Meeting Minutes
February 12-13, 2009
Atlanta, Georgia
<table>
<thead>
<tr>
<th>Table of Contents</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acronyms</td>
<td>3</td>
</tr>
<tr>
<td>Call to Order, Welcome, Introductions</td>
<td>5</td>
</tr>
<tr>
<td>Division of Healthcare Quality Promotion Updates</td>
<td>6</td>
</tr>
<tr>
<td>Guideline Updates: UTI, Carbapenamase, &amp; HCW</td>
<td>8</td>
</tr>
<tr>
<td>Guidance for Jurisdictions Considering MRSA and / or MDRO Legislation</td>
<td>10</td>
</tr>
<tr>
<td>Proposed Changes of MMR Vaccine “Evidence of Immunity” Requirements for Healthcare Personnel</td>
<td>10</td>
</tr>
<tr>
<td>Norovirus Guideline Draft Review</td>
<td>11</td>
</tr>
<tr>
<td>Surgical Infection Prevention</td>
<td>12</td>
</tr>
<tr>
<td>Pediatric Infection Prevention</td>
<td>13</td>
</tr>
<tr>
<td>Infection Control for Healthcare Personnel</td>
<td>14</td>
</tr>
<tr>
<td>Ambulatory Care Delivery</td>
<td>15</td>
</tr>
<tr>
<td>Liaison Reports</td>
<td>16</td>
</tr>
<tr>
<td>HHS Action Plan for HAI Elimination</td>
<td>20</td>
</tr>
<tr>
<td>Brainstorming Session</td>
<td>23</td>
</tr>
<tr>
<td>Draft manuscript: “Estimating the proportion of reasonably preventable healthcare associated infections and associated mortality and costs”</td>
<td>26</td>
</tr>
<tr>
<td>Closing Session: Action Items / Certification</td>
<td>27</td>
</tr>
<tr>
<td>Attachment 1: Attendance Roster</td>
<td>29</td>
</tr>
</tbody>
</table>
## Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Name</th>
</tr>
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<tbody>
<tr>
<td>AABB</td>
<td>American Association of Blood Banks</td>
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<tr>
<td>ACET</td>
<td>Advisory Committee on Elimination of Tuberculosis</td>
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<td>ACIP</td>
<td>Advisory Committee on Immunization Practices</td>
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<td>ACOEM</td>
<td>American College of Occupational and Environment Medicine</td>
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<td>ACS</td>
<td>American College of Surgeons</td>
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<td>AHA</td>
<td>American Hospital Association</td>
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<td>AHRQ</td>
<td>Agency for Healthcare Research and Quality</td>
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<td>BCG</td>
<td>Bacille Calmette-Guerin</td>
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<td>CAUTI</td>
<td>Catheter-Associated Urinary Tract Infections</td>
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<td>CDAD</td>
<td>Coordinating Center for Infectious Diseases</td>
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<td>CCID</td>
<td>Clinical Document Architecture</td>
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<td>CDC</td>
<td>Centers for Disease Control and Prevention</td>
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<td>CDI</td>
<td>Clinical and Environmental Laboratory Branch</td>
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<td>CHCA</td>
<td>Child Health Corporation of America</td>
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<td>CLSI</td>
<td>Clinical and Laboratory Standards Institute</td>
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<td>CMS</td>
<td>Centers for Medicare &amp; Medicaid Services</td>
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<td>CoPs</td>
<td>Medicare Conditions of Participation</td>
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<td>CRKP</td>
<td>Carbapenem Resistant <em>K. pneumoniae</em></td>
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<td>CVC</td>
<td>Central Venous Catheter</td>
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<td>CVM</td>
<td>Center for Veterinary Medicine</td>
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<td>CMS</td>
<td>Department of Homeland Security</td>
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<td>Division of Healthcare Quality Promotion</td>
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<td>DTBE</td>
<td>Division of Tuberculosis Elimination</td>
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<td>EAMT</td>
<td>Environmental and Applied Microbiology Team</td>
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<td>ECMO</td>
<td>Extracorporeal Membrane Oxygenation</td>
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<td>EIPs</td>
<td>Emerging Infections Programs</td>
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<td>EMR</td>
<td>Electronic Medical Record</td>
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<td>EPA</td>
<td>Environmental Protection Agency</td>
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<td>FDA</td>
<td>Food and Drug Administration FDA</td>
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<td>HAI</td>
<td>Healthcare-Associated Infections</td>
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<td>HCP</td>
<td>Healthcare Personnel</td>
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<td>HHS</td>
<td>Department of Health and Human Services</td>
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<td>HICPAC</td>
<td>Healthcare Infection Control Practices Advisory Committee</td>
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<td>HIEs</td>
<td>Health Information Exchanges</td>
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<td>HL7</td>
<td>Health Level Seven</td>
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<td>ICAT</td>
<td>Infection Control Audit Tool</td>
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<td>IPPS</td>
<td>Inpatient Prospective Payment</td>
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<td>IT</td>
<td>Information Technology</td>
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<td>LRN</td>
<td>Laboratory Response Network</td>
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<td>MAC</td>
<td><em>Mycobacterium Avium</em> Complex</td>
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<td>MDRO</td>
<td>Multidrug-Resistant Organisms</td>
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<td>MDR-TB</td>
<td>Multidrug-Resistant TB</td>
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<td>MMR</td>
<td>Measles, Mumps, Rubella</td>
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<td>MMWR</td>
<td>Morbidity and Mortality Weekly Report</td>
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<td>MOU</td>
<td>Memorandum of Understanding</td>
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<td>MTB</td>
<td><em>Mycobacterium tuberculosis</em></td>
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<td>NACHRI</td>
<td>National Association for Children’s Hospitals and Related Institutions</td>
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<td>NCID</td>
<td>National Center for Infectious Diseases</td>
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<tr>
<td>NCPDCID</td>
<td>National Center for Preparedness, Detection and Control of Infectious</td>
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<tr>
<td>Acronym</td>
<td>Description</td>
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<tr>
<td>NCIRD</td>
<td>National Center for Immunization and Respiratory Diseases</td>
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<td>NCPHI</td>
<td>National Center for Public Health Informatics</td>
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<td>NHANES</td>
<td>National Health and Nutrition Examination Survey</td>
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<td>NHIN</td>
<td>Nationwide Health Information Network</td>
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<td>NHSN</td>
<td>National Healthcare Safety Network</td>
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<td>NHSRC</td>
<td>National Homeland Security Research Center</td>
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<td>NICU</td>
<td>Neonatal Intensive Care Unit</td>
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<td>NQF</td>
<td>National Quality Forum</td>
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<td>NSQIP</td>
<td>National Surgical Quality Improvement Program</td>
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<td>NTM</td>
<td>Nontuberculosis Mycobacteria</td>
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<td>ONC</td>
<td>Office of the National Coordinator</td>
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<td>PCICU</td>
<td>Pediatric Cardiac Intensive Care Units</td>
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<td>PFGE</td>
<td>Pulsed-Field Gel Electrophoresis</td>
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<td>PHIS</td>
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<td>PICU</td>
<td>Pediatric Intensive Care Unit</td>
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<td>PRB</td>
<td>Prevention and Response Branch</td>
</tr>
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<td>PSOs</td>
<td>Patient Safety Organizations</td>
</tr>
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<td>PSQIA</td>
<td>Patient Safety and Quality Improvement Act</td>
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<td>RGM</td>
<td>Rapidly-Growing Mycobacteria</td>
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<td>RSV</td>
<td>Respiratory Syncytial Virus</td>
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<tr>
<td>SHEA</td>
<td>Society for Healthcare Epidemiology of America</td>
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<tr>
<td>SNF</td>
<td>Skilled Nursing Facility</td>
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<td>SSI</td>
<td>Surgical site infection</td>
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<td>UTI</td>
<td>Urinary Tract Infection</td>
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<td>VA</td>
<td>Veteran’s Administration</td>
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<td>VLBW</td>
<td>Very Low Birth Weight</td>
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<td>VPDs</td>
<td>Vaccine Preventable Diseases</td>
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<td>VRE</td>
<td>Vancomycin-Resistant Enterococcus</td>
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<td>VRSA</td>
<td>Vancomycin-Resistant <em>Staphylococcus aureus</em></td>
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<tr>
<td>XDR-TB</td>
<td>Extensively Drug-Resistant Tuberculosis</td>
</tr>
</tbody>
</table>
HEALTHCARE INFECTION CONTROL PRACTICES ADVISORY COMMITTEE

February 12-13, 2009
Atlanta, Georgia

Meeting Minutes

The Department of Health and Human Services (HHS) and the Centers for Disease Control and Prevention (CDC), National Center for Preparedness, Detection, and Control of Infectious Diseases (NCPDCID), Division of Healthcare Quality Promotion (DHQP) convened a meeting of the Healthcare Infection Control Practices Advisory Committee (HICPAC) on February 12-13, 2009 at CDC’s Global Communications Center, Building 19, Auditorium B3, in Atlanta, Georgia.

Call to Order, Welcome, Introductions

Patrick J. Brennan, MD, HICPAC Chairman
Chief Medical Officer, Division of Infectious Diseases
University of Pennsylvania Health Systems

Dr. Brennan called the meeting to order at 9:22 a.m. on June 12, 2009. He welcomed those present, including several new members, expressing gratitude for everyone’s time and attendance. He then requested that participants introduce themselves. The list of those in attendance is appended to the minutes as Attachment 1. The following conflicts of interest were declared:

- Denise M. Murphy, MPH, RN, CIC will serve as faculty for a course that Merck is conducting for their Six Sigma Division in Spring 2009.
- Alexis Elward, MD will be conducting a webcast sponsored by Kimberly Clark
- Barbara Soule, RN, MPA, CIC will be speaking for Efficon, is engaged in consulting work with Johnson & Johnson, and is working for Ortho-McNeil.
- Tammy Lundstrom, MD, JD attended a Joint Commission resources review of multidrug-resistant organisms (MDRO) tools sponsored by Ortho-McNeil on behalf of Assention Health

Ms. Wendy Vance, HICPAC’s Committee Management Specialist, reviewed housekeeping items.
Prevention and Response Branch

Joseph Perz, DrPH
Prevention Team Lead

Dr. Perz reported on examples of recent activities in the Prevention and Response Branch (PRB), as well as issues pertaining to *Clostridium difficile* infection (CDI) control and prevention. PRB continues to develop an Infection Control Audit Tool (ICAT), and worked with the Centers for Medicare & Medicaid Services (CMS) in 2008 to pilot the tool in ambulatory surgical centers. PRB has also been making progress with its Safe Injection Practices Coalition One and Only Campaign ([http://www.oneandonlycampaign.org](http://www.oneandonlycampaign.org)). The Safe Injection Practices Coalition consists of about nine member groups, including CDC as well as patient advocacy groups and a host of professional organizations. DHQP had the pleasure of announcing this campaign at a press event at the Capitol in D.C.

Turning to *Clostridium difficile* infections, Dr. Perz pointed out that hospitalizations related to CDI continue to increase, reminding everyone that the recent SHEA / IDSA Compendium addressed basic and special approaches to prevent CDI in acute care hospitals. This compendium also addresses prevailing questions and controversies pertaining to CDI control. Another development that makes this discussion pertinent and necessary is that there is now Food and Drug Administration (FDA) clearance for a new PCR-based assay. The current assay is FDA-approved for diagnosis in symptomatic patients only; however, DHQP (PRB) is holding discussions with the manufacturer and FDA regarding use of PCR-based diagnostics for the detection of carriers and potential infection control interventions.

The following questions were posed to the HICPAC members for consideration and discussion:

- What are the potential ramifications and implications of identifying asymptomatic *Clostridium difficile* carriers?
- In the interim, should HICPAC extend the duration of isolation for CDI patients in the isolation guideline for those patients with clinical disease?

**Discussion Points**

- This is an example of an area in which HICPAC will require additional input from a variety of sources, particularly given the potential for unintended consequences (e.g., monetary, patient safety, et cetera).

- While from the laboratory perspective it is great that the assay has been approved, the majority of hospitals will not be able to afford these assays. As a result, hospitals will continue to use enzyme immunoassay-based toxin assay and when testing asymptomatic patients, this will result in a dramatic increase in false positives and the vast majority of people tested being placed in isolation unnecessarily.
• Many hospitals have already taken it upon themselves to extend the duration of isolation for the entire hospitalization period.

• The gene is specific for toxin production, so most patients who test positive for the gene using the molecular test will have toxin producing organisms. An asymptomatic individual could harbor a toxin-producing strain and not be sick. If someone had salmonella diarrhea, theoretically they would be positive if they harbored the organism even if it was not the cause of their current diarrhea.

• Perhaps a more formal decision model would be beneficial in terms of estimating the potential economic and clinical consequences, and so that decisions are more sound and transparent.

• There is a need to determine a standard framework / principles not only for HICPAC, but also for decision making at the local level in order to avoid the confusion of dealing with a barrage of new recommendations.

• Further vetting of the data and the development of a framework should be included on the June HICPAC agenda.

Clinical and Environmental Laboratory Branch

Matthew J. Arduino, DrPH, Chief
Environmental and Applied Microbiology Section

The Clinical and Environmental Laboratory Branch (CELB) is increasingly in need of outside sources of funding for its laboratory work. For FY09, the branch garnered funding from the Environmental Protection Agency (EPA) from the Office of Water to conduct drinking water disinfection work. Funding has also been received from the National Homeland Security Research Center (NHSRC) to examine surface sampling methods, develop a swab and wipe for recovery of organisms from surfaces, and develop an amino magnetic bead separation of Bacillus anthracis spores from soil. An allocation was received from the Department of Homeland Security (DHS) to fund a study examining rapid MIC testing for Bacillus anthracis utilizing a rapid viability PCR assay in addition to examining sample integrity in the shipping process.

Other recent activities and updates include: the Division of Tuberculosis Elimination (DTBE) is in the process of transferring nontuberculosis mycobacteria (NTM) activities to DHQP; an evaluation of Staphylococcus aureus strain typing methods is being conducted of spa typing and T5000 (PCR-mass spec); and preparations are underway for a study of C. difficile collected as part of the Emerging Infections Program’s (EIP’s) national surveillance activity.

Water safety funds have also been obtained for two FY09 projects: 1) a study of the influence of amoeba on chlorine efficacy against pathogens residing in water distribution systems, because even in NTM amoeba play a role; and 2) an evaluation of shock chlorination and chloramination for pathogen control in biofilms.

In conclusion, Dr. Arduino reported that on March 31-April 1, 2009 the laboratory will conduct an external peer review at CDC, during which six external partners will examine the laboratory program.
National Healthcare Safety Network

Daniel Pollock, MD
Surveillance Branch Chief

Dr. Pollock reported on the National Healthcare Safety Network (NHSN), indicating that growth in terms of the number of users continues with 2146 facilities in 48 states as of February 10, 2009. Mandates for healthcare-associated infections (HAI) reporting are being implemented in 19 states using NHSN as the technical infrastructure for mandatory reporting, with several other states engaged in conversations with the agency about possible use of NHSN. There is new functionality in the system, with new capacities for monitoring central line insertion practices and high risk patient influenza vaccination coverage. Currently, a new hemovigilance module is in pilot testing, which is a departure from focus healthcare-associated infection. This module, which focuses on blood safety amongst recipients of blood products, was developed with the American Association of Blood Banks (AABB) and is expected to go into full production in mid-March. Forthcoming modules include Multidrug-Resistant Organism (MDRO) and *Clostridium difficile* Associated Disease (CDAD) and Healthcare Personnel Safety with two modules (e.g., influenza vaccination coverage; and blood and body fluid exposure). Definition reviews and changes underway include urinary tract infection (UTI) and pneumonia. The Surveillance Branch continues to work as actively as possible to make advances in electronic surveillance, focusing on use of electronic messages for reporting raw data and electronic documents for reporting infection events and denominator data.

Motion

Dr. Soule made a motion for HICPAC to send a formal letter, aligned with the GAO report, to the Secretary of HHS requesting sufficient support to sustain and further develop NHSN. Dr. Olmsted seconded the motion. The motion carried unanimously.

Guideline Updates: UTI, Carbapenamase, & HCW

Michael Bell, MD
Associate Director for Infection Control
Division of Healthcare Quality Promotion
National Center for Preparedness, Detection, and Control of Infectious Diseases
Centers for Disease Control and Prevention

Dr. Bell reported that the UTI Guideline is close to publication in the *Federal Register* for public comment. Once published, the guideline will be open for comments for one month. A dedicated email address will be in place to collect all input rather than a website, given that comments must be screened for inappropriate language. All comments will be published as appropriate on the website. An overarching issue that might inform other guidelines HICPAC pursues is that while they have rightly engaged in a critical and substantially upgraded approach to evidence review and analysis, they have also included the jargon of evidence review and analysis. While the language used for evidenced-analysis in clinical decision-making might make sense, it might not be useful to the actual users of the guideline. With that in mind, the UTI Guideline language should be adjusted in order to make it clearer for users. Formatting
options have also been suggested. In addition, it was suggested that all new guidelines include a brief bulleted list of important changes that have been made since the last edition.

The carbapenamase document is on schedule to be published in the *Morbidity and Mortality Weekly Report* (MMWR) in March 2009. This document basically addresses the importance of identifying and being aware of the prevalence and incidences of carbapenamase-resistant organisms in locales / facilities. This will be published in partnership with a couple of web-based protocols for modified Hodge tests and other microbiologic protocols that are currently in the process of being cleared.

The Healthcare Worker (HCW) Immunization Guideline is in progress with the Advisory Committee on Immunization Practices (ACIP). There is not yet a firm date for publication, given that updates are still being made to several sections of the revised recommendations. There also may be changes to policy related to measles immunity for healthcare personnel, which will be presented to ACIP during their February 2009 meeting for a decision that will likely be made in June 2009. Hopefully, recommendations will be presented to ACIP in October 2009 and HICPAC may be able to bring this to a close during the November 2009 meeting.
Dr. Bell prefaced Dr. Lundstrom’s presentation by reminding everyone that during the past two meetings, there were discussions regarding states increasingly wanting to legislate MRSA, and in a couple of instances a broader MDRO language has been attempted. Draft legislation that has been shared with HICPAC has included provisions that could be problematic to implement (e.g., pre-admission screening for all MDROs). Dr. Lundstrom indicated that the suggested title for the report is “Guidance for Jurisdictions Considering MRSA and / or MDRO Legislation.” She then reviewed the following list of some of the potential benefits, risks, and unintended consequences of a legislative approach.

Dr. Engel proposed a motion that HICPAC send out for public health law review the question pertaining to whether regulation of matters concerning hospital infections should be relegated to the police powers of the state. Dr. Ramsey seconded the motion. With 4 members voting in favor and 10 members opposed, the motion did not carry.

Amy Parker, MSN, MPH, LCDR USPHS
CDC/CCID/NCIRD/DVD/EB

LCDR Parker provided background on current measles, mumps, and rubella (MMR) vaccine recommendations for healthcare personnel (HCP) routine vaccination and vaccination during outbreaks; and discussed the proposed changes and rationales.

Since the last revision of the ACIP / HICPAC vaccine recommendations for HCP in 1997-98, the epidemiology of measles has changed considerably. The US declared elimination, meaning interruption of endemic disease transmission, in 2000. However, the there is an on-going risk of measles importation and indigenously acquired cases. A single measles case anywhere in the US now results in an extensive response by local and state health departments to contain transmission. There is now a much higher expectation of maintaining high population immunity to measles and minimizing risk of transmission than a decade ago. Between 2001 and 2007, there was an average of 60 total reported measles cases per year. About half of the cases every year were importations. In 2008, there was a sharp increase in total number of cases with 140 and more spread from the imported cases compared to previous years.
There are several reasons why changes are being proposed to vaccination and immunity requirements for HCP. In the era of measles and rubella elimination, the tolerance for any cases or exposures has decreased. To maintain elimination, the goal is to have 100% immunity in high risk populations such as HCP. Proposed changes are driven primarily by measles, but are also relevant to rubella, another disease that has been eliminated in the US. Measles is highly contagious with the chance of spreading in unvaccinated subgroups. Importations into the US are continuing. Due to the high exposure risk, it is important to protect HCP preemptively. During outbreaks, it is disruptive and time-consuming to determine which staff are born before 1957, to find them, and to vaccinate them. Current permissive vaccine recommendations that allow healthcare facilities to consider vaccinations for HCP born before 1957 are not clear, and many facilities are already conducting routine serology screening for vaccination of this group.

Currently, healthcare personnel are considered to have evidence of immunity if they have one or more of the following, with the proposed changes underlined or stricken:

1) Appropriate vaccination against measles, mumps, and rubella (i.e., administration on or after the first birthday of two doses of live measles and mumps vaccine separated by greater than or equal to 28 days and at least one dose of live rubella vaccine)
2) Laboratory evidence of immunity or laboratory-confirmation of disease
3) Documentation of physician diagnosed disease (measles & mumps)
4) Born before 1957

The first proposed revision is the laboratory confirmation of disease, as well as laboratory evidence of immunity. The second is for the elimination of documentation of physician diagnosed disease for measles and mumps. The third proposed revision is for the elimination of birth before 1957 as acceptable evidence of immunity for HCP.

LCDR Parker will present this information to the ACIP during the February 2009 meeting, and it will likely be voted on by ACIP during the June 2009 meeting. Unless HICPAC decides to vote on the matter first, ACIP will bring the issue back to HICPAC for endorsement following the ACIP vote.

Norovirus Guideline Draft Review

Kurt B. Stevenson, MD, MPH
Division of Infectious Diseases
Department of Internal Medicine
The Ohio State University Medical Center

Dr. Stevenson acknowledged the extensive work of the Norovirus Guideline Working Group, and reported on the status of the “Guideline for the Prevention and Management of Norovirus Outbreaks in Healthcare Settings.” While not ready for distribution, a sample copy of the guideline was provided to be reviewed on-site, which included the evidence tables. Internal and external reviewers are being engaged to further review the document.

The initial questions formulated were as follows:
1. What patient, virus or institution characteristics increase or decrease the risk of Norovirus infection in healthcare settings?
2. What interventions best prevent Norovirus outbreaks in healthcare settings?
3. What are the best methods to identify a Norovirus outbreak in a healthcare setting?
4. What patient management interventions best contain Norovirus outbreaks in healthcare settings?
5. What environmental management interventions best contain Norovirus outbreaks in healthcare settings?

As the Working Group has reviewed the literature and developed the tables, the key questions were revised as follows:

1. What patient, virus, or environmental characteristics increase or decrease the risk of Norovirus infection in healthcare settings?
2. What are the best methods to identify a Norovirus occurrence or outbreak in healthcare settings?
3. What interventions best prevent or contain Norovirus outbreaks in healthcare settings?

With respect to the analytic framework for research questions, the group took into consideration patients at baseline; sporadic infection / outbreak; and morbidity and mortality and spread of outbreak.

The same general process that was used with the UTI Guideline was used for the Norovirus Guideline. In September 2007, the working group reviewed the previous guidelines, developed the key questions that arose out of that review, and vetted these with clinical experts. In November 2007, databases were identified, a search strategy was developed, references were stored, and duplicates were resolved. In February 2008, abstract and full text screenings began. Initially, 3700 relevant studies were identified of which 3323 studies were eliminated upon further review. The 379 full text studies that remained were carefully reviewed, at which time another 248 studies were eliminated, some because they were not primary analytical research, some because they did not relate to the key questions, and some because they were duplicates or full text was not available. Following the abstract and full text screenings, 130 studies remained. In June 2008, data extraction and synthesis was conducted in order to develop evidence and grade tables. The working group is currently in the process of developing the narrative summaries and formulating recommendations. The plan is to have the guideline in final draft form by the June 2009 HICPAC meeting.

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**Surgical Infection Prevention**

**William P. Schecter, MD**  
Department of Surgery, Ward 3A 17  
San Francisco General Hospital

Dr. Schecter enumerated the variety of sites in which surgeons are interested in preventing infections, which include: surgical site infections; catheter-associated infections from intravascular and drainage catheters (e.g., bladder, abdomen, chest, cranial vault, and soft tissues); ventilator-associated pneumonias; occupational / therapeutic transmission of blood-borne infections; and treatment of established infections requiring debridement, drainage, and source control.
During this presentation, Dr. Schecter concentrated his remarks on surgical site infections (e.g., superficial wound infections and deep intra-abdominal or intra-thoracic infections). The causes of superficial infections probably differ slightly from the causes of deep infections, which typically relate to an anastomotic leak or piece of necrotic material left in the abdomen or chest (e.g., tissue); whereas superficial infections are related to some degree to contamination, local wound factors, and immunity.

**Discussion Points**

- With respect to whether HICPAC should develop an updated surgical site infection guideline:
  - Some areas of the guideline could be updated and revised (e.g., there is new research that should be added, and since the 1999 guideline the number of surgeries that include implants has increased considerably).
  - Prior to guideline revisions, other areas require attention: 1) a clearer wound classification system is needed, 2) data reported according to wound classification are needed, and 3) a severity score for surgical site infection that is easy to use and relevant is needed.
  - Guideline revisions should be made in partnership with ACS’s National Surgical Quality Improvement Program (NSQIP) and/or the Surgical Infection Society.

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**Pediatric Infection Prevention**

Alexis Elward, MD, PhD  
Assistant Professor, Pediatric Infectious Diseases  
Washington University School of Medicine  
Department of Pediatrics, Division of Infectious Diseases

Dr. Elward reviewed issues specific to pediatric infection prevention, identifying gaps in terms of benchmarking and research, reviewing the list of stakeholders, and discussing the manner in which future HICPAC guidelines should address these issues.

**Discussion Points**

- Given the number of gaps in evidence, perhaps it would be of benefit to the research community and other federal agencies to broadly disseminate a summary of these gaps to help focus research activities.

- Guidelines regarding drainage tubes may be timely, particularly given that there is a prototype with the UTI Guideline. HICPAC could perhaps get some traction on this issue.

- Surgical site infection is one of the greatest problems with the least useful data. Many of these infections occur in the outpatient setting due to ambulatory surgery, with no organized method to capture these infections. There was some sentiment that HICPAC should answer a major question such as this versus questions that are easier to answer.
Mark Russi, MD, MPH  
American College of Occupational and Environmental Medicine

Dr. Russi illustrated the extent to which he has utilized his copy of the “Infection Control for Healthcare Personnel” by holding up his well-used, dog-eared hard copy of the guideline. He stressed that this is an extremely useful document, with solid guidance pertaining to the infrastructure of a medical center-based occupational health unit and what practices need to be in place in order to deal with infection control issues. The guidance includes discussions that move beyond the specific infectious agents to deal with special populations (e.g., pregnant personnel, lab personnel, emergency response personnel, et cetera). Much of what is addressed does not require radical change.

A number of components, particular with regard to specific organisms, need to be updated such as pertussis. Some sections need to be added based on the experience from SARS, the guidance that has been developed regarding pandemic influenza, changes pertaining to tuberculosis, the adequate literature that now supports treatment within 12 to 16 weeks of seroconversion of acute hepatitis C, et cetera. This may also be a very good time to direct attention to the role of healthcare workers in infection control in hospitals in terms of MRSA, training opportunities, and other issues.

A decision needs to be made regarding the approach to updating the document, giving consideration to whether it might follow the approach used for the “Healthcare Worker Vaccine” document in that it is being limited to a compendium of extant guidance.

**Discussion Points**

- A complete rewrite of the document is not necessary. For topics where recommendations are not substantively different, it should be sufficient to state that the guideline has not changed from the previous version and simply refer back to that version. The exception may be important references that are worth noting in terms of particular issues.

- Make this a live document by publishing it on-line so that as recommendations change, new vaccines are approved, et cetera it can easily be updated and attention can easily be called to the components that have been revised. Consideration should be given to doing this with other guidelines as well.

- Other portions of the guideline that require updating based on the current literature, public disclosure laws, et cetera include: Varicella; screening following exposure for all HCW known to be colonized with MRSA; work restrictions based on pathogens and procedures; the broader issue of HCW who do choose to work in terms of when this is safe or not; post sharps injury and body fluid exposure to address contemporary testing and real time issues; and process and outcome metrics.
Motion

Dr. Soule made a motion for HICPAC to revise the “Infection Control Guideline for Healthcare Personnel.” Dr. Murphy seconded the motion. The motion carried unanimously.

Ambulatory Care Delivery

Michael R. Bell, MD
Associate Director for Infection Control
Division of Healthcare Quality Promotion
National Center for Preparedness, Detection, and Control of Infectious Diseases
Centers for Disease Control and Prevention

Dr. Bell reminded everyone that during the previous HICPAC meeting, ambulatory care delivery was discussed to some extent with regard to the Nevada experience with the on-going transmission of hepatitis C virus. This illustrates the need to address how to approach ambulatory care settings. As previously discussed, ambulatory care lacks the quality of evidence necessary to produce a traditional HICPAC guideline using the standard rigorous approach. Perhaps instead guidance could be produced in the form of a “White Paper,” that is less formal in terms of the evidence base, and that does not go through the rigorous process used for the two guidelines in progress. This is not intended to be a patient-care practices guidance, but is rather a guidance for infection prevention translated to the ambulatory care setting. There appears to be a need in ambulatory care for high level ventilator-associated pneumonia prevention and bundles, as well as the basic safe practices of not reusing a syringe. This may be a place to begin to address the challenge in conducting post-operative surgical site infection surveillance in ambulatory settings. With regard to the child life and sibling issue, ambulatory settings and pediatric care are rife with the need for fomite handling and cohorting issues that are unique to pediatrics. This could provide a testing ground for some of the specialized sub-sections that could be addressed reasonably well.

Following a discussion, Dr. Bell concluded that a concise document is needed that focuses on ambulatory care in general. The document should serve the purposes of the CMS rules so that CMS will have something with which to regulate. In contrast to documents dealing with infection control teams and healthcare epidemiologists whose interpretive skills can be relied upon, this document will need to be comparatively prescriptive and concrete (e.g., In ambulatory care settings, you must do x, x, and x. You must never do x, x, or x). The document should probably be no more than 20 pages in length, and should serve as the center point for the other ambulatory care guidelines that are already in place (e.g., oral health, dialysis, et cetera) such that these can be linked to easily. It is not realistic to include ambulatory surgical care in a 20-page document that is intended to address the basics; however, the opportunities to add to this document are many and will likely become more numerous moving forward.
Advisory Committee on Elimination of Tuberculosis
Ms. Stricof reported that the Advisory Committee on Elimination of Tuberculosis (ACET) continues to develop guidance on Bacille Calmette-Guerin (BCG) vaccine for individuals traveling to high endemic areas for extensively drug-resistant tuberculosis (XDR-TB) and multidrug-resistant TB (MDR-TB). In addition, ACET is urging a shift from using the conventional laboratory methods for diagnosing *Mycobacterium tuberculosis* (MTB) to the more rapid diagnostic capabilities. Ms. Stricof suggested that HICPAC should collaborate in the discussion regarding how to interpret nucleic acid amplification techniques on smear negative and / or smear positive patients and when to remove individuals from isolation, given that interpretation of the recommendation is very difficult.

Agency for Healthcare Research and Quality
With respect to the Patient Safety and Quality Improvement Act (PSQIA), Dr. Baine indicated that the effective date of the Final Rule was January 19, 2009. As of February 4th, 43 organizations had been listed (http://www.pso.ahrq.gov/listing/psolist.htm) as Patient Safety Organizations (PSOs). The National Quality Forum intends to complete the review of comments on the Common Formats by the end of February. Plans are under way for a kick-off meeting of the PSOs September 16-18 2009 to follow the AHRQ Annual Meeting September 13-16. In addition, a paper is currently in press that shows that a better estimate can be made of catheter-associated UTIs by simply looking at all surgical patients versus attempting to find a specific notation of the insertion of a catheter as a procedure in charts.

American College of Occupational and Environmental Medicine
Dr. Russi reported that there have been six new position statements from ACOEM since the fall, including: 1) Depression in the Working Population; 2) Ethical Aspects of Drug Testing; 3) Qualifications of Medical Review Officers (MROs) in regulated and non-regulated drug testing; 4) The personal physician’s role in helping patients with medical conditions stay at work or return to work; 5) HIV and AIDS in the Workplace; and 6) Seasonal Influenza Prevention in Healthcare Workers, which is improved over the previous document, but stops short of recommending mandatory vaccinations. It does discuss adherence to good infection control practices, and recommends mandatory education and tracking to ensure that all mandatory education is carried out with HCWs. The ACOEM annual meeting will take place April 24-29, 2009 in San Diego, California.

American Hospital Association
Ms. Schulman indicated that AHA submitted a comment letter to HHS on the “Action Plan to Prevent Healthcare-Associate Infections,” which was included in members’ meeting packages. As mentioned in the last HICPAC meeting, AHA was recently awarded a three-year research contract received from AHRQ to implement an evidence-based intervention to reduce central line-associated bloodstream infections in ICUs in at least 100 hospitals in 10 states. They will soon announce the 10 state hospital associations that have been selected (i.e., Colorado, California, Florida, Massachusetts, Nebraska, North Carolina, Ohio, Pennsylvania, Texas, and Washington), and a number of patient safety organizations have been chosen to assist in the rolling out of this research.
Association of periOperative Registered Nurses
Ms. Blanchard indicated that the 2009 “Perioperative Standards and Recommended Practices” book has been published. The 56th annual Congress to Embrace the Future March 14-19, 2009, AORN will roll out its first electronic “Recommended Practices,” which addresses hand hygiene.

Association for Professionals in Infection Control and Epidemiology
Ms. Bjerke reported that APIC’s Legislative Department has been very active in monitoring funding, and submitting comments on the HHS “National Vaccine Plan” as well as the “Action Plan to Prevent HAIs,” and is engaged in on-going state and federal monitoring. There is a new “Ambulatory Care Newsletter.” APIC has a specialty group in the area of ambulatory care, which is currently working on a state-of-the-art report on home laundering of scrubs. While research on this issue is currently scant, given that this is a major issue APIC is collaborating with AORN and the Recommended Practices Group in order to show joint support. The concern is that there are existing recommendations; however, it is recognized that home laundering cannot be enforced and that there is no method by which to monitor this. There is a public perception about the issue due to some of the inflammatory news reports that have been published. As the culture changes and there is staff turnover, compliance with operating room aseptic technique is not adhered to as it should be. For example, a number of surgeons and other allied operating room staff support multiple facilities wear the same scrubs as they did on the outside, and are not putting on sterile gowns prior to entering the sterile field. The movement to shift to home laundering was largely financial, given that many hospitals were financially burdened and did not want to continue to have to support commercial laundry costs. Moreover, the scrub has become the healthcare uniform of the day. Many staff members, including receptionists, wear these. Thus, it is difficult to distinguish those who are in restricted areas from everyone else. In order to make this a more powerful document, APIC would be happy to involve surgeons, anesthesiologists, and AHA representation to the group working on this issue. APIC’s annual meeting, The Power of Collaboration, will be convened June 7-11, 2009 in Ft. Lauderdale, Florida.

Center for Medicare and Medicaid
Ms. Miller noted that CMS has entered the rulemaking phase and will be proposing the selected hospital-acquired conditions in the April 2009 publication of the inpatient prospective payment (IPPS) rule, which will all be finalized in the fall.

Consumers Union
Ms. McGiffert reported that along with a number of other consumer organizations and individuals, the Consumers Union submitted comments to HHS regarding the “National Vaccine Plan,” which was included in the members’ packages. A conference is planned in March 2009 in Washington, DC for consumers who are working on patient safety issues.

Council of State and Territorial Epidemiologists
Dr. Kainer indicated that CSTE submitted comments to HHS regarding the “Action Plan to Prevent HAIs.” CSTE’s annual conference will be convened in June 2009 in Buffalo, New York. There will be one plenary session and four breakout sessions pertaining to HAIs, which illustrates how the discipline of HAI is moving into the realm of state health departments.
Food and Drug Administration
Dr. Murphey reported that FDA has published a 2009 Medical Device Safety Calendar (Luer Misconnections) which focuses on this very important safety issue. This is an issue for all types of connections. Misconnections can lead to patient injury, infection, and even death. The entire calendar is available at www.fda.gov/cdrh/luer. It contains important safety tips from the Joint Commission. It is not copyrighted or restricted in any way, and FDA encourages use of all or part of it in hospital safety efforts. This is a good example of a tool that could be used for other issues, such as injection safety. With respect to luer locks, while these are supposed to facilitate connections and are standardized, to prevent IV luers from interconnecting with other luers industry would have to develop a different system. The FDA would like for this to be done, but it does not occur often enough to legislate a change.

FDA is moving toward the bar coding of medical devices in the same way medical drugs are currently bar coded. Although this will be a very complicated undertaking that will take a few years, in the long-term it will allow the tracking of what happens with devices and will help users identify devices for which problems have arisen. Given that this process is in the initial stages, no decisions have been made about what level of bar coding may be selected. An FDA-convened workshop, Unique Device Identification Public Workshop, was underway February 12, 2009 in Gaithersburg, Maryland to deliberate this issue. Numerous stakeholders were invited, including manufacturers. It was noted that comments could be posted to the Docket until 2/27/09.

The Joint Commission
With respect to the discussions pertaining to engineering solutions, Dr. Wise pointed out that they still receive incidence reports of patients on oxygen being asphyxiated because they receive nitrogen and CO₂. Although a connection of oxygen ostensibly cannot be hooked to nitrogen, they have found the root cause of the problem to have been an engineer using a wrench to make them fit illustrating that engineering controls can fail. The Joint Commission’s Hand Hygiene Monograph, “MEASURING HAND HYGIENE ADHERENCE: OVERCOMING THE CHALLENGES” is expected to be published in March 2009 on The Joint Commission’s website. The monograph is the result of collaboration with many stakeholder organizations committed to reducing hospital acquired infections and improving hand hygiene. The monograph focuses on the challenges associated with hand hygiene measurement. Specifically the monograph addresses: Strengths and limitations of different strategies for measuring hand hygiene; resources for measurement and improvement; and examples of measurement tools. The Joint Commission is currently working with partners to determine mechanisms to ensure that this very important document is well-maintained.

National Institutes of Health
Ms. Palmore indicated that NIH recently participated in a federal task force regarding influenza vaccination of healthcare workers, as well as the HHS committees that developed the HAI recommendations. In addition, NIH began mandatory vaccination in its own hospital of all employees with any patient care contact. An 87% rate of vaccination was achieved among those employees, with 11% declining and 1% falling off of the grid. Employees who declined were required to give their reasons for declination, which she will be presenting at a late-breaker poster at SHEA. NIH cannot force employees to be vaccinated, and they did get some pushback. However, the department heads bought into mandatory vaccination before the campaign began, which was beneficial in terms of achieving a high rate of compliance. The number of employees who had medical complications was miniscule at 90 out of nearly 3000. Dr. Murphy added that BJC HealthCare made influenza vaccines mandatory across the entire
system, which includes 13 hospitals and approximately 25,000 employees. They achieved 98% compliance. As at NIH, this was better received in the groups who were educated prior to the launch of the vaccination program.

Public Health Agency of Canada
Ms. Paton expressed the Public Health Agency of Canada’s gratitude for being included as a liaison member to HICPAC. The agency is currently engaged in a great deal of work pertaining to risk assessments, and has begun to think of these in terms of an organizational risk assessment for infection control and a point of care risk assessment.

Society for Healthcare Epidemiology of America
Dr. Maragakis reported that SHEA signed a health care coalition letter sent by multiple organizations to Congress and the White House urging that several billion dollars remain in the final legislation for the stimulus bill. SHEA has also submitted a response to the HHS “Action Plan to Prevent HAIs.” SHEA has developed a course to help California meet its new requirement of official CME accredited training for infection control, which will be offered prior to the SHEA that will be convened March 19, 2009 in San Diego. SHEA is also seeking other opportunities to offer this course. With respect to the compendium, plans are being discussed to publish an on-line, live document so that updates can be made available electronically rather than continually having to republish the full document. This is currently under the purview of the SHEA Guidelines Committee. Dr. Brennan added that there are six FAQs included in the patient education materials that accompany the compendium, which have been very well-received and are being widely used. These were developed by SHEA, CDC, and their partners. These have been translated into at least one other language, with more translations on the horizon. The SHEA Decennial Annual Scientific Meeting will be convened March 18-21, 2010 at the Hyatt Regency Atlanta in Atlanta, Georgia.
**Veteran’s Administration**

Stephen Kralovic indicated that the VA will implement a special training campaign on safety called a “Step-Up” from March 8-14, 2009 at all medical centers and outpatient clinics to ensure that VA staff follow the highest standards for patient safety. Normal activities will continue during the Step-Up at all VA facilities, but with extra emphasis on safety and proper processing protocols. Specific efforts will include retraining on reprocessing endoscopes, establishment of easily-tracked accountability for instrument processing, and training on standard operating procedures by facility leadership.

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**HHS Action Plan for HAI Elimination**

**Donald Wright, MD, MPH**  
Principal Deputy Assistant Secretary for Health  
U.S. Department of Health and Human Services

Dr. Wright expressed HHS’s gratitude for everyone’s generous remarks about the plan, stressing that a team effort made this a reality. In six months an action plan was developed via a concurrence process through the department. He acknowledged the tremendous role that HICPAC members played in the generation of this action plan, contributing their time and expertise. The action plan was published in early January 2009 at which time public comment was requested, which continue to be received and which will be utilized to revise and update the plan moving forward. The plan released in early January 2009 is the HHS plan to reduce healthcare-associated infections, but from the outset it was intended to have impact on a national basis. HHS recognizes that healthcare-associated infections are of significant public health concern and that HHS has some responsibility to take a leadership role in reducing these, which the department has attempted to do through the action plan.

Based upon input received from various sources, the decision was made to include some metrics—some benchmarks for success. Thus, seven targets were created during a stakeholder meeting that was convened in September 2008. Dr. Wright was called upon to speak to the House Appropriations Committee in January about HAI's. While questions were posed regarding the action plan, he was unable to discuss the plan in any detail because it had not been through the concurrence process. However, he did share the fact that metrics had been established to grade success. The House Appropriations Committee strongly commended and was highly supportive of the fact that targets / goals had been set to benchmark success moving forward.

HHS attempted to identify gaps in the knowledge base as related to HAI's. Once identified, a research agenda was created to address those gaps in order to ensure that prevention guidelines are translated into bedside care. From an information technology (IT) perspective, a recommendation was made to standardize data elements, which is crucial with respect to tracking infections in a consistent and meaningful manner. From an incentives perspective, the regulatory capabilities of CMS were taken into consideration as they relate to accreditation of hospitals, as well as existing incentives that may relate in the future to value-based purchasing. The possibility of some positive incentives was documented in the action plan as well. Another element in the action plan delves into the issue of messaging, outreach, and mechanisms to ensure that the action plan is communicated to the important stakeholders in this area (e.g.,
healthcare institutions, providers, and consumers). Successful reduction of HAIs truly is a shared responsibility.

HHS believes in public engagement and plans to convene two to three stakeholders (e.g., experts in the field of infection control, consumers, et cetera) meetings in order to acquire further feedback, the first of which will probably be in early April 2009. Over 90 comments had been received at the time of this HICPAC meeting. All comments received will be used to revise and update the plan.

**General Discussion Points**

During this session, the following general discussion points were raised regarding the action plan. These are grouped according to the category under which they were raised.

**Action Plan Focus**
- Dr. Wright assured everyone that long-term care facilities and ambulatory surgical centers would ultimately be addressed. However, given the magnitude of the healthcare system, he realized the need to tier the approach in order to accomplish something in the shorter term.

**Communications**
- Communication to patients and their families when an HAI is identified can be very damaging to the relationship between a patient and his or her physician when mandates are required. The other key stakeholder group that needs to be informed about how to handle this appropriately is the medical community at large in terms of how to speak to patients about HAIs. Hospitals are using surveillance definitions to identify HAIs, while physicians are using their appropriate clinical judgment. Thus, there is a great deal of conflict regarding what constitutes an infection and whether a physician decides to treat an infection. There is also a major issue with respect to litigation potential. Targeted education is needed in the medical community with respect to HAI disclosures.

- The transition to a new administration provides an excellent opportunity for HHS to be assertive and take the lead with respect to communication and education efforts targeted to various audiences that need to have information from this plan.

**Metrics and Targets**
- Prior to the stakeholders meeting HHS plans to convene in April 2009, the metrics and targets should be more fully developed so that they are more concrete. CDC will take the lead and will work with HHS and others to flesh these out further.

- No research metrics are included.

- Three times in the document “education” is mentioned; however, no metric is included for education.

- Some of the device-associated infections recommended in the plan were part of Healthy People 2010. Given that 2010 is fast approaching, and in terms of building Healthy People 2020, there should be further clarity about how these national metrics will be incorporated so that everyone is working in conjunction toward the same goal. While Healthy People 2010 includes some HAI objectives, they are not very robust. The Office of Disease Prevention and Health Promotion, an office of Public Health and Science develops the Healthy People goals. A workgroup has already been convened to begin work on Health People 2020, which plans to include most robust HAI goals.
**Recommendations**

- There is a notable absence of an emphasis of hand hygiene. As a broad strategy one advantage of the hand hygiene model is that it applies regardless of where the care delivery is.

- Preliminary research suggests that two other key points of hygiene include environmental care of the inanimate environment around the patient, and involvement of the patient in their own hygiene while in the healthcare delivery setting.

**Reporting**

- From the state and infection control professional perspective, the use of NHSN over Hospital Compare was encouraged. The most important reason for this for facilities and for public health is that the minute data are entered in the NHSN system, they are useable by the facility. It is a by-directional information system. Hospital Compare data are generated, information does not have to go in for three to six months, and hospitals do not see and cannot use the data that go into that system. NHSN data are useful to the facilities, which is critically important for patient safety.

- It would be beneficial for HHS to coordinate between CDC and CMS in order to reconcile the reporting recommendations, given that 2000 hospitals are already using NHSN and have put a great deal of effort into doing so. There are no measures in Hospital Compare for BSI or UTI. Rather than having new measures created in Hospital Compare, this is an opportunity for an existing system to work with CMS.

- In terms of alignment, as AHRQ proceeds with implementing the PSOs, consideration should be given to incorporating the same definitions of HAIs so that the same data are not being collected repeatedly with a different twist.

- In the states, information from NHSN is being used for Hospital Compare with some validation. Most of the 2000 hospitals in the NHSN system are likely there because states are mandating them to report using that system. When the states receive the information back, they create the public reports. Some envision that Hospital Compare would serve as the reporting system.

- Reminder: HICPAC voted unanimously on February 12, 2009 to compose a letter of support to the Secretary of HHS regarding NHSN, given that HICPAC views this as an essential piece of the public health infrastructure in terms of HAI prevention and reporting. Now that 19 states and over 2000 facilities have mandated the use of NHSN, which amounts to approximately 40% of the hospitals in the country, the committee believes there is need for additional support. The professional societies have made that recommendation in testimonies before Congress. Of the 25 states with mandatory reporting laws, only two or three do not plan to use NHSN.

**Research**

- It is important to include the gaps in the evidence in a research agenda, but it is also important to include the basic science basis for the understanding of pathogenesis and acquisition of HAIs. There are major basic science gaps, particularly in certain areas. This should be included in addition to the recommendation gaps.
• Not only can this document identify the knowledge gaps, but also it can advocate for concerted funding mechanisms to be in place. There are currently limited opportunities and there does not seem to be an extramural research home for these types of investigations. CDC’s extramural program is funding this type of research, but is not clear within NIH where to submit grant applications of this nature.

• Translational research also needs to be fostered in order to get information to the patient/caregiver interface (e.g., determine what evidence exists already and determine how that can be applied immediately). There was significant agreement that operational research is needed.

Next Steps for HICPAC
HICPAC has been engaged in this process from early on and is well-prepared to participate further. HICPAC members were represented at the September 2008 meeting, and many have been involved in offering input since the release of the plan. With that in mind, the following potential HICPAC contributions were suggested:

• Assist in the development of the research agenda by driving out the lower weighted recommendations from the documents the committee has already produced

• Given that HICPAC plays an advisory role to the Secretary, work with AHRQ, NIH, and other agencies to develop a research agenda and offer suggestions about how to invest finite resources to move the field forward together:
  → HHS will continue the Senior Level Steering Committee on an on-going basis to ensure that CMS, AHRQ, CDC, NIH, and all of the various operating and staff divisions are talking with one another—the use of all taxpayer dollars must be maximized to the common good

• Assist HHS in identifying stakeholders who should be invited to be a part of the public engagement process (e.g., April 2009 meeting, which will most likely be convened at the HHS headquarters building in DC)

• Play a significant role with respect to long-term and ambulatory care in the future

Brainstorming Session

Michael R. Bell, MD
Division of Healthcare Quality Promotion

Dr. Bell indicated that they had been asked to suggest ways in which CDC could partner effectively and usefully with other agencies within HHS. For example, research gaps identified in the guideline writing process could be fed back to inform research agendas throughout the Department. Using that as an example, the participants were divided into smaller groups to discuss high level issues that seemed obvious and straightforward, as well as those that were more subtle and easily missed. Upon reconvening, each team presented their list of suggestions:

Team 1
• Research identification and prioritization with AHRQ
• Work with AHRQ in PSO refinement to ensure that if HAIs are to be included in PSO voluntary reporting, the definitions are consistent
• With respect to CMS, CoP refinement is needed for HAI prevention and HAC transformation into value-based purchasing and a rate-based approach for quality improvement
• Regarding OPHS outreach and messaging, educate clinicians with respect to how to communicate with patients regarding HAIs and their disclosure
• In terms of ONC, ensure support and dedicated resources for improvements and refinements for NHSN (e.g., general improvements in process flow and work requirements)
• Work with CMS to teach facilities what elements should be included in risk assessment, and how risk assessment can be translated into adoption of NHSN modules directed toward the facility rather than all pathogens all the time

**Team 2**
While there is an HAI prevention plan, there is not an operational plan for implementation:

• Form an inter-agency task force that includes, but is not limited to, representation from CDC, HICPAC, AHRQ, NIH, FDA, CMS, and others
• To facilitate the research portion of the HAI prevention plan, due to the relative unfriendliness of the NIH to translational research in this area, a new study section should be formed on the transmission dynamics of infection control

**Team 3**
• Endorse and enhance the ability of NHSN to serve as the platform for reporting HAI data on a state and / or federal level, and enhance the transparency of those data to end users and interested individuals in the private sector
• Substantially enhance analytic and reporting capabilities of NHSN, and garner additional support for IT infrastructure of the system as well as for the training of end users in the utilization of this reporting interface
• In the broader context of IT enhancements, through NHSN the division needs to partner with other experts to ensure the functionality, robustness, and transparency of data submitted, especially with regard to enhancing the capability of the system to use existing electronic data signals from a variety of sources within and outside the hospital, including public health
• Be on point with regard to inter-agency messaging and communications, and focus on the critical role the division can play in enhancing appropriate messaging to private stakeholders (especially the public) and end users in hospitals (particularly clinicians and hospital administration) with regard to understanding the critical nature of this initiative

**Team 4**
• NHSN should be the repository for all HAI information, but more resources are needed to do that appropriately (e.g., funding, computers, personnel, et cetera)
• Establish a coordinated, friendly marketing and education program across the board and collaborate with other agencies for better connections and continued information sharing, such that various agencies are not working on the same issue in a silo
• Establish a routine process for agency coordination, collaboration, and cooperation
• With regard to research, multi-center and clinical trials should be well-designed to change some of the patterns of care
• Identify all relevant entities in which patient care is provided
• Provide funding for agencies to travel to coordinating meetings
Team 5

- In order to move forward with electronic lab reporting, there should be a partnership between CDC, NCPHI, DHQP, the Office of the National Coordinator, and other outside partners (e.g., CSTE; Association for Public Health Laboratories) to develop a strategy to use electronic lab reporting as an interim step on the way to implementation of electronic health records.

- Standardization is needed of specimen type and specimen source, given that everything else flows from there and if this is incorrect, data will be very poor in the long-term; this could be tackled in the short-term and would have far-reaching benefits.

- With regard to basic infection control education for medical providers and other healthcare professionals, partnerships should be utilized between CDC, ASTHO, APIC, and medical boards to develop basic infection control educational models that every healthcare professional must follow in order to become accredited, with continuing education requirements.

- Address the disconnect between two parts of CMS, both of which are very important: 1) the quality standards, CoPs, and Interpretive Guidelines side; and 2) the Center for Medicare Management that defines the payment policy; this is particularly important with regard to aligning incentives.

- Recognize that reporting to the public can differ from reporting for surveillance purposes; reports for the public must translate well to that audience.

- Even if NHSN is used as a base, do not lose access to other information that is available to CMS and through other state data that is collected about hospitals; ways should be explored to merge various data resources.

Team 6

- $300 million in comparative effectiveness grants is coming out of AHRQ, which has been an under-utilized partner for CDC, other agencies, and states; if this is a research arm of the federal government, this agency should consider and make HAIs one of their targets as an outcome for comparing the effectiveness of efforts to reduce HAIs.
Craig A. Umscheid, MD, MSCE
University of Pennsylvania Health System
Center for Evidence-Based Practice

Dr. Umscheid reviewed the changes made to the document “Estimating the proportion of reasonably preventable healthcare associated infections and associated mortality and costs” since the last time it was circulated in November 2008. This paper will be presented at a podium presentation at SHEA in March 2009. Basically, three major changes were made: 1) the document was reframed as one that is estimating what proportion of HAIs are preventable, particularly in the context of the recent CMS initiatives pertaining to HAIs; 2) the range of HIV preventability was narrowed by excluding studies conducted outside of the US; and 3) the limitations section was expanded and a limitation section was added to the abstract.

Discussion Points

- While there is a need to get this document out, the benefit of the additional endorsement by HICPAC and CDC clearance outweighs the speed of publication.

- This will not be an evidence-based guideline in the usual sense, nor would it be a quick blurb in the MMRW. Instead, it would be more along the lines of a “White Paper” such as the one discussed for ambulatory care. Adjustments to format may be needed, and couching with preamble language may also be required. Simply stating that the agency made these calculations and believes a certain proportion is preventable will necessarily require a broadened discussion so that people reading this will understand what HICPAC wants them to think about it.

- The document should not be perceived as saying this is all that can be done, but that this is what the evidence reflects has been accomplished to date.

- Consideration should be given to what additional information should be incorporated so that this becomes a HICPAC committee-driven document versus a scholarly treatise. In addition, consideration should be given to where the document should be published, disseminated, and how. For example, should an editorial accompany it?

Motion

Dr. Soule motioned to accept the “Preventability Paper” as a formally endorsed HICPAC document that will require further review and all of the elements of the HICPAC approval process. Dr. Burns seconded the motion. The motion carried unanimously.
In closing, the following action items were enumerated:

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<th>Item</th>
<th>Members / Others Assigned</th>
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| For the “Pediatric Infectious Disease Epidemiology Guideline” effort, a conference call will be set up among Drs. Elward, Bell, and Brennan in preparation for a meeting to occur at SHEA in order to solicit input from pediatric infectious disease epidemiology representatives regarding the broad outlines of the document and the areas to target. | Dr. Elward (lead)  
Dr. Pegues  
The Center for Evidence Based Practice |
| For the “Infection Control in Healthcare Workers Guideline” a roster of individuals who will participate has been identified. | Lundstrom (lead)  
McCarten  
Russi  
Soule  
Weber |
| The “Ambulatory Guideline” is third in the pipeline, but will be triaged until a later time. | To be identified |
| The “Surgical Site Infection Guideline” is fourth in the pipeline, but will be triaged until a later time. | Murphy  
Pegues |
| The draft “Norovirus Guideline” will be presented at the next HICPAC meeting. | Stevenson (lead)  
Elward  
Ramsey |
| The draft of the “Catheter-Related Bloodstream Infection Guideline” will be presented at the next HICPAC meeting. Like the “Disinfection Guideline” this does not quite fit with the current guideline model. | Burns (lead) |
| Recommendations for communication and disclosure to patients | Murphy |
| In November, the creation of a surveillance and risk assessment guide / tool / protocol was approve. Another meeting should be scheduled in Washington to convene various groups with an interest in guideline and tool production. Perhaps risk assessment tool-making should be farmed out to HICPAC partners who do this on a regular basis. | Olmstead (lead)  
Murphy  
SHEA liaison  
APIC liaison |
| Convene a follow-up conference call on the MRSA / MDRO document under revision. Dr. Lundstrom will make revisions on the jurisdictions considering pathogen-specific legislation and will disseminate that to HICPAC members. | Lundstrom (lead) |
| Convene a follow-up conference call on the CDI question | HICPAC |
| Develop letter to the HHS Secretary | HICPAC |
| Cull research gaps out of the gap analysis conducted on HICPAC guidelines for Dr. Wright / HHS. | CDC  
HICPAC |
The next HICPAC meeting will be convened on June 15-16, 2009 at CDC’s Global Communications Center in Atlanta, Georgia. With no further discussion or business posed, Dr. Brennan adjourned the meeting at 11:50 a.m. on February 13, 2009.

I hereby certify that to the best of my knowledge, the foregoing minutes of the February 2009 HICPAC meeting are accurate and complete:

____________________ ________________________________
Date

Patrick J. Brennan, MD
Chair, Healthcare Infection Control Practices Advisory Committee
### Attachment 1: Attendance Roster

#### HICPAC Members
- Dr. Patrick Brennan, Chair
- Ms. Lillian Burns
- Dr. Jeffrey Engel
- Dr. Alexis Elward
- Dr. Tammy Lundstrom
- Dr. Yvette McCarter
- Dr. David Pegues
- Dr. Peter Pronovost
- Dr. Keith Ramsey
- Dr. William Schecter
- Ms. Barbara Soule
- Dr. Kurt Stevenson

#### CDC Representatives
- Dr. Rima Khabbaz, NCPDCID Director
- Dr. Denise Cardo, DHQP Director
- Kathy Allen-Bridson
- Kitty Anderson
- Al Barkley
- Elise Beltrami
- Elizabeth Bolyard
- Kristin Brinsley-Rainisch
- Blake Caldwell
- Amy Collins
- Maggie Dudeck
- Kathleen Gallagher
- Susan Goldstein
- Jeff Hageman
- Aron Hall
- Teresa Horan
- John Iskander
- Valerie Johnson
- Melanie King
- Melanie Kyser
- Tara MacCannell
- Huong McLean
- Gloria C. Morrell
- Joseph Perz
- Jean Randolph
- Maria Rangel
- Cathy Rebmann
- Susan Redd
- Chesley Richards
- Lynne Sehulster
- Joni Young
- Matt Wise
- Betty Wong

#### Designated Federal Official
- Dr. Michael Bell, Executive Secretary

#### Ex-Officio and Liaison Members
- Dr. William Baine (Agency for Healthcare Research and Quality)
- Ms. Nancy Bjerke (Association of Professionals of Infection Control and Epidemiology, Inc.)
- Ms. Joan Blanchard (Association of periOperative Registered Nurses)
- Ms. Lorine Jay (Health Resources and Services Administration)
- Ms. Marion Kainer (Council of State and Territorial Epidemiologists)
- Dr. Stephen Kralovic (Veterans Administration)
- Dr. Lisa Maragakis (Society for Healthcare Epidemiology of America)
- Ms. Lisa McGiffert (Consumer's Union)
- Ms. Jeannie Miller (Center for Medicare and Medicaid Services)
- Dr. Sheila Murphey (Food and Drug Administration)
- Dr. Tara Palmore (National Institutes of Health)
- Dr. Shirley Paton (Public Health Agency of Canada)
- Dr. Mark Russi (American College of Occupational and Environmental Medicine)
- Ms. Roslyne Schulman (American Hospital Association)
- Ms. Rachel Stricof (Advisory Council for the Elimination of Tuberculosis)
- Dr. Robert Wise (Joint Commission)

#### Guest Presenters and Members of the Public
- Francis Bieman (3M)
- Jan Foote (BD Becton Dickison)
- D. Graham (APIC)
- Helen Haskell (Consumers Union)
- Dr. Stephen Kralovic (Veterans Administration)
- Hollie Lewis (Cepheid)
- Michele Marli (Hospital Employee Health)
- Larry Pickering (ACIP)
- Jaime Ritter (CR Bard, Inc.)
- Craig Umscheid (University of Pennsylvania Health System Center for Evidence-Based Practice)
- Don Wright (Principal Deputy Assistant Secretary for Health, HHS)
- Frances Zieman (3M)