Environment of Care

Update 2008

Standard Interpretation Group

The Joint Commission

Joint Commission Resources

Agenda

- EC.1.10 EPs 4 & 5, EP 9 Application
- EC.1.20 EP 1 Application
- EC.5.40 EP 14 Damper Extension
- EC.7.10 & EC.4.17 Contingency Plans
- EC.8.30 Proactive Infection Control Risk Assessment
- LD.2.20 EP 2 When documents are not there…
- Other Issues
  - Computers on Wheels & other LSC Interpretations
  - Oxygen cylinder management
  - Eye Wash Stations
- SII Project

Joint Commission Resources

EC.1.10 EPs 4 and 5

EC.1.10 EP 4 is a B category

- Did the organization conduct a risk assessment?
  - Yes or No: This is the only question
  - If no, score as insufficient compliance
- How well was the assessment conducted?
  - Evaluate the process
- If not comprehensive, score as partial compliance
  - If multiple risk based issues are identified, the risk assessment process was not comprehensive
    - Score partial

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EC.1.10 EPs 4 & 5, and EC.8.10 EP 4

- Score unsafe conditions and hazards as follows:
  - Oxygen cylinders that are mishandled, volume and storage issues are scored at EC.5.10 EP 2
    - Oxygen zone valve labeling will be scored at EC.7.50 EP 3
- Examples of unsafe conditions not identified in a risk assessment should be scored at EC.8.10 EP 4
  - Unprotected receptacles in pediatrics
  - Unsafe conditions behavioral health (i.e. exposed piping & suicide risk)
  - ABHR over ignition source
  - Holes in flooring that could be trip hazard

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EC.1.10 EPs 4 and 5

5. The hospital *uses the risks identified* to select and implement procedures and controls to achieve the lowest potential for adverse impact on the safety and health of patients, staff, and other people coming to the hospital's facilities.

- EP 5 only addresses "risks identified" in EC.1.10 EP 4
  - If risk was not identified, then the issue is scored at EC.8.10 EP 4 (if in patient care area)

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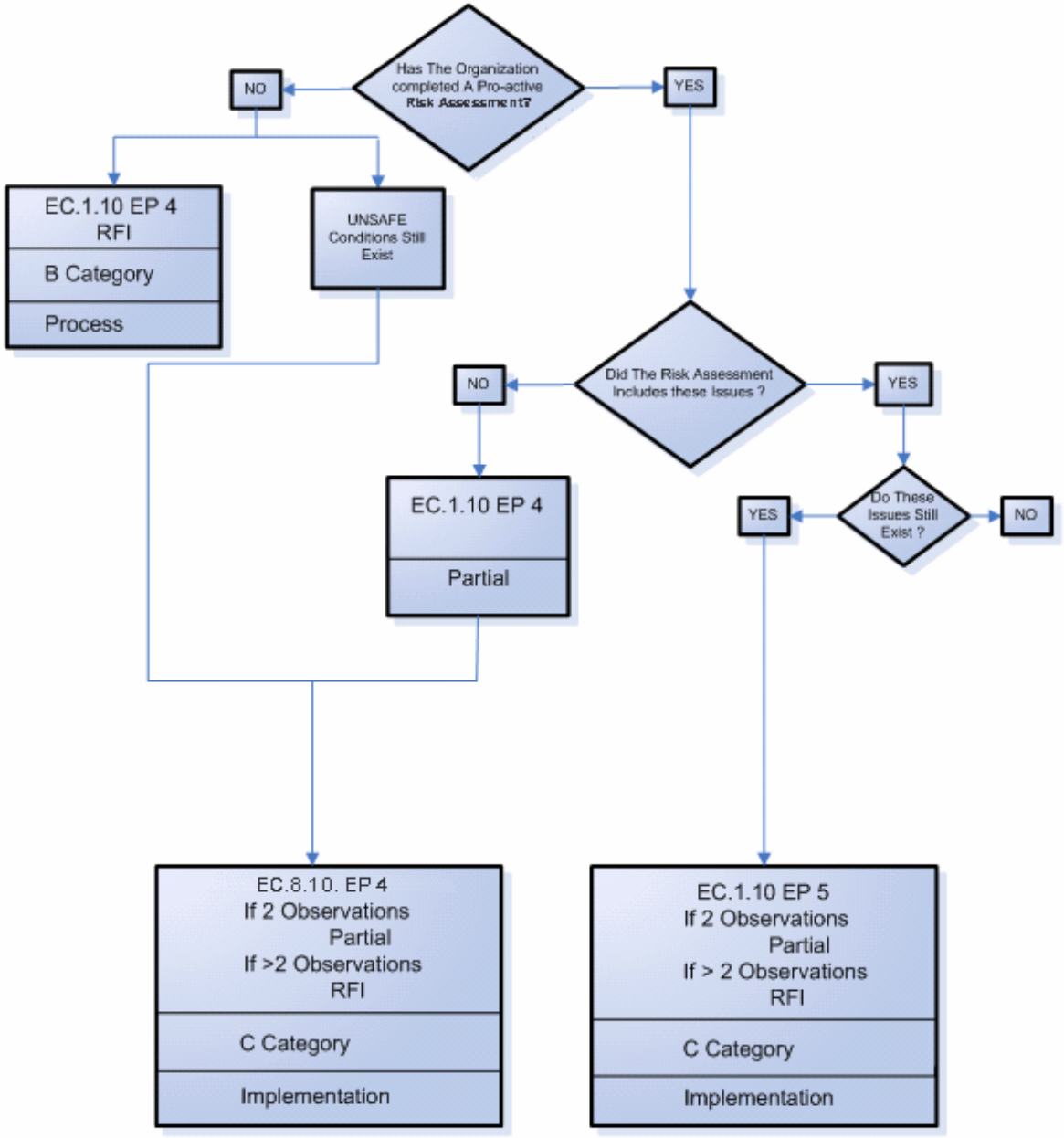
EC.1.10 EPs 4 & 5



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EC.1.10 EP 9

EC.1.10 EP 9

The hospital ensures that all grounds and equipment are maintained appropriately.

- Grounds in this EP includes sidewalks, parking surfaces, lawns, etc.
- Equipment in this EP includes the equipment to maintain the grounds, such as snow and lawn equipment with appropriate guards; user training for proper operation
- This EP does not address improper use of equipment inside the building

Joint Commission Resources

EC.1.20

- Environmental Tours should include:
  - All patient care areas twice a year (EP 2)
  - All non-patient care areas at least once a year (EP 3)

- EC.1.20 EP 1 is a B category
  - This EP is asking if the organization conducts environment of care tours
    - If not, score as insufficient compliance
  - As a B Category; how well were the tours conducted?
    - Did the tours assess environmental deficiencies, hazards and unsafe conditions?

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EC.1.20

- Evidence of the process of Environmental Tours:
  - May include documentation of the Environmental Tours
    - Criteria for the organization to identify environmental deficiencies, hazards and unsafe conditions
    - Review Environment of Care Committee (or Safety Committee) minutes for trends that indicate effectiveness of the environmental tours
  - If evidence of the process is lacking, score partial

Joint Commission Resources

Damper Inspection (EC.5.40 EP 14)

All fire and smoke dampers are operated one year after installation and then at least every six years in buildings where inpatient services are provided and four years in other buildings to verify that they fully close.[1]

Note: The initial test that must occur one year after installation applies only to dampers installed on and after January 1, 2008.

[1]For additional guidance, see NFPA 80-2007 (19.4.1.1) and NFPA 105-2007 (6.5.2).

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NFPA Standards

- NFPA 80-2007 Chapter 19, Installation, Testing and Maintenance of fire dampers
  - 19.4.1.1 The test and inspection frequency shall then be every 4 years, except in hospitals, where the frequency shall be every 6 years.
- NFPA 105-2007 Chapter 6, Installation, Testing and Maintenance of smoke dampers
  - 6.5.2 Each damper shall be tested and inspected one year after installation. The test and inspection frequency shall then be every 4 years, except in hospitals, where the frequency shall be every 6 years.

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Dampers

- Effective 1/1/2008:
  - The Joint Commission will allow a hospital to begin the 6 year frequency effective 1/1/2008
    - 6 year cycle of damper inspections for hospitals
    - Hospitals may add 2 years to current 4 year inspection practice
  - Any new damper installed after 1/1/2008 must be inspected one year after installation

Joint Commission Resources

EC.5.40: Inspect, Test and Maintain

- Major concern is DOCUMENTATION
- Inspecting, testing and maintaining assures the organization the process or system is able to continue
- NFPA body of codes currently used include:
  - Life Safety Code (101-2000)
  - Health Care Facilities (99-1999)
  - Fire Alarm Code (72-1999)
  - Maintain, Test & Inspect Sprinklers (25-1998)
  - Sprinkler Systems (13-1998)
  - Installation of AC & Ventilation (90A-1999)

Joint Commission Resources

Contingency Planning

- Utilities exist to provide a safe and comfortable environment of care
- Failure of utilities could directly impact patient care delivery
- Activities associated with managing utilities are designed to ensure the reliability of the systems day to day
- Contingency plans are developed to ensure reliability of utilities systems
- Contingency plans address two issues:
  - Equipment failure or disruption
  - Emergency related failures or disruption

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Contingency Planning: Survey

- Organizations should ensure their contingency plans are accurate
- Discuss with the organization how they ensure the contingency plans are accurate to support patient care delivery
- Discuss the organization Memorandum of Understanding and its impact in the community
- Suggest the organization include exercising these contingency plans with their Emergency Exercise

Joint Commission Resources

EC.7.10 & EC.4.17

EC.7.10 EPs 12-14

A 12. The hospital identifies and implements emergency procedures for responding to utility system disruptions or failures that address the following:

- What to do if utility systems malfunction
- Identification of an alternative source of hospital-defined essential utilities
- Shutting off the malfunctioning systems and notifying staff in affected areas
- How and when to perform emergency clinical interventions when utility systems fail
- Obtaining repair services

B 13. The hospital maps the distribution of utility systems.

C 14. The hospital labels controls for a partial or complete emergency shutdown.

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EC.7.10 & EC.4.17

EC.4.17 EPs 1 – 5

Organizations identify an alternative means of providing for the following utilities in the event that their supply is compromised or disrupted:

1. electricity;
2. water needed for consumption and essential care activities;
3. water needed for equipment and sanitary purposes;
4. fuel required for building operations or essential transport activities; and
5. other essential utility needs (for example, ventilation, medical gas/vacuum systems, etc.).

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EC.8.30

- Incorporate into the construction planning process
- Protect the occupants by separation as needed
- The organization uses risk criteria that address the impact of demolition, renovation, or new construction on air quality requirements, infection control, utility requirements, noise, vibration, and emergency procedures

Joint Commission Resources

LD.2.20 EP 2: What to do when the documentation isn't there…

- During survey documentation is often requested by the surveyor for review
- Occasionally the organization replies that the information is not at the site, or is with a third party contractor, etc but will be available later in the survey
  - The requested information should be utilized by the organization, so not having the information may indicate a lack of accountability
- Regardless if the late arriving documentation indicates compliance this issue of not managing data should be scored as partial at LD.2.20 EP 2
  - Leaders hold staff accountable for their responsibilities

Joint Commission Resources

Computers on Wheels

& other Life Safety Code issues…

Joint Commission Resources

Corridor Clutter

If the corridor looks cluttered, it probably is

- Carts with wheels that are not parked and forgotten (not longer than 30 minutes), but are actively used are allowed provided they are "in use"
- Crash Carts are always considered "in use" and allowed with staff understanding that in an emergency situation the cart is moved out of the corridor
- Isolation carts, located outside a occupied patient room & required would be “in use”

Joint Commission Resources

Computers on Wheels

- Computers on Wheels and other wheeled carts may be stored in a corridor for not more than 30 minutes
- Computers on Wheels may be charging in the corridor while being used
- Computers on Wheels may be stored in alcoves
  - The corridor width must not be compromised

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Computers on Wheels

What about the Batteries?

- Battery and charging systems must meet the following design requirements to ensure safe operation:
  - Sealed Lead-Acid Batteries:
    - Absorbed Glass Mat design and
    - Sealed Case (Sealed Lead-Acid)
  - All Battery Systems (SLA, NiMH, Li+ Ion, Li+ Ion Polymer):
    - Smart Charging system with overcharge protection and
    - Shorted cell protection that shuts down upon detecting a shorted cell

Joint Commission Resources

General Life Safety Interpretations

- Rated doors must have legible labels on the door and jambs
  - Missing labels may be equivalized if evidence of compliance is provided to central office
  - Alternative is to have third party testing agency re-label doors
  - Are ILSM in place where non-compliant door assemblies are found?

Joint Commission Resources

General Life Safety Interpretations

- Fire stop: existing application is acceptable if:
  - It was installed in a manner consistent with original design specifications
  - It is in acceptable condition currently
    - If the firestop is cracking, etc, then it is to be removed and repaired using current technologies
- Testing has confirmed foam alcohol based hand rub (ABHR) is equivalent to gel
- JC does not accept the expanding foam used for insulation in any fire or smoke barrier
    - This product does have a UL label, for insulation properties
    - Easily ignited
    - Toxic gases when burned

General Life Safety Issues

Fully sprinklered buildings

- Sprinkler heads are not required in electrical distribution panel closets (typically 1’-6” x 5’-0” or less)
- Not required in elevator mechanical rooms if state codes do not allow (i.e. Ohio, Minnesota)
- Ensure sprinkler piping is not used to support wiring or other material
  - Score as life safety code deficiency: 3A.1A.4
    - For each building listed in Table 3B-2: item 4, an AASS (approved automatic sprinkler system) provided (NFPA 101-19.3.5.1)

Joint Commission Resources

Non Flammable Medical Gas Storage: General Issues

- <300 ft^3: **12** 'e' cylinders per smoke compartment, in rack or appropriate holders
  - Each 'e' cylinder is 24.96 ft^3
  - Smoke Compartment is limited to 22,500 ft^2
- Between 300 and 3000 ft^3 must be stored in a room that is limited construction with doors that can be locked
- "In use" verses "in storage"
  - On gurney is considered "in use"
  - In rack is "in storage"
    - limited to 12 racked, per smoke compartment
- "Empty" are NOT considered part of the 12 "in storage"

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Non-Flammable Gas Storage: NFPA 99-2005

NFPA 99-2005 edition has additional language regarding O_2 storage requirements, specifically:

Storage of nonflammable gases:

9.4.1 ≥ 3000 cubic feet
9.4.2 300 – 3000 cubic feet
9.4.3 0 - 300 cubic feet

Other:

5.1.3.3.2 design and construction
5.1.3.3.3 ventilation of locations for manifolds
5.1.3.3.3.2 ventilation for motor driven equipment
5.1.3.3.3.3 ventilation for outdoors

NOTE: CMS also recognizes the above references

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Time Defined

- *Daily, Weekly, Monthly* and *Quarterly* are calendar references, even if it is the Jan 1: June 30 scenario.
- Bi-monthly is every other month (6 times per year).
- Semi-annual and annual will be defined as:
  - Semi-annual: 6 months since last occurrence +/- 20 days
  - Annual: one year since last occurrence +/- 30 days.

Joint Commission Resources

Eye Wash Station
Federal Requirements: OSHA

- Risk assess location / application based on OSHA recommendation to reduce the risk of injury from contact with corrosive materials
- Weekly flush recommended
- Mixing valve recommended to achieve tepid
  - Risk assess potential exposure to determine if cold water only would be acceptable

Joint Commission Resources

Eye Wash Station: Recommended locations (i.e. OSHA)

Medical services and first aid 1910.151(c)

The eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use.

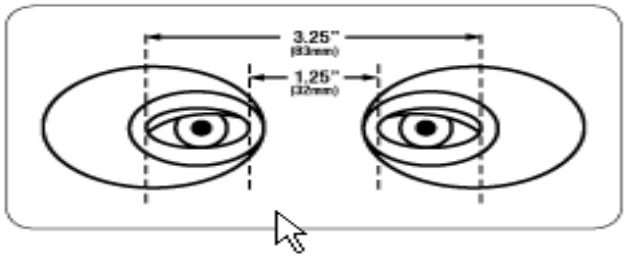
Formaldehyde 1910.1048(i)(3)

- If there is any possibility that an employee's eyes may be splashed with solutions containing 0.1 percent or greater formaldehyde, the employer shall provide acceptable eyewash facilities within the immediate work area for emergency use.

Battery charging and changing 1917.157(i)

- Facilities for flushing the eyes, body and work area with water shall be provided wherever electrolyte is handled, except that this requirement does not apply when employees are only checking battery electrolyte levels or adding water.

Joint Commission Resources



Controlled, low velocity flow completely rinses eyes and face and is not injurious to user. (Section 6.1.1)

Protect spray heads from airborne contaminants. (Section 6.1.3)

Valve actuator shall be easy to locate and readily accessible to user. (Section 6.2)

Unit must deliver at least 3.0 gallons (11.4 liters) of water per minute for 15 minutes. (Section 6.1.6, 6.4.5)

"Hands-free" stay-open valve shall activate in one second or less. (Section 6.1.4, 6.2)

Outlet heads shall be positioned between 33" (83.8 cm) and 45" (114.3 cm) from the floor and at least 6" (15.3 cm) from the wall or nearest obstruction. (Section 6.4.4)

33-45"

Connect unit to uninterruptible water supply delivering at least 3.0 GPM. (Section 6.4.5)

Identification
Identify eye/face wash with highly visible sign. Area around eye/face wash shall be well lighted. (Section 6.4.3)

Location
Install eye/face wash unit within 10 seconds of hazard, on the same level as hazard and with unobstructed travel path. (Section 6.4.2)

Water Temperature
Water delivered by eye/face wash shall be tepid (lukewarm). (Section 6.4.6)

Training
Instruct all employees in the location and proper use of eye/face washes. (Section 6.5.4)

Maintenance/Inspection
Activate eye/face wash at least weekly. (Section 6.5.2)
Inspect annually for compliance with standard. (Section 6.5.5)

Standards Improvement Initiative

Joint Commission Resources

SII Project Goals…

- Goals include
  - Enhance clarity and objectivity of standards and EPs
  - Tailor standards language to characteristics of Ambulatory, Office-based Surgery, Home Care, Hospital and Critical Access Hospital organizations
  - Refine scoring and decision processes
  - Enhance manuals for ease of use

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SII Standards and EPs review includes…

- Extensive staff work with guidelines and criteria
- Most extensive field engagement ever undertaken
  - Web-based field surveys in 2006 (baseline) and in 2007
  - Surveyor questionnaire in 2006 and 2007
  - Accredited Customer Group
  - Unaccredited Customer Group
  - Payer/purchaser Group
  - PTAC review
  - Correspondence from many professional organizations

Joint Commission Resources

Standards and EPs are reviewed for…

- Structure
  - Is it logically placed?
  - Is it duplicative of other requirements?
  - Is it essential?
- Wording
  - Is it clear?
  - Is it program specific?

Joint Commission Resources

Guidelines for Change…

- Language
  - Use simple direct language
  - Avoid “hard to measure” words
    - (e.g.; appropriate, *considers*, *as needed*)
  - Reduce jargon & terms unique to Joint Commission
  - Conform to style – seeking one voice
  - Requirements apply in most cases
    - All situations cannot be covered

Joint Commission Resources

More Guidelines…

- Structure
  - Create a logical flow – EPs within a standard, standards within a chapter, chapters within a manual
  - Avoid compound or bulleted requirements that are scored individually
  - Avoid the same requirement in two places

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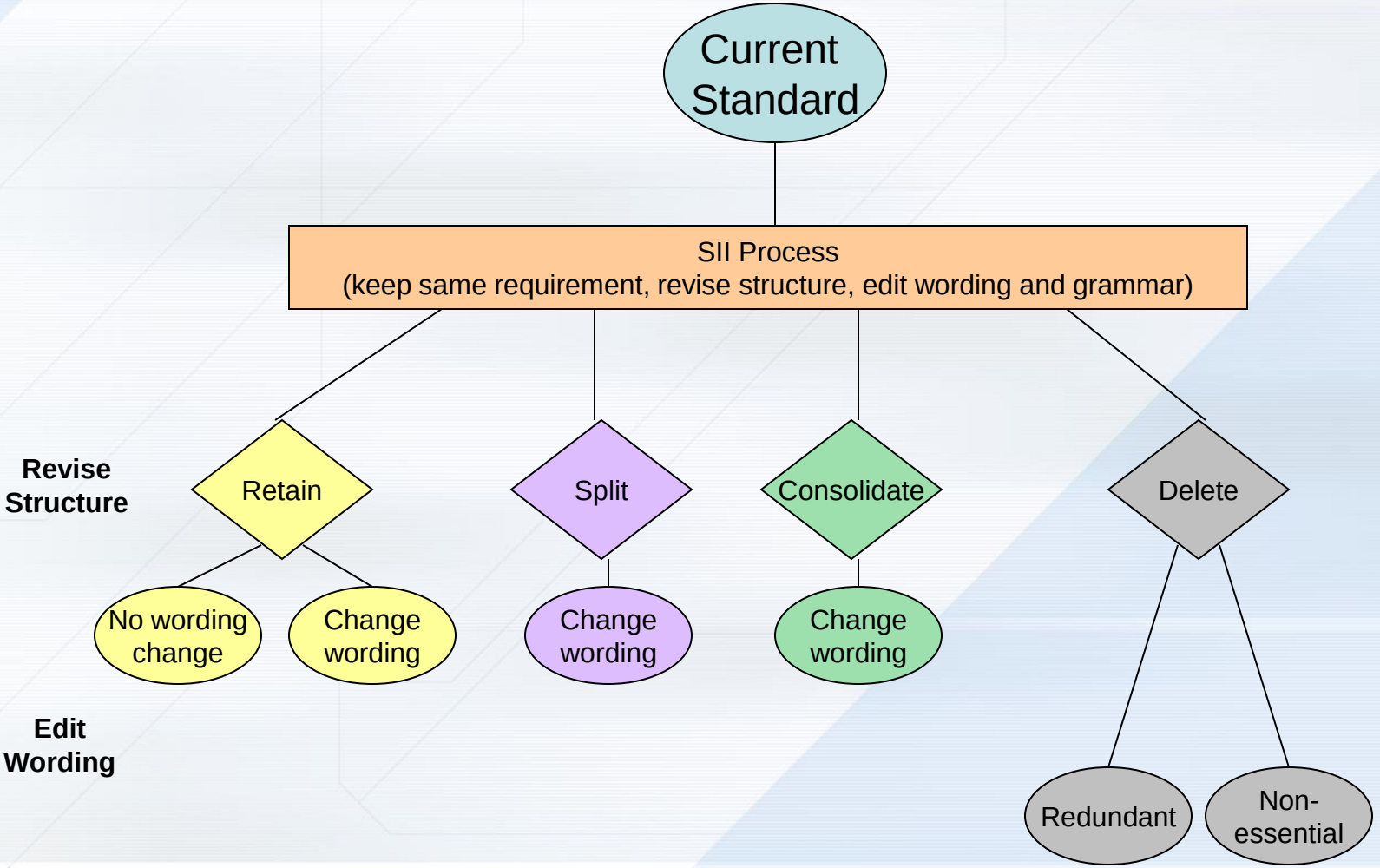
Standards Improvement Initiative (SII) Process



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Field review…

- Three EC related chapters are in development
- The Management of the Environment of Care chapter, Life Safety Chapter and Emergency Management Chapter have all been posted for field review
- Public comments are closed

Important to Remember About SII…

- Only looking at current requirements – not adding new ones
- We are finding that as we clarify, gaps become apparent and the need to fill those gaps is being suggested
- These “gaps” will be handled using our usual standards development process and are not part of SII

Joint Commission Resources

Time Line & Benefits

- All work will be completed by mid-2008
- Implementation is planned for January 2009
- Standards and elements of performance are useful tools for surveyors and organizations
- Manuals are easier to use
- Decisions more accurately reflect organizational performance

Joint Commission Resources

Life Safety Chapter

- Based on the Life Safety Code
  - NFPA 101-200
- Standards & Elements of Performance
- Structured following the LSC format
- LS.01.01.00 Administrative
- LS.01.02.00 Interim Life Safety Measures
- LS.02 - .05
  - LS.02 Healthcare
  - LS.03 Ambulatory
  - LS.04 RTC ≤ 16 Rooming & Lodging
  - LS.05 RTC ≥ 17 Hotel & Dormitory

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Life Safety Chapter

- LS.02.03.00 EP 3 =
  - Life Safety Chapter.Healthcare.Protection
  - EP is Sequentially listed
- Exception language accepted
- BMP

Joint Commission Resources

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