

What about Day 2? Transitioning from Construction to Operations and Regulatory Compliance at Occupancy

A PRESENTATION FOR
HFMS NJ 2011 Seminar

Transitioning from Construction to Operations & Regulatory Compliance 





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Session Outline


- Challenges
- Best practices from recent studies and reports by industry activation thought leaders
- Regulatory compliance at occupancy

Early activation and turnover approaches

 **S**cheduling building turnover sequence

 **L**ogistics: new equipment and furniture

 **D**epartment moves 

 **P**atient moves **Opening**

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Current thinking about new facilities

- Resolve existing service delivery concerns
- Incorporate best practice operational models
- Clear vision
 - Guiding principles
 - Performance objectives
- A much taller order!




Facility activation challenges

- Manage risks
- Minimize duration
- Meet regulatory compliance reqmts for an early unannounced survey
- Manage impact on existing operations
- Plan & coordinate patient care
- Budget for start-up and ongoing operations

Facility activation limitations


- No more visioning
- No changes during activation (too late)
- Avoid new operational procedures & standards
- Prioritize goals



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Activation planning issues - **Logistical**

- Facility-related
- Building turnover
- Equipment, furniture
- Telecom, data, etc.
- Moves, sequences
- Schedules, tasks
- Budgets, resources



Activation planning issues - **Operational**

- Plan for modified processes, practices
- All functions, all areas, all departments
- Intended changes
- Unintended consequences
- Implementation of details




Activation success factors

- Project champion and team “captains”
- Multidiscipline teams: clear roles and responsibilities
- Cross-functional processes
- Meeting management techniques
- Real-time communication with hotline
- Activation issues dB with FAQs
- Timely decisions; communicate decisions

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More activation best practices




- Dedicated leadership and staff
- Schedule and milestone management
- Communication ability and approach
- Conflict management
- Moratorium on new technologies
- Detailed testing

Building Readiness

- Contractor building turnover schedules
- Commissioning agent coordination
- Building cleaning & security
- Inspections, licenses, compliance, surveys
- Equipment & furniture
- Supplies, medications, spare parts

Department moves


- Department operating interdependencies
- Department move sequences
- Interim operations
- Continuity of operations
- Labor and cost control
- Repair damaged items
- Moving company/contractor support
- Trash disposal, cleanup, environ. svcs.



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Patient Moves

- Establish sequence & routing
- Organize support equipment & personnel
- Plan for patient safety & dignity
- Define support department responsibilities
- Maintain communications, FAQs

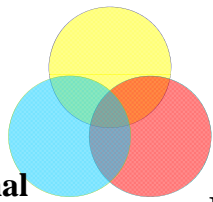


Staff & LIP orientation

New Facilities

New Operational Plans





New Practices



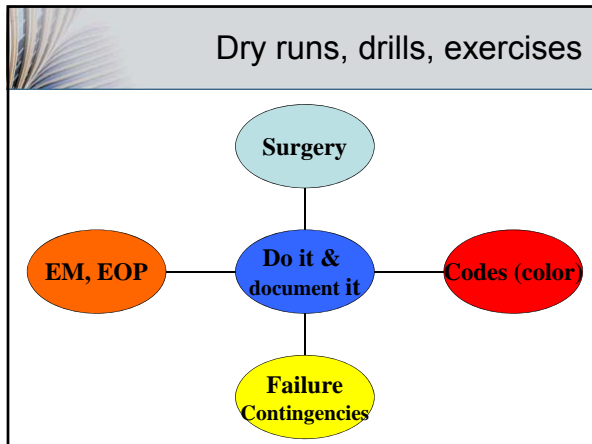
Staff training: initial & ongoing

- Staff training on new building systems
- Staff training on new equipment


Video it



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- New equipment & technologies
- Redesigned processes – new P&P's
 - Existing CMMS WO's may be outdated
 - Revisit failure contingency plans
 - Perform negative testing (break the system)
 - Are training materials available, accurate, sufficient?
 - Educate users & maintainers

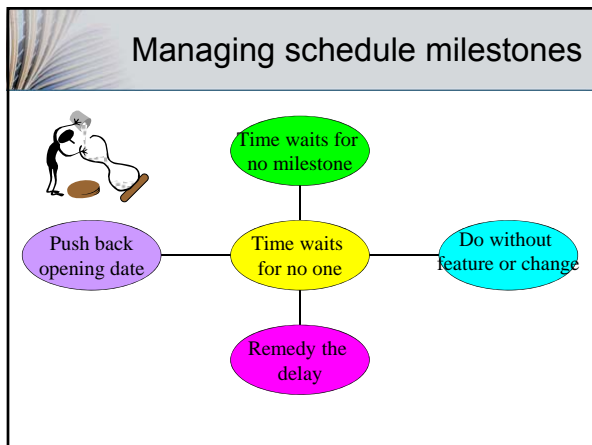
- Proactive approach
- “Proactive avoidance” Acceptance Testing
 - Confirm what was ready
 - Identify what was not ready in time to fix it
 - Manage this process
 - Proactive compliance
 - Determine what is needed
 - Identify what is missing in time to get it
 - Manage this process
- 

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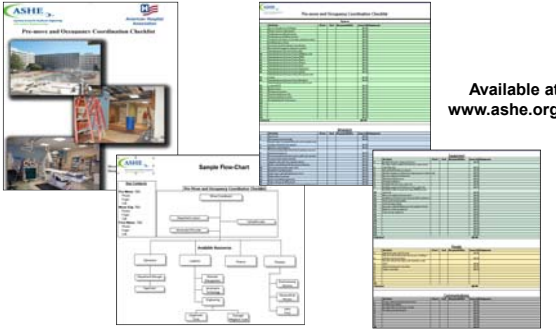
Facility startup

- Commissioning!
- Start-up/testing of MEPF equipment/systems
- Start-up/testing of low voltage systems
- Test equipment: rent, GC, or purchase
- Assistance in testing, adjusting, balancing
- Providing O&M info, as-built drawings
- Finalize and prove out system operating descriptions
- Owner training





Pre-move and Occupancy Coordination Checklist by ASHE PDC Committee




Available at www.ashe.org

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Regulatory compliance

- Bridge the gap between construction and operating compliance
- Be proactive
- Not just project record documentation
- Define future states & impact of C/R project changes in all P&P's
- Be ready for **early** unannounced survey
- Be prepared for continuous compliance




Regulatory compliance

- Identify AHJ surveys, timeframes
 - CMS, TJC, DNV, state, local
- What is all of the required documentation?
- Who in the C/R project “owns” each piece?
- Are resources dedicated to get it all done on time?
- Manage supporting contracts & licenses
- Identify licensing tasks; award & follow
- Do it only once: save time & resources
- Leverage with GC documentation already survey-ready



TJC compliance challenges with construction projects



Never gets done

Gets done, gets documented, documentation is OK, but ... it does not get in on time

Gets done, but not documented

Gets done, gets documented, but documentation does not meet the rules

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Compliance needs for an unannounced survey soon after occupancy

- Project documentation
- Management plans
- Policies and procedures
- Risk assessments
- Training records
- Life Safety Assessment
- LS Plans, SOC™, PFI's
- LSC Performance-based options [equivalencies]
- Input from O&M manuals
- Inventories, evaluations
- PPE, spill kits, supplies
- Lists, spreadsheets, dB's
- Monitoring equipment
- Permits, licenses, manifests
- Schedules: drills, inspections, tests, PM
- Test & inspection reports (GC)
- Test & inspection forms (next)
- Certifications & AHJ approvals
- EM & EOP input & activities

TJC survey soon after occupancy

Oh, crap! Was that TODAY?

REGAN

Changes to Management Plans

Locations & Relocations

Infrastructure Equipment & Systems


Facility & Area Use

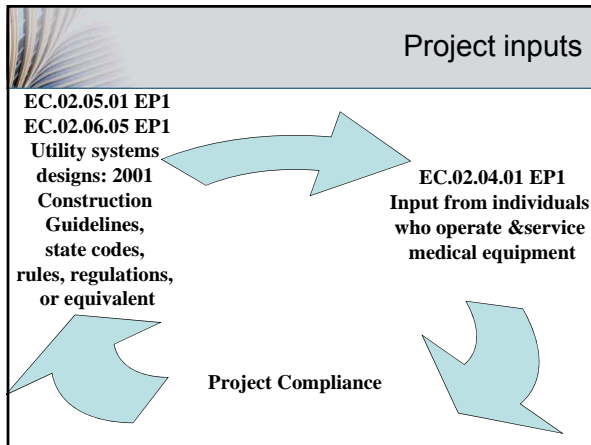
Processes

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Managing Risk (i.e. Assessments)

- Fire
- Safety
- Security
- Patient smoking
- Medical equipment
- Operating components of utility systems
- Emergency power
- Input to EM, EOP, HVA
- Hazardous chemicals
- Hazardous energy sources: radiation, lasers, batteries
- Hazardous medications
- Hazardous gases & vapors
- Radioactive materials
- LSC deficiencies: ILSM
- Demolition and C/R
 - PRA, ICRA






**Evaluated before initial use:
Whether to include in Inventory?**



EC.02.04.01 EP2
Medical equipment



EC.02.05.01 EP2
New types of utility components


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Testing & certifications

- Reports on file
- Easily accessible during unannounced surveys
- Contractor, commissioning agent documents
- AHJ documentation: Local, State, NRC, DOT, FAA...
- Policies and procedures for ongoing testing
- Lists, spreadsheets, schedules for all components
- CMMS: include new equipment and processes
- Helipads, separator tank
- BAS/BMS, Elevators, fuel tanks, pressure vessels, lightning protection, LV systems, FP water systems, etc.

Testing building systems

- Test under full load
- Be sure they all work together
- Integrated system testing
- Verify patient safety, comfort, convenience
- Emergency management: test people & systems
- Negative testing (stress / break the system)
- Confirm all tested areas ready to go live



Detailed test scripts

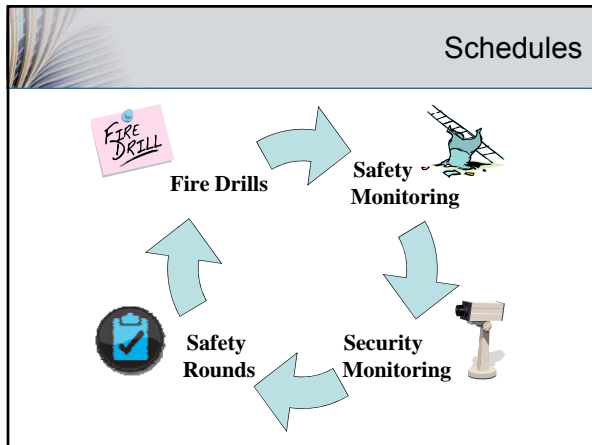
- Planning works, have adequate support
- Equipment interfaces correctly defined, carried out and understood
- Prove out wireless coverage
- Verify failure contingency planning
- Verify security, IT, Telecom, MEPP
- Prove system readiness
- Confirm operational accountability

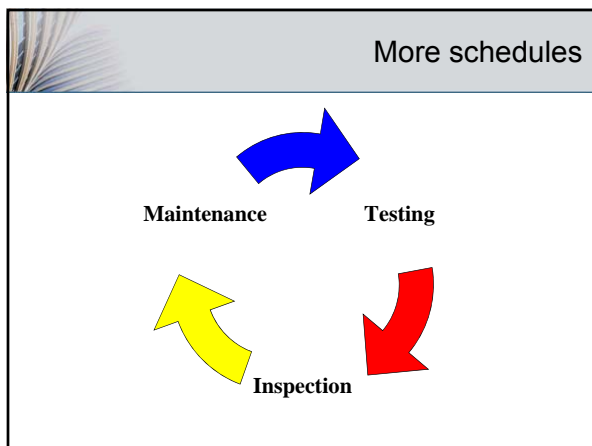
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User acceptance testing best practices

- Again ... test people and systems
- Use command center for activation & move control; record problems & resolutions
- Structured debriefing and problem solving
- Retest resolved processes & operations








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Inspections

- Initial + schedules / P&P's for ongoing
- Old BMP components (smoke & corridor walls; fire, smoke & corridor doors, exit signs, egress lights, T/L chutes, grease producing, ice/snow [egress obstructions])
- Fire walls
- Dampers
- Fire protection systems, devices, equipment
- Fire alarm systems, devices, equipment
- Emergency power; MedGas; other systems





Training: existing & new staff

- Security incidents
- Facility systems, Clinical systems
- Other equipment and systems
- All hazmat/waste requirements
- Use of PPE
- Fire response
- Staff & LIP's: EC risks, incidents, reporting
- Emergency management: EOP

Labels

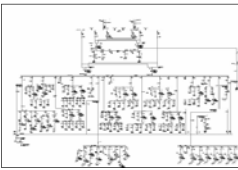
- HazMat & Waste
- Utility system controls to facilitate partial or complete emergency shutdowns
- MedGas valves
- Maps if required by AHJ
- Signage: permanent & temp.
- Arc Flash Hazard Marking
 - HFM article available



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Mapping of utility systems

- Normal Power
- Emergency Power
- Water, Plumbing, Piping, Fire Protection
- Fire Alarm & Emergency Communication
- MedGas and Vacuum
- Steam and CHW
- Telecom, Data
- Other systems





Failure contingency plans

Written procedures for responding to all utility system disruptions



Medical equipment



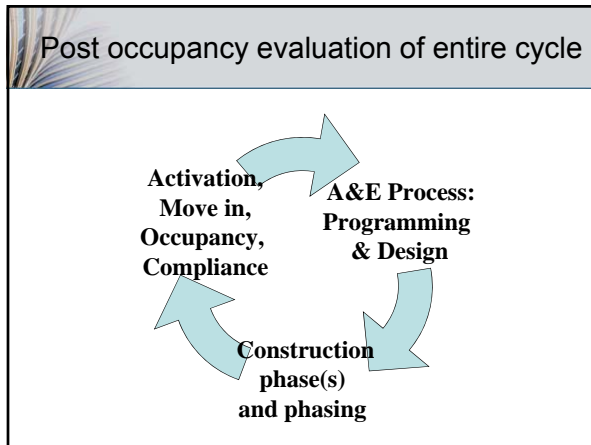
Utility maintenance documentation

- Provisions to obtain, store & access
 - Internally generated & outside services
 - Equipment failures & unannounced surveys
 - Internal P&P's & contract provisions
- All operating components on Inventory
 - Life & Non-life support; Infection control
- Document considering PM, PdM, RCM, corrective or metered maintenance

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Other equipment maintenance

- Biomed / clinical engineering
- Department service contracts
- Equipment service contracts
- Owner-furnished equipment
- Provisions to obtain, store & access
- Inventories
- PM, PdM, RCM, CM, metered maintenance



Some lessons learned

- Factor TJC-specific documentation requirements into your planning process and document it.
 - *Example* - EC.02.04.01 EP1: medical equip user input
- Factor compliance documentation requirements into your contract documents.
 - Examples – Dates, details from 99, 101, 110, etc.
 - These are not within design team's scope of services
- Get all submittals as electronic documents for easy searchable storage and retrieval
 - PDFs if you just want electronic equivalent of paper records
 - Spreadsheets of equipment lists and locations to assist you in uploading into your inventories & CMMS

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Other lessons learned – Things commonly missed

- Allow time for creation of compliance documentation after receipt of input from project
- All test & inspection sheets need to be dated
- Make sure “failed” notations are clearly superseded in later documentation
- Typical MEP labels rarely meet TJC EC.02.05.01 EP8
- Supervisories: inventories, documentation, testing, etc.
- Missing signatures on certifications & inspections
- O&M recommendations on all equipment – put in CMMS and service contracts or risk-assess it
- Blanks in project checklists, tests & certifications

Other lessons learned – Things commonly missed

- Many specific requirements (99) (101) etc.
- Door test report data (101)
- Electrical safety test instrument certif. (99)
- Generator and ATS testing details (99)
- Documentation of EES circuit bkr testing (99)
- All test & inspection contracts in place



Compliance News

Transitioning from Construction to Survey-Ready Compliance - Part 1

What About Day 2? Transitioning from Construction to Operations

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Transitioning from Construction to Survey-Ready Compliance - Part 3

References



Opening Day

Transitioning from construction to survey-ready operations

BY DAVID L. STYMIEST, P.E., CHFM, FASHE

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Thank you. Questions?

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(References follow this slide.)

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