



**BUILDING
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National Institute of Building Sciences

Provider Number: G168

“Managing Assets Starts With A Comprehensive Master Plan”

1-TU-3C-1

James (Jim) G. Easter, Jr, ACHE, Principal

Member ASHE, ACHE, and Associate Member AIA (Founder Academy Journal)

Easter Healthcare Consulting (Ehc)

January 8, 2019





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Course Description

With over 5,000 hospitals, 400+ systems and numerous ambulatory care centers around the USA, how will the campus master plan (MP) change? The **CHANGE** will require a “global perspective from 50,000 feet” to understand how service systems can operate more effectively with less waste and advanced technology.

In addition, each building and hospital campus will require a regularly scheduled MP product to manage the assets, determine the most appropriate budgetary allocations and methods for accessing the **ROI and VALUE** of the investments (time, energy, money). This MP should include quantifiable metrics, projected financial analysis and data-based narratives to quantify what, where, when and why”? In the **FUTURE**, the ideal MP will be combined with a **FUNCTIONAL PROGRAM, PROCESS Improvement Narrative** and **FACILITY MANAGEMENT (FM) PROTOCOLS**. Without these linkages working in harmony, the resulting plan will fall short of the competent business efforts.

A finely orchestrated **STRATEGY** in synch with the MP and the FM efforts will reduce waste, significantly improve patient care, improve bonds specifically for us, and engage site, departmental and service leaders on each site and within the delivery system. No, not everyone will gain approval of their projects, but the road map will be clearly delineated, and measurable for all to understand. Training for staff and regular updates of the **SP + MP + FM and technology enhancers** work effectively when understood and **communicated clearly** to the C-Suite and other responsible partners.





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Learning Objectives

At the end of the this course, participants will be able to:

1. Understand the **ASSETS** we refer to in a SYSTEM?
2. How the **SP + MP + IFM** Process works and What Are Some **Anomalies** to Take Into Consideration? Steps in SP, MP and FM will be discussed and compared. Meaningful Use to **INTEROPERABILITY**.
3. Compare the POTENTIAL WAYS to **INVOLVE the users** to gain input and build consensus; We'll discuss Alternative **Opportunities and Situations** with this group of presenters (Martin, Dillinger and Easter).
4. Lessons Learned From **Recent Experiences** and **Benchmarks** Include the Following;
 - a. Director of Two **Cancer Centers**
 - b. Planner for A **Surgical and Women's Health Program**
 - c. Programmer for **A Rural CAH Program**
 - d. Member of ACHE and Studying for **Fellowship**





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EVENT UPDATE



BUILDING INNOVATION 2019

January 7 - 10
Mandarin Oriental
Washington, DC

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What, When, Where

[Building Innovation 2019 Conference & Expo](#)
January 7-10
Mandarin Oriental
Washington, DC
1330 Maryland Ave., SW
Washington, DC 20024

Dates to Know

Online Registration Ends:
December 31, 2018

Stay Up to Date

Meet the Session Speakers, See the Presentation Topics



Thank You!



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Nebraska Society of Healthcare Engineers Annual Fall Meeting

Thoughts Shared With YOU From A
Year of **Transition & Change** (ICAHN, Planetree,
CMS, Consumers, Providers and Third Party Payors)



“Building on the Planetree Base of Success”

October 8, 2018

Annual Meeting

Boston, Massachusetts



HFR DESIGN

**“Patient-Centered
Programming: Form, Function,
Economy, and Time”**

NASHVILLE • MARCH 25-28, 2018

**PDC
SUMMIT
2018**

International Summit & Exhibition on
Health Facility Planning, Design, & Construction

PDCSUMMIT.ORG • #PDCSUMMIT

The Illinois Critical Access Hospital Network 15th Annual Conference

Honoring the Past: Celebrating the Future

Illinois Critical Access Hospital Network
October 29, 1:00 PM - October 30, 3:30 PM





People



Users



Patients and Family



Consumers

Sharing A Corporate Story

Values Leadership Vision
CHANGE
Management Strategy
Talent

Assets Within A Site/Campus

- Why Do We Need A **SITUATION ASSESSMENT** and VISION, MISSION, Values, Goals and Objectives
- Discuss the **FACT GATHERING** Process:
 - 13 Cloud Based Items
 - Director Perspectives
 - Engineering Leadership
- Identify **DATA COLLECTION** Methods (QA Style)
- What Are Key Planning Units (**KPU**)
- What Are **MARKET Factors** and Population Health Factors and Value of the Community Health Needs Assessment (**CHNA**)



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Assets Within A System

- A SYSTEM Is **A 50,000+ Foot** Perspective:
 - Regional Portals of Entry and Access
 - Regional Demographics and Trends
 - Regional Barriers and Socio-economic Factors
 - Balance and Equity Factors
 - Arteries, Pathways and Transportation
 - Areawide Perspective and Vision Based on Regional and Economic Plan (Yes/No/Maybe)
 - Business and Reimbursement Factors
 - Transformation Factors (Small Rural and Multi-Hospital Systems)



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SP + MP + FM and Anomalies

- The Optimum SP Should...
- The MP and Functional Program Should...
- The FM and BIM Modelling Would Ideally:
 - **Use of Accurate Spatial Data** (Existing by Dept)
 - Build on Infrastructure Building by Building
 - TJC Equivalent Life/Safety/Hazards and Acts of God
 - **Wayfinding, Finishes and Interior Design** (Perception and Branding)
 - Medical Equipment (I, II, III, Other)
 - Systems (IT, Phone, Telecom)
 - Low Voltage Systems
 - FFE and Built In Items
 - Environmental/Security and Safety
 - **Master Planning and Functional Program** (Maintaining Consistency)
 - Data Mining and Assembly of Relevant Metrics
 - Real Estate/Property Management
 - **Site Optimization and Strategic LRP**



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The Added Value Of A White Paper Conversation

*ACHA Edited and
Approved
Submission*



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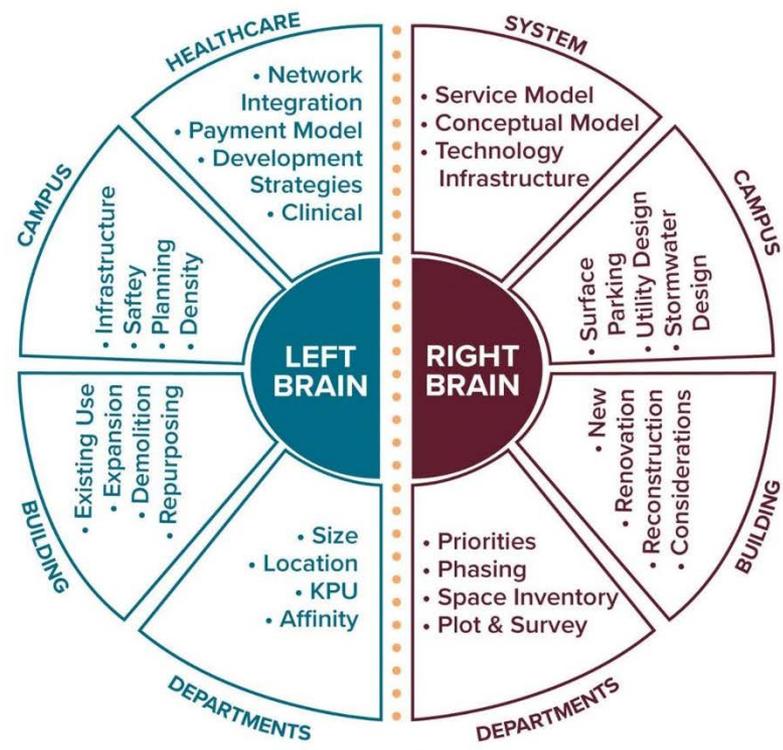
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A Comprehensive Perspective

(White Paper With ACHA Research 2018)

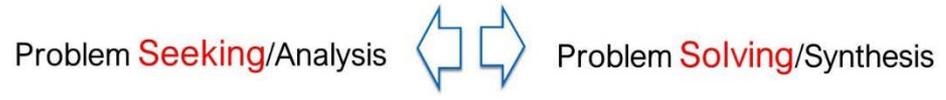
FOCUS/CRITERIA

- Mission
- Vision
- Access
- Growth
- Consolidation
- Expansion



RESOURCES/STAKEHOLDERS

- Board
- Steering Committee
- Departmental Directors
- Departmental Managers
- Planner
- Infrastructure Engineering
- Statistician
- Wayfinding Consultant
- Facilities Manager



Credits to HFR Design, Inc and CRS/CRSS/HOK – “Problem Seeking” by Pena and Focke



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A Comprehensive Perspective



“Failing to Plan Effectively is Planning to Fail”

Credits to HFR Design, Inc and Ehc



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A Comprehensive Perspective

(White Paper With ACHA Research 2018)



We Believe
The **FUTURE** Will Require
More **COMPREHENSIVE** Pre-Design
Efforts,
Than Provided in the Past!
(4 Tiers and Parallel Efforts)



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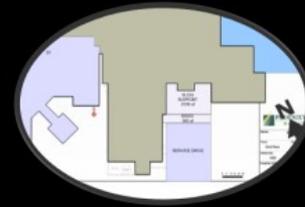
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Changes from an A/E/C/\$

Perspective (A Integrated Facility Management Program)

Service Entry and Dock Considerations



The Factors Impacting our Service Delivery Hourly, Daily And Significantly.



Deferred Maintenance and Systems Upgrades Are A Priority Concern. Good Job Todd and Team! (FM Support Required!)

Engineering Analysis

By

SSR and Staff
(Input by Todd)

In the '68 portion of the building the electrical distribution equipment is in very poor fair condition. There are exceptions where renovation has occurred, but most of the panelboards are obsolete Federal Pacific panels. There are a number of fused and/or split bus panels. These panels are beyond their normal expected lifespan. Replacement parts are no longer readily available for the old panels.



In older portions of the building, the existing electrical closet doors are small, and generally cramped. There are some working clearance issues, some of which are rather severe. There are a number of electrical panels located in corridor walls. This is not allowed by current guidelines. When renovating, these panels will have to be moved out of the corridors. In general the existing panels and electric closets will not support renovation.

Numerous **Engineering Issues** to be confirmed asap:

- ✓ Highest Risk Areas
- ✓ Sustainable
- ✓ Life/Safety
- ✓ Code
- ✓ FGI Guidelines
- ✓ Budget Factors
- ✓ Deferred Maintenance
- ✓ Phasing and Staging of Areas For OB/LDR/Nursery/Surgery

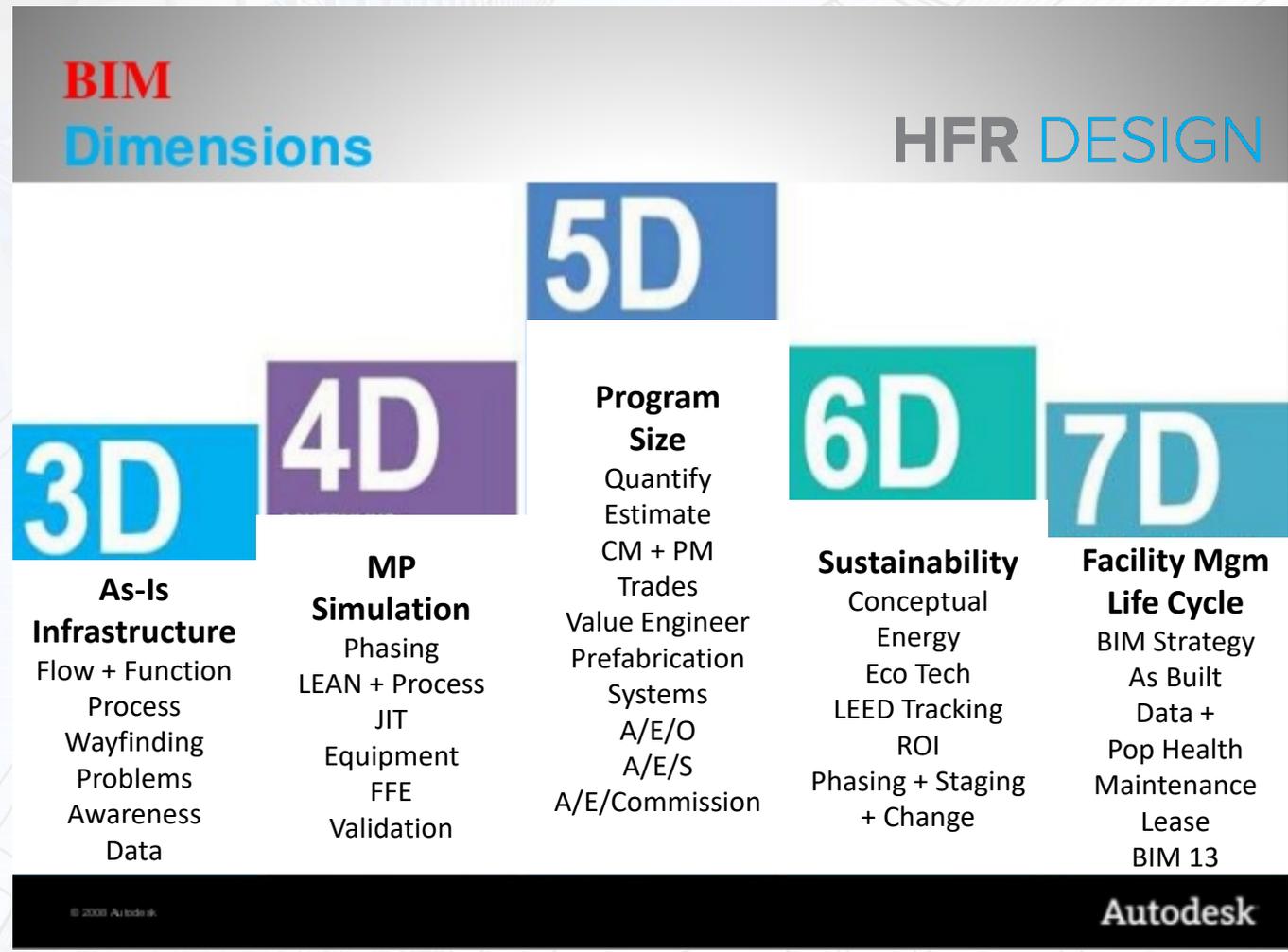


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Building Information Management Building Integration Modeling (BIM)





Key Spatial Management Data

(Programs to capture and maintain information of all buildings and sites owned by the healthcare system)

- **Space Inventory** - Portfolio of Owned and Leased Buildings and Tenant Spaces
- **Space Assignments** - Business Practice and Standardization
- **Space Tabulations** - Standard Practice and User Classification
- **Space Requisition** - Tabulation in Spread Sheet format for Linkages to BIM (3D) Modeling
- **Space Data Management** – Review, Updates and Approvals
- **Space Optimization and Process Change** - Efficient and Cost Effective Use (Waste Reduction)
- **Space Cost/Revenue Audits** - Costs Associated With Use/Rentals and Leases
- **Space Compliance** - CMS/AHJ/TJC and FGI Guidelines
- **Space Accessibility** - Consulting Partners Project by Project:
 - Site
 - Building
 - Users
 - Floor Plans
 - Data Comparisons
 - Benchmarks
 - Inventory
 - Asset Improvements
 - Asset Re-Alignment and Relocation
 - Asset Budgeting and Phasing (Quick Changes)



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What Are The Cloud-Based FACTS and Metrics For The Future?



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What Are The Cloud-Based FACTS and Metrics For The Future?

Module 3 – Life/Safety Systems - BIM 4D

- Fire Sprinkler Zones and Aligned Policies
- Smoke Zones and Compartmentalization
- Fire Compartmentation Zones
- Building Construction Classification Zones
- USP and CMS Compliance Factors and Zones of Risk

*“Statement Of
Conditions”*

Module 4 – Interior Design Systems - BIM 4D

- Ceiling Finish Types/Systems and Heights
- Floor and Wall Finish Types
- Interior Finish Chronology Zones (Time Frames and
- Signage and Wayfinding Interface and Chronology

*“Early Feedback
And Concept
Refinement”*

Module 5 – Medical Equipment - BIM 4D

- Major Fixed Medical Equipment
- Major/Minor Moveable Equipment

*“Areas of
Planning
With The
Most*

Module 6 – IT/Data Systems and Telephone - BIM 4D

- Desktop Computers
- Servers
- Phone System (With Vendor)
- Telecom (With Vendor)

*Challenges
Why & When”*



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What Are The Cloud-Based FACTS and Metrics For The Future?

**Mixture of
MP, Design and Operations in
Partnership With Change**



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What Are The Cloud-Based FACTS and Metrics For The Future?

Module 11 – Data Mining and Assembly of Relevant Metrics - BIM 5D

- HCAAP Scores
- Patient Safety
- Risk Management
- Operational Efficiency
- Customer Satisfaction
- Compliance Management
- Maintenance Optimization and Waste Reduction
- Predictive and Preventive Maintenance and Management

Module 12 – Real Estate/Property Management - BIM 5D

- Project Management
- Contract Management
- Space Quality Management – Amenities and Deficiencies
- Space Optimization and Common/Shared Services
- Trend Analysis

Module 13 – Site Optimization - BIM 5D

- Parking Access/Ownership
- Access/Egress (Fire and Ambulance, Service and General Public/Visitors)
- Expansion and Construction Phasing
- Height and Zoning by AHJ and Community Ordinances
- Setbacks/Easements/Storm Retention and Detention
- Energy and Landscape Standards
- Signage and Wayfinding

**Quality and Need
Benchmarks
Systems Have Lots
Of Investment Property,
Land and Buildings**



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Examples of A **Successful** Process

Discussion of Cancer Center Project Within A **Major System**:

- Transition Planning (TP)
- Staffing and Orientation
- Process Change
- Architect/Engineer and Owner Factors:
 - Hire Smart
 - Experience
 - Comprehensive
 - Smart Tools and Techniques
 - Responsive



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Examples of A **Successful** Process

Discussion of A **Master Plan** (MP) Within a **Hospital System**:

- Step-By-Step Process
- Lessons Learned
- Building A Base With Benchmarks
- Regional Implications
- Change Within A “Partial Perspective”
- Remember The Soft Costs
- Remember The Infrastructure
- Issues



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Examples of A **Successful Process**

Planetree **Implications** and Illustration:

- Planetree Focus and Top 10 Factors
- Added Value Attributes of Concept
- How/Why Process Change
- Association **Value + Awareness** and Training:
 - AIA and ACHA
 - ACHE
 - ASHE
 - AHA
 - Other

*“Cultural and Societal
Adaptation To
Diverse Perspectives
And Needs...Progress”*



The 10 Components of the Planetree Model

- 01. Human Interaction**
- 02. Architectural Design + Healing**
- 03. Nutrition + Diet**
- 04. Patient Empowerment**
- 05. Family, Friends, Social Support**
- 06. Spiritual and Emotional Support**
- 07. Human Touch**
- 08. Healing Arts and Sensory Factors**
- 09. Complementary Therapies**
- 10. Healthy Communities (Youth + Aged)**



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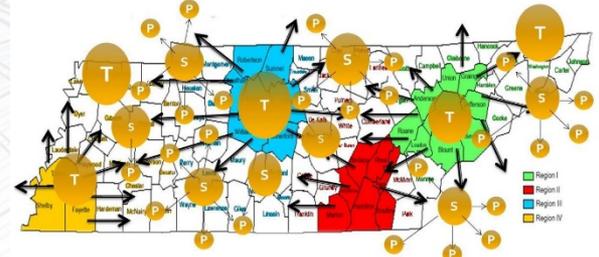
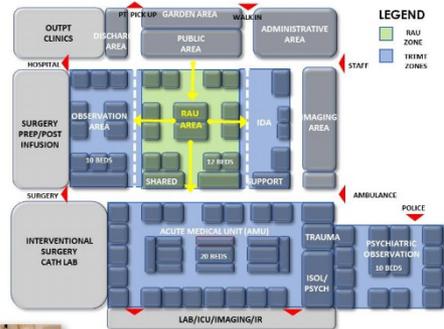
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Vision and Change Management

FUNCTIONAL PROGRAMMING

- DEFINITIONAL CRITERIA
- PROGRAM NARRATIVE
- OPPORTUNITIES/CONSTRAINTS
- BUDGET PARAMETERS
- GOALS/OBJECTIVES/NEEDS
- STRATEGIC INITIATIVES

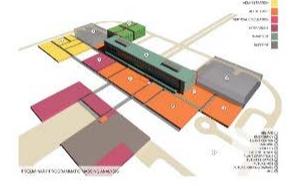
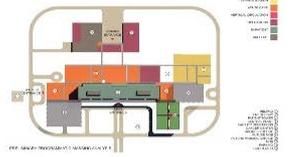
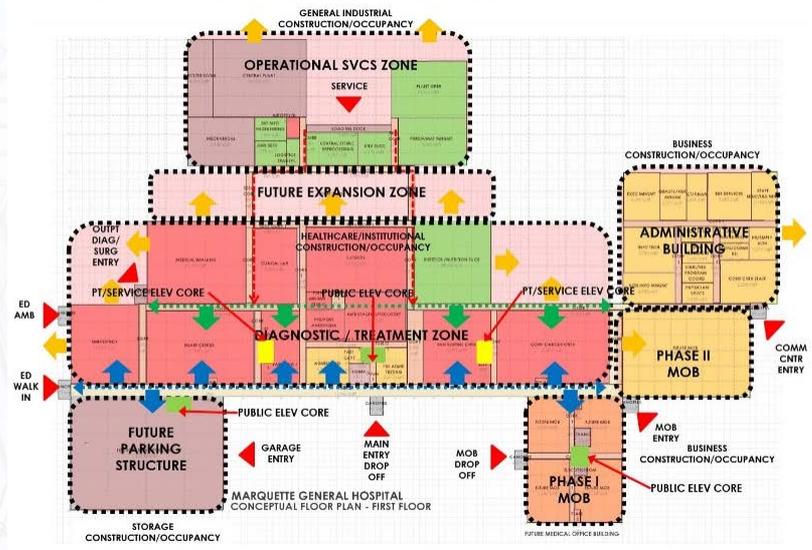


"Regional and Statewide Healthcare Planning Can Respond to All Human Service Needs When Managed Carefully and Implemented Comprehensively".

Healthcare Should Have No Boundaries to Access.



MASTER ZONING/STACKING/ BLOCKING





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Vision and Change Management

Partnership Effort On Finance, Needs and Strategy Very Important!

1. Data Assessment

- Service Area Defined
- External and Internal Sources
- Local Studies
- Community Inventory

What do we know?

2. Community Input

- Public Health
- Underserved Populations
- Chronic Disease Populations
- Others

What are we hearing?

**Must Share
The Data
To Work
Effectively!**

3. Implementation Strategy

- Summary of Data and Community Input
- Prioritizing
- Implementation Strategy for Each
- What is NOT included and Why?

What are the priorities and how do we implement?

4. Reporting

- CHNA Summary Report
- Implementation Strategy Board Approval
- Posted on Website
- 990 Reporting

How do we package the final material?

5. Monitoring

- Measurements
- Annual Data Updates
- Prepare for the Next CHNA

**With ACA
On The
Downward
Spiral,
States
Must Take
The
Lead!**



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The Well-Managed Healthcare Organization

by: Ken White and John Griffith, Eighth Edition (Fellowship for ACHE)

1. Foundations of High-Performing Healthcare Organizations
2. **Cultural Leadership**
3. Operational Leadership
4. Governance
5. Foundations of Clinical Performance
6. Clinical Staff Organization
7. Nursing
8. Clinical Support Services
9. **Population Health**
10. Knowledge Management
11. Human Resources
12. **Environment of Care**
13. Financial Management
14. Internal Consulting
15. **Marketing and Strategy**

**Culture
Population
Environment
Strategy**



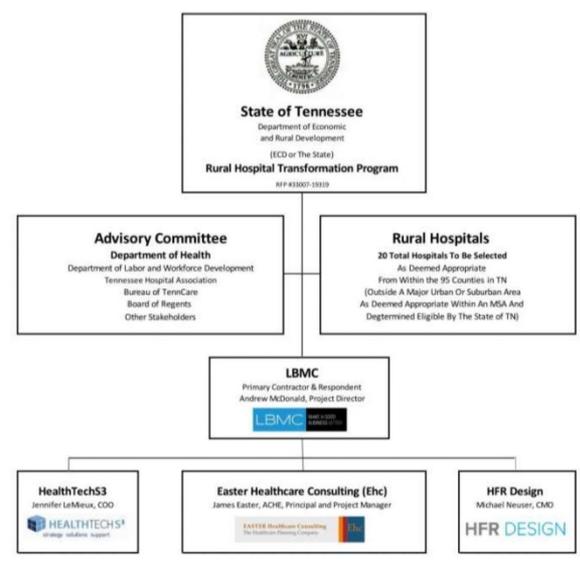
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The Future Continuum “A Virtual Cradle to Grave”

Organizational Chart



COMPREHENSIVE HEALTHCARE PLANNING

BIM 3D PROGRAMMING





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This concludes The American Institute of Architects
Continuing Education Systems Course

EASTER Healthcare Consulting
The Healthcare Planning Company



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Thank You
Questions/Comments

