Recommendation on the NHSN CAUTI Definition Age Specification for Fever

Date: May 2018

Preface

The Healthcare Infection Control Practices Advisory Committee (HICPAC) is a federal advisory committee chartered to provide advice and guidance to the Centers for Disease Control and Prevention (CDC) and the Secretary of the Department of Health and Human Services (HHS) regarding the practice of infection control and strategies for surveillance, prevention, and control of healthcare-associated infections, antimicrobial resistance and related events in United States healthcare settings. At the July 2017 HICPAC meeting, CDC asked HICPAC for input on topics related to the National Healthcare Safety Network (NHSN), including, but not limited to:

- Data access policies and practices
- Data validation
- Quality measurement priorities and methods
- Data use for healthcare-associated infection (HAI) prevention at the facility, local, state, and national levels
- Informatics/information technology (IT) advances and surveillance improvements, including data security and IT platforms

HICPAC formed a workgroup to develop this input. The NHSN Workgroup provided updates and obtained HICPAC feedback at the November 2017 and May 2018 HICPAC Meetings. At the May 2018 meeting, HICPAC voted to finalize the recommendation to amend the NHSN catheter-associated urinary tract infection (CAUTI) definition by removing the age specifications from the fever criterion in two CAUTI protocols.

Background

NHSN is the most widely used secure, internet-based HAI surveillance system in the United States. NHSN provides facilities, states, regions, and the nation with data needed to identify problem areas, measure progress of prevention efforts, and ultimately eliminate healthcare-associated infections. Additionally, facilities that participate in reporting programs operated by the Centers for Medicare & Medicaid Services (CMS) can use NHSN to report their data to CMS.

In NHSN, symptomatic urinary tract infections (SUTIs) are defined using three different criteria: SUTI 1a (CAUTI); SUTI 1b (non-CAUTI); and SUTI 2 (CAUTI or non-CAUTI in patients less than one year of age). The current SUTI 1b surveillance definition does not accept fever without other signs or symptoms of urinary tract infection as a criterion for patients older than 65 years of age. In contrast, fever without other signs or symptoms can be used to meet the SUTI 1a definition for patients older than 65 years of age who have had a urinary catheter in place



for greater than two calendar days, leading to some instances where CAUTI classification is directly impacted by patient age.

In addition, the age distinction for the use of fever as a criterion for SUTI 1a and SUTI 1b is complicated and potentially confusing, and this may result in variability in the application of these definitions. This variability can impact the accuracy of inter-hospital comparisons, CMS facility reimbursement levels, as well as publicly reported hospital rankings based on CAUTI outcomes.

Draft Recommendation

Remove the age specifications pertaining to fever from the SUTI 1b ("in a patient that is ≤65 years of age") criteria, and from the SUTI 1a criteria ("to use fever in a patient >65 years of age, the indwelling urinary catheter needs to be in place >2 calendar days on date of event") surveillance definitions.

References

1. Centers for Disease Control and Prevention. Device-associated Module: <u>Urinary Tract Infection (Catheter-Associated Urinary Tract Infection [CAUTI] and Non-Catheter-Associated Urinary Tract Infection [UTI]) and Other Urinary System Infection [USI]) Events.</u>

(https://www.cdc.gov/nhsn/pdfs/pscmanual/7psccauticurrent.pdf). Published January 2018. Accessed 10 August 2018.

Abbreviations

Abbreviation	Definition
CAUTI	Catheter-Associated Urinary Tract Infection
CDC	Centers for Disease Control and Prevention
HAI	Healthcare-Associated Infection
CMS	Centers for Medicare & Medicaid Services
HHS	(United States Department of) Health and Human Services
HICPAC	Healthcare Infection Control Practices Advisory Committee
IT	Information Technology
SUTI	Symptomatic Urinary Tract Infection

Suggested Citation

Healthcare Infection Control Practices Advisory Committee. Recommendation on the NHSN CAUTI Definition Age Specification for Fever – the Healthcare Infection Control Practices Advisory Committee (HICPAC). 2018.

Contributors

HICPAC NHSN Workgroup Members

Deborah S. Yokoe, MD, MPH, University of California, San Francisco (Co-lead); Anthony Harris, MD, MPH, University of Maryland (Co-lead); Hilary M. Babcock, MD, MPH, Washington University School of Medicine; Andrea Benin, MD, Yale-New Haven Children's Hospital; Vickie M. Brown, RN, MPH, Infection Prevention Consultant; Yvonne Chow, MPP, Health Resources & Services Administration (HRSA); Sarah Duvall, MPH, CPHQ, Healthcare Association of New York State (HANYS); Tricia Elliot, MBA, CPHQ, The Joint Commission (TJC); Patti

Grant, Association of Professionals of Infection Control and Epidemiology, Inc. (APIC); Michael D. Howell, MD, MPH, Google; W. Charles Huskins, MD, MSc, Mayo Clinic College of Medicine; Lynn Janssen, MS, CIC, CPHQ, California Department of Public Health; Marion Kainer, MD, MPH, Council of State and Territorial Epidemiologists (CSTE); Surbhi Leehka, MD, University of Maryland; Lisa L. Maragakis, MD, MPH, Johns Hopkins University School of Medicine; Daniel Schwartz, MD, MBA, Centers for Medicare & Medicaid Services (CMS); Connie J. Steed, RN, CIC, MSN, Greenville Health Systems; Kaede Ota Sullivan, MD, Temple University; Tom R. Talbot, MD, MPH, Vanderbilt University; Mary Therriault, MS, RN, Healthcare Association of New York State (HANYS); Judy Trawick, Health Resources & Services Administration (HRSA); Margaret VanAmringe, MHS, The Joint Commission (TJC)

HICPAC Members

Daniel J. Diekema, MD, University of Iowa Carver College of Medicine (Co-Chair); Deborah S. Yokoe, MD, MPH, University of California, San Francisco (Co-Chair); Hilary M. Babcock, MD, MPH, Washington University School of Medicine; Vickie M. Brown, RN, MPH, Infection Prevention Consultant; Kristina Bryant, MD, University of Louisville School of Medicine; Sheri Chernetsky Tejedor, MD, Emory University School of Medicine; Vineet Chopra, MBBS, MD, MSc, FACP, FHM, Michigan Medicine and VA Ann Arbor Health System; Loretta L. Fauerbach, MS, CIC, Fauerbach & Associates, LLC; Michael D. Howell, MD, MPH, Google; W. Charles Huskins, MD, MSc, Mayo Clinic College of Medicine; Lynn Janssen, MS, CIC, CPHQ, California Department of Public Health; Lisa L. Maragakis, MD, MPH, Johns Hopkins University School of Medicine; Jan Patterson, MD, University of Texas Health Science Center San Antonio; Selwyn O. Rogers Jr., MD, MPH, FACS, The University of Chicago

HICPAC ex officio Members

Yvonne Chow, MPP, Health Resources & Services Administration (HRSA); Elizabeth Claverie-Williams, MS, US Food and Drug Administration (FDA); David Henderson, MD, National Institutes of Health (NIH); Stephen Kralovic, MD, MPH, US Department of Veterans Affairs (VA); Melissa A. Miller, BSN, MD, MS, Agency for Healthcare Research and Quality (AHRQ); Gary Roselle, MD, US Department of Veterans Affairs (VA); Daniel Schwartz, MD, MBA, Center for Medicare & Medicaid Services (CMS); Judy Trawick, Health Resources & Services Administration (HRSA)

HICPAC Liaison Representatives

Darlene Carey, MSN, RN, CIC, NE-BECAUSE, FAPIC, Association of Professionals of Infection Control and Epidemiology, Inc. (APIC); Craig M. Coopersmith, MD, Society of Critical Care Medicine (SCCM); Elaine Dekker, RN, BSN, CIC, America's Essential Hospitals (AEH); Louise M. Dembry, MD, MS, MBA, Society for Healthcare Epidemiology of America (SHEA); Kathleen Dunn, BScN, MN, RN, Public Health Agency of Canada (PHAC); Maryellen Guinan, America's Essential Hospitals (AEH); Marion Kainer, MD, MPH, Council of State and Territorial Epidemiologists (CSTE); Jason Kane, MD, MS, Society for Critical Care Medicine (SCCM); Evelyn Knolle, American Hospital Association (AHA); Jacqueline Lawler, MPH, CIC, CPH, National Association of County and City Health Officials (NACCHO); Emily Lutterloh, MD, MPH, Association of State and Territorial Health Officials (ASTHO); Lisa McGiffert, Consumers Union; Dana Nguyen, National Association of County and City Health Officials (NACCHO); Sharon Morgan, MSN, RN, NP-C, American Nurses Association (ANA); Michael Anne Preas, RN, Association of Professionals of Infection Control and Epidemiology, Inc. (APIC); Paulo Pontemayor, MPH, The Joint Commission (TJC); Mark Russi, MD, MPH, American College of Occupational and Environmental Medicine (ACOEM); Sanjay Saint, MD, MPH, Society of Hospital Medicine (SHM); Robert G. Sawyer, MD, FACS, FIDSA, FCCM, Surgical Infection Society (SIS); Linda Spaulding RN, CIC, DNVGL Healthcare; Donna Tiberi, RN, MHA, Healthcare Facilities Accreditation Program (HFAP); Dawn Terashita, MD, MPH, FACPM, National Association of County and City Health Officials (NACCHO); Lisa Tomlinson, MA, Association of Professionals of Infection Control and Epidemiology (APIC); Margaret VanAmringe, MHS, The Joint Commission (TJC); Valerie Vaughn, MD, Society of

Recommendation on the NHSN CAUTI Definition Age Specification for Fever

Hospital Medicine (SHM); Stephen Weber, MD, Infectious Disease Society of America (IDSA); Amber Wood, MSN, RN, CNOR, CIC, FAPIC, Association of periOperative Registered Nurses (AORN)

CDC Technical Advisors

Rashad Arcement, MSPH; Jeneita Bell, MD MPH; Katherine Allen-Bridson, RN, BSN, MScPH, CIC; Sheri Chernetsky Tejedor, MD; Ray Dantes, MD, MPH; Margaret Dudeck, BS, MPH; Jonathan Edwards, MS; Anthony Fiore, MD; Alice Guh, MD, MPH; John Jernigan, MD; Preeta Kutty, MD, MPH; Denise Leaptrot, BS, MS; Kent Lemoine, MBA; L. Clifford McDonald, MD; Daniel Pollock, MD; Theresa A. Rowe, MD; Sujan Reddy, MD; Katharina van Santen, MSPH; Eileen Scalise, MSN; Nimalie Stone, MD, MS; Lauren Wattenmaker, MPH, BS; Lindsey Weiner, MPH: Division of Healthcare Quality Promotion (DHQP), Centers for Disease Control and Prevention

Acknowledgements

Michael Bell, MD, HICPAC Designated Federal Official (DFO); Koo-Whang Chung, MPH; Kendra Cox, MA; and Erin Stone, MS, Committee Management Specialist (CMS): Division of Healthcare Quality Promotion (DHQP), Centers for Disease Control and Prevention