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Via: OIDP-HAI@hhs.gov

B. Kay Hayes, MPA
Deputy Assistant Secretary for Infectious Disease
Director, Office of Infectious Disease and HIV/AIDS Policy
Executive Director, Presidential Advisory Council on HIV/AIDS
Office of the Assistant Secretary for Health
Department of Health and Human Services
1101 Wootton Parkway
Rockville, MD 20852

RE: Notice for Public Comments on Healthcare-Associated Infections (HAI) National Action Plan Targets

Dear Ms. Hayes,

The Society for Healthcare Epidemiology of America (SHEA), the Infectious Diseases Society of America (IDSA), the Pediatric Infectious Diseases Society (PIDS), and the Society of Infectious Diseases Pharmacists (SIDP) appreciate the opportunity to provide comments on the Department of Health and Human Services' (HHS) proposed new Healthcare-Associated Infections (HAI) National Action Plan Targets.

SHEA represents more than 2,200 physicians and other healthcare professionals globally with expertise in healthcare epidemiology, infection prevention, and antibiotic stewardship. SHEA is dedicated to advancing the science and practice of healthcare epidemiology and preventing patient morbidity, mortality, and reducing the cost of care linked to healthcare-associated infections.

IDSA represents over 12,000 infectious disease physicians and scientists devoted to prevention, public health, education, and research in the area of infectious diseases. IDSA members possess clinical expertise in recognition, diagnosis, treatment, and prevention of infectious diseases in patients.

PIDS represents over 1,700 professionals advocating for the improved health of children with infectious diseases both nationally and around the world. PIDS membership encompasses leaders across the global scientific and public health spectrum, including clinical care, advocacy, academics, government, and the pharmaceutical industry.

SIDP represents over 2,000 health professionals dedicated to promoting the appropriate use of antimicrobial agents. The Society's diverse membership is comprised of pharmacists and other allied healthcare professionals who are involved in education, clinical practice, research and policy development related to antimicrobial use and prevention/management of infectious diseases.

The societies reaffirm our commitment to supporting the call to action in the National Action Plan to Prevent Healthcare-Associated Infections.

Preventing HAIs and reducing the prevalence of multidrug-resistant organisms (MDROs) is quintessential to our societies' advocacy for improved patient safety and the advancement of healthcare quality. Our expert clinicians, researchers, and professionals that make up the infection prevention and infectious diseases communities have dedicated their careers to translating emerging science into innovative prevention interventions that improve mortality and morbidity rates due to preventable HAIs while also reducing costs to the healthcare system. We have a long track record of engagement with federal partners including the Centers for Disease Control and Prevention (CDC), the Agency for Healthcare Research and Quality (AHRQ), and the Centers for Medicaid and Medicare Services (CMS) in our shared goals of confronting the most complex challenges in reducing the prevalence of HAIs. A robust and active federal surveillance system is critical to reducing harms and maintaining performance accountability. Our organizations fully support the objectives of the HAI National Action Plan and recognize its essential role on establishing national benchmarks for HAI reduction since 2009. We commend the Department of Health and Human Services' dedication to sustaining improvements in healthcare quality and patient safety through regularly updating targets for the most common preventable HAIs. We are committed to continued advocacy for necessary investments in our healthcare infrastructure to facilitate meaningful reductions in HAIs.

The SARS-CoV-2 global pandemic has eroded progress towards reductions in incident HAIs.

Evidence-based interventions and guidance for healthcare epidemiology, infection prevention, and antibiotic stewardship, many of which are the product of the research and translational science emerging from the organizations represented in this letter, have led to significant achievements in reducing HAIs over the past decade. However, the onset of the SARS-CoV-2 global pandemic saw a dramatic erosion of basic infection prevention practices due to the extraordinary reallocation of resources to maintain capacity to care for an unprecedented surge of patients with severe COVID-19 illness.

Hospitals continue to experience protracted healthcare workforce shortages due to mass resignations of nursing staff and other healthcare professionals critical to maintaining basic infection prevention practices. These shortages are particularly severe among the infection preventionists that specialize in training and implementing best practices to prevent HAIs. Twenty-five percent of healthcare facilities have reported a vacant infection preventionist position, with more than half of long-term care facilities seeing an infection preventionist leave within the last 24 months. These gaps will likely continue to be a challenge in the future as well, as 40% of the infection preventionist workforce will be entering retirement age within the next ten years. In addition, infectious diseases (ID) physicians, who provide critical leadership for infection prevention and control activities, are also in shortage and facing significant recruitment challenges. Nearly 80% of counties in the US do not have a single ID physician. In the most recent residency match, only 56% of ID physician training programs filled their slots¹.

¹ Gilmartin H, Reese SM, Smathers S. Recruitment and hiring practices in United States infection prevention and control departments: Results of a national survey. *Am J Infect Control*. 2021 Jan;49(1):70-74. doi: 10.1016/j.ajic.2020.07.024. Epub 2020 Jul 21. PMID: 32702390; PMCID: PMC7769860.

This loss of infection prevention capacity is coupled with the ongoing challenges of burnout, supply chain shortages, and reduced financial resources. The effect of prolonged crisis conditions in hospitals, particularly during periods of surge, will be felt for years to come. The average length of stay for patients in hospitals transitioning to skilled nursing facilities (SNFs) has increased due to similar downstream staffing and infrastructure challenges. Many hospitals and SNFs are still recovering in 2023 from the impact of the COVID-19 pandemic. While we agree that the returning to pre-pandemic operations should be a goal to aim for, the impact of the SARS-CoV-2 pandemic on the patient population, healthcare facilities, and public health capacity have not yet abated. Our societies believe that 2023 is not an appropriate baseline year for the next 5-year goal period.

The societies are concerned the proposed reduction targets are too aggressive given the current state of healthcare infrastructure.

HHS proposes to establish 2023 as the baseline for gauging progress in reducing the prevalence of several HAIs over the upcoming five-year period (2023-2028): central line-associated bloodstream infections (CLABSI), catheter-associated urinary tracts infections (CAUTI), hospital-onset methicillin-resistant *Staphylococcus aureus* (MRSA) bacteremia, and *Clostridioides difficile* infections (CDI). The new baseline will not be available until at least sometime in 2024, making it difficult for hospitals to compare their progress to targets for achievement. A fundamental premise of setting appropriate targets is the achievability of these goals. The reductions in HAIs observed prior to the pandemic were built upon years of significant research, innovation, and progress. The shift to saving the lives of critically ill patients during multiple periods of surge has decreased resources for innovation and technological advancements in the area of infection prevention. No new major interventions or technologies have been introduced recently or are anticipated imminently for implementation during the target timeframe. The substantial reductions in HAIs made prior to the pandemic can be regained; however, they also suggest that we may be reaching the asymptotic maximum of the incremental gain in quality or safety that is achievable for "topped out" metrics².

RECOMMENDATIONS

The societies offer the following recommendations for the next phase of the HAI National Action Plan:

1. HHS should delay the publication of new target HAI reduction rates by one year until 2024.

The societies invite HHS, federal agencies, and partners in the patient safety improvement community to meet in 2023 to discuss the variables, challenges, and opportunities that impact hospitals' ability to reduce HAIs. Following these discussions, HHS is urged to reconsider the reduction targets in its proposal and revise them to reflect more realistic targets given current available resources and the state of hospital staffing and infrastructure. We also believe the infection prevention and infectious diseases communities will be better positioned in 2024 to understand the data that supports the rationale for the baseline and target goals.

² Jean Carlet, Jacques Fabry, René Amalberti, Laurent Degos, The "Zero Risk" Concept for Hospital-Acquired Infections: A Risky Business!, *Clinical Infectious Diseases*, Volume 49, Issue 5, 1 September 2009, Pages 747–749, <https://doi.org/10.1086/604720>

2. HHS should provide more clarity on the definitions used to determine how HAIs are reported and determined for meeting target goals.

The National Healthcare Safety Network (NHSN) will be releasing updated definitions for CDI and hospital-onset bloodstream infections (HOBSSI) shortly. The impact of these changing definitions on determining the baseline and setting target goals is unknown at this time. Should HHS agree to our meeting request, the societies would like to discuss definitions and parameters for each target goal, as well as the tools and resources available to actually achieve these goals. The societies would like to see goals that are consistent, reliable, and center around achieving improved patient outcomes versus an exercise in numbers that can be gamed.

3. HHS should reconsider its proposed targets for HAI reduction goals and apply more reasonable targets that will achieve realistic improvements.

Although the societies recommend a one-year delay and stakeholder engagement before finalizing the target goals, we are offering recommendations for amending HHS' proposed five-year target goals based on what reflects the state of hospital and healthcare system conditions.

- HHS is proposing to establish five-year target goals beginning with 2023 as the baseline year and 2028 as the goal year. **The societies propose using a 2022 baseline to determine reduction target goals.** The infection prevention and infectious diseases communities will know more about 2022 performance sooner and would have better data in hand to guide plans for achieving target rate reduction goals.
- HHS is proposing a goal to reduce CLABSI in intensive care units (ICUs) and ward-located patients by 40% from 2023-2028. **The societies propose a target goal of 20% rate reduction from a baseline of 2022.**
- HHS is proposing a goal to reduce CAUTI in ICUs and ward-located patients by 25% from 2023-2028. **The societies propose a target goal of 20% rate reduction from a baseline of 2022.**
- HHS is proposing a goal to reduce hospital-onset MRSA bacteremia by 40% from 2023-2028. **The societies propose a target goal of 10% rate reduction from a baseline of 2022.**
- HHS is proposing a goal to reduce hospital-onset *Clostridioides difficile* infections (CDI) by 20% from 2023-2028. **The societies propose a target goal of 10% rate reduction from a baseline of 2022.**

4. The societies recommend including a target goal for surgical site infections (SSI) in the 2023-2028 National Action Plan.

Target goals for improvement help hospitals focus priorities and resources on patient outcomes. The societies recommend the revised HAI National Action Plan include a target goal for SSIs. SSIs cause significant patient morbidity and costs. Elective surgeries were reduced in the early half of 2020 during wide-spread efforts to prevent the spread of SARS-CoV-2. Elective surgeries are largely back to pre-pandemic levels after observing harms from delays in care due to the suspension of surgical procedures. SSI reduction should be prioritized alongside other HAI targets. HHS should not set an SSI target goal until there is an opportunity to meet with the infection prevention and infectious disease communities.

5. The HAI National Action Plan update should include goals for prioritizing improvements in antimicrobial use.

HHS should incorporate in this update of the HAI National Action Plan a goal that prioritizes taking incremental steps toward establishing national utilization benchmarks for various classes of antimicrobials and their use in certain patient populations. Currently, there is no antibiotic use metric optimized for adoption by a national quality improvement program. The NHSN Standardized Antimicrobial Administration Ratio (SAAR) measure, while useful to gain insight at the institution-level, requires additional development before broad national adoption to establish a baseline and recommend national reduction target goals. Additionally, more work is needed toward optimizing its risk adjustments. Many hospitals remain in the early stages of building infrastructure that would allow them to use this measure. For some hospitals, particularly critical access and rural, the necessary information system infrastructure is cost prohibitive. At the same time, the prevalence of MDROs is rapidly approaching the point of becoming the next healthcare crisis³. While we applaud the achievements made since the 2018 publication of the previous HAI National Action Plan update, we remain committed to sustaining these achievements but must continue to pursue additional milestones. Even modest efforts will make a difference in slowing the pace toward a crisis. HHS must also prioritize the call for increasing targeted federal funding for modernizing the NHSN, expanding the Antimicrobial Resistance Solutions Initiative, and sustaining predictable funding for medical research that addresses knowledge gaps and drives innovation in preventing the spread of MDROs.

6. HHS must prioritize investments in ensuring appropriate risk adjustment for measures that determine improvements in patient safety and outcomes.

A critical issue with most HAI metrics and benchmarks is the lack of appropriate risk adjustment. Current NHSN models include facility-level factors but limited or no patient-level factors are included in the risk models. Patient-level risk adjustment is a better predictor for CLABSI and SSI risk than unit-level risk adjustment. As a result, hospitals taking care of the most complex patients – for whom the preventability of many of these infections is less clear – have artificially high rates due to incorrect benchmarking. Thus, patient level factors are important in determining the achievability of these targets. Our societies suggest HHS invest in capturing and using patient-level risk factors. This may be achievable with better integration of electronic health records with national data systems.

7. HHS must prioritize recruitment and retention of the infectious diseases and infection prevention and control workforce, including funding and implementation of the new Bio-Preparedness Workforce Pilot Program.

The Consolidated Appropriations Act of 2023 authorizes a new Bio-Preparedness Workforce Pilot Program as a part of the PREVENT Pandemics Act. The pilot would help address significant ID and infection prevention workforce challenges by providing loan repayment for healthcare professionals with expertise in infectious diseases and emergency preparedness who work in federal facilities, health professional shortage areas, and medically underserved communities. We urge HHS to request that Congress provide funding to launch this program. We further request that HHS improve

³ “2019 Antibiotic Resistance Threats Report.” Centers for Disease Control and Prevention, Centers for Disease Control and Prevention, 23 Nov. 2021, <https://www.cdc.gov/drugresistance/biggest-threats.html>.

reimbursement for ID professionals and explore additional opportunities to strengthen recruitment and retention of the workforce necessary to achieve meaningful reductions in HAIs.

SUMMARY

Our organizations consider the success of the HAI National Action Plan and its stated goals a top priority. We look forward to meeting with HHS and other federal agency partners to discuss what is needed to achieve our broader mutual goals. With time and additional thought, attainable progress can be made in the next five-year target goal period. More investments in infrastructure are key and we want to see HHS succeed in getting the needed funding to support these efforts.

Thank you for the opportunity to comment. Contact Lynne Batshon at ibatshon@shea-online.org to coordinate contact with the societies.

Sincerely,



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