WHY IS HEALTHCARE REACTIONARY?
HEALTHCARE CHALLENGES

- Healthcare Reform
- Older and Sicker Patients
- Consumer Choice/Expectations
- Clinical/Infrastructure Innovations (Equipment, Systems, EMR)
- Ever-changing Codes and Standards
- Reduced Capital Budgets
- Aging Facilities
- Energy Intensity (24/7 Operation, Reheat energy for mandated ACH)

WHY IS HEALTHCARE REACTIONARY?
“Evidence-based design (EBD) is the process of basing decisions about the built environment on credible research to achieve the best possible outcomes.”

1970: Evidence-based medicine starts with Professor Cochrane’s book

1972: Evidence-based medicine starts with Professor Cochrane’s book


1978: Planetree is founded

1980: 1984: Pioneering Ulrich study linking views of nature to patient outcomes

1984: Pioneering Ulrich study linking views of nature to patient outcomes

1985: Center for Health Design is founded

1985: First Planetree model hospital

1986: CHD publishes first literature review; 84 EBD studies

1993: IOM – To Err is Human

1996: CHD publishes first literature review; 84 EBD studies

1998: Dr. Haya Rubin study on # EBD studies

1999: Center for Health Design is founded

1999: Pebble Project Launches

2000: 2004: 600 EBD studies

2001: IOM – The Quality Chasm

2006: EBD in industry guidelines

2007: HERD journal launches

2008: CHD launches EDAC

2009: 100 EDAC certified individuals

2009: 100 EDAC certified individuals

2012: 1000 EDAC certified individuals

Adapted from Center for Health Design; http://www.healthdesign.org/edac/about

EVIDENCE-BASED DESIGN TIMELINE
“Architects are public health workers. We have a partnership – public health professionals and architects and planners. Our minds have to talk because we have an influence on America’s public health that we’re only now beginning to grasp.”

Design & Health: Six approaches to achieving health through built environment design and policy
SIX APPROACHES TO ACHIEVING HEALTH THROUGH BUILT ENVIRONMENT DESIGN & POLICY

• Environmental Quality
• Natural Systems
• Physical Activity
• Safety
• Sensory Environments
• Social Connectedness

AIA Design & Health Topics: Six Approaches To Achieving Health Through Built Environment Design & Policy

AMERICAN INSTITUTE OF ARCHITECTS
URBAN LAND INSTITUTE
“Ten Principles for Building Healthy Places” Applied to Healthcare
• **Put people first.** Individuals are more likely to be active in healthcare settings that encourage use of stairs and pleasant internal destinations, such as courtyards and dining areas. Sites that are accessible by mass transit and biking encourage exercise, and walking paths allow staff and family to take active breaks.

• **Recognize economic value.** Walkable, mixed-use communities have increased real estate value. Instead of locating new healthcare campuses on isolated greenfield sites, consider more compact and urban campuses that complement and spawn adjacent development.

• **Energize shared spaces.** Incorporating public gathering spaces into healthcare settings can have a positive effect on health by providing space for wellness programming.

• **Make healthy choices easy.** Improved wayfinding and communication within hospitals can allow caregivers and family to move about without anxiety, making visits safer and more active.

• **Ensure equitable access.** Spaces should be designed for all ages and abilities, where anyone can be accommodated without a loss of quality of life. Collocating health facilities near schools and senior living facilities also improves access.

• **Mix it up.** Mixed-use developments improve physical and social activity. Locating healthcare facilities in vibrant, walkable developments with retail and housing encourages utilization.

• **Make it active.** Urban design can be employed to create an active healthcare site, including providing sidewalks and bike racks as well as playgrounds and gardens.

CASE STUDY
University of Maryland Medical Center
CASE STUDY
University of Maryland Medical Center

- Environmentally Conscious Purchasing
- Greening the OR
- Sustainable Foods
- Safer Chemicals
- Leaner Energy
- Green Commuting
- University Farmers Market
- Green Workplace
- Green Cleaning
- Edible Landscape
- Healthier Hospitals Initiative (HHI)
- Tracking toward LEED 2.2 Gold
PROACTIVE APPROACH TO WELLNESS

“Health” Design instead of Healthcare Design

Sara Marberry “Healthcare Design or Health Design?” February 2015
In my work as an environmental advocate in health care, I am often asked how people can best contribute to a healthy environment. There is much we can and should do to lessen our impact on the environment, such as reducing reliance on fossil fuel, preferring products that do not contain harmful chemicals, and being mindful about consumption and waste. **I believe, however, that the best thing we can do for the environment is to reduce our own health risks, or if we are healthy to stay that way.** The main causes of poor health in the United States are preventable: unhealthy eating, insufficient physical activity, tobacco use, and too much alcohol. One third of Americans are obese, and there is a tsunami of diabetics headed our way because millions of Americans are prediabetic today. **Sedentary behavior increases the odds of cancer, stroke, depression, loss of bone density, and a host of other illnesses.** The resulting response from the health care system to diagnose and treat these illnesses is environmentally intensive.

See more at: http://share.kaiserpermanente.org/article/greening-health-care-preface/#sthash.yewiilzZ.dpuf
MONUMENTAL STAIRS
PHILADELPHIA MONUMENTAL STAIRS
THE ULTIMATE MONUMENTAL STAIR