Presentation on:

State of Codes and Standards

Midwest Healthcare Engineering Conference and Trade Show

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The Codes Environment

- What does the future look like?
  - Everyone wants to regulate health care facilities!
  - Very little thought to increased cost of health care by having:
    - Multiple and conflicting codes
    - Authorities enforcing codes with little understanding of what they are enforcing
    - Multiple layers of enforcing authorities all with different ideas on what is important

What Does 2012 Look Like?

- Code Authorities
  - CMS
    - Will begin process to update to 2012 Life Safety Code and NFPA 99 Code for Health Care Facilities
    - Will continue to enforce the 2000 edition of NFPA 101
    - ASHE is working with senior leadership to put moratoriums on code requirements that have been modified by more recent editions
    - ASHE is requesting that categorical waivers be issued on major elements that have changed

So what do you think our chances are of success? Remember this is the Federal Government!

- 1 in 10
- 1 in 50
- 1 in 1000
- 1 in 100,000
- 1 in 1,000,000

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It is a lost cause!

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Or is it?

CMS on ESRDs

- Admitted that they over applied the Life Safety Code to these non-residential facilities
- Found that NFPA 101 duplicated many of the local building code requirements and added others retroactively
- Assumed need for defend in place - WRONG
- Data shows extremely low risk from fire over past 40 years - A bit late to find that out!!

CMS on ESRDs

- While risk is low, cost of compliance with NFPA 101 is high
- CMS found out that the cost of compliance:
  - considerable and profoundly exceeded the governments original estimate of $1,960
  - New cost estimate is ranging from a low of $23,500 to a high of $222,000 for an existing facility

What Does 2012 Look Like?

- Code Authorities
  - Joint Commission will continue to be the lap dog of CMS
  - State departments of health and fire marshal's are bound by CMS
  - Local authorities having jurisdiction will continue to apply the codes and standards without change

What is the Solution?

- ☑ One set of health care codes and standards
- ☑ Federal mandate for every regulatory agency to use the same regulations and editions of the code or standard
- ☑ Qualified enforcing agents and inspectors
  - ☑ Certification
  - ☑ If surveyed by one, accepted by all
  - ☑ Responsible to a board of ethics
  - ☑ A single interpretations committee

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ASHE and ICC

A Strategic Partnership to Enhance the IBC and ICC

Ad Hoc Committee Details

- Formed in cooperation with ASHE
- Charge to comprehensively review and update fire provision
  - Hospitals
  - Ambulatory Care
- Objective is to develop code change proposals for the 2015 edition
- 15 member committee

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What are we trying to accomplish?

- Approximately 95% of all municipalities, counties, and states follow the I-Codes
- New construction will be designed to follow the I-Codes and many times the NFPA Life Safety Code
- Number of codes applied to health care in the area of building and life safety needs to be limited to ONE
- Not trying to put the NFPA out of business, still going to reference NFPA installation and performance standards

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ASHE Activities on ICC

- Establishing a risk based baseline on current needs based on data and trends
- Working to remove excess provisions based on emotion or an increase in market share
- Working to enhance system requirements to meet our mission of providing patient care
- and most importantly --------

Working toward one code for health care facility compliance

Global Topics

- New code language for 2015 I-Codes
- Review of formal interpretations on I-Codes
- Working to distinguish requirements between hospitals and nursing homes
- Enhancing existing requirements for hospitals and ambulatory care
- Using the CMS K-tag document as a reference for areas to be covered for existing facilities

Topic Areas Being Reviewed

- Increasing Decorations on walls to 20%
  - bulletin boards
  - artwork
  - hangings
  - posters

Topic Areas Being Reviewed

- Elevator Lobbies and the need for separation
- Part of defend-in-place
- Machine rooms
- Use for vertical transportation during an event

Topic Areas Being Reviewed

- Mechanical systems and smoke control
  - Operating rooms
  - Smoke control in patient care areas, currently an exception for
    - buildings sprinklered throughout
    - fully ducted HVAC systems in patient care areas
  - Looking at infection control issues

Topic Areas Being Reviewed

- Corridor walls/smoke barriers
  - continuity of walls
    - terminate at the lay-in ceiling with a smoke tight joint at the corridor wall
    - does corridor or patient room ceiling need to be monolithic
    - ceiling not used as a plenum
    - room not classified as a hazardous area

Topic Areas Being Reviewed

- Ventilation rates
  - ad hoc committee is debating on referencing ventilation table in ASHRAE 170
- Increasing size of smoke compartments to 40,000 sq. ft.
- Deleting smoke dampers in smoke barriers

Topic Areas Being Reviewed

- Cooking facilities in break rooms
  - clarify that this does not include
    - microwaves,
    - crockpots,
    - popcorn poppers, and
    - coffee pots

Topic Areas Being Reviewed

- Corridor width of 8 feet with a 5 foot clear aisle space
  - similar to NFPA 101
    - All staging on one side of the corridor
    - Only one piece of equipment per sleeping or treatment room on the unit
  - concern about use of automatic guided vehicles
  - concern about evacuation of patients and staff

Topic Areas Being Reviewed

- Fire alarms - audible and visible
  - use of private mode fire alarm systems
  - use of visible verses audible alarms
  - staff versus patient/visitor notification
  - defend in place concept

  Remember ADA only requires a health care facility to meet industry accepted alarm practices!

Topic Areas Being Reviewed

- New and existing facilities to be fully sprinklered
  - continue requirement for QRS
  - IFC currently requires existing I-2 to be fully sprinklered
  - definition of fully sprinklered
  - testing of system

Topic Areas Being Reviewed

- Areas defined as hazardous locations
- Medical gas systems
  - IPC
  - NFPA 99
- Alcohol dispensers
  - distance separation of 1” to match LSC
  - quantity
  - definition of location over counter tops

NFPA 99 - 2010 Edition

It's now a Code!!!

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Brief Advocacy Update

- NFPA 99, 2012 edition
  - Use of categories of patient risk to determine requirements
  - ORs are wet locations unless a risk assessment determines otherwise
  - Selective coordination has been established at 0.1 seconds
  - Removed non-recirculating HVAC systems requirements for smoke control in the Operating Rooms
  - Reclassified emergency electrical systems to Essential Electrical Power Supply Systems
  - Medical gas inlet/outlet testing on a periodic basis (NOT ANNUAL)

Removed humidity requirements from NFPA 99!

CMS is still trying to figure out what to do with the new lower limit of 20%.

Categories of Patient Risk

Category 1

Facility systems in which failure of such equipment or system is likely to cause major injury or death of patients or caregivers shall be designed to meet system category 1 as defined in this standard.

Annex Material

Category 1: Systems are expected to work or be available at all times to support patient needs.

Categories of Patient Risk

Category 2

Facility systems in which failure of such equipment is likely to cause minor injury to patients or caregivers shall be designed to meet system category 2 as defined in this standard.

Annex Material

Category 2: Systems are expected to provide a high level of reliability; however, limited short durations of equipment downtime can be tolerated without significant impact on patient care.
Category 2 systems support patient needs, but are not critical for life support.

Categories of Patient Risk

Category 3

Facility systems in which failure of such equipment is not likely to cause injury to the patients or caregivers, but may cause patient discomfort shall be designed to meet system category 3 as defined in this standard

Annex Material

Category 3: Normal building system reliabilities are expected. Such systems support patient's needs but failure of such equipment would not immediately effect patient care. Such equipment is not critical for life support.

Categories of Patient Risk

Category 4

Facility systems in which failure of such equipment would have no impact on patient care shall be designed to meet system category 4 as defined in this standard.

Annex Material

Category 4: Such systems have no impact on patient care and would not be noticeable to patients in the event of failure. There are no minimum requirements for such equipment.

2012 NFPA 101

Proposed Changes

Chapter 18/19 Proposed Changes

- New language permitting sections of health care facilities to be separate occupancies
- Ambulatory care facilities, medical clinics, and similar facilities shall be permitted to be used for diagnostic and treatment services of inpatients who are capable of self-preservation
- Continue to work on locking provisions

Chapter 18/19 Proposed Changes

- Patient sleeping suites increased to 10,000 sf
  - direct visual supervision within the suite
  - complete smoke detector coverage
  - sprinkler protected
- Access to exits within rooms or suites do not need to be marked where staff is responsible for relocating or evacuation of occupants

Corridor Width

18.2.3.4* Aisles, corridors, and ramps required for exit access in a hospital or nursing home shall be not less than 8 ft (2440 mm) in clear and unobstructed width, unless otherwise permitted by the following:

(4) Projections into the required width shall be permitted for wheeled equipment provided that all of the following conditions are met:
(a) The wheeled equipment does not reduce the clear unobstructed corridor width to less than 5 ft (1525 mm).
(b) The health care occupancy fire safety plan and training program address the relocation of the wheeled equipment during a fire or similar emergency.
(c) The wheeled equipment is limited to:
i* Equipment in use and carts in use
ii* Medical emergency equipment not in use
iii* Patient lift and transport equipment

Corridor Width

Annex Material

A.18.2.3.4(4)(C)i Wheeled equipment and carts in use include food service carts, housekeeping carts, medication carts, isolation carts, and similar items. Isolation carts should only be in the corridor where patients require isolation precautions.

Corridor Width

Annex Material

A.18.2.3.4(4)(C)ii Unattended wheeled crash carts and other similar wheeled emergency equipment are permitted to be located in the corridor when “not in use” because they need to be immediately accessible during a clinical emergency. Note that “not in use” is not the same as “in storage”. Storage is not permitted to be open to the corridor, unless it meets one of the provisions permitted in 18.3.6.1 and is not a hazardous area.

Corridor Width

Annex Material

A.18.2.3.4(4)(C)iii Wheeled portable patient lift or transport equipment needs to be readily available to clinical staff for moving, transferring, toileting, or relocation of patients. These devices are used daily for safe handling of patients and to provide for worker safety. This equipment might not be defined as “in use” but needs to be convenient for the use of caregivers at all times.

Chapter 18/19 Proposed Changes

- Added annex language about the corridor wall requirement not needing to meet smoke barrier or partition requirements
- Stored combustible materials in a room or space open to the corridor does not turn the corridor into a hazardous area
- Changed the ABHR quantity limit to 10 gallons in egress corridors only, room ABHR not included

Chapter 19 Proposed Changes

- For the three referenced sections of NFPA 99 only the administration, maintenance and testing portions apply:
  - anesthetizing location
  - medical gas
  - laboratories
- Changed the retroactive high rise sprinkler requirement to 9 years