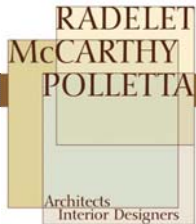




The Design Professional and Infection Prevention for Healthcare Facilities

David J. Wells, AIA

October 7, 2016



Personal Background

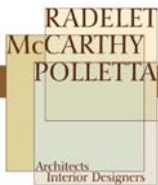


David J. Wells, AIA

21 Years of Experience in Healthcare Design

Representative Clients:

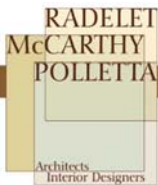
- Allegheny Health Network
- Penn State Hershey Medical Center
- Uniontown Hospital
- University of Pittsburgh Medical Center
- VA Healthcare System



Discussion Topics



1. Design Professional Role
2. Approach to Infection Control
3. Hospital Guidelines and Codes
4. Construction Practices
5. Discussion



Design Professional Role



Understanding Project Goals and Objectives

- Working with all stakeholders
- Involvement of Infection Control Officer
- The patient population

Review of Hospital Guidelines and Codes

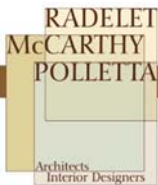
- Governmental requirements
- Impact on project program

Thoughtful Design

- Patient and staff flow
- Maximize infection control through design

Construction Observation

- Assistance with coordination of infection control criteria
- Construction process and infection control



Approach to Infection Control



Project Layout

- Appropriateness within the facility
- Reduce cross traffic – High Risk / Low Risk

Promoting Hand Washing through Design

- Placement of sinks
- Hands free controls
- Wrist blades
- Seamless sink design



Hand Sanitizers

- Quantities
- Placement

Airborne Infection Isolation Rooms

- Anterooms
- Special design features



Approach to Infection Control



Material Selection

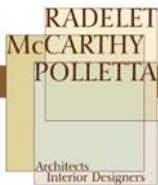
- Easily cleanable
- Seamless products

Advancements

- Vinyl like fabrics
- Easier maintenance
- Antimicrobial products

HVAC, Plumbing, and Electrical

- Fresh air requirements
- Air changes
- Filtering
- Flushing of plumbing systems
- Hands free controls



Hospital Guidelines and Codes



FGI Guidelines for Healthcare Facilities

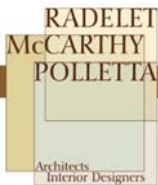
- Key objectives
- Infection Control Risk Assessment (ICRA)
- Infection Control Risk Mitigation (ICRM)
- Patient Handling and Movement Assessment (PHAMA)

International Building Codes and NFPA

- IBC and IEBC – Construction requirements
- NFPA and Pennsylvania Department of Health

Other Codes

- Americans with Disabilities Act (ADA)
- Allegheny Co. Amendments to the Plumbing Code
- Energy Codes



Construction Practices



Maintain ICRA Barriers

- Placement
- Types of barrier construction
- HEPA filtering and exhaust
- Maintaining the ICRA barrier
- Project phasing

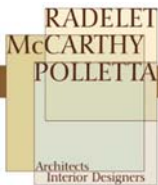
Control Access to the construction site

- Contractors, Hospital Staff, Visitors
- Debris removal and material delivery



Mitigate Impact to adjacent spaces

- Construction site access route
- Elevators
- Adjacent MEP Systems
- Project close-out / final inspection



Discussion



Photo Credits:

Denmarsh Photography
DuPont
Facility Guidelines Institute

Mintie Corporation
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