Components of an Effective Infection Control Program

Disclosure

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Learning Objectives

- Identify key regulatory agencies that mandate specific practices;
- Identify key accrediting organizations for ambulatory surgery centers;
- Describe the essential elements of an infection control program.
House Keeping

• Questions
• Mute feature (*7 = unmute, *6 = mute)
• “Chat” feature
• Technical difficulties
• CE credits
• Post session follow-up

Background

• First IC efforts began in 1950s
• 1960–1970s: Increased number of IC programs
• 1970s and beyond – Many changes!!
• Today – Major focus on prevention of HAIs, patient safety, employee health, bioterrorism and emergency preparedness…and care delivered in the outpatient setting

Infection Control in Ambulatory Surgery Centers (ASCs)

• Health care delivery has shifted toward outpatient setting – area of immense growth!
• > 5000 ASCs in the US participate in the Medicare program
  • ASCs provide surgical services to patients not requiring hospitalization or stays in a surgical setting < 24 hours
• Little is known about infection control practice in ASCs

CMS Pilot of ASCs

- 3 states selected (Maryland, North Carolina, Oklahoma)
- 68 ASCs assessed (stratified random sample)
  - 32 – Maryland
  - 16 – North Carolina
  - 20 – Oklahoma
- 5 Focus areas
  - Hand hygiene, injection safety and medication handling, equipment reprocessing, environmental cleaning and handling of blood glucose equipment

Source: [www.jama.com](http://www.jama.com) (JAMA, June 9, 2010 – Vol 303, No 22: 2273-2279)

Outcome Measures, Results, Conclusion

- Primary Outcome Measures
  - Proportion of ASCs with lapses in each IC category
- Results
  - 46/68 ASCs had at least 1 lapse in IC
  - 12/68 had lapses in 3 or more of the 5 categories
  - Most common – reuse of single use med vials; failure to follow recommended practices for reprocessing of equipment; lapses in proper handling of blood glucose equipment
- Conclusion
  - Lapses in IC were common in this sample

Source: [www.jama.com](http://www.jama.com) (JAMA, June 9, 2010 – Vol 303, No 22: 2273-2279)
Organizations - Recommended Practices/Guidelines

- Centers for Disease Control and Prevention (CDC)
- Association of PeriOperative Registered Nurses (AORN)
- Association for the Advancement of Medical Instrumentation (AAMI)
- Association for Professionals in Infection Control and Epidemiology (APIC)
- Society for Healthcare Epidemiology of America (SHEA)

Regulatory Agencies

- US Dept. of Health and Human Services (HHS) - principal agency for protecting the health of all Americans and providing essential human services
  - Centers for Medicare and Medicaid (CMS) - Healthcare facilities must comply with federal standard requirements for IC program
  - New conditions for OP Surgery Centers – Effective May 18, 2009
- Food and Drug Administration (FDA) - Activities related to food, blood, medical devices, antimicrobials, germicides of interest to IC
- National Institute for Occupational Safety and Health (NIOSH) - Established in 1970, part of CDC in 1973, focuses on employee protection (e.g. respirators, sharps containers)
- Occupational Safety and Health Administration (OSHA) - Began activities in 1987 (Bloodborne Pathogen rules), focuses on employee risks as result of exposure to communicable diseases.

Accrediting Organizations

38% of ASC are Accredited

American Association for Accreditation Of Ambulatory Surgery Facilities
The Joint Commission

- Published minimal standard for IC in 1953
- 1976, IC programs became specific requirement
- Must be functional IC program focused on surveillance, prevention and control of infections
- 2007, implemented tracer methodology with unannounced surveys

Joint Commission’s National Patient Safety Goals – Goal #7

- Reduce the risk of healthcare-associated infections
  - Adherence to Hand Hygiene Guidelines (NPSG.07.01.01)
    - Comply with CDC or WHO hand hygiene guidelines (policy/procedure, culture, monitor compliance w/ feedback)
  - Implement evidence-based practices to prevent HAIs due to MDROs – e.g. MRSA, VRE, C-diff (NPSG.07.03.01)
  - Preventing Central-line associated blood stream infections (NPSG.07.04.01)
  - Preventing surgical site infections – evidence-based practices e.g. surveillance, education (NPSG.07.05.01)

Components on an Infection Control Program
**Structure and Function**

- Specific needs of facility must be addressed
  - Size of facility, case-mix, types of care provided
- Need to:
  - Obtain/manage critical data (e.g. lab, surveillance info)
  - Develop/recommend policies and procedures
  - Intervene to prevent infections
  - Educate/train healthcare workers, patients and non-medical caregivers

**Multidisciplinary Infection Control Team**

- Infection Preventionist, Healthcare Epidemiologist, Employee Health Nurse
- Administration (CNO, CMO)
- Others: Surgeon, OR Nurse, Resp. Therapist, Pharmacist, Environmental Services
- Meet on regular basis; develop/approve IC policies; discuss issues/interventions; decision making and dissemination of IC info!

**Infection Preventionist**

- May be full/part time – may have other job duties
- Typically nursing/lab background
- Attend training for IC - APIC basic/advanced training courses
- Certification through Certification Board of Infection Control (CBIC)
- Reporting Structure: Nursing/Medical Admin, Quality/Performance Improvement, Risk Management
Impact of Healthcare-associated Infections (HAIs)

- Various methods can be used to document cost of HAIs (www.apic.org)
- Cost of IC Program – salaries, employee benefits, education, commodity expenses

Influencing Practice

- IC Program influences practice through
  - Surveillance and feedback!!
  - Policy and procedure review and development – need to be evidenced-based and support IC needs of facility (e.g. environmental cleaning, sterilization, etc.)
  - Participation on key committees (product, safety, performance improvement, nursing/medical staff, construction, etc.)
  - Training and education of staff (new employee orientation, annual updates, resident orientation)

Quality of the Infection Prevention and Control Program

- Annual evaluation of IC Program
- Develop goals, objectives, strategies for IC Program (annually)
- Mission Statement for IC Program
  - Vision (what)
  - Mission (why)
  - Core Values (what)
Quality of IC Program, continued

- Identify Customers (internal/external)
- Multidisciplinary Activities (be involved with teams)
- Epidemiological Method – ability to apply epidemiological tools and principles to the problems of HAIs (e.g., calculating rates)
- Performance Improvement – essential component of quality care
  - Track/identify problems and variations
  - Evaluate outcomes and processes and use data for improvement initiatives

Setting Priorities

- Helps to focus on appropriate allocation of resources
  - Establish reliable, focused IC Program
  - Streamline data management
  - Analyze IC rates (prospective)
  - Aim for benchmark (zero tolerance)
  - Educate staff on prevention measures
  - Identify opportunities for performance improvement and take leadership role!
  - Develop/implement action plans to accomplish objectives
Discussion: Your Infection Control Program....

• What’s working well?
• What could be improved upon?
  • Gaps in current processes that could impact your effectiveness to prevent infections.
• Does your IC Program meet the CMS requirements?
• Are you accredited by any agency?

Resources

Resources – Upcoming Seminars

• ASCA - www.ascassociation.org
  • Annual Conference, May 11-14, 2011 in Orlando, FL

• AORN
  • Many upcoming webinars – many free to members

• APIC
  • Epi 101 – 10/25 – 10/28 in Atlanta, GA
  • IP for Ambulatory Care Centers, April 4/5, 2011 in Las Vegas
Resources - APIC

- Infection Control in Ambulatory Care (2004)
- Ambulatory Care Newsletter
- Webinars
- www.apic.org

Resources – Helpful Websites

- www.ihi.org (Institute for Healthcare Improvement)
- www.aorn.org (Association of PeriOperative Registered Nurses)
- www.aami.org (Association for the Advancement of Medical Instrumentation)
- www.asa.org/about/index.htm (American Institute of Architects)

Thank You