Background:

The Patient Safety project is entering its second phase. This project will evaluate measures related to patient safety that can be used for accountability and public reporting for all populations and in all settings of care. The Patient Safety project will also review 25 measures that are eligible for maintenance, including NHSN CAUTI and CLABSI outcome measures.

In its review of the measures, the Patient Safety Standing Committee identified several overarching issues that were factored into the Committee’s ratings and recommendations for multiple measures and are not repeated in detail with each individual measure.

The Usefulness of Process Measures for Patient Safety Even When Outcome Measures Exist

The Committee highlighted the importance of process measures for quality improvement despite the presence of good outcome measures. The Committee discussed measurement of the use of specific steps to prevent central line-associated bloodstream infections (CLABSI), even though a measure of CLABSIs is broadly used. Specific procedures (e.g., appropriate use of hand hygiene, chlorhexidine skin preparation, full barrier precautions during central venous insertions, etc.) are associated with reduction of CLABSIs. However, outcome measures are still essential to increasing accountability and for quality improvement purposes. The presence of process measures that provide clinical guides to improve outcomes therefore are helpful adjuncts and still are useful measures of quality.

Concerns with the Intended Use of Measures

NQF’s current policy is to endorse measures with the intended use in both accountability applications (including public reporting) and performance improvement. However, the Committee expressed concern over the appropriateness of measures that use claims data to determine payment for providers.

Improvement of Existing Measures and Harmonization

Measure development is a continuous process that requires developers to monitor and improve measures over time. For example, ad hoc reviews of measures 0138 (CLASBI) and 0139 (CAUTI) involved several changes that improve each measure’s specifications.
Infection-Related Patient Safety Measures

**Measure**: 0531 Patient Safety for Selected Indicators (PSI 90)

**Measure Steward**: Agency for Healthcare Research and Quality (AHRQ)

**NQF Evaluation**: Consensus Not Reached

**Discussion**: This measure is a composite of 11 AHRQ Patient Safety Indicators. It was last endorsed in 2009. During its 2014 review, the Standing Committee raised concerns that the measure gave equal weighting to indicators that might be less significant or less preventable than other indicators in the composite. Although AHRQ revised the measure following that review, new concerns were raised, including:

- the imprecise definitions for claims-based data compared to other definitions such as CDC’s National Healthcare Safety Network (NHSN);
- use of claims data may not provide the opportunity for improving prevention strategy or adjustment of patient care;
- imprecise data that may not lead to improved care for the patient may not be appropriate for CMS payment determination.

Based on its discussion, the Committee did not reach consensus on endorsement of this measure. The recommendation will be reconsidered after review of public comments.

**APIC Comments**: APIC expresses concern with the use of claims-based data for any kind of measurement for healthcare-associated infections (HAIs). Additionally, we express concern for the composite measure approach. Claims-based data can be less precise, as opposed to the NHSN standardized definitions, and composite measures lack specific direction for prevention strategy focus. The use of less precise measurement data which impacts healthcare setting reimbursement raises significant concern. The migration from ICD-9 to ICD-10 billing codes poses an even greater risk of imprecise measurement data for PSI 90. Although this may be somewhat temporary as facilities convert to the new codes, data based on those codes should not be used for reimbursement, especially during the transition period.

**Measure**: 2720: National Healthcare Safety Network (NHSN) Antimicrobial Use Measure

**Measure Steward**: Centers for Disease Control and Prevention (CDC)

**NQF Evaluation**: Recommended for endorsement

**Description**: This measure assesses antimicrobial use in hospitals based on medication administration data that hospitals collect electronically at the point of care and report via electronic file submissions to NHSN. The antimicrobial use data that are in scope for this measure are antibacterial agents administered to adult and pediatric patients in a specified set of ward and intensive care unit locations: medical, medical/surgical, and surgical wards and units. The measure compares antimicrobial use that the hospitals report with antimicrobial use that is predicted on the basis of nationally aggregated data.

**Discussion**: The Committee agreed this is a very important topic and there is a need for measures in this area because of the worldwide problem of antibiotic resistance and antibiotic overuse. Although the testing sample was small, the
Committee agreed the testing was adequate as additional testing will be performed once use of the measure is expanded. The Committee noted that the measure only uses electronic data, and raised this as a feasibility concern.

**APIC Comments:** APIC endorses the Antimicrobial Use measure, recognizing the need for intense work in this area to better understand the role antimicrobial use plays in drug resistance, as well as the need for benchmarking data. APIC does express concern about the lack of uniform electronic surveillance availability in many settings, including the acute hospital settings, despite ongoing progress in implementing technology. We agree with the developer’s plan to propose the measure for accountability programs after additional field experience.

**Measure:** 2726: Prevention of Central Venous Catheter (CVC)-Related Bloodstream Infections

**Measure Steward:** American Society of Anesthesiologists (ASA)

**NQF Evaluation:** Recommended for endorsement

**Discussion:**
This is a new process measure that assesses the percent of patients undergoing CVC insertion where the CVC is inserted with all elements of maximal sterile barrier technique, hand hygiene, skin preparation and, if ultrasound is used, sterile ultrasound techniques are followed. An earlier version of this measure was submitted during the previous Patient Safety project (Phase 1) but was not recommended because of concerns that there was not enough definitive evidence to link maximal sterile technique with outcomes and that outcome measures exist for this area.

The developer responded that while this measure can be used by any provider who places central lines, it is particularly important for anesthesiologists because they most often place the central line in the operating room or intensive care unit but are not involved in later care when complications can occur. The Committee agreed that, although there are already good outcome measures in this area for CLABSI, process measures remain critical to reducing infections.

**APIC Comments:** APIC supports advancement of patient safety best practices and appreciates the efforts of the Anesthesia Society of America and NQF to develop this measure to monitor compliance with the central line insertion bundle by the anesthesia discipline in acute care facilities. Process monitoring for CLABSI prevention has been in place for some time within many organizations, however APIC recognizes that inclusion of anesthesia in measurement of central line insertion practices has been inconsistent and with limited accountability. APIC appreciates that the existing National Anesthesia Clinical Outcomes Registry and the limited Medicare data set will be solely utilized as the data collection mechanism for this measure as it avoids adding the burden of data collection on infection preventionists (IPs) and channels this responsibility to the department of anesthesia. This prudent utilization of resources allows time for additional collaborative prevention efforts between IPs and anesthesia staff to emphasize and promote accountability for the implementation of sound prevention practices in that setting.

As a caution, APIC does not endorse that this process measure be used to correlate with any outcomes measure data identified through claims information. Additionally, we emphasize that we do not endorse the use of IPs for the data collection portion of this process measure should that be necessary, but rather propose that this responsibility reside with the anesthesia team. Utilization of IPs in a collaborative prevention model at the frontline is a more effective use of resources.
of IP expertise and a more proactive approach to reducing CLABSIs and other HAIs.

**Ad Hoc Reviews**

An ad hoc review is a formal measure evaluation and endorsement reconsideration outside of the scheduled maintenance of endorsement process. An ad hoc review is limited and focused on a specific issue regarding an evaluation criterion and is not the same as a maintenance of endorsement evaluation.


**Measure steward:** CDC

**NQF Evaluation:** The Committee approved these changes and agreed the measure still meets the criteria for NQF endorsement.

**Discussion:** This *ad hoc* review was performed at the developer’s request because of material changes made to the measure during the Annual Update of the measure specifications. These changes reflect the changes to the NHSN CAUTI definitions.

**APIC Comments:** APIC endorses the changes made to this measure which reflect the most recent NHSN definition changes.

**Measure: 0139: National Healthcare Safety Network (NHSN) Central line-associated Bloodstream Infection (CLABSI) Outcome Measure**

**Measure Steward:** CDC

**NQF Evaluation:** The Committee approved these changes and agreed the measure still meets the criteria for NQF endorsement.