

Panel Discussion



Health Care in the Built Environment

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Agenda

- Team Selection
- Project Planning
- Design
- Construction
- Occupancy
- Operations



Team Selection

Begin with the end in mind



Team Selection

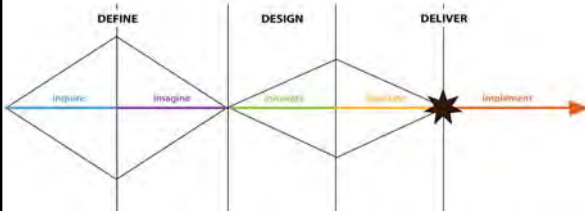
- **Project Charter**
 - What is the problem we're trying to solve?
 - Are there standards we need to adhere to?
 - How will we measure success?



Team Selection

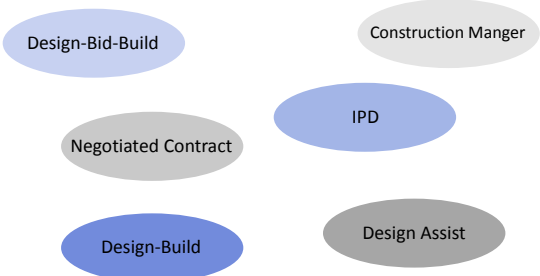
Structure Process for Success

- Team involvement from start to finish
- How do you obtain timely input?
- Continuous feedback ?



Team Selection

Delivery Strategies



Team Selection

Owners	Architect/ Engineers	Construction Team	AHJ
<ul style="list-style-type: none"> • Clinical • Facilities • Operations • BioMed • IT • Security • Environmental Services 	<ul style="list-style-type: none"> • Architect • MEPSC Engineers • Additional design consultants 	<ul style="list-style-type: none"> • General Contractor • Construction Manager • Subcontractor 	<ul style="list-style-type: none"> • State • Local • Fire Marshall

Team Selection


The 3 Ps of Best Practice

- Early engagement of the *right people*, with *structured process* focused on delivering a *defined product*




Project Planning

- Optimal outcome when **healthcare executives**
 - Planning phase
 - Process
 - Construction



Project Planning

- **Owner Project Requirements (OPR)**
 - Written
 - Validated
 - Manual




Project Planning

- **Quality** optimal outcomes
 - Project standard definition
 - Project materials
 - Project services



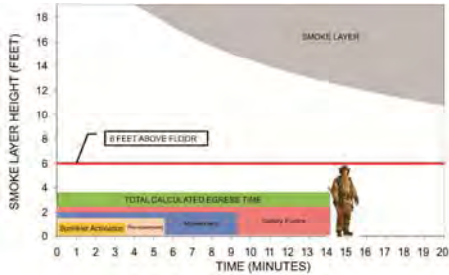
Project Planning

- **Contract** optimal outcomes
 - Project criteria
 - Project compliance
 - Project performance



Project Planning

Performance – based example



Design

- **Owner provides**
 - Basis of Design
 - Define specifically Services needed
 - Define applicable standards and codes
 - i.e. outpatient
- **Review requirements**
 - As minimums
- **Reference best practices**
 - FGI whitepapers
 - AORN, AAMI



Design

- **Establish a method** for team decision making
 - Document issues
 - Document the decision
 - Invaluable post occupancy
- **Code related concerns**
 - Define the conflict
 - Develop alternatives
 - Develop resolution plan
 - Document the resolution
 - Variance or compliance changes to design



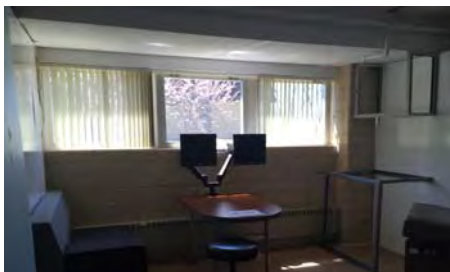
Design

- **Best Practices**
 - Complete a LEAN process review
 - Tour other locations
 - Review of several renditions
 - Gather, evaluate, and implement feedback
 - Construct Mock Ups
 - Validate Phasing



Design

Exam room mock-up Phase 1



Design

Exam room mock-up Phase 2



Design

- **Coordinate documents** between disciplines
 - Reduces conflicts
 - Reduces change orders (saves \$)
- **Review documents** at multiple stages
 - Reduces rework conflicts identified early.



Construction

- **Safety** optimal outcomes
 - Priority
 - Patients & residents
 - Facility personnel
 - Construction workers
 - Code officials



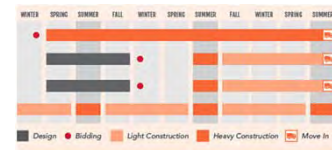
Construction

- **Project communication** optimal outcomes
 - Periodic
 - Throughout project
 - Building occupants



Construction

- **Completion benchmarks** optimal outcomes
 - Written
 - Scope per benchmark
 - Communicated
 - Facility review



Construction

- **Schedule** optimal outcomes
 - Transparent
 - Communicated periodically
 - Stakeholders updated
 - Proactively shared
 - Revision notices



Occupancy

- **Optimal outcome**
 - Facility performs within Basis of Design (BOD)
 - Staff perform within Owners Project Requirements (OPR)



Occupancy

• Optimal outcome

- Staff training
- Systems are interconnected
- System operational verification
- Terminal cleaning



Occupancy

• Optimal outcome

- Activation plan is implemented
- Space usage realization
- New care model implementation



Occupancy

• Optimal outcome

- Project to facility hand-off
- Equipment inventories are updated
- Operational and maintenance manuals reviewed
- As-built drawings



Occupancy

• Optimal outcome

- Warranty new items
- Managed and tracking
- Documentation
- Decommissioning space and FFE



Operations

Strategy → Design → Operations

- Staffing
- Maintenance
- Energy
- Technology
- Custodial



Operations

Prepare a Plan

- Alignment with Strategic Plan
- Budget Cost vs. Revenue
- Identify Responsibilities
- Determine Timelines
- Performance Metrics
- Process for monitoring progress

An Operational Plan is the basis for, and justification of an Annual Operating Budget

Operations

Operational Impacts on Design

Flexibility

- Expansion
- Technology
- Obsolescence



Operations

Factors Defining Exit Strategy

- Treatments change
- Care delivery
- Infrastructure design



Operations

Exit Strategy

- Adaptive re-use
- Sale
- Demolition



Summary

- Team Selection
- Project Planning
- Design
- Construction
- Occupancy
- Operations



Insights



THANK YOU

