such as patients seeking heroin or other illicitly obtained opioids (1,2)
  or interference with appropriate pain treatment.(3) Data indicate that if access to prescription opioids is
  limited, some users of opioid analgesics will transition to heroin or other illicitly obtained opioids, leading
  to increased overdose death coincident with prescribing restrictions.(

#### 5. Related and Competing Measures

- Measure 2950: Use of Opioids from Multiple Providers in Persons without Cancer- The proportion (XX out of 1,000) of individuals without cancer receiving prescriptions for opioids from four (4) or more prescribers AND four (4) or more pharmacies.
- Measure 2940: Use of Opioids at high Dosage in Persons without Cancer- The proportion (XX out of 1,000) of individuals without cancer receiving prescriptions for opioids with a daily dosage greater than 120mg morphine equivalent dose (MED) for 90 consecutive days or longer.
- These measures are also being considered for endorsement. The Committee determined that they are related but not competing.

Steering Committee Recommendation for Endorsement: 18-Y; 0-N

6. Public and Member Comment

#### 7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X

8. Board of Directors Vote: Y-X; N-X

9. Appeals

#### 2988: Medication Reconciliation for Patients Receiving Care at Dialysis Facilities

#### Submission | Specifications

**Description**: Percentage of patient-months for which medication reconciliation\* was performed and documented by an eligible professional.\*\*

\* "Medication reconciliation" is defined as the process of creating the most accurate list of all home medications that the patient is taking, including name, indication, dosage, frequency, and route, by comparing the most recent medication list in the dialysis medical record to one or more external list(s) of medications obtained from a patient or caregiver (including patient-/caregiver-provided "brown bag" information), pharmacotherapy information network (e.g., Surescripts), hospital, or other provider.

\*\* For the purposes of medication reconciliation, "eligible professional" is defined as: physician, RN, ARNP, PA, pharmacist, or pharmacy technician.

**Numerator Statement**: Number of patient-months for which medication reconciliation was performed and documented by an eligible professional during the reporting period.

The medication reconciliation MUST:

• Include the name or other unique identifier of the eligible professional;

AND

• Include the date of the reconciliation;

AND

#### 2988: Medication Reconciliation for Patients Receiving Care at Dialysis Facilities

• Address ALL known home medications (prescriptions, over-the-counters, herbals, vitamin/mineral/dietary (nutritional) supplements, and medical marijuana);

#### AND

• Address for EACH home medication: Medication name(1), indication(2), dosage(2), frequency(2), route of administration(2), start and end date (if applicable)(2), discontinuation date (if applicable)(2), reason medication was stopped or discontinued (if applicable)(2), and identification of individual who authorized stoppage or discontinuation of medication (if applicable)(2);

AND

• List any allergies, intolerances, or adverse drug events experienced by the patient.

1. For patients in a clinical trial, it is acknowledged that it may be unknown as to whether the patient is receiving the therapeutic agent or a placebo.

2. "Unknown" is an acceptable response for this field.

**Denominator Statement**: Total number of patient-months for all patients permanently assigned to a dialysis facility during the reporting period.

**Exclusions**: In-center patients who receive < 7 hemodialysis treatments in the facility during the reporting month. **Adjustment/Stratification**: N/A

Level of Analysis: Facility

Setting of Care: Ambulatory Care: Dialysis Facility

Type of Measure: Process

Data Source: Electronic Clinical Data, Electronic Clinical Data: Electronic Health Record

Measure Steward: Kidney Care Quality Alliance

STEERING COMMITTEE MEETING 07/27-07/28/2016

#### 1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: 0-H; 14-M; 4-L; 1-I 1b. Performance Gap: 7-H; 10-M; 1-L; 2-I

Rationale:

- The developer conducted a literature review which shows evidence to support the high incidence of medication-related problems in dialysis patients as well as evidence that supports their economic impact.
- Performance scores over time are not available. However, the measure was tested using data from three Kidney Quality Alliance member dialysis organizations, each with the capacity to provide retrospective analysis from a data warehouse repository. The mean performance score obtained from these organizations was 52.62% with a median score of 48.18%.

2. Scientific Acceptability of Measure Properties: <u>The measure meets the Scientific Acceptability criteria</u>

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: 9-H; 10-M; 0-L; 0-I 2b. Validity: 0-H; 17-M; 2-L; 0-I

Rationale:

- The developer tested the measure at the score level using beta-binomial testing. The mean reliability score is 0.9935.
- There was a systematic assessment of face validity by experts. Two groups of field experts in the field of ESRD / dialysis care.
  - 88.9% of the 9-member panel agreed it is highly likely or likely that the measure score provides an accurate reflection of medication reconciliation quality.
  - 77.8% of the panel agreed it is highly likely or likely that the measure can be used to distinguish good from poor quality.

#### 3. Feasibility: 6-H; 11-M; 1-L; 2-I

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/

#### NATIONAL QUALITY FORUM

NQF REVIEW DRAFT— Comments due by October 7 by 6:00 PM ET.

#### 2988: Medication Reconciliation for Patients Receiving Care at Dialysis Facilities

*unintended consequences identified 3d. Data collection strategy can be implemented)* Rationale:

- All data elements are defined in fields in electronic health records.
- This measure is generated or collected by and used by healthcare personnel during the provision of care (e.g., blood pressure, lab value, diagnosis, depression score)

#### 4. Usability and Use: 5-H; 12-M; 3-L; 0-I

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

Rationale:

- Variants of the measure are currently in use member dialysis organizations for internal quality improvement, prompting the developer to develop this measure to standardize the specifications and definitions for accountability purposes.
- The developer suggests the measure be used in accountability programs in the future.

#### 5. Related and Competing Measures

#### **Related measures:**

- 0097: Medication Reconciliation Post-Discharge- The percentage of discharges for patients 18 years of age and older for whom the discharge medication list was reconciled with the current medication list in the outpatient medical record by a prescribing practitioner, clinical pharmacist or registered nurse.
- 0554: Medication Reconciliation Post-Discharge (MRP)- The percentage of discharges during the first 11 months of the measurement year (e.g., January 1–December 1) for patients 66 years of age and older for whom medications were reconciled on or within 30 days of discharge.
- 2456: Medication Reconciliation: Number of Unintentional Medication Discrepancies per Patient-This measure assesses the actual quality of the medication reconciliation process by identifying errors in admission and discharge medication orders due to problems with the medication reconciliation process. The target population is any hospitalized adult patient. The time frame is the hospitalization period.
- This measure is harmonized with existing NQF-endorsed medication reconciliation measures in that all similarly specify that the medication reconciliation must address ALL prescriptions, over-the-counters, herbals, vitamin/mineral/dietary (nutritional) supplements AND must contain the medications' name, dosage, frequency, and route. This measure, however, is unique among the currently endorsed medication reconciliation measures in that the level of analysis is the dialysis facility. The KCQA measure also moves beyond a single "check/box", specifying multiple components that must be met to be counted as a "success".

Steering Committee Recommendation for Endorsement: 17-Y; 2-N

#### 6. Public and Member Comment

### 7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X

- 8. Board of Directors Vote: Y-X; N-X
- 9. Appeals

### 2993: Potentially Harmful Drug-Disease Interactions in the Elderly

#### Submission | Specifications

**Description**: The percentage of patients 65 years of age and older who have evidence of an underlying disease, condition or health concern and who are dispensed an ambulatory prescription for a potentially harmful medication, concurrent with or after the diagnosis. Four rates are reported for this measure:

-Rate 1: The percentage of those with a history of falls that received a potentially harmful medication

#### 2993: Potentially Harmful Drug-Disease Interactions in the Elderly

-Rate 2: The percentage of those with dementia that received a potentially harmful medication

-Rate 3: The percentage of those with chronic kidney disease that received a potentially harmful medication

-Rate 4: Total rate

A lower rate represents better performance for all rates.

**Numerator Statement**: Numerator 1: Patients with a history of falls who received at least one potentially harmful medication from Table DDE-A or Table DDE-B

Numerator 2: Patients with a diagnosis of dementia who received at least one potentially harmful medication from Table DDE-D

Numerator 3: Patients with chronic kidney disease who received at least one potentially harmful medication from Table DDE-E

Numerator 4: The sum of the three numerators

**Denominator Statement**: All patients ages 65 years of age and older with a history of falls, dementia or chronic kidney disease in the measurement year or the year prior to the measurement year.

**Exclusions**: The following are exclusions for the condition-specific rates and total rate:

For those who meet denominator criteria for the history of falls rate (Rate 1): exclude those with a diagnosis of psychosis, schizophrenia, bipolar disorder or seizure disorder.

For those who meet denominator criteria for those with dementia rate (Rate 2): exclude those with a diagnosis of psychosis, schizophrenia or bipolar disorder.

#### Adjustment/Stratification: N/A

Level of Analysis: Health Plan, Integrated Delivery System

Setting of Care: Ambulatory Care: Clinician Office/Clinic, Pharmacy

Type of Measure: Process

Data Source: Administrative claims, Electronic Clinical Data, Electronic Clinical Data: Pharmacy

Measure Steward: National Committee for Quality Assurance

#### STEERING COMMITTEE MEETING 07/27-07/28/2016

#### 1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: 13-H; 7-M; 0-L; 0-I; 1b. Performance Gap: 17-H; 3-M; 0-L; 0-I

Rationale:

- The developer provides evidence based on the AGS Beers Criteria recommendations against the use of potentially harmful medications in older adults with specific conditions.
- The developer provided data extracted from HEDIS data collection for Medicare Advantage Health Plans (including both HMO and PPO plans). The performance data is summarized at the health plan level. The data demonstrates variation in all four rates of the measure.
- For 2014, 48.0 percent of individuals with a history of falls received at least one high-risk medication. Among individuals with dementia, 48.5 percent received at least one high-risk medication and among those with chronic kidney disease, 9.6 percent received at least one high-risk medication.

#### 2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: 9-H; 8-M; 3-L;0-I 2b. Validity: 7-H; 9-M; 4-L;0-I

Rationale:

- The developer tested the measure at the score level using beta-binomial testing. Strong reliability is demonstrated since majority of variance is due to signal and not to noise. The reliability rates for each condition are:
  - Rate 1 (History of Falls)-0.96565

#### 2993: Potentially Harmful Drug-Disease Interactions in the Elderly

- o Rate 2 (Dementia)-0.97552
- Rate 3 (Chronic Kidney Disease)-0.95273
- o Rate 4 (Total)-0.98571
- There was both an assessment of face validity and also of construct validity by correlations of this measure with other measures of medication safety. The developers found Pearson correlation coefficients:
  - Rate 1 (History of Falls)-0.694
  - o Rate 2 (Dementia)-0.585
  - Rate 3 (Chronic Kidney Disease)-0.480
  - o Rate 4 (Total)-0.386
    - Coefficients with absolute value of less than 0.3 are generally considered indicative of weak associations whereas absolute values of 0.3 or higher denote moderate to strong associations.

#### 3. Feasibility: 12-H; 5-M; 3-L; 0-I

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/ unintended consequences identified 3d. Data collection strategy can be implemented) Rationale:

- This measure is generated or collected by and used by healthcare personnel during the provision of care
  - (e.g., blood pressure, lab value, diagnosis, depression score)
  - ALL data elements are in defined fields in a combination of electronic sources.

#### 4. Usability and Use: 11-H; 7-M; 2-L; 0-I

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

Rationale:

• The measure is currently used in several accountability programs.

#### 5. Related and Competing Measures

- 0022: Use of High-Risk Medications in the Elderly (DAE)- There are two rates for this measure: the percentage of patients 65 years of age and older who received at least one high-risk medication. The percentage of patients 65 years of age and older who received at least two prescriptions for the same high-risk medication. For both rates a lower rate represents better performance.
- This measure is not completely harmonized with 0022. They both have a similar focus (measuring potentially inappropriate medication use in the elderly) and reporting level (health plan), however they have different target populations. This measure targets patients with a specific condition or disease that can experience adverse effects when combined with certain medications that are recommended to be avoided for that condition. NQF 0022 targets a larger population of all older adults and assesses use of high-risk medications that have been recommended to be avoided in all older adults.

Steering Committee Recommendation for Endorsement: 17-Y; 3-N

6. Public and Member Comment

#### 7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X

8. Board of Directors Vote: Y-X; N-X

9. Appeals

#### **3001: PACE Participant Fall Rate**

Submission | Specifications

**Description**: The quarterly incidence rate of falls amongst PACE participants per 1,000 participant days.

NQF REVIEW DRAFT— Comments due by October 7 by 6:00 PM ET.

#### **3001: PACE Participant Fall Rate**

#### Numerator Statement:

Falls experienced by Participants in the PACE program during the month.

Denominator Statement: The denominator represents exposure of PACE participants to the risk of falling.

**Exclusions**: Exclude persons who were not enrolled as PACE participants, or who were not in their home location. **Adjustment/Stratification**: N/A

# Level of Analysis: Facility

**Setting of Care:** Other: PACE programs provide services to participants who live in their own homes (or in home-like settings) in the community. Participants attend PACE centers regularly (e.g., 3 days per week) for a variety of activities and support services.

Type of Measure: Outcome

Data Source: Electronic Clinical Data: Electronic Health Record, Management Data, Paper Medical Records

Measure Steward: Center for Medicare and Medicaid Services

#### STEERING COMMITTEE MEETING 07/27-07/28/2016

#### 1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: 16-Y; 3-N; 1b. Performance Gap: 2-H; 15-M; 1-L; 1-I

Rationale:

- The developer provides the structural and process factors that influence fall rates and cites several studies that find an indirect relationship between inpatient staffing and fall rates. The developer also calls out two studies that found, through a systematic review and meta-analysis, that fall prevention activities can reduce falls by up to 30 percent.
- The Committee agreed that there were ways that providers could reduce the incidence of falls. The Committee also recognized the importance of falls an important measure of quality, but was concerned that the evidence presented for this measure did not include some of the literature describing fall prevention in the home, rather it focused on fall prevention in hospitals. Notably, this measure not only includes falls where the patient reaches the floor but also falls that are assisted.
- The developers collected data from a sample of 50 sites which were randomly selected out of a total of 114 PACE sites. A total of 34 of these sites submitted data from January –March 2015 for the fall rate. One site was excluded. They found a mean fall rate of 4.27 per 1,000 participant day (n=33). The mean rate appears to be higher that the rates obtained from primarily hospital-based studies provided by the developer after a review of the literature.
- The developers examined fall rates based on two demographic variables, age and gender, to that the
  potential so socio-demographic adjustment could be assessed. Both PACE-site mean participant age and
  mean proportion of males had very weak correlations with total fall rates (r = 0.08 and r = -0.14,
  respectively).
- Several studies have demonstrated a difference in falls rates for specific populations. Disparities have been identified according to age, gender, disability, and race/ethnicity. Hospitalization for hip fractures due to falls is significantly higher for females than for males. However, fatality rates due to falls are higher for men than for women, and higher for Caucasians compared to African-Americans. Among community-dwelling older women, age-adjusted fall rates are not different between African-Americans and Caucasians.

#### 2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

#### 2a. Reliability: 0-H; 17-M; 1-L;1-I 2b. Validity: 15-M; 4-L; 0-I

Rationale:

- The committee agreed that the specifications of this metric were clear.
- Reliability data using a signal-to-noise analysis demonstrated that it was reliable with score of 0.83 across 33 PACE sites.

#### **3001: PACE Participant Fall Rate**

- Content validity was assessed with a group of experts which demonstrated that experts agreed that this
  was a valid measure of quality.
- There were also several exclusions to this measure, including falling into a chair, toilet or bed that were
  not included. There were some concerns by the Committee that these falls were also clinically significant
  and should be included. Given these definitions there was concern about the precision of measuring falls,
  particularly in the home setting where monitoring may vary. For these reasons, there was a concern
  about under-reporting.

#### 3. Feasibility: 0-H; 14-M; 5-L; 0-I

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/ unintended consequences identified 3d. Data collection strategy can be implemented)

#### Rationale:

- This measure is generated or collected by and used by healthcare personnel during the provision of care (e.g., blood pressure, lab value, diagnosis, depression score) Abstracted from a record by someone other than person obtaining original information (e.g., chart abstraction for quality measure or registry)
- Some data elements are in defined fields in a combination of electronic sources.
- Some PACE Organizations do not use electronic medical records. All organizations will abstract data manually for this measure from either their electronic or paper charts.
- After collecting data from PACE sites for feasibility and reliability testing, a post-data collection survey was conducted, to ask PACE sites about data that they did not have available, data collection burden, and other issues.
- Some sites reported a fairly high data collection burden, however, this was balanced by the fact that over half of the sites stated that the data were very easy to obtain. Although there is a perceived data collection burden, this is outweighed by the usefulness of the data and comparative benchmarks.
- Because of the high reported ease of obtaining the data, we anticipate that the perceived data collection burden will decrease as sites become more familiar with the data collection and submission process.
- No fees or licensing requirements to use any aspect of the measure as specified, were reported.
- The committee did not have any major concerns about feasibility.

#### 4. Usability and Use: 0-H; 14-M; 3-L; 0-I

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

Rationale:

- CMS is considering the use of the PACE Participant Fall Rate in accountability applications within the next two years.
- The Committee discussed the impact of public reporting this metric in the future and potential issues that may arise regarding its usability and feasibility in practice

#### 5. Related and Competing Measures

- There are two related measures in the portfolio: 0141: Patient Fall Rate and 0266: Patient Fall which measure falls in different settings.
- There was also concern that because NQF has endorsed several fall measures that vary in definition those future efforts should focus on ensuring that fall definitions are harmonized across measures.

#### Steering Committee Recommendation for Endorsement: 17-Y; 1-N

#### 6. Public and Member Comment

#### 7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X

#### 8. Board of Directors Vote: Y-X; N-X

#### 9. Appeals

#### **3003: PACE- Participants Falls with Injury**

#### Submission | Specifications

**Description**: The quarterly incidence rate of falls with injury amongst PACE participants per 1,000 participant days. **Numerator Statement**: Falls with injury experienced by participants in the PACE program during the month.

Denominator Statement: The denominator represents exposure of PACE participants to the risk of falling.

**Exclusions**: Exclude persons who were not enrolled as PACE participants, or who were not in their home location. **Adjustment/Stratification**: N/A

Level of Analysis: Facility

**Setting of Care:** Other: PACE programs provide services to participants who live in their own homes (or in home-like settings) in the community. Participants attend PACE centers regularly (e.g., 3 days per week) for a variety of activities and support services.

Type of Measure: Outcome

Data Source: Electronic Clinical Data: Electronic Health Record, Management Data, Paper Medical Records

Measure Steward: Center for Medicare and Medicaid Services

#### STEERING COMMITTEE MEETING 07/27-07/28/2016

#### 1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: 18-Y;1-N 1b. Performance Gap: 6-H; 12-M; 1-L; 0-I

Rationale:

- The developers reviewed eight peer-reviewed articles on patient falls in hospitals and summarized the strengths and weaknesses of those studies. Overall, these studies found a significant indirect relationship between some aspect of inpatient nursing staffing and fall rates. Two studies found the evidence on fall prevention activities (processes) is mixed. One study found through a systematic literature review and meta-analysis that fall prevention activities may have reduced fall rates by up to 25 percent. Another study found that fall prevention strategies reduced falls up to 30 percent, although an optimal prevention bundle was not identified.
- The developers found a 1.78 mean participant falls with injury rate (n=33). They concluded that there are performance gaps in falls with injury and cited a study that reported falls with injury rates in acute inpatient units varied by unit type and over time.
- The committee agreed that there were one or more ways that providers can impact falls rates with injury as an outcome. However, there was concern by the committee that the literature provided by the developer solely includes studies from inpatient studies, particularly when it comes to preventing falls with injury.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

#### 2a. Reliability: 10-H; 9-M; 0-L;0-I 2b. Validity: 16-M; 3-L; 0-I

Rationale:

- The committee agreed that the specifications for this metric were clear.
- Reliability testing was done at 33 PACE sites and demonstrate a signal-to-noise ratio of 0.88.
- Content experts reviewed the validity of the measure and agreed that falls with injury was a valid measure of quality.
- The committee did not have concerns about the scientific acceptability of this measure.

#### 3. Feasibility: 6-H; 11-M; 2-L; 0-I

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/ unintended consequences identified 3d. Data collection strategy can be implemented) Rationale:

• This measure is generated or collected by and used by healthcare personnel during the provision of care (e.g., blood pressure, lab value, diagnosis, depression score) Abstracted from a record by someone other

3003: PACE- Participants Falls with Injury
<ul> <li>than person obtaining original information (e.g., chart abstraction for quality measure or registry)</li> <li>Some data elements are in defined fields in a combination of electronic sources.</li> </ul>
<ul> <li>Some PACE Organizations do not use electronic medical records. All organizations will abstract data manually for this measure from either their electronic or paper charts.</li> </ul>
<ul> <li>After collecting data from PACE sites for feasibility and reliability testing, a post-data collection survey was conducted, to ask PACE sites about data that they did not have available, data collection burden, and other issues.</li> </ul>
<ul> <li>Some sites reported a fairly high data collection burden, however, this was balanced by the fact that over half of the sites stated that the data were very easy to obtain. Although there is a perceived data collection burden, this is outweighed by the usefulness of the data and comparative benchmarks.</li> </ul>
<ul> <li>Because of the high reported ease of obtaining the data, we anticipate that the perceived data collection burden will decrease as sites become more familiar with the data collection and submission process.</li> </ul>
<ul> <li>No fees or licensing requirements to use any aspect of the measure as specified, were reported.</li> <li>The committee did not have concerns about the feasibility of this measure.</li> </ul>
4. Usability and Use: 6-H; 10-M; 3-L; 0-I
(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)
Rationale:
<ul> <li>CMS is considering the use of the PACE Participant Fall Rate in accountability applications within the next two years.</li> </ul>
There were no concerns about the usability of this metric.
5. Related and Competing Measures
<ul> <li>There are measures that are related to this that measure the same concept but do it in different (i.e. non-PACE settings), specifically 0202: Falls with injury and 0674: Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay).</li> </ul>
• There was concern that there was overlap with measure 3001 specifically this metric is a subset of the 3001 (falls in PACE settings).
Steering Committee Recommendation for Endorsement: 18-Y; 1-N
6. Public and Member Comment
7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X
8. Board of Directors Vote: Y-X; N-X
9. Appeals

#### 3025: Ambulatory Breast Procedure Surgical Site Infection (SSI) Outcome Measure

#### Submission | Specifications

**Description**: This measure is for the risk-adjusted Standardized Infection Ratio (SIR) for all Surgical Site Infections (SSI) following breast procedures conducted at ambulatory surgery centers (ASCs) among adult patients (ages 18 - 108 years) and reported to the Centers for Disease Control and Prevention (CDC) National Healthcare Safety Network (NHSN). The measure compares the reported number of surgical site infections observed at an ASC with a predicted value based on nationally aggregated data. The measure was developed collaboratively by the CDC, the Ambulatory Surgery Center Quality Collaboration (ASC QC), and the Colorado Department of Public Health and Environment. CDC is the measure steward.

**Numerator Statement**: Surgical site infections (SSIs) during the 30-day (superficial SSI) and 90-day (deep and organ/space SSI) postoperative periods following breast procedures in Ambulatory Surgery Centers.

**Denominator Statement**: Breast procedures, as specified by the operative codes that comprise the breast procedure category of the NHSN Patient Safety Component Protocol, performed at ambulatory surgery centers.

3025: Ambulatory Breast Procedure Surgical Site Infection (SSI) Outcome Measure Exclusions: Hospital inpatients and hospital outpatient department patients, pediatric patients and very elderly patients, and brain-dead patients whose organs are being removed for donor purposes Adjustment/Stratification: N/A Level of Analysis: Facility	
patients, and brain-dead patients whose organs are being removed for donor purposes Adjustment/Stratification: N/A	,
-	/
Level of Analysis: Facility	
Setting of Care: Ambulatory Care: Ambulatory Surgery Center (ASC)	
Type of Measure: Outcome	
Data Source: Electronic Clinical Data, Electronic Clinical Data: Electronic Health Record, Paper Medical Records	
<b>Measure Steward</b> : Surveillance Branch, Division of Healthcare Quality Promotion, Centers for Disease Control Prevention	and
STEERING COMMITTEE MEETING 07/27-07/28/2016	
1. Importance to Measure and Report: The measure meets the Importance criteria	
(1a. Evidence, 1b. Performance Gap)	
1a. Evidence: <b>19-Y; 0-N</b> ; 1b. Performance Gap: <b>7-H; 12-M; 0-L; 0-I</b>	
Rationale:	
•	
2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria	
(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)	
2a. Reliability: <b>12-M; 5-L;3-I</b> 2b. Validity: <b>17-M; 1-L; 1-I</b>	
Rationale:	
•	
3. Feasibility: 3-H; 16-M; 1-L; 0-I	
(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/ unintended consequences identified 3d. Data collection strategy can be implemented)	
Rationale:	
•	
4. Usability and Use: 12-H; 7-M; 0-L; 0-I	
(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)	
Rationale:	
5. Related and Competing Measures	
<ul> <li>This measure directly competes with [NQF # and Title] [Description]. [Summarize the related/compet measure issue here, and the disposition of it]</li> </ul>	ing
OR	
No related or competing measures noted.	
Steering Committee Recommendation for Endorsement: 20-Y; 0-N	
Rationale	
•	
6. Public and Member Comment	
•	
7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X	_
8. Board of Directors Vote: Y-X; N-X	
9. Appeals	

# Measure with Endorsement Decision Deferred

The following measures submitted for the Standing Committee's review during the project have been deferred for future consideration:

#### 3000: PACE-Acquired Pressure Ulcer-Injury Prevalence Rate

#### Submission | Specifications

**Description**: Prevalence of PACE participants on the PACE organization census with pressure ulcers/injuries in a quarter, expressed as persons with 1 or more pressure ulcers/injuries divided by the number of participants on the PACE organization's census for at least one day during the quarter.

This is a rate-based measure of skin breakdown due to pressure or pressure combined with sheer. The rate will be calculated quarterly. The target population is participants on a PACE organizations census for at least one day during the quarter.

**Numerator Statement**: The total number of participants enrolled during the quarter that have at least one documented PU (of any stage) acquired while a PACE participant.

Denominator Statement: Number of participants on a PACE organization's census during the quarter.

**Exclusions**: Exclude persons who were not on the PACE census for at least one day during the quarter. Exclude participants who lived outside their home/assisted living setting for every day of the quarter.

#### Adjustment/Stratification: N/A

Level of Analysis: Facility

**Setting of Care:** Other: PACE programs provide services to participants who live in their own homes (or in home-like settings) in the community. Participants attend PACE centers regularly (e.g., 3 days per week) for a variety of activities and support services.

Type of Measure: Outcome

Data Source: Electronic Clinical Data, Management Data, Paper Medical Records

Measure Steward: Center for Medicare and Medicaid Services

#### STEERING COMMITTEE MEETING 07/27-07/28/2016

#### 1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: 16-Y;2-N 1b. Performance Gap: 0-H; 8-M; 3-L; 7-I;

Rationale:

- Pressure ulcers are an important outcome, particularly in the frail older adult population cared for in PACE programs.
- The committee agreed that there were ways to prevent pressure ulcers, as an outcome, in this population of frail older adults who are cared for in PACE organizations.
- The developers collected data from a sample of 50 sites which were randomly selected out of a total of 114 PACE sites. A total of 29 of these sites submitted data from January-February 2015 for the fall rate. One site was excluded.
- The developers found a mean pressure related injury rate of 1.85 among every 100 participants (n=28) and a mean of 0.81 per 100 participations for stage 3 or above. Their testing showed some evidence of variation in pressure injury rates by academic affiliation and with metropolitan status, however due to small sample size, none of the differences were statistically significant.
- The literature selected by the developer seem to indicate that there is a performance gap in pressure ulcer related injury rates. However, there was considerable discussion on the performance gap, and despite a demonstrated performance gap by the developer the committee did not reach consensus on performance gap

**2. Scientific Acceptability of Measure Properties:** <u>The measure meets the Scientific Acceptability criteria</u> (2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

#### **3000: PACE-Acquired Pressure Ulcer-Injury Prevalence Rate**

#### 2a. Reliability: **0-H; 7-M; 5-L;6-I** 2b. Validity: **H-X; M-X; L-X; I-X** Rationale:

- There were specifications provided by the developer that were somewhat confusing to the committee.
- The reliability data was provided as a signal-to-noise analysis. Mean reliability scores were 0.73 for all ulcers and 0.83 for stage 3 and 4 ulcers.
- A total of 8 academic experts completed content validity testing. As shown in Table 2 above, the majority of items on the content validity testing survey had good validity as indicated by an I-CVI of greater than 0.78 (16 of 20 items or 75%). In addition, none of the items was disagreed upon by 6 or more experts
- There were concerns by the committee over the validity of the assessment of the pressure ulcers, particularly because a high percentage of them were "unknown" states.
- There were also concerns that the reliability was poorer for lower stage ulcers, particularly stage 1 and 2 than stage 3 and 4 (deeper ulcers). The committee was identified several issues with the specifications of the measure, that were somewhat confusing. As a result, the measure failed on reliability and was recommended that the developer clarify the specifications for re-review at a later time.

#### 3. Feasibility: H-X; M-X; L-X; I-X

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/ unintended consequences identified 3d. Data collection strategy can be implemented)

#### Rationale:

- This measure is generated or collected by and used by healthcare personnel during the provision of care (e.g., blood pressure, lab value, diagnosis, depression score, and/or, Abstracted from a record by someone other than person obtaining original information (e.g., chart abstraction for quality measure or registry)
- Some data elements are in defined fields in electronic sources
- Some PACE Organizations do not use electronic medical records. All organizations will abstract data manually for this measure from either their electronic or paper charts.
- Overall, the data collection time was reasonable, around 4 hours with less than an hour for data submission when the developer conducted a survey with PACE organizations to collect information on their experiences with data collection.
- There is a perceived data collection burden, however, this is outweighed by the usefulness of the data for quality improvement and distinguishing PACE sites based on their quality of care.
- Because of the high reported ease of obtaining the data, the developer anticipates that the perceived data collection burden will decrease as sites become more familiar with the data collection and submission process.
- No fees or licensing requirements to use any aspect of the measure as specified, were reported.
- There was no discussion on feasibility by the committee.

#### 4. Usability and Use: 10-H; 9-M; 1-L; 0-I

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

Rationale:

- The developer is evaluating its use in upcoming PACE quality programs.
- The developer is considering the use of the PACE-Acquired Pressure Ulcer/Injury Prevalence Rate in accountability applications within the next two years.
- There was no discussion on usability and use.

#### 5. Related and Competing Measures

- There are several related measures that measure pressure ulcers in different settings. However, no
  metrics specifically report the outcome of pressure ulcers in PACE organizations so no measures are
  directly competing.
- 0201: Pressure ulcer prevalence (hospital acquired)
- 0538: Pressure Ulcer Prevention and Care

#### NATIONAL QUALITY FORUM

NQF REVIEW DRAFT— Comments due by October 7 by 6:00 PM ET.

**3000: PACE-Acquired Pressure Ulcer-Injury Prevalence Rate** 

- 0678: Percent of Residents or Patients with Pressure Ulcers That Are New or Worsened (Short-Stay)
- 0679: Percent of High Risk Residents with Pressure Ulcers (Long Stay) measure issue here, and the disposition of it]

Steering Committee Recommendation for Endorsement: Y-X; N-X Rationale

• The committee did not vote on a recommendation for endorsement.

6. Public and Member Comment

7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X

8. Board of Directors Vote: Y-X; N-X

Rationale for deferral

## Measure Approved for Trial Use

#### **2983: Potassium Sample Hemolysis in the Emergency Department**

Submission | Specifications

**Description**: Percentage of laboratory potassium samples drawn in the emergency department (ED) with hemolysis.

Numerator Statement: ED Potassium Samples with Hemolysis

Denominator Statement: All ED patients getting a lab potassium sample

Exclusions: None

Adjustment/Stratification: N/A

Level of Analysis: Facility

Setting of Care: Hospital/Acute Care Facility, Other

Type of Measure: Intermediate Clinical Outcome

Data Source: Electronic Clinical Data: Laboratory

Measure Steward: Cleveland Clinic

#### STEERING COMMITTEE MEETING 07/27-07/28/2016

#### 1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: 6-H;11-M; 1-L; 2-I; 1b. Performance Gap: 3-H; 16-M; 0-L; 0-I;

<u>Rationale</u>:

- The developer provided a number of studies that demonstrate that hemolysis is preventable by using appropriate blood draw techniques. The evidence is weak to moderate and several studies provided are rated as insufficient evidence.
- The developer presented results from a study conducted at the Cleveland Clinic between June 2013 and October 2015. The percentage of hemolysis in Cleveland Clinic's emergency department decreased over time with about 13% hemolysis rate in June-2013 and a 2% rate in October 2015.

**2. Scientific Acceptability of Measure Properties:** <u>As this e-measure is a candidate for eMeasure Approval for Trial</u> Use, testing for the measure will be submitted at a later time.

(2b1. specifications consistent w/evidence)

#### Trial Measure Specifications: H-X; M-X; L-X; I-X

The measure may be considered for endorsement after sufficient data to assess reliability and validity have been submitted to NQF, within three years of approval.

#### Rationale:

• This measure has not yet been tested; for this reason, it is being considered for Trial Use Approval.

#### 3. Feasibility: 11-H; 7-M; 0-L; 0-I

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/ unintended consequences identified 3d. Data collection strategy can be implemented)

Rationale:

- There are multiple ways to collect this data. The developer collected data from both the ONC certified EMR Epic (Epic 14) and the ONC certified Laboratory information systems
- ALL data elements are in defined fields in electronic health records (EHRs).
- This measure is generated or collected by and used by healthcare personnel during the provision of care (e.g., blood pressure, lab value, diagnosis, depression score)

#### 4. Usability and Use: 4-H; 13-M; 0-L; 0-I

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

#### NATIONAL QUALITY FORUM

NQF REVIEW DRAFT— Comments due by October 7 by 6:00 PM ET.

#### 2983: Potassium Sample Hemolysis in the Emergency Department

#### Rationale:

- The measure is not currently in use.
- Panned use includes: Public Reporting, Public Health/Disease Surveillance, Quality Improvement with Benchmarking (external benchmarking to multiple organizations), and Quality Improvement (Internal to the specific organization)

#### 5. Related and Competing Measures

• N/A

Steering Committee Recommendation for eMeasure Approval for Trial Use: 19-Y; 0-N

#### 6. Public and Member Comment

7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X

8. Board of Directors Vote: Y-X; N-X

9. Appeals

## Measures Not Recommended

3006: Initial Baseline Screen of Nutritional Status for Every Patient within 24 Hours of PICU Admission

#### **Submission**

**Description**: The measure will determine the percentage of pediatric intensive care unit (PICU) patients for whom an initial nutritional status screening was performed. The screening is to be performed within the first 24 hours of admission to the PICU with the use of a standardized nutrition-screening tool. The results of the screening must be documented in the patient's chart upon completion.

**Numerator Statement**: Number of PICU patients for whom a screening of nutritional status was documented with use of a standardized nutrition screening tool within 24 hours of admission to the PICU.

**Denominator Statement**: All patients admitted to the PICU for at least 24 hours during a monthly or quarterly reporting period.

**Exclusions**: Patients who have already had a documented nutrition screening or assessment in the previous 48 hours.

Adjustment/Stratification: N/A

Level of Analysis: Facility, Integrated Delivery System

Setting of Care: Hospital/Acute Care Facility

Type of Measure: Process

Data Source: Electronic Clinical Data: Electronic Health Record, Other

Measure Steward: Pediatric Consultants, LLC

#### STEERING COMMITTEE MEETING 07/27-07/28/2016

1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: 2-H; 8-M; 7-L; 3-I 1b. Performance Gap: 0-H; 10-M; 9-L; 1-I;

Rationale:

- The developers provide evidence based on clinical guidelines from the American Society for Parenteral and Eternal Nutrition. The guideline states "children admitted with critical illnesses should undergo nutrition screening to identify those with existing malnutrition or those who are nutritionally at-risk."
- The developers cite a systematic review and studies published after the systematic review that

2000 Initial Receive Server of Nutritional Status for Even Rations within 24 Hour	
3006: Initial Baseline Screen of Nutritional Status for Every Patient within 24 Hour	
demonstrate the that the majority of children present to the PICU with indices of n	
throughout PICU stay, negative energy and protein balances are common among p	atients and correlate
with decreasing anthropometric changes.	
At the time of publication of this clinical guideline, there were no validated nutritio	
tools in use in PICUs, and for that reason, the clinical guideline does not present es nutritional screening.	timates of benefit of
• The eMeasure also demonstrated good clinical performance across age groups with	n 92% of screens
performed for children 0 - <6, 96% of screens performed for children 6 - <13, and 8	8% of screens
performed for children 13 - <19 meeting the measure. Only 67% of screens perform	
years or older met the measure due to the low sample size (N=3) in this age group.	
<ul> <li>Reasons for not meeting the measure included not meeting the denominator criter</li> </ul>	ia by having a nutrition
screen more than 48 hours prior to PICU admission (N=8), not having the screen pe	
(n=2), and meeting the denominator exclusion criteria by having a nutrition screen	
24 hours and 48 hours of PICU admission (N=5).	•
• There was concern that while nutritional status assessment in PICUs may be impor	tant, there was
insufficient evidence linking this process measure to outcomes. Based upon the dis	
was not able to reach consensus on the evidence for the measure.	
• In addition, the committee did not reach consensus on measurement gap.	
<u>riteria</u> 2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)	
a. Reliability: <b>7-M; 8-L;4-I</b> 2b. Validity: <b>H-X; M-X; L-X; I-X</b>	
ationale:	
• To demonstrate reliability, the developer performed data element testing at one h	ospital site (Ann and
Robert H. Lurie Children's Hospital) with 288 pediatric beds (including 40 PICU beds	
11,291 pediatric admissions annually.	,,
<ul> <li>The testing involved implementation of the eMeasure to compute scores automati</li> </ul>	cally, and manual char
review of the same patients by a trained chart abstracter; inter-rater reliability was	-
<ul> <li>The developer reported that inter-rater reliability was conducted on five patient ch</li> </ul>	
<ul> <li>Agreement was 100% for all critical data elements, and 100% for overall clinical per</li> </ul>	
measure.	
<ul> <li>Because the developer presented reliability results at the data element level in a si</li> </ul>	ngle facility. and there
was no testing at the measure score level, the committee voted that the measure of	
reliability, and there was no additional discussion about this measure.	F <b>v</b>
<ul> <li>There was no vote on validity because the measure failed on reliability.</li> </ul>	
. Feasibility: H-X; M-X; L-X; I-X	
· · · · · · · · · · · · · · · · · · ·	
3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to i	naccuracies/

unintended consequences identified 3d. Data collection strategy can be implemented)
<u>Rationale</u>:

- There was concern that there is no broadly used tool across institutions, and there was no validated instrument for this process. There was also concern that this was already, to some degree required by the Joint Commission.
- There was no committee discussion or vote on feasibility because it failed on reliability.

#### 4. Usability and Use: H-X; M-X; L-X; I-X

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

Rationale:

• This measure is being submitted for endorsement for use in public and private health plans, Medicaid, and CHIPRA to assess the quality of care related to the prevention of pressure ulcers for children in the

3006: Initial Baseline Screen of Nutritional Status for Every Patient within 24 Hours of PICU Admission

PICU for public reporting and quality improvement.

- The developer sees this measure becoming a part of an American Board of Pediatrics (ABP) Maintenance of Certification (MOC) Performance Improvement Module (PIM).
- The developer also foresees this measure being tested as a discrete module in the Virtual Pediatric System (VPS) pending receipt of funding from AHRQ.
- There was no committee discussion on usability and use because it failed on reliability.

#### 5. Related and Competing Measures

• There are no related and competing measures.

Steering Committee Recommendation for Endorsement: Y-X; N-X Rationale:

• The Committee did not vote on the suitability for the endorsement because the measure did not pass on reliability.

#### 6. Public and Member Comment

#### 7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X

8. Board of Directors Vote: Y-X; N-X

9. Appeals

# **3005:** Initial Risk Assessment for Immobility-Related Pressure Ulcer within 24 Hours of PICU Admission

#### Submission

**Description**: This measure determines the proportion of Pediatric Intensive Care Unit (PICU) patients for whom an initial risk assessment for development of an immobility-related pressure ulcer is performed. The assessment is to be performed within the first 24 hours of admission to the PICU with the use of a standardized, validated pressure ulcer risk assessment tool designated as appropriate by the institution. The results of the assessment must be documented in the patient's chart upon completion.

**Numerator Statement**: Number of PICU patients for whom an assessment of immobility-related pressure ulcer risk using a standardized pressure ulcer risk assessment tool was documented within 24 hours of admission.

**Denominator Statement**: All patients admitted to the PICU for at least 24 hours during a monthly or quarterly reporting period.

Exclusions: none

Adjustment/Stratification: N/A

Level of Analysis: Facility, Integrated Delivery System

Setting of Care: Hospital/Acute Care Facility

Type of Measure: Process

Data Source: Electronic Clinical Data: Electronic Health Record, Other, Paper Medical Records

Measure Steward: Pediatric Consultants, LLC

STEERING COMMITTEE MEETING 07/27-07/28/2016

#### 1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **0-H; 6-M; 9-L; 4-I** 1b. Performance Gap: **H-X**; **M-X**; **L-X**; **I-X**; **;** Evidence Exception: **Y-X; N-X** <u>Rationale</u>:

• The developers state that there are currently no clinical guidelines for pressure ulcer prevention and treatment in the pediatric population. Assessment tools are limited, so the Braden Q Scale was adapted from the Braden Scale of be used in this population.

# **3005:** Initial Risk Assessment for Immobility-Related Pressure Ulcer within 24 Hours of PICU Admission

- The developer proposed that the early identification of patients at risk for pressure ulcer is a key step in preventing them in critically ill and injured children which has been shown to reduce morbidity and mortality rates as well as healthcare costs.
- There was concern by the committee that despite being an important area of focus that there was insufficient evidence to demonstrate a link between assessment and outcomes. There was no systematic review of the evidence nor any grading provided by the developer.
- This measure was tested as an eMeasure at one site, Lurie Children's Hospital. Electronic output was
  provided for a reporting period of 01 Jan 31 March 2015 and included 106 unique patients representing
  109 events. Overall (N=106), clinical performance was high with 94% of patients meeting the measure.
- Reasons for not meeting the measure including having a pressure ulcer assessment performed outside of the 24-hour window (N=4) and not having a pressure ulcer assessment performed at all (N=3). Looking across age groups, of the children aged 0 <6 (N=66), 92% met the measure, of the children aged 6 <13 (N=16), 94% met the measure, of the children aged 13 <19 (N=20), 95% met the measure, and of PICU patients 19 and older (N=4), 100% met the measure.</li>
- The committee also mentioned that studies in pediatric populations are harder to do, and high-grade evidence is more difficult to attain than for other populations. It was also pointed out that there was a performance gap, and that despite not having evidence linking this process to outcomes, clinicians felt that not assessing for pressure ulcers placed children at risk. However, the committee felt that the assessment required to implement this the Braden Q scale may overburden providers given that there are 28 questions. This would be a threat to the feasibility of implementation of the measure. Ultimately, for these reasons the committee did not pass the measure on evidence and there was no further discussion of the measure.

# 2. Scientific Acceptability of Measure Properties: <u>The measure [does/does not] meet the Scientific Acceptability</u> <u>criteria</u>

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity)

2a. Reliability: H-X; M-X; L-X; I-X 2b. Validity: H-X; M-X; L-X; I-X

Rationale:

- This measure assesses the proportion of PICU patients for whom an initial risk assessment for development of an immobility-related pressure ulcer has been performed within 24 hours of admission.
- The measure is specified at the hospital facility or integrated delivery system level of analysis, and is meant to be reported on a monthly or quarterly basis.
- The denominator includes all patients admitted to the PICU for at least 24 hours during the reporting period.
- The numerator includes patients from the denominator population who have been assessed for risk of pressure ulcers using a standardized, validated tool.
- The measure defines a standardized, validated pressure ulcer risk assessment tool as "a validated assessment tool that is applied in a standardized fashion to each patient admitted to the PICU for at least 24 hours."
- The developer notes that, currently, the Braden Q is the only validated immobility-related pressure ulcer risk assessment tool available for critically ill and injured children; however, the measure allows for the use of other validated risk assessment tools, if available.
- To demonstrate reliability, the developer performed data element testing at one hospital site with 288 pediatric beds (including 40 PICU beds) and approximately 11,291 pediatric admissions annually.
- The developer reported that inter-rater reliability was 100% for all critical data elements, and 100% for overall clinical performance of the measure.
- Because this measure failed on evidence, scientific acceptability was not discussed.

#### 3. Feasibility: H-X; M-X; L-X; I-X

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c.Susceptibility to inaccuracies/

# **3005:** Initial Risk Assessment for Immobility-Related Pressure Ulcer within 24 Hours of PICU Admission

*unintended consequences identified 3d. Data collection strategy can be implemented)* Rationale:

• The committee felt that the assessment required to implement this – the Braden Q scale – may overburden providers given that there are 28 questions.

#### 4. Usability and Use: H-X; M-X; L-X; I-X

(Used and useful to the intended audiences for 4a. Accountability and Transparency; 4b. Improvement; and 4c. Benefits outweigh evidence of unintended consequences)

- Rationale:
  - Use and usability of this metric was not discussed by the committee.

#### 5. Related and Competing Measures

• There are two related measures, one outcome and one process measure: 0337: Pressure Ulcer Rate (PDI 2) and 0539: Pressure Ulcer Prevention Implemented during Short Term Episodes of Care

Steering Committee Recommendation for Endorsement: Y-X; N-X Rationale:

• The Committee did not vote on the suitability for the endorsement because the measure did not pass on evidence.

#### 6. Public and Member Comment

7. Consensus Standards Approval Committee (CSAC) Vote: Y-X; N-X

#### 8. Board of Directors Vote: Y-X; N-X

9. Appeals

## Measures Withdrawn from Consideration

Five measures previously endorsed by NQF have not been re-submitted for maintenance of endorsement or have been withdrawn during the endorsement evaluation process. Endorsement for these measures will be removed.

Measure	Reason for withdrawal
0267: Wrong Site, Wrong Side, Wrong Patient, Wrong Procedure, Wrong Implant	
0301: Surgery patients with appropriate hair removal	
0515: Ambulatory surgery patients with appropriate method of hair removal	
0263: Patient Burn	
0515: Ambulatory surgery patients with appropriate method of hair removal	

NQF#	Measure Title	Measure Steward
0022	Use of High Risk Medications in the Elderly	National Committee for Quality Assurance
0097	Medication Reconciliation	National Committee for Quality Assurance
0101	Falls: Screening for Future Fall Risk	National Committee for Quality Assurance
0138	Urinary catheter-associated urinary tract infection for intensive care unit (ICU) patients	Centers for Disease Control and Prevention
0139	Central line catheter-associated blood stream infection rate for ICU and high-risk nursery (HRN) patients	Centers for Disease Control and Prevention
0141	Patient Fall Rate	American Nurses Association
0202	Falls with injury	American Nurses Association
0204	Skill mix (Registered Nurse [RN], Licensed Vocational/Practical Nurse [LVN/LPN], unlicensed assistive personnel [UAP], and contract)	American Nurses Association
0205	Nursing care hours per patient day (RN, LPN, and UAP)	American Nurses Association
0206	Practice Environment Scale - Nursing Work Index (composite and five subscales)	The Joint Commission
0239	Perioperative Care: Venous Thromboembolism (VTE) Prophylaxis	AMA-convened Physician Consortium for Performance Improvement
0266	Patient Fall	Ambulatory Surgical Center Quality Collaboration
0337	Pressure Ulcer Rate (PDI 2)	Agency for Healthcare Research and Quality
0344	Accidental Puncture or Laceration Rate (PDI 1)	Agency for Healthcare Research and Quality
0345	Accidental Puncture or Laceration Rate (PSI 15)	Agency for Healthcare Research and Quality
0346	Iatrogenic Pneumothorax Rate (PSI 6)	Agency for Healthcare Research and Quality
0347	Death Rate in Low-Mortality Diagnosis Related Groups (PSI 2)	Agency for Healthcare Research and Quality

# Appendix B: NQF Patient Safety Portfolio and Related Measures

NQF#	Measure Title	Measure Steward
0348	latrogenic Pneumothorax Rate (PDI 5)	Agency for Healthcare Research and Quality
0349	Transfusion Reaction (PSI 16)	Agency for Healthcare Research and Quality
0350	Transfusion Reaction (PDI 13)	Agency for Healthcare Research and Quality
0352	Failure to Rescue In-Hospital Mortality (risk adjusted)	The Children's Hospital of Philadelphia
0353	Failure to Rescue 30-Day Mortality (risk adjusted)	The Children's Hospital of Philadelphia
0362	Retained Surgical Item or Unretrieved Device Fragment Count (PDI 3)	Agency for Healthcare Research and Quality
0363	Retained Surgical Item or Unretrieved Device Fragment Count (PSI 05)	Agency for Healthcare Research and Quality
0419	Documentation of Current Medications in the Medical Record	Centers for Medicare & Medicaid Services
0450	Postoperative Pulmonary Embolism or Deep Vein Thrombosis Rate (PSI 12)	Agency for Healthcare Research and Quality
0500	Severe Sepsis and Septic Shock: Management Bundle	Henry Ford Hospital
0530	Mortality for Selected Conditions	Agency for Healthcare Research and Quality
0531	Patient Safety for Selected Indicators	Agency for Healthcare Research and Quality
0537	Multifactor Fall Risk Assessment Conducted in Patients 65 and Older	Centers for Medicare & Medicaid Services
0538	Pressure Ulcer Prevention Included in Plan of Care	Centers for Medicare & Medicaid Services
0541	Proportion of Days Covered (PDC): 5 Rates by Therapeutic Category	Pharmacy Quality Alliance, Inc.
0553	Care for Older Adults (COA) – Medication Review	National Committee for Quality Assurance
0555	Monthly INR Monitoring for Beneficiaries on Warfarin	Centers for Medicare & Medicaid Services
0556	INR for Beneficiaries Taking Warfarin and Interacting Anti-Infective Medications	Centers for Medicare & Medicaid Services
0674	Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay)	Centers for Medicare & Medicaid Services
0678	Percent of Residents with Pressure Ulcers That Are New or Worsened (Short-Stay)	Centers for Medicare & Medicaid Services

NQF#	Measure Title	Measure Steward
0679	Percent of High Risk Residents with Pressure Ulcers (Long Stay)	Centers for Medicare & Medicaid Services
0684	Percent of Residents with a Urinary Tract Infection (Long-Stay)	Centers for Medicare & Medicaid Services
0687	Percent of Residents Who Were Physically Restrained (Long Stay)	Centers for Medicare & Medicaid Services
0689	Percent of Residents Who Lose Too Much Weight (Long-Stay)	Centers for Medicare & Medicaid Services
0709	Proportion of patients with a chronic condition that have a potentially avoidable complication during a calendar year.	Bridges To Excellence
0751	Risk Adjusted Urinary Tract Infection Outcome Measure After Surgery	American College of Surgeons
0753	American College of Surgeons – Centers for Disease Control and Prevention (ACS-CDC) Harmonized Procedure Specific Surgical Site Infection (SSI) Outcome Measure	Centers for Disease Control and Prevention
1716	National Healthcare Safety Network (NHSN) Facility-wide Inpatient Hospital-onset Methicillin-resistant Staphylococcus aureus (MRSA) Bacteremia Outcome Measure	Centers for Disease Control and Prevention
1717	National Healthcare Safety Network (NHSN) Facility-wide Inpatient Hospital-onset Clostridium difficile Infection (CDI) Outcome Measure	Centers for Disease Control and Prevention
2337	Antipsychotic Use in Children Under 5 Years Old	Pharmacy Quality Alliance (PQA, Inc.)
2371	Annual Monitoring for Patients on Persistent Medications (MPM)	National Committee for Quality Assurance
2720	National Healthcare Safety Network (NHSN) Antimicrobial Use Measure	Centers for Disease Control and Prevention
2723	Wrong-Patient Retract-and-Reorder (WP-RAR) Measure	NewYork-Presbyterian Hospital
2726	Prevention of Central Venous Catheter (CVC)-Related Bloodstream Infections	American Society of Anesthesiologists
2732	INR Monitoring for Individuals on Warfarin after Hospital Discharge	Centers for Medicare & Medicaid Services

# Appendix C: Patient Safety Portfolio—Use in Federal Programs

NQF #	Title	Federal Programs: Finalized as of July 24, 2016
0022	Use of High Risk Medications in the Elderly	Medicare Physician Quality Reporting System (PQRS), Physician Feedback/Quality and Resource Use Reports (QRUR), Physician Value- Based Payment Modifier (VBM)
0097	Medication Reconciliation	Medicare Physician Quality Reporting System (PQRS), Physician Compare, Physician Feedback/Quality and Resource Use Reports (QRUR), Physician Value-Based Payment Modifier (VBM)
0101	Falls: Screening for Future Fall Risk	Medicare Physician Quality Reporting System (PQRS), Medicare Shared Savings Program (MSSP), Physician Feedback/Quality and Resource Use Reports (QRUR), Physician Value-Based Payment Modifier (VBM)
0138	Urinary catheter- associated urinary tract infection for intensive care unit (ICU) patients	Hospital Compare, Hospital Inpatient Quality Reporting, Hospital Value-Based Purchasing, Hospital-Acquired Condition Reduction Program, Inpatient Rehabilitation Facility Quality Reporting, Long- Term Care Hospital Quality Reporting, Prospective Payment System (PPS)-Exempt Cancer Hospital Quality Reporting
0139	Central line catheter- associated blood stream infection rate for ICU and high-risk nursery (HRN) patients	Hospital Compare, Hospital Inpatient Quality Reporting, Hospital Value-Based Purchasing, Hospital-Acquired Condition Reduction Program, Long-Term Care Hospital Quality Reporting, Medicaid, Prospective Payment System (PPS)-Exempt Cancer Hospital Quality Reporting
0141	Patient Fall Rate	N/A
0202	Falls with injury	N/A
0204	Skill mix (Registered Nurse [RN], Licensed Vocational/Practical Nurse [LVN/LPN], unlicensed assistive personnel [UAP], and contract)	N/A
0205	Nursing care hours per patient day (RN, LPN, and UAP)	N/A
0206	Practice Environment Scale - Nursing Work Index (composite and five subscales)	N/A
0239	Perioperative Care: Venous Thromboembolism (VTE) Prophylaxis	Medicare Physician Quality Reporting System (PQRS), Physician Feedback/Quality and Resource Use Reports (QRUR), Physician Value- Based Payment Modifier (VBM)
0266	Patient Fall	Ambulatory Surgical Center Quality Reporting, Hospital Compare

NQF #	Title	Federal Programs: Finalized as of July 24, 2016
0337	Pressure Ulcer Rate (PDI 2)	N/A
0344	Accidental Puncture or Laceration Rate (PDI 1)	N/A
0345	Accidental Puncture or Laceration Rate (PSI 15)	N/A
0346	latrogenic Pneumothorax Rate (PSI 6)	N/A
0347	Death Rate in Low- Mortality Diagnosis Related Groups (PSI 2)	N/A
0348	latrogenic Pneumothorax Rate (PDI 5)	N/A
0349	Transfusion Reaction (PSI 16)	N/A
0350	Transfusion Reaction (PDI 13)	N/A
0352	Failure to Rescue In- Hospital Mortality (risk adjusted)	N/A
0353	Failure to Rescue 30- Day Mortality (risk adjusted)	N/A
0362	Retained Surgical Item or Unretrieved Device Fragment Count (PDI 3)	N/A
0363	Retained Surgical Item or Unretrieved Device Fragment Count (PSI 05)	N/A
0419	Documentation of Current Medications in the Medical Record	Medicare Physician Quality Reporting System (PQRS), Medicare Shared Savings Program (MSSP), Physician Feedback/Quality and Resource Use Reports (QRUR), Physician Value-Based Payment Modifier (VBM)
0450	Postoperative Pulmonary Embolism or Deep Vein Thrombosis Rate (PSI 12)	N/A
0500	Severe Sepsis and	Hospital Compare, Hospital Inpatient Quality Reporting

NQF #	Title	Federal Programs: Finalized as of July 24, 2016
	Septic Shock: Management Bundle	
0530	Mortality for Selected Conditions	N/A
0531	Patient Safety for Selected Indicators	Hospital Compare, Hospital Inpatient Quality Reporting, Hospital Value-Based Purchasing, Hospital-Acquired Condition Reduction Program
0537	Multifactor Fall Risk Assessment Conducted in Patients 65 and Older	Home Health Quality Reporting
0538	Pressure Ulcer Prevention Included in Plan of Care	Home Health Quality Reporting
0541	Proportion of Days Covered (PDC): 5 Rates by Therapeutic Category	Qualified Health Plan (QHP) Quality Rating System (QRS)
0553	Care for Older Adults (COA) – Medication Review	N/A
0555	Monthly INR Monitoring for Beneficiaries on Warfarin	N/A
0556	INR for Beneficiaries Taking Warfarin and Interacting Anti- Infective Medications	N/A
0674	Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay)	Inpatient Rehabilitation Facility Quality Reporting, Long-Term Care Hospital Quality Reporting, Skilled Nursing Facility Quality Reporting
0678	Percent of Residents with Pressure Ulcers That Are New or Worsened (Short-Stay)	Home Health Quality Reporting, Inpatient Rehabilitation Facility Quality Reporting, Long-Term Care Hospital Quality Reporting, Skilled Nursing Facility Quality Reporting
0679	Percent of High Risk Residents with Pressure Ulcers (Long Stay)	N/A
0684	Percent of Residents with a Urinary Tract Infection (Long-Stay)	N/A

NQF #	Title	Federal Programs: Finalized as of July 24, 2016
0687	Percent of Residents Who Were Physically Restrained (Long Stay)	N/A
0689	Percent of Residents Who Lose Too Much Weight (Long-Stay)	N/A
0709	Proportion of patients with a chronic condition that have a potentially avoidable complication during a calendar year.	N/A
0751	Risk Adjusted Urinary Tract Infection Outcome Measure After Surgery	N/A
0753	American College of Surgeons – Centers for Disease Control and Prevention (ACS-CDC) Harmonized Procedure Specific Surgical Site Infection (SSI) Outcome Measure	Hospital Compare, Hospital Inpatient Quality Reporting, Hospital Value-Based Purchasing, Hospital-Acquired Condition Reduction Program, Prospective Payment System (PPS)-Exempt Cancer Hospital Quality Reporting
1716	National Healthcare Safety Network (NHSN) Facility-wide Inpatient Hospital- onset Methicillin- resistant Staphylococcus aureus (MRSA) Bacteremia Outcome Measure	Hospital Compare, Hospital Inpatient Quality Reporting, Hospital Value-Based Purchasing, Hospital-Acquired Condition Reduction Program, Inpatient Rehabilitation Facility Quality Reporting, Long- Term Care Hospital Quality Reporting, Prospective Payment System (PPS)-Exempt Cancer Hospital Quality Reporting
1717	National Healthcare Safety Network (NHSN) Facility-wide Inpatient Hospital- onset Clostridium difficile Infection (CDI) Outcome Measure	Hospital Compare, Hospital Inpatient Quality Reporting, Hospital Value-Based Purchasing, Hospital-Acquired Condition Reduction Program, Inpatient Rehabilitation Facility Quality Reporting, Long- Term Care Hospital Quality Reporting, Prospective Payment System (PPS)-Exempt Cancer Hospital Quality Reporting
2337	Antipsychotic Use in Children Under 5 Years Old	N/A
2371	Annual Monitoring for	Medicaid, Qualified Health Plan (QHP) Quality Rating System (QRS)

NQF #	Title	Federal Programs: Finalized as of July 24, 2016
	Patients on Persistent Medications (MPM)	
2720	National Healthcare Safety Network (NHSN) Antimicrobial Use Measure	N/A
2723	Wrong-Patient Retract-and-Reorder (WP-RAR) Measure	N/A
2726	Prevention of Central Venous Catheter (CVC)-Related Bloodstream Infections	N/A
2732	INR Monitoring for Individuals on Warfarin after Hospital Discharge	N/A

# **Appendix D: Project Standing Committee and NQF Staff**

#### **STANDING COMMITTEE**

#### Ed Septimus, MD (Co-Chair)

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# Appendix E: Measure Specifications

0022 Use of High-Risk Medications in the Elderly (DAE)			
Status	Steering Committee Review		
Steward	National Committee for Quality Assurance		
Description	<ul> <li>There are two rates for this measure:</li> <li>The percentage of patients 65 years of age and older who received at least one high-risk medication.</li> <li>The percentage of patients 65 years of age and older who received at least two prescriptions for the same high-risk medication.</li> <li>For both rates, a lower rate represents better performance.</li> </ul>		
Туре	Process		
Data Source	Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Pharmacy This measure is based on administrative claims collected in the course of providing care to health plan members. NCQA collects the Healthcare Effectiveness Data and Information Set (HEDIS) data for this measure directly from Health Management Organizations and Preferred Provider Organizations via NCQA's online data submission system. No data collection instrument provided No data dictionary		
Level	Health Plan, Integrated Delivery System		
Setting	Ambulatory Care : Clinician Office/Clinic, Pharmacy		
Numerator Statement	<ul> <li>Numerator 1: Patients who received at least one high-risk medication during the measurement year.</li> <li>Numerator 2: Patients who received at least two prescriptions for the same high-risk medication during the measurement year.</li> <li>For both numerators a lower rate indicates better performance.</li> </ul>		
Numerator Details	Patients who had at least one dispensing event for a high-risk medication during the measurement year. Follow the steps below to identify numerator compliance. Include patients who meet criteria in more than one step only once in the numerator. Do not include denied claims. Step 1: Identify patients with at least one dispensing event (any days supply) during the measurement year for a medication in Table DAE-A. These patients are compliant for Numerator 1. Step 2: Identify patients with a single dispensing event during the measurement year for a medication in Table DAE-B where days supply exceeds the days supply criteria listed for the medication. These patients are compliant for Numerator 1. For medications dispensed during the measurement year, sum the days supply and include any days supply that extends beyond December 31 of the measurement year. For example, a prescription of a 90-days supply dispensed on December 1 of the measurement year counts as a 90-days supply. Step 3: Identify patients with a single dispensing event during the measurement year for a medication in Table DAE-C where average daily dose exceeds the average daily dose criteria listed for the medication. These patients are compliant for Numerator 1. To calculate average daily dose multiply the quantity of pills dispensed by the dose of each pill and divide by the days supply. For example, a prescription for a 30-days supply of digoxin containing 15 pills, .250 mg each pill, has an average daily dose of 0.125 mg. To calculate average daily dose for elixirs and concentrates, multiply the volume dispensed by daily dose and divide by the days supply. Do not round when calculating average daily dose. Numerator 2: Patients who had at least two dispensing events for the same high-risk medication during the		

O022 Use of High-Risk Medications in the Elderly (DAE)           measurement year.         Follow the steps below to identify numerator compliance. Include patients who meet criter in more than one step only once in the numerator. Do not include denied claims.           Step 1: Identify patients with two or more dispensing events (any days supply) on differendates of service during the measurement year for a medication in Table DAE-A. The dispendence of the serve dware and dentified by the Dward D in the NDC list.	ria
Follow the steps below to identify numerator compliance. Include patients who meet crite in more than one step only once in the numerator. Do not include denied claims. Step 1: Identify patients with two or more dispensing events (any days supply) on differen dates of service during the measurement year for a medication in Table DAE-A. The dispen	ria
in more than one step only once in the numerator. Do not include denied claims. Step 1: Identify patients with two or more dispensing events (any days supply) on differen dates of service during the measurement year for a medication in Table DAE-A. The dispen	ria
dates of service during the measurement year for a medication in Table DAE-A. The disper	
events must be for the same drug as identified by the Drug ID in the NDC list. These patien are compliant for Numerator 2.	nsing
Step 2: For each patients identify all dispensing events during the measurement year for medications in Table DAE-B. Identify patients with two or more dispensing events on differ dates of service for medications in the same medication class (as identified in the Description column). For example, a prescription for zolpidem and a prescription for zaleplon are considered two dispensing events for medications in the same medication class (these drus share the same description: Nonbenzodiazepine hypnotics). Sum the days supply for prescriptions in the same medication class. Identify patients with two or more dispensing events for medications of the same medication class where the summed days supply exce the days supply criteria listed for the medication. These patients are compliant for Numer 2. For medications dispensed during the measurement year sum the days supply and inclu- any days supply that extends beyond December 31 of the measurement year. For example prescription of a 90-days supply dispensed on December 1 of the measurement year cour	ion Igs eds ator Ide e, a
<ul> <li>a 90-days supply.</li> <li>Note: The intent is to identify all patients who had multiple dispensing events where the summed days supply exceeds the days supply criteria; there is no requirement that each dispensing event exceed the days supply criteria.</li> </ul>	
Step 3: For each patient identify all dispensing events during the measurement year for medications in Table DAE-C where average daily dose exceeds the average daily dose crite listed for the medication. Identify patients with two or more dispensing events on the san different dates of service that exceed the average daily dose criteria for the same drug as identified by the Drug ID in the NDC list (do not include drugs with a single dispensing eve These patients are compliant for Numerator 2. To calculate average daily dose for each dispensing event, multiply the quantity of pills dispensed by the dose of each pill and divid the days supply. For example, a prescription for a 30-days supply of digoxin containing 15	ne or nt). le by
.250 mg each pill, has an average daily dose of 0.125 mg. To calculate average daily dose f elixirs and concentrates, multiply the volume dispensed by daily dose and divide by the da supply. Do not round when calculating average daily dose.	or
HIGH-RISK MEDICATIONS (Table DAE-A) Anticholinergics, First-generation antihistamines:	
Brompheniramine, Carbinoxamine, Chlorpheniramine, Clemastine, Cyproheptadine, Dexbrompheniramine, Dexchlorpheniramine, Diphenhydramine (oral), Dimenhydrinate, Doxylamine, Hydroxyzine, Meclizine, Promethazine, Triprolidine	
Anticholinergics, anti-Parkinson agents:	
Benztropine (oral), Trihexyphenidyl	
Antispasmodics:	
Atropine (exclude ophthalmic), Bellandonna alkaloids, Clidinium-Chlordiazepoxide, Dicyclomine, Hyoscyamine, Propantheline, Scopolamine	
Antithrombotics:	
Dipyridamole, oral short-acting (does not apply to the extended-release combination with aspirin), Ticlopidine	
Cardiovascular, alpha agonists, central:	
Guanabenz, Guanfacine, Methyldopa	

	0022 Use of High-Risk Medications in the Elderly (DAE)
	Cardiovascular, other:
	Disopyramide, Nifedipine (immediate release)
	Central nervous system, antidepressants:
	Amitriptyline, Clomipramine, Imipramine, Trimipramine, Amoxapine, Desipramine, Nortiptyline, Paroxetine, Protriptyline
	Central nervous system, barbiturates:
	Amobarbital, Butabarbital, Butalbital, Mephobarbital, Pentobarbital, Phenobarbital, Secobarbital
	Central nervous system, vasodilators:
	Ergot mesylates, Isoxsuprine
	Central nervous system, other:
	Meprobamate
	Endocrine system, estrogens with or without progestins; include only oral and topical patch products:
	Conjugated estrogen, Esterified estrogen, Estradiol, Estropipate
	Endocrine system, sulfonylureas, long-duration:
	Chlorpropamide, Glyburide
	Endocrine system, other:
	Desiccated thyroid, Megestrol
	Pain medications, skeletal muscle relaxants:
	Carisoprodol, Chlorzoxazone, Cyclobenzaprine, Metaxalone, Methocarbamol, Orphenadrine
	Pain medications, other:
	Indomethacin, Ketorolac (includes parenteral), Meperidine, Pentazocine
	HIGH-RISK MEDICATIONS WITH DAYS SUPPLY CRITERIA (Table DAE-B)
	Anti-infectives, other (greater than 90 days supply, days supply criteria):
	Nitrofurantoin, Nitrofurantoin macrocrystals, Nitrofurantoin macrocrystals-monohydrate
	Nonbenzodiazepine hypnotics (greater than 90 days supply, days supply criteria):
	Eszopiclone, Zolpidem, Zaleplon
	 HIGH-RISK MEDICATIONS WITH AVERAGE DAILY DOSE CRITERIA (Table DAE-C)
	Alpha agonists, central (greater than 0.1 mg/day, average daily dose criteria): Reserpine
	Cardiovascular, other (greater than 0.125 mg/day, average daily dose criteria): Digoxin
	Tertiary TCAs (as single agent or as part of combination products), (greater than 6 mg/day, average daily dose criteria):
	Doxepin
	Note: NCQA will post a comprehensive list of medications and NDC codes to www.ncqa.org by November 2016. For medications in Table DAE-A and DAE-C, identify different drugs using the Drug ID field located in the NDC list on NCQA's Web site (www.ncqa.org), posted by November, 2016.
Denominator	All patients 65 years of age and older.

	0022 Use of Uigh Dick Medications in the Elderky (DAE)				
Statement	0022 Use of High-Risk Medications in the Elderly (DAE)				
Statement					
Denominator Details	All patients that are 66 years of age and older as of December 31 of the measurement year.				
Exclusions	Patients who were enrolled in hospice care at any time during the measurement year.				
Exclusion details	N/A				
Risk Adjustment	No risk adjustment or risk stratification N/A				
Stratification	N/A				
Type Score	Rate/proportion better quality = lower score				
Algorithm	Step 1. Determine the denominator: All patients 66 years of age and older as of the end (e.g., December 31) of the measurement year.				
	Step 2: Identify numerator 1: Individuals in the denominator who have received at least one high-risk medication (see definition of high-risk medications for numerator 1 in section S.6) during the measurement year.				
	Step 3: Identify numerator 2: Individuals in the denominator who have received at least two prescriptions for the same high-risk medication (see definition of high-risk medications for numerator 2 in section S.6) during the measurement year.				
	Step 4: Calculate the rates: Rate 1: Numerator 1 divided by the denominator; Rate 2: Numerator 2 divided by the denominator.				
	Note: for this measure a lower rate indicates better performance. No diagram provided				
Copyright / Disclaimer	5.1 Identified measures:				
	5a.1 Are specs completely harmonized? No				
	5a.2 If not completely harmonized, identify difference, rationale, impact: The Potentially Harmful Drug-Diseased Interactions in the Elderly (DDE) measure and NQF 0022 have a similar focus (measuring potentially inappropriate medication use in the elderly) and reporting level (health plan), however they have different target populations. The DDE measure targets patients with a specific condition or disease that can experience adverse effects when combined with certain medications that are recommended to be avoided for that condition. This measure (NQF 0022) targets a larger population of all older adults and assesses use of high-risk medications that have been recommended to be avoided in all older adults. The DDE measure is being submitted as a new measure for NQF endorsement during this current Patient Safety project.				
	5b.1 If competing, why superior or rationale for additive value: N/A				

	0450 Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate (PSI 12)	
Status	Steering Committee Review	
Steward	Agency for Healthcare Research and Quality	
Description	Perioperative pulmonary embolism or proximal deep vein thrombosis (secondary diagnosis) per 1,000 surgical discharges for patients ages 18 years and older. Excludes cases with	

	0450 Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate (PSI 12)		
	principal diagnosis for pulmonary embolism or proximal deep vein thrombosis; cases with secondary diagnosis for pulmonary embolism or proximal deep vein thrombosis present on admission; cases in which interruption of vena cava occurs before or on the same day as the first operating room procedure; and obstetric discharges.		
Туре	Outcome		
Data Source	Administrative claims 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 or ICD-10-CM/PCS coded administrative billing/claims/discharge dataset. Available at measure-specific web page URL identified in S.1 Attachment		
	PSI12_Technical_Specifications_v6.0_160531.xlsx		
Level	Facility		
Setting	Hospital/Acute Care Facility		
Numerator Statement	Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with a secondary ICD-9-CM or ICD-10-CM diagnosis code for proximal deep vein thrombosis or a secondary ICD-9-CM or ICD-10-CM diagnosis code for pulmonary embolism.		
Numerator Details	Please see attached excel file in S.2b. for version 6.0 specifications.		
Denominator Statement	Surgical discharges, for patients ages 18 years and older, with any-listed ICD-9-CM or ICD-10- PCS procedure codes for an operating room procedure. Surgical discharges are defined by specific MS-DRG codes.		
Denominator Details	Please see Patient Safety Indicators Appendices in attached excel file in S.2b. for version 6.0 specifications.		
Exclusions	<ul> <li>Exclude cases:</li> <li>with a principal ICD-9-CM or ICD-10-CM diagnosis code (or secondary diagnosis present on admission) for proximal deep vein thrombosis</li> </ul>		
	• with a principal ICD-9-CM or ICD-10-CM diagnosis code (or secondary diagnosis present on admission) for pulmonary embolism		
	• where a procedure for interruption of vena cava occurs before or on the same day as the first operating room procedure*		
	• any-listed ICD-9-CM or ICD-10-PCS procedure code for extracorporeal membrane oxygenation (ECMO)		
	any-listed ICD-9-CM or ICD-10-CM diagnosis code for acute brain or spinal injury present on admission		
	<ul> <li>MDC 14 (pregnancy, childbirth, and puerperium)</li> <li>with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), or principal diagnosis (DX1=missing)</li> </ul>		
	*If day of procedure is not available in the input data file, the rate may be slightly lower than it the information was available.		
Exclusion details	Please see attached excel file in S.2b. for version 6.0 specifications.		
Risk Adjustment	Statistical risk model		
	The predicted value for each case is computed using a hierarchical model (logistic regression with hospital random effect) and covariates for gender, age (in 5-year age groups, except for the youngest age range), Modified Diagnosis Related Groups, which are the base MS DRGs without any distinction for "comorbidity and complications" (CC/MCC), AHRQ Comorbidity Index, Major Diagnosis Categories (MDC) based on the principal diagnosis, and transfer in from another acute care hospital. A parsimonious model was identified using a backward		

 0450 Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate (PSI 12)		
of the predicted interest (i.e., ho the observed rat Additional infor the AHRQ Qualit	on procedure with bootstrapping. The expected rate is computed as the sum value for each case divided by the number of cases for the unit of analysis of spital). The risk adjusted rate is computed using indirect standardization as the divided by the expected rate, multiplied by the reference population rate. mation on methodology can be found in the Empirical Methods document on cy Indicator website (www.qualityindicators.ahrq.gov). The Empirical Methods d in the supplemental materials.	
	ariates for this measure are as follows:	
PARAMETER	LABEL	
Intercept	Intercept	
Sex   Age Demo		
M_AgeCat_1	Male   Age 18 - 29	
M_AgeCat_2	Male   Age 30 - 34	
M_AgeCat_3	Male   Age 35 - 39	
M_AgeCat_4	Male   Age 40 - 44	
M_AgeCat_5	Male   Age 45 - 49	
M_AgeCat_6	Male   Age 50 - 54	
M_AgeCat_7	Male   Age 55 - 59	
M_AgeCat_8	Male   Age 60 - 64	
M_AgeCat_9	Male   Age 65 - 69	
M_AgeCat_10	Male   Age 70 - 74	
M_AgeCat_11	Male   Age 75 - 79	
M_AgeCat_12	Male   Age 80 - 84	
M_AgeCat_13	Male   Age 85 - 89	
M_AgeCat_14	Male   Age >=90	
F_AgeCat_1	Female   Age 18 - 29	
F_AgeCat_2	Female   Age 30 - 34	
F_AgeCat_3	Female   Age 35 - 39	
F_AgeCat_4	Female   Age 40 - 44	
F_AgeCat_5	Female   Age 45 - 49	
F_AgeCat_6	Female   Age 50 - 54	
F_AgeCat_7	Female   Age 55 - 59	
F_AgeCat_8	Female   Age 60 - 64	
F_AgeCat_9	Female   Age 65 - 69	
F_AgeCat_10	Female   Age 70 - 74	
F_AgeCat_11	Female   Age 75 - 79	
F_AgeCat_12	Female   Age 80 - 84	
F_AgeCat_13	Female   Age 85 - 89	
F_AgeCat_14	Female   Age >=90	
Origin		
TRNSFER	Transfer from another facility	
Comorbidities		
ANEMDEF	Deficiency Anemias	
BLDLOSS	Chronic blood loss anemia	
CHF	Congestive heart failure	

0450 Periope	erative Pulmonary Embolism or Deep Vein Thrombosis Rate (PSI 12)
COAG	Coagulopathy
DEPRESS	Depression
DM	Diabetes w/o chronic complications
DMCX	Diabetes w/ chronic complications
HTN_C	Hypertension, Complicated
НҮРОТНҮ	Hypothyroidism
IMMUNE	Immune disorders
LIVER	Liver disease
LYMPH	Lymphoma
LYTES	Fluid and electrolyte disorders
METS	Metastatic cancer
OBESE	Obesity
PARA	Paralysis
PSYCH	Psychoses
PULMCIRC	Pulmonary circulation disease
RENLFAIL	Renal failure
TUMOR	Solid tumor w/out metastasis
WGHTLOSS	Weight loss
Major Diagnos	stic Categories (MDC)
MDC_1	MDC 1: Nervous System
MDC_3	MDC 3: Ear Nose Mouth And Throat
MDC_4	MDC 4: Respiratory System
MDC_5	MDC 5: Circulatory System
MDC_6	MDC 6: Digestive System
MDC 7	MDC 7: Hepatobiliary System And Pancreas
MDC_8	MDC 8: Musculoskeletal And Connective
MDC_9	MDC 9: Skin Subcutaneous And Breast
MDC_10	MDC 10: Endocrine Nutritional And Metabolic
MDC_11	MDC 11: Kidney And Urinary Tract
MDC 13	MDC 13: Female Reproductive System
MDC_16	MDC 16: Blood and Immunological
	MDC 18: Infectious and Parasitic
MDC_20	MDC 20: Alcohol/Drug Disorders
MDC_21	MDC 21: Injuries Poison And Toxic
MDC_22	MDC 22: Burns
MDC_23	MDC 23: Factors Influencing Health
	nostic Related Groups (MDRG)
mdrg_1001	Adrenal & pituitary procedures
mdrg_1002	Amputation of lower limb for endocrine
mdrg_1003	O.R. procedures for obesity
mdrg_1004	Skin grafts & wound debridement for endoc
mdrg_1005	Thyroid parathyroid & thyroglossal procedures
mdrg_1006	Other endocrine nutritional & metabolic procedures
mdrg_102	Craniotomy w major dev impl/acute complex CNS

0450 Periopera	tive Pulmonary Embolism or Deep Vein Thrombosis Rate (PSI 12)
mdrg_103	Craniotomy & endovascular intracranial procedures
mdrg_104	Spinal procedures
mdrg_105	Ventricular shunt procedures
mdrg_106	Carotid artery stent procedure
mdrg_107	Extracranial procedures
mdrg_108	Peripheral & cranial nerve & other nervous system procedures
mdrg_1101	Kidney transplant
mdrg_1102	Major bladder procedures
mdrg_1103	Kidney & ureter procedures for neoplasm
mdrg_1104	Kidney & ureter procedures for non-neoplasm
mdrg_1105	Minor bladder procedures
mdrg_1106	Prostatectomy
mdrg_1107	Transurethral procedures
mdrg_1108	Urethral procedures
mdrg_1109	Other kidney & urinary tract procedures
mdrg_1201	Major male pelvic procedures
mdrg_1202	Penis procedures
mdrg_1203	Testes procedures
mdrg_1204	Transurethral prostatectomy
mdrg_1301	Pelvic evisceration - radical hysterectomy
mdrg_1302	Uterine & adnexa procedures ovarian or adnexal malignancy
mdrg_1303	Uterine adnexa procedures non-ovarian/adnexal malignancy
mdrg_1304	Uterine & adnexa procedures for non-malignancy
mdrg_1305	D&C conization laparoscopy & tubal interruption
mdrg_1306	Vagina cervix & vulva procedures
mdrg_1307	Female reproductive system reconstructive
mdrg_1308	Other female reproductive system procedures
mdrg_1601	Splenectomy
mdrg_1602	Other O.R. procedures of the blood & blood forming
mdrg_1707	Lymphoma & leukemia
mdrg_1708	Lymphoma & non-acute leukemia
mdrg_1801	Infectious & parasitic diseases w procedure
mdrg_1802	Postoperative or post-traumatic infections
mdrg_2101	Wound debridements for injuries
mdrg_2102	Skin grafts for injuries
mdrg_2103	Hand procedures for injuries
mdrg_2104	Other O.R. procedures for injuries
mdrg_2201	Full thickness burn w skin graft or inhalation injury
mdrg_2210	Extensive burns or full thickness burns
mdrg_2301	O.R. procedures w diagnoses of other contact
mdrg_2407	Limb reattachment hip & femur procedures
mdrg_2408	Other O.R. procedures for multiple sig trauma
mdrg_301	Acute major eye infections
 mdrg_302	Other ear nose mouth & throat O.R. procedures

0450 Periopera	ative Pulmonary Embolism or Deep Vein Thrombosis Rate (PSI 12)
mdrg_304	Mouth procedures
mdrg_305	Salivary gland procedures
mdrg_401	Major chest procedures
mdrg_402	Other respiratory system O.R. procedures
mdrg_502	Percutaneous cardiovascular procedures w non-drug-eluting stent
mdrg_503	Cardiac valve & other major cardiothoracic procedures
mdrg_504	Cardiac defibrillator implant
mdrg_505	Other cardiothoracic procedures
mdrg_506	Coronary bypass w PTCA
mdrg_507	Coronary bypass w cardiac catheterization
mdrg_509	Amputation for circulatory sys disorders
mdrg_510	Permanent cardiac pacemaker implant
mdrg_511	Percutaneous cardiovascular procedures w drug-eluting stent
mdrg_513	Percutaneous cardiovascular procedures w/o coronary artery stent
mdrg_514	Other vascular procedures
mdrg_515	Upper limb & toe amputation
mdrg_516	Cardiac pacemaker device replacement
mdrg_517	Cardiac pacemaker revision
mdrg_519	Other circulatory system O.R. procedures
mdrg_601	Stomach esophageal & duodenal procedures
mdrg_602	Major small & large bowel procedures
mdrg_603	Rectal resection
mdrg_604	Peritoneal adhesiolysis
mdrg_605	Appendectomy w complicated principal diagnosis
mdrg_606	Appendectomy w/o complicated principal diagnosis
mdrg_607	Minor small & large bowel procedures
mdrg_608	Anal & stomal procedures
mdrg_609	Inguinal & femoral hernia procedures
mdrg_610	Hernia procedures except inguinal & femoral
mdrg_611	Other digestive system O.R. procedures
mdrg_701	Pancreas liver & shunt procedures
mdrg_702	Biliary tract procedures except only cholecystectomy
mdrg_703	Cholecystectomy w common duct exploration
mdrg_704	Cholecystectomy except by laparoscope
mdrg_705	Laparoscopic cholecystectomy
mdrg_706	Hepatobiliary diagnostic procedures
mdrg_707	Other hepatobiliary or pancreas procedures
mdrg_7701	Heart transplant or implant heart assist system
mdrg_7702	Liver transplant
mdrg_7703	Lung transplant
mdrg_801	Combined anterior/posterior spinal fusion
mdrg_802	Spinal fusion except cervical w spinal curvature/malignancy/infection
mdrg_803	Spinal fusion except cervical
mdrg_804	Bilateral or multiple major joint procedures

	0450 Periope	erative Pulmonary Embolism or Deep Vein Thrombosis Rate (PSI 12)
	mdrg_805	Wnd debridement & skin graft excision hand for musculoskeletal
	mdrg_805	Revision of hip or knee replacement
	mdrg_807	Major joint replacement or reattachment
	mdrg_808	Cervical spinal fusion
	mdrg_809	Amputation for musculoskeletal system
	mdrg_810	Biopsies of musculoskeletal system
	mdrg_811	Hip & femur procedures except major joint
	mdrg_812	Major joint & limb reattachment
	mdrg_813	Knee procedures w principal diagnosis of infection
	mdrg_814	Knee procedures w/o principal diagnosis of infection
	mdrg_815	Back & neck procedures exc spinal fusion
	mdrg_816	Lower extremity & humerus procedures
	mdrg_817	Local excision & removal internal fixation devices
	mdrg_818	Local excision & removal internal fixation devices
	mdrg_819	Soft tissue procedures
	mdrg_820	Foot procedures
	mdrg_821	Major thumb or joint procedures
	mdrg_822	Major shoulder or elbow joint procedures
	mdrg_824	Shoulder elbow or forearm procedures
	mdrg_825	Hand or wrist procedures
	mdrg_826	Other musculoskeletal system & connective tissue procedures
	mdrg_8899	Non-Extensive O.R. Procedures Unrelated to PDX
	mdrg_901	Skin graft &/or debridement for skin ulcer or cellulitis
	mdrg_902	Skin graft &/or debridement except for skin ulcer
	mdrg_903	Other skin subcutaneous tissue & breast procedures
	mdrg_904	Mastectomy for malignancy
	mdrg_905	Breast biopsy local excision
	c-statistic = .75	51
	Source: http://	/www.qualityindicators.ahrq.gov/Modules/psi_resources.aspx
	Parameter est S.2b	imates are also included with the Technical Specifications attached in section
	Available in at	tached Excel or csv file at S.2b
Stratification	Not applicable	
Type Score	Rate/proportion better quality = lower score	
Algorithm	The observed	rate is the number of discharge records where the patient experienced the PSI
		divided by the number of discharge records at risk for the event. The expected
		arative rate that incorporates information about a reference population that is
		user's input dataset – what rate would be observed if the expected level of in the reference population and estimated with risk adjustment regression
		applied to the mix of patients with demographic and comorbidity distributions
		e user's dataset. The expected rate is calculated only for risk-adjusted
		rate is estimated for each person using a generalized estimating equations (GEE)
		ccount for correlation at the hospital or provider level.
	The risk-adjust	ed rate is a comparative rate that also incorporates information about a

	0450 Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate (PSI 12)
	reference population that is not part of the input dataset – what rate would be observed if the level of care observed in the user's dataset were applied to a mix of patients with demographics and comorbidities distributed like the reference population? The risk adjusted rate is calculated using the indirect method as observed rate divided by expected rate multiplied by the reference population rate. The smoothed rate is the weighted average of the risk-adjusted rate from the user's input dataset and the rate observed in the reference population; the smoothed rate is calculated with a shrinkage estimator to result in a rate near that from the user's dataset if the provider's rate is estimated in a stable fashion with minimal noise, or to result in a rate near that of the reference population if the variance of the estimated rate from the input dataset is large compared with the hospital-to-hospital variance estimated from the reference population. Thus, the smoothed rate is a weighted average of the risk-adjusted rate and the reference population rate, where the weight is the signal-to- noise ratio. In practice, the smoothed rate brings rates toward the mean, and tends to do this more so for outliers (such as rural hospitals). For additional information, please see the supplemental materials for the AHRQ QI Empirical
	Methods. Available at measure-specific web page URL identified in S.1
Copyright / Disclaimer	5.1 Identified measures:
	5a.1 Are specs completely harmonized?
	5a.2 If not completely harmonized, identify difference, rationale, impact:
	5b.1 If competing, why superior or rationale for additive value: Not applicable

	2909 Perioperative Hemorrhage or Hematoma Rate (PSI 09)
Status	Steering Committee Review
Steward	Agency for Healthcare Research and Quality
Description	Perioperative hemorrhage or hematoma cases involving a procedure to treat the hemorrhage or hematoma, following surgery per 1,000 surgical discharges for patients ages 18 years and older. Excludes cases with a diagnosis of coagulation disorder; cases with a principal diagnosis of perioperative hemorrhage or hematoma; cases with a secondary diagnosis of perioperative hemorrhage or hematoma present on admission; cases where the only operating room procedure is for treatment of perioperative hemorrhage or hematoma; obstetric cases.
Туре	Outcome
Data Source	Administrative claims 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- or ICD-10-CM/PCS coded administrative billing/claims/discharge dataset.
	Available at measure-specific web page URL identified in S.1 Attachment PSI09_Technical_Specifications_160513-636009765292866470.xlsx
Level	Facility
Setting	Hospital/Acute Care Facility
Numerator Statement	<ul> <li>Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with:</li> <li>any secondary ICD-9-CM or ICD-10-CM diagnosis codes for perioperative hemorrhage or hematoma and any-listed ICD-9-CM or ICD-10-PCS procedure codes for treatment of</li> </ul>

	2909 Perioperative Hemorrhage or Hematoma Rate (PSI 09)
	hemorrhage or hematoma
	Note that the ICD-10-CM specification is limited to postoperative hemorrhage or hematoma, whereas the ICD-9-CM specification captures both intraoperative and postoperative hemorrhage or hematoma (due to diagnosis codes that are less specific).
Numerator Details	Please see attached excel file in S.2b. for version 6.0 specifications.
Denominator Statement	Surgical discharges, for patients ages 18 years and older, with any-listed ICD-9-CM or ICD-10- PCS procedure codes for an operating room procedure. Surgical discharges are defined by specific MS-DRG codes. See Appendices: (attached in S.2b)
Denominator Details	Appendix A – Please see attached excel file in S.2b. for version 6.0 specifications.
Exclusions	Exclude cases:
	• with a principal ICD-9-CM or ICD-10-CM diagnosis code (or secondary diagnosis present on admission(1) for perioperative hemorrhage or postoperative hematoma
	• where the only operating room procedure is for treatment of perioperative hemorrhage or hematoma
	• with any secondary ICD-9-CM or ICD-10-CM diagnosis codes for perioperative hemorrhage or hematoma and any-listed ICD-9-CM or ICD-10-PCS procedure codes for treatment of perioperative hemorrhage or hematoma occurring before the first operating room procedure(2)
	<ul> <li>with any-listed ICD-9-CM or ICD-10-CM diagnosis codes for coagulation disorder</li> </ul>
	<ul> <li>MDC 14 (pregnancy, childbirth, and puerperium)</li> </ul>
	<ul> <li>with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), or principal diagnosis (DX1=missing)</li> </ul>
	1. Only for cases that otherwise qualify for the numerator.
	2. If day of procedure is not available in the input data file, the rate may be slightly lower than if the information were available.
Exclusion details	Please see attached excel file in S.2b. for version 6.0 specifications.
Risk Adjustment	Statistical risk model The predicted value for each case is computed using a hierarchical model (logistic regression with hospital random effect) and covariates for gender, age (in 5-year age groups, except for the youngest age range), Modified Diagnosis Related Groups, which are the base MS DRGs without any distinction for "comorbidity and complications" (CC/MCC), AHRQ Comorbidity Index, Major Diagnosis Categories (MDC) based on the principal diagnosis, and transfer in from another acute care hospital. A parsimonious model was identified using a backward stepwise selection procedure with bootstrapping. The expected rate is computed as the sum of the predicted value for each case divided by the number of cases for the unit of analysis of interest (i.e., hospital). The risk adjusted rate is computed using indirect standardization as the observed rate divided by the expected rate, multiplied by the reference population rate. Additional information on methodology can be found in the Empirical Methods document on the AHRQ Quality Indicator website (www.qualityindicators.ahrq.gov). The Empirical Methods are also attached in the supplemental materials. The specific covariates for this measure are as follows:
	PARAMETER LABEL

2909 Periopera	ative Hemorrhage or Hematoma Rate (PSI 09)
Intercept	Intercept
Sex   Age Demog	-
M_AgeCat_1	Male   Age 18 - 29
M_AgeCat_2	Male   Age 30 - 34
M_AgeCat_3	Male   Age 35 - 39
M_AgeCat_4	Male   Age 40 - 44
M_AgeCat_5	Male   Age 45 - 49
M_AgeCat_6	Male   Age 50 - 54
M_AgeCat_7	Male   Age 55 - 59
M_AgeCat_8	Male   Age 60 - 64
M_AgeCat_9	Male   Age 65 - 69
M_AgeCat_10	Male   Age 70 - 74
M_AgeCat_11	Male   Age 75 - 79
M_AgeCat_12	Male   Age 80 - 84
M_AgeCat_13	Male   Age 85 - 89
M AgeCat 14	Male   Age >=90
F_AgeCat_1	Female   Age 18 - 29
F_AgeCat_2	Female   Age 30 - 34
F_AgeCat_3	Female   Age 35 - 39
F_AgeCat_4	Female   Age 40 - 44
F_AgeCat_5	Female   Age 45 - 49
F_AgeCat_6	Female   Age 50 - 54
F_AgeCat_7	Female   Age 55 - 59
F_AgeCat_8	Female   Age 60 - 64
F_AgeCat_9	Female   Age 65 - 69
F_AgeCat_10	Female   Age 70 - 74
F_AgeCat_11	Female   Age 75 - 79
F_AgeCat_12	Female   Age 80 - 84
F_AgeCat_13	Female   Age 85 - 89
F_AgeCat_14	Female   Age >=90
Origin:	
TRNSFER	Transfer from another facility
Comorbidities:	
AIDS	Acquired immune deficiency syndrome
ALCOHOL	Alcohol abuse
ANEMDEF	Deficiency Anemias
CHF	Congestive heart failure
COAG	Coagulopathy
DM	Diabetes w/o chronic complications
DMCX	Diabetes w/ chronic complications
DRUG	Drug abuse
IMMUNE	Immune disorders
LIVER	Liver disease
LYTES	Fluid and electrolyte disorders

2909 Periopera	ative Hemorrhage or Hematoma Rate (PSI 09)	
Major Diagnostic Categories (MDC):		
MDC_1	MDC 1: Nervous System	
MDC_3	MDC 3: Ear Nose Mouth And Throat	
MDC_4	MDC 4: Respiratory System	
MDC_5	MDC 5: Circulatory System	
MDC_6	MDC 6: Digestive System	
MDC_7	MDC 7: Hepatobiliary System And Pancreas	
MDC_8	MDC 8: Musculoskeletal And Connective	
MDC_9	MDC 9: Skin Subcutaneous And Breast	
MDC_10	MDC 10: Endocrine Nutritional And Metabolic	
MDC_11	MDC 11: Kidney And Urinary Tract	
MDC_13	MDC 13: Female Reproductive System	
MDC_16	MDC 16: Blood and Immunological	
	MDC 17: Myeloproliferative Diseases and Disorders	
MDC_18	MDC 18: Infectious and Parasitic	
MDC_21	MDC 21: Injuries Poison And Toxic	
METS	Metastatic cancer	
PERIVASC	Peripheral vascular disease	
PULMCIRC	Pulmonary circulation disease	
RENLFAIL	Renal failure	
VALVE	Valvular disease	
WGHTLOSS	Weight loss	
Modified Diagno	stic Related Groups (MDRG):	
mdrg_1001	Adrenal & pituitary procedures	
mdrg_1002	Amputation of lower limb for endocrine	
mdrg_1003	O.R. procedures for obesity	
mdrg_1004	Skin grafts & wound debridement for endocrine, nutrit, metab disorders	
mdrg_1005	Thyroid parathyroid & thyroglossal procedures	
mdrg_1006	Other endocrine nutrit & metab proc	
mdrg_102	Craniotomy w major dev impl/acute complex CNS	
mdrg_103	Craniotomy & endovascular intracranial procedures	
mdrg_104	Spinal procedures	
mdrg_105	Ventricular shunt procedures	
mdrg_106	Carotid artery stent procedure	
mdrg_107	Extracranial procedures	
mdrg_108	Periph & cranial nerve & other nerv syst proc	
mdrg_1101	Kidney transplant	
mdrg_1102	Major bladder procedures	
mdrg_1103	Kidney & ureter procedures for neoplasm	
mdrg_1104	Kidney & ureter procedures for non-neoplasm	
mdrg_1105	Minor bladder procedures	
mdrg_1106	Prostatectomy	
mdrg_1107	Transurethral procedures	
mdrg_1108	Urethral procedures	

2909 Perioper	ative Hemorrhage or Hematoma Rate (PSI 09)
mdrg_1109	Other kidney & urinary tract procedures
mdrg_1203	Testes procedures
mdrg_1204	Transurethral prostatectomy
mdrg_1301	Pelvic evisceration - rad hysterectomy
mdrg_1302	Uterine & adnexa proc ovarian or adnexal malig
mdrg_1303	Uterine adnexa proc non-ovarian/adnexal malig
mdrg_1304	Uterine & adnexa proc for non-malignancy
mdrg_1305	DnC conization laparoscopy & tubal interruption
mdrg_1306	Vagina cervix & vulva procedures
mdrg_1307	Female reproductive system reconstructive
mdrg_1308	Other female reproductive system procedures
mdrg_1601	Splenectomy
mdrg_1602	Other O.R. proc of the blood & blood forming
mdrg_1707	Lymphoma & leukemia
mdrg_1708	Lymphoma & non-acute leukemia
mdrg_1709	Myeloprolif disord or poorly diff neopl w maj OR proc
mdrg_1710	Myeloprolif disord or poorly diff neopl w other OR proc
mdrg_1801	Infectious & parasitic diseases w procedure
mdrg_1802	Postoperative or post-traumatic infections
mdrg_2101	Wound debridement for injuries
mdrg_2102	Skin grafts for injuries
mdrg_2103	Hand procedures for injuries
mdrg_2104	Other O.R. procedures for injuries
mdrg_2408	Other O.R. procedures for multiple sig trauma
mdrg_301	Acute major eye infections
mdrg_302	Other ear nose mouth & throat O.R. procedures
mdrg_303	Sinus & mastoid procedures
mdrg_304	Mouth procedures
mdrg_305	Salivary gland procedures
mdrg_401	Major chest procedures
mdrg_402	Other resp system O.R. procedures
mdrg_502	Perc cardiovasc proc w non-drug-eluting stent
mdrg_503	Cardiac valve & oth major cardiothoracic proc
mdrg_504	Cardiac defibrillator implant
mdrg_505	Other cardiothoracic procedures
mdrg_506	Coronary bypass w PTCA
mdrg_507	Coronary bypass w cardiac cath
mdrg_509	Amputation for circ sys disorders
mdrg_510	Permanent cardiac pacemaker implant
mdrg_511	Perc cardiovasc proc w drug-eluting stent
mdrg_513	Perc cardiovasc proc w/o coronary artery stent
mdrg_514	Other vascular procedures
mdrg_515	Upper limb & toe amputation
 mdrg_516	Cardiac pacemaker device replacement

2909 Periopera	ative Hemorrhage or Hematoma Rate (PSI 09)
mdrg_517	Cardiac pacemaker revision
mdrg_519	Other circulatory system O.R. procedures
mdrg_601	Stomach esophageal & duodenal
mdrg_602	Major small & large bowel proc
mdrg_603	Rectal resection
mdrg_604	Peritoneal adhesiolysis
mdrg_605	Appendectomy w complicated principal diag
mdrg_606	Appendectomy w/o complicated principal diag
mdrg_607	Minor small & large bowel procedures
mdrg_608	Anal & stomal procedures
mdrg_609	Inguinal & femoral hernia procedures
mdrg_610	Hernia procedures except inguinal & femoral
mdrg_611	Other digestive system O.R. procedures
mdrg_701	Pancreas liver & shunt procedures
mdrg_702	Biliary tract proc except only cholecyst
mdrg_703	Cholecystectomy w c.d.e.
mdrg_704	Cholecystectomy except by laparoscope
mdrg_705	Laparoscopic cholecystectomy
mdrg_706	Hepatobiliary diagnostic procedures
mdrg_707	Other hepatobiliary or pancreas procedures
mdrg_7701	Heart transplant or implant heart assist sys
mdrg_801	Combined anterior/posterior spinal fusion
mdrg_802	Spinal fus exc cerv w spinal curv/malig/infec
mdrg_803	Spinal fusion except cervical
mdrg_804	Bilateral or multiple major joint procs
mdrg_805	Wnd debrid & skn grft exc hand for musculo
mdrg_806	Revision of hip or knee replacement
mdrg_807	Major joint replacement or reattachment
mdrg_808	Cervical spinal fusion
mdrg_809	Amputation for musculoskeletal sys
mdrg_810	Biopsies of musculoskeletal system
mdrg_811	Hip & femur procedures except major joint
mdrg_812	Major joint & limb reattachment
mdrg_813	Knee procedures w pdx of infection
mdrg_814	Knee procedures w/o pdx of infection
mdrg_815	Back & neck proc exc spinal fusion
mdrg_816	Lower extrem & humer proc
mdrg_817	Local excision & removal int fix devices
mdrg_819	Soft tissue procedures
mdrg_820	Foot procedures
mdrg_826	Other musculoskelet sys & conn tiss proc
mdrg_8899	Non-Extensive O.R. Proc Unrelated to PDX
mdrg_901	Skin graft &/or debrid for skn ulcer or cellulitis
mdrg_902	Skin graft &/or debrid exc for skin ulcer

	2909 Perioperative Hemorrhage or Hematoma Rate (PSI 09)
	mdrg_903 Other skin subcut tiss & breast c-statistic = .769
	Source: http://qualityindicators.ahrq.gov/Modules/psi_resources.aspx Parameter estimates are also included with the Technical Specifications attached in section S.2b
	Available in attached Excel or csv file at S.2b
Stratification	Not applicable
Type Score	Rate/proportion better quality = lower score
Algorithm	<ul> <li>The observed rate is the number of discharge records where the patient experienced the PSI adverse event divided by the number of discharge records at risk for the event. The expected rate is a comparative rate that incorporates information about a reference population that is not part of the user's input dataset – what rate would be observed if the expected level of care observed in the reference population and estimated with risk adjustment regression models, were applied to the mix of patients with demographic and comorbidity distributions observed in the user's dataset. The expected rate is calculated only for risk-adjusted indicators.</li> <li>The expected rate is estimated for each person using a generalized estimating equations (GEE)</li> </ul>
	approach to account for correlation at the hospital or provider level.
	The risk-adjusted rate is a comparative rate that also incorporates information about a reference population that is not part of the input dataset – what rate would be observed if the level of care observed in the user's dataset were applied to a mix of patients with demographics and comorbidities distributed like the reference population? The risk adjusted rate is calculated using the indirect method as observed rate divided by expected rate multiplied by the reference population rate. The smoothed rate is the weighted average of the risk-adjusted rate from the user's input dataset and the rate observed in the reference population; the smoothed rate is calculated with a shrinkage estimator to result in a rate near that from the user's dataset if the provider's rate is estimated in a stable fashion with minima noise, or to result in a rate near that of the reference population if the variance of the estimated rate from the input dataset is large compared with the hospital-to-hospital variance estimated from the reference population. Thus, the smoothed rate is a weighted average of the risk-adjusted rate and the reference population rate, where the weight is the signal-to-noise ratio. In practice, the smoothed rate brings rates toward the mean, and tends to do this more so for outliers (such as rural hospitals). For additional information, please see the supplemental materials for the AHRQ QI Empirical Methods. No diagram provided
Copyright / Disclaimer	5.1 Identified measures:
	5a.1 Are specs completely harmonized?
	5a.2 If not completely harmonized, identify difference, rationale, impact: Not Applicable
	5b.1 If competing, why superior or rationale for additive value:

	2940 Use of Opioids at High Dosage in Persons Without Cancer	
Status	Steering Committee Review	

## NATIONAL QUALITY FORUM

NQF REVIEW DRAFT— Comments due by October 7 by 6:00 PM ET.

	2940 Use of Opioids at High Dosage in Persons Without Cancer
Steward	PQA
Description	The proportion (XX out of 1,000) of individuals without cancer receiving prescriptions for opioids with a daily dosage greater than 120mg morphine equivalent dose (MED) for 90 consecutive days or longer.
Туре	Process
Data Source	Administrative claims Health Plan Medical and Pharmacy Claims. Health Plan member enrollment information. No data collection instrument provided Attachment Cancer_Exclusion_RxHCCICD-
	9_and_10_Codes.xlsx
Level	Health Plan, Population : National, Population : State
Setting	Other, Pharmacy The level of analysis for this measure is the prescription drug health plan, but it contains claims data from multiple care settings, including ambulatory, skilled nursing facility, pharmacy etc.
Numerator Statement	Any member in the denominator with opioid prescription claims where the MED is greater than 120mg for 90 consecutive days or longer*
Nume e un t	*MED calculation is included in S.6 Numerator Details
Numerator Details	Any member in the denominator with opioid prescription claims greater than 120mg MED for 90 consecutive days or longer* (See Table Opioids-A: Opioid Medications)
	*Identifying members with prescription opioids that exceeded the MED threshold:
	To identify members with prescription opioids that exceeded the MED threshold, each claim is to be converted into the MED using the appropriate conversion factor associated with the opioid product of that prescription claim (see Appendix A). The MED for each day's claims then are summed to determine the total MED for that day.
	For each member in the denominator:
	1. Calculate the MED for each opioid prescription claim during the measurement period, using the following equations:
	• # of Opioid Dosage Units per day = (Opioid claim quantity) / (Opioid claim days supply)
	• MED Daily Dose per claim = (# of opioid dosage units per day) X (# mg opioid per dosage unit) X (MED
	conversion factor)
	2. Sum the daily MEDs of all opioid claims for each day to arrive at a total daily MED for each member.
	3. Identify the days where the MED threshold is exceeded.
	4. Any member, for whom the MED threshold is exceeded for 90 consecutive days or longer, meets the criteria for the MED component of the numerator.
	Table Opioid-A: Opioid Medications (MED conversion factor)
	buprenorphine patch (12.6)buprenorphine tab or film (10)butorphanol (7)codeine (0.15)dihydrocodeine (0.25)fentanyl buccal or SL tablets, or lozenze/troche(0.13)fentanyl film or oral spray (0.18)fentanyl nasal spray (0.16)patch (7.2)hydrocodone (1)hydromorphone (4)levorphanol (11)morphine (1)opium(1)oxycodone (1.5)oxymorphone (3)pentadol (0.4)tramadol (0.1)
	*Note: Injectables and Opioid cough and cold products and combination products containing buprenorphine and naloxone (e.g., BunavailTM, Suboxone®, Zubsolv®) are excluded from the MED calculations. Ionsys® (fentanyl transdermal patch) is also excluded as it is only for inpatient use; It is also only available through a restricted program under a Risk Evaluation and

2940 Use of Opioids at High Dosage in Persons Without Cancer         Mitigation Strategy (REMS)				
Any member with two or more prescription claims for opioids filled on at least two separate days, for which the sum of the days supply is greater than or equal to 15.				
days, for which the	sum of the days su			wo separate
buprenorphine hydrocodone	butorphanol	codeine	dihydrocodeine	fentanyl
hydromorphone opium	levorphanol	meperidine	methadone	morphine
oxycodone	oxymorphone	pentazocine	tapentadol	tramadol
Any member with a diagnosis for Cancer or a Prescription Drug Hierarchical Condition Category (RxHCC) 8, 9, 10, or 11 for Payment Year 2015; or RxHCC 15, 16, 17, 18, or 19 for Payment Year 2016 (see list in S.11 and S.2b); or a hospice indicator (Medicare Part D) from the enrollment database.				
<ul> <li>Hospice exclusion: Exclude those members identified in the Medicare Enrollment Database as being enrolled in hospice.</li> <li>Cancer exclusion: For Payment Year 2015: RxHCC 8, 9, 10, or 11. For Payment Year 2016: RxHCC 15, 16, 17, 18, or 19</li> <li>ICD 9 and 10 Codes to Identify Cancer: Please see attachment in S2 b</li> </ul>				
No risk adjustment or risk stratification				
The measure is stratified by the following lines of business for the health plan:CommercialMedicareMedicaidMedicare Plans are further stratified by Low Income Subsidy statusDefinition: Medicare Low Income Subsidy (LIS) - A subsidy paid by the Federal government tothe drug plan for Medicare beneficiaries who need extra help with their prescription drugcosts due to limited income and resources. Medicare beneficiaries apply for the LIS with theSocial Security Administration or their State Medicaid agency.The Medicare Master Beneficiary Summary file contains the Cost Share Group variable used toidentify Low Income Subsidy status, which is subsidized Part D coverage. There are 12 monthlyvariables - where the 01 through 12 at the end of the variable name correspond with themonth (e.g., 01 is January and 12 is December). CMS identifies beneficiaries with fully-subsidized Part D coverage by looking for individuals that have a 01, 02, or 03 for the month.Other beneficiaries who are eligible for the LIS but do not receive a full subsidy have a 04, 05,06, 07, or 08. The remaining values indicate that the individual is not eligible for subsidized				
	better quality = low	ver score		
	,,			
Calculate the deno prescription claims	for opioids filled o	n at least two sepa		
Step Two:				
	Mitigation Strategy Any member with t days, for which the Table Opioid-A: Op buprenorphine hydrocodone hydromorphone opium oxycodone Any member with a Category (RxHCC) & Payment Year 2016 the enrollment dat Hospice exclusion: being enrolled in he Cancer exclusion: F RxHCC 15, 16, 17, 1 ICD 9 and 10 Codes No risk adjustment N/A The measure is stra Commerci Medicare Medicare Definition: Medicare Medicaid Medicare Plans are Definition: Medicare the drug plan for N costs due to limited Social Security Adm The Medicare Mast identify Low Incom variables - where th month (e.g., 01 is J subsidized Part D c Other beneficiaries 06, 07, or 08. The r Part D coverage. Rate/proportion Step One: Calculate the deno prescription claims	Mitigation Strategy (REMS)Any member with two or more prescr days, for which the sum of the days suAny member with two or more prescr days, for which the sum of the days suTable Opioid-A: Opioid Medications buprenorphine hydrocodonehydrocodonehydromorphone opiumoxycodoneoxycodoneAny member with a diagnosis for Came Category (RxHCC) 8, 9, 10, or 11 for Pa Payment Year 2016 (see list in S.11 and the enrollment database.Hospice exclusion: Exclude those mem being enrolled in hospice.Cancer exclusion: For Payment Year 2RxHCC 15, 16, 17, 18, or 19ICD 9 and 10 Codes to Identify CancerNo risk adjustment or risk stratification N/AThe measure is stratified by the follow Commercial Medicare MedicaidMedicare Plans are further stratified H Definition: Medicare Low Income Sub the drug plan for Medicare beneficiar costs due to limited income and resous Social Security Administration or their The Medicare Master Beneficiary Sum identify Low Income Subsidy status, w variables - where the 01 through 12 a month (e.g., 01 is January and 12 is De subsidized Part D coverage by looking Other beneficiaries who are eligible for 06, 07, or 08. The remaining values in Part D coverage.Rate/proportionbetter quality = lowStep One: Calculate the denominator by identify prescription claims for opioids filled o	Mitigation Strategy (REMS) Any member with two or more prescription claims for op days, for which the sum of the days supply is greater than Any member with two or more prescription claims for op days, for which the sum of the days supply is greater than Table Opioid-A: Opioid Medications buprenorphine butorphanol codeine hydrocodone hydromorphone levorphanol meperidine opium oxycodone oxymorphone pentazocine Any member with a diagnosis for Cancer or a Prescription Category (RxHCC) 8, 9, 10, or 11 for Payment Year 2015; Payment Year 2016 (see list in S.11 and S.2b); or a hospic the enrollment database. Hospice exclusion: Exclude those members identified in t being enrolled in hospice. Cancer exclusion: For Payment Year 2015: RxHCC 8, 9, 10 RxHCC 15, 16, 17, 18, or 19 ICD 9 and 10 Codes to Identify Cancer: Please see attachr No risk adjustment or risk stratification N/A The measure is stratified by the following lines of busines Commercial Medicare Medicaid Medicare beneficiaries who need extra costs due to limited income and resources. Medicare ber Social Security Administration or their State Medicaid age The Medicare Master Beneficiary Summary file contains 1 identify Low Income Subsidy status, which is subsidized P variables - where the 01 through 12 at the end of the var month (e.g., 01 is January and 12 is December). CMS ider subsidized Part D coverage by looking for individuals that Other beneficiaries who are eligible for the LIS but do nor 06, 07, or 08. The remaining values indicate that the indiv Part D coverage. Rate/proportion better quality = lower score Step One: Calculate the denominator by identifying the number of a	Mitigation Strategy (REMS) Any member with two or more prescription claims for opioids filled on at least t days, for which the sum of the days supply is greater than or equal to 15. Any member with two or more prescription claims for opioids filled on at least t days, for which the sum of the days supply is greater than or equal to 15. Table Opioid-A: Opioid Medications buprenorphine butorphanol codeine dihydrocodeine hydrocodone hydrocodone pentazocine tapentadol Any member with a diagnosis for Cancer or a Prescription Drug Hierarchical Con Category (RxHCC) 8, 9, 10, or 11 for Payment Year 2015; or RxHCC 15, 16, 17, 18 Payment Year 2016 (see list in S.11 and S.2b); or a hospice indicator (Medicare Fi the enrollment database. Hospice exclusion: Exclude those members identified in the Medicare Enrollmer being enrolled in hospice. Cancer exclusion: For Payment Year 2015: RxHCC 8, 9, 10, or 11. For Payment Y RxHCC 15, 16, 17, 18, or 19 ICD 9 and 10 Codes to Identify Cancer: Please see attachment in S2.b No risk adjustment or risk stratification N/A The measure is stratified by the following lines of business for the health plan: Commercial Medicare Medicare Low Income Subsidy (LIS) - A subsidy paid by the Federal ge the drug Plan for Medicare beneficiaries who need extra help with their prescrip costs due to limited income and resources. Medicare beneficiaries apply for the Social Security Administration or their State Medicaid agency. The Medicare Master Beneficiary Summary file contains the Cost Share Group v variables - where the 01 through 12 at the end of the variable name correspond mont (e.g., 01 is January and 12 is December). CMS identifies beneficiaries with subsidized Part D coverage by looking for individuals is not eligible for Part D coverage. Rate/proportion better quality = lower score Step One: Calculate the denominator by identifying the number of all eligible members wi prescription claims for opioids filled on at least two separate days, for which the

	2940 Use of Opioids at High Dosage in Persons Without Cancer
	For each member in the denominator:
	a. Calculate the MED for each opioid prescription claim during the measurement period, using the following equations:
	• # of Opioid Dosage Units per day = (Opioid claim quantity) / (Opioid claim days supply)
	• MED Daily Dose per claim = (# of opioid dosage units per day) X (# mg opioid per dosage unit) X (MED conversion factor)
	b. Sum the daily MEDs of all opioid claims for each day to arrive at a total daily MED for each member.
	c. Identify the days where the MED threshold is exceeded.
	d. Any member, for whom the MED threshold is exceeded for 90 consecutive days or longer, meets the criteria for the MED component of the numerator.
	Step Three:
	Divide the number of members that met the criteria in numerator (Step Two d.) by the denominator (Step One) and multiply times 1000. The rate is reported as a proportion: XX out of 1,000 members. No diagram provided
Copyright / Disclaimer	5.1 Identified measures:
	5a.1 Are specs completely harmonized?
	5a.2 If not completely harmonized, identify difference, rationale, impact:
	5b.1 If competing, why superior or rationale for additive value: N/A

	2950 Use of Opioids from Multiple Providers in Persons Without Cancer
Status	Steering Committee Review
Steward	PQA
Description	The proportion (XX out of 1,000) of individuals without cancer receiving prescriptions for opioids from four (4) or more prescribers AND four (4) or more pharmacies.
Туре	Process
Data Source	Administrative claims Health Plan Medical and Pharmacy Claims. Health Plan member enrollment information.
	No data collection instrument provided Attachment Cancer_Exclusion_RxHCCICD- 9_and_10_Codes-635969250747751020.xlsx
Level	Health Plan, Population : National, Population : State
Setting	Other, Pharmacy The level of analysis for this measure is the prescription drug health plan, but it contains claims data from multiple care settings, including ambulatory, skilled nursing facility, pharmacy etc.
Numerator Statement	Any member in the denominator who received opioid prescription claims from 4 or more prescribers AND 4 or more pharmacies.
Numerator Details	For each member in the denominator: 1. Calculate the number of unique pharmacy providers associated with an opioid prescription

	2950 Use of Opio	ids from Multipl	e Providers in Per	sons Without Cance	r
		n four or more uni	que pharmacy prov	with an opioid prescri iders AND four or more	
Denominator Statement	Any member with two or more prescription claims for opioids filled on at least two separate days, for which the sum of the days supply is greater than or equal to 15.			wo separate	
Denominator Details	Any member with t days, for which the Table Opioid-A: Opi	sum of the days su		ioids filled on at least t n or equal to 15.	wo separate
	buprenorphine hydrocodone	butorphanol	codeine	dihydrocodeine	fentanyl
	hydromorphone opium	levorphanol	meperidine	methadone	morphine
	oxycodone	oxymorphone	pentazocine	tapentadol	tramadol
Exclusions	Any member with a diagnosis for Cancer or a Prescription Drug Hierarchical Condition Category (RxHCC) 8, 9, 10, or 11 for Payment Year 2015; or RxHCC 15, 16, 17, 18, or 19 for Payment Year 2016; (see list in S.11 and S.2b); or a hospice indicator from the enrollment database.				
Exclusion details	<ul> <li>Hospice Exclusion: Exclude those members identified in the Medicare Enrollment Database as being enrolled in hospice.</li> <li>Cancer Exclusion: For Payment Year 2015: RxHCC 8, 9, 10, or 11. For Payment Year 2016: RxHCC 15, 16, 17, 18, or 19</li> <li>ICD 9 and 10 Codes to Identify Cancer: Please see attachment in S2.b</li> </ul>				
Risk Adjustment	No risk adjustment N/A	or risk stratificatio	n		
Stratification	The measure is stra Commercia Medicare Medicaid Medicare Plans are Definition: Medicar A subsidy paid by th need extra help wit Medicare benefician Medicaid agency. The Medicare Mast identify Low Income monthly variables - the month (e.g., 01 subsidized Part D co Other beneficiaries	further stratified b e Low Income Sub be Federal governr h their prescription ries apply for the L er Beneficiary Sum e Subsidy status, w where the 01 thro is January and 12 overage by looking who are eligible for	by Low Income Subs sidy (LIS) nent to the drug pla n drug costs due to IS with the Social So mary file contains which is subsidized P bugh 12 at the end co is December). CMS for individuals that or the LIS but do no	is for the health plan: bidy status an for Medicare benefic limited income and res ecurity Administration the Cost Share Group v art D coverage. There of the variable name co identifies beneficiaries have a 01, 02, or 03 fo t receive a full subsidy l vidual is not eligible for	sources. or their State ariable used to are 12 rrespond with with fully- or the month. have a 04, 05,
	06, 07, or 08. The re Part D coverage.	emaining values in		0.11	Subsidized
Type Score	Part D coverage.	emaining values in petter quality = low			

	2050 Lies of Onicide from Multiple Providers in Persons Without Concer
	2950 Use of Opioids from Multiple Providers in Persons Without Cancer
	prescription claims for opioids filled on at least two separate days, for which the sum of the days supply is greater than or equal to 15.
	Step Two:
	Calculate the numerator by:
	a. Calculate the number of unique pharmacy providers associated with an opioid prescription claim.
	b. Calculate the number of unique prescribers associated with an opioid prescription claim.
	c. Any member with four or more unique pharmacy providers AND four or more unique prescribers meets the criteria for the Numerator.
	Step Three:
	Divide the number of members that met the criteria in numerator (Step Two c.) by the denominator (Step One) and multiply times 1000. The rate is reported as a proportion: XX out of 1,000 members. No diagram provided
Copyright / Disclaimer	5.1 Identified measures:
	5a.1 Are specs completely harmonized?
	5a.2 If not completely harmonized, identify difference, rationale, impact:
	5b.1 If competing, why superior or rationale for additive value: N/A

	2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer
Status	Steering Committee Review
Steward	PQA
Description	The proportion (XX out of 1,000) of individuals without cancer receiving prescriptions for opioids with a daily dosage greater than 120mg morphine equivalent dose (MED) for 90 consecutive days or longer, AND who received opioid prescriptions from four (4) or more prescribers AND four (4) or more pharmacies.
Туре	Process
Data Source	Administrative claims Health Plan Medical and Pharmacy Claims. Health Plan member enrollment information. No data collection instrument provided Attachment Cancer_Exclusion_RxHCCICD- 9_and_10_Codes-635969265833553126.xlsx
Level	Health Plan, Population : National, Population : State
Setting	Other, Pharmacy The level of analysis for this measure is the prescription drug health plan, but it contains claims data from multiple care settings, including ambulatory, skilled nursing facility, pharmacy etc.
Numerator Statement	Any member in the denominator with opioid prescription claims where the MED is greater than 120mg for 90 consecutive days or longer* AND who received opioid prescriptions from 4 or more prescribers AND 4 or more pharmacies. *MED calculation is included in S.6 Numerator Details
Numerator Details	Any member in the denominator with opioid prescription claims greater than 120mg MED for 90 consecutive days or longer* AND who received opioid prescriptions from 4 or more

	2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer
	<ul> <li>prescribers AND 4 or more pharmacies(See Table Opioids-A: Opioid Medications)</li> <li>*Identifying members with prescription opioids that exceeded the MED threshold:</li> <li>To identify members with prescription opioids that exceeded the MED threshold, each claim is to be converted into the MED using the appropriate conversion factor associated with the opioid product of that prescription claim (see Appendix A). The MED for each day's claims then are summed to determine the total MED for that day.</li> </ul>
	For each member in the denominator: 1. Calculate the MED for each opioid prescription claim during the measurement period, using
	<ul> <li>the following equations:</li> <li># of Opioid Dosage Units per day = (Opioid claim quantity) / (Opioid claim days supply)</li> <li>MED Daily Dose per claim = (# of opioid dosage units per day) X (# mg opioid per dosage</li> </ul>
	unit) X (MED conversion factor) 2. Sum the daily MEDs of all opioid claims for each day to arrive at a total daily MED for each
	member. 3. Identify the days where the MED threshold is exceeded.
	<ul><li>4. Any member, for whom the MED threshold is exceeded for 90 consecutive days or longer, meets the criteria for the MED component of the numerator.</li><li>5. From the members meeting the criteria for the MED component of the numerator (4),</li></ul>
	<ul><li>calculate the number of unique pharmacy providers associated with an opioid prescription claim.</li><li>6. From the members meeting the criteria for the MED component of the numerator (4),</li></ul>
	<ul> <li>calculate the number of unique prescribers associated with an opioid prescription claim.</li> <li>7. From the members meeting the criteria for the MED component of the numerator (4), any member with four or more unique pharmacy providers AND four or more unique prescribers meets the criteria for the Numerator.</li> </ul>
	Table Opioid-A: Opioid Medications (MED conversion factor)buprenorphine patch (12.6)buprenorphine tab or film (10)butorphanol (7)codeine (0.15)dihydrocodeine (0.25)fentanyl buccal or SL tablets, or lozenze/troche(0.13)fentanyl film or oral spray (0.18)fentanyl nasal spray (0.16)patch (7.2)hydrocodone (1)hydromorphone (4)uperidine (0.1)methadone (3)morphine (1)oxycodone (1.5)oxymorphone (3)pentazocine (0.37)tapentadol (0.4)tramadol (0.1)
	*Note: Injectables and Opioid cough and cold products and combination products containing buprenorphine and naloxone (e.g., BunavailTM, Suboxone <sup>®</sup> , Zubsolv <sup>®</sup> ) are excluded from the MED calculations. Ionsys <sup>®</sup> (fentanyl transdermal patch) is also excluded as it is only for inpatient use; It is also only available through a restricted program under a Risk Evaluation and Mitigation Strategy (REMS)
Denominator Statement	Any member with two or more prescription claims for opioids filled on at least two separate days, for which the sum of the days supply is greater than or equal to 15.
Denominator Details	Any member with two or more prescription claims for opioids filled on at least two separate days, for which the sum of the days supply is greater than or equal to 15.
	Table Opioid-A: Opioid Medicationsbuprenorphinebutorphanolcodeinedihydrocodeinefentanylhydrocodone
	hydromorphone levorphanol meperidine methadone morphine

	2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer			
	opium oxycodone oxymorphone pentazocine tapentadol tramadol			
Exclusions	Any member with a diagnosis for Cancer or a Prescription Drug Hierarchical Condition Category (RxHCC) 8, 9, 10, or 11 for Payment Year 2015; or RxHCC 15, 16, 17, 18, or 19 for Payment Year 2016 (see list in S.11 and S.2b); or a hospice indicator (Medicare Part D) from the enrollment database.			
Exclusion details	<ul> <li>Hospice exclusion: Exclude those members identified in the Medicare Enrollment Database as being enrolled in hospice.</li> <li>Cancer exclusion: For Payment Year 2015: RxHCC 8, 9, 10, or 11. For Payment Year 2016: RxHCC 15, 16, 17, 18, or 19</li> <li>ICD 9 and 10 Codes to Identify Cancer: Please see attachment in S2.b</li> </ul>			
Risk Adjustment	No risk adjustment or risk stratification N/A			
Stratification	<ul> <li>The measure is stratified by the following lines of business for the health plan:</li> <li>Commercial</li> <li>Medicare</li> <li>Medicaid</li> <li>Medicare Plans are further stratified by Low Income Subsidy status</li> <li>Definition: Medicare Low Income Subsidy (LIS)</li> <li>A subsidy paid by the Federal government to the drug plan for Medicare beneficiaries who need extra help with their prescription drug costs due to limited income and resources.</li> <li>Medicaid agency.</li> <li>The Medicare Master Beneficiary Summary file contains the Cost Share Group variable used to identify Low Income Subsidy status, which is subsidized Part D coverage. There are 12 monthly variables - where the 01 through 12 at the end of the variable name correspond with the month (e.g., 01 is January and 12 is December). CMS identifies beneficiaries with fully-subsidized Part D coverage by looking for individuals that have a 01, 02, or 03 for the month. Other beneficiaries who are eligible for the LIS but do not receive a full subsidy have a 04, 05, 06, 07, or 08. The remaining values indicate that the individual is not eligible for subsidized</li> </ul>			
Type Score	Part D coverage.			
Type Score Algorithm	Rate/proportion       better quality = lower score         Step One:       Calculate the denominator by identifying the number of all eligible members with two or more prescription claims for opioids filled on at least two separate days, for which the sum of the days supply is greater than or equal to 15.         Step Two:       Calculate the numerator by:         For each member in the denominator:			
	<ul> <li>a. Calculate the MED for each opioid prescription claim during the measurement period, using the following equations:</li> <li># of Opioid Dosage Units per day = (Opioid claim quantity) / (Opioid claim days supply)</li> <li>MED Daily Dose per claim = (# of opioid dosage units per day) X (# mg opioid per dosage unit) X (MED conversion factor)</li> </ul>			
	b. Sum the daily MEDs of all opioid claims for each day to arrive at a total daily MED for each			

	2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer
	member.
	c. Identify the days where the MED threshold is exceeded.
	d. Any member, for whom the MED threshold is exceeded for 90 consecutive days or longer, meets the criteria for the MED component of the numerator.
	Step Three: From those members meeting the MED component in (Step 2d.) identify those members who received opioids from 4 or more prescribers AND 4 or more pharmacies.
	a. Calculate the number of unique pharmacy providers associated with an opioid prescription claim.
	b. Calculate the number of unique prescribers associated with an opioid prescription claim.
	c. Any member from Step 2d with four or more unique pharmacy providers AND four or more unique prescribers meets the criteria for the Numerator.
	Step Four:
	Divide the number of members that met the criteria in numerator (Step Three c.) by the denominator (Step One) and multiply times 1000. The rate is reported as a proportion: XX out of 1,000 members. No diagram provided
Copyright / Disclaimer	5.1 Identified measures:
	5a.1 Are specs completely harmonized?
	5a.2 If not completely harmonized, identify difference, rationale, impact:
	5b.1 If competing, why superior or rationale for additive value: N/A

	2983 Potassium Sample Hemolysis in the Emergency Department
Status	Steering Committee Review
Steward	Cleveland Clinic
Description	Percentage of laboratory potassium samples drawn in the emergency department (ED) with hemolysis.
Туре	Intermediate Clinical Outcome
Data Source	Electronic Clinical Data : Laboratory Not applicable
	No data collection instrument provided Attachment Potassium_Sample_Hemolysis_in_the_Emergency_Departmentfin26highlights.pdf
Level	Facility
Setting	Hospital/Acute Care Facility, Other emergency department
Numerator Statement	ED Potassium Samples with Hemolysis
Numerator	patients with lab potassium sample where the result was hemolyzed.
Details	Please see attached specifications
Denominator Statement	all ED patients getting a lab potassium sample
Denominator Details	All ED patient who get lab potassium sample

	2983 Potassium Sample Hemolysis in the Emergency Department
Exclusions	None
Exclusion details	not applicable
Risk Adjustment	No risk adjustment or risk stratification
	Not applicable.
	Provided in response box S.15a
Stratification	Not applicable.
Type Score	Rate/proportion better quality = lower score
Algorithm	The total number of hemolized potassiun samples are divided by the total number of ED potassium samples No diagram provided
Copyright / Disclaimer	5.1 Identified measures:
	5a.1 Are specs completely harmonized? No
	5a.2 If not completely harmonized, identify difference, rationale, impact:
	5b.1 If competing, why superior or rationale for additive value: NA

	2988 Medication Reconciliation for Patients Receiving Care at Dialysis Facilities
Status	Steering Committee Review
Steward	Kidney Care Quality Alliance (KCQA)
Description	Percentage of patient-months for which medication reconciliation* was performed and documented by an eligible professional.**
	* "Medication reconciliation" is defined as the process of creating the most accurate list of all home medications that the patient is taking, including name, indication, dosage, frequency, and route, by comparing the most recent medication list in the dialysis medical record to one or more external list(s) of medications obtained from a patient or caregiver (including patient-/caregiver- provided "brown bag" information), pharmacotherapy information network (e.g., Surescripts), hospital, or other provider.
	** For the purposes of medication reconciliation, "eligible professional" is defined as: physician, RN, ARNP, PA, pharmacist, or pharmacy technician.
Туре	Process
Data Source	Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record Dialysis facility medical record; intended for use by CMS in its CROWNWeb ESRD Clinical Data Repository.
	No data collection instrument provided No data dictionary
Level	Facility
Setting	Dialysis Facility
Numerator Statement	Number of patient-months for which medication reconciliation was performed and documented by an eligible professional during the reporting period.
	The medication reconciliation MUST:
	<ul> <li>Include the name or other unique identifier of the eligible professional;</li> </ul>
	AND
	• Include the date of the reconciliation;

	2988 Medication Reconciliation for Patients Receiving Care at Dialysis Facilities
	AND
	<ul> <li>Address ALL known home medications (prescriptions, over-the-counters, herbals, vitamin/mineral/dietary (nutritional) supplements, and medical marijuana);</li> <li>AND</li> </ul>
	<ul> <li>Address for EACH home medication: Medication name(1), indication(2), dosage(2), frequency(2), route of administration(2), start and end date (if applicable)(2), discontinuation date (if applicable)(2), reason medication was stopped or discontinued (if applicable)(2), and identification of individual who authorized stoppage or discontinuation of medication (if applicable)(2);</li> <li>AND</li> </ul>
	• List any allergies, intolerances, or adverse drug events experienced by the patient.
	<ul> <li>-</li> <li>1. For patients in a clinical trial, it is acknowledged that it may be unknown as to whether the patient is receiving the therapeutic agent or a placebo.</li> <li>2. "Unknown" is an acceptable response for this field.</li> </ul>
Numerator Details	NUMERATOR STEP 1. For each patient meeting the denominator criteria in the given calculation month, identify all patients with each of the following three numerator criteria (a, b, and c) documented in the facility medical record to define the numerator for that month:
	A. Facility attestation that during the calculation month:
	1. The patient's most recent medication list in the dialysis medical record was reconciled to one or more external list(s) of medications obtained from the patient/caregiver (including patient- /caregiver-provided "brown-bag" information), pharmacotherapy information network (e.g., Surescripts <sup>®</sup> ), hospital, or other provider AND that ALL known medications (prescriptions, OTCs, herbals, vitamin/mineral/dietary [nutritional] supplements, and medical marijuana) were reconciled;
	AND
	<ul><li>2. ALL of the following items were addressed for EACH identified medication:</li><li>a) Medication name;</li></ul>
	b) Indication (or "unknown");
	c) Dosage (or "unknown");
	d)Frequency (or "unknown");
	e) Route of administration (or "unknown");
	f) Start date (or "unknown");
	g) End date, if applicable (or "unknown");
	h) Discontinuation date, if applicable (or "unknown");
	i) Reason medication was stopped or discontinued, if applicable (or "unknown"); and
	j) Identification of individual who authorized stoppage or discontinuation of medication, if applicable (or "unknown");
	AND
	3. Allergies, intolerances, and adverse drug events were addressed and documented.
	B. Date of the medication reconciliation.
	C. Identity of eligible professional performing the medication reconciliation.
	NUMERATOR STEP 2. Repeat "Numerator Step 1" for each month of the one-year reporting period to define the final numerator (patient-months).
Denominator	Total number of patient-months for all patients permanently assigned to a dialysis facility during

	2988 Medication Reconciliation for Patients Receiving Care at Dialysis Facilities
Statement	the reporting period.
Denominator Details	DENOMINATOR STEP 1. Identify all in-center and home hemodialysis and peritoneal dialysis patients permanently assigned to the dialysis facility in the given calculation month.
	DENOMINATOR STEP 2. For all patients included in the denominator in the given calculation month in "Denominator Step 1", identify and remove all in-center hemodialysis patients who received < 7 dialysis treatments in the calculation month.
	DENOMINATOR STEP 3. Repeat "Denominator Step 1" and "Denominator Step 2" for each month of the one-year reporting period.
Exclusions	In-center patients who receive < 7 hemodialysis treatments in the facility during the reporting month.
Exclusion details	As detailed in "Denominator Step 2" above, transient patients, defined as in-center patients who receive < 7 hemodialysis treatments in the facility during the reporting month, are excluded from the measure.
Risk Adjustment	No risk adjustment or risk stratification Not applicable.
Stratification	Not applicable.
Type Score	Rate/proportion better quality = higher score
Algorithm	Scores are calculated using the following algorithm. For each calculation month in the one-year reporting period:
	1. IDENTIFY THE "RAW DENOMINATOR POPULATION"
	Identify all in-center and home hemodialysis and peritoneal dialysis patients permanently assigned to the dialysis facility during the given calculation month.
	2. REMOVE PATIENTS MEETING MEASURE EXCLUSION CRITERIA TO DEFINE THE "FINAL DENOMINATOR POPULATION" FOR THE CALCULATION MONTH
	For all patients included in the denominator during the given calculation month in Step 1 above, identify and remove all in-center patients who received < 7 hemodialysis treatments during the given calculation month.
	3. IDENTIFY THE "NUMERATOR POPULATION" FOR THE CALCULATION MONTH
	For each patient remaining in the denominator during the given calculation month after Step 2, identify all patients with each of the following three numerator criteria (a, b, and c) documented in the facility medical record to define the numerator for that month:
	A. Facility attestation that during the calculation month:
	1. The patient's most recent medication list in the dialysis medical record was reconciled to one or more external list(s) of medications obtained from the patient/caregiver (including patient /caregiver-provided "brown-bag" information), pharmacotherapy information network (e.g., Surescripts®), hospital, or other provider AND that ALL known medications (prescriptions, OTCs, herbals, vitamin/mineral/dietary [nutritional] supplements, and medical marijuana) were reconciled;
	AND
	2. ALL of the following items were addressed for EACH identified medication:
	a) Medication name;
	b) Indication (or "unknown");
	c) Dosage (or "unknown"); d) Fraguency (or "unknown");
	d) Frequency (or "unknown"); e) Route of administration (or "unknown");
	f) Start date (or "unknown");

	2988 Medication Reconciliation for Patients Receiving Care at Dialysis Facilities
	g) End date, if applicable (or "unknown");
	h) Discontinuation date, if applicable (or "unknown");
	i) Reason medication was stopped or discontinued, if applicable (or "unknown"); and
	<ul> <li>j) Identification of individual who authorized stoppage or discontinuation of medication, if applicable (or "unknown");</li> <li>AND</li> </ul>
	3. Allergies, intolerances, and adverse drug events were addressed and documented. B. Date of medication reconciliation.
	C. Identity of eligible professional performing medication reconciliation.
	4. CALCULATE THE PERFORMANCE SCORE FOR THE CALCULATION MONTH
	Calculate the facility's performance score for the given calculation month as follows:
	Month's Performance Score = Month's Final Numerator Population ÷ Month's Final Denominator Population
	5. CALCULATE THE ANNUAL PERFORMANCE SCORE
	Calculate the facility's annual performance score as follows:
	Facility's Annual Performance Score = (Facility's Month 1 Score + Month 2 Score + + Month 12 Score) ÷ 12 No diagram provided
Copyright /	5.1 Identified measures: 0097 : Medication Reconciliation Post-Discharge
Disclaimer	0554 : Medication Reconciliation Post-Discharge (MRP)
	2456 : Medication Reconciliation: Number of Unintentional Medication Discrepancies per Patient
	5a.1 Are specs completely harmonized? No
	5a.2 If not completely harmonized, identify difference, rationale, impact: Medication Reconciliation for Patients Receiving Care at Dialysis Facilities is harmonized with existing NQF- endorsed medication reconciliation measures in that all similarly specify that the medication reconciliation must address ALL prescriptions, over-the-counters, herbals, vitamin/mineral/dietary (nutritional) supplements AND must contain the medications' name, dosage, frequency, and route. The KCQA measure, however, is unique among the currently endorsed medication reconciliation measures in that the level of analysis is the dialysis facility. The KCQA measure also moves beyond a single "check/box", specifying multiple components that must be met to be counted as a "success." It requires the following additional information on each medication, where applicable and known: indication, start and end date, discontinuation date, reason the medication was stopped or discontinued, and identification of the individual who authorized stoppage or discontinuation of the medication. Additionally, given the increasing frequency with which medical marijuana is prescribed, the KCQA measure specifies that this pharmacotherapeutic agent must be addressed during the reconciliation. KCQA believes these additional foci are necessary to ensure the medication reconciliation process is as comprehensive as possible to better identify and effectively address potential sources of adverse drug-related events and not function merely as a single "check-box" measure. Testing demonstrated these data elements are effectively captured and recorded in facility's electronic medical record systems during the routine medication reconciliation process.
	5b.1 If competing, why superior or rationale for additive value: Not applicable; this medication management measure is unique in its specific focus on the ESRD population.

	2993 Potentially Harmful Drug-Disease Interactions in the Elderly
Status	Steering Committee Review
Steward	National Committee for Quality Assurance
Description	The percentage of patients 65 years of age and older who have evidence of an underlying disease, condition or health concern and who are dispensed an ambulatory prescription for a potentially harmful medication, concurrent with or after the diagnosis. Four rates are reported for this measure:
	-Rate 1: The percentage of those with a history of falls that received a potentially harmful medication
	-Rate 2: The percentage of those with dementia that received a potentially harmful medication
	-Rate 3: The percentage of those with chronic kidney disease that received a potentially harmful medication
	-Rate 4: Total rate
	A lower rate represents better performance for all rates.
Туре	Process
Data Source	Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Pharmacy This measure is based on administrative claims collected in the course of providing care to health plan members. NCQA collects the Healthcare Effectiveness Data and Information Set (HEDIS) data for this measure directly from Health Management Organizations and Preferred Provider Organizations via NCQA's online data submission system.
	No data collection instrument provided         Attachment DDE_Value_Sets-           635979522717911582.xlsx         635979522717911582.xlsx
Level	Health Plan, Integrated Delivery System
Setting	Ambulatory Care : Clinician Office/Clinic, Pharmacy
Numerator Statement	Numerator 1: Patients with a history of falls who received at least one potentially harmful medication from Table DDE-A or Table DDE-B
	Numerator 2: Patients with a diagnosis of dementia who received at least one potentially harmful medication from Table DDE-D
	Numerator 3: Patients with chronic kidney disease who received at least one potentially harmful medication from Table DDE-E
	Numerator 4: The sum of the three numerators
Numerator Details	Rate 1 numerator: Dispensed an ambulatory prescription for an anticonvulsant, nonbenzodiazepine hypnotic, or SSRI (Table DDE-A), antipsychotic, benzodiazepine, nonbenzodiazepine hypnotic or tricyclic antidepressant (Table DDE-B) on or between the index episode start data and December 31 of the measurement year.
	Rate 2 numerator: Dispensed an ambulatory prescription for an antipsychotic, benzodiazepine, nonbenzodiazepine hypnotic or tricyclic antidepressant (Table DDE-B), or H2 receptor antagonist or anticholinergic agent (Table DDE-D) on or between the IESD and December 31 of the measurement year.
	Rate 3 numerator: Dispensed an ambulatory prescription for an NSAID or Cox-2 selective NSAID (Table DDE-E) on or between the IESD and December 31 of the measurement year.
	Rate 4 numerator: The sum of numerators 1, 2 and 3.
	Note: Do not include denied claims.
	Table DDE-A: Potentially Harmful Drugs – Rate 1
	Anticonvulsants:

2993 Potentially Harmful Drug-Disease Interactions in the Elderly
Carbamazepine, Clobazam, Divalproex sodium, Ethosuximide, Ethotoin, Ezogabine, Felbamate Fosphenytoin, Gabapentin, Lacosamide, Lamotrigine, Levetiracetam, Mephobarbital, Methsuximide, Oxcarbazepine, Phenobarbital, Phenytoin, Pregabalin, Primidone, Rufinamide, Tiagabine HCL, Topiramate, Valproate sodium, Valproic acid, Vigabatrin, Zonisamide SSRIs:
Citalopram, Escitalopram, Fluoxetine, Fluvoxamine, Paroxetine, Setraline
Table DDE-B: Potentially Harmful Drugs – Rate 1 (History of Falls) and Rate 2 (Dementia)
Antipsychotics:
Aripiprazole, Asenapine, Brexpiprazole, Cariprazine, Chlorpromazine, Clozapine, Fluphenazine, Haloperidol, Iloperidone, Loxapine, Lurasidone, Molindone, Olanzapine, Paliperidone, Perphenazine, Pimozide, Quetiapine, Risperidone, Thioridazine, Thiothixene, Trifluoperazine, Ziprasidone
Benzodiazepine hypnotics:
Alprazolam, Chlordiazepoxide products, Clonazepam, Clorazepate-Dipotassium, Diazepam, Estazolam, Flurazepam HCL, Lorazepam, Midazolam HCL, Oxazepam, Quazepam, Temazepam, Triazolam
Nonbenzodiazepine hypnotics:
Eszopiclone, Zaleplon, Zolpidem
Tricyclic antidepressants:
Amitriptyline, Amoxapine, Clomipramine, Desipramine, Doxepin (>6 mg), Imipramine, Nortriptyline, Protriptyline, Trimipramine
Table DDE-D: Potentially Harmful Drugs – Rate 2 (Dementia)
H2 receptor antagonists:
Cimetidine, Famotidine, Nizatidine, Ranitidine
Anticholinergic agents, antiemetics:
Prochlorperazine, Promethazine
Anticholinergic agents, antihistamines:
Carbinoxamine, Chlorpheniramine, Hydroxyzine products, Brompheniramine, Clemastine, Cyproheptadine, Promethazine, Triprolidine, Dimenhydrinate, Diphenhydramine, Meclizine, Dexbromphenirmine, Dexchlorpheniramine, Doxylamine
Anticholinergic Agents, antimuscarinics (oral)
Atropine, Homatropine, Belladonna alkaloids, Dicyclomine, Hyoscyamine, Propantheline, Scopolamine, Clidinium-chlordiazepoxide
Anticholinergic agents, antimuscarinics (oral)
Darifenacin, Fesoterodine, Solifenacin, Trospium, Flavoxate, Oxybutynin, Tolterodine
Anticholinergic agents, anti-Parkinson agents
Benztropine, Trihexyphernidyl
Anticholinergic agents, skeletal muscle relaxants
Cyclobenzaprine, Orphenadrine
Anticholinergic agents, SSRIs:
Paroxetine
Anticholinergic agents, antiarrhythmic:
Disopyramide

	2993 Potentially Harmful Drug-Disease Interactions in the Elderly
	Table DDE-E: Cox-2 Selective NSAIDs and Nonasprin NSAIDs         Cox-2 Selective NSAIDs:         Celecoxib
	Nonaspirin NSAIDs:
	Diclofenac potassium, Diclofenac sodium, Etodolac, Fenoprofen, Flurbiprofen, Ibuprofen, Indomethacin, Ketoprofen, Ketorolac, Meclofenamate, Mefenamic acid, Meloxicam, Nabumetone, Naproxen, Naproxen sodium, Oxaprozin, Piroxicam, Sulindac, Tolmetin
Denominator Statement	All patients ages 65 years of age and older with a history of falls, dementia or chronic kidney disease in the measurement year or the year prior to the measurement year.
Denominator Details	All patients ages 67 years and older as of December 31 of the measurement year with a history of falls, dementia or chronic kidney disease. Each of the four rates in the measure has a different denominator:
	Rate 1 denominator: Patients with an accidental fall or hip fracture (Note: hip fractures are used as a proxy for identifying accidental falls). Individuals with either of the following on or between January 1 of the year prior to the measurement year and December 1 of the measurement year meet criteria:
	<ul> <li>-An accidental fall (Falls Value Set).</li> <li>-An outpatient visit (Outpatient Value Set), an observation visit (Observation Value Set) or an ED visit (ED Value Set), with a hip fracture (Hip Fractures Value Set).</li> </ul>
	-An acute or nonacute inpatient discharge with a hip fracture (Hip Fractures Value Set). To identify acute and nonacute inpatient discharges: 1) Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set). 2) Identify the discharge date for the stay.
	Rate 2 denominator: Patients with a diagnosis of dementia (Dementia Value Set) or a dispensed dementia medication (Table DDE-C) on or between January 1 of the year prior to the measurement year and December 1 of the measurement year.
	Rate 3 denominator: Patients with chronic kidney disease as identified by a diagnosis of ESRD (ESRD Value Set), stage 4 chronic kidney disease (CKD Stage 4 Value Set) or kidney transplant (Kidney Transplant Value Set) on or between January 1 of the year prior to the measurement year and December 1 of the measurement year.
	Rate 4 denominator: The sum of the denominators for rates 1, 2 and 3
	Note: Patients with more than one disease or condition may appear in the measure multiple times (i.e., in each indicator for which they qualify). See S.2.b for all Value Sets
	Table DDE-C: Prescriptions to Identify Members with Dementia Cholinesterase inhibitors:
	Donepezil, Galantamine, Rivastigmine Miscellaneous central nervous system agents:
Exclusions	Memantine           The following are exclusions for the condition-specific rates and total rate:
	For those who meet denominator criteria for the history of falls rate (Rate 1): exclude those with a diagnosis of psychosis, schizophrenia, bipolar disorder or seizure disorder.
	For those who meet denominator criteria for those with dementia rate (Rate 2): exclude those with a diagnosis of psychosis, schizophrenia or bipolar disorder.

	2993 Potentially Harmful Drug-Disease Interactions in the Elderly
Exclusion details	For those who meet denominator criteria for the history of falls rate (Rate 1): Exclude patients with a diagnosis of psychosis (Psychosis Value Set), schizophrenia (Schizophrenia Value Set), bipolar disorder (Bipolar Disorder Value Set; Other Bipolar Disorder Value Set) or seizure disorder (Seizure Disorders Value Set) on or between January 1 of the year prior to the measurement year and December 1 of the measurement year.
	For those who meet denominator criteria for those with dementia rate (Rate 2): Exclude patients with a diagnosis of psychosis (Psychosis Value Set), schizophrenia (Schizophrenia Value Set) or bipolar disorder (Bipolar Disorder Value Set; Other Bipolar Disorder Value Set) or or between January 1 of the year prior to the measurement year and December 1 of the measurement year.
	See S.2.b for all Value Sets
Risk Adjustment	No risk adjustment or risk stratification N/A
Stratification	No risk adjustment or risk stratification
Type Score	Rate/proportion better quality = lower score
Algorithm	Step 1. Determine the eligible population: All patients 67 years of age and older as of the end (i.e., December 31) of the measurement year.
	Step 2: Identify the denominators for each of the four rates:
	Rate 1: Those in the eligible population with a history of falls (see S.9 for details) on or between January 1 of the year prior to the measurement year and December 1 of the measurement year. Exclude patients with a diagnosis of psychosis, schizophrenia, bipolar disorder, or seizure disorder (see S.11 for details). Identify the index episode start date.
	Rate 2: Those in the eligible population with a dementia (see S.9 for details) on or between January 1 of the year prior to the measurement year and December 1 of the measurement year. Exclude patients with a diagnosis of psychosis, schizophrenia or bipolar disorder (see S.11 for details). Identify the index episode start date.
	Rate 3: Those in the eligible population with end stage renal disease (see S.9 for details) on or between January 1 of the year prior to the measurement year and December 1 of the measurement year. Identify the index episode start date.
	Rate 4: The sum of denominators for Rates 1, 2 and 3.
	Step 3: Identify the numerators: Individuals in each of the denominators who have received at least one potentially harmful medication on or after the index episode start date (see definitions of potentially harmful medications for each numerator in section S.6).
	Step 4: Calculate the rates:
	Rate 1 – Numerator 1 divided by denominator 1.
	Rate 2 – Numerator 2 divided by denominator 2.
	Rate 3 – Numerator 3 divided by denominator 3. Rate 4 – The sum of the three numerators divided by the sum of the three denominators.
	Note: for this measure a lower rate indicates better performance for all four rates.
	Index Episode Start Date. The earliest diagnosis, procedure or prescription between January 1
	of the year prior to the measurement year and December 1 of the measurement year.
	For an outpatient claim/encounter, the IESD is the date of service.
	For an inpatient claim/encounter, the IESD is the discharge date.
	For dispensed prescriptions, the IESD is the dispense date. No diagram provided
Copyright / Disclaimer	5.1 Identified measures: 0022 : Use of High-Risk Medications in the Elderly (DAE)

2993 Potentially Harmful Drug-Disease Interactions in the Elderly
5a.1 Are specs completely harmonized? No
5a.2 If not completely harmonized, identify difference, rationale, impact: This measure and NQF 0022 have a similar focus (measuring potentially inappropriate medication use in the elderly) and reporting level (health plan), however they have different target populations. This measure targets patients with a specific condition or disease that can experience adverse effects when combined with certain medications that are recommended to be avoided for that condition. NQF 0022 targets a larger population of all older adults and assesses use of high-risk medications that have been recommended to be avoided in all older adults.
5b.1 If competing, why superior or rationale for additive value: N/A

	3000 PACE-Acquired Pressure Ulcer/Injury Prevalence Rate
Status	Steering Committee Review
Steward	CMS
Description	<ul> <li>Prevalence of PACE participants on the PACE organization census with pressure ulcers/injuries in a quarter, expressed as persons with 1 or more pressure ulcers/injuries divided by the number of participants on the PACE organization's census for at least one day during the quarter.</li> <li>This is a rate-based measure of skin breakdown due to pressure or pressure combined with sheer. The rate will be calculated quarterly. The target population is participants on a PACE organizations census for at least one day during the quarter.</li> </ul>
Туре	Outcome
Data Source	Electronic Clinical Data, Management Data, Paper Medical Records Collection instrument is provided as an uploaded appendix.
	Available in attached appendix at A.1 Attachment PAPUI_Data_Collection_Code_Sheet- 635987554553524645.xlsx
Level	Facility
Setting	Other PACE programs provide services to participants who live in their own homes (or in home-like settings) in the community. Participants attend PACE centers regularly (e.g., 3 days per week) for a variety of activities and support services. If a participan
Numerator Statement	The total number of participants enrolled during the quarter that have at least one documented PU (of any stage) acquired while a PACE participant.
Numerator	Inclusion criteria for numerator:
Details	<ul> <li>Include participants living at home or in assisted living facilities.</li> </ul>
	• Include participants with pressure injuries that developed and were identified less than 24 hours after the participant was in an emergency room, admitted to the hospital, nursing home, skilled nursing facility, hospice facility, or rehabilitation facility.
	Exclusion criteria for numerator:
	• Exclude participants who were not enrolled in a PACE Program for at least one day during the quarter.
	<ul> <li>Exclude participants who were not in their home setting for at least one day of the quarter.</li> <li>For each participant, exclude participants who were only:</li> <li>o In a nursing home facility</li> </ul>

3000 PACE-Acquired Pressure Ulcer/Injury Prevalence Rate
o In a hospice facility
o In hospice care at home
o In skilled nursing care, or
o In a rehabilitation setting
• Exclude participants whose pressure ulcer/injury was acquired before they were enrolled in PACE.
• Exclude participants with other kinds of skin breakdown that developed during the quarter, such as diabetic ulcers or venous ulcers.
• Exclude participants whose only skin breakdown was documented as a "Kennedy Terminal Ulcer" during the quarter. Kennedy Terminal Ulcers are not acknowledged as a pressure ulcer/injury stage by NPUAP.
• Exclude participants with pressure ulcer/injury that developed and were identified less than 24 hours after a participant returned home (or to an assisted living facility). Specific data collection items and responses:
Participant No.
• Age (at end of month):
- Age in years if 55–89
- Age greater >89 = 90+
- Unknown = 99
• Gender:
- Male = 1
- Female = $2$
- Unknown = 99
Pressure Injury No.
Month
- January = 1
- February = 2
- Etc.
Pressure Injury Stage
- Stage I = 1
- Stage II = 2
- Stage III = 3
- Stage IV = 4
- Unstageable = 5
- Deep Tissue = 6
- Unknown = 99
Pressure Injury as defined by the National Pressure Ulcer Advisory Panel*:
A pressure injury is localized damage to the skin and/or underlying soft tissue usually over a
bony prominence or related to a medical or other device. The injury can present as intact skin or an open ulcer and may be painful. The injury occurs as a result of intense and/or prolonged pressure or pressure in combination with shear. The tolerance of soft tissue for pressure and shear may also be affected by microclimate, nutrition, perfusion, co-morbidities and condition
of the soft tissue.
Pressure ulcers/injuries are characterized by stage:
Stage 1 Pressure Injury: Non-blanchable erythema of intact skin
Intact skin with a localized area of non-blanchable erythema, which may appear differently in

	2000 DACE Acquired Dressure Illeer/Injum Drevelence Date
	3000 PACE-Acquired Pressure Ulcer/Injury Prevalence Rate
	darkly pigmented skin. Presence of blanchable erythema or changes in sensation, temperature, or firmness may precede visual changes. Color changes do not include purple or maroon discoloration; these may indicate deep tissue pressure injury.
	Stage 2 Pressure Injury: Partial-thickness skin loss with exposed dermis
	Partial-thickness loss of skin with exposed dermis. The wound bed is viable, pink or red, moist and may also present as an intact or ruptured serum-filled blister. Adipose (fat) is not visible and deeper tissues are not visible. Granulation tissue, slough and eschar are not present. These injuries commonly result from adverse microclimate and shear in the skin over the pelvis and shear in the heel. This stage should not be used to describe moisture associated skin damage (MASD) including incontinence associated dermatitis (IAD), intertriginous dermatitis (ITD), medical adhesive related skin injury (MARSI), or traumatic wounds (skin tears burns, abrasions).
	Stage 3 Pressure Injury: Full-thickness skin loss
	Full-thickness loss of skin, in which adipose (fat) is visible in the injury and granulation tissue and epibole (rolled wound edges) are often present. Slough and/or eschar may be visible. The depth of tissue damage varies by anatomical location; areas of significant adiposity can develop deep wounds. Undermining and tunneling may occur. Fascia, muscle, tendon, ligament, cartilage and/or bone are not exposed. If slough or eschar obscures the extent of tissue loss this is an Unstageable Pressure Injury.
	Stage 4 Pressure Injury: Full-thickness skin and tissue loss
	Full-thickness skin and tissue loss with exposed or directly palpable fascia, muscle, tendon, ligament, cartilage or bone in the injury. Slough and/or eschar may be visible. Epibole (rolled edges), undermining and/or tunneling often occur. Depth varies by anatomical location. If slough or eschar obscures the extent of tissue loss this is an Unstageable Pressure Injury.
	Unstageable Pressure Injury: Obscured full-thickness skin and tissue loss
	Full-thickness skin and tissue loss in which the extent of tissue damage within the injury cannot be confirmed because it is obscured by slough or eschar. If slough or eschar is removed, a Stage 3 or Stage 4 pressure injury will be revealed. Stable eschar (i.e. dry, adherent, intact without erythema or fluctuance) on an ischemic limb or the heel(s) should no be removed.
	Deep Tissue Pressure Injury: Persistent non-blanchable deep red, maroon or purple discoloration
	Intact or non-intact skin with localized area of persistent non-blanchable deep red, maroon, purple discoloration or epidermal separation revealing a dark wound bed or blood filled blister. Pain and temperature change often precede skin color changes. Discoloration may appear differently in darkly pigmented skin. This injury results from intense and/or prolonged pressure and shear forces at the bone-muscle interface. The wound may evolve rapidly to reveal the actual extent of tissue injury, or may resolve without tissue loss. If necrotic tissue, subcutaneous tissue, granulation tissue, fascia, muscle or other underlying structures are visible, this indicates a full thickness pressure injury (Unstageable, Stage 3 or Stage 4). Do not use DTPI to describe vascular, traumatic, neuropathic, or dermatologic conditions.
	* This PU/I data collection will follow the NPUAP pressure ulcer/injury definition and staging categories. More information can be found in this link: http://www.npuap.org/national-pressure-ulcer-advisory-panel-npuap-announces-a-change-in-terminology-from-pressure-ulcer-to-pressure-injury-and-updates-the-stages-of-pressure-injury/
Denominator Statement	Number of participants on a PACE organization's census during the quarter.
Denominator Details	Number of participants on the PACE site census at least one day during the quarter.

	3000 PACE-Acquired Pressure Ulcer/Injury Prevalence Rate
Exclusions	Exclude persons who were not on the PACE census for at least one day during the quarter. Exclude participants who lived outside their home/assisted living setting for every day of the quarter.
Exclusion details	<ul> <li>Exclude participants who were not on a PACE organization's census for each one day during the quarter.</li> <li>Exclude participants who were not in their home setting every day of the quarter. Exclude participants who spent the entire quarter living: <ul> <li>In a nursing home facility</li> <li>In a hospice facility</li> <li>In hospice care at home</li> <li>In skilled nursing care, or</li> <li>In a rehabilitation setting</li> </ul> </li> </ul>
Risk Adjustment	Stratification by risk category/subgroup Not applicable. Provided in response box S.15a
Stratification	<ul> <li>Risk stratification will be used rather than risk adjustment. Stratification will be based on PACE organization characteristics. Because PACE participants are frail elderly in each organization, they may be considered a single population, not requiring risk adjustment to account for different populations across PACE organizations.</li> <li>Two demographic variables—age and gender—will be collected so that the potential for sociodemographic adjustment can be assessed.</li> <li>Age is defined as the participant age at the end of the reporting month. It is to be recorded in single years from 55 through 89. To comply with HIPAA requirements, all participants aged 90 and above will be top coded at 90.</li> <li>Gender is to be classified as male or female.</li> </ul>
Type Score	Ratio better quality = lower score
Algorithm	<ol> <li>The target population is all included participants on a PACE organization's census for at least one day during a calendar quarter.</li> <li>The numerator is the number of PACE participants whose clinical records documented the presence of one or more included pressure injuries during the quarter.</li> <li>Count the number of included PACE participants on a PACE organization's census for at least one day during a calendar quarter.</li> <li>Divide the quarterly number of participants with pressure injuries by the number of participants on the census during the quarter. No diagram provided</li> </ol>
Copyright / Disclaimer	<ul> <li>5.1 Identified measures: 0679 : Percent of High Risk Residents with Pressure Ulcers (Long Stay)</li> <li>0678 : Percent of Residents or Patients with Pressure Ulcers That Are New or Worsened (Short-Stay)</li> <li>0201 : Pressure ulcer prevalence (hospital acquired)</li> <li>0538 : Pressure Ulcer Prevention and Care</li> <li>5a.1 Are specs completely harmonized? No</li> <li>5a.2 If not completely harmonized, identify difference, rationale, impact: The measures being developed for the PACE program are not closely aligned with any of the four endorsed pressure ulcer/injury measures. It appears that they all use the same conceptual definition of</li> </ul>

3000 PACE-Acquired Pressure Ulcer/Injury Prevalence Rate
to result in concrete definitional differences. In addition to differences in data sources, none of the related measures collect data on pressure injuries acquired in the home setting or pressure ulcers/injuries in PACE participants. The proposed measure includes pressure injuries of any stage in PACE participants. Percent of High-Risk Residents With Pressure Ulcers (Long Stay) (NQF 0679) is limited to high risk long-stay patients in nursing facilities with pressure ulcers that are Stage II or greater, while Percent of Residents or Patients With Pressure Ulcers That Are New or Worsened (Short Stay) (NQF 0678) is limited to short-stay nursing facility patients with Stage II–IV pressure ulcers that are new or worsened since the prior assessment. Pressure Ulcer Prevalence (Hospital Acquired) (NQF 0201) is limited to pressure ulcers Stage II or greater acquired during a stay in an acute care hospital, and Pressure Ulcer Rate (NQF 0538) is limited to pediatric hospitals.
5b.1 If competing, why superior or rationale for additive value: Not applicable.

	3001 PACE Participant Fall Rate
Status	Steering Committee Review
Steward	CMS
Description	The quarterly incidence rate of falls amongst PACE participants per 1,000 participant days.
Туре	Outcome
Data Source	Electronic Clinical Data : Electronic Health Record, Management Data, Paper Medical Records The data collection instrument is uploaded to this application as an appendix (A.1). Data are to be collected from participant clinical records, both paper and electronic. The data sources are participant clinical records from clinicians affiliated with the PACE program, including registered nurses (RNs), physical therapists (PTs), occupational therapists (OTs), physicians (MDs and DOs), nurse practitioners (NPs), and physician assistants (PAs). If the PACE participant was in an institutional setting during the reporting period, include falls documented in the clinical records from the institution, whether a hospital, emergency room, nursing home, skilled nursing facility, rehabilitation, or some other institutional setting. Data collectors should extract fall information from clinical records in those organizations as well. Participant Days data are to be collected from participant census data. Data collectors should record the number of PACE participants on each day in the quarter and note this information in the form presented in Table 2. Partial days count as 1 day for the purpose of this measure. Available in attached appendix at A.1 Attachment Falls_Data_Collection_Code_Sheet.xlsx
Level	Facility
Setting	Other PACE programs provide services to participants who live in their own homes (or in home-like settings) in the community. Participants attend PACE centers regularly (e.g., 3 days per week) for a variety of activities and support services. If a participant i
Numerator Statement	Falls experienced by Participants in the PACE program during the month.
Numerator Details	A PACE participant fall is a sudden, unanticipated descent in which a participant comes to rest on the floor or some other surface, person, or object. Inclusion Criteria:
	• All PACE participant falls occurring in the participants home; in assisted living facilities, if that is their usual place of residence; in the PACE center, or in the care of a PACE transportation operator.

	3001 PACE Participant Fall Rate
	• Participants who are assisted to the floor by a care provider (assisted fall) are to be included in the count of falls. Exclusion Criteria:
	<ul> <li>Participants who fall (or sink) back to a bed, chair, car seat, walker seat, or toilet are excluded in the count of falls.</li> </ul>
	• Exclude falls in the participant home by staff, visitors, family members, or others who
	<ul> <li>were not PACE participants</li> <li>Exclude participants who were not in their home location. For example, exclude participants who were in an emergency room, hospitalized, in a long term care facility, in a hospice facility, in skilled nursing care, in a rehabilitation setting.</li> </ul>
	Specific data collection items and responses:
	• Fall Auto No.
	Month of Fall
	- January = 1
	- February = 2
	<ul> <li>Etc.</li> <li>Age (at end of month):</li> </ul>
	- Age in years if 55–89
	- Age greater >89 = 90+
	- Unknown = 99
	Gender:
	- Male = 1
	- Female = 2
	- Unknown = 99
Denominator Statement	The denominator represents exposure of PACE participants to the risk of falling.
Denominator Details	Total number of PACE participant days during the calendar month. This is calculated as the sum of the PACE site participant census for each day in the month, aggregated quarterly.
Exclusions	Exclude persons who were not enrolled as PACE participants, or who were not in their home location.
Exclusion details	• Exclude persons who were not enrolled as PACE participants on the specific day of the month.
	• Exclude participants who were not in their home location. For example, exclude participants who were hospitalized, in a long term care facility, in a hospice facility, in skilled nursing care, in a rehabilitation setting.
	• Exclude participants who were deceased for each day after the date of death.
Risk Adjustment	Stratification by risk category/subgroup Not applicable.
	Provided in response box S.15a
Stratification	Stratification will be based on characteristics of PACE programs, including caseload size, location, region of the country and academic affiliation, and years of operation.
	• Caseload size varies significantly across PACE sites. Categories of caseload size will be determined after we gather information on the size of each program and size of fluctuations over the course of a year. With just over 100 PACE programs, we anticipate having no more than 3 categories so that there is a sufficient sample size to produce reliable rates in each group.

	3001 PACE Participant Fall Rate
	Per the U.S. Office of Management and Budget definition:
	Location
	- Metropolitan is a county or group of contiguous counties, of which one or more has a core urban area with a population of 50,000 or more. The counties are linked by social and economic integration.
	- Micropolitan is a county or group of contiguous counties, of which one or more has an urban area with at least 10,000 persons but less than 50,000 population.
	- Non-Metropolitan is a county that is not associated with a Metropolitan or Micropolitan group of counties.
	• Academic affiliation will have two categories: Yes and No. Yes indicates a site that is operated by the primary clinical site for a School of Medicine. No indicates that a site is operated by another organization.
	• Years of operation for PACE programs vary widely; one program has been in operation for only a few months, while another has been in operation for more than 17 years. Years of Operation is indicated in whole years and months in a partial year. At most, three categories of "Years of Operation" will be identified in order to maintain a sufficient sample in each category to support reliable reporting. Risk Adjustment Type:
	Risk Adjustment Type. Risk stratification will be used rather than risk adjustment. Stratification will be based on PACE site characteristics. Because PACE participants are frail elderly in each site, they may be considered a single population, not requiring risk adjustment to account for different populations across PACE sites.
	Two demographic variables—age and gender—will be collected so that the potential for sociodemographic adjustment can be assessed.
	• Age is defined as the participant age at the end of the reporting month. It is to be recorded in single years from 55 through 89. To comply with HIPAA requirements, all participants aged 90 and above will be top coded at 90.
	Gender is to be classified as male or female.
Type Score	Ratio better quality = lower score
Algorithm	The Fall Rate is calculated as the number of falls to PACE participants per 1,000 participant days during a calendar quarter. Data are collected monthly. The calculation steps are as follows:
	1. Sum the number of falls for each of the 3 months in the quarter.
	2. Multiply the numerator by 1,000. This step merely facilitates interpretation of results because it reduces leading zeros in the rate.
	3. List the number of PACE site participants in the census for each day in the months included in the quarter.
	4. Sum the number of participants across each day.
	5. Sum the number of participant days in each month.
	6. Rate calculation: (Number of falls x 1,000) / (Total number of participant days). No diagram provided
Copyright /	5.1 Identified measures: 0141 : Patient Fall Rate
Disclaimer	0266 : Patient Fall
	5a.1 Are specs completely harmonized? No
	5a.2 If not completely harmonized, identify difference, rationale, impact: The numerator for

3001 PACE Participant Fall Rate
the fall measure being developed for the PACE program is closely aligned with NQF-endorsed measures 0141. They use the same definition of falls, however, the proposed measure uses a different denominator that reflects fall exposure in PACE programs as opposed to hospitals. NQF-endorsed measure 0266 is limited to ambulatory surgical centers (ASCs) and is expressed per admission rather than per day.
5b.1 If competing, why superior or rationale for additive value: Not applicable.

	3003 PACE Participant Falls With Injury Rate
Status	Steering Committee Review
Steward	CMS
Description	The quarterly incidence rate of falls with injury amongst PACE participants per 1,000 participant days.
Туре	Outcome
Data Source	Electronic Clinical Data : Electronic Health Record, Management Data, Paper Medical Records The data collection instrument is uploaded as an appendix (A.1) to this application. Data are to be collected from participant clinical records, both paper and electronic. The data sources are participant clinical records from clinicians affiliated with the PACE program, including RNs, PTs, OTs, physicians (MDs and DOs), NPs, and PAs.
	Participant Days data are to be collected from participant census data. Data collectors should record the number of PACE participants on each day in the quarter and record this information in the form presented in the appendix. Partial days count as 1 day for the purpose of this measure.
	Available in attached appendix at A.1       Attachment         FallsInjury_Data_Collection_Code_Sheet.xlsx
Level	Facility
Setting	Other PACE programs provide services to participants who live in their own homes (or in home-like settings) in the community. Participants attend PACE centers regularly (e.g., 3 days per week) for a variety of activities and support services. If a participant i
Numerator Statement	Falls with injury experienced by participants in the PACE program during the month.
Numerator Details	A PACE participant fall with injury is a sudden, unanticipated descent in which a participant comes to rest on the floor or some other surface, person, or object, resulting in an injury level of minor or greater.
	Injury Level: Injury levels should be assessed 24 hours after the fall and be categorized as:
	• None: Participant had no injuries (no signs of symptoms) resulting from the fall; if an x ray, CT scan, or other post fall evaluation results in a finding of no injury.
	• Minor: Resulted in application of dressing, cleaning wound, ice, limb evaluation, topical medication, pain, bruise, or abrasion.
	• Moderate: Resulted in wound treatment such as suturing, skin glue, steri-strips, or splint; possible muscle or joint strain.
	• Major: Resulted in fracture, surgery, casting, traction, or required neurological or internal injury consultation. Possibly resulting in hospitalization or in permanent loss of function.
	Death: Participant died as a result of injuries from the fall.

	3003 PACE Participant Falls With Injury Rate
	Inclusion Criteria:
	• All PACE participant falls with injury occurring in the participants home; in assisted living facilities, if that is their usual place of residence; in the PACE center, or in the care of a PACE transportation operator.
	• Participants who are injured when assisted to the floor by a care provider (assisted fall) are to be included in the count of falls with injury.
	Exclusion Criteria:
	• Participants who fall (or sink) back to a bed, chair, car seat, walker seat, or toilet are excluded in the count of falls with injury.
	• Exclude falls in the participant home by staff, visitors, family members, or others who were not PACE participants
	• Exclude participants who were not in their home location. For example, exclude participants who were in an emergency room, hospitalized, in a long term care facility, in a hospice facility, in skilled nursing care, in a rehabilitation setting.
	Specific data collection items and responses:
	Fall Auto No.
	Month of Fall
	- January = 1
	- February = 2
	- Etc.
	Age (at end of month):
	- Age in years if 55–89
	- Age greater >89 = 90+
	<ul> <li>Unknown = 99</li> <li>Gender:</li> </ul>
	- Male = 1 - Female = 2
	- Unknown = 99
	Injury Level
	- None = 1
	- Minor = 2
	- Moderate = 3
	- Major = 4
	- Death = 5
	- Unknown = 99
Denominator Statement	The denominator represents exposure of PACE participants to the risk of falling.
Denominator Details	Total number of PACE participant days during the calendar month. This is calculated as the sum of the PACE site participant census for each day in the month, aggregated quarterly.
Exclusions	Exclude persons who were not enrolled as PACE participants, or who were not in their home location.
Exclusion details	• Exclude persons who were not enrolled as PACE participants on the specific day of the month.
	• Exclude participants who were not in their home location. For example, exclude participants who were hospitalized, in a long term care facility, in a hospice facility, in skilled nursing care, in a rehabilitation setting.

	3003 PACE Participant Falls With Injury Rate
	• Exclude participants who were deceased for each day after the date of death.
Risk Adjustment	Stratification by risk category/subgroup
	Not applicable.
	Provided in response box S.15a
Stratification	Stratification will be based on characteristics of PACE programs, including caseload size, location, region of the country and academic affiliation, and years of operation.
	• Caseload size varies significantly across PACE sites. Categories of caseload size will be determined after we gather information on the size of each program and size of fluctuations over the course of a year. With just over 100 PACE programs, we anticipate having no more than 3 categories so that there is a sufficient sample size to produce reliable rates in each group.
	Per the U.S. Office of Management and Budget definition:
	Location
	- Metropolitan is a county or group of contiguous counties, of which one or more has a core urban area with a population of 50,000 or more. The counties are linked by social and economic integration.
	- Micropolitan is a county or group of contiguous counties, of which one or more has an urban area with at least 10,000 persons but less than 50,000 population.
	- Non-Metropolitan is a county that is not associated with a Metropolitan or Micropolitan group of counties.
	• Academic affiliation will have two categories: Yes and No. Yes indicates a site that is operated by the primary clinical site for a School of Medicine. No indicates that a site is operated by another organization.
	• Years of operation for PACE programs vary widely; one program has been in operation for only a few months, while another has been in operation for more than 17 years. Years of Operation is indicated in whole years and months in a partial year. At most, three categories of "Years of Operation" will be identified in order to maintain a sufficient sample in each category to support reliable reporting. Risk Adjustment Type:
	Risk stratification will be used rather than risk adjustment. Stratification will be based on PACE site characteristics. Because PACE participants are frail elderly in each site, they may be considered a single population, not requiring risk adjustment to account for different populations across PACE sites.
	Two demographic variables—age and gender—will be collected so that the potential for sociodemographic adjustment can be assessed.
	• Age is defined as the participant age at the end of the reporting month. It is to be recorded in single years from 55 through 89. To comply with HIPAA requirements, all participants aged 90 and above will be top coded at 90.
	Gender is to be classified as male or female.
Type Score	Rate/proportion better quality = lower score
Algorithm	The Falls With Injury Rate is calculated as the number of falls with injury to PACE participants per 1,000 participant days during a calendar quarter. Data are collected monthly and reported quarterly. The calculation steps are as follows:
	<ol> <li>Sum the number of falls with injury for each of the 3 months in the quarter.</li> <li>Multiply the numerator by 1,000. This step merely facilitates interpretation of results</li> </ol>
	because it reduces leading zeros in the rate.

	3003 PACE Participant Falls With Injury Rate		
	3. List the number of PACE site census for each day for each of the months included in the quarter.		
	4. Sum the number of participants across each day.		
	5. Sum the number of participant days in each month.		
	6. Rate calculation: (Number of Falls With Injury x 1,000) / (Total number of participant days No diagram provided		
Copyright /	5.1 Identified measures: 0202 : Falls with injury		
Disclaimer	0674 : Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay)		
	5a.1 Are specs completely harmonized? No		
5a.2 If not completely harmonized, identify difference, rationale, impact: The the falls with injury measure being developed for the PACE program is closely NQF-endorsed measures 0202. They use the same description of injury levels, proposed measure uses a different denominator that reflect fall exposure in P opposed to hospitals. NQF-endorsed measure 0266 is limited to long-stay nur residents with major injuries from falls rather than any injury.			
	5b.1 If competing, why superior or rationale for additive value: Not applicable.		

	3005 Initial Risk Assessment for Immobility-Related Pressure Ulcer within 24 Hours of PICU Admission	
Status	Submitted	
Steward	Pediatric Consultants, LLC	
Description	This measure determines the proportion of Pediatric Intensive Care Unit (PICU) patients for whom an initial risk assessment for development of an immobility-related pressure ulcer is performed. The assessment is to be performed within the first 24 hours of admission to the PICU with the use of a standardized, validated pressure ulcer risk assessment tool designated as appropriate by the institution. The results of the assessment must be documented in the patient's chart upon completion.	
Туре	Process	
Data Source	Electronic Clinical Data : Electronic Health Record, Other, Paper Medical Records Other Data Source (S.23): Electronic Data Warehouse	
	The data source for this measure is the patient medical record. Data is collected through the Electronic Health Record (EHR) system.	
	Available in attached appendix at A.1 Attachment S.2bData_Dictionary _Pressure_Ulcer_4.28.16.docx	
Level	Facility, Integrated Delivery System	
Setting	Hospital/Acute Care Facility	
Numerator Statement	Number of PICU patients for whom an assessment of immobility-related pressure ulcer risk using a standardized pressure ulcer risk assessment tool was documented within 24 hours of admission.	
Numerator Details	A standardized, validated pressure ulcer risk assessment tool is defined as a validated assessment tool that is applied in a standardized fashion to each patient admitted to the PICU	

	3005 Initial Risk Assessment for Immobility-Related Pressure Ulcer within 24 Hours of PICU Admission
	for at least 24 hours. The assessment should be based on an immobility-related pressure ulcer risk assessment tool which has been validated for the majority of the institutions' PICU patients and the assessment should occur within the 24 hours of PICU admission. Currently, the Braden Q is the only validated immobility-related pressure ulcer risk assessment tool available for critically ill and injured children. Other validated risk assessment tools are acceptable, if available.
Denominator Statement	All patients admitted to the PICU for at least 24 hours during a monthly or quarterly reporting period.
Denominator Details	n/a
Exclusions	none
Exclusion details	n/a
Risk Adjustment	No risk adjustment or risk stratification n/a
Stratification	n/a
Type Score	Rate/proportion better quality = higher score
Algorithm	1) Identify the target population: patients admitted to the PICU within the reporting period;
	2) Evaluate the charts in the patient sample to see whether the patients meet the denominator criteria: admitted to the PICU for at least 24 hours during the reporting period;
	3) Evaluate the charts that meet the denominator criteria to see whether the patients meet the numerator criteria: documentation of an assessment of immobility-related pressure ulcer risk using a standardized, validated pressure ulcer risk assessment tool within 24 hours of PICU admission; and
	4) Calculate performance score by dividing the numerator by the denominator. No diagram provided
Copyright /	5.1 Identified measures: 0337 : Pressure Ulcer Rate (PDI 2)
Disclaimer	0539 : Pressure Ulcer Prevention Implemented during Short Term Episodes of Care
	5a.1 Are specs completely harmonized? No
	5a.2 If not completely harmonized, identify difference, rationale, impact: NQF measure #0539, Pressure Ulcer Prevention and Care, is a pressure ulcer prevention measure targeted towards the adult population in a home health setting. While this measure appears to be somewhat comparable to the PICU measure we are proposing, our measure is designed for critically ill and injured children in the PICU, an entirely different patient population and medical care setting. NQF measure #0337, Pressure Ulcer Rate (PDI2), is a measure that captures the rate of Stage III or IV pressure ulcers in patients age 17 and younger but excludes neonates, stays less than 5 days, transfers from another facility, obstetric discharges, cases with diseases of the skin, subcutaneous tissue and breast, discharges in which debridement or pedicle graft is the only operating room procedure, discharges with debridement or pedicle graft before or on the same days as the major operating room procedure, and discharges in which pressure ulcer is the principal diagnosis or secondary diagnosis of Stage III or IV pressure ulcer is present on admission. While this measure is targeted at the same age group as our proposed measure, the current endorsed measure assesses the percentage of patients who have a Stage III or IV pressure ulcer. Our measure requires the use of a validated tool to assess immobility pressure ulcer risk in order to prevent the occurrence of developing a pressure ulcer at all. Our

3005 Initial Risk Assessment for Immobility-Related Pressure Ulcer within 24 Hours of PICU Admission
measure is applied only to the care of critically ill and injured children in the PICU, a more circumscribed, but more at risk population.
5b.1 If competing, why superior or rationale for additive value: No PICU-related measures are currently included in the Core Set of Children's Health Care Quality Measures for Medicaid and CHIP (Child Core Set), yet the PICU is where a hospital's sickest and most vulnerable children are treated. In addition to closing

	3006 Initial Baseline Screen of Nutritional Status for Every Patient within 24 Hours of PICU Admission	
Status	Submitted	
Steward	Pediatric Consultants, LLC	
Description	The measure will determine the percentage of pediatric intensive care unit (PICU) patients for whom an initial nutritional status screening was performed. The screening is to be performed within the first 24 hours of admission to the PICU with the use of a standardized nutrition-screening tool. The results of the screening must be documented in the patient's chart upon completion.	
Туре	Process	
Data Source	Electronic Clinical Data : Electronic Health Record, Other Other Data Source (S.23): Electronic Data Warehouse	
	The data source for this measure is the patient medical record. Data is collected for the construction of the measure through the Electronic Health Record (EHR) system.	
	Available in attached appendix at A.1 Attachment S.2bData_Dictionary _Nutritional_Status_4.28.16.docx	
Level	Facility, Integrated Delivery System	
Setting	Hospital/Acute Care Facility	
Numerator Statement	Number of PICU patients for whom a screening of nutritional status was documented with use of a standardized nutrition screening tool within 24 hours of admission to the PICU.	
Numerator Details	A standardized nutrition screening tool is a screening tool that is applied in a standardized manner to each patient admitted to the PICU and should be based on a nutrition screening tool which has been validated for the majority of the institutions' PICU patients. Examples of this would include STAMP, the Paediatric Yorkhill Malnutrition Score, and potentially, institution-derived nutrition screening tools.	
Denominator Statement	All patients admitted to the PICU for at least 24 hours during a monthly or quarterly reporting period.	
Denominator Details	n/a	
Exclusions	Patients who have already had a documented nutrition screening or assessment in the previous 48 hours.	
Exclusion details	n/a	
Risk Adjustment	No risk adjustment or risk stratification n/a	
Stratification	n/a	

	3006 Initial Baseline Screen of Nutritional Status for Every Patient within 24 Hours of PICU Admission	
Type Score	Rate/proportion better quality = higher score	
Algorithm	<ol> <li>Identify the target population: patients admitted to the PICU within the reporting period;</li> <li>Evaluate the charts in the patient sample to see whether the patients meet the denominator criteria: patients admitted to the PICU for at least 24 hours;</li> </ol>	
	3) Evaluate the charts the meet the denominator criteria for the exclusion criteria, patients who have already had a documented nutrition screening or assessment in the previous 48 hours, and remove them from the denominator population;	
	4) Evaluate the remaining charts to see whether they meet the numerator criteria: PICU patients for whom a screening of nutritional status was documented with the use of a standardized nutrition screening tool within 24 hours of admission; and	
	5) Calculate the performance score by dividing the numerator by the denominator No diagram provided	
Copyright / Disclaimer	5.1 Identified measures:	
	5a.1 Are specs completely harmonized?	
	5a.2 If not completely harmonized, identify difference, rationale, impact: n/a	
	5b.1 If competing, why superior or rationale for additive value: n/a	

	3025 Ambulatory Breast Procedure Surgical Site Infection (SSI) Outcome Measure		
Status	Steering Committee Review		
Steward	Surveillance Branch, Division of Healthcare Quality Promotion, Centers for Disease Control and Prevention		
Description	This measure is for the risk-adjusted Standardized Infection Ratio (SIR) for all Surgical Site Infections (SSI) following breast procedures conducted at ambulatory surgery centers (ASCs) among adult patients (ages 18 - 108 years) and reported to the Centers for Disease Control and Prevention (CDC) National Healthcare Safety Network (NHSN). The measure compares the reported number of surgical site infections observed at an ASC with a predicted value based on nationally aggregated data. The measure was developed collaboratively by the CDC, the Ambulatory Surgery Center Quality Collaboration (ASC QC), and the Colorado Department of Public Health and Environment. CDC is the measure steward.		
Туре	Outcome		
Data SourceElectronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Pap Records Currently, NHSN data collection for SSIs following outpatient operativ via the Patient Safety Component. Plans call for NHSN data collection for SSIs outpatient operative procedures to be moved to the new Outpatient Procedure 2018.			
	Available at measure-specific web page URL identified in S.1 Attachment Breast_Procedure_CPT_List_and_Final_Model_for_Ambulatory_Breast_Procedure_SSI_Outcio me_Measure_05.31.2016Copy.xlsx		
Level	Facility		

	3025 Ambulatory Breast Procedure Surgical Site Infection (SSI) Outcome Measure	
Setting	Ambulatory Care : Ambulatory Surgery Center (ASC)	
Numerator Statement	rrgical site infections (SSIs) during the 30-day (superficial SSI) and 90-day (deep and gan/space SSI) postoperative periods following breast procedures in Ambulatory Surgery enters.	
Numerator Details	SSIs are defined in the NHSN Patient Safety Protocol: http://www.cdc.gov/nhsn/CPTcodes/ssi- cpt.html.	
	Surgical site infection: An infection, following a breast procedure, of either the skin, subcutaneous tissue and breast parenchyma at the incision site (superficial incisional SSI), deep soft tissues of the incision site (deep incisional SSI), or any part of the body deeper than the fascial/muscle layers that is opened or manipulated during the operative procedure (organ/space SSI).	
	Superficial incisional SSI	
	Must meet the following criteria:	
	Infection occurs within 30 days after any NHSN operative procedure (where day 1 = the procedure date) AND	
	involves only skin, subcutaneous tissue (e.g. fatty tissue) and breast parenchyma (e.g. milk ducts and glands that produce milk) of the incision AND	
	patient has at least one of the following:	
	a. purulent drainage from the superficial incision.	
	b. organisms identified from an aseptically-obtained specimen	
	from the superficial incision or subcutaneous tissue by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatmen (e.g., not Active Surveillance Culture/Testing (ASC/AST).	
	c. superficial incision that is deliberately opened by a surgeon, attending physician** or other designee and culture or non-culture based testing is not performed.	
	d. diagnosis of a superficial incisional SSI by the surgeon or attending physician** or other designee.	
	AND	
	patient has at least one of the following signs or symptoms: pain or tenderness; localized swelling; erythema; or heat. A culture or non-culture based test that has a negative finding doe not meet this criterion.	
	Deep incisional SSI	
	Must meet the following criteria:	
	Infection occurs within 90 days after the NHSN operative procedure (where day 1 = the procedure date)	
	according to the list in Table 2	
	AND	
	involves deep soft tissues of the incision (e.g., fascial and muscle layers) AND	
	patient has at least one of the following:	
	a. purulent drainage from the deep incision.	
	b. a deep incision that spontaneously dehisces, or is deliberately opened or aspirated by a surgeon, attending physician** or other designee and organism is identified by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical	
	diagnosis or treatment (e.g., not Active Surveillance Culture/Testing (ASC/AST) or culture or	

	3025 Ambulatory Breast Procedure Surgical Site Infection (SSI) Outcome Measure
	non-culture based microbiologic testing method is not performed
	c. an abscess or other evidence of infection involving the deep incision that is detected on gross anatomical or histopathologic exam, or imaging test AND
	patient has at least one of the following signs or symptoms: fever (>38°C); localized pain or tenderness. A culture or non-culture based test that has a negative finding does not meet this criterion.
	Organ/Space SSI
	Must meet the following criteria:
	Infection occurs within 30 or 90 days after the NHSN operative procedure (where day 1 = the procedure date) according to the list in Table 2 AND
	infection involves any part of the body deeper than the fascial/muscle layers (e.g. subpectoral), that is opened or manipulated during the operative procedure AND
	patient has at least one of the following:
	a. purulent drainage from a drain that is placed into the organ/space (e.g., closed suction drainage system, open drain, T-tube drain, CT guided drainage)
	b. organisms are identified from an aseptically-obtained fluid or tissue in the organ/space by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (e.g., not Active Surveillance Culture/Testing (ASC/AST).
	c. an abscess or other evidence of infection involving the organ/space that is detected on gross anatomical or histopathologic exam, or imaging test AND
	meets at least one of the following criteria for BRST-Breast abscess or mastitis
	BRST-Breast abscess/infection
	1. Patient has organisms identified from affected breast tissue or fluid obtained by invasive procedure by a culture or non-culture based microbiologic testing method which is performed for purposes of clinical diagnosis or treatment (e.g., not Active Surveillance Culture/Testing (ASC/AST).
	2. Patient has a breast abscess or other evidence of infection on gross anatomic or histopathologic exam.
	AND Physician initiates antimicrobial therapy within 2 days of onset or worsening of symptoms. Notes:
	• Breast procedures may involve a secondary operative site. i.e., procedures that include flaps. The flap site is the secondary site. Secondary sites have a 30 day surveillance period. If the secondary site meets criteria for an SSI, it reported as either a superficial incisional SSI at the secondary site or deep incisional infection at the incisional site.
	• Accessing a breast expander after a breast procedure is considered an invasive procedure and any subsequent infection is not deemed an SSI attributable to the breast procedure.
	** The term attending physician for the purposes of application of the NHSN SSI criteria may be interpreted to mean the surgeon(s), infectious disease, other physician on the case, emergency physician or physician's designee (nurse practitioner or physician's assistant).
Denominator	Breast procedures, as specified by the operative codes that comprise the breast procedure

	3025 Ambulatory Breast Procedure Surgical Site Infection (SSI) Outcome Measure	
Statement	category of the NHSN Patient Safety Component Protocol, performed at ambulatory surgery centers.	
Denominator	Information required to calculate the denominator:	
Details	CPT codes for NHSN Breast Procedure category:	
	11970, 19101, 19112, 19120, 19125, 19126, 19300, 19301, 19302, 19303, 19304, 19305, 19306 19307, 19316, 19318, 19324, 19325, 19328, 19330, 19340, 19342, 19350, 19355, 19357, 19361 19364, 19366, 19367, 19368, 19369, 19370, 19371, 19380	
	See attached spreadsheet for descriptions of each code.	
	Note: Bilateral breast procedures performed during the same trip to operating room are counted as two separate procedures	
	Ambulatory surgical center (ASC): any distinct entity that operates exclusively for the purpose of providing surgical services to patients not requiring hospitalization and in which the expected duration of services would not exceed 24 hours following an admission.	
	Parameter estimates for breast procedure logistic regression model are needed to calculate the expected number of SSIs (included in the attached document).	
	Patient-specific data: Age, American Society of Anesthesiologists Physical Status Classification (ASA Class).	
Exclusions	Hospital inpatients and hospital outpatient department patients, pediatric patients and very elderly patients, and brain-dead patients whose organs are being removed for donor purposes	
Exclusion details	Exclusion Criteria:	
	1. Inpatient breast procedures*	
	2. Breast procedures performed on patients under age 18 or age 109 or over.	
	3. Breast procedures with ASA Class VI (6).	
	*Breast procedures performed in hospital outpatient departments (HOPDs) are not included in the measure scope.	
Risk Adjustment	Statistical risk model	
	Multivariable logistic regression modeling including factors associated with differences in risk or surgical site infection. Variables available and considered in modeling: Patient age, ASA class, duration of procedure, Patient gender, wound classification, anesthesia use. Final risk model: Patient Age, ASA class.	
	Available in attached Excel or csv file at S.2b	
Stratification	None	
Type Score	Ratio better quality = lower score	
Algorithm	Each SIR is calculated as follows:	
	1. Identify the number of infections reported during the measurement period for an observed number of infections.	
	2. Obtain the predicted number of infections by applying the risk adjustment model to all eligible breast procedures during the measurement period.	
	3. Divide the observed number of infections by the predicted number of infections.	
	4. Result = SIR for the given period.	
	5. Note: SIRs are not calculated when the number of predicted infections is less than 0.2. No diagram provided	
Copyright / Disclaimer	5.1 Identified measures:	

	3025 Ambulatory Breast Procedure Surgical Site Infection (SSI) Outcome Measure
5a.2 If not completely harmonized, identify difference, rationale, impact:	
	5b.1 If competing, why superior or rationale for additive value: None

## Appendix F: Related and Competing Measures

## Comparison of NQF #0022 and NQF #2993

	0022: Use of High-Risk Medications in the Elderly (DAE)	2993: Potentially Harmful Drug-Disease Interactions in the Elderly
Steward	National Committee for Quality Assurance	National Committee for Quality Assurance
Description	<ul> <li>There are two rates for this measure:</li> <li>The percentage of patients 65 years of age and older who received at least one high-risk medication.</li> <li>The percentage of patients 65 years of age and older who received at least two prescriptions for the same high-risk medication.</li> <li>For both rates, a lower rate represents better performance.</li> </ul>	The percentage of patients 65 years of age and older who have evidence of an underlying disease, condition or health concern and who are dispensed an ambulatory prescription for a potentially harmful medication, concurrent with or after the diagnosis. Four rates are reported for this measure: -Rate 1: The percentage of those with a history of falls that received a potentially harmful medication -Rate 2: The percentage of those with dementia that received a potentially harmful medication -Rate 3: The percentage of those with chronic kidney disease that received a potentially harmful medication -Rate 4: Total rate A lower rate represents better performance for all rates.
Туре	Process	Process
Data Source	Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Pharmacy This measure is based on administrative claims collected in the course of providing care to health plan members. NCQA collects the Healthcare Effectiveness Data and Information Set (HEDIS) data for this measure directly from Health Management Organizations and Preferred Provider Organizations via NCQA's online data submission system. No data collection instrument provided No data dictionary	Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Pharmacy This measure is based on administrative claims collected in the course of providing care to health plan members. NCQA collects the Healthcare Effectiveness Data and Information Set (HEDIS) data for this measure directly from Health Management Organizations and Preferred Provider Organizations via NCQA's online data submission system. No data collection instrument provided Attachment DDE_Value_Sets- 635979522717911582.xlsx
Level	Health Plan, Integrated Delivery System	Health Plan, Integrated Delivery System
Setting	Ambulatory Care : Clinician Office/Clinic, Pharmacy	Ambulatory Care : Clinician Office/Clinic, Pharmacy
Numerator Statement	Numerator 1: Patients who received at least one high-risk medication during the measurement year.	Numerator 1: Patients with a history of falls who received at least one potentially harmful medication from Table DDE-A or Table DDE-B
	Numerator 2: Patients who received at least two prescriptions for the same high-risk medication during the measurement year.	Numerator 2: Patients with a diagnosis of dementia who received at least one potentially harmful medication from Table DDE-D

	0022: Use of High-Risk Medications in the Elderly (DAE)	2993: Potentially Harmful Drug-Disease Interactions in the Elderly
	For both numerators a lower rate indicates better performance.	Numerator 3: Patients with chronic kidney disease who received at least one potentially harmful medication from Table DDE-E Numerator 4: The sum of the three numerators
Numerator Details	<ul> <li>Patients who had at least one dispensing event for a high-risk medication during the measurement year. Follow the steps below to identify numerator compliance. Include patients who meet criteria in more than one step only once in the numerator. Do not include denied claims.</li> <li>Step 1: Identify patients with at least one dispensing event (any days supply) during the measurement year for a medication in Table DAE-A. These patients are compliant for Numerator 1.</li> <li>Step 2: Identify patients with a single dispensing event during the measurement year for a medication. These patients are compliant for the medication. These patients are compliant for Numerator 1. For medications dispensed during the measurement year, sum the days supply and include any</li> </ul>	Rate 1 numerator: Dispensed an ambulatory prescription for an anticonvulsant, nonbenzodiazepine hypnotic, or SSRI (Table DDE-A), antipsychotic, benzodiazepine, nonbenzodiazepine hypnotic or tricyclic antidepressant (Table DDE-B) on or between the index episode start data and December 31 of the measurement year. Rate 2 numerator: Dispensed an ambulatory prescription for an antipsychotic, benzodiazepine, nonbenzodiazepine hypnotic or tricyclic antidepressant (Table DDE-B), or H2 receptor antagonist or anticholinergic agent (Table DDE-D) on or between the IESD and December 31 of the measurement year. Rate 3 numerator: Dispensed an ambulatory prescription for an NSAID or Cox-2 selective NSAID (Table DDE-E) on or between the IESD and December 31 of the measurement year.
	days supply that extends beyond December 31 of the measurement year. For example, a prescription of a 90-days supply dispensed on December 1 of the measurement year counts as a 90-days supply. Step 3: Identify patients with a single dispensing event during the measurement year for a medication in Table DAE-C where average daily dose exceeds the average daily dose criteria listed for the medication. These patients are compliant for Numerator 1. To calculate average daily dose multiply the quantity of pills dispensed by the dose of each pill and divide by the days supply. For example, a prescription for a 30-days supply of digoxin containing 15 pills, .250 mg each pill, has an average daily dose for elixirs and concentrates, multiply the volume dispensed by daily dose and divide by the days supply. Do not round when calculating average daily dose.	Rate 4 numerator: The sum of numerators 1, 2 and 3. Note: Do not include denied claims.  Table DDE-A: Potentially Harmful Drugs – Rate 1 Anticonvulsants: Carbamazepine, Clobazam, Divalproex sodium, Ethosuximide, Ethotoin, Ezogabine, Felbamate, Fosphenytoin, Gabapentin, Lacosamide, Lamotrigine, Levetiracetam, Mephobarbital, Methsuximide, Oxcarbazepine, Phenobarbital, Phenytoin, Pregabalin, Primidone, Rufinamide, Tiagabine HCL, Topiramate, Valproate sodium, Valproic acid, Vigabatrin, Zonisamide SSRIs: Citalopram, Escitalopram, Fluoxetine, Fluvoxamine, Paroxetine, Setraline
	<ul> <li>Numerator 2:</li> <li>Patients who had at least two dispensing events for the same high-risk medication during the measurement year.</li> <li>Follow the steps below to identify numerator compliance. Include patients who meet criteria in more than one step only once in the</li> </ul>	 Table DDE-B: Potentially Harmful Drugs – Rate 1 (History of Falls) and Rate 2 (Dementia) Antipsychotics: Aripiprazole, Asenapine, Brexpiprazole, Cariprazine, Chlorpromazine,

0022: Use of High-Risk Medica	tions in the Elderly (DAE)	2993: Potentially Harmful Drug-Disease Interactions in the Elderly
numerator. Do not include der Step 1: Identify patients with t supply) on different dates of se a medication in Table DAE-A. T same drug as identified by the are compliant for Numerator 2 Step 2: For each patients ident measurement year for medica with two or more dispensing e medications in the same medic Description column). For exam prescription for zaleplon are co medications in the same medic description: Nonbenzodiazepin prescriptions in the same medic descriptions in the same medic descriptions in the same medic or more dispensing events for class where the summed days listed for the medication. Thes 2. For medications dispensed of days supply and include any da December 31 of the measurem a 90-days supply dispensed on counts as a 90-days supply. - Note: The intent is to identify dispensing events where the s supply criteria; there is no requ exceed the days supply criteria Step 3: For each patient identif	hied claims. wo or more dispensing events (any days ervice during the measurement year for The dispensing events must be for the Drug ID in the NDC list. These patients 2. Cify all dispensing events during the tions in Table DAE-B. Identify patients wents on different dates of service for cation class (as identified in the tople, a prescription for zolpidem and a considered two dispensing events for cation class (these drugs share the same the hypnotics). Sum the days supply for ication class. Identify patients with two medications of the same medication supply exceeds the days supply criteria the patients are compliant for Numerator during the measurement year sum the ays supply that extends beyond thent year. For example, a prescription of December 1 of the measurement year all patients who had multiple ummed days supply exceeds the days uirement that each dispensing event	2993: Potentially Harmful Drug-Disease Interactions in the Elderly Clozapine, Fluphenazine, Haloperidol, Iloperidone, Loxapine, Lurasidone, Molindone, Olanzapine, Paliperidone, Perphenazine, Pimozide, Quetiapine, Risperidone, Thioridazine, Thiothixene, Trifluoperazine, Ziprasidone Benzodiazepine hypnotics: Alprazolam, Chlordiazepoxide products, Clonazepam, Clorazepate- Dipotassium, Diazepam, Estazolam, Flurazepam HCL, Lorazepam, Midazolam HCL, Oxazepam, Quazepam, Temazepam, Triazolam Nonbenzodiazepine hypnotics: Eszopiclone, Zaleplon, Zolpidem Tricyclic antidepressants: Amitriptyline, Amoxapine, Clomipramine, Desipramine, Doxepin (>6 mg), Imipramine, Nortriptyline, Protriptyline, Trimipramine  Table DDE-D: Potentially Harmful Drugs – Rate 2 (Dementia) H2 receptor antagonists: Cimetidine, Famotidine, Nizatidine, Ranitidine Anticholinergic agents, antiemetics: Prochlorperazine, Promethazine Anticholinergic agents, antihistamines: Carbinoxamine, Chlorpheniramine, Hydroxyzine products, Brompheniramine, Clemastine, Cyproheptadine, Promethazine, Triprolidine, Dimenhydrinate, Diphenhydramine, Meclizine, Dexbrompheniramine, Dexchlorpheniramine, Doxylamine Anticholinergic Agents, antimuscarinics (oral) Atropine, Homatropine, Belladonna alkaloids, Dicyclomine, Hyoscyamine, Propantheline, Scopolamine, Clidinium-chlordiazepoxide
daily dose exceeds the average medication. Identify patients v the same or different dates of	e daily dose criteria listed for the vith two or more dispensing events on service that exceed the average daily	Anticholinergic agents, antimuscarinics (oral) Darifenacin, Fesoterodine, Solifenacin, Trospium, Flavoxate, Oxybutynin, Tolterodine
list (do not include drugs with	g as identified by the Drug ID in the NDC a single dispensing event). These nerator 2. To calculate average daily t, multiply the quantity of pills	Anticholinergic agents, anti-Parkinson agents Benztropine, Trihexyphernidyl Anticholinergic agents, skeletal muscle relaxants

0022: Use of High-Risk Medications in the Elderly (DAE)	2993: Potentially Harmful Drug-Disease Interactions in the Elderly
dispensed by the dose of each pill and divide by the days supply. For example, a prescription for a 30-days supply of digoxin containing 15 pills, .250 mg each pill, has an average daily dose of 0.125 mg. To calculate average daily dose of elixirs and concentrates, multiply the volume dispensed by daily dose and divide by the days supply. Do not round when calculating average daily dose. HIGH-RISK MEDICATIONS (Table DAE-A) Anticholinergics, First-generation antihistamines: Brompheniramine, Carbinoxamine, Chlorpheniramine, Clemastine, Cyproheptadine, Dexbrompheniramine, Dexchlorpheniramine, Diphenhydramine (oral), Dimenhydrinate, Doxylamine, Hydroxyzine, Meclizine, Promethazine, Triprolidine Anticholinergics, anti-Parkinson agents: Benztropine (oral), Trihexyphenidyl Antispasmodics: Atropine (exclude ophthalmic), Bellandonna alkaloids, Clidinium- Chlordiazepoxide, Dicyclomine, Hyoscyamine, Propantheline, Scopolamine Antithrombotics: Dipyridamole, oral short-acting (does not apply to the extended- release combination with aspirin), Ticlopidine Cardiovascular, alpha agonists, central: Guanabenz, Guanfacine, Methyldopa Cardiovascular, other: Disopyramide, Nifedipine (immediate release) Central nervous system, antidepressants: Amitriptyline, Clomipramine, Imipramine, Protriptyline Central nervous system, barbiturates: Amobarbital, Butabarbital, Butabital, Mephobarbital, Pentobarbital, Phenobarbital, Secobarbital Central nervous system, vasodilators: Ergot mesylates, Isossuprine	Cyclobenzaprine, Orphenadrine Anticholinergic agents, SSRIs: Paroxetine Anticholinergic agents, antiarrhythmic: Disopyramide  Table DDE-E: Cox-2 Selective NSAIDs and Nonasprin NSAIDs Cox-2 Selective NSAIDs: Celecoxib Nonaspirin NSAIDs: Diclofenac potassium, Diclofenac sodium, Etodolac, Fenoprofen, Flurbiprofen, Ibuprofen, Indomethacin, Ketoprofen, Ketorolac, Meclofenamate, Mefenamic acid, Meloxicam, Nabumetone, Naproxen, Naproxen sodium, Oxaprozin, Piroxicam, Sulindac, Tolmetin

0022: Use of High-Risk Medications in the Elderly (DAE)	2993: Potentially Harmful Drug-Disease Interactions in the Elderly
Central nervous system, other:	
Meprobamate	
Endocrine system, estrogens with or without progestins; include only oral and topical patch products:	
Conjugated estrogen, Esterified estrogen, Estradiol, Estropipate	
Endocrine system, sulfonylureas, long-duration:	
Chlorpropamide, Glyburide	
Endocrine system, other:	
Desiccated thyroid, Megestrol	
Pain medications, skeletal muscle relaxants:	
Carisoprodol, Chlorzoxazone, Cyclobenzaprine, Metaxalone, Methocarbamol, Orphenadrine	
Pain medications, other:	
Indomethacin, Ketorolac (includes parenteral), Meperidine, Pentazocine	
HIGH-RISK MEDICATIONS WITH DAYS SUPPLY CRITERIA (Table DAE-B)	
Anti-infectives, other (greater than 90 days supply, days supply criteria):	
Nitrofurantoin, Nitrofurantoin macrocrystals, Nitrofurantoin macrocrystals-monohydrate	
Nonbenzodiazepine hypnotics (greater than 90 days supply, days supply criteria):	
Eszopiclone, Zolpidem, Zaleplon	
HIGH-RISK MEDICATIONS WITH AVERAGE DAILY DOSE CRITERIA (Table DAE-C)	
Alpha agonists, central (greater than 0.1 mg/day, average daily dose criteria):	
Reserpine	
Cardiovascular, other (greater than 0.125 mg/day, average daily dose criteria):	

	0022: Use of High-Risk Medications in the Elderly (DAE)	2993: Potentially Harmful Drug-Disease Interactions in the Elderly
	Digoxin Tertiary TCAs (as single agent or as part of combination products), (greater than 6 mg/day, average daily dose criteria): Doxepin  Note: NCQA will post a comprehensive list of medications and NDC codes to www.ncqa.org by November 2016. For medications in Table DAE-A and DAE-C, identify different drugs using the Drug ID field located in the NDC list on NCQA's Web site (www.ncqa.org), posted by November, 2016.	
Denominator Statement	All patients 65 years of age and older.	All patients ages 65 years of age and older with a history of falls, dementia or chronic kidney disease in the measurement year or the year prior to the measurement year.
Denominator Details	All patients that are 66 years of age and older as of December 31 of the measurement year.	All patients ages 67 years and older as of December 31 of the measurement year with a history of falls, dementia or chronic kidney disease. Each of the four rates in the measure has a different denominator: Rate 1 denominator: Patients with an accidental fall or hip fracture (Note: hip fractures are used as a proxy for identifying accidental falls). Individuals with either of the following on or between January 1 of the year prior to the measurement year and December 1 of the measurement year meet criteria: -An accidental fall (Falls Value Set). -An outpatient visit (Outpatient Value Set), an observation visit (Observation Value Set) or an ED visit (ED Value Set), with a hip fracture (Hip Fractures Value Set). -An acute or nonacute inpatient discharge with a hip fracture (Hip Fractures Value Set). To identify acute and nonacute inpatient discharges: 1) Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set). 2) Identify the discharge date for the stay. Rate 2 denominator: Patients with a diagnosis of dementia (Dementia Value Set) or a dispensed dementia medication (Table DDE-C) on or between January 1 of the year prior to the measurement year and

	0022: Use of High-Risk Medications in the Elderly (DAE)	2993: Potentially Harmful Drug-Disease Interactions in the Elderly
		Rate 3 denominator: Patients with chronic kidney disease as identified by a diagnosis of ESRD (ESRD Value Set), stage 4 chronic kidney disease (CKD Stage 4 Value Set) or kidney transplant (Kidney Transplant Value Set) on or between January 1 of the year prior to the measurement year and December 1 of the measurement year.
		Rate 4 denominator: The sum of the denominators for rates 1, 2 and 3
		Note: Patients with more than one disease or condition may appear in the measure multiple times (i.e., in each indicator for which they qualify).
		See S.2.b for all Value Sets
		Table DDE-C: Prescriptions to Identify Members with Dementia
		Cholinesterase inhibitors:
		Donepezil, Galantamine, Rivastigmine
		Miscellaneous central nervous system agents: Memantine
Exclusions	Patients who were enrolled in hospice care at any time during the measurement year.	The following are exclusions for the condition-specific rates and total rate: For those who meet denominator criteria for the history of falls rate (Rate 1): exclude those with a diagnosis of psychosis, schizophrenia, bipolar disorder or seizure disorder.
		For those who meet denominator criteria for those with dementia rate (Rate 2): exclude those with a diagnosis of psychosis, schizophrenia or bipolar disorder.

	2988: Medication Reconciliation for Patients Receiving Care at Dialysis Facilities	0097 : Medication Reconciliation Post-Discharge	0554 : Medication Reconciliation Post-Discharge (MRP)	2456 : Medication Reconciliation: Number of Unintentional Medication Discrepancies per Patient
Steward	Kidney Care Quality Alliance (KCQA)	National Committee for Quality Assurance	National Committee for Quality Assurance	Brigham and Women's Hospital
Description	Percentage of patient-months for which medication reconciliation* was performed and documented by an eligible professional.** * "Medication reconciliation" is defined as the process of creating the most accurate list of all home medications that the patient is taking, including name, indication, dosage, frequency, and route, by comparing the most recent medication list in the dialysis medical record to one or more external list(s) of medications obtained from a patient or caregiver (including patient-/caregiver-provided "brown bag" information), pharmacotherapy information network (e.g., Surescripts), hospital, or other provider. ** For the purposes of medication reconciliation, "eligible professional" is defined as: physician, RN, ARNP, PA, pharmacist, or pharmacy technician.	The percentage of discharges for patients 18 years of age and older for whom the discharge medication list was reconciled with the current medication list in the outpatient medical record by a prescribing practitioner, clinical pharmacist or registered nurse.	The percentage of discharges during the first 11 months of the measurement year (e.g., January 1–December 1) for patients 66 years of age and older for whom medications were reconciled on or within 30 days of discharge.	This measure assesses the actual quality of the medication reconciliation process by identifying errors in admission and discharge medication orders due to problems with the medication reconciliation process. The target population is any hospitalized adult patient. The time frame is the hospitalization period. At the time of admission, the admission orders are compared to the preadmission medication list (PAML) compiled by trained pharmacist (i.e., the gold standard) to look for discrepancies and identify which discrepancies were unintentional using brief medical record review. This process is repeated at the time of discharge where the discharge medication list is compared to the PAML and medications ordered during the hospitalization.

## Comparison of NQF #2988, NQF #0097, NQF #0554 and NQF #2456

	2988: Medication Reconciliation for Patients Receiving Care at Dialysis Facilities	0097 : Medication Reconciliation Post-Discharge	0554 : Medication Reconciliation Post-Discharge (MRP)	2456 : Medication Reconciliation: Number of Unintentional Medication Discrepancies per Patient
Туре	Process	Process	Process	Outcome
Data Source	Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record Dialysis facility medical record; intended for use by CMS in its CROWNWeb ESRD Clinical Data Repository. No data collection instrument provided No data dictionary	Administrative claims, Electronic Clinical Data, Paper Medical Records Health Plan Level: - This measure is based on administrative claims and medical record documentation collected in the course of providing care to health plan patients. NCQA collects the Healthcare Effectiveness Data and Information Set (HEDIS) data for this measure directly from Health Maintenance Organizations via NCQA's online data submission system. Physician Level: - This measure is based on administrative claims to identify the eligible population and medical record documentation collected in the course of providing care to health plan patients to identify the numerator. In the PQRS program, this measure is coded using CPT and CPT Category II codes specific to quality measurement. No data collection instrument provided No data dictionary	Administrative claims, Electronic Clinical Data, Paper Medical Records NCQA collects HEDIS data directly from Health Management Organizations and Preferred Provider Organizations via a data submission portal - the Interactive Data Submission System (IDSS). URL Attachment	Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Healthcare Provider Survey, Other, Paper Medical Records, Patient Reported Data/Survey, Electronic Clinical Data : Pharmacy MARQUIS Medication Comparison Data Collection Sheet -Attachment of medication med comparison sheet to electronic application. (See Appendix) Available in attached appendix at A.1
Level	Facility	Clinician : Group/Practice, Health Plan, Clinician :	Health Plan, Integrated Delivery	Facility

	2988: Medication Reconciliation for Patients Receiving Care at Dialysis Facilities	0097 : Medication Reconciliation Post-Discharge	0554 : Medication Reconciliation Post-Discharge (MRP)	2456 : Medication Reconciliation: Number of Unintentional Medication Discrepancies per Patient
		Individual, Integrated Delivery System	System	
Setting	Dialysis Facility	Ambulatory Care : Clinician Office/Clinic	Ambulatory Care : Clinician Office/Clinic, Pharmacy	Hospital/Acute Care Facility
Numerator Statement	Number of patient-months for which medication reconciliation was performed and documented by an eligible professional during the reporting period. The medication reconciliation MUST: • Include the name or other unique identifier of the eligible professional; AND • Include the date of the reconciliation; AND • Address ALL known home medications (prescriptions, over-the-counters, herbals, vitamin/mineral/dietary (nutritional) supplements, and medical marijuana); AND • Address for EACH home medication: Medication name(1), indication(2), dosage(2), frequency(2), route of administration(2), start and end date (if	Medication reconciliation conducted by a prescribing practitioner, clinical pharmacist or registered nurse on or within 30 days of discharge. Medication reconciliation is defined as a type of review in which the discharge medications are reconciled with the most recent medication list in the outpatient medical record.	Medication reconciliation conducted by a prescribing practitioner, clinical pharmacist or registered nurse on or within 30 days of discharge.	For each sampled inpatient in the denominator, the total number of unintentional medication discrepancies in admission orders plus the total number of unintentional medication discrepancies in discharge orders.

	2988: Medication Reconciliation for Patients Receiving Care at Dialysis Facilities	0097 : Medication Reconciliation Post-Discharge	0554 : Medication Reconciliation Post-Discharge (MRP)	2456 : Medication Reconciliation: Number of Unintentional Medication Discrepancies per Patient
	applicable)(2), discontinuation date (if applicable)(2), reason medication was stopped or discontinued (if applicable)(2), and identification of individual who authorized stoppage or discontinuation of medication (if applicable)(2); AND • List any allergies, intolerances, or adverse drug events experienced by the patient. 			
Numerator Details	field. NUMERATOR STEP 1. For each patient meeting the denominator criteria in the given calculation month, identify all patients with each	This measure is specified for medical record or administrative data collection. Medical Record Numerator Details:	Medication reconciliation is defined as a type of review in which the discharge medications are reconciled with the most recent medication list in the	First, a "gold-standard" preadmission medication history is taken by a trained study pharmacist at each site, following a strict protocol and using all available sources of information, including subject and

2988: Medication Reconciliation for Patients Receiving Care at Dialysis Facilities	0097 : Medication Reconciliation Post-Discharge	0554 : Medication Reconciliation Post-Discharge (MRP)	2456 : Medication Reconciliation: Number of Unintentional Medication Discrepancies per Patient
Facilitiesof the following three numerator criteria (a, b, and c) documented in the facility medical record to define the numerator for that month:A. Facility attestation that during the calculation month:1. The patient's most recent medication list in the dialysis medical record was reconciled to one or more external list(s) of medications obtained from the patient/caregiver (including patient-/caregiver- provided "brown-bag" information), pharmacotherapy information network (e.g., Surescripts®), hospital, or other provider AND that ALL known medications (prescriptions, OTCs, herbals, vitamin/mineral/dietary [nutritional] supplements, 	-Documentation in the outpatient medical record must include evidence of medication reconciliation between the inpatient medication list and the medication list in the outpatient medical record, and the date on which it was performed. Any of the following evidence meets criteria: (1) Documentation of the current medications with a notation that references the discharge medications (e.g., no changes in meds since discharge, same meds at discharge, discontinue all discharge meds), (2) Documentation of the patient's current medications with a notation that the discharge medications were reviewed, (3) Documentation that the provider "reconciled the current and discharge meds," (4) Documentation of a current medication list, a discharge medication list and notation that the appropriate practitioner type reviewed both	outpatient medical record, on or within 30 days after discharge. ADMINISTRATIVE Medication reconciliation Value Set) conducted by prescribing practitioner, clinical pharmacist or registered nurse on or within 30 days of discharge. - See corresponding Excel document for the Medication Reconciliation Value Set  MEDICAL RECORD Documentation in the medical record must include evidence of medication reconciliation, and the date when it was performed. The following evidence meets criteria: • Notation that medications prescribed or ordered upon discharge were reconciled with the current medications (in the outpatient record) by the appropriate practitioner type, OR • A medication list in a discharge summary that is present in the	<ul> <li>family/caregiver interviews, prescription pill bottles, outpatient electronic medical records, hard copies of forms/patient lists, previous hospital discharge orders, outpatient providers, and outpatient pharmacies (see Appendix A for complete protocol). The resulting preadmission medication list is then compared with the medical team's documented preadmission and discharge medication orders. Any discrepancies between the gold-standard history and medication orders are identified and reasons for these changes sought from the medical record. Pharmacists may also need to communicate directly with the medical team to clarify reasons for discrepancies, as needed. Medication discrepancy:</li> <li>1. History error: the order is incorrect because the medical team's preadmission medication list is incorrect (e.g., the team did not know the patient was taking aspirin prior to admission, does not record it in the preadmission medication list, and therefore does not order it at admission)</li> <li>2. Reconciliation error: the medical</li> </ul>
identified medication: a) Medication name;	lists on the same date of service, (5) Notation that no medications were prescribed or	outpatient chart and evidence of a reconciliation with the current	team's preadmission medication list is correct, but there is still an error in the
b) Indication (or "unknown");	ordered upon discharge Administrative:	medications conducted by an appropriate practitioner type (the organization must be able to	orders. For example, the team knew the patient was taking aspirin prior to admission and documents it in the preadmission

2988: Medication Reconciliation for Patients Receiving Care at Dialysis Facilities	0097 : Medication Reconciliation Post-Discharge	0554 : Medication Reconciliation Post-Discharge (MRP)	2456 : Medication Reconciliation: Number of Unintentional Medication Discrepancies per Patient
<ul> <li>c) Dosage (or "unknown");</li> <li>d)Frequency (or</li> <li>"unknown");</li> <li>e) Route of administration</li> <li>(or "unknown");</li> <li>f) Start date (or</li> <li>"unknown");</li> <li>g) End date, if applicable</li> <li>(or "unknown");</li> <li>h) Discontinuation date, if</li> <li>applicable (or "unknown");</li> <li>i) Reason medication was</li> <li>stopped or discontinued, if</li> <li>applicable (or "unknown");</li> <li>and</li> <li>j) Identification of</li> <li>individual who authorized</li> <li>stoppage or discontinuation</li> <li>of medication, if applicable</li> <li>(or "unknown");</li> <li>AND</li> <li>3. Allergies, intolerances,</li> <li>and adverse drug events were</li> <li>addressed and documented.</li> <li>B. Date of the medication</li> <li>reconciliation.</li> <li>C. Identity of eligible</li> <li>professional performing the</li> <li>medication reconciliation.</li> <li>NUMERATOR STEP 2. Repeat</li> <li>"Numerator Step 1" for each</li> </ul>	Medication Reconciliation CPT Codes: - 99495: Transitional care management services with the following required elements: (1) communication (direct contact, telephone, electronic) with the patient and/or caregiver within 2 business days of discharge, (2) medical decision making of at least moderate complexity during the service period and (3) face-to-face visit, within 14 calendar days of discharge. - 99496: Transitional care management services with the following required elements: (1) communication (direct contact, telephone, electronic) with the patient and/or caregiver within 2 business days of discharge, (2) medical decision making of high complexity during the service period and (3) face-to-face visit, within 7 calendar days of discharge. - 1111F: Discharge med/current med merge	distinguish between the patient's discharge medications and the patient's current medications). OR • Notation that no medications were prescribed or ordered upon discharge Only documentation in the outpatient chart meets the intent of the measure, but an in-person, outpatient visit is not required	medication list. The team decides to hold the aspirin on admission for a clinical reason such as bleeding, but the team forgets to restart the aspirin at discharge. The admission discrepancy would be considered intentional (no error, not counted in the numerator), but the discharge discrepancy would be counted as a reconciliation error. The type of error should also be recorded: omission, discrepancy in dose, route, frequency, or formulation, or an additional medication. Lastly, the time of the error should be recorded: admission vs. discharge.
month of the one-year			

	2988: Medication Reconciliation for Patients Receiving Care at Dialysis Facilities	0097 : Medication Reconciliation Post-Discharge	0554 : Medication Reconciliation Post-Discharge (MRP)	2456 : Medication Reconciliation: Number of Unintentional Medication Discrepancies per Patient
	reporting period to define the final numerator (patient- months).			
Denominator Statement	Total number of patient- months for all patients permanently assigned to a dialysis facility during the reporting period.	All discharges from an in-patient setting for patients who are 18 years and older.	Acute or nonacute inpatient discharge during the first 11 months of the measurement year (e.g., January 1 to December 1) for patients who are 66 years and older as of the end of the measurement year.	The patient denominator includes a random sample of all potential adults admitted to the hospital. Our recommendation is that 25 patients are sampled per month, or approximately 1 patient per weekday. So, for example, if among those 25 patients, 75 unintentional discrepancies are identified, the measure outcome would be 3 discrepancies per patient for that hospital for that month.
Denominator Details	DENOMINATOR STEP 1. Identify all in-center and home hemodialysis and peritoneal dialysis patients permanently assigned to the dialysis facility in the given calculation month. DENOMINATOR STEP 2. For all patients included in the denominator in the given calculation month in "Denominator Step 1", identify and remove all in- center hemodialysis patients who received < 7 dialysis treatments in the calculation month. DENOMINATOR STEP 3. Repeat "Denominator Step 1" and "Denominator Step 2" for	The denominator for this measure is identified by administrative codes, which are specific to the level of reporting. The denominator for both levels of reporting is based on episodes, not patients. If patients have more than one discharge, include all discharges between January 1 and December 1 of the measurement year. This measure is stratified by age group so three denominator groups are identified for each level of reporting: Patients age 18-64, Patients age 65+ and all patients. Health Plan Level: Administrative:	An acute or nonacute inpatient discharge during the first 11 months of the measurement year (e.g., January 1 to December 1). The denominator is based on discharges, not patients. Patients may appear more than once in the denominator. If patients have more than one discharge, include all discharges during the first 11 months of the measurement year. If the discharge is followed by a readmission or direct transfer to an acute or non-acute facility within the 30-day follow-up period, count only the readmission discharge or the discharge from the facility to which the patient was	Patients are randomly selected each day from a list of admitted patients the day before. A target number of patients are selected( e.g. one patient per weekday) and these patients are interviewed by the pharmacist.

2988: Medication Reconciliation for Patients Receiving Care at Dialysis Facilities	0097 : Medication Reconciliation Post-Discharge	0554 : Medication Reconciliation Post-Discharge (MRP)	2456 : Medication Reconciliation: Number of Unintentional Medication Discrepancies per Patient
each month of the one-year reporting period.	<ul> <li>An acute or nonacute inpatient discharge on or between January 1 and December 1 of the measurement year.</li> <li>Stratify the denominator by age group based on age as of December 31 of the measurement year: Patients 18-64 years of age; Patients 65 years of age and older; All Patients 18 years of age and older.</li> <li>Physician Level: <ul> <li>Patients who were discharged from an acute or nonacute inpatient facility on or between January 1 and December 1 of the measurement year and seen within 30 days following discharge in the office by the physician, prescribing practitioner, registered nurse, or clinical pharmacist providing on-going care. Codes to identify visit with on-going care provider are below.</li> <li>Stratify the denominator by age group based on age on the date of encounter: Patients 18-64 years of age; Patients 65 years of age and older; All Patients 18 years of age and older.</li> </ul> </li> </ul>	transferred. Exclude both the initial discharge and the readmission/direct transfer discharge if the readmission/direct transfer discharge occurs after the first 11 months of the measurement year (e.g., December 1).	

	2988: Medication Reconciliation for Patients Receiving Care at Dialysis Facilities	0097 : Medication Reconciliation Post-Discharge	0554 : Medication Reconciliation Post-Discharge (MRP)	2456 : Medication Reconciliation: Number of Unintentional Medication Discrepancies per Patient
		CPT encounter codes for visit with Ongoing Care Provider: 90791, 90792, 90832, 90834, 90837, 90839, 90845, 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99495, 99496, G0402, G0438, G0439		
Exclusions	In-center patients who receive < 7 hemodialysis treatments in the facility during the reporting month.	The following exclusions are applicable to the Health Plan Level measure. - Exclude both the initial discharge and the readmission/direct transfer discharge if the readmission/direct transfer discharge occurs after December 1 of the measurement year. - If the discharge is followed by a readmission or direct transfer to an acute or non-acute facility within the 30-day follow-up period, count only the readmission discharge or the discharge from the facility to which the patient was transferred.	N/A	Patients that are discharged or expire before a gold standard medication list can be obtained.

	3000: PACE-Acquired Pressure Ulcer/Injury Prevalence Rate	0201: Pressure ulcer prevalence (hospital acquired)	0538 : Pressure Ulcer Prevention	0678 : Percent of Residents or Patients with Pressure Ulcers That Are New or Worsened (Short-Stay)	0679 : Percent of High Risk Residents with Pressure Ulcers (Long Stay)
Steward	CMS	The Joint Commission	Centers for Medicare & Medicaid Services	Centers for Medicare & Medicaid Services	Centers for Medicare & Medicaid Services
Description	Prevalence of PACE participants on the PACE organization census with pressure ulcers/injuries in a quarter, expressed as persons with 1 or more pressure ulcers/injuries divided by the number of participants on the PACE organization's census for at least one day during the quarter. This is a rate-based measure of skin breakdown due to pressure or pressure combined with sheer. The rate will be calculated quarterly. The target population is participants on a PACE organizations census for at least one day during the quarter.	The total number of patients that have hospital-acquired (nosocomial) category/stage II or greater pressure ulcers on the day of the prevalence measurement episode.	Pressure Ulcer Risk Assessment Conducted: Percentage of home health episodes of care in which the patient was assessed for risk of developing pressure ulcers at start/resumption of care. Pressure Ulcer Prevention Included in Plan of Care: Percentage of home health episodes of care in which the physician-ordered plan of care included interventions to prevent pressure Ulcer Prevention Implemented: Percentage of home health episodes of care during which interventions to prevent	This quality measure reports the percent of patients or short-stay residents with Stage 2-4 pressure ulcers that are new or worsened since admission. The measure is based on data from the Minimum Data Set (MDS) 3.0 assessments for Skilled Nursing Facility (SNF) / Nursing Home (NH) residents, the Long- Term Care Hospital (LTCH) Continuity Assessment Record & Evaluation (CARE) Data Set for LTCH patients, and the Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI) for Inpatient Rehabilitation Facility (IRF) patients. Data are collected separately in each of the three settings using	This measure reports the percentage of long-stay residents identified as at high risk for pressure ulcers in a nursing facility who have one or more Stage 2-4 or unstageable pressure ulcer(s) reported on a target Minimum Data Set (MDS) assessment (OBRA, PPS, and/or discharge) during their episode during the selected target quarter. High risk populations are defined as those who are comatose, or impaired in bed mobility or transfer, or suffering from malnutrition. Long-stay residents are identified as residents who have had at least 101 cumulative days of nursing facility care. A separate measure (NQF#0678, Percent of Residents With Pressure Ulcers That are New or Worsened (Short-Stay)) is to be used for residents whose length of stay is less than or equal to

## Comparison of NQF #3000, NQF #0201, NQF #0538, NQF #0678 and NQF #0679

3000: PACE-Acquired Pressure Ulcer/Injury Prevalence Rate	0201: Pressure ulcer prevalence (hospital acquired)	0538 : Pressure Ulcer Prevention	0678 : Percent of Residents or Patients with Pressure Ulcers That Are New or Worsened (Short-Stay)	0679 : Percent of High Risk Residents with Pressure Ulcers (Long Stay)
		pressure ulcers were included in the physician-ordered plan of care and implemented.	standardized items that have been harmonized across the MDS, LTCH CARE Data Set, and IRF- PAI. For residents in a SNF/NH, the measure is calculated by examining all assessments during an episode of care for reports of Stage 2-4 pressure ulcers that were not present or were at a lesser stage since admission. For patients in LTCHs and IRFs, this measure reports the percent of patients with reports of Stage 2-4 pressure ulcers that were not present or were at a lesser stage on admission. Of note, data collection and calculation for this measure are conducted and reported separately for each of the three provider settings and will not be combined across settings. For SNF/NH residents, this measure is restricted	100 days.

	3000: PACE-Acquired Pressure Ulcer/Injury Prevalence Rate	0201: Pressure ulcer prevalence (hospital acquired)	0538 : Pressure Ulcer Prevention	0678 : Percent of Residents or Patients with Pressure Ulcers That Are New or Worsened (Short-Stay)	0679 : Percent of High Risk Residents with Pressure Ulcers (Long Stay)
				to the short-stay population defined as those who have accumulated 100 or fewer days in the SNF/NH as of the end of the measure time window. In IRFs, this measure is restricted to IRF Medicare (Part A and Part C) patients. In LTCHs, this measure includes all patients.	
Туре	Outcome	Outcome	Process	Outcome	Outcome
Data Source	Electronic Clinical Data, Management Data, Paper Medical Records Collection instrument is provided as an uploaded appendix. Available in attached appendix at A.1 Attachment PAPUI_Data_Collection_Code _Sheet- 635987554553524645.xlsx	Electronic Clinical Data, Other, Paper Medical Records	Electronic Clinical Data The measure is calculated based on the data obtained from the Home Health Outcome and Assessment Information Set (OASIS- C), which is a core standard assessment data set that home health agencies integrate into their own patient-specific, comprehensive assessment to identify each patient's need for home care. The data set	Electronic Clinical Data, Electronic Clinical Data : Laboratory Nursing Home MDS 3.0, Inpatient Rehabilitation Facility Patient Assessment Instrument, Long-Term Care Hospital Continuity Assessment Record & Evaluation Data Set URL No data dictionary	Electronic Clinical Data http://www.cms.gov/Medicare/ Quality-Initiatives-Patient- Assessment- Instruments/NursingHomeQuali tyInits/NHQIQualityMeasures.ht ml Please see "MDS 3.0 QM User's Manual" in Downloads section at the bottom of the page. Available in attached appendix at A.1 No data dictionary

3000: PACE-Acquired Pressure Ulcer/Injury Prevalence Rate	0201: Pressure ulcer prevalence (hospital acquired)	0538 : Pressure Ulcer Prevention	0678 : Percent of Residents or Patients with Pressure Ulcers That Are New or Worsened (Short-Stay)	0679 : Percent of High Risk Residents with Pressure Ulcers (Long Stay)
		is the foundation for valid and reliable information for patient assessment, care planning, and service delivery in the home health setting, as well as for the home health quality assessment and performance improvement program. Home health agencies are required to collect OASIS data on all non- maternity Medicare/Medicaid patients, 18 or over, receiving skilled services. Data are collected at specific time points (admission, resumption of care after inpatient stay, recertification every 60 days that the patient remains in care, transfer, and at discharge). HH agencies are required to encode and transmit patient OASIS data to the OASIS		
		repository. Each HHA		

	3000: PACE-Acquired Pressure Ulcer/Injury Prevalence Rate	0201: Pressure ulcer prevalence (hospital acquired)	0538 : Pressure Ulcer Prevention	0678 : Percent of Residents or Patients with Pressure Ulcers That Are New or Worsened (Short-Stay)	0679 : Percent of High Risk Residents with Pressure Ulcers (Long Stay)
			has on-line access to outcome and process measure reports based on their own OASIS data to the OASIS repository. Each HHA has on-line access to outcome and process measure reports based on their own OASIS data submissions, as well as comparative state and national aggregate reports, case mix reports, and potentially avoidable event reports. CMS regularly collects OASIS data for storage in the national OASIS repository, and makes measures based on these data (including this measure) available to consumers and to the general public through the Medicare Home Health Compare website.		
Level	Facility	Facility, Clinician : Team	Facility	Facility, Population : National	Facility

	3000: PACE-Acquired Pressure Ulcer/Injury Prevalence Rate	0201: Pressure ulcer prevalence (hospital acquired)	0538 : Pressure Ulcer Prevention	0678 : Percent of Residents or Patients with Pressure Ulcers That Are New or Worsened (Short-Stay)	0679 : Percent of High Risk Residents with Pressure Ulcers (Long Stay)
Setting	Other PACE programs provide services to participants who live in their own homes (or in home-like settings) in the community. Participants attend PACE centers regularly (e.g., 3 days per week) for a variety of activities and support services. If a participan	Hospital/Acute Care Facility, Post Acute/Long Term Care Facility : Inpatient Rehabilitation Facility, Post Acute/Long Term Care Facility : Long Term Acute Care Hospital, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility	Home Health	Post Acute/Long Term Care Facility : Inpatient Rehabilitation Facility, Post Acute/Long Term Care Facility : Long Term Acute Care Hospital, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility	Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility
Numerator Statement	The total number of participants enrolled during the quarter that have at least one documented PU (of any stage) acquired while a PACE participant.	Patients that have at least one category/stage II or greater hospital- acquired pressure ulcer on the day of the prevalence measurement episode.	Pressure Ulcer Risk Assessment Conducted: Number of home health episodes of care in which the patient was assessed for risk of developing pressure ulcers either via an evaluation of clinical factors or using a standardized tool, at start/resumption of care. Pressure Ulcer Prevention Included in Plan of Care: Number of home health episodes of care in which the physician-ordered plan	SNF/NH Numerator: The numerator is the number of short-stay residents with an MDS assessment during the selected time window who have one or more Stage 2-4 pressure ulcers, that are new or worsened, based on examination of all assessments in a resident's episode for reports of Stage 2-4 pressure ulcers that were not present or were at a lesser stage on prior assessment.	The numerator is the number of long-stay residents identified as at high risk for pressure ulcer with a target MDS 3.0 assessment (OBRA quarterly, annual or significant change/correction assessments or PPS 14-, 30-, 60-, or 90-day assessments; or discharge assessments; or discharge assessment with or without return anticipated) in an episode during the selected target quarter reporting one or more Stage 2-4 or unstageable pressure ulcer(s) at time of assessment. High risk residents are those who are comatose, or impaired in bed mobility or transfer, or suffering from malnutrition. Unstageable

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			of care included interventions to prevent pressure ulcers. Pressure Ulcer Prevention Implemented: Number of home health episodes of care during which interventions to prevent pressure ulcers were included in the physician-ordered plan of care and implemented.		pressure ulcers include pressure ulcers that are unstageable due to non-removable dressing/device (M0300E1), slough or eschar (M0300F1), and suspected deep tissue injury (M0300G1).
Numerator Details	<ul> <li>Inclusion criteria for numerator:</li> <li>Include participants living at home or in assisted living facilities.</li> <li>Include participants with pressure injuries that developed and were identified less than 24 hours after the participant was in an emergency room, admitted to the hospital, nursing home, skilled nursing facility, hospice facility, or rehabilitation facility.</li> <li>Exclusion criteria for numerator:</li> </ul>	Included Populations: • Hospital- Acquired pressure ulcers (ulcer is discovered or documented after the first 24 hours from the time of inpatient admission) • Category/stage II or greater pressure ulcers • Unstageable/u nclassified pressure ulcers • Suspected deep tissue injury	Pressure Ulcer Risk Assessment Conducted: Number of home health patient episodes of care where at start of episode: (M1300) Pressure Ulcer Risk Assessment conducted = 1 (yes-clinical factors) or 2 (yes-standardized tool) Pressure Ulcer Prevention Included in Plan of Care: Number of home health patient episodes of care where at start of episode: (M2250f) Pressure Ulcer	SNF/NH Numerator Details: The numerator is the number of short-stay residents with an MDS assessment during the selected time window who have one or more Stage 2-4 pressure ulcers, that are new or worsened, based on examination of all assessments in a resident's episode for reports of Stage 2-4 pressure ulcers that were not present or were at a lesser stage on prior	Residents are counted if they are long-stay residents, defined as residents whose length of stay is 101 days or more. Residents who return to the nursing home following a hospital discharge may not have their length of stay within the episode of care reset to zero. The numerator is the number of long-stay residents with a selected target assessment that meets both of the following conditions: 1. Condition #1: There is a high risk for pressure ulcers, where high-risk is defined in the

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<ul> <li>Exclude participants who were not enrolled in a PACE Program for at least one day during the quarter.</li> <li>Exclude participants who were not in their home setting for at least one day of the quarter. For each participant, exclude participants who were only:         <ul> <li>In a nursing home facility</li> <li>In a hospice facility</li> <li>In a hospice care at home</li> <li>In skilled nursing care, or</li> <li>In a rehabilitation setting</li> </ul> </li> <li>Exclude participants whose pressure ulcer/injury was acquired before they were enrolled in PACE.</li> <li>Exclude participants with other kinds of skin breakdown that developed during the quarter, such as diabetic ulcers or venous ulcers.</li> <li>Exclude participants whose only skin breakdown was documented as a "Kennedy Terminal Ulcer" during the quarter. Kennedy Terminal Ulcers are not acknowledged</li> </ul>	Data Elements: • Observed Pressure Ulcer • Observed Pressure Ulcer – Hospital- Acquired • Observed Pressure Ulcer – Category/stage	Prevention in Care Plan = 1 (yes) Pressure Ulcer Prevention Implemented: Number of ho	assessment. 1) Stage 2 (M0800A) > 0, OR 2) Stage 3 (M0800B) > 0, OR 3) Stage 4 (M0800C) > 0 Assessments may be discharge, PPS 5-, 14-, 30-, 60-, 90-day, *SNF PPS Part A Discharge Assessment or OBRA admission, quarterly, annual or significant change assessments. *The SNF PPS Part A Discharge Assessment will be added to the October 1, 2016 release of the MDS 3.0. LTCH Numerator Details: The numerator is the number of stays for which the discharge assessment indicates one or more new or worsened Stage 2-4 pressure ulcers compared to the admission assessment. 1) Stage 2 (M0800A) > 0, OR	denominator definition below. 2. Condition #2: Stage 2-4 or unstageable pressure ulcers are present, as indicated by any of the following six conditions: 2.1 Current number of unhealed Stage 2 ulcers (M0300B1) = [1, 2, 3, 4, 5, 6, 7, 8, 9 or more] or 2.2 Current number of unhealed Stage 3 ulcers (M0300C1) = [1, 2, 3, 4, 5, 6, 7, 8, 9 or more] or 2.3 Current number of unhealed Stage 4 ulcers (M0300D1) = [1, 2, 3, 4, 5, 6, 7, 8, 9 or more] or 2.4 Current number of unstageable ulcers due to non- removable dressing/device (M0300E1) = [1, 2, 3, 4, 5, 6, 7, 8, 9 or more] or 2.5 Current number of unstageable ulcers due to wound bed being covered by slough or eschar (M0300F1) = [1, 2, 3, 4, 5, 6, 7, 8, 9 or more] or 2.6 Current number of unstageable ulcers with suspected deep tissue injury in evolution (M0300G1) = [1, 2, 3, 4, 5, 6, 7, 8, 9 or more]. Stage 1 pressure ulcers are not

	E-Acquired Pressure y Prevalence Rate	0201: Pressure ulcer prevalence (hospital acquired)	0538 : Pressure Ulcer Prevention	0678 : Percent of Residents or Patients with Pressure Ulcers That Are New or Worsened (Short-Stay)	0679 : Percent of High Risk Residents with Pressure Ulcers (Long Stay)
stage by N • Exclude p pressure u developed identified I after a par home (or t facility). Specific da and respor • Participa • Age (at e - Age great - Unknown • Gender: - Male = 1 - Female = - Unknown • Pressure • Month - January = - February - Etc.	2 2 9 9 2 1 1 2 1 1 2 1 1 2 1 1 2 1 2 1 1 2 2 1 1 2 2 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2			<ul> <li>2) Stage 3 (M0800B) &gt; 0, OR</li> <li>3) Stage 4 (M0800C) &gt; 0</li> <li>IRF Numerator Details: The numerator is the number of stays for</li> <li>which the IRF-PAI</li> <li>indicates one or more</li> <li>Stage 2-4 pressure</li> <li>ulcer(s) that are new or</li> <li>worsened at discharge</li> <li>compared to admission.</li> <li>2014 IRF-PAI (Version</li> <li>1.2) items used to</li> <li>determine presence of</li> <li>new or worsened Stage</li> <li>2-4 pressure ulcer(s) at</li> <li>discharge:</li> <li>1) Stage 2 (M0300B4) &gt; 0,</li> <li>OR</li> <li>2) Stage 4 (M0300D4) &gt; 0</li> <li>Draft 2016 IRF-PAI</li> <li>(Version 1.4) items used</li> <li>to determine presence of</li> <li>new or worsened Stage</li> <li>2-4 pressure ulcer(s) at</li> <li>discharge:</li> <li>1) Stage 2 (M0300D4) &gt; 0,</li> <li>OR</li> <li>3) Stage 4 (M0300D4) &gt; 0</li> <li>Draft 2016 IRF-PAI</li> <li>(Version 1.4) items used</li> <li>to determine presence of</li> <li>new or worsened Stage</li> <li>2-4 pressure ulcer(s) at</li> <li>discharge:</li> <li>1) Stage 2 (M0800A) &gt; 0,</li> </ul>	included in this measure because recent studies have identified difficulties in objectively measuring them across different populations (Lynn et al., 2007). Stage 2 pressure ulcer: Partial thickness loss or dermis presenting as shallow open ulcer with red or pink wound bed, without slough. May also present as an intact or open/ruptured blister. Stage 3 pressure ulcer: Full thickness tissue loss. Subcutaneous fat may be visible but bone, tendon, or muscle is not exposed. Slough may be present but does not obscure the depth of tissue loss. May include undermining or tunneling. Stage 4 pressure ulcer: Full thickness tissue loss with exposed bone or tendon, or muscle. Slough or eschar may be present on some parts of the wound bed. Often includes undermining or tunneling. Non-removable dressing/device: Includes, for example, a primary

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<ul> <li>Stage IV = 4</li> <li>Unstageable = 5</li> <li>Deep Tissue = 6</li> <li>Unknown = 99</li> <li>Pressure Injury as defined by the National Pressure Ulcer Advisory Panel*:</li> <li>A pressure injury is localized damage to the skin and/or underlying soft tissue usually over a bony prominence or related to a medical or other device. The injury can present as intact skin or an open ulcer and may be painful. The injury occurs as a result of intense and/or prolonged pressure or pressure in combination with shear. The tolerance of soft tissue for pressure and shear may also be affected by microclimate, nutrition, perfusion, co-morbidities and condition of the soft tissue.</li> <li>Pressure ulcers/injuries are characterized by stage:</li> <li>Stage 1 Pressure Injury: Non- blanchable erythema of intact skin</li> <li>Intact skin with a localized area of non-blanchable</li> </ul>			OR 2) Stage 3 (M0800B) > 0, OR 3) Stage 4 (M0800C) > 0	surgical dressing that cannot be removed, an orthopedic device, or cast. Slough tissue: Non-viable yellow, tan, gray, green or brown tissue; usually moist, can be soft, stringy and mucinous in texture. Slough may be adherent to the base of the wound or present in clumps throughout the wound bed. Eschar tissue: Dead or devitalized tissue that is hard or soft in texture; usually black, brown, or tan in color, and may appear scab-like. Necrotic tissue and eschar are usually firmly adherent to the base of the wound and often the sides/ edges of the wound. Suspected deep tissue injury: Purple or maroon area of discolored intact skin due to damage of underlying soft tissue. The area may be preceded by tissue that is painful, firm, mushy, boggy, warmer or cooler as compared to adjacent tissue. (Target assessments may be OBRA quarterly, annual or

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d p b c t t t t t t t t t t t t t t t t t t	erythema, which may appear differently in darkly oigmented skin. Presence of olanchable erythema or changes in sensation, cemperature, or firmness may precede visual changes. Color changes do not include purple or maroon discoloration; chese may indicate deep cissue pressure injury. Stage 2 Pressure Injury: Partial-thickness skin loss with exposed dermis Partial-thickness loss of skin with exposed dermis. The wound bed is viable, pink or red, moist, and may also present as an intact or ruptured serum-filled blister. Adipose (fat) is not visible and deeper tissues are not visible. Granulation tissue, slough and eschar are not present. These njuries commonly result from adverse microclimate and shear in the skin over the pelvis and shear in the heel. This stage should not be used to describe moisture associated skin damage [MASD] including				significant change/correction assessments (A0310A = 02, 03, 04, 05, 06) or PPS 14-, 30-, 60-, 90-day assessments (A0310B = 02, 03, 04, 05) or discharge assessment with or without return anticipated (A0310F = 10, 11)). Reference 1. Lynn J, West J, Hausmann S, Gifford D, Nelson R, McGann P, Bergstrom N, Ryan JA (2007). Collaborative clinical quality improvement for pressure ulcers in nursing homes. Journal of the American Geriatrics Society, 55(10), 1663- 9.

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incontinence associated dermatitis (IAD), intertriginous dermatitis (ITD), medical adhesive related skin injury (MARSI), or traumatic wounds (skin tears, burns, abrasions). Stage 3 Pressure Injury: Full- thickness skin loss Full-thickness loss of skin, in which adipose (fat) is visible in the injury and granulation tissue and epibole (rolled wound edges) are often present. Slough and/or eschar may be visible. The depth of tissue damage varies by anatomical location; areas of significant adiposity can develop deep wounds. Undermining and tunneling may occur. Fascia, muscle, tendon, ligament, cartilage and/or bone are not exposed. If slough or eschar obscures the extent of tissue loss this is an Unstageable Pressure Injury. Stage 4 Pressure Injury: Full- thickness skin and tissue loss Full-thickness skin and tissue				

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loss with exposed or directly palpable fascia, muscle, tendon, ligament, cartilage or bone in the injury. Slough and/or eschar may be visible. Epibole (rolled edges), undermining and/or tunneling often occur. Depth varies by anatomical location. If slough or eschar obscures the extent of tissue loss this is an Unstageable Pressure Injury. Unstageable Pressure Injury: Obscured full-thickness skin and tissue loss Full-thickness skin and tissue loss in which the extent of tissue damage within the injury cannot be confirmed because it is obscured by slough or eschar. If slough or eschar is removed, a Stage 3 or Stage 4 pressure injury will be revealed. Stable eschar (i.e. dry, adherent, intact without erythema or fluctuance) on an ischemic limb or the heel(s) should not be removed. Deep Tissue Pressure Injury: Persistent non-blanchable				

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deep red, maroon or purple discoloration Intact or non-intact skin with localized area of persistent non-blanchable deep red, maroon, purple discoloration or epidermal separation revealing a dark wound bed or blood filled blister. Pain and temperature change often precede skin color changes. Discoloration may appear differently in darkly pigmented skin. This injury results from intense and/or prolonged pressure and shear forces at the bone-muscle interface. The wound may evolve rapidly to reveal the actual extent of tissue injury, or may resolve without tissue loss. If necrotic tissue, subcutaneous tissue, granulation tissue, fascia, muscle or other underlying structures are visible, this indicates a full thickness pressure injury (Unstageable, Stage 3 or Stage 4). Do not use DTPI to describe vascular, traumatic, neuropathic, or dermatologic conditions.				

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	* This PU/I data collection will follow the NPUAP pressure ulcer/injury definition and staging categories. More information can be found in this link: http://www.npuap.org/nation al-pressure-ulcer-advisory- panel-npuap-announces-a- change-in-terminology-from- pressure-ulcer-to-pressure- injury-and-updates-the- stages-of-pressure-injury/				
Denominator Statement	Number of participants on a PACE organization's census during the quarter.	All patients surveyed for the measurement episode.	Pressure Ulcer Risk Assessment Conducted: Number of home health episodes of care ending during the reporting period, other than those covered by generic exclusions. Pressure Ulcer Prevention Included in Plan of Care: Number of home health episodes of care ending during the reporting period, other than those covered by generic exclusions. Pressure Ulcer Prevention	SNF/NH Denominator: The denominator is the number of short-stay residents with one or more MDS assessments that are eligible for a look-back scan (except those with exclusions). Assessment types include: an admission, quarterly, annual, significant change/correction OBRA assessment; or a PPS 5-, 14-, 30-, 60-, or 90-day, or discharge with or without return anticipated; or *SNF PPS	The denominator includes all long-stay nursing home residents who had a target MDS assessment (ORBA, PPS, or discharge) during the selected quarter and were identified as at high risk for pressure ulcer, except those meeting the exclusion criteria.

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			Implemented: Number of home health episodes of care ending during the reporting period, other than those covered by generic or measure-specific exclusions.	Part A Discharge Assessment. *The SNF PPS Part A Discharge Assessment will be added to the October 1, 2016 release of the MDS 3.0. LTCH Denominator: The denominator is the number of patient stays with both an admission and discharge LTCH CARE Data Set assessment, except those that meet the exclusion criteria. IRF Denominator: The denominator is the number of Medicare patient stays* (Part A and Part C) with an IRF-PAI assessment, except those that meet the exclusion criteria. *IRF-PAI data are submitted for Medicare patients (Part A and Part C) only.	
Denominator Details	Number of participants on the PACE site census at least one day during the quarter.	Included Populations: Patients who are admitted to all eligible units that are surveyed	Denominator for each measure: Number of home health patient episodes of care,	SNF/NH Denominator Details: The denominator is the number of short- stay residents with one or	Residents are counted if they are long-stay residents, defined as residents whose length of stay is 101 days or more.

Acquired Pressure 0201: Pressure ulcer prevalence Rate acquired)	0538 : Pressure Ulcer Prevention	0678 : Percent of Residents or Patients with Pressure Ulcers That Are New or Worsened (Short-Stay)	0679 : Percent of High Risk Residents with Pressure Ulcers (Long Stay)
for the measurement episode. Data Elements: • Admission Date • Birthdate • Sex • Type of Unit • Prevalence Measurement Date Inherent in prevalence measurement method is that ALL eligible units are surveyed at the same point in time (note labor, delivery, post partum and psychiatry units are excluded). Hospitals do not choose units to be surveyed; units surveyed are standardized across institutions by those eligible reporting units as defined in the Type of Unit data element.	inpatient facility – not discharged), 7 (Transfer to inpatient facility – discharged), 8 (Death at home), or 9 (Discharge from agency)), other than those covered by denominator exclusions.	more MDS assessments that are eligible for a look-back scan (except those with exclusions). A look-back scan is a review of all qualifying assessments within the resident's current episode to determine whether events occurred during the look-back period. All assessments with target dates within the episode are examined to determine whether the event or condition of interest occurred at any time during the episode. Assessment types include: an admission, quarterly, annual, significant change/correction OBRA assessment (A0310A = 01, 02, 03, 04, 05, 06); or a PPS 5-, 14-, 30-, 60-, or 90-day, (A0310B = 01, 02, 03, 04, 05) or discharge with or without return anticipated (A0310F = 10, 11); or *SNF PPS Part A Discharge Assessment	Residents who return to the nursing home following a hospital discharge may not have their length of stay within the episode of care reset to zero. The denominator is the number of long-stay residents with a selected target assessment (assessment types include: a quarterly, annual, significant change/correction admission OBRA assessment (A0310A = 02, 03, 04, 05, 06); or a PPS 14-, 30-, 60-, or 90-day assessment (A0310B = 02, 03, 04, 05); or discharge with or without return anticipated (A0310F = 10, 11)) during the selected quarter, except those with exclusions. Residents must be high risk for pressure ulcer where high risk is defined by meeting one of the following criteria on the selected target assessment: 1. Impaired in bed mobility or transfer: This is indicated by a level of assistance reported on either item G0110A1, Bed mobility (self-performance) or G0110B1 Transfer (self-performance) at the level of: extensive

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				(A0310H = 1). *The SNF PPS Part A Discharge Assessment will be added to the October 1, 2016 release of the MDS 3.0. LTCH Denominator Details: The denominator is the number of patient stays with both an admission (A0250=01) and discharge (A0250=10, 11), LTCH CARE Data Set assessment, except those that meet the exclusion criteria. IRF Denominator Details : The denominator is the number of Medicare patient stays* (Part A and Part C) with an IRF-PAI assessment, except those that meet the exclusion criteria. *IRF-PAI data are submitted for Medicare patients (Part A and Part C) only.	assistance (3), total dependence (4), activity occurred only once or twice (7) OR activity or any part of the ADL was not performed by resident or staff at all over the entire 7 day period (8) OR 2. Comatose (B0100 = 1 (yes)) OR 3. Malnutrition [protein or calorie] or at risk for malnutrition (Active Diagnoses Item I5600 = 01)
Exclusions	Exclude persons who were not on the PACE census for at least one day during the	Excluded Populations: • Patients who refuse to be assessed	Pressure Ulcer Risk Assessment Conducted: No measure-specific	SNF/NH Denominator Exclusions: 1. Short-stay residents	A resident is excluded from the denominator if the target MDS assessment is an OBRA

3000: PACE-Acquired Pres Ulcer/Injury Prevalence Ra		0538 : Pressure Ulcer Prevention	0678 : Percent of Residents or Patients with Pressure Ulcers That Are New or Worsened (Short-Stay)	0679 : Percent of High Risk Residents with Pressure Ulcers (Long Stay)
quarter. Exclude participants who lived out their home/assisted living setting for every day of the quarter.	the prevalence	exclusions. Pressure Ulcer Prevention Included in Plan of Care: Episodes in which the patient is not assessed to be at risk for pressure ulcers. Pressure Ulcer Prevention Implemented: Number of home health episodes in which the patient was not assessed to be at risk for pressure ulcers, or the home health episode ended in transfer to an inpatient facility or death.	are excluded if none of the assessments that are included in the look-back scan has a usable response for items indicating the presence of new or worsened Stage 2, 3, or 4 pressure ulcers since the prior assessment. 2. Short-stay residents are excluded if there is no initial assessment available to derive data for risk adjustment (covariates). 3. Death in facility tracking records are excluded from measure calculations. LTCH Denominator Exclusions: 1. Patient stay is excluded if data on new or worsened Stage 2, 3, and 4 pressure ulcers are missing on the planned or unplanned discharge assessment. 2. Patient stay is excluded if the patient died during	admission assessment, a PPS 5- day assessment or a PPS readmission/return assessment, or if the resident did not meet the pressure ulcer conditions for the numerator AND any Stage 2, 3, or 4 item is missing (M0300B1 = - OR M0300C1 = - OR M0300D1 = -). If the facility sample includes fewer than 30 residents, then the facility is excluded from public reporting because of small sample size.

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			<ul> <li>the LTCH stay.</li> <li>3. Patient stay is excluded if there is no admission assessment available to derive data for risk adjustment (covariates).</li> <li>IRF Denominator Exclusions:</li> <li>1. Patient stay is excluded if data on new or worsened Stage 2, 3, and 4 pressure ulcers are missing at discharge.</li> </ul>	
			2. Patient stay is excluded if the patient died during the IRF stay.	

# Comparison of NQF #3006, NQF #0202, and NQF #0674

	3006: Initial Baseline Screen of Nutritional Status for Every Patient within 24 Hours of PICU Admission	0202 : Falls with injury	0674 : Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay)
Steward Description	Pediatric Consultants, LLC The measure will determine the percentage of pediatric intensive care unit (PICU) patients for whom an initial nutritional status screening was performed. The screening is to be performed within the first 24 hours of admission to the PICU with the use of a standardized nutrition-screening tool. The results of the screening must be documented in the patient's chart upon completion.	American Nurses Association All documented patient falls with an injury level of minor or greater on eligible unit types in a calendar quarter. Reported as Injury falls per 1000 Patient Days. (Total number of injury falls / Patient days) X 1000 Measure focus is safety. Target population is adult acute care inpatient and adult rehabilitation patients.	Centers for Medicare & Medicaid Services This measure reports the percentage of residents who have experienced one or more falls with major injury during their episode of nursing home care ending in the target quarter (3-month period). Major injury is defined as bone fractures, joint dislocations, closed head injuries with altered consciousness, or subdural hematoma. The measure is based on MDS 3.0 item J1900C, which indicates whether any falls that occurred were associated with major injury. Long-stay residents are identified as residents who have had at least 101 cumulative days of nursing facility care.
Туре	Process	Outcome	Outcome
Data Source	Electronic Clinical Data : Electronic Health Record, Other Other Data Source (S.23): Electronic Data Warehouse The data source for this measure is the patient medical record. Data is collected for the construction of the measure through the Electronic Health Record (EHR) system. Available in attached appendix at A.1 Attachment S.2bData_Dictionary _Nutritional_Status_4.28.16.docx	Electronic Clinical Data, Other, Paper Medical Records Database: National Database of Nursing Quality Indicators(R) [NDNQI(R)]; participant hospitals have NDNQI guidelines and Excel spreadsheets to guide data collection; data are provided to NDNQI via a secure web-based data entry portal or XML upload. Original sources for injury falls are incident reports, patient medical records (including electronic health records). Available at measure-specific web page URL identified in S.1 Attachment falls codebook- 634488471691406810-	Electronic Clinical Data Nursing Home Minimum Data Set 3.0 Available in attached appendix at A.1 No data dictionary

	3006: Initial Baseline Screen of Nutritional Status for Every Patient within 24 Hours of PICU Admission	0202 : Falls with injury	0674 : Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay)
		635326354485752311.pdf	
Level	Facility, Integrated Delivery System	Facility, Clinician : Team	Facility
Setting	Hospital/Acute Care Facility	Hospital/Acute Care Facility, Post Acute/Long Term Care Facility : Inpatient Rehabilitation Facility	Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility
Numerator Statement	Number of PICU patients for whom a screening of nutritional status was documented with use of a standardized nutrition screening tool within 24 hours of admission to the PICU.	<ul> <li>Total number of patient falls of injury level minor or greater (whether or not assisted by a staff member) by eligible hospital unit during the calendar month X 1000.</li> <li>Included Populations:</li> <li>Falls with Fall Injury Level of "minor" or greater, including assisted and repeat falls with an Injury level of minor or greater</li> <li>Patient injury falls occurring while on an eligible reporting unit</li> <li>Target population is adult acute care inpatient and adult rehabilitation patients.</li> <li>Eligible unit types include adult critical care, step-down, medical, surgical, medical- surgical combined, critical access, adult rehabilitation in-patient.</li> </ul>	The numerator is the number of long-stay nursing home residents who experienced one or more falls that resulted in major injury (J1900C = 1 or 2) on one or more look-back scan assessments during their episode ending in the target quarter (assessments may be OBRA, PPS or discharge). In the MDS 3.0, major injury is defined as bone fractures, joint dislocations, closed head injuries with altered consciousness, or subdural hematoma.
Numerator Details	A standardized nutrition screening tool is a screening tool that is applied in a standardized manner to each patient admitted to the PICU and should be based on a nutrition screening tool which has been validated for the majority of the institutions' PICU patients. Examples of this would include STAMP, the Paediatric Yorkhill Malnutrition Score, and potentially, institution-derived nutrition screening tools.	Definition: A patient injury fall is an unplanned descent to the floor with injury (minor or greater) to the patient, and occurs on an eligible reporting nursing unit.* Include falls when a patient lands on a surface where you would not expect to find a patient. Unassisted and assisted (see definition below) falls are to be included whether they result from physiological reasons (e.g., fainting) or environmental reasons (slippery floor). Also	The numerator is the number of long-stay nursing home residents who experienced one or more falls that resulted in major injury (J1900C = 1 or 2) on one or more look-back scan assessments during their episode ending in the target quarter (assessments may be OBRA, PPS or discharge). In the MDS 3.0, major injury is defined as bone fractures, joint dislocations, closed head injuries with altered consciousness, or subdural

3006: Initial Baseline Screen of Nutritional Status for Every Patient within 24 Hours of PICU Admission	0202 : Falls with injury	0674 : Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay)
	report patients that roll off a low bed onto a mat as a fall.	hematoma.
	Exclude falls:	
	By visitors	
	• By students	
	By staff members	
	Falls on other units not eligible for	
	reporting	
	• By patients from eligible reporting units	
	when patient was not on unit at time of the	
	fall (e.g., patient falls in radiology	
	department)	
	*The nursing unit area includes the hallway,	
	patient room and patient bathroom. A	
	therapy room (e.g., physical therapy gym),	
	even though physically located on the nursing unit, is not considered part of the unit.	
	Assisted fall is a fall in which any staff	
	member (whether a nursing service	
	employee or not) was with the patient and	
	attempted to minimize the impact of the fall	
	by easing the patient's descent to the floor or	
	in some manner attempting to break the	
	patient's fall, e.g., when a patient who is	
	ambulating becomes weak and the staff	
	lowers the patient to the floor. In this	
	scenario, the staff was using professional judgment to prevent injury to the patient. A	
	fall that is reported to have been assisted by	
	a family member or a visitor counts as a fall,	
	but does not count as an assisted fall.	
	"Assisting" the patient back into a bed or	
	chair after a fall is not an assisted fall. Any	

3006: Initial Baseline Screen of Nutritional Status for Every Patient within 24 Hours of PICU Admission	0202 : Falls with injury	0674 : Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay)
	fall that is not documented as an assisted fall counts as an "unassisted fall".When the initial fall report is written by the nursing staff, the extent of injury may not yet be known. Hospitals have 24 hours to determine the injury level, e.g., while awaiting diagnostic test results or consultation reports.Injury levels:None—patient had no injuries (no signs or symptoms) resulting from the fall; if an x-ray, CT scan or other post fall evaluation results in a finding of no injuryMinor—resulted in application of a dressing, ice, cleaning of a wound, limb elevation, topical medication, pain, bruise or abrasion Moderate—resulted in suturing, application 	
	<ul> <li>Major—resulted in surgery, casting, traction, required consultation for neurological (basilar skull fracture, small subdural hematoma) or internal injury (rib fracture, small liver laceration) or patients with coagulopathy who receive blood products as a result of a fall</li> <li>Death—the patient died as a result of injuries sustained from the fall (not from physiologic events causing the fall)</li> <li>Data Elements required: Collected at a patient level</li> <li>Month</li> </ul>	

	3006: Initial Baseline Screen of Nutritional Status for Every Patient within 24 Hours of PICU Admission	0202 : Falls with injury	0674 : Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay)
		<ul> <li>Year</li> <li>Event Type (injury fall, assisted fall, repeat fall)</li> <li>Level of injury</li> <li>Type of Unit</li> </ul>	
Denominator Statement	All patients admitted to the PICU for at least 24 hours during a monthly or quarterly reporting period.	Denominator Statement: Patient days by Type of Unit during the calendar month. Included Populations: •Inpatients, short stay patients, observation patients, and same day surgery patients who receive care on eligible inpatient units for all or part of a day on the following unit types: •Adult critical care, step-down, medical, surgical, medical-surgical combined, critical access and adult rehabilitation inpatient units. •Patients of any age on an eligible reporting unit are included in the patient day count.	The denominator is the total number of long-stay residents in the nursing facility who were assessed during the selected target quarter and who did not meet the exclusion criteria.
Denominator Details	n/a	Conceptually, a patient day is 24 hours, beginning the hour of admission. The operational definitions of patient day are explained in the section labeled Patient Day Reporting Methods. The total number of patient days for each unit is reported for each calendar month in the quarter. Short stay patients = Patients who are not classified as in-patients. Variously called short stay, observation, or same day surgery patients who receive care on in-patient units for all or part of a day. With the growth in the number of short stay patients on in-patient units, the midnight	Residents are counted if they are long-stay residents, defined as residents whose length of stay is 101 days or more. Residents who return to the nursing home after a hospital discharge will not have their stay reset to zero. The target population includes all long stay residents with a target assessment during the previous 3 months. Target assessments may be an OBRA admission, quarterly, annual or significant change/correction assessments (A0310A = 01, 02, 03, 04, 05, 06) or PPS 5-, 14-, 30-, 60-, or 90-day assessments (A0310B = 01, 02, 03, 04, 05)

3006: Initial Baseline Screen of Nutritional Status for Every Patient within 24 Hours of PICU Admission	0202 : Falls with injury	0674 : Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay)
	census does not accurately represent the demand for nursing services on many units. Although some facilities have dedicated units for short stay patients, many do not. While the midnight census may be the only measure of patient census available for some facilities, others will have additional information that can be used to produce a patient census that is adjusted to reflect the additional demand for nursing required by short stay patients. Each unit should report patient days using the method that most accurately accounts for the patient work load. There are four (4) Patient Days reporting methods:	or discharge assessment with or without return anticipated (A0310F = 10, 11).
	•Method 1-Midnight Census This is adequate for units that have all in-	
	patient admissions. This method is not appropriate for units that have both in- patient and short stay patients. The daily number should be summed for every day in the month.	
	•Method 2-Midnight Census + Patient Days from Actual Hours for Short Stay Patients	
	This is an accurate method for units that have both in-patients and short stay patients. The short stay "days" should be reported separately from midnight census and will be summed by NDNQI to obtain patient days. The total daily hours for short stay patients should be summed for the month and divided by 24.	

	3006: Initial Baseline Screen of Nutritional Status for Every Patient within 24 Hours of PICU Admission	0202 : Falls with injury	0674 : Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay)
		<ul> <li>Method 3-Patient Days from Actual Hours This is the most accurate method. An increasing number of facilities have accounting systems that track the actual time spent in the facility by each patient. Sum actual hours for all patients, whether in- patient or short stay, and divide by 24.</li> <li>Method 4-Patient Days from Multiple Census Reports</li> <li>Some facilities collect censuses multiple times per day (e.g., every 4 hours or each shift). This method has shown to be almost as accurate as Method 3. Patient days based on midnight and noon census have shown to be sufficient in adjusting for short stay patients. A sum of the daily average censuses can be calculated to determine patient days for the month on the unit.</li> <li>Data Elements: <ul> <li>Month</li> <li>Year</li> <li>Patient Days Reporting method that includes midnight census and short stay patient days</li> <li>Type of Unit</li> <li>Patient days</li> </ul> </li> </ul>	
Exclusions	Patients who have already had a documented nutrition screening or assessment in the previous 48 hours.	Excluded Populations: Other unit types (e.g., pediatric, psychiatric, obstetrical, etc.)	Long-stay residents for whom data from J1800 (Any Falls Since Admission/Entry or Reentry or Prior Assessment (OBRA or Scheduled PPS)) or J1900C (Number of Falls Since Admission/Entry or Reentry or Prior

3006: Initial Baseline Screen of Nutritional Status for Every Patient within 24 Hours of PICU Admission	0202 : Falls with injury	0674 : Percent of Residents Experiencing One or More Falls with Major Injury (Long Stay)
		Assessment (OBRA or Scheduled PPS)) is missing on all qualifying assessments included in the look-back are excluded from this measure. Residents must be present for more 101 days or more in the facility to be included in long-stay measures.
		If the facility sample includes fewer than 30 residents, then the facility is excluded from public reporting because of small sample size.

	3005: Initial Risk Assessment for Immobility-Related Pressure Ulcer within 24 Hours of PICU Admission	0337: Pressure Ulcer Rate (PDI 2)	0539: Pressure Ulcer Prevention Implemented during Short Term Episodes of Care
Steward	Pediatric Consultants, LLC	Agency for Healthcare Research and Quality	Centers for Medicare & Medicaid Services
Description	This measure determines the proportion of Pediatric Intensive Care Unit (PICU) patients for whom an initial risk assessment for development of an immobility-related pressure ulcer is performed. The assessment is to be performed within the first 24 hours of admission to the PICU with the use of a standardized, validated pressure ulcer risk assessment tool designated as appropriate by the institution. The results of the assessment must be documented in the patient's chart upon completion.	Stage III or IV pressure ulcers (secondary diagnosis) per 1,000 discharges among patients ages 17 years and younger. Includes metrics for discharges grouped by risk category. Excludes neonates; stays less than five (5) days; transfers from another facility; obstetric discharges; cases with diseases of the skin, subcutaneous tissue and breast; discharges in which debridement or pedicle graft is the only operating room procedure; discharges with debridement or pedicle graft before or on the same day as the major operating room procedure; and those discharges in which pressure ulcer is the principal diagnosis or secondary diagnosis of Stage III or IV pressure ulcer is present on admission [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.]	Percentage of short term home health episodes of care during which interventions to prevent pressure ulcers were included in the physician-ordered plan of care and implemented.
Туре	Process	Outcome	Process
Data Source	Electronic Clinical Data : Electronic Health Record, Other, Paper Medical Records Other Data Source (S.23): Electronic Data Warehouse The data source for this measure is the patient medical record. Data is collected through the	Administrative claims 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 Version 5.0 (April 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.	Electronic Clinical Data OASIS-C instrument URL URL https://www.cms.gov/OASIS/Downloads/oasisp200.zip

# Comparison of NQF #3005, NQF #0337, and NQF #0539

	3005: Initial Risk Assessment for Immobility-Related Pressure Ulcer within 24 Hours of PICU Admission	0337: Pressure Ulcer Rate (PDI 2)	0539: Pressure Ulcer Prevention Implemented during Short Term Episodes of Care
	Electronic Health Record (EHR) system. Available in attached appendix at A.1 Attachment S.2bData_Dictionary _Pressure_Ulcer_4.28.16.docx	Available at measure-specific web page URL identified in S.1 Attachment PDI02_v5.0_150327.xlsx	
Level	Facility, Integrated Delivery System	Facility	Facility
Setting	Hospital/Acute Care Facility	Hospital/Acute Care Facility	Home Health
Numerator Statement	Number of PICU patients for whom an assessment of immobility-related pressure ulcer risk using a standardized pressure ulcer risk assessment tool was documented within 24 hours of admission.	Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with any secondary ICD-9-CM diagnosis codes for pressure ulcer and any secondary ICD-9-CM diagnosis codes for pressure ulcer stage III or IV (or unstageable).	Number of home health episodes of care during which interventions to prevent pressure ulcers were included in the physician-ordered plan of care and implemented.
Numerator Details	A standardized, validated pressure ulcer risk assessment tool is defined as a validated assessment tool that is applied in a standardized fashion to each patient admitted to the PICU for at least 24 hours. The assessment should be based on an immobility-related pressure ulcer risk assessment tool which has been validated for the majority of the institutions' PICU patients and the assessment should occur within the 24 hours of PICU admission.	ICD-9-CM Pressure ulcer diagnosis codes: 7070 DECUBITUS ULCER 70700 PRESSURE ULCER, SITE NOS 70701 PRESSURE ULCER, ELBOW 70702 PRESSURE ULCER, UPR BACK 70703 PRESSURE ULCER, LOW BACK 70704 PRESSURE ULCER, HIP 70705 PRESSURE ULCER, BUTTOCK 70706 PRESSURE ULCER, ANKLE 70707 PRESSURE ULCER, HEEL 70709 PRESSURE ULCER, SITE NEC ICD-9-CM Pressure ulcer stage diagnosis codes: 70723 PRESSURE ULCER, STAGE III 70724 PRESSURE ULCER, STAGE IV	Number of home health patient episodes of care where at end of episode: - (M2400e) Pressure Ulcer Prevention Plan implemented = 1 (yes)

	3005: Initial Risk Assessment for Immobility-Related Pressure Ulcer within 24 Hours of PICU Admission	0337: Pressure Ulcer Rate (PDI 2)	0539: Pressure Ulcer Prevention Implemented during Short Term Episodes of Care
	Currently, the Braden Q is the only validated immobility- related pressure ulcer risk assessment tool available for critically ill and injured children. Other validated risk assessment tools are acceptable, if available.	70725 PRESSURE ULCER, UNSTAGEBL	
Denominator Statement	All patients admitted to the PICU for at least 24 hours during a monthly or quarterly reporting period.	Surgical and medical discharges, for patients ages 17 years and younger. Surgical and medical discharges are defined by specific DRG or MS-DRG codes.	Number of home health episodes of care ending during the reporting period, other than those covered by generic or measure-specific exclusions.
Denominator Details	n/a	<ul> <li>See Pediatric Quality Indicators Appendices:</li> <li>Appendix B – Surgical DRGs</li> <li>Appendix C – Surgical MS-DRGs</li> <li>Appendix D – Medical DRGs</li> <li>Appendix E – Medical MS-DRGs</li> <li>Appendices are included in supplemental files and online at http://www.qualityindicators.ahrq.gov/Modules/PDI_TechSpec.aspx</li> </ul>	Number of home health patient episodes of care, defined as: A start/resumption of care assessment ((M0100) Reason for Assessment = 1 (Start of care) or 3 (Resumption of care)) paired with a corresponding discharge/transfer assessment ((M0100) Reason for Assessment = 6 (Transfer to inpatient facility – not discharged), 7 (Transfer to inpatient facility – discharged), 8 (Death at home), or 9 (Discharge from agency)), other than those covered by denominator exclusions.
Exclusions	none	<ul> <li>Exclude cases:</li> <li>with a principal ICD-9-CM diagnosis code for pressure ulcer (see above)</li> <li>with any secondary ICD-9-CM diagnosis codes for pressure ulcer (see above) present on admission and any secondary ICD-9-CM diagnosis codes for pressure ulcer stage III or IV (or unstageable, see above) present on admission</li> <li>with any-listed ICD-9-CM procedure codes for debridement or pedicle graft before or on the same day as the major operating</li> </ul>	Number of home health episodes in which the patient was not assessed to be at risk for pressure ulcers, or the home health episode ended in transfer to an inpatient facility or death.

3005: Initial Risk Assessment for Immobility-Related Pressure Ulcer within 24 Hours of PICU Admission	0337: Pressure Ulcer Rate (PDI 2)	0539: Pressure Ulcer Prevention Implemented during Short Term Episodes of Care
	<ul> <li>room procedure (surgical cases only)</li> <li>with any-listed ICD-9-CM procedure codes for debridement or pedicle graft as the only major operating room procedure (surgical cases only)</li> <li>neonates</li> <li>with length of stay of less than five (5) days</li> <li>transfer from a hospital (different facility)</li> <li>transfer from a Skilled Nursing Facility (SNF) or Intermediate Care Facility (ICF)</li> <li>transfer from another health care facility</li> <li>MDC 9 (skin, subcutaneous tissue, and breast)</li> <li>MDC 14 (pregnancy, childbirth, and puerperium)</li> <li>with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing) or principal diagnosis (DX1=missing)</li> </ul>	
	<ul> <li>See Pediatric Quality Indicators Appendices:</li> <li>Appendix I – Definitions of Neonate, Newborn, Normal Newborn, and Outborn</li> <li>Appendix J – Admission Codes for Transfers</li> <li>Appendices are included in supplemental files and online at http://www.qualityindicators.ahrq.gov/Modules/PDI_TechSpec.aspx</li> </ul>	

# **Appendix G: Pre-Evaluation Comments**

### Comments received as of July 25, 2016

# NQF #0022 Use of High-Risk Medications in the Elderly (DAE)

#### Mr. Jeff Zucker

ADVault believes that people live better lives and, if in a health crisis, can receive better care when they have confidence they can be involved in the creation and implementation of their medical treatment plans and decisions, factors extremely important when it comes to high risk medication being prescribed to the elderly. To do so, they must be able to communicate and express their goals, preferences and priorities for care in a meaningful and actionable way so providers can consider those thoughts. At some point in life, everyone will lose his or her ability to communicate effectively and understand what is being asked of him or her. Healthcare agents should have the confidence to know those value statements as well, in order to fulfill their role as surrogate decision-makers. Non-surrogate family members are comforted with third-party decision-making if they have proof the patient's voice is being heard, clearly understood, and to the extent possible, honored.

Therefore, ADVault strongly recommends providers (1) search for a person's digital emergency, critical and advance care plan (ECACP) upon admission and each time the patient is transitioned to a new site of care, (2) review and update the ECACP in various stages of a person's admission (outpatient or inpatient) and/or illness to ensure respect for the person's goals, preferences and priorities for care, (3) link the digital ECACP to the EHR and/or patient portal in order to ease access and address security, privacy and patient concerns, (4) track and make available the number of ECACPs found, opened and revisited, and the impact they have on the care of the patient, as well as patient, family and caregiver satisfaction, such data to be reported in a manner such that: (a) consumers can make better choices about hospitals and doctors; (b) doctors improve the satisfaction and quality of their work; and (c) hospital administrators gauge performance and align caregiving goals with actual outcomes. Finally, if no ECACP can be found via standards-based healthcare IT transport mechanisms, the hospital/provider should engage the patient to create one whenever possible.

# NQF #0022 Use of High-Risk Medications in the Elderly (DAE)

#### Nadine Shehab, PharmD, MPH

CDC strongly supports a patient safety measure related to medication management in older adults; however, we are concerned that the CDC data cited is not appropriately applied and the measure may not efficiently reduce adverse drug events (ADEs). First, the measure rationale is that reduction in "highrisk medication" (HRM) use "should decrease morbidity and mortality" associated with ADEs and CDC data are cited in the discussion of measure impact. However, CDC data indicate the opposite--Beers Criteria (BC) HRMs are not leading causes of emergency department (ED) visits or hospitalizations for ADEs (Ann Intern Med 2007;147:755-65; N Engl J Med 2011;365:2002-12). Approximately 1% of U.S. hospitalizations for ADEs among older adults involve BC HRMs, while approximately 66% involve 3 other drug classes (warfarin, antidiabetics, oral antiplatelets). After accounting for prescribing, the hospitalizations rate for ADEs from these 3 drug classes is at least 40 times higher than the hospitalization rate for ADEs from BC HRMs (N Engl J Med 2011;365:2002-12). Second, although there are a few studies to support an epidemiologic association of BC HRMs with health outcomes, there are many other studies that do not support this finding. The studies cited in the measure are based on older BC versions. We are not aware of new data demonstrating that use of the updated BC is associated with morbidity, mortality, or resource utilization reductions. Third, using a composite measure targeting hundreds of drugs/interactions obscures the contribution of specific drugs and thus cannot be efficiently used to implement interventions (J Hosp Med 2008;3:87-90). One-half of Medicare Advantage beneficiaries meet criteria for HRM drug-disease interactions, suggesting the measure is not useful for targeting the highest risk drugs. Fourth, basing a broad healthcare quality measure on the "potentially inappropriate" concept is problematic because it supersedes the treating clinician's judgment without having supporting information for that clinical judgment. The 2015 BC update states: "these criteria are not meant to be applied in a punitive manner. Prescribing decisions are not always clear-cut, and clinicians must consider multiple factors...Quality measures must be...measured with limited information and thus...cannot perfectly distinguish appropriate from inappropriate care". The BC is a useful tool to guide individual clinical decisions; however, as a quality measure, it is likely to have minimal population impact. A fundamental criterion of NQF measures is that they be aligned with national health priorities; for medication safety, these have been defined as improving safe use of anticoagulants, antidiabetics, and opioids (health.gov/hcq/ade-action-plan.asp). Incorporation of these medications into national quality measures will go further toward improving health outcomes for older Americans than measures focused on HRMs.

# NQF# 0450 Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate (PSI 12)

#### Dr. Matt Austin, PhD

We support efforts to measure patient safety in hospitals. We believe that valid and reliable measures of patient safety events are the foundation to improving performance and holding hospitals accountable.

Given the recent article by Winters et al. in Medical Care that found this measure did not meet validity thresholds when measured against the reference standard of a medical chart review, we would urge the standing committee to review the Medical Care article as part of their careful evaluation of the measure's validity.

Winters BD, Bharmal A, Wilson RF, Zhang A, Engineer L, Defoe D, Bass EB, Dy S, Pronovost PJ. Validity of the Agency for Health Care Research and Quality Patient Safety Indicators and the Centers for Medicare and Medicaid Hospital-acquired Conditions: A Systematic Review and Meta-Analysis. Medical care. 2016 Apr.

# NQF #2909 Perioperative Hemorrhage or Hematoma Rate (PSI 09)

#### Dr. Matt Austin, PhD

We support efforts to measure patient safety in hospitals. We believe that valid and reliable measures of patient safety events are the foundation to improving performance and holding hospitals accountable.

Given the recent article by Winters et al. in Medical Care that found this measure did not meet validity thresholds when measured against the reference standard of a medical chart review, we would urge the standing committee to review the Medical Care article as part of their careful evaluation of the measure's validity.

Winters BD, Bharmal A, Wilson RF, Zhang A, Engineer L, Defoe D, Bass EB, Dy S, Pronovost PJ. Validity of the Agency for Health Care Research and Quality Patient Safety Indicators and the Centers for Medicare and Medicaid Hospital-acquired Conditions: A Systematic Review and Meta-Analysis. Medical care. 2016 Apr.

# NQF #2940 Use of Opioids at High Dosage in Persons Without Cancer

#### Mr. Jeff Zucker

ADVault believes that people live better lives and, if in a health crisis, can receive better care when they have confidence they can be involved in the creation and implementation of their medical treatment plans and decisions, factors extremely important when it comes to addictive, narcotic medications like opioids. To do so, they must be able to communicate and express their goals, preferences and priorities for care in a meaningful and actionable way so providers can consider those thoughts. At some point in life, everyone will lose his or her ability to communicate effectively and understand what is being asked of him or her. Healthcare agents should have the confidence to know those value statements as well, in order to fulfill their role as surrogate decision-makers. Non-surrogate family members are comforted with third-party decision-making if they have proof the patient's voice is being heard, clearly understood, and to the extent possible, honored.

Therefore, ADVault strongly recommends providers (1) search for a person's digital emergency, critical and advance care plan (ECACP) upon admission and each time the patient is transitioned to a new site of care, (2) review and update the ECACP in various stages of a person's admission (outpatient or inpatient) and/or illness to ensure respect for the person's goals, preferences and priorities for care, (3) link the digital ECACP to the EHR and/or patient portal in order to ease access and address security, privacy and patient concerns, (4) track and make available the number of ECACPs found, opened and revisited, and the impact they have on the care of the patient, as well as patient, family and caregiver satisfaction, such data to be reported in a manner such that: (a) consumers can make better choices about hospitals and doctors; (b) doctors improve the satisfaction and quality of their work; and (c) hospital administrators gauge performance and align caregiving goals with actual outcomes. Finally, if no ECACP can be found via standards-based healthcare IT transport mechanisms, the hospital/provider should engage the patient to create one whenever possible.

# NQF #2950 Use of Opioids from Multiple Providers in Persons Without Cancer

#### Mr. Jeff Zucker

ADVault believes that people live better lives and, if in a health crisis, can receive better care when they have confidence they can be involved in the creation and implementation of their medical treatment plans and decisions, factors extremely important when it comes to addictive, narcotic medications like opioids. To do so, they must be able to communicate and express their goals, preferences and priorities for care in a meaningful and actionable way so providers can consider those thoughts. At some point in life, everyone will lose his or her ability to communicate effectively and understand what is being asked of him or her. Healthcare agents should have the confidence to know those value statements as well, in order to fulfill their role as surrogate decision-makers. Non-surrogate family members are comforted with third-party decision-making if they have proof the patient's voice is being heard, clearly understood, and to the extent possible, honored.

Therefore, ADVault strongly recommends providers (1) search for a person's digital emergency, critical and advance care plan (ECACP) upon admission and each time the patient is transitioned to a new site of care, (2) review and update the ECACP in various stages of a person's admission (outpatient or inpatient) and/or illness to ensure respect for the person's goals, preferences and priorities for care, (3) link the digital ECACP to the EHR and/or patient portal in order to ease access and address security, privacy and patient concerns, (4) track and make available the number of ECACPs found, opened and revisited, and the impact they have on the care of the patient, as well as patient, family and caregiver satisfaction, such data to be reported in a manner such that: (a) consumers can make better choices about hospitals and doctors; (b) doctors improve the satisfaction and quality of their work; and (c) hospital administrators gauge performance and align caregiving goals with actual outcomes. Finally, if no ECACP can be found via standards-based healthcare IT transport mechanisms, the hospital/provider should engage the patient to create one whenever possible.

# NQF #2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer

#### Mr. Jeff Zucker

ADVault believes that people live better lives and, if in a health crisis, can receive better care when they have confidence they can be involved in the creation and implementation of their medical treatment plans and decisions, factors extremely important when it comes to addictive, narcotic medications like opioids. To do so, they must be able to communicate and express their goals, preferences and priorities for care in a meaningful and actionable way so providers can consider those thoughts. At some point in life, everyone will lose his or her ability to communicate effectively and understand what is being asked of him or her. Healthcare agents should have the confidence to know those value statements as well, in order to fulfill their role as surrogate decision-makers. Non-surrogate family members are comforted with third-party decision-making if they have proof the patient's voice is being heard, clearly understood, and to the extent possible, honored.

Therefore, ADVault strongly recommends providers (1) search for a person's digital emergency, critical and advance care plan (ECACP) upon admission and each time the patient is transitioned to a new site of care, (2) review and update the ECACP in various stages of a person's admission (outpatient or inpatient) and/or illness to ensure respect for the person's goals, preferences and priorities for care, (3) link the

digital ECACP to the EHR and/or patient portal in order to ease access and address security, privacy and patient consent concerns, (4) track and make available the number of ECACPs found, opened and revisited, and the impact they have on the care of the patient, as well as patient, family and caregiver satisfaction, such data to be reported in a manner such that: (a) consumers can make better choices about hospitals and doctors; (b) doctors improve the satisfaction and quality of their work; and (c) hospital administrators gauge performance and align caregiving goals with actual outcomes. Finally, if no ECACP can be found via standards-based healthcare IT transport mechanisms, the hospital/provider should engage the patient to create one whenever possible.

# NQF #2993 Potentially Harmful Drug-Disease Interactions in the Elderly

#### Mr. Jeff Zucker

ADVault believes that people live better lives and, if in a health crisis, can receive better care when they have confidence they can be involved in the creation and implementation of their medical treatment plans and decisions, factors extremely important when it comes to potentially harmful medication being prescribed to the elderly. To do so, they must be able to communicate and express their goals, preferences and priorities for care in a meaningful and actionable way so providers can consider those thoughts. At some point in life, everyone will lose his or her ability to communicate effectively and understand what is being asked of him or her. Healthcare agents should have the confidence to know those value statements as well, in order to fulfill their role as surrogate decision-makers. Non-surrogate family members are comforted with third-party decision-making if they have proof the patient's voice is being heard, clearly understood, and to the extent possible, honored.

Therefore, ADVault strongly recommends providers (1) search for a person's digital emergency, critical and advance care plan (ECACP) upon admission and each time the patient is transitioned to a new site of care, (2) review and update the ECACP in various stages of a person's admission (outpatient or inpatient) and/or illness to ensure respect for the person's goals, preferences and priorities for care, (3) link the digital ECACP to the EHR and/or patient portal in order to ease access and address security, privacy and patient consent concerns, (4) track and make available the number of ECACPs found, opened and revisited, and the impact they have on the care of the patient, as well as patient, family and caregiver satisfaction, such data to be reported in a manner such that: (a) consumers can make better choices about hospitals and doctors; (b) doctors improve the satisfaction and quality of their work; and (c) hospital administrators gauge performance and align caregiving goals with actual outcomes. Finally, if no ECACP can be found via standards-based healthcare IT transport mechanisms, the hospital/provider should engage the patient to create one whenever possible.

# NQF #2993 Potentially Harmful Drug-Disease Interactions in the Elderly

#### Nadine Shehab, PharmD, MPH

CDC strongly supports a patient safety measure related to medication management in older adults; however, we are concerned that the CDC data cited is not appropriately applied and the measure may not efficiently reduce adverse drug events (ADEs). First, the measure rationale is that reduction in "highrisk medication" (HRM) use "should decrease morbidity and mortality" associated with ADEs and CDC data are cited in the discussion of measure impact. However, CDC data indicate the opposite--Beers Criteria (BC) HRMs are not leading causes of emergency department (ED) visits or hospitalizations for ADEs (Ann Intern Med 2007;147:755-65; N Engl J Med 2011;365:2002-12). Approximately 1% of U.S. hospitalizations for ADEs among older adults involve BC HRMs, while approximately 66% involve 3 other drug classes (warfarin, antidiabetics, oral antiplatelets). After accounting for prescribing, the hospitalizations rate for ADEs from these 3 drug classes is at least 40 times higher than the hospitalization rate for ADEs from BC HRMs (N Engl J Med 2011;365:2002-12). Second, although there are a few studies to support an epidemiologic association of BC HRMs with health outcomes, there are many other studies that do not support this finding. The studies cited in the measure are based on older BC versions. We are not aware of new data demonstrating that use of the updated BC is associated with morbidity, mortality, or resource utilization reductions. Third, using a composite measure targeting hundreds of drugs/interactions obscures the contribution of specific drugs and thus cannot be efficiently used to implement interventions (J Hosp Med 2008;3:87-90). One-half of Medicare Advantage beneficiaries meet criteria for HRM drug-disease interactions, suggesting the measure is not useful for targeting the highest risk drugs. Fourth, basing a broad healthcare quality measure on the "potentially inappropriate" concept is problematic because it supersedes the treating clinician's judgment without having supporting information for that clinical judgment. The 2015 BC update states: "these criteria are not meant to be applied in a punitive manner. Prescribing decisions are not always clear-cut, and clinicians must consider multiple factors...Quality measures must be...measured with limited information and thus...cannot perfectly distinguish appropriate from inappropriate care". The BC is a useful tool to guide individual clinical decisions; however, as a guality measure, it is likely to have minimal population impact. A fundamental criterion of NQF measures is that they be aligned with national health priorities; for medication safety, these have been defined as improving safe use of anticoagulants, antidiabetics, and opioids (health.gov/hcq/ade-action-plan.asp). Incorporation of these medications into national quality measures will go further toward improving health outcomes for older Americans than measures focused on HRMs.

# NQF #3003 PACE Participant Falls With Injury Rate

#### Peg Graham

Strongly suggest that this measure includes data re the urgency of the task, i.e., whether patients chose to walk to the bathroom rather than wait for lift, personal assistance, etc. See this reference for inpatient setting:

http://www.patientsafetysolutions.com/docs/December\_22\_2009\_Falls\_on\_Toileting\_Activities.htmhtt p://www.patientsafetysolutions.com/docs/December\_22\_2009\_Falls\_on\_Toileting\_Activities.htm

Literature supports multifactorial nature of falls, sensitive to the medications, changes in hemodynaic function. Not aware of studies reporting the frequency distribution of the tasks associated with a fall, importance of innovative design of assistive equipment design to support self-care to avoid situations as outlined in recent NYT article:

http://www.nytimes.com/2016/07/21/nyregion/insurance-groups-in-new-york-improperly-cut-home-care-hours.html.

Capture the intersection of patient and staff safety, interact with safe patient handling community at www.asphp.org for more information.

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