

Integrated Facility Design - Breakthrough Improvement in New Outpatient Center

Lisa Bradenburg, MPA/MPH, Chief of Staff to CEO, SVP & Chief Administrative Officer

Cindy Evans, VP, Ambulatory Services

Paula Holmes, RN, MPH, Senior Director, Regional Services and Service Lines

Seattle Children's, Seattle, WA

Learning Objectives: After viewing this session, attendees should be able to:

1. Understand the basic tools of integrated facility design
2. Reduce square footage and capital dollars needed for new construction
3. Understand how to link operational improvement and new space design

Introduction/Background:

IFD is a different way of designing and building new space that focuses on designing improvements in operations into new space, using data to determine space needs, breaking down barriers between departments to create multi-use space, and the successive review of mocked up physical space.

Initiative Description:

The project met the stretch goals outlined for cost reduction, space reduction, on time delivery, operational improvement, and patient/family satisfaction. Multi-day design events were focused on data and observations of current processes, and using full size "macro mock-up's" to simulate operational processes and remove unnecessary steps, square footage and travel distances. Hundreds of staff were invited to tour various mock-up configurations and give feedback which was incorporated by the team following each tour. A newsletter was sent out each day during events to update staff and providers who could not attend. In addition a tri party agreement between architect/contractor/owner was used to create incentives for all parties to reduce construction cost. This created a different team approach, whereby the measures of change activity on the project: requests for information, change in work requests and owner change requests, were dramatically decreased thereby reducing cost of construction.

Innovation:

The need to improve access and efficiency while decreasing cost is a challenge we all face. The use of CPI/Lean tools and a strong expectation for excellence and results can bring us breakthrough improvements – 25 percent – 50 percent improvement in multiple area's. This level of improvement is still relatively rare.

Results/Outcomes or Potential Results/Outcomes:

Overall, we learned that the use of lean tools and thinking can lead to significant improvements in efficiency and service while decreasing our need for and our cost of building expensive clinical space. Our specific results were:

1. Reduced square footage by 30 percent from original medical planner estimates
2. Reduced capital requirement by \$30M
3. Reduced RFI's and Owner Change Orders by >50 percent
4. Reduced clinic visit time in room by >25 percent
5. Reduced non operative time in OR's by 40 percent
6. Improved patient/family satisfaction scores by 30 percent

Lessons Learned:

These tools and methods work! Key to our success was

1. An organization with experience using CPI/Lean principles,
2. Populating our Core Team with our best lean thinkers,
3. Using Macro Mock-up's to turn 2D design into 'real" spaces for simulations and
4. The tri-party contract agreement. Next time we will put in place additional education on lean thinking for all external partners and more discussion on how the IFD process changes everyone's usual role.

Future of Initiative/Next Steps:

We are now incorporating the use of IFD into all of our new building projects, as well as major remodeling work.

Presenter Biographies:**Lisa Brandenburg, MPA/MPH, Chief of Staff to CEO, SVP & Chief Administrative Officer
Seattle Children's, Seattle, WA**

Lisa Brandenburg serves as the Chief of Staff to the CEO, SVP and Chief Administrative Officer for Seattle Children's Hospital. In this capacity, she is responsible for Clinical Properties and Facilities, Human Resources, Strategic Sourcing, Transportation and physician practice management for Medical Director departments. Prior to joining Seattle Children's, Lisa served as the Chief Operating Officer of University of Washington Medical Center.

**Cindy Evans, VP, Ambulatory Services
Seattle Children's, Seattle, WA**

Cindy Evans serves as the VP of Ambulatory and Regional Services for Seattle Children's.

**Paula Holmes, RN, MPH, Senior Director, Regional Services and Service Lines
Seattle Children's, Seattle, WA**

Paula Holmes is a Senior Director for Ambulatory Regional Services at Seattle Children's. With over 25 years of operational management experience, Paula has provided leadership to primary care, urgent care and specialty care services, as well as ambulatory surgery centers. She is a Continuous Performance Improvement certification candidate, and is passionate about the application of CPI principles to address operational inefficiencies. Paula led a core team of providers, architects and construction staff through a two year Lean design and workflow development process that culminated in the highly successful Bellevue Clinic and Surgery Center, which surpassed all financial and operational targets within its first 6 months of opening.

Link to website:

<http://www.childrenshospitals.net/AM/Template.cfm?Section=20114&TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=57536#>