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APIC
Association for Professionals in Infection Control and Epidemiology

The APIC/Joint Commission Infection Prevention and Control Workbook

FIFTH EDITION

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Table of Contents

INTRODUCTION

The Infection Prevention and Control Program—A Global Perspective

By Heather Stoltzfus, MPH, RN, CIC, and Tiffany Wiksten, DNP, RN, CIC

Background

The twenty-first century has seen (and will continue to see) an increasing emphasis on preventing and controlling the transmission of infectious organisms and diseases. Each year, millions of people around the world are exposed to infectious organisms within healthcare settings and their communities. Globalization and ease of international travel have facilitated the spread of infectious organisms and diseases and have created a greater awareness of the social and economic effects of infectious disease. The good news is, healthcare providers across the globe are seeing advances in infection prevention and control (IPC) efforts, including safer design of medical devices, more robust clinical practice techniques, faster vaccine development, and the positive effects of antibiotic stewardship programs. These efforts and others are supporting IPC initiatives in both developed and developing nations. However, healthcare-associated infections (HAIs)[1] and newly emerging infectious diseases have demonstrated the need for continuous efforts in mitigating and managing reemerging and evolving infectious diseases.[2]

Although the *APIC/Joint Commission Infection Prevention and Control Workbook* focuses primarily on HAIs, this new edition also underscores how infectious agents in the community can pose risks to quality care and patient safety in healthcare settings. Infection prevention professionals in all healthcare settings must plan and prepare for both HAIs and infectious disease threats, including new viruses, from a global perspective.

Global infectious disease threats are not new. In the last two decades, these threats have included the severe acute respiratory syndrome (SARS) outbreak in 2003,[3] the Middle East respiratory syndrome (MERS-CoV) in 2012,[4] and the West African Ebola virus of 2014–2015 (with confirmed cases in the United States).[5] Currently, the world continues to monitor COVID-19, which has resulted in more than one million deaths in the United States and more than seven million deaths worldwide.[6,7] This edition of the *APIC/Joint Commission Infection Prevention and Control Workbook* continues its global perspective on IPC by including both Joint Commission domestic and Joint Commission International IPC standards and offering potential strategies and solutions for all healthcare settings.

HAIs—such as pneumonia, urinary tract infections (UTIs), bloodstream infections, and surgical site infections (SSIs)—as well as multidrug-resistant organisms (MDROs)—can be acquired anywhere healthcare is delivered. This includes inpatient acute

care and long-term care facilities as well as outpatient facilities (such as ambulatory surgical and dialysis centers). HAIs may result in extended hospital or residential stays, additional illness and treatment, and sometimes death. In all types of facilities, HAIs increase the demands on healthcare for supportive leadership, trained staff, a safe environment, collaboration among staff and public health agencies, and associated medical costs. In 2011 the Centers for Disease Control and Prevention (CDC) estimated that the annual cost of HAIs could be as high as $45 billion.[8] In a 2013 meta-analysis study, total annual costs for five major HAIs alone (central line–associated infection, ventilator-associated pneumonia, SSIs, *Clostridium [Clostridioides] difficile* infection, and catheter-associated urinary tract infection [CAUTI]) were estimated to cost $9.8 billion annually.[1] A 2019 study in the Netherlands tallied national hospital costs attributable to SSIs following colectomy, mastectomy, and total hip arthroplasty (mainly from prolonged length of hospital stay) at €39.6 million.[9]

Many years ago, HAIs were thought to be an inevitable, "expected" consequence of complex care delivered to increasingly ill patients. Within the last two decades, this mindset has changed. Many organizations have significantly decreased HAIs in their healthcare settings and continue to work toward zero preventable infections.[10,11] Eliminating HAIs is the ultimate goal of IPC programs, thus making an effective IPC program one of the most significant patient safety initiatives for any healthcare organization. Setting aggressive goals and providing resources to achieve these goals should be a top priority for leaders and staff.

Since the fourth edition of this workbook published in 2021, healthcare organizations have continued to reduce rates of several types of HAIs. In 2023 US hospitals saw 13% fewer central line–associated blood stream infections (CLABSIs) and *C. difficile* events compared to the 2022 national baseline. Other infections have also steadily declined, including CAUTIs and SSIs, in part due to evidence-based practices.[12] In fact, CDC reported that between 2011 and 2015, the reduction in SSIs and UTIs in acute care settings was directly attributable to evidence-based IPC practices. In general, fewer patients had HAIs in 2023 than in 2019.[13,14] However, a January 2025 report from the National Healthcare Safety Network cites a slight uptick in SSIs despite progress in reducing other HAIs.[15] Increasingly, antibiotic stewardship has become integral to IPC in many care settings. Consequently, this new edition features an expanded discussion of the role of the infection preventionist (IP) in antibiotic stewardship programs. This edition also places greater importance on including and educating patients and their family advocates about their role in IPC efforts, which is critical to patient safety.[16]

Standards and Requirements for IPC

Joint Commission enforces standards that meet US Centers for Medicare & Medicaid Services (CMS) requirements (for example, Conditions of Participation [CoPs]) and as such has been granted "deeming authority" to survey organizations on behalf of CMS. During surveys of organizations that use their Joint Commission accreditation for deemed status purposes, surveyors must ensure that the minimum CMS requirements are met; therefore, current CMS references are included for related discussions.

In 2025 Joint Commission launched Accreditation 360: The New Standard, an initiative designed to dramatically streamline and simplify standards and processes, reduce burden on healthcare organizations, and share leading practices across the healthcare ecosystem. In part, this involved updating the *Comprehensive Accreditation Manuals*—for accredited hospitals and critical access hospitals—to more clearly identify Centers for Medicare & Medicaid Services (CMS)–directed Conditions of Participation (CoPs). Effective January 1, 2026, two standards chapters were introduced for Joint Commission–accredited hospitals and critical access hospitals: The "Physical Environment" (PE) chapter, which streamlined and combined all requirements from the "Environment of Care" (EC) and "Life Safety" (LS) chapters, as well as the "National Performance Goals" (NPG) chapter,

which organizes requirements that rise above regulation into salient, measurable topics with clearly defined goals. For the hospital and critical access accreditation programs, the NPG chapter replaces the "National Patient Safety Goals®" (NPSG) chapter, which currently remains applicable to other Joint Commission accreditation programs.

For most Joint Commission–accredited programs, IPC requirements are found in the "Infection Prevention and Control" (IC) chapter, as well as the "Leadership" (LD), "Environment of Care" (EC), "Human Resources" (HR), "Medication Management" (MM), "National Performance Goals" (NPG), "National Patient Safety Goals" (NPSG), and "Physical Environment" (PE) chapters.

For the global community, similar IPC requirements are addressed in *Joint Commission International Accreditation Standards for Hospitals*, 8th edition. Relevant chapters include "Prevention and Control of Infections" (PCI), as well as "Quality Improvement and Patient Safety" (QPS), "Governance, Leadership, and Direction" (GLD), and "Staff Qualifications and Education" (SQE).

Together, these standards support IPs in all settings to systematically develop, implement, and evaluate an effective infection prevention and control program. In this new edition, relevant Joint Commission and Joint Commission International accreditation standards are in an appendix.

Please note that although Joint Commission and Joint Commission International standards are referenced in this book, the strategies presented here may go beyond what the standards require. This workbook is not intended to focus strictly on compliance with standards but to share leading practices and evidence-based strategies.

Purpose of This Book

The *APIC/Joint Commission Infection Prevention and Control Workbook*, fifth edition, aims to help healthcare organizations, IPC teams, and IPs identify infection risks and challenges in their healthcare settings and minimize those risks by providing strategies and resources to develop, implement, and evaluate a comprehensive IPC program. Discussions, examples, tables, graphs, figures, case studies, and other tools are provided to support organizations and IPs to achieve an effective IPC program. This book is designed to help those individuals responsible for IPC to enhance and improve all IPC practices and activities across the continuum of care to move toward safer care and healthier communities.

Although this book addresses healthcare organizations other than acute care hospitals, some strategies may be most appropriate for hospitals. IPs in all healthcare settings are encouraged to consider the evidence-based practices and extrapolate lessons and guidance as appropriate.

Using the *APIC/Joint Commission Infection Prevention and Control Workbook*

This book is organized to help IPs develop a comprehensive IPC program by first providing an overview of designing and managing an effective program, then addressing in more detail the following key components of the program:

- Assessing risks
- Setting goals based on those identified risks
- Developing an IPC plan based on identified goals and risks
- Implementing an effective surveillance plan
- Managing high-consequence infectious diseases
- Evaluating IPC program effectiveness and improvement

To reduce infections and transmission of pathogenic microorganisms to patients, staff, and visitors, a systematic and proactive IPC program must be planned, implemented, and monitored and include everyone involved in the organization's daily operations—including leadership and administration, purchasing, clinical personnel, environmental services, sterilization services, occupational health, and patients and their families.

These topics are discussed in the following chapters:

- Chapter 1: Designing and Managing an Effective IPC Program
- Chapter 2: The Role of Leadership in IPC
- Chapter 7: Maintaining a Safe Environment of Care
- Chapter 8: Medical Devices and Equipment
- Chapter 10: Occupational Health Issues

Because assessing risks, surveillance, education, and communication are essential to the effectiveness and success of an IPC program, these topics are covered in depth in the following chapters:

- Chapter 3: A Risk-Based Approach to Infection Prevention and Control
- Chapter 4: Planning and Implementing an Effective Surveillance Program
- Chapter 5: High-Consequence Infectious Diseases
- Chapter 6: Clinical Strategies to Reduce Infection Risk
- Chapter 9: Communication and Education Strategies

The effectiveness of an IPC program depends on vigilant assessment of the status of goals and objectives and how the program integrates with and improves patient safety and the quality of care. These chapters address these important issues:

- Chapter 11: Evaluating an IPC Program
- Chapter 12: Integrating IPC into Patient Safety and PI

The figure on page 5 shows how the topics in this workbook are all components of an effective IPC program.

The tools featured in this book are downloadable so that you can use them in your IPC efforts. To access these tools, see the URL on page iv. E-book users may click on the tools listed at the end of each chapter.

A Collaborative Effort

This workbook continues the collaboration between the Association for Professionals in Infection Control and Epidemiology (APIC) and Joint Commission. APIC is the leading professional membership association for IPs. Its mission is to advance the science and practice of infection prevention and control.[17] The mission of Joint Commission is to enable and affirm the highest standards of healthcare quality and safety for all.[18] These two organizations have joined together to assist IPC teams in all healthcare settings and countries to establish comprehensive risk-based IPC programs to protect patients, staff, and families from infections acquired in the community and in healthcare facilities. The *APIC/Joint Commission Infection Prevention and Control Workbook*, fifth edition, continues to incorporate the experience of the IPs who work across the United States and throughout the world who have shared their expertise and knowledge of infection surveillance, prevention, and control.

About the Contributors

Kinta Alexander, DrPH, MS, MPH, CIC, FNYAM, is Director of Infection Prevention and Control at NYC Health + Hospitals | Harlem. With more than 18 years in IPC, Alexander has led innovative initiatives, including the development of a systemwide protocol to combat multidrug-resistant *Candida auris* (recently reclassified as *Candidozyma auris*) while at Mount Sinai Brooklyn. This protocol was later recognized as a best practice by the New York State Department of Health. Alexander has authored publications covering CRE, *C. difficile*, measles, CAUTI, neonatal *Pseudomonas*, and hand hygiene compliance. An accomplished presenter, Alexander has shared her expertise at the International Conference on Prevention & Infection Control (ICPIC) in Geneva and at APIC's national conference. Alexander serves as a subject matter reviewer for the *American Journal of Infection Control* (AJIC) and *Infection Control and Hospital Epidemiology* (ICHE), co-chairs the Infection Prevention Council for NYC Health + Hospitals, and leads the mentorship program as a

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organizations, including as APIC Arkansas President in 2007 and North Carolina President in 2018. She served on the national APIC Communications Committee from 2013 to 2018 and as the APIC Text editor and author from 2014 to 2024. She was named to the North Carolina Great 100 Nurses list in 2023. Allen earned a bachelor of science degree in nursing from Kaplan University and a master of science in nursing education from the University of Texas at Tyler.

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She is a Fellow of the Association for Professionals in Infection Control and Epidemiology (FAPIC). As an active member of APIC, she has held multiple leadership roles at the local chapter level, contributing to strategic planning, member engagement, and educational programming. Nationally, she serves as co-lead editor for APIC's flagship publication, *The APIC Text of Infection Control and Epidemiology*, overseeing content development, author collaboration, and the integration of emerging best practices into this critical resource. Dean contributes to the advancement of infection prevention science by publishing and peer-reviewing scholarly articles in professional journals. Her focus areas include strategies to reduce HAIs, regulatory compliance, and programmatic leadership in IPC across complex health systems.

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Wiksten has worked as an infection preventionist for more than 10 years. Prior to joining Joint Commission, she was the manager of infection prevention at a major metropolitan medical center. She has led IPC programs and efforts in a variety of healthcare settings, including large academic medical centers, community hospitals, and ambulatory settings. Wiksten received a bachelor of science in nursing from Lewis University, Romeoville, Illinois, and a master of science in nursing from Loyola University Chicago, with a focus on population-based infection control and environmental safety. Wiksten earned a doctor of nursing practice from Rush University, Chicago, with a focus on transformational leadership.

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