



Environment of Care

Update 2008

Standards Interpretation Group
The Joint Commission

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
- ▶ Emergency Management Relief
- ▶ SII Project

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

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

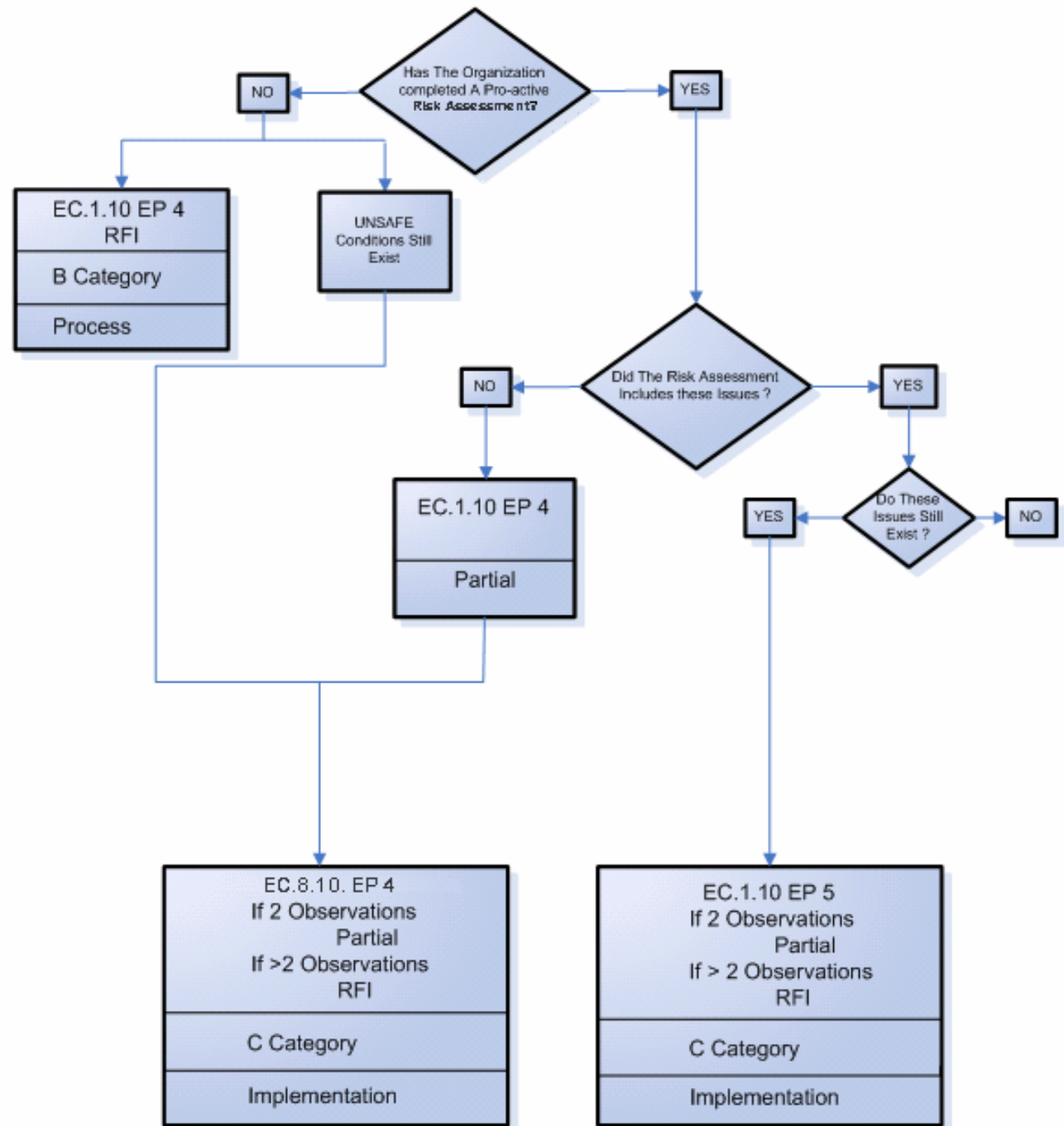
EC.1.10 EPs 4 and 5

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)

EC.1.10 EPs 4 & 5



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

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?

EC.1.20

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- ▶ 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



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.

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

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.

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

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)

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

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

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.


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.).

EC.8.30

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- ▶ 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

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



Computers on Wheels & other Life Safety Code issues...

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"

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

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

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?

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.3
 - For each building listed in Table 3B-2: item 4, an AASS (approved automatic sprinkler system) provided (NFPA 101-19.3.5.1)

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 $22,500\text{ ft}^2$
- 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"

Non-Flammable Gas

Storage:

NFPA 99-2005

NFPA 99-2005 edition has additional language regarding O₂ storage requirements, specifically:

Storage of nonflammable gases:

9.4.1 \geq 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

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.

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 required (ANSI, Z358.1-2004)
- ▶ Mixing valve recommended to achieve tepid
 - Risk assess potential exposure to determine if cold water only would be acceptable

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

Medical services and first aid 1910.151(c)

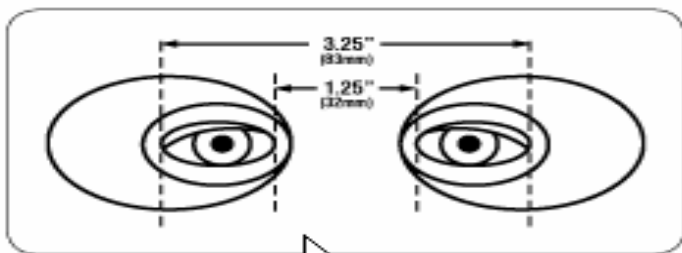
The eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use.

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)

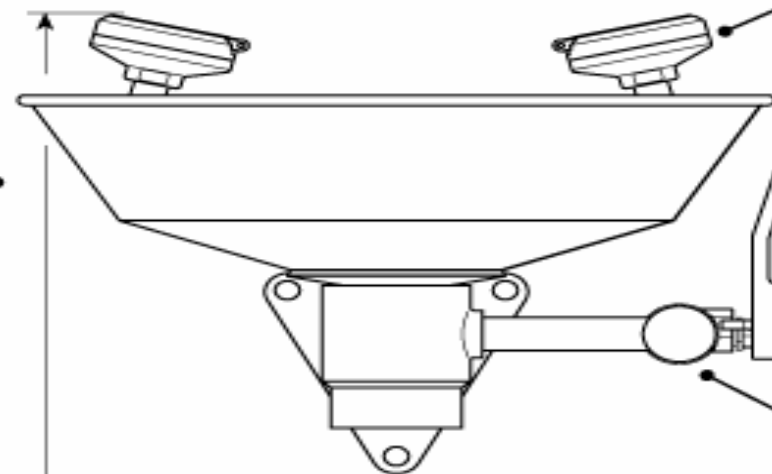
- ▶ Facilities for flushing the eyes, body and work area with water shall be provided wherever electrolyte is handled, except that this requirement does not apply when employees are only checking battery electrolyte levels or adding water.



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

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)

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)



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)

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

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)

Relief: until 12/31/2008

- ▶ The following 15 EPs will not impact your accreditation status
- ▶ These EPs will be cited but not aggregated
 - EC.4.11 EP 9 & 10
 - EC.4.12 EP 6
 - EC.4.13 EP 7
 - EC.4.14 EP 8 & 10
 - EC.4.15 EP 2, 3 & 5
 - EC.4.16 EP 2 & 3
 - EC.4.17 EP 4
 - EC.4.18 EP 4, 5, & 6

NOTE: EC.4.20 has until the end of 2008 to show compliance, so they are not included here

EC.4.12 EP 6

The EOP identifies the organization's **capabilities** and establishes response efforts when the organization **cannot be supported by the local community** for at least 96 hours in the six critical areas.

Note: Acceptable response efforts could include:

- conservation of resources*
- curtailment of services*
- supplementing of resources from outside the local community*
- staged evacuation*
- total evacuation*

Continuum of escalating events: Summary: EC.4.20 EP 3

1. Integrated Community Planning
2. Communication Strategies
3. Incident Command Center
 - Incident Management System
4. Utilities
 - Contingency Plans
5. Security
6. Supplies (medical & non-medical)
7. Staffing
8. Non-hospital assets

Surveying Emergency Management

- ▶ Review of the organizations emergency operations plan
- ▶ Two themes:
 - Discussion
 - Observation
- ▶ The subject matter will be based on a review of the Hazard Vulnerability Analysis

Survey Enhancements – EM

Discussion Phase (40% of session)


1. Compliance with EM Standards
 - ✓ EOP
 - ✓ Six Critical Functions
2. Discuss Emergency Operations Plan
3. Surveyor is evaluating Team Dynamics

Survey Enhancements – EM

Based On:

- ▶ Survey Activity Guide (SAG)
 - Facility information
- ▶ Based on HVA
 - Select a scenario
 - Trace all appropriate EP's
 - Discuss identified strengths

Discussion Phase



Surveyor initiates discussion around the four EM categories:

- Mitigation
- Planning
- Response
- Recovery

Surveyor examines:

- Six Critical Functions
- Organization's overall EM structure
- Operations
- Planning activities

Survey Enhancements – EM

Surveyor concentrates on:

- How the facility handles actual emergencies
- Evaluated with the organization
- Availability of supplies & equipment
- Training efforts that accompanied EOP
- Effectiveness of communication systems
- Contingency Planning
- Patient care

Survey Enhancements – EM

Observation Phase (60% of session)

Evaluate compliance with following standards:

- E.C.4.11 - 18 EOP established, updated and working
- E.C.4.20 Drills are conducted
- IC.6.10 Surge Capacity/ Handling of Infectious Patients
- IM.2.30 Back-up of critical data
- LD.3.15 Leadership's Role/Knowledge in disasters
- MS.4.110 Medical Staff Role/Knowledge in disasters
- HR.1.25 Credentialing for other than LIPs



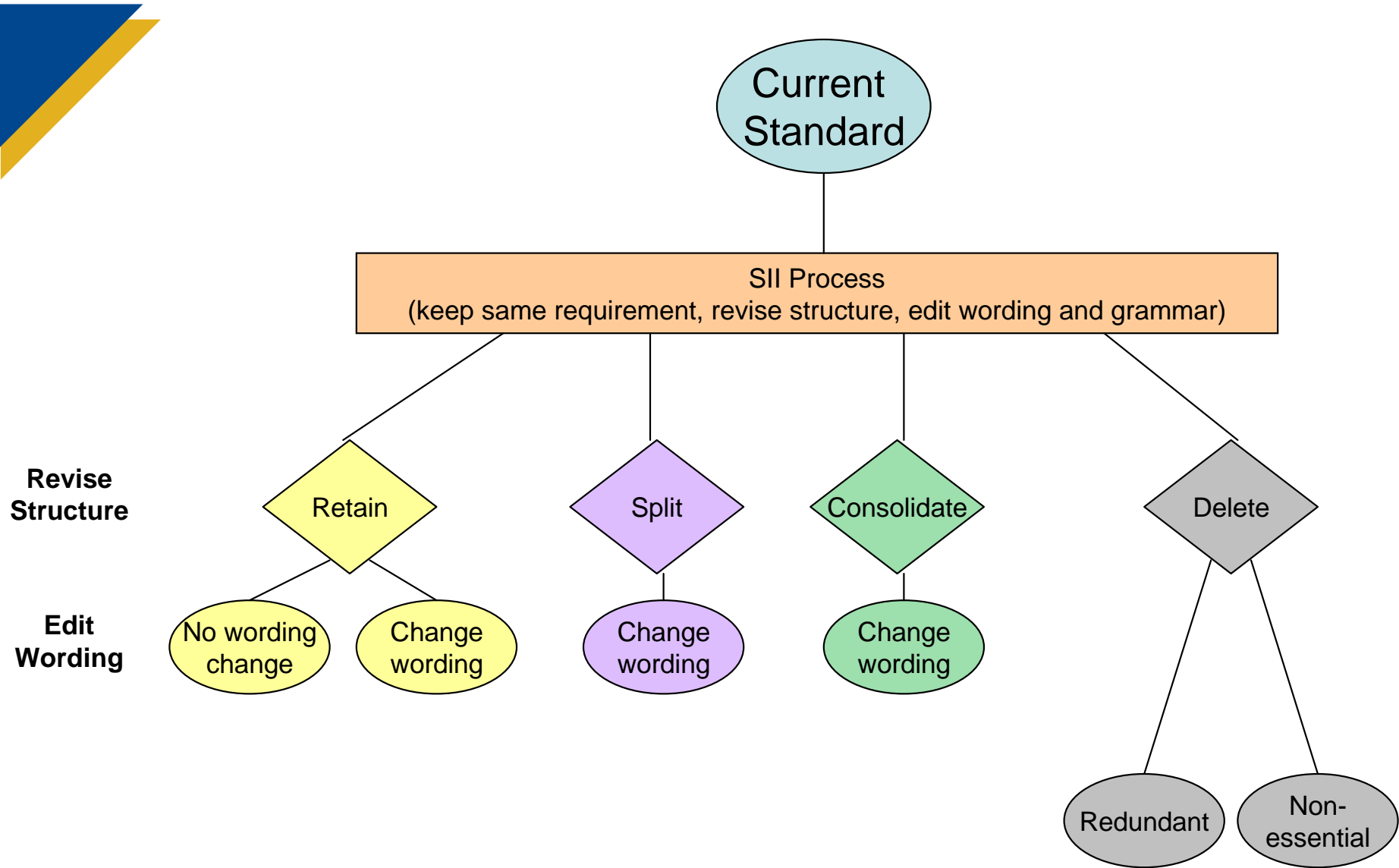
Standards Improvement Initiative


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

Standards Improvement Initiative (SII) Process





Standards and EPs are reviewed for...

Structure

- Is it logically placed?
- Is it duplicative of other requirements?
- Is it essential?
- Avoid compound or bulleted lists

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

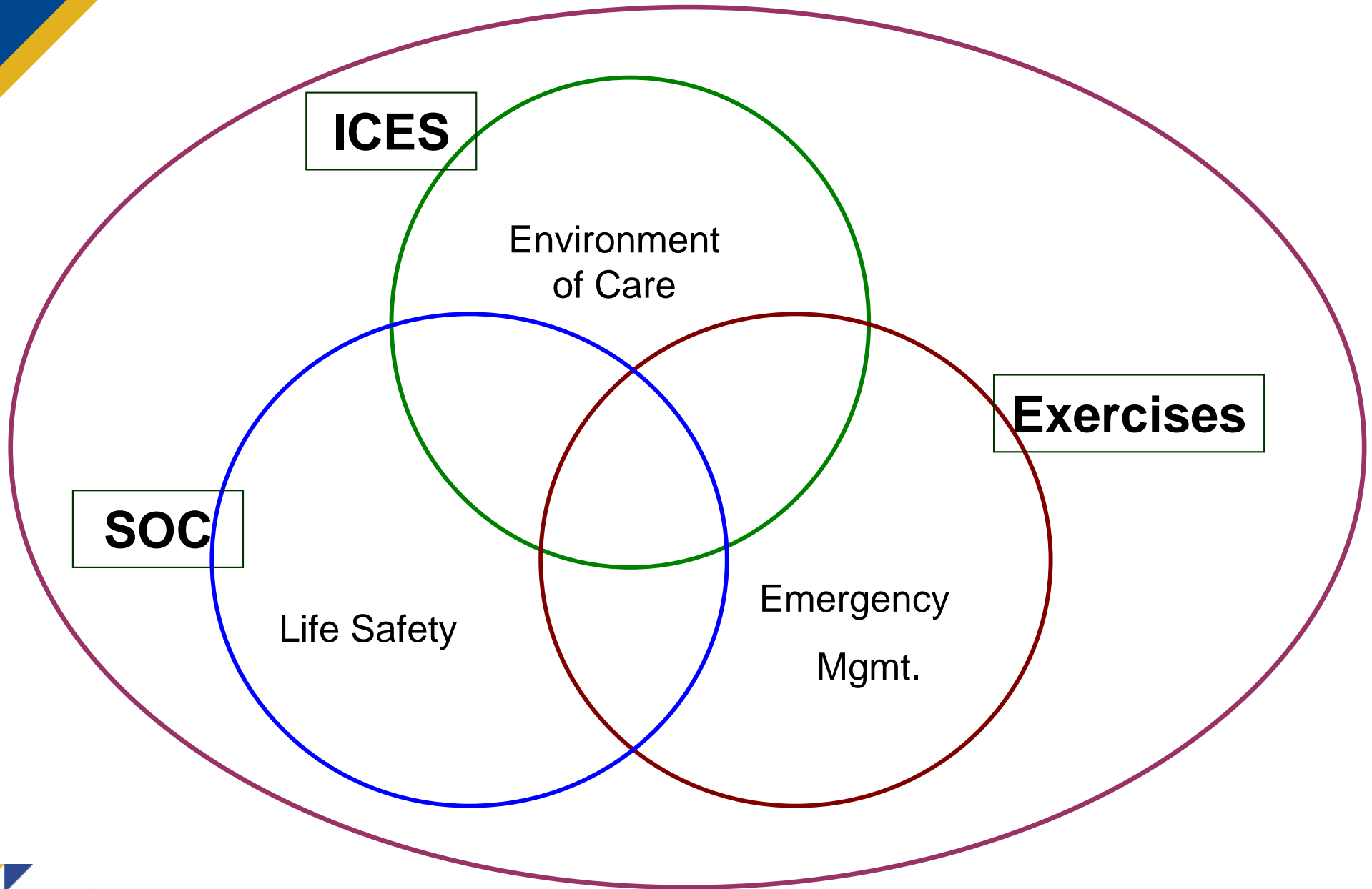
Time Line & Benefits

- ▶ 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

Related to the Physical Environment

- ▶ Three chapters related to the Physical Environment have been developed:
 - Life Safety Chapter
 - Emergency Management Chapter
 - Management of the Environment of Care
- ▶ There have not been any new expectations for 2009 in these 3 chapters
- ▶ Management of these 3 chapters is up to the organization

Managing EC, LS, and EM



Life Safety Chapter

- ▶ Based on NFPA Life Safety Code®
- ▶ Format to be consistent with NFPA
- ▶ CMS K-Tags reconciled
- ▶ Three occupancies
 - Healthcare
 - Ambulatory
 - Residential
- ▶ Exception language accepted
- ▶ Annual Life Safety Assessment will occur as part of Periodic Performance Review

Life Safety Chapter

- ▶ LS.02.01.34 EP 3 =
 - Life Safety.Healthcare.One Building Type.
Protection Fire Alarm Communication
 - EP is Sequentially listed
- ▶ Exception language accepted
- ▶ Interim Life Safety Measures is
relocated to the LS Chapter
- ▶ BMP

Life Safety Process

Overview: When an hospital finds that it is out of compliance with Standards LS.02.01.10 through LS.04.02.50, the hospital **either resolves the deficiencies immediately or** manages it through one of the following options:

- a maintenance management process that documents the deficiency and corrective resolution within **45** days; or
- a Plan For Improvement derived from the *Statement of Conditions*TM; or
- a Life Safety Code Equivalency approved by The Joint Commission.

Emergency Management

- ▶ Based on 2008 EC standards
- ▶ The Joint Commission will incorporate other chapter standards into this chapter
- ▶ EC.4.11 – EC.4.20 has been replaced by the new chapter
- ▶ All 66 EPs from 2008 are present in the 2009 chapter

6 Critical Components

1. Communication [EM.02.02.01]
2. Resources & Assets [EM.02.02.03]
3. Safety & Security [EM.02.02.05]
4. Staff responsibilities [EM.02.02.07]
5. Utilities Management [EM.02.02.09]
6. Patient, clinical & support activities [EM.02.02.11]

Environment of Care: Structure

- ▶ Plan (EC.01.01.01)
- ▶ Implement
 - Safety and Security (EC.02.01.01, 02.01.03)
 - Hazardous Materials and Wastes (EC.02.02.01)
 - Fire Safety (EC.02.03.01, 02.03.03, 02.03.05)
 - Medical Equipment (EC.02.04.01, 02.04.03)
 - Utilities (EC.02.05.01, 02.05.03, 02.05.05, 02.05.07, 02.05.09)
 - Other Physical Environment Requirements (EC.02.06.01, 02.06.05)
- ▶ Staff Demonstrate Competence (EC.03.01.01)
- ▶ Monitor and Improve (EC.04.01.01, 04.01.03, 04.01.05)



Questions?

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