Intent of PCI.01.02

This standard is about providing adequate resources, including the number of staff members needed for the infection prevention and control program. The infection prevention and control program must be given adequate staff and resources, including administrative support, to meet its goals and responsibilities, to meet the needs of the hospital, and to meet or exceed local laws and regulations. The number of staff is determined by the hospital's size, complexity of services, and level of risks; the program's scope; and laws and regulations, national health care industry standards, and professional association standards.

Hospital leaders ensure that human resources are available to support the infection prevention and control program. This includes the following:

- Appointment of a qualified individual(s) to oversee the program and high-risk areas
- Staff to provide education about the infection prevention and control program
- Clinical staffing numbers that allow for safe practice, including infection prevention and control practices

The infection prevention and control program requires resources to provide education to all staff and to purchase supplies. Hospital leaders ensure that the program has adequate resources to effectively carry out its goals and responsibilities. Hospital leaders approve and allocate resources and ensure that they are provided to the infection prevention and control program as intended and to meet the hospital's needs.

Information management systems are needed to support the data collection, aggregation, and analysis, and tracking and trending of risks, rates, and trends in health care–associated infections. Information management functions support the analysis and interpretation of data and the presentation of findings. Infection prevention and control program data and information are managed with the hospital's continuous improvement program.

Measurable Elements of PCI.01.02

1. Hospital leaders approve staffing levels and provide staff for the infection prevention and control program according to the hospital's size, complexity of activities, level of risks, and the program's scope.
2. Hospital leaders ensure that the infection prevention and control program receives the resources required to meet its goals and responsibilities.
3. Information management systems support the infection prevention and control program.

Goals of the Infection Prevention and Control Program

Standard PCI.02.00

The hospital uses a risk-based data-driven method to establish priorities, implement interventions, and monitor the effectiveness of the health care–associated infection prevention and control program.

Intent of PCI.02.00

Health care–associated infections, including those caused by multidrug-resistant organisms (MDROs), are preventable, cause significant morbidity and mortality, and significantly increase the cost of care to the patient and the hospital. A formal risk assessment using a data-driven approach helps hospitals identify high-risk areas and processes, develop effective interventions, and monitor the effectiveness of those interventions to make changes when necessary. The infection prevention and control process is designed to lower the risk of infection for patients, staff, and others. Health care–associated infections and multidrug-resistant organisms pose a significant risk to patients and communities. Health care–associated infections are generally considered preventable and reflective of a hospital's quality of care. Multidrug-resistant organisms are a serious threat, as there are limited medications that are effective against these rapidly evolving pathogens.

Each hospital must identify infection risks, to its patients, staff, and visitors. Examples of these infection risks include the following:

- Epidemiologically significant infections and infectious organisms (*see* Standard PCI.07.02)
- MDROs
- High-risk patient populations
- Device-associated infections
- Invasive procedures and high-risk practices

The infection prevention and control program identifies other high-risk areas for infection through an annual risk assessment. The hospital conducts infection surveillance for gathering and analyzing the data to guide the risk assessment. Goals for the infection prevention and control program are established based on this risk assessment and surveillance throughout the hospital. Risk assessments may also be completed by the individual(s) with oversight of the infection prevention and control program using information from these activities to implement evidence-based interventions to minimize these infection risks. Ongoing monitoring of identified risks and risk reduction interventions are monitored for effectiveness and includes continuous improvement changes to the program goals based on the trends in monitoring data, including the hospital's performance with internal and external benchmarks.

Some patient care treatments and interventions have been identified as major sources of hospital-associated infections, such as surgical procedures, mechanical ventilation, and insertion of central lines or indwelling catheters. Hospital-associated infections can severely impact a patient's emotional and financial well-being. They are a significant source of complications that can lead to further illness and even death. Many of these infections are preventable. Research studies suggest that implementing practices designed to prevent hospital-acquired infections can lead to as much as a 70% reduction of those infections.

In 2001 the Institute for Healthcare Improvement (IHI) began developing and testing the concept of enhancing teamwork and communication in multidisciplinary teams to improve the clinical care provided to patients. This initiative led to the creation of "bundles" of care. *Bundles* are defined by IHI as "a small set of evidence-based interventions for a defined patient segment/population and care setting that, when implemented together, will result in significantly better outcomes than when implemented individually." Examples of bundles include central line–associated bloodstream infection (CLABSI), ventilator-associated pneumonia (VAP), catheter-associated urinary tract infection (CAUTI), surgical site infection (SSI), and severe sepsis bundle.

Implementing bundles of care will have the greatest impact on patient outcomes when the hospital identifies gaps in best practice or continued poor outcomes in a particular area. Evidence-based infection prevention and control bundles have been shown to reduce the risk of infection more than when individual improvement strategies are implemented separately. It is important for leaders to evaluate compliance with the bundles and track improvements in clinical outcomes.

The hospital must proactively identify and track risks, rates, and trends in health care–associated infections, including special considerations to address the risks from MDROs. When hospitals collect data on colonization rates of MDROs as well as infections caused by those microorganisms, the data should be aggregated separately. The hospital uses infection data to understand its rates and trends, and to compare its performance against other similar hospitals, and contributes data to infection-related databases as required by laws and regulations, infection control organization requirements, and professional organization requirements as applicable. This information is used to prioritize infection prevention and control program activities and to monitor the effectiveness of evidence-based infection prevention and reduction strategies.

The hospital implements evidence-based infection prevention and reduction strategies. Examples of these strategies include the following:

- Clinical practice guidelines
- Care bundles, such as for central lines and ventilators to prevent infections
- Antimicrobial stewardship programs

- Programs to reduce community- and hospital-associated infections
- Initiatives to decrease the use of unnecessary invasive devices

The hospital must also maintain awareness of community data and information on infectious diseases and emerging infectious or novel diseases, such as that compiled by the World Health Organization (WHO), US Centers for Disease Control and Prevention (CDC), national Ministries of Health, local public health agencies, and other official sources.

The infection prevention and control program identifies high-risk areas for infection and develops its goals based on an annual risk assessment. The purpose of the risk assessment is to identify and anticipate the following:

- Trends in current infection data in the hospital, the community, and globally
- Potential sources of infection in the hospital, the community, and globally
- Practices or procedures that do not align with current infection prevention and control recommendations
- Changes to hospital systems or infrastructure (for example, updating ventilation systems)

The goals of the annual infection prevention and control risk assessment include the following:

- Identifying infection risks
- Prioritizing infection risks
- Resetting goals for continuous improvement
- Implementing strategies to minimize or eliminate infection risks
- Defining what infection data to monitor
- Ensuring that the hospital has required supplies, equipment, and structure in place to minimize or eliminate infection risk
- Providing resources and education to staff to minimize infection risk to staff and patients

The infection prevention and control risk assessment includes, at minimum, the following:

Pathogens and HAIs

- Tracking current infection data in the hospital, community, and globally. **Note:** The hospital is not required to collect data from the community, only to maintain awareness of community data on infectious diseases such as that published by WHO, CDC, national Ministries of Health, local health departments, and other official sources.
- Tracking infection rates within the hospital, including community-acquired and health care–associated infections and MDROs
- Employee health and exposures

Emergency Preparedness

- Emerging infectious disease identification and management
- Outbreak management
- Risks associated with geographic location and community environment

Administrative

- Monitoring compliance with infection prevention and control practices
- Monitoring infection prevention and control practices throughout the hospital (for example, hand hygiene)
- Education resources required for staff, patients, and community
- Contracted services

Environmental

- Monitoring air flow and ventilation, temperature, and humidity
- Monitoring engineering controls during construction
- Monitoring of environmental cleaning and disinfection practices
- Management of infectious waste

Supplies/Equipment

- High-level disinfection and sterilization of instruments
- Low- and intermediate-level disinfection of equipment

Other

- Identification of individuals or populations that the risks impact, such as staff, patients, certain high-risk populations, and the community
- The impacts on the identified individuals or populations
- Severity of the risks
- Likelihood of the identified risks occurring
- Level of preparedness to address the identified risks

The goals, strategies, and actions of the infection prevention and control program are updated to reflect the risks identified through the risk assessment.

Measurable Elements of PCI.02.00

1. Ⓓ The hospital completes and documents an infection prevention and control risk assessment to establish the priorities of the health care–associated infection program through data collection and analysis at least annually, and when necessary for specific events, and it includes, at minimum, the following:
   - Respiratory tract infections
   - Urinary tract infections
   - Intravascular invasive devices
   - Surgical sites
   - Multidrug-resistant organisms
   - Epidemiologically significant infections
   - Emerging or reemerging infections within the community
2. Ⓓ The hospital identifies and implements evidence-based interventions to address infection risks identified in the risk assessment.
3. The hospital implements infection prevention and control interventions to reduce the rates of health care associated–infections, including multidrug-resistant organisms, through implementation of evidence-based care bundles wherever these are applicable.
4. Ⓓ The hospital monitors the effectiveness of infection prevention and control interventions through data collection and analysis and updates these as indicated.
5. Ⓓ The hospital performs ongoing data monitoring and surveillance to ensure that infection risks are reduced or eliminated.

Standard PCI.02.01

The laboratory implements a process to reduce the risks of infection resulting from exposure to infectious diseases and biohazardous materials and waste.

Intent of PCI.02.01

Staff working in the laboratory are at risk of exposure to infectious and biohazardous materials and waste. The laboratory must implement processes to identify and reduce risks of infection to staff. The hospital implements policies, procedures, and practices to reduce the hazards of exposure to biohazardous materials. Exposures and infections acquired in the laboratory are immediately reported internally to infection prevention and control, to hospital leaders, and to public health agencies when required. The hospital identifies biosafety hazards in the laboratory and implements policies and procedures to address those hazards. Staff are educated on the policies and procedures and consistently follow these requirements.