2010 ASHE Region 10
Conference and Technical Exhibition

Developing a Functional Program for Construction to Meet the FGI Guidelines

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“Construction is likely to be the only experience where otherwise sophisticated, business savvy Owners feel distinctly uncomfortable with the process because of their inability to understand and control it.”
HEALTH CARE DESIGN & CONSTRUCTION JEOPARDY
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<th>Codes &amp; Standards</th>
<th>The Process</th>
<th>The Players</th>
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Codes & Standards

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Codes & Standards

The Acronym **PHAMA** stands for this
Codes & Standards

What is “Patient Handling and Movement Assessment”? 
The Process

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The Process

A common method used in health care construction but rarely acknowledged
The Process

What is ‘Build-Design’?
The Players

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The Players

The Contractor who is wondering what he left out of his price
The Players

Who is the Low Bidder?
Presentation Outlines

- Project Challenges and Success Factors
- About the Guidelines
- Components of a Functional Program
- Conclusion
Construction Projects: What to Avoid

✓ Schedule Goes On & On
✓ Costs Out of Control
✓ Untimely Decision Making
✓ Legal Battles (Costly & Frustrating)
✓ Unrealized Expectations
Typical Project Challenges

✓ Defining Project’s Scope of Work (Criteria)

✓ Coordination of Design & Construction Elements

✓ Mixed Expertise/Experience of Project Team Members

✓ Responsible Estimating, Value Analysis, Budgeting

✓ Scheduling/Sequencing/Phasing of Activities

✓ Efficient & Effective Communication
Key Success Factors

✓ Use Clearly Defined Project Objectives
✓ Use Appropriate Project Process
✓ Ensure Efficient and Effective Decision Making
✓ Involve Right Project Team Members
About the Guidelines

1.1 Introduction:
Uses of this document

These Guidelines . . . include . . . the promotion of safe practices and methods in planning, design, and construction for various types of health care facilities. (1.1 – 1.2.1)
About the Guidelines

- Through a consensus process
- By experts representing varied viewpoints and interests in the PDC process
- Considers public review and input
- Considers a variety of facility (project) types
Description of PDC
Requirements/Practices

- General (Part 1)
- Facility Type (Parts 2, 3, 4, 5)
- Ventilation (Part 6)
Part 1 - General

1.1 Introduction
1.2 Planning, Design, Construction, and Commissioning
1.3 Site
1.4 Equipment
1.2 Planning, Design, and Implementation Process

*Multidisciplinary groups/persons (stakeholders) affected by and integral to the design shall be included . . . in the process.* (1.2 – 1.2)
1.2 Planning, Design, and Implementation Process

The multidisciplinary team shall include, at a minimum, administrators, clinicians, infection preventionists, design professionals, architects, facility managers, safety officers, users of equipment, and support staff . . .

(1.2 – 1.2)
1.2 Planning, Design, and Implementation Process

1.2-2 Functional Program

The health care provider shall supply a functional program for each facility project. (1.2 – 2.1)
Functional Program Not Required When . . .

- Only Equipment Replacement
- Only Fire Safety Upgrades
- Only Minor Renovations (won’t change facility function/character)
Deliverable – What Does It Look Like?
Format

- Narratives
- Spreadsheets (space, costs, schedules)
- Diagrams
- Outline Specifications
1.2 Planning, Design, and Implementation Process

1.2-2 Functional Program: Outline

Purpose of Project:

A description of those services necessary for the complete operation of the facility shall be provided in the functional program. (1.2 – 2.2.1.1)
1.2 Planning, Design, and Implementation Process

1.2-2 Functional Program: Outline

Environment of Care Components:

The relationship between . . . environment of care components . . . and the functional requirements shall be addressed . . . (1.2 – 2.2.2)
1.2 Planning, Design, and Implementation Process

1.2-2 Functional Program: Outline

Delivery of Care Model:

The delivery of care model shall be defined . . . The functional program shall support the delivery of care model . . . (1.2 – 2.2.2.1)
1.2 Planning, Design, and Implementation Process

1.2-2 Functional Program: Outline

Facility and Service Users:

The physical environment shall support the users . . . (1.2 – 2.2.2.2)
1.2 Planning, Design, and Implementation Process

1.2-2 Functional Program: Outline

Systems Design:

The physical environment shall support organizational, technological, and building systems. . . (1.2 – 2.2.2.3)
1.2 Planning, Design, and Implementation Process

1.2-2 Functional Program: Outline

Layout/Operational Plan:

The layout and design . . . shall enhance operational efficiencies and [end user] satisfaction . . . (1.2 – 2.2.2.4)
1.2 Planning, Design, and Implementation Process

1.2-2 Functional Program: Outline

Physical Environment:

The physical environment shall be designed to support the intended delivery of care model . . . (1.2 – 2.2.2.5)
1.2 Planning, Design, and Implementation Process

1.2-2 Functional Program: Outline

*Design Process and Implementation:*

*Stakeholders* affected by and integral to the design shall be included in the planning/implementation process.

(1.2 – 2.2.2.6)
1.2 Planning, Design, and Implementation Process

1.2-2 Functional Program: Outline

Functional Requirements:

The facility shall incorporate functional requirements . . . to [fulfill] the institution’s objectives . . . commensurate with scope/purpose . . . (1.2 – 2.2.3)
1.2 Planning, Design, and Implementation Process

1.2-2 Functional Program: Outline

Space and Equipment Needs:

- Size/Function of each space
- Furnishings, Fixtures, Equipment
- Circulation Patterns

(1.2 – 2.2.3.6)
1.2 Planning, Design, and Implementation Process

1.2-2 Functional Program: Outline

Short/Long-Term Planning Considerations:

- Future growth
- Impact on existing adjacent facilities
- Impact on existing operations/departments
- Flexibility
- Technology/Equipment

(1.2 – 2.2.3.7)
Timing

Step 1
Scope of Work
Assumptions

Step 2
Project Planning
Phase

Step 3
Project Delivery
Phase - Design

Step 4
Project Delivery
Phase - Construction

Step 5
Project Process
Assessment

Budget Finalized
Scope of Work
Purchased

Functional Program Developed

Scope of Work Specifications
Why Use a Functional Program?

- Recognized Best Practice
- Often Required by AHJ
- Manages Everyone’s Expectations
- Aligns Built Environment with Business/Case Model
Contact Information

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