the purview of any accrediting agencies, knowledge of and ability to adhere to standards or guidelines can be variable setting the stage for differential care.

We describe our experience to date with a centralized outpatient IP team in a large healthcare system, highlighting the most common IP gaps found on initial assessment and barriers to program implementation. Building support for these programs requires increasing awareness and socializing the benefits to health system administration. National benchmarking is needed for the necessary IP support in the outpatient setting, which incorporates the complexity of these sites and the number of clinics. An infection prevention program with access to trained infection preventionists has allowed for the (gradual) advancement of IP in ambulatory setting for our large, multi-state healthcare system. Our experience emphasizes the scale of this problem and why addressing it poses a challenge without coordinated effort and oversight.

**Supplementary material.** The supplementary material for this article can be found at https://doi.org/10.1017/ice.2024.232

**Financial support.** None reported.

**Competing interests.** All authors report no conflicts of interest relevant to this article.

#### References

 Burke LG, Burke RC, Orav EJ, et al. Trends in performance of hospital outpatient procedures and associated 30-day costs among Medicare beneficiaries from 2011 to 2018. Healthc (Amst) 2023;11:100718.

- Shariq OA, Bews KA, Etzioni DA, Kendrick ML, Habermann EB, Thiels CA. Performance of general surgical procedures in outpatient settings before and after onset of the COVID-19 pandemic. *JAMA Netw Open* 2023;6: e231198
- 3. Sg2. 2022 Impact of Change® Forecast Highlights. Vizient, Inc.; 6/7/2022.
- 4. Wu HW, M E., Kizer KW. A Review of Regulatory Standards, Quality of Care Concerns, and Oversight of Ambulatory Surgery Clinics, Comprehensive Outpatient Rehabilitation Facilities, and End-Stage Renal Disease Facilities. In: Institute for Population Health Improvement UoCD, ed: California Department of Public Health; 2017.
- Pogorzelska-Maziarz M, Kalp EL. Infection prevention outside of the acute care setting: Results from the MegaSurvey of infection preventionists. Am J Infect Control 2017;45:597–602.
- 6. Centers for Disease Control and Prevention. Outbreaks and Patient Notifications in Outpatient Settings, Selected Examples, 2010-2014. 2015. https://archive.cdc.gov/#/details?url=https://www.cdc.gov/hai/settings/outpatient/outbreaks-patient-notifications.html. Accessed 7/12/2024.
- Centers for Disease Control and Prevention. Guide to Infection Prevention
  for Outpatient Settings: Minimum Expectations for Safe Care. 2016. https://
  www.cdc.gov/healthcare-associated-infections/hcp/prevention-healthcare/
  outpatient-expectations.html?CDC\_AAref\_Val=https://www.cdc.gov/hai/
  settings/outpatient/outpatient-care-guidelines.html. Accessed 7/12/2024.
- Schaefer MK, Jhung M, Dahl M, et al. Infection control assessment of ambulatory surgical centers. JAMA 2010;303:2273–2279.
- Braun BI, Chitavi SO, Perkins KM, et al. Referrals of infection control breaches to public health authorities: ambulatory care settings experience, 2017. Jt Comm J Qual Patient Saf 2020;46:531–541.
- K OY, Coelho L, Bancroft E, Terashita D. Health care-associated infection outbreak investigations in outpatient settings, Los Angeles County, California, USA, 2000-2012. Emerg Infect Dis 2015;21:1317–1321.

## Response to "Healthcare worker attitudes on routine non-urological preoperative urine cultures: a qualitative assessment"

Anas Babar (1)

King Edward Medical University Lahore, Neela Gumbad Road Lahore, Pakistan

#### Dear Editor,

I recently read the article titled "Healthcare Worker Attitudes on Routine Non-Urological Preoperative Urine Cultures: A Qualitative Assessment" by Friberg Walhof *et al.* (2024) with great interest. The study provides valuable insights into the persistent use of preoperative urine cultures for asymptomatic bacteriuria (ASB), despite evidence-based guidelines recommending against their routine use in non-urological surgeries. <sup>2,3</sup>

The authors effectively highlight the influence of perceived risks on clinical decision-making. However, I would like to contribute additional perspectives, particularly concerning the long-term implications of over-testing and overtreatment of ASB in surgical settings. The overprescription of antibiotics for ASB significantly contributes to the global challenge of antimicrobial resistance (AMR).<sup>4</sup> Although the study touches on this issue, a stronger

Corresponding author: Anas Babar; Email: babaranas20@gmail.com

Cite this article: Babar A. Response to "Healthcare worker attitudes on routine non-urological preoperative urine cultures: a qualitative assessment". *Infect Control Hosp Epidemiol* 2025. 46: 441–442, doi: 10.1017/ice.2024.187

emphasis on diagnostic stewardship is crucial.<sup>5</sup> Clinicians, particularly in high-risk surgeries like orthopedics and cardiothoracic procedures, need targeted education to distinguish between true infection risks and unnecessary prophylactic treatments.<sup>6</sup>

The study also notes surgeons' reluctance to discontinue urine cultures due to concerns about postoperative infections. In this context, multidisciplinary teams, including infection control specialists and antimicrobial stewardship pharmacists, could play a pivotal role in supporting the de-implementation process. These teams can provide peer-supported education, clarify current evidence, and emphasize the low risk of ASB-related complications in non-urological surgeries.<sup>2</sup>

Additionally, the psychological barriers to changing practice patterns, as outlined through the Dual Process Model, are well explored in the article. However, future interventions may benefit from incorporating behavioral science strategies to address cognitive biases that hinder guideline adherence. Personalized feedback and case-based discussions, focused on evidence-based outcomes, could offer an effective way to address these barriers within clinical practice.

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



In conclusion, the qualitative insights offered by Friberg Walhof *et al.* make a significant contribution to understanding the persistence of routine preoperative urine cultures in non-urological surgeries. However, for effective de-implementation, a multidisciplinary approach enhanced education on the implications of AMR, and strategies for cognitive behavior modification are essential.

Financial support. None.

Competing interests. None.

### References

 Friberg Walhof JE, Schweizer ML, Gupta K, et al. Healthcare worker attitudes on routine non-urological preoperative urine cultures: a qualitative assessment. Infect Control Hosp Epidemiol 2024;Sep 19:1–6.

- Nicolle LE, Gupta K, Bradley SF, et al. Clinical practice guideline for the management of asymptomatic bacteriuria: 2019 update by the infectious diseases society of America. Clin Infect Dis 2019;68:e83–e110.
- 3. Trautner BW. Asymptomatic bacteriuria: when the treatment is worse than the disease. *Nat Rev Urol* 2011;9:85–93.
- 4. Spivak ES, Burk M, Zhang R, *et al.* Management of bacteriuria in veterans affairs hospitals. *Clin Infect Dis* 2017;65:910–7.
- Singh HK, Claeys KC, Advani SD, et al. Diagnostic stewardship to improve patient outcomes and healthcare-associated infection (HAI) metrics. Infect Control Hosp Epidemiol 2024;45:405–11.
- Berríos-Torres SI, Umscheid CA, Bratzler DW, et al. Centers for disease control and prevention guideline for the prevention of surgical site infection, 2017. JAMA Surg 2017;152:784–91.
- Helfrich CD, Rose AJ, Hartmann CW, et al. How the dual process model of human cognition can inform efforts to de-implement ineffective and harmful clinical practices: a preliminary model of unlearning and substitution. J Eval Clin Pract 2018;24:198–205.

# Response to Mr. Babar's Letter to the Editor regarding "Healthcare worker attitudes on routine non-urological preoperative urine cultures: a qualitative assessment"

Julia E. Friberg Walhof MPH<sup>1</sup> , Marin L. Schweizer PhD<sup>2,3</sup> , Kalpana Gupta MD<sup>4,5,6</sup> , Madisen Brown MS<sup>5</sup> , Daniel Suh MS, MPH<sup>1</sup>, Judith Strymish MD<sup>5</sup> , William J. O'Brien MS<sup>5</sup> , Jeffrey Chan BS<sup>5</sup>, Kelly Miell PhD<sup>1,7</sup> , Vanessa Au MS<sup>1</sup> , Barbara W. Trautner MD<sup>8,9</sup> and Kimberly C. Dukes PhD<sup>1,10</sup>

<sup>1</sup>Center for Comprehensive Access and Delivery Research and Evaluation (CADRE), Iowa City VA Healthcare System, Iowa City, IA, USA, <sup>2</sup>William S. Middleton VA Hospital, Madison, WI, USA, <sup>3</sup>University of Wisconsin-Madinson, Madison, WI, USA, <sup>4</sup>Division of Infectious Diseases, VA Boston Healthcare System, Boston, MA, USA, <sup>5</sup>Center for Healthcare Organization and Implementation Research (CHOIR), Boston Campus, VA Boston Healthcare System, Boston, MA, USA, <sup>6</sup>Department of Medicine, Boston University School of Medicine, Boston, MA, USA, <sup>7</sup>Office of Rural Health, Veterans Rural Health Resource Center, Iowa City VA Health Care System, Iowa City, IA, USA, <sup>8</sup>Center for Innovations in Quality, Effectiveness and Safety (IQuESt), Michael E. DeBakey Veterans Affairs Medical Center, Houston, TX, USA, <sup>9</sup>Department of Medicine, Section of Health Services Research, Baylor College of Medicine, Houston, TX, USA and <sup>10</sup>Division of General Internal Medicine, Carver College of Medicine, Iowa City, IA, USA

We would like to reply to Mr. Babar's Letter to the Editor<sup>1</sup> in response to our recently published article, "Healthcare worker attitudes on routine non-urological preoperative urine cultures: a qualitative assessment." We appreciate the interest in our paper and agree that this is an initial step toward improving urine culturing practices. The work described was actually the prelude to an intervention to de-implement routine testing that includes multidisciplinary teamwork, personalized case-based education, and directed feedback.

We have presented ongoing work that further explores attitudes toward interventions to reduce preoperative urine testing in non-urological surgeries.<sup>3</sup> This research focuses on questions asked of clinician participants about the acceptability of 4 prospectively identified potential interventions to de-implement routine preoperative urine testing for asymptomatic bacteriuria: substitution of another infection prevention intervention, lab restrictions

Cite this article: Walhof JEF, Schweizer ML, Gupta K, et al. Response to Mr. Babar's Letter to the Editor regarding "Healthcare worker attitudes on routine non-urological preoperative urine cultures: a qualitative assessment". *Infect Control Hosp Epidemiol* 2025. 46: 442–443, doi: 10.1017/ice.2024.216

on ordering urine tests, audit and feedback on guideline concordance, and interactive workshops on evidence.

We agree that cognitive behavior modification is a necessary, yet difficult step to reducing the number of unnecessary urine tests and subsequent antibiotics. All members of the multidisciplinary team want the patient to experience the best outcomes possible while utilizing evidence-based practices. Receipt of unnecessary antibiotics can lead to worse outcomes for individual patients. Our research team aims to develop and implement interventions that help all team members achieve this common goal, while also reducing unnecessary testing and treatment and ultimately decreasing the global burden of antimicrobial resistance.

**Acknowledgments.** The contents presented herein do not represent the views of the US Department of Veterans Affairs or the US Government.

**Financial support.** This work was funded by the US Department of Veterans Affairs Health Services Research and Development Service (grant no. IIR 18-057; PIs: KG and MLS).

K.G. reports receiving consulting fees in the previous 36 months from GSK, Iterum Therapeutics, Utility Therapeutics, Spero Therapeutics, Qiagen, PhenUtest Diagnostics, and CarbX and royalties from UpToDate.

B.W.T.'s work is supported in part by the US Department of Veterans Affairs Health Services Research and Development Service (grant no. CIN 13-413) at

© Veterans Health Administration, 2025. This is a work of the US Government and is not subject to copyright protection within the United States. Published by Cambridge University Press on behalf of The Society for Healthcare Epidemiology of America.