Top 10 Deficiencies in Infection Prevention in Long Term Care

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NADONALTC

PRESENTS ...

Superbugs: Integration of an Antimicrobial Stewardship Program in Post Acute Care Settings

1 Contact Hour

Participants must complete entire activity. No partial credit will be awarded
Participants must submit a post event evaluation form
There is no conflict of interest for any planner or presenter

This continuing nursing education activity was approved by the Montana Nurses Association, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation

Dr. Hudson Garrett

Dr. Hudson Garrett is currently employed as the Vice President, Clinical Affairs for PDI, and is responsible for the global clinical affairs program and also the Medical Science Liaison program for all divisions within the company. He is a recognized international infection prevention and control expert. He has completed the Johns Hopkins Fellows Program in Hospital Epidemiology and Infection Control, and the CDC Fundamentals of Healthcare Epidemiology program. He is board certified in family practice, critical care, vascular access, moderate sedation, and long term care. He is the President of the Vascular Access Certification Corporation, President of the Southeastern Chapter of the Infusion Nurses Society, and the Chairperson for the Research Committee for the Association for the Healthcare Environment.

Objectives

- Discuss the impact of HAI's to Long Term Care settings
- Review the most significantly cited CMS citations related to Infection Prevention in Long Term Care
- Review techniques to mitigate risk and improve accountability to reduce HAI's

What are the Expectations?

"Facility must establish and maintain an Infection Control Program designed to provide a safe, sanitary and comfortable environment and to help prevent the development and transmission of disease and infection."

Components……
Preventing the Spread

- When the Infection Control Program determines the spread of infection, the facility must isolate the resident
- The facility must prohibit employees with a communicable disease or infected skin lesions from direct contact with residents or their food, if direct contact will transmit the disease
- The facility must require staff to wash their hands after each direct resident contact for which handwashing is indicated by accepted professional practice
- Personnel must handle, store, process and transport lines so as to prevent the spread of infection

Source: 483.65 (a)

Components……Program

- Investigates, controls, and prevents infection in the facility
- Decides what procedures, such as isolation, should be applied to an individual resident
- Maintains a record of incidents and corrective actions related to infections

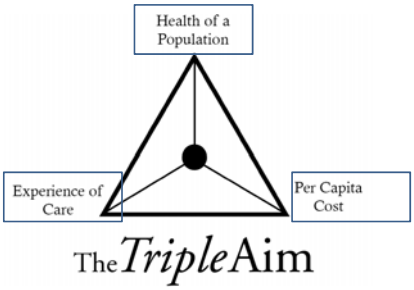
Source: 483.65 (b) and 483.65 (c)

It touches all of us

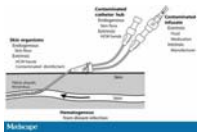
- **1 to 3 million serious infections every year in long term care**
- **As many as 380,000 residents die of the infections they contract**
- **Infections are among the most frequent reasons long term care residents get admitted to the hospital**

What is our current level of compliance with EBP?

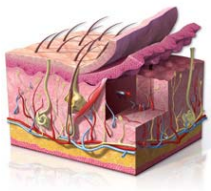
The Future of Healthcare

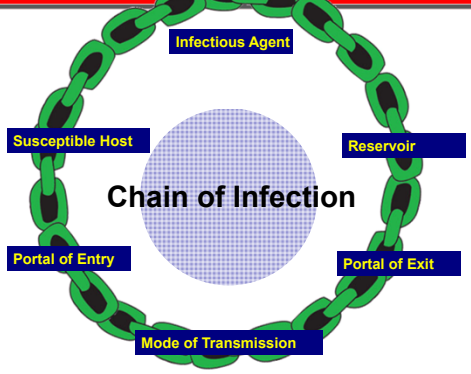


What do these have in common?

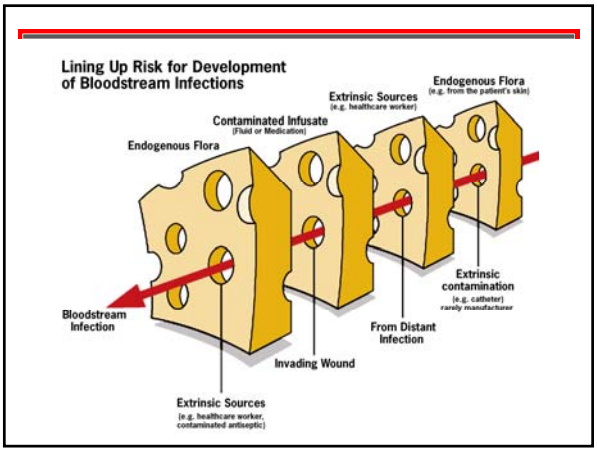


What is the Ideal?

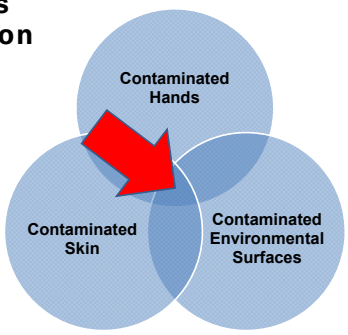




Centers for Disease Control and Prevention (2003). Available at http://www.cdc.gov/Oralhealth/InfectionControl/guidelines/slides/008.htm



How Does Transmission Occur?



Why Be Concerned?

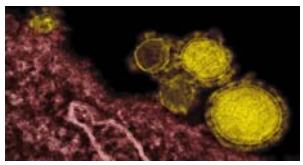
- **Infections have a significant negative influence on health status and function of residents**
- **Defense mechanisms against infection decline with age**
- **Infections cause 26% - 50% of transfers to hospitals**
- **25% - 70% of antibiotic use in LTC is inappropriate**

Chilton, L. Infections and Antimicrobial Resistance in the Elderly Living in Long-Term Cares Settings. Available at http://www.medscape/com/viewarticle/493678

Common Infections

Infection	Prevalence %	Incidence/1,000 Patient-Days
All Infections	1.6 - 32.7	1.8 - 13.5
Respiratory	0.3 - 3.7	0.3 - 4.7
Urinary	0.6 - 21.8	0.19 - 2.2
Skin and Soft Tissue	1.1 - 8.8	0.1 - 2.1
Gastrointestinal	------	0.1 - 2.5
Bloodstream	------	0.2 - 0.4

Chilton, L. Infections and Antimicrobial Resistance in the Elderly Living in Long-Term Cares Settings. Available at http://www.medscape/com/viewarticle/493678



The Importance of a Checklist

WHO Checklist for Safer Surgical Care

Top Opportunities for Improvement

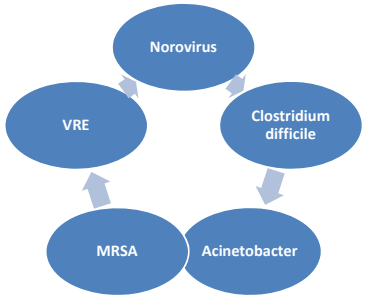
- Just follow your policy
- Critically Think
- Engage the Resident and Staff
- Disinfect everything between resident uses
- Implement Isolation Precautions
- Disinfect Glucometers between uses
- Wash those Hands
- Vaccinate, Vaccinate, Vaccinate
- Have an Infection Prevention Program
- Unit Based Champions

Self Check

"So with all of the evidence based practices that exist for the prevention of HAIs, why do most healthcare facilities fail to utilize these recommendations approximately 60% of the time?"

Consumers Union

Pathogens of Particular Concern

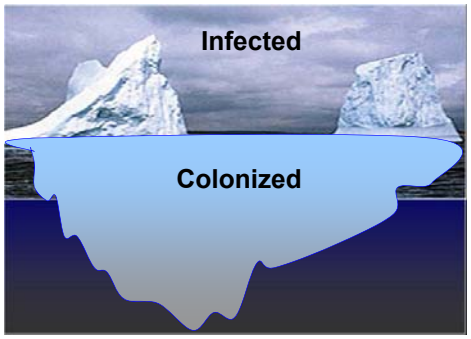


Colonized or Infected: What is the Difference?

- People who carry bacteria without evidence of infection (fever, increased white blood cell count) are **colonized**

~ Bacteria can be transmitted even if the resident is not infected ~

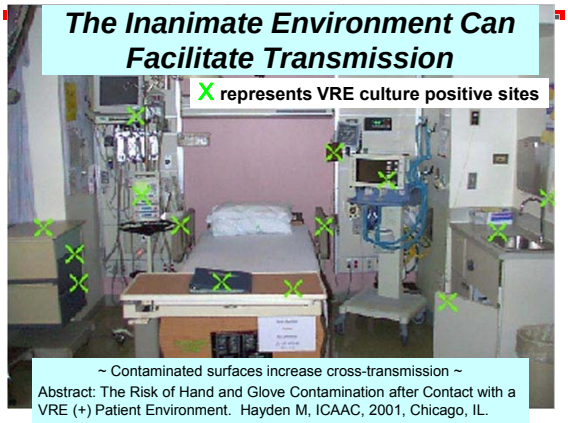
The Iceberg Effect



Your 5 Moments for Hand Hygiene

WHO Save Lives; Clean Your Hands http://www.who.int/gpsc/5may/background/5moments/en

The Inanimate Environment Can Facilitate Transmission



~ Contaminated surfaces increase cross-transmission ~

Abstract: The Risk of Hand and Glove Contamination after Contact with a VRE (+) Patient Environment. Hayden M, ICAAC, 2001, Chicago, IL.

Levels of Disinfection

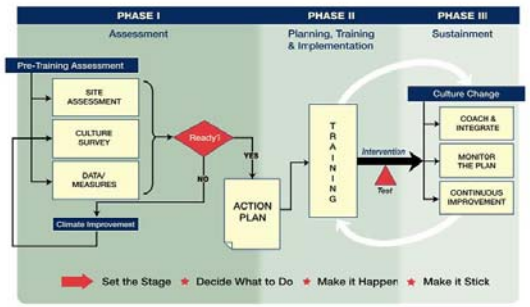
- Sterilization
- High-level disinfection (expected to destroy all microorganisms except high numbers of bacterial spores)
- Intermediate-level disinfection (inactivates *Mycobacterium tuberculosis*, vegetative bacteria, most viruses, most fungi)
- Low-level disinfection (can kill most bacteria, some viruses, and some fungi, but cannot be relied on to kill resistant microorganisms such as tubercle bacilli or bacterial spores)

Contact Time

" Disinfect noncritical surfaces with an EPA-registered hospital disinfectant using the label's safety precautions and use directions. By law, the user must follow all applicable label instructions on EPA-registered products. If the user selects exposure conditions that differ from those of EPA-registered products label, the user assumes liability for any injuries resulting from off-label use and is potentially subject to enforcement action under FIFRA"

Rutala, W. Disinfection, Sterilization and Antisepsis Principles, Practices, Current Issues and New Research. APIC Conference Proceedings, 2006. Page 103.

Shift Towards a Culture of Safety



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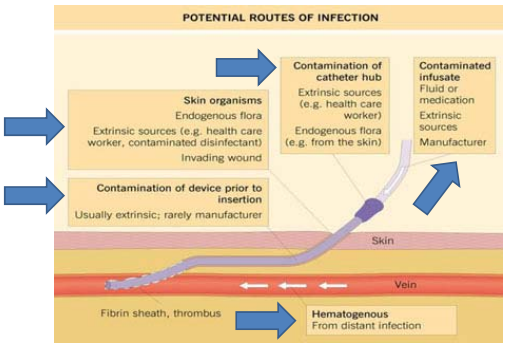
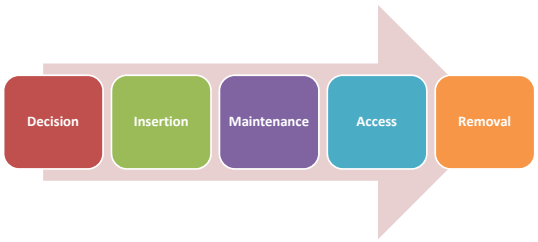


Continuum of Care for Vascular Access



Safe Injection Practices

Safe Use of Needles & Syringes

"In medicine, as in any profession, we must grapple with systems, resources, circumstances, people-and our own shortcomings, as well. We face obstacles of seemingly endless variety. Yet somehow we must advance, we must refine, we must improve."

Atul Gawande, *Better: A Surgeon's Notes on Performance*

Resident Health Program

- **Resident Care Practices**
  - Resident Hand Hygiene
  - Oral Hygiene
  - Prevention of Aspiration
  - Skin Care
  - Prevention of UTI's

SHEA/APIC Guideline: Infection Prevention and Control in the Long-Term Care Facility. (2008). Available at http://www.journals.uchicago.edu/doi/pdf/10.1086/592416

Antibiotic Stewardship

- Failure to distinguish between colonization and infection.
- Treatment of colonization
- Antimicrobials are among the most frequently prescribed medications (2.9 – 13.9 antibiotic courses per 1,000 resident days)
- Significant variability in antibiotic prescribing patterns in LTC

SHEA/APIC Guideline: Infection Prevention and Control in the Long-Term Care Facility. (2008). Available at http://www.journals.uchicago.edu/doi/pdf/10.1086/592416

The Study We Have All Heard

- The Institute of Medicine (IOM) study "To Err is Human; Building a Safer Healthcare System"
- Adverse events occur in 2.9 to 3.7% of all hospitalizations
- 44,000 to 98,000 patients dies a year as a result of medical errors
- Source at http://books.nap.edu/openbook.php?isbn=0309068371

Definition of Patient Safety

Definition of Patient Safety by NQF;

Freedom from injury or illness resulting from the processes of care

Patient safety event is an occurrence or potential occurrence, that is directly linked to the delivery of healthcare that results, or could result, in injury, death, or illness

Patient Safety and Just Culture

- The studies show that individual blame is still dominant despite the literature
- No blame is the appropriate stance for system related errors
- But what about reckless behavior or intentional acts that lead to harm
- Certain errors do demand accountability and the Just Culture theory is that balance
- Establishes zero tolerance for reckless behavior such as ignoring all of the safety steps put in place

Just Culture

Just Culture

- Human factor design to reduce the rate of error
  - When cardioverting the machine automatically reverted to defib and the patient died so let's redesign the machine
- Redundancy to limit the effects of failure (mistake proofing)
- Balance duty against organizational and individual values
- There are three duties
  - Duty to avoid causing unjustified risk or harm
  - Duty to produce an outcome
  - Duty to follow a procedural rules

Just Culture Principles

Values and expectations- what is important to the organization

System design- continual redesign of system and address processes and systems so it does not happen to someone else

- Coaching and open environment

Peer to peer coaching where helping one another to stay safe and make sure things are being done correctly

- Just culture algorithms can help

46

Just Culture Principles

Responses to human error- willing to discuss this and discipline does not help if one makes a mistake

Responses to reckless behavior- take action if reckless behavior to one who knowingly endangers a patient- need to be fair culture

Severity bias in rejection of no harm no foul, it is not based on only looking at issue if patient was harmed

Equity is about being fair and consistent with every employee group and all are set for the same expectations

47

Please Use CUS Words

but *only* when appropriate!

DESC Script

A constructive approach for managing and resolving conflict

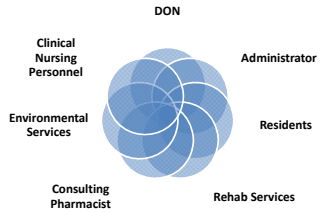
- D = Describe the specific situation or behavior; provide concrete data
- E = Express how the situation makes you feel/what your concerns are
- S = Suggest other alternatives and seek agreement
- C = Consequences should be stated in terms of impact on established team goals; strive for consensus

31

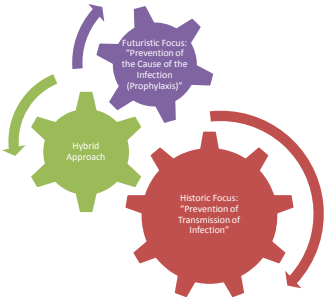
Mutual Support

EVIDENCE-BASED PRACTICES

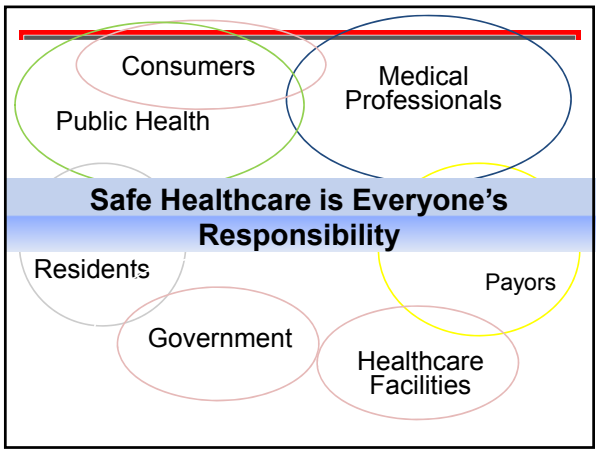
Collaboration & Communication



Moving From the Past to the Future



Formula for Success



Question and Answer

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