

## ***Mon-B8 Health By Design: Best Practices in Hospital and Senior Living Gardens***

### **Description:**

A therapeutic garden is a place where the environment is adapted to accommodate specific planned or self-directed activities, and that improves outcomes for the great majority of users. More gardens are being built in healthcare settings, but some of the garden designs are failing or not reaching their potential to provide health benefits to the garden users. This session details the current factors affecting healthcare, summarizes some of the underlying research of the benefits of nature to humans, and illustrates research-based processes and practices to facilitate better healthcare landscape design.

### **Learning Objectives:**

1. Summarize two research theories that support therapeutic garden design.
2. Describe three benefits of gardens to patients, families, or staff in healthcare facilities.
3. Outline processes and practices to promote interdisciplinary planning, programming, and evaluation of gardens in healthcare settings.

### **Presentation Outline:**

#### **A. Changes in Medical Practice**

1. More out-patient procedures and ambulatory care centers
  - a) Gardens for waiting family members, post-surgery exercise.
2. Most hospital inpatients are not ambulatory or have very limited mobility
  - a) Complementary/alternative medicine more integrated into mainstream medicine.
  - b) Gardens for tai-chi, meditation, contemplative walking.
  - c) Hospitals introducing elements found at resorts or health spas.
3. Decline in preventative medicine physicians
  - a) More people, particularly aging Baby Boomers, becoming more health conscious.
  - b) Opportunities to promote wellness gardens for yoga, meditation, exercise, etc., in addition to gardening as therapy.
4. Federal government (Medicare) now requires hospital patient satisfaction surveys, tied to reimbursements
  - a) Hospital management interested in what affects satisfaction.
  - b) Access to nature always features high on list of preferences.
  - c) Providing gardens is a relatively low cost method to increase satisfaction.
5. Critical staff shortages
  - a) Staff are prime users of healthcare outdoor space.
  - b) Insufficient staffing raises staff stress level.
  - c) Presence of garden may affect hiring and retention of staff.

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### 6. Hospital Green Teams

#### **B. Demographic Changes**

1. Aging population
  - a) Burgeoning market in senior living, nursing homes, and Alzheimer's facilities.
  - b) If elderly spend some time outdoors each day, it means fewer demands on staff and potential lower costs to management (benefits of movement/exercise, Vitamin D, Circadian rhythms).
  - c) Recommendations for neighborhoods with large senior populations (wellness walkways).
2. Increasing need for day care centers
  - a) Many elderly and disabled family members formerly cared for at home, now taken to day care centers.
  - b) Day centers – where garden is significant component, especially for:
    - 1) Those with Alzheimer's disease and other forms of dementia;
    - 2) The well elderly who live alone and seek social life activities;
    - 3) Those with mental illness too severe to hold down job, but not severe enough to be hospitalized; and
    - 4) Those with a physical disability living at home who want to participate in a social program and continue gardening.
3. More people living in cities
  - a) Less access to nature.
  - b) Increased attention fatigue.
  - c) Decreased physical activity.

#### **C. Public Health Issues**

1. Increasing numbers of overweight and obese adults and children
  - a) Promote walking trails, bike paths, linear parks, usable sidewalks, greenways.
  - b) Argue the case for neighborhood design as a public health issue.
  - c) Exercise leads to healthier heart and reduces rate of early-onset Alzheimer's disease.
2. Increasing numbers of children diagnosed with autism and attention deficit disorder (ADD)
  - a) Univ. of Illinois research indicates children who spend more time in green nature reduce problems with ADD.
  - b) Autistic children hyper-sensitive to sensory input (light, noise, glare); easily feel "invaded."
  - c) Need to provide green, quiet, cozy spaces where child can be alone.
3. Decreasing Exposure to Nature
  - a) More digital entertainment.

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- b) Fewer opportunities for outdoor play.
- c) Reductions in physical education.
- 4. Fatigued Hospital Staff
  - a) 1 in 5 nurses experience depression.

### **D. Research Concepts**

- 1. Biophilia
- 2. Evolutionary Genetics
- 3. Attention Restoration Theory
  - a) Focused vs Effortless Attention
  - b) Landscape Preference Theory
- 4. Environmental Press
- 5. Stress Reduction
  - a) Social Support
  - b) Control
  - c) Exercise
  - d) Nature
- 6. Experience vs Memory
- 7. Emotional Congruence

### **E. Design Patterns**

- 1. Indoors/Outdoors
- 2. Pathways and Landmarks
- 3. Garden Places
- 4. Enclosure
- 5. Garden Views
- 6. Plantings
- 7. Furnishings
- 8. Place-making

### **F. Benefits of Healthcare Gardens**

- 1. More familiar environment
- 2. Staff restoration
- 3. Exposure to nature

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4. Mild Exercise
5. Decreased agitation
6. Increased attention
7. Physiological calming

### **G. Case Studies**

1. Emanuel Hospital Children's Garden – Portland, OR
2. Good Samaritan Hospital Healing Garden – Portland, OR
3. Oregon Burn Center – Portland, OR
4. St. Anthony's Hospital – Gig Harbor, WA
5. Samaritan Lebanon Hospital, Lebanon, OR
6. Converse Home, Burlington, VT
7. Meadowood Retirement Community, Worcester, PA
8. Harrison Hospital Healing Garden, Bremerton, WA

### **H. Evaluating Therapeutic Gardens**

1. Post Occupancy Evaluation (POE) studies
2. Patient-specific gardens
  - a) Rehabilitation and dementia are fairly well documented.
  - b) Need more research on other large patient groups: autism, PTSD, addiction.

### **Speaker Biographies**

**Mark Epstein**, ASLA, is Principal of Hafs | Epstein Landscape Architecture in Seattle, Washington. For nine years he served as co-chair of the ASLA Healthcare and Therapeutic Design Professional Practice Network. In addition to designing hospital gardens, he has taught healthcare garden design for the last ten years at the Chicago Botanic Garden and the University of Washington.

**Teresia Hazen**, MEd, HTR, QMHP is a Registered Horticultural Therapist and the Coordinator of Therapeutic Gardens & Horticultural Therapy for Legacy Health in Portland, Oregon. Teresia has been head of Legacy Health Horticultural Therapy department in Portland for over 20 years, overseeing numerous programs and exemplary therapeutic gardens. Three of her gardens have received the American Horticultural Therapy Association's Therapeutic Garden Design Award.