

Joint Statement

Saving lives through infection prevention, healthcare epidemiology, and antimicrobial stewardship: Getting back to preventing healthcare-associated infections

Deborah S. Yokoe MD, MPH¹ and Patricia Jackson RN, MA, BSN²

¹Department of Medicine, University of California San Francisco School of Medicine, San Francisco, California and ²White Rock Medical Center, Dallas, Texas

"Just as nature takes every obstacle, every impediment, and works around it—turns it to its purposes, incorporates it into itself—so, too, a rational being can turn each setback into raw material and use it to achieve its goal."

—Marcus Aurelius

"If you're going through hell, keep going." -Winston Churchill

Although the coronavirus disease 2019 (COVID-19) pandemic increased broad appreciation of the critical role of infection preventionists (IPs), healthcare epidemiologists (HEs), and antimicrobial stewards (ASs) in responding to infectious disease crises, its all-consuming demands led to diversion of resources and efforts away from core infection prevention functions. As reflected in the Centers for Disease Control and Prevention (CDC) National Healthcare Safety Network (NHSN) data showing worsened outcomes for most categories of healthcare-associated infections (HAIs)^{1,2} and increased multidrug-resistant organism (MDRO) infection rates³ since the start of the pandemic, the challenges that we have faced during the past several years have had major impacts on our ability to prevent HAIs. The continuing demands of constantly evolving exigencies related to COVID-19 as well as other new, emerging, and re-emerging pathogens such as mpox, Candida auris, measles, and polio, plus seasonal surges of endemic infections, including RSV and influenza, have taken a toll on our infection prevention and control (IPC) teams and even more broadly among staff across all healthcare fields. This situation has led to exhaustion, burnout, and increased attrition, further impeding our ability to refocus and reinvigorate HAI prevention efforts.

Addressing worsening HAI outcomes

The COVID-19 pandemic has created unprecedented challenges that affect the ability of healthcare facilities to consistently maintain practices essential for HAI prevention. These challenges had negative impacts on HAI outcomes as hospitals responded to surges of patients with COVID-19 that strained available healthcare resources including hospital beds, staffing, and medical supplies, and diverted HAI prevention resources toward COVID-19 response efforts. Even prior to 2020, many IPC programs were underresourced to adequately cover the broad spectrum of work

Corresponding author: Deborah S. Yokoe; Email: Deborah.Yokoe@ucsf.edu

Cite this article: Yokoe DS, Jackson P. Saving lives through infection prevention, healthcare epidemiology, and antimicrobial stewardship: Getting back to preventing healthcare-associated infections. Infect Control Hosp Epidemiol 2024. 45: 1–2, doi: 10.1017/ice.2023.212

and responsibilities that IPC programs are accountable for. Metrics used by many healthcare facilities to estimate HE and IP staffing levels are outdated and typically based on ratios of full-time equivalents (FTEs) to the number of acute-care inpatient beds. This situation inadequately reflects the breadth and complexity of the spectrum of healthcare settings and services requiring IPC oversight. Increasing demands on IPC resources over the past several years have exacerbated and amplified these pre-existing limitations. In addition to IPC-specific impacts, overall healthcare personnel staffing levels, exhaustion and burnout affecting attention and adherence to core infection prevention practices, and financial constraints that many healthcare facilities and systems are currently facing have further reduced the effectiveness and sustainability of HAI prevention programs.

The Society for Healthcare Epidemiologists of America (SHEA) and the Association for Professionals in Infection Control and Epidemiology (APIC) are committed to continuing to work together to support the HAI prevention work that our members are leading. Some examples of ongoing work include the following:

- Collaborating on multiorganizational work to delineate infrastructure and resource requirements needed for effective IPC and antimicrobial stewardship programs that can be used to advocate for the support needed to do our work
- Partnering to create resources that can be used to guide and prioritize HAI prevention efforts, including "A compendium of strategies to prevent healthcare-associated infections in acute care hospitals: 2022 updates"⁴
- Promoting a whole-healthcare, systemwide approach to HAI prevention including a shared vision regarding the critical importance of HAI prevention for patient safety and shared accountability across all levels of the healthcare system.

Addressing burnout and attrition among infection preventionists, healthcare epidemiologists, and antimicrobial stewards

As discussed above, burnout and retirement-associated attrition continue to have major impacts on our fields. Based on a recent APIC member survey, 40% of APIC members will enter retirement age during the next 10 years.⁵ Additional survey data among IPs report high rates of depression, anxiety, and burnout at 21.5%, 29.8%, and 65%, respectively.⁶ A recent publication based on survey responses from healthcare epidemiologists⁷ noted that ~25% of respondents experienced burnout even prior to the

© The Author(s), 2024. Published by Cambridge University Press on behalf of The Society for Healthcare Epidemiology of America.



COVID-19 pandemic and, on top of this, about half described an increased sense of burnout as a result of COVID-19.

APIC and SHEA acknowledge the significance of increased burnout among our members and are working to used multimodal strategies to support the well-being of IPs, HEs, and ASs. Some examples include the following:

- Collaborating to highlight for the broader healthcare community, policymakers, regulators, and the public the critical importance of work led by and the subject matter expertise of IPs, HEs, and ASs
- Providing opportunities for our members to broaden and strengthen their involvement in activities that are meaningful to them by participating in APIC and SHEA committees, taskforces, and projects
- Identifying and promulgating interventions and resources to combat burnout among APIC and SHEA members
- Creating opportunities for growth and development through leadership training
- Building a variety of venues for networking with colleagues
- Working together to identify strategies to motivate others to enter our fields such as the development of an IP academic pathway.

Harnessing the APIC-SHEA partnership to move forward together

APIC and SHEA leadership are committed to working together to make progress toward our shared vision of safe healthcare for all. We strongly believe that there is synergy in combining the areas of expertise and perspectives of IPs, HEs, and ASs. The work that we do together in preventing HAIs will save lives and prevent suffering among the patients that we have the privilege of caring for. Given the recent and ongoing challenges discussed above, our

partnership and mutual advocacy and support are more important than ever.

Acknowledgments.

Financial support. No financial support was provided relevant to this article.

Conflicts of interest. All authors report no conflicts of interest relevant to this article.

References

- Weiner-Lastinger L, Pattabiraman V, Konnor RY, et al. The impact of coronavirus disease 2019 (COVID-19) on healthcare-associated infections in 2020: a summary of data reported to the National Healthcare Safety Network. Infect Control Hosp Epidemiol 2022;43:12–25.
- Lastinger LM, Alvarez CR, Kofman A, et al. Continued increases in the incidence of healthcare-associated infection (HAI) during the second year of the coronavirus disease 2019 (COVID-19) pandemic. *Infect Control Hosp Epidemiol* 2023;44:997–1001.
- COVID-19: U.S. impact on antimicrobial resistance, Special Report, 2022.
 Centers for Disease Control and Prevention website. https://www.cdc.gov/drugresistance/covid19.html. Accessed October 10, 2023.
- Yokoe DS, Advani SD, Anderson DJ, et al. Executive Summary: A compendium of strategies to prevent healthcare-associated infections in acute care hospitals: 2022 updates. *Infect Control Hosp Epidemiol* 2023. doi: 10.1017/ice.2023.138.
- Pogorzelska-Maziarz M, Monsees E, Hessels A. APIC Megasurvey 2020: methodology and overview of results. Am J Infect Control 2023;51:241–247.
- Melnyk BM, Hsieh AP, Mu J, et al. Associations among infection prevention professionals' mental/physical health, lifestyle behaviors, shift length, race, and workplace wellness support during COVID-19. Am J Infect Control 2023;51:62–69.
- 7. Guy Smith TJ, Pryor R, Hota SS, *et al.* Characterizing burnout among healthcare epidemiologists in the early phases of the COVID-19 pandemic: a study of the SHEA Research Network. *Antimicrob Stewardship Healthc Epidemiol* 2023;3(e52):1–4.