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**Comments of
the Association for Professionals in Infection Control and Epidemiology (APIC)
on the HIT Policy Committee Measure Concepts
December 22, 2010**

The Association for Professionals in Infection Control and Epidemiology (APIC) appreciates the opportunity to provide input to the HIT Policy Committee Measure Concepts. APIC is a nonprofit, multi-disciplinary, international organization representing greater than 13,500 infection preventionists (IPs), whose mission is to improve health and promote safety by reducing the risks of infection and adverse outcomes in patients and healthcare personnel. Our members are critical to efforts to provide data for internal facility quality improvement, as well as public health efforts.

Patient Safety Domain: Measures of process and outcome improvement of hospital-associated infections

APIC appreciates inclusion of healthcare-associated infections (HAIs) in these measure concepts. According to the Centers for Disease Control and Prevention (CDC), HAIs accounted for an estimated 1.7 million infections and 99,000 associated deaths in 2002, and cause \$28 to \$33 billion in excess healthcare costs each year. APIC recommends that the Office of the National Coordinator for Health Information Technology (ONC) align its HAI quality measures with those of the HHS Action Plan to Prevent Healthcare-Associated Infections, using definitions for the quality measures already used by CDC's National Healthcare Safety Network (NHSN).

The Centers for Medicare and Medicaid Services (CMS) included in its FY 2011 update to the Hospital Inpatient Prospective Payment System a requirement that hospitals begin reporting central line-associated bloodstream infections (CLABSI) for FY 2013 Medicare payment determination, with data collection beginning in January 2011, and begin reporting surgical site infections (SSI) for FY 2014 Medicare payment determination, with data collection beginning in January 2012. Specifically, CMS requires the use of CDC's NHSN for collecting CLABSI and SSI data, thus ensuring the data fields are defined in accordance with established CDC metrics for each measure.

In addition, the Patient Protection and Affordable Care Act of 2010 (PPACA, PL 111-148) requires that the hospital value-based purchasing program include HAIs among its quality measures, according to the targets and metrics of the HHS HAI Action Plan. In order to best achieve coordination of care, government agencies must be consistent in guidance and requirements across types of facilities and types of care. For this reason, we urge that HIT quality measures incorporate data fields related to HAIs to be consistent with the metrics already in place for the quality measure definitions developed by other HHS agencies such as CDC's NHSN.



NHSN is actively pursuing strategic directions aimed at optimizing informatics to support prevention and control of HAIs. Specifically, leadership at NHSN has been working with vendors who have developed surveillance technology used by IPs to assure these systems incorporate HL7 Clinical Document Architecture (CDA) specifications and guidance to facilitate efficient reporting of HAI data such as that outlined by recent CMS incentives.¹ APIC has also provided a wide variety of resources on use of surveillance technology that are aimed at enhancing use of surveillance to prevent and control HAIs.² We felt it important to highlight these for the HIT Policy Committee as evidence that IPs are key stakeholders and partners in use of informatics to improve safety and quality of care.

One ongoing challenge with surveillance is capture of epidemiologically-sound denominators such as device days, e.g. monthly tally of central line or urinary catheter days for a patient care unit, to permit calculation of incidence densities for outcome measures recommended by NHSN. Currently most IPs depend on their clinical colleagues to manually collect such data. There are some examples of use of electronic health record (EHR) to automatically capture this data but these remain the exception.³ We do recommend therefore that the HIT Policy Committee encourage development of EHR systems that will facilitate easy, reliable capture of denominator data that is used in surveillance of HAIs as well as related process metrics.

More advanced use of health informatics to improve care using the electronic health record (EHR) include real time decision support, antimicrobial stewardship and study of intersection of processes and outcomes. These have been described elsewhere.⁴ Incumbent on developers of EHR systems however is proactive and early engagement of IPs and clinicians to assure efficient and effective decision support is incorporated into these.

Clinical Appropriateness Domain: Measures of all cause readmissions and length of stay (LOS)

The PPACA established a national pilot program for integrated care during an episode of care in order to improve the coordination, quality, and efficiency of health care services. Since an episode of care may involve a number of healthcare settings and providers, APIC believes that true integrated care would require EHRs to be able to follow the patient through each event during an episode of care, including the post-acute care phase, regardless of healthcare setting. In addition, examination of reasons for readmission is ongoing but we agree that HAIs may be a contributing factor but additional study of the extent of this is warranted.⁵

Quality measure definitions should also take into account circumstances where readmissions are planned in order to improve patient outcomes from procedures. Electronic health records should be accessible across systems and facilities in order to provide integrated care to each patient regardless of provider. This is essential in order to determine if the apparent readmission is related to the original admission, or a new episode involving an unrelated diagnosis.

Given these essential elements for determining accurate readmissions and attribution of a diagnosis to a given admission or LOS, we urge caution in moving too aggressively given the variation of electronic health records status in hospitals.



Clinical Appropriateness Domain: Measures assessing appropriate medication treatments, including overuse and/or underuse

When used correctly, antibiotics provide an essential benefit to patient care. However, overuse can render these drugs less effective when infectious organisms adapt to them. In addition, antimicrobial pressure increases the incidence of antibiotic-associated conditions such as *Clostridium difficile* and Methicillin-resistant *Staphylococcus aureus* (MRSA). The Surgical Care Improvement Project (SCIP) includes process measures for use of antibiotics before, during and after surgery in order to protect patients from bacterial infections while also preventing development of antibacterial resistance. APIC recommends that HIT quality measures include appropriate fields to accurately measure use of antibiotics in selected measures. There have been notable examples in the literature wherein stewardship involving use of antibiotics has been improved with use of informatics.⁶

Population and Public Health Domain: Effective Preventative Services

APIC recommends including a measure concept on prevention of vaccine-preventable diseases among both patients and personnel by immunization. We wonder if this topic lends itself to reinforcing delivery of vaccines to those for whom they are recommended when seeking healthcare. Informatics can be an important tool to assure that missed opportunities for delivery of vaccines are kept to a minimum.^{7,8}

General comments

Once again, given that many healthcare providers are still in the early stages of designing and installing electronic health records, we encourage the committee to take into account time, costs and resources necessary for develop and/or upgrade to new systems. We believe data should be retrievable from existing data sources without causing a demand for additional human resource needs, and those systems should allow for secure data sharing across systems and providers. We also urge the HIT quality measures ensure definitional fields to be consistent with quality measure definitions already used by other federal agencies.

Thank you again for this opportunity to provide input to the committee.

Sincerely,
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