Executive Summary: DHQP Peer Review Panel on National Healthcare Safety Network (NHSN)

Highlights of All Preliminary Recommendations with Focus on those Directed to HICPAC

CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

The primary focus of this external peer review of the Surveillance Branch of the Division of Healthcare Quality Promotion (DHQP) was the National Healthcare Safety Network (NHSN) surveillance system. Before the 1.5-day on-site review held last month, two conference calls were held and material was provided to the members of the External Peer Review Panel to aid the deliberations. Proceedings and preliminary recommendations from the Panel are provided in this report.

In recent years, interest in health care-associated infections (HAIs) has grown steadily in the U.S. among consumers, legislators, providers, payers, regulatory/accreditation organizations, and organizations that focus on patient safety and performance improvement. HAIs are now a major clinical and public health problem across the spectrum of health care settings, not just acute-care hospitals, that results in high morbidity, mortality, and costs. Given their impact, there has been a rising chorus of calls for the elimination of HAIs.

Surveillance systems must be able to document the impact of HAIs, monitor trends, and evaluate the effectiveness of prevention efforts. There are notable examples of reductions in HAIs through prevention and control efforts. These success stories are predicated on surveillance data collected using sound epidemiologic principles, are scientifically credible and validated. The predecessor of NHSN, the National Nosocomial Infections Surveillance (NNIS) System, was built on these attributes. DHQP developed NHSN on the same principals

The Panel was provided a comprehensive overview of the current landscape of HAI surveillance as well as the current status and future plans for NHSN. Legislative mandates to use NHSN as a foundation for HAI reporting in a growing number of states have resulted in logarithmic growth in the number of enrollees, placing significant stress on the system. Other external forces such as value-based purchasing, health informatics, and increasing incorporation of processes and outcomes involving HAIs by performance improvement collaboratives are also having a significant impact on NHSN.

The Panel expressed concerns that continued growth will be difficult for DHQP to support administratively, financially, and scientifically. For NHSN to meet the challenge and remain the standard for HAI surveillance, it must be adequately supported and viewed as an essential surveillance activity of CDC. This includes staffing, training, and incorporation of emerging information technologies. The Panel felt not only CDC but also the broader universe of stakeholders must address these needs.

Other major themes identified by the Panel included external perception that data collection and entry into NHSN is labor-intensive and demanding especially for settings with limited infrastructure dedicated to infection prevention and control. Efficient and effective monitoring of HAIs is therefore an area DHQP needs to address. NNIS was very acute-care hospital focused. Today the direction of healthcare delivery is moving rapidly away from hospitals towards venues such as ambulatory care, long-term-care, etc. NHSN must adapt to these realities, and it needs to be flexible and scalable to address a patient-centric focus.

Preliminary Recommendations of the External Peer Review Panel

The Panel's recommendations are summarized below. **Note: more detailed recommendations for HICPAC will be presented at the June 12-13, 2008 meeting.**

- CDC needs to recognize NHSN as a high priority, core surveillance activity and assure adequate support for this program. Advocacy for dependable budgetary support by advisory groups such as HICPAC and other external stakeholders will be essential.
- NHSN should be recognized as the expert entity for setting the standard(s) for surveillance of HAIs and should be utilized throughout the health care delivery system. DHQP should set ambitious goals to incorporate as many health care facilities into NHSN as possible without sacrificing data integrity or quality. To do this will require embracing innovative technology solutions.

- The Panel had several recommendations for HICPAC given its role is to advise the Secretary on matters related to prevention of HAIs. These included:
  - HICPAC should explicitly endorse NHSN as the standard for surveillance of HAIs and reinforce this endorsement in relevant Guidelines and other communications it produces.
  - HICPAC should facilitate linkages between NHSN and evidence-based guidelines, new contributions to the scientific literature, etc., towards development of a fully functional, real-time knowledge network.
  - The Committee, in collaboration with DHQP, should develop a facility-based and/or a care setting-based risk assessment template for application by infection control professionals to surveillance system(s) they develop for their affiliates. NNIS and now NHSN offer a rich resource for indicating appropriate directions for surveillance and HICPAC, their liaisons, and DHQP can apply epidemiologic and analytical skills to development of a template.
  - HICPAC needs to assist DHQP-CDC with development of a vibrant, diverse constituency that support the aims and goals of NHSN as the premier source of information on HAIs.

- The rapid growth in number of enrollees in NHSN will require both short – term and long-term strategic planning. For example, training, data audits and quality control will be an important priority for NHSN to maintain its current high-level performance.
- Attention must be paid to lessening the burden of surveillance and developing efficient, user-friendly data collection especially with the move to a patient-centric healthcare delivery system.
- There are existing examples of collaboration between CDC and other HHS agencies, around topics such as outbreak investigations, collaboration on value-based purchasing, and national estimates of prevalence of infections caused by *Clostridium difficile* and methicillin-resistant *Staphylococcus aureus* (MRSA), but the Panel concluded there is much more potential and value with collaborative analysis/sharing of the NHSN database that can be brought to bear on prevention of HAI. The Panel encourages more of this consistent with GAO Report recommendations.
- Continue to develop and enhance the use of NHSN's eSurveillance project.
- Continue to expand collection of metrics on processes of care that support prevention of HAIs.
- DHQP/CDC should encourage and promote the use of NHSN data by outside researchers. DHQP should also develop a standard policy regarding access to this data, including the specific purpose of the request, what data are needed, and how the information will be used.
- CDC needs to increase visibility and awareness of the value of NHSN and channel findings from surveillance to groups such as consumers using media that will reach a wider audience.