So what’s so special about healthcare?

Jonathan Flannery, MHSA, CHFM, FASHE
Senior Associate Director of Advocacy
American Society of Healthcare Engineering
American Hospital Association
FCIA Firestop Industry Conference & Trade Show
REACHING NEW HEIGHTS!
Healthcare Focused Firestopping & Effective Compartmentation
7 November 2013, Hyatt Tamaya, Santa Ana Pueblo, NM
Why is Health Care “Unique”?

Different Customer
Different Staff
Different Facility
Different Rules
“Patients” Required
Typical Health Care Customers

- Sick people
- Elderly and/or frail
- Respiratory problems
- Diagnostic tests
- Scared/confused
- Patient’s family, friends and visitors
Typical Health Care Staff

- Single Largest Employer
- Clinical Staff
  - Doctors aren’t Staff
  - Nurses Rule the Day – and Night!
- Support Staff Focus on Care
- Here for Different Reason
- Patient Care is Priority 1
Typical Facility

- Built Different - Used Different
- Aging Buildings and Infrastructure
- Technology Advances
- Lots of needs and desires
- No matter what happens, patient care must go on
Hospital Operational Rules

- Heavily regulated
- Risk management oriented
- Performance/process improvement oriented
- Clinical Staff are an integral part of the hospital
- Patient care is a driving force
Patients = Patience

• The healing environment
• Keeping them safe & secure
• Increasing the value
• Image
• Patients are #1!
What is Unique to Healthcare?

Patients - This is What is Unique to Healthcare
The Greatest Challenge to US Healthcare

COST
<table>
<thead>
<tr>
<th>Country</th>
<th>Per Capita Healthcare Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>$7,290</td>
</tr>
<tr>
<td>Switzerland</td>
<td>$4,417</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>$4,162</td>
</tr>
<tr>
<td>Canada</td>
<td>$3,895</td>
</tr>
<tr>
<td>Austria</td>
<td>$3,763</td>
</tr>
<tr>
<td>France</td>
<td>$3,601</td>
</tr>
<tr>
<td>Denmark</td>
<td>$3,512</td>
</tr>
<tr>
<td>Sweden</td>
<td>$3,323</td>
</tr>
<tr>
<td>Australia</td>
<td>$3,137</td>
</tr>
<tr>
<td>UK</td>
<td>$2,992</td>
</tr>
<tr>
<td>Finland</td>
<td>$2,840</td>
</tr>
<tr>
<td>Spain</td>
<td>$2,671</td>
</tr>
<tr>
<td>Japan</td>
<td>$2,581</td>
</tr>
<tr>
<td>New Zealand</td>
<td>$2,510</td>
</tr>
<tr>
<td>Portugal</td>
<td>$2,150</td>
</tr>
<tr>
<td>South Korea</td>
<td>$1,688</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>$1,626</td>
</tr>
<tr>
<td>Slovakia</td>
<td>$1,555</td>
</tr>
<tr>
<td>Hungary</td>
<td>$1,388</td>
</tr>
<tr>
<td>Poland</td>
<td>$1,035</td>
</tr>
</tbody>
</table>

![Bar chart showing average life expectancy at birth](chart.png)

**U.S. SPENDS MORE ON HEALTHCARE YET FALLS BEHIND OTHER NATIONS ON QUALITY**

Dollar figures reflect all public and private spending on care, from doctor visits to hospital infrastructure. 

*Source: OECD Health Data 2009*
Percentage Distribution of Health Care Spending by Type of Service 2010

Data from the Agency for Healthcare Research and Quality Statistical Brief #396 issued Jan 2013
12.1a | Only 1 percent of the population accounts for about one fifth of health spending; 5 percent account for nearly half half.


<table>
<thead>
<tr>
<th>Top 1%</th>
<th>Top 2%</th>
<th>Top 5%</th>
<th>Top 10%</th>
<th>Top 50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>$116,147</td>
<td>$94,873</td>
<td>$54,624</td>
<td>$36,569</td>
<td>$11,143</td>
</tr>
</tbody>
</table>

Distribution of Population Ranked by Annual Per Capita Health Spending

Note: percentages are for the civilian, non-institutionalized population based on Medical Expenditures Panel Survey (MEPS) data for 2008. 2011 per capita spending has been calculated from 2008 figures, adjusted to account for increased personal health spending per capita and to reduce differences between MEPS and National Health Expenditure estimates.
U.S. is spending much more for older ages

Figure 3. Projected annual family health care costs (premium contribution plus out-of-pocket costs) and average household income in the United States.

Sources: Ann Fam Med 2012;10:156-162. doi:10.1370/afm.1348. Who Will Have Health Insurance in the Future? An Updated Projection, Richard A. Young, MD, Jennifer E. DeVoe, MD, Dphil, John Peter Smith Hospital FMRP, Fort Worth, Texas Department of Family Medicine, Oregon Health Sciences University, Portland, Oregon
Figure 2. Projected annual family health insurance premium costs and average household income in the United States.

Sources: Ann Fam Med 2012;10:156-162. doi:10.1370/afm.1348. Who Will Have Health Insurance in the Future? An Updated Projection, Richard A. Young, MD, Jennifer E. DeVoe, MD, Dphil, John Peter Smith Hospital FMRP, Fort Worth, Texas Department of Family Medicine, Oregon Health Sciences University, Portland, Oregon
What Drives These Costs?

Huge Debate
Many Expert Opinions

Prices
Fee for Service
Quilted System
Defensive Medicine
Pharmaceuticals
Technology
Insurance

Waste
Improper Use
Harm to Patients
Lack of Transparency
Unnecessary Use
Accountability
Fraud
Patient Protection and Affordable Care Act

- Expand healthcare coverage to an estimated 32 million Americans
  - At a cost of $940 Billion
- Substantial reductions to federal funding for Medicare and Medicaid hospital programs
  - According to CBO Medicare expenditures will be reduced by an estimated $379 billion from 2012 to 2021
Volume Based to Value Based

- Accountable Care Organizations
- Bundling of reimbursements will lower reimbursements to hospitals
  - One fee regardless how many tests
- Increased efficiencies will lead to lowering operational costs
  - Efficient healthcare models already exists
  - Inefficient organizations will fall by the wayside or taken over by efficient ones
CBO Projection of Federal Government Outlays and Revenues (% of GDP)

- Net Interest
- Health Care (Medicare, Medicaid, etc.)
- Social Security
- Discretionary Programs (e.g. Security Agencies, Transportation, Education)

Fiscal Deficit: 19%

Revenues
Healthcare Business Environment

- Health Care Operating Margins
  - Due to a perfect storm of higher costs and capped revenues, margins are razor thin
  - Many institutions have negative margins
  - Average margins have returned since 2008
  - To move from Expert Centric to Patient Centric model requires margin to fund change initiatives
What Can We Do About Cost?

Dedicated to optimizing the health care physical environment
AHA

• National Organization Serves:
  o All types of hospitals
  o Health care networks, and
  o Their patients and communities

• Nearly 5,000 hospitals and 43,000 individuals

• Mission: To advance the health of individuals and communities.
Who is ASHE?

- Largest association dedicated to health care physical environment
- Over 11,000 Members
- Trusted Industry Resource

**ASHE Mission**

* Dedicated to optimizing the health care physical environment
ASHE Strategic Initiatives

• Unified Code

• Succession Planning

• Health Facility Commissioning
Energy Efficiency
Our Next Opportunity

- 25% Reduction in energy costs – Double institutions margin
- Capital Project Driver
- Reduced Energy Intensity
- HFCx, a quality process
- Move to Operational Sustainability

Retail Electricity Rates

ASHE
Dedicated to optimizing the health care physical environment
American Hospital Association
Succession Planning

• Industry is graying
  o Average Retirement Forecast is 30% or greater!

• Traditional Career Path
  o Doesn’t Exist

• Increasing Responsibility
  o Manage the Boiler Room
Unified Code

Who Regulates Hospitals?

Source: American Hospital Association
Who is CMS?

• Centers for Medicare & Medicaid Services
  o Previously - Health Care Financing Administration
  o Federal agency within DHHS

• Responsible for:
  o Medicare, Medicaid & SCHIP
  o HIPAA
  o Quality Standards thru Accreditation
Example of Poor Code Interpretation

• CMS cites facilities for microwaves not listed as “hospital grade” – even though there are no “hospital grade” microwaves

• Assuming commercial-grade appliances would satisfy CMS, this interpretation could cost the health care industry $30 million!
Example of Poor Code Interpretation

• 2010 citation – required sprinklered OR supply cabinets
• If all states required that, the estimated cost to the health care industry would top $425 million!
Poor Codes Cost Money

• $9 - $16 billion a year wasted because of conflicting or excessive codes and standards

• Small things can have a profound effect
The objective of this committee is to develop code change proposals to the International Codes which will result in the most contemporary, effective and efficient provisions for hospital and ambulatory care facilities to assure the highest level of safety for all users of such facilities.
AD HOC Mission

Assess and amend the current ICC family of codes to ensure that these requirements are appropriate to the special safety risks that exist within hospitals and ambulatory surgery facilities.
Ad Hoc Committee

15-person Ad Hoc Committee
Started in April 2011

12 Meetings and Countless Calls
Produced

Over 180 Code Changes Developed, reviewed or commented on

36 Group A Proposals – 26 Approved
40 Group B Proposals – 35 Recommended by Committee
Reviewed another 104 Proposals
The Code Change Proposals
General Work Group

IBC – Defend In Place
Definition

• Commonly accepted practice, often misunderstood

• Lays groundwork for other changes
The Code Change Proposals

Occupancy Work Group

Split Group I-2

- **Condition 1** - Nursing homes, Foster care
- **Condition 2** – Hospitals

Coordinated with ICC Code Technology Committee
2013 Code Action Hearings

IFC – Approved Proposals

F225 – Date Specific for Sprinklering

F209 – Wheeled Equipment in 8’ corridors

F236 – F243 Retroactive Requirements to Chapter 11 (new concept in I-Codes)

EB26 – Maintenance Requirement After Fully Sprinklered
AD HOC Future

Working with ICC Staff and Board to:
Continue Original Mission
Expand to Other Healthcare Types
Establish a Maintenance Process
Lessons Learned From the Code Development Process

- Developing relationships
- Understanding opposing positions
- Difficult discussions that result in consensus
- Including all parties
- Knowing when not to say what
- Consensus – Doing the Right Thing for the Right Reason
Challenges Within the Healthcare Physical Environment

• Aging Facilities and Infrastructures
  o Average Age of Plant Increased to 15.75 years

• Reduced Operating Budgets
  o Projected Reductions of 3% - 12%

• Increasing Regulations

• Continued Compliance
  o 7 of Top 10 Citations