



Executive Summary
Response to DHHS Action Plan to Prevent Healthcare-Associated Infections
Society for Healthcare Epidemiology of America (SHEA) and
Infectious Diseases Society of America (IDSA)

- The Society for Healthcare Epidemiology of America (SHEA) and the Infectious Diseases Society of America (IDSA) applaud the Department of Health and Human Services (DHHS) for its effort to develop an *Action Plan to Prevent Healthcare-Associated Infections*.
- The document provides much useful background information and begins to chart the course for interagency coordination around this important effort. An action plan, however, should contain well-defined action items with defined deliverables that are designed to achieve objectives or goals within a specific time frame. As stakeholders, SHEA and IDSA would welcome the opportunity to collaborate with federal agencies in order to translate HHS goals and objectives to actions at the bedside that can achieve meaningful reductions in healthcare-associated infections (HAIs).
- Given the tremendous importance of this work to improve patient safety, and thus the impact on providers, states, and patients, SHEA and IDSA urge HHS to invite stakeholders to provide input in additional venues (for example, public meetings or listening sessions).
- There exists an immediate opportunity for closer alignment between the Centers for Disease Control and Prevention (CDC) and the Center for Medicare and Medicaid Services (CMS) as Value-Based Purchasing (VBP) is pursued, building on existing measures such as the National Healthcare Safety Network (NHSN) outcome and process measures and CMS measures, such as the Surgical Care Improvement Project (SCIP) process measures.
- Experts in the field (Epidemiologists and Infection Preventionists) in collaboration with CDC and the Agency for Healthcare Research and Quality (AHRQ) should be engaged in order to further define and prioritize the research agenda.
- We agree with CDC and CMS that the focus should be on preventability. Funds should be made available through CDC and AHRQ for translational research projects that can allow more rapid integration of science into practice.
- Multiple states mandate the use of NHSN for state public reporting. Thus, immediate efforts should be made to enable interfaces between electronic health records (EHRs) and NHSN such that additional burdens are not placed upon healthcare entities from either an infection prevention and control or information technology (IT) perspective as the desirability for national database integration proceeds.

The Society for Healthcare Epidemiology of America (SHEA) and the Infectious Diseases Society of America (IDSA) applaud the Department of Health and Human Services (DHHS) for its effort to develop an *Action Plan to Prevent Healthcare-Associated Infections*.

SHEA was founded in 1980 to advance the application of the science of healthcare epidemiology. SHEA works to achieve the highest quality of patient care and healthcare personnel safety in all healthcare settings by applying epidemiologic principles and prevention strategies to a wide range of quality-of-care issues. SHEA is a growing organization, strengthened by its membership in all branches of medicine, public health, and healthcare epidemiology.

IDSA represents more than 8,000 physicians, scientists and other healthcare professionals who specialize in infectious diseases in the United States and internationally. IDSA's purpose is to improve the health of individuals, communities, and society by promoting excellence in patient care, education, research, public health, and prevention relating to infectious diseases.

We will first provide a few general comments before delving into each section of the plan with more specific comments.

General Comments:

We support the efforts of the DHHS to improve coordination among agencies regarding healthcare-associated infection (HAI) prevention efforts including development of standard terms and measures to ensure quality data, sharing best practices, engaging partners such as SHEA and IDSA, among others, coordinating research activities and disseminating information. The document provides much useful background information and begins to chart the course for interagency coordination around this important effort. It is a summary of the current state for a few important healthcare-associated infection syndromes and organisms, as well as an outline of the challenges we are facing in our efforts to eliminate preventable HAIs, an important first step.

An action plan, however, should contain well-defined action items with defined deliverables that are designed to achieve objectives or goals within a specified time frame. Included is a set of metrics with associated targets, but no clear roadmap for each agency as to how the specific targets are to be achieved. Alignment among agencies is referenced throughout the document; however it is not clear as to how this will be achieved. The CDC's Healthy People 2010 initiative includes reductions in device-associated infections (CLA-BSI, VAP, and CA-UTI) in ICUs, as well as NICUs (CLA-BSI and VAP); however, the *Action Plan* does not include a summary of progress to date which would allow the agencies to build on efforts already underway. Currently the NQF National Priorities Partnership includes a national focus on CLA-BSI, CA-UTI, SSI and VAP, while the CMS 9th Scope of Work is focused on a voluntary effort to reduce MRSA infections. None of the initiatives referenced above includes an emphasis on the organism *Clostridium difficile*, for example, although it is prominent in the Action Plan and is an increasing issue in many healthcare settings. If one goal of the plan, as stated, is to "minimize reporting burden and maximize information output" (pg 51) then all

partners should, among other considerations, look toward CDC's Healthy People 2020 plan to assure alignment of overall goals, metrics and implementation processes.

The national effort to reduce HAIs is a laudable one. However, given the critical need to engage non-federal partners such as providers, state health departments and consumers, all of whom are vital in any effort to develop and implement any action plan to reduce HAIs, we urge HHS to provide additional, timely opportunities for stakeholder input and involvement.

Specific comments by plan section:

Prevention

Introduction

Paragraph 1, 2nd sentence and paragraph 2, 1st sentence: The first point among the top ten messages listed on the Executive Summary (page 3) is that “*many* healthcare-associated infections are preventable”. We suggest that, in order not to confuse the public and legislators, the term “HAI elimination” is replaced with the CDC’s term “elimination of preventable HAIs” throughout the document.

Paragraph 2, 1st sentence: In addition to technological and procedural advancements, we recommend emphasizing the importance of building partnerships between healthcare providers and healthcare consumers and their communities to enable consumers to make choices that will result in lowering their risks of infection using prevention strategies.

We recommend that the introduction include reference to essential overarching HAI prevention strategies such as those listed below. Since these prevention strategies cannot be overemphasized, they should be reiterated as a recurring theme throughout the document.

These include:

- Optimizing hand hygiene adherence among healthcare personnel
- Minimizing the use and duration of use of catheters and other invasive medical devices
- Significantly increasing immunization rates among healthcare personnel
- Significantly increasing immunization rates among patients
- Advancing antimicrobial stewardship as noted by CDC
- Providing resources required for an effective infection prevention and control program, including adequate staffing and expertise.

We are grateful to HHS for utilizing the SHEA/IDSA *Compendium of Strategies to Prevent Healthcare-Associated Infections in Acute Care Hospitals*, which stress the above-mentioned key prevention strategies.

Central Line-associated Bloodstream Infections:

Metric 1: The component of this metric that recommends monitoring CLABSIs per 1,000 device days in “other locations” outside of ICUs is vague. If non-ICU areas or services are to be included, these should be specified. It is important to take into account, however, the

difficulty of measuring device-days outside of the ICU setting. Patient-days could be considered as a more readily accessible surrogate denominator. Utilization of validated electronic surveillance (e.g., electronic charting of vascular catheter presence) could assist in achieving this metric for those facilities with an integrated electronic medical record.

Metric 2: It is important to take into account the substantial resources that would be required for widespread utilization of the central line insertion practices (CLIP) component of NHSN. We recommend assessment of the accuracy and usefulness of these data (e.g., will hospitals actually document instances of nonadherence?). The goal of this process measure (100%) should ideally be consistent with the goals of the SSI process measures (currently set to 95%). Finally, “non-emergent insertions” should be defined.

Catheter-Associated Urinary Tract Infections:

Metric 4: We agree with focusing on symptomatic CA-UTIs.

Before utilizing the metric based on ICD-9-CM codes, it will be important to assess the sensitivity and specificity compared to NHSN surveillance results. It would be worth describing the discharges metric in more detail:

Number of UTIs (ICD9+not present on admission) / (#major surgery ICD9+urinary catheter ICD9)*100

Is this meant to target CA-UTIs specifically among surgical patients or is it intended for use as a surrogate for all CA-UTIs?

We believe that it's worth considering the rate of bloodstream infections attributable to UTI as an outcome measure, given the current limitations of the CA-UTI definition, although this is an infrequent event.

Methicillin-resistant *Staphylococcus aureus*:

Metric 5: Given the increasingly blurred distinction between healthcare-associated and community-acquired MRSA infection, consideration should be given to focusing on the incidence of all invasive MRSA infections. If the decision is made to focus the metric and target only on *healthcare-associated* invasive MRSA infections, it will be important to clearly define this. The Emerging Infections Program (EIP) and Active Bacterial Core Surveillance (ABC) invasive MRSA data may under represent the full MRSA disease burden. In addition, HA-MSSA infections can also result in significant morbidity and mortality.

Surgical Site Infections:

Metric 6: We agree with focusing on deep incision and organ/space infection rates.

- We suggest that there be a clear indication that vancomycin and fluoroquinolones should be started 2 hours before incision because of the longer infusion time required for these antimicrobials.
- To be consistent with the SCIP measures, we suggest focusing post-operative glucose control on patients undergoing cardiac surgery. Consider specifying targets for glucose control (e.g., less than 200 mg/dL on postoperative days 1 and 2).
- We suggest removing normothermia after colorectal surgery as a process measure for SSI prevention given conflicting data regarding the impact of postoperative normothermia on infection rates. Normothermia is categorized as an unresolved issue in the SHEA/IDSA *Compendium*.

Ventilator-Associated Pneumonia (VAP):

We agree that at this time, no valid outcome or process metric has been identified for VAP.

We recommend adding a description of the importance of partnerships with patients, families and their communities as a component of HAI prevention efforts. We also suggest including language to clarify that metrics are important to assess current status and monitor the impact of interventions, but that measurement alone without corresponding prevention efforts will not lead to HAI prevention and improvements in morbidity and mortality. In addition, we feel that it is important to point out that efforts focused solely on measurement can deplete resources available for prevention efforts, further highlighting the need for coordination among agencies.

Prevention: Prioritized Recommendations

Prevention of Catheter-Associated Urinary Tract Infections:

We recommend specifying the “appropriate indications” for catheter insertion. Some considerations include perioperative use for selected surgical procedures, urine output monitoring in critically ill patients, management of acute urinary retention and urinary obstruction, assistance in pressure ulcer healing for incontinent patients, and as an exception, at patient request to improve comfort (as noted in the SHEA/IDSA *Compendium*).

Prevention of Intravascular Catheter-Associated Infection:

Priority Module 1, 4th bullet: We recommend specifying the use of chlorhexidine-based gluconate (CHG) skin antiseptics for patients older than 2 months of age unless contraindicated (CHG is not FDA-approved for children younger than 2 months of age). There is sufficient evidence available since publication of the HICPAC guidelines to give this a IA rating as defined by the guideline.

Priority Module 1, 5th, 6th, 7th bullet: Consider combining these 3 recommendations into one summary recommendation that describes the need to balance the risks and benefits associated with choice of insertion site to avoid the appearance of contradictory recommendations.

Priority Module 2, 2nd bullet: Consider adding indications for deciding when a central venous catheter is “no longer essential”.

Priority Module 2: Consider adding a recommendation to disinfect catheter hubs, needleless connectors and injection ports before accessing the catheter. We realize that there may currently be insufficient published evidence to support a IA rating as defined by the HICPAC guideline, but believe that there is a wide gap between optimal catheter maintenance practices and actual practice and that some CLA-BSIs can be prevented by improving these practices.

Prevention of Surgical Site Infections

Priority Module 1, bullet 3: We would favor a stronger explicit statement against the use of razors for hair removal.

Priority Module 1, bullet 5: We would recommend adding a recommendation for intraoperative dosing of antimicrobials for long procedures as a way to maintain adequate drug concentrations. We realize, however, that this is not included in SCIP and NQF SSI prevention measures and may, therefore, detract from harmonization.

Priority Module 1, bullet 6: We would recommend harmonizing this module with the SCIP/NQF allowance of perioperative antimicrobial prophylaxis up to 24 hours after wound closure (48 hours for cardiac surgery).

Priority Module 1, bullet 7: We would recommend removing this recommendation. Based on evidence published after the HICPAC guidelines, mechanical bowel prep for elective colorectal surgery has not been found to reduce the risk of SSI or other complications.^{1, 2} Prophylaxis with either nonabsorbable oral antimicrobials or systemic antimicrobials is reasonable, and the question of whether a combination of oral and systemic antimicrobial prophylaxis is superior to either alone is unresolved.

Priority Module 1, bullet 8: Consider specifying what is “appropriate” as an antiseptic agent for skin preparation.

Priority Module 2, bullet 1: We would recommend focusing this recommendation on patients undergoing cardiac surgery since most of the supporting literature involves this patient population. This would also harmonize with SCIP/NQF measures. We would also recommend setting specific targets for glucose control (see comments under Prevention: Metrics and Targets).

Prevention of Ventilator-Associated Pneumonia

Priority Module 1, bullet 6: The term “regular” oral care is vague, however we realize that there may be insufficient data to support any specific frequency recommendation.

Research

General Comments

We greatly appreciate the recognition of the importance of HAIs by HHS, as well as the focus on the need to identify gaps in our knowledge base. The document outlines the challenges we are facing in our efforts to eliminate all preventable infections. However, as noted in our general comments, the document as currently written lacks the specifics of an action plan.

The Introduction identifies two broad goals: 1) identify gaps in the existing knowledge base and, 2) develop a coordinated research agenda. Whereas the report does identify some of the gaps in our understanding of HAIs and current infection control practices, a clear research agenda for healthcare epidemiology, including outlining each agencies responsibilities and deliverables, is needed. SHEA and IDSA as well as the Association for Professionals in

¹ Guenaga KF, et al. Mechanical bowel preparation for elective colorectal surgery. Cochrane Database Syst Rev; 2005.

² Willie-Jorgensen P, et al. Pre-operative mechanical bowel cleansing or not? An updated meta-analysis. Colorectal Dis 2005; 7:304-310.

Infection Control and Epidemiology (APIC) in conjunction with CDC and AHRQ, could play a helpful role as architects of such a research agenda, as we believe that the development of a science-based, collaborative approach to these questions offers the best chance for success.

The document does not adequately characterize the gaps in the existing healthcare epidemiology knowledge base (several examples are provided below). Specifically, the document does not sufficiently underscore the importance of conducting basic, epidemiological and translational studies (to fill the basic and clinical science gaps). Rather the document focuses only on the conduct of health services research (i.e., successful implementation of strategies already known or suspected to be beneficial). While such an approach may provide some immediate short-term benefit, to achieve further success, a substantial investment in basic science, translational medicine, and epidemiology is needed.

Measurement of process and outcomes issues and their validity is an important but understated issue. The use of CDC definitions to make clinical and legislative decisions may or may not be appropriate, as the definitions were not developed in this specific context. While healthcare epidemiology has developed, validated and used standard definitions for years, these need to be tested and validated outside of the context for which they were initially developed.

Specific Comments (by section)

II. A. 2) As we strive to “eliminate all preventable HAIs”, we need to identify the gaps in our understanding of what is actually preventable – What risk factors or characteristics define that group? This distinction is critical to help guide subsequent research priorities and to help set realistic expectations. Whereas a “broad-brush” approach may provide some immediate benefit by moving healthcare toward standardized, evidence-based practices, critical gaps in the science base in healthcare epidemiology will require a substantial investment in basic, epidemiological and translational science to permit effective and precise, interventions that prevent HAIs.

Onset of HAI in the community following discharge from a facility, an increasingly common occurrence with shorter hospital stays, is discussed in regard to surveillance strategies. However, coordination of prevention as well as surveillance strategies needs to be studied across the full spectrum of the healthcare delivery system (acute care, rehabilitation, long term care, home care, dialysis, etc.). There are large gaps in our understanding of interventions across this complex system that must be addressed in order to develop a coordinated research agenda. Similarly, the report does not discuss the contribution of patient factors in the development of healthcare-associated infections. Patient condition, behavior and education also require attention as part of a coordinated response.

II. B. 1) As noted, the vast majority of CLA-BSIs occur outside of the ICU setting. However, studies of recent efforts to reduce these infections have focused exclusively in the ICU. We need to determine whether this research is generalizable beyond the ICU. We need a much better evidence-base for all HAIs in both the non-ICU setting (oncology units, transplant units, etc.) as well as the non-hospital setting (long term care, home care, etc.). This issue does not receive adequate attention in this report. We need studies at a patient and population level that test innovative prevention strategies before multicenter studies can be developed.

II. B. 2) The need for improved risk adjustment strategies is paramount to achieving any of the goals listed with respect to prevention of surgical site infections and must be one of the primary

research goals in this area. Interventions cannot be adequately assessed unless the accurate comparisons can be made between at-risk populations.

II. B. 3) The rate of metronidazole resistance in *C. difficile* is listed as a gap in basic science knowledge. Any such analysis must be coupled with an assessment of the clinical significance of this organism. Additionally, the emerging role of *C. difficile* as a community pathogen requires further study. Finally, hand hygiene practices specifically related to *C. difficile* (alcohol-based hand sanitizers versus soap and water) and the role of environmental disinfection are missing from the list of gaps in prevention practices knowledge.

II. B. 4) The report states that “urinary drainage systems are often reservoirs for multidrug-resistant bacteria.” We are not aware of any evidence supporting this assertion.

II. B. 5) The primary focus of research with respect to ventilator-associated pneumonia (VAP) should focus on the development of a consistent surveillance definition of the infection (or reasonable surrogate markers) that is easy to apply and that is reproducible within and between entities. Progress toward preventing VAP cannot be achieved until this goal is accomplished. This is a fundamental gap in our ability to advance the science in this area.

II. B. 6) Concentration of effort on a single organism, Methicillin-Resistant *Staphylococcus aureus* (MRSA) may divert resources from other more locally prominent organisms. While infections caused by MRSA have significant morbidity and mortality, the organism only causes 8% of healthcare-associated infections. A focus restricted to MRSA ignores the 92% of other organisms that cause HAIs, many of which are more resistant to antimicrobials than MRSA. Therefore, we prefer that the focus in this area be expanded to include all multidrug-resistant organisms.

The MRSA section does not adequately assess the impact of CA-MRSA on healthcare-associated infections and the role that CA-MRSA plays in healthcare settings.

The role of active surveillance must be investigated along with interventions put in place in response to the results of passive surveillance. For example, should all individuals colonized with MRSA be placed in contact isolation? What are the adverse and unintended consequences of this intervention? What should be the approach to an infected/colonized healthcare professional? What impact do standard hand hygiene practices have on MDRO acquisition and transmission?

III. 1) The entire section on evaluation of proposed projects is difficult to follow. Criteria are not clearly delineated and those proposed seem subjective. Studies must be feasible and well designed to answer specific questions with methodological rigor and adequate statistical power. In order to design and perform such “well designed” studies, we need a cadre of trained clinician researchers who understand the issues specific to HAIs. Training grants should be made available so that these individuals develop the skills necessary to further this ambitious research agenda.

III. 4) “Public Impact” is proposed as an evaluation criterion. While we are aware of the increased focus on HAIs by consumer organizations and support public awareness of these issues, a more appropriate criterion would be “Impact on Public Health”.

IV. Several proposed research projects contradict gaps in basic science knowledge described earlier in the document. For instance, a focus on strategies for preventing or eliminating biofilms is premature until we understand the significance of biofilms in the etiology and pathophysiology of HAIs. Additionally, investigation of several known important factors in the pathogenesis of HAIs is absent. For instance, we need to enhance our understanding of the ecology of skin microflora in the etiology of CLABSI and SSI.

IV. b. ii. 3. The primary purpose of antimicrobial stewardship is to guarantee that patients receive appropriate and effective anti-infective therapy, not to reduce overall use. A national effort focused exclusively on reducing antimicrobial use could paradoxically result in a negative impact on the quality of care. A focus on appropriate use would instead reduce unnecessary use without such a risk.

IV. c. A “simple cluster-randomized study” is not achievable. Cluster-randomized studies are by their nature very complex to administer and to analyze. Furthermore, in the specific example listed in this paragraph, it is not clear what decolonization strategies should be evaluated.

IV. d-e. Research directed toward the development of improved measurement strategies must precede any investigation of additional interventions to prevent healthcare-associated infections.

V. The role and standing of the Healthcare-Associated Infections Research Working Group requires further explanation. Is this an advisory group to HHS? Who will lead the group and what authority will it have? We strongly believe that the HHS working group would benefit from the participation of key stakeholders, particularly input from relevant professional societies such as SHEA and IDSA who have significant expertise in the arenas of infectious disease and epidemiology and who are eager to contribute to this important effort.

Information Systems and Technology:

This section outlines an ambitious vision for the role of information technology (IT) in the prevention of healthcare-associated infections. While we applaud this vision, we are concerned that the specifics of how this vision will be achieved are not fully outlined in the current plan.

The introduction seems to focus on data that would be available at a local level, and on advances in local implementation of electronic health records (e.g., the “early warning” system in point 5 of the introduction). However sections III, IV, and V describe the formation of a federal interagency working group. One of the tasks of this group would be to assess data already available in national databases (e.g., NHSN) and determine what would need to be done for data exchange between these national datasets. No mention is made of how local users would be integrated into these efforts. The boundaries between national aggregate data sets and local data are not clear throughout the document, and there is a distinct lack of mention of any involvement of healthcare organizations and medical practitioners at the local level, other than a mention of communicating with external stakeholders on page 51.

The action plan would be stronger if it made a clearer statement of what IT capabilities need to be in place to support improved surveillance for HAI and prevention efforts. These include broader adoption of electronic health records (EHRs), including CPOE and decision support capabilities. A comprehensive review of these needs was recently published (Am J Infect Control 2008; 36:S37-46).

Finally, we would like to point out that multiple states mandate the use of NHSN for state public reporting. Thus, efforts should be made to allow interfaces between EHRs and NHSN such that additional burdens are not placed upon healthcare entities from either infection prevention and control or IT perspective as the desire for national database integration proceeds.

Incentives and Oversight

Regulatory oversight

Recommendations and Action Plans: Conditions of Participation: SHEA and IDSA agree with the comments that infection prevention and control requirements should be flexible and should avoid a prescriptive regulatory approach that would focus on specific infections.

Accreditation: We applaud CMS's effort to refine and improve the current method of measuring the performance of Accreditation Organizations (AO) in regards to HAIs and agree with looking at the utility of complaint data as a means to assess performance of the AOs. We also note that the Joint Commission (TJC), in its' propagation of NPSG and IC standards and elements of performance, is at risk of becoming increasingly prescriptive, contrary to states CMS goals. Also, as CMS is requiring TJC to incorporate CMS conditions of participation (CoP) into its standards in order to retain deemed status, the risk for increasing the prescriptiveness of standards is multiplied.

Survey and Certification: We agree with plans including conducting a pilot of a survey tool in conjunction with CDC. While the institutional expertise of the CDC is valuable and in fact essential to the development of such a tool, other stakeholders (e.g. SHEA, IDSA) have a shared and at times complementary expertise that should also be accessed. If performance metrics are added, we agree that they should be done in collaboration with CDC and AHRQ and take advantage of NHSN.

Value Based Purchasing (VBP) Financial Incentives

HAC and POA coding

SHEA supports the concept of VBP and agrees that financial incentives are an innovative way to encourage change. CMS has previously indicated intent to collect data and analyze the implementation of POA and HAC measures. Given that these are new programs, we agree that there is a need for good measurement systems to assess efficacy and reliability of the systems and to look for unintended consequences.

HAC selection

The existence of evidence-based guidelines to reduce the risk of HAIs does not in and of itself assure that information regarding the extent to which such conditions are preventable is provided. This statement is relevant to catheter-associated UTI HAC which doesn't appear to meet the HAC requirement that the condition could reasonably have been prevented through the application of evidence-based guidelines. SHEA is also concerned about the potential unintended consequences of this measure. For example, non-payment for the current HAC, catheter-associated UTI, could lead hospitals to screen patients unnecessarily on admission in an effort to document the presence of bacteria in the urine that is "POA." Newly hospitalized patients found to have low-grade, asymptomatic bacteriuria may then receive unnecessary antibiotic treatment, which in turn may fuel the development of infections due to multidrug resistant organisms or *Clostridium difficile*. SHEA encourages CMS to collect relevant data to assess whether or not the unintended consequences of the UTI HAC support elimination of this HAC.

Hospital VBP Plan

We agree that the hospital VBP would provide powerful incentives for encouraging HAI prevention. SHEA and IDSA believe that there are opportunities to closely align current CDC initiatives with CMS incentives. We believe it is critical that the evidence-based measures selected in this HAI reduction plan align closely with CMS incentives. HHS/CMS validated quality measures including SCIP process measures need thorough testing and reporting before attaching payment to such measures. HAI should be treated in the same way. As CMS moves into VBP systems there is great opportunity to align similar efforts with current outcome data collected via the NHSN system.

While a "rollup" infection measure would be convenient in developing a hospital performance score, each time infection data are rolled into larger and larger aggregate measures, the refinement precision of the data become more obscured. Developing and validating such a rollup measure will be a challenge but such care is critical for this plan to be a success and to achieve alignment between economic incentives and tools to reduce HAI.

Transparency and Associated Incentives

SHEA and IDSA agree that transparency is a strong incentive for organizations to improve performance. However, there needs to be more research on the impact of public reporting on the quality of care, on the claim that public reporting drives patient choice, and on any unintended consequences of transparency. The recommendation and action plan section mentions that catheter associated UTI, CLABSI, VAP, SSI, MRSA and *C. difficile* may be added to the Hospital Compare website. Before these measures are added, further research, particularly with the CDC, is critical to refine risk adjustment methodology and to ensure reliability of data collection. Developing standardized surveillance methodology that would allow inter-institutional comparison is problematic for some of these measures; CMS needs to make sure that measurement systems are validated before they are introduced.

Recommendations and Action Plan

Just as with quality measures, some HAI measures are useful for public reporting while some are better suited to internal performance improvement efforts. In reviewing quality measures used in the current HospitalCompare report, there was no attempt to roll-up various measures into a single domain. The variability is lost and therefore the capability to identify areas for improvement is also lost. CA-BSI and CA-UTI for example, are as different as AMI and CHF in terms of measures of underlying systems; yet HospitalCompare does not attempt to combine AMI and CHF measures, understanding they represent quite different events and opportunities to improve.

Conclusion:

SHEA and IDSA applaud HHS on the development of this document and the strong message it contains that alignment of agencies can further prevention efforts. We do however believe that development of an implementation plan for the overall goal as well specific action plans within each agency that will permit implementation and measure success would greatly strengthen the document. Leadership within both SHEA and IDSA hope that HHS leadership will continue to work with them and other Tier I partners in order to achieve the shared vision of HAI prevention.

We strongly believe that given the tremendous importance of this work and the impact on providers, states, and patients, that HHS should develop additional venues to invite stakeholder input into this plan.

We further believe that CMS should pursue alignment with CDC as plans for Value Based Purchasing are refined, and that experts in the field should be engaged in collaboration with close alignment between CDC and AHRQ as the research agenda is further defined and prioritized.

As NHSN is mandated by multiple states for the purposes of HAI public reporting, and as NHSN definitions have been validated for surveillance purposes and are widely used for internal performance improvement, CDC should be resourced adequately to continue to make improvements in NHSN that allow interface with hospital electronic medical records in order to reduce the burden of data collection for hospitals.

SHEA and IDSA greatly appreciate the invitation to review and comment on this plan and look forward to working with CDC, CMS, AHRQ and other federal partners in this important effort to improve patient safety and outcomes.