

The APIC/JCR **Infection Prevention and Control Workbook** *Third Edition*



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FOREWORD

Infection prevention and control are of critical importance to health care organizations. Patients, staff, and visitors to health care facilities are at perpetual risk of acquiring an infection. Only effectively implemented infection prevention and control strategies protect the health of these individuals from often serious and sometimes fatal infections.

This is evidenced by the sheer number of health care–associated infections (HAIs) that occur in the United States each year. According to the US Centers for Disease Control and Prevention’s (CDC) annual *National and State Healthcare-Associated Infections Progress Report*, on any given day 1 of every 25 patients is suffering from at least one HAI. The CDC estimates that, in 2011, approximately 648,000 patients in acute care settings contracted 722,000 HAIs.

This third edition of the *APIC/JCR Infection Prevention and Control Workbook* comes at a time when health care organizations are bolstering their preparedness for emerging threats such as the recent Ebola crisis, the spread of the Zika virus, and other infectious diseases. The health care community is also working to address the rise of antibiotic-resistant strains of disease-causing bacteria. This is in addition to infection preventionists’ continuing work to prevent patient safety events such as central line–associated bloodstream infections; surgical site infections; ventilator-associated pneumonia; health care–acquired influenza and tuberculosis, *Clostridium difficile*, and other HAIs.

This workbook represents close collaboration between Joint Commission Resources (JCR)—the publishing, education, and consulting affiliate of The Joint Commission—and the Association for Professionals in Infection Control and Epidemiology (APIC), the leading professional association for infection preventionists. In this third edition, leading infection prevention and control experts from APIC

and JCR offer practical guidance to help health care organizations improve their infection prevention and control systems and processes. The authors’ firsthand experiences provide invaluable perspective and insight into current infection prevention and control challenges. The authors also provide key tips, strategies, tools, and a wealth of examples from health care organizations of all types.

This workbook is a practical tool that can help infection preventionists assess the effectiveness of their current systems, implement hands-on solutions to protect everyone in their organization from dangerous infections, and improve compliance with Joint Commission infection prevention and control standards and National Patient Safety Goals. The development of this book furthers APIC’s mission to create a safer world through prevention of infection, as well as JCR’s mission to continuously improve the safety and quality of health care in the United States and in the international community.

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and Epidemiology

December 2016

SETTING THE STAGE: AN INTRODUCTION TO INFECTION PREVENTION AND CONTROL AND JOINT COMMISSION ACCREDITATION

By Barbara M. Soule, RN, MPA, CIC, FSHEA, FAPIC; and Lisa Waldowski, DNP (c), MS, APRN, CIC

BACKGROUND

Health care–associated infections (HAIs) can be acquired anywhere health care is delivered, including inpatient acute care hospitals; outpatient settings such as ambulatory surgery centers, dialysis centers, and physician’s offices; nursing care centers; and home care or hospice. Millions of people, both healthy and ill, are exposed to health care each year and are at risk for acquiring HAIs—potentially resulting in prolonged hospital or residential stays, additional illness and treatment needs, and sometimes death.

To provide context to HAIs, a point-prevalence survey performed by the US Centers for Disease Control and Prevention (CDC) in acute care settings in the United States in 2011 estimated that 1 in 25 hospitalized patients on any given day will acquire at least one HAI, with more than half occurring in non-ICU settings.¹ In 2011, HAIs in the United States were estimated to occur in 648,000 patients, with 75,000 associated deaths. Those HAIs included pneumonia, bloodstream infections, surgical site infections, and gastrointestinal illness (most commonly *Clostridium difficile*).¹ Costs attributed to HAIs range from \$35 billion to \$45 billion annually.²

Formerly HAIs were thought to be inevitable for some patients and were considered a consequence of complex care delivered to increasingly ill patients. In other words, HAIs were an “expected” outcome of health care. However, in the past decade, there has been a significant shift in that thinking; many organizations have been working toward achieving zero preventable infections, and some are realizing this goal.^{3–6} Studies have demonstrated that HAIs should not be considered an inevitable consequence of health care, and many can be prevented by implementing

evidence-based infection prevention and control (IPC) practices.^{7,8} Education, interventions, and organizational commitment can effect change and reduce or eliminate HAIs. The elimination of HAIs is the ultimate goal of infection surveillance, prevention, and control programs. This goal makes these programs one of the most significant patient safety initiatives for an organization. IPC should be a top priority for leaders and staff.

CREATING A COMPREHENSIVE INFECTION PREVENTION AND CONTROL PROGRAM

To help reduce the occurrence of infections and the likelihood of transmission of pathogenic organisms, health care organizations need to create a systematic and proactive IPC program. This program should be based on the specific infection risks an organization faces, the services it provides, and the populations it serves. Such a program should stress communication and collaboration and be based on accepted best practices regarding IPC. Because the infection risks, services provided, and populations served by an organization can change, regular evaluation of the IPC program is important. As part of evaluation efforts, organizations must use data to modify the IPC program to ensure that the most appropriate IPC strategies are in place.

A robust IPC program has the input, involvement, and endorsement of leadership and frontline staff. Actually, everyone involved in the daily operations of an organization—including clinical staff, administrative staff, environmental services staff, and so on—should play a

role in developing, implementing, and sustaining the IPC program.

Figure 1, below, illustrates the various components of an effective infection prevention program and the topics that will be covered in the workbook.

Note that infectious agents are not solely found within the health care settings where we work. Infection preventionists must think, plan, and prepare for infections from a global perspective that is beyond the organization’s four walls, including newly emergent and reemerging infections. This planning occurs through the vigilant development, implementation, and sustainment of IPC programs that are comprehensive, responsive, and inclusive of many of the topics addressed in this updated *APIC/JCR Infection Prevention and Control Workbook*.

THE JOINT COMMISSION APPROACH TO INFECTION PREVENTION AND CONTROL

Although The Joint Commission’s IPC philosophy and requirements are directly represented in both The Joint Commission’s Infection Prevention and Control (IC) standards and their associated elements of performance (EPs), as well as in the National Patient Safety Goals (NPSGs) specific to IC, other standards within the Leadership (LD), Environment of Care (EC), Human Resources (HR), and Medication Management (MM) standards are relevant to IPC. Using The Joint Commission’s standards to approach IPC will help infection preventionists in all settings to systematically develop, implement, and evaluate an effective infection surveillance, prevention, and control program (see Figure 2, page xi).

Multidisciplinary collaboration is critical to the success of performing a comprehensive risk assessment, setting risk-based goals, developing the IPC plan, implementing

FIGURE 1: Components of an Effective Infection Prevention and Control (IPC) Program

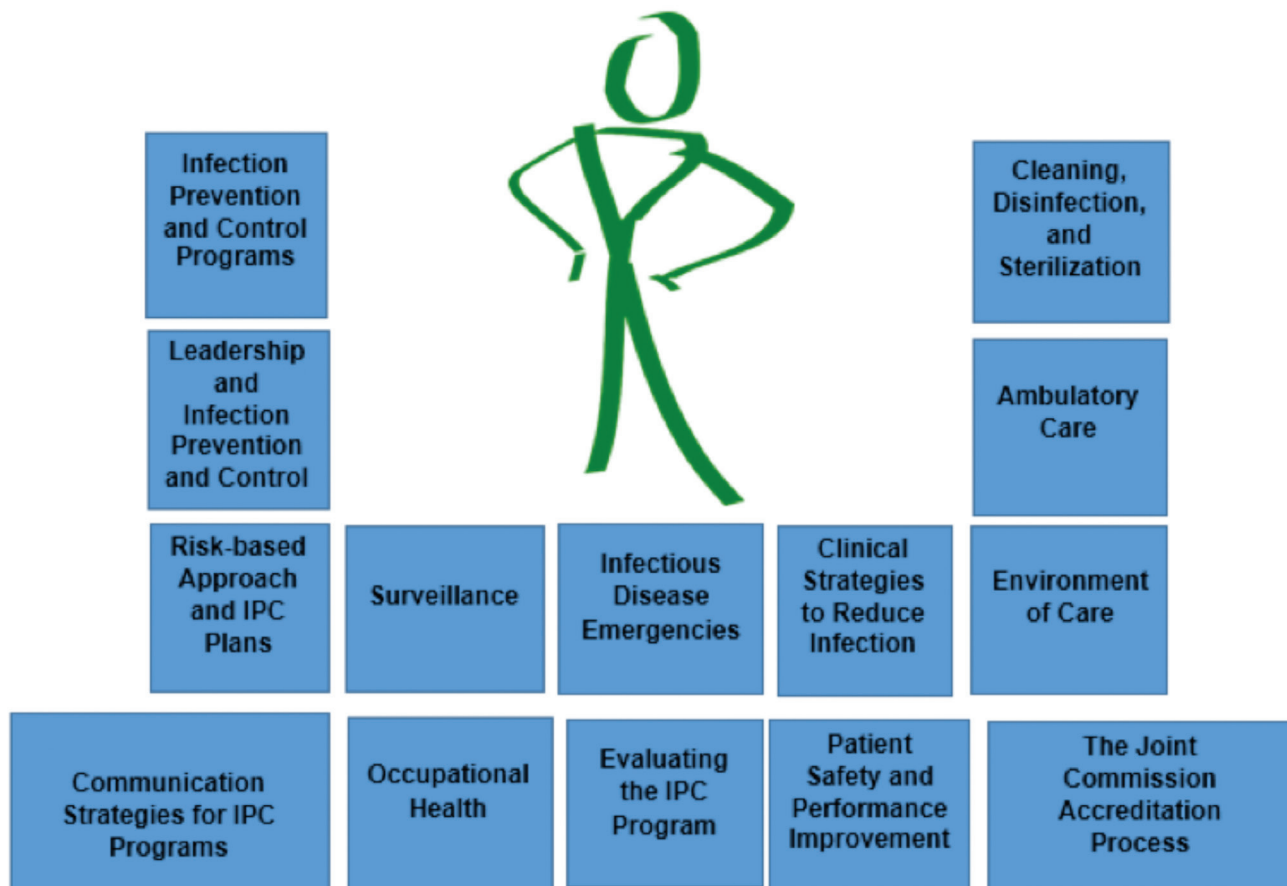
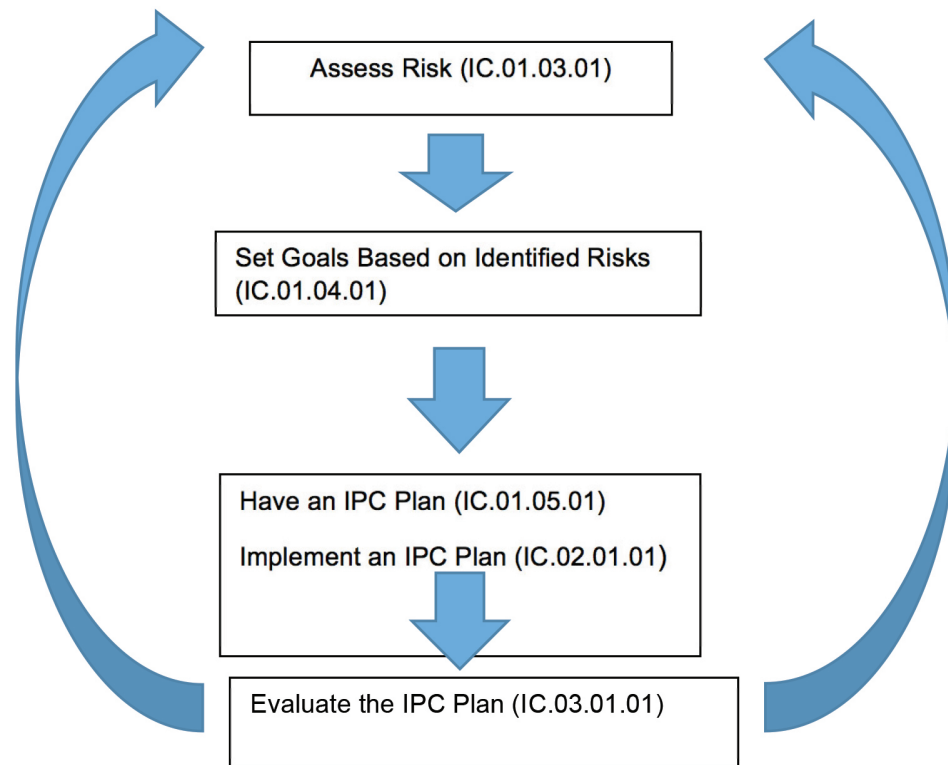


FIGURE 2: The Joint Commission Approach to Infection Prevention and Control (IPC)

IPC activities, and evaluating the effectiveness of the IPC program.

Equally important are the elements that support a successful program:

- A multidisciplinary team to oversee the IPC program
- Identified individual(s) responsible for the daily activities of the IPC program
- Leadership support as demonstrated by appropriate resources and program visibility
- An IPC risk assessment and plan
- Preparation for an influx of potentially infectious patients
- Practices for minimizing the risk of infections associated with medical equipment, devices, and supplies
- Policies for preventing infection transmission among patients, residents, visitors, licensed independent practitioners, and staff
- A proactive occupational health and influenza vaccination program
- Use of evidence-based guidelines and current science to support practice
- Protocol for identifying and managing an infectious disease outbreak
- Full execution of NPSG 7— reducing the risk of HAIs through implementation of policies and procedures to address the following:
 - Hand hygiene
 - Multidrug-resistant organisms
 - Central line–associated bloodstream infections
 - Surgical site infections
 - Catheter-associated urinary tract infections
- Coordination with patient safety, quality improvement, and performance improvement programs
- Continuous preparation for external surveys and assessments

All of these topics are covered in this workbook.

TIP

Always refer to the current accreditation manual for a comprehensive list of all applicable NPSG and IC standards.

The Joint Commission Standards and CMS Requirements

The Joint Commission IC and related standards and NPSGs form the framework for this workbook to help the infection preventionist, physicians, nurses, and others in the organization to identify the relationship between IPC strategies and the associated standards, EPs, and NPSGs. The IPC requirements of the US Centers for Medicare & Medicaid Services are also discussed where applicable, as there is close coordination between the two entities.

USING THE APIC/JCR INFECTION PREVENTION AND CONTROL WORKBOOK

This workbook exemplifies the ongoing collaboration between the Association for Professionals in Infection Control and Epidemiology (APIC) and The Joint Commission. It incorporates the talents of infection preventionists across the country who share their expertise and knowledge of infection surveillance, prevention, and control issues. The purpose of this hands-on workbook is to take an organization through the most challenging IPC-related issues and explore the patient-centric concepts behind The Joint Commission's IC standards, other relevant standards, and the NPSGs.

This revision imparts a wealth of valuable information about current infection surveillance, prevention, and control issues and Joint Commission standards and is intended to help health care organizations and the infection preventionist in developing and implementing a comprehensive IPC program that can effectively minimize the risk of transmission of infections by providing safe, high-quality patient care. Specifically, this third edition includes updated discussions on IPC strategies, IPC in the environment of care, and the Joint Commission accreditation process; it also focuses on the emerging topics of surveillance and infectious disease outbreaks. The workbook addresses infection prevention issues in a variety of health care settings and offers forms, tables, graphs, figures, and other tools to help organizations and infection preventionists in their compliance efforts.

By using this workbook, infection preventionists and others in the organization, including senior leaders, directors, managers, supervisors, and frontline staff providing direct patient care or critical support services, can collaborate to develop, implement, and sustain an effective infection prevention program to minimize infection risk and maximize safe and high-quality care for patients, residents, and staff and all who enter the organization.

ABOUT THE CONTRIBUTORS

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