Akron Children's Hospital: How we Used Departmental Mock-Ups to Transform the Design Process, and Why We Smell Like Tires

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Introductions

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Agenda

• Project Background
• Mock-ups and TVD
• Mock-ups as a Design & Implementation Tool
• Value from the Owner’s Perspective
• Lessons Learned
• Q&A
PROJECT BACKGROUND
About Akron Children’s

• Day Nursery in 1890 to independent stand-alone teaching hospital – 125 years old
• Largest pediatric health care system in northeast Ohio
• 372 bed hospital – 2 hospital campuses
• Offering services at 80+ locations across the region.
• 712,370 outpatient visits (2012)
• 9,453 inpatient admissions (2012)
• 15,341 surgeries (2012)
About Akron Children’s

- 4,619 employees
- 780 Medical Staff
- Gold Seal of Approval from the Joint Commission
- Magnet Recognition Status from American Nurses Credentialing Center
- 2,854 transports/509 air in 2012
- 408 Research Studies
- 20 Primary Care office network
Lean Journey/COE Background

Mark A. Watson Center of Operations Excellence

The mission of the Center for Operations Excellence is to develop and use in-house talent to improve the healthcare experience of our patients and families, while improving the working experience of our staff.
The Project

• 368,000 square feet
• Provides new “front door” to children’s hospital
• Includes 39 room Pediatric ED, Ambulatory Surgery Center with 8 OR’s, 75 bed NICU with room for future growth, and high-risk OB with room for expansion to full program
• Ground breaking – June, 2013
• Completion – March, 2015
The IPD Team

- Owner
- Owners Representative
- Architect
- Architect
- Construction Manager Partnership
- MEP Partnership
- Structural Engineers

Look how far we’ve come
Co-Located...Sort of...

Follow the smell of tires...

ILPD BIG ROOM

DESIGN WORKSHOP WAREHOUSE
The Process
Design Workshops

Look how far we’ve come
MOCK-UPS & TARGET COST
Innovation Teams

8 teams; needed to cut over 20% in costs
Workshop Teams

Emergency Department

Neonatal Intensive Care Unit

Ambulatory Surgery Center
Right Quantity of Rooms
Right Size
Minimize Construction Rework
Maximize Customer Satisfaction
Prototype Cost-Saving Ideas
MOCK-UPS AS A DESIGN & IMPLEMENTATION TOOL
Lost in Translation

- 2D drawings are not a universal language
- Miscalculations and premature assumptions made without true understanding
- Who is leading who, and who is truly the expert
- Signed, sealed, delivered... Or not?
I Can See Clearly Now!

- Standing in the spaces together put us on a level playing field to truly communicate
- Process improvement and design decisions made with confidence and understanding
- Users experience true ownership of their future space
- Scenario testing and planning for future processes
Change is Good

• Transition to a new way of operating is difficult, but the ability to truly understand the implications helps everyone move forward with confidence.

• Opening day will offer fewer surprises, as the users were intimately involved in defining their spaces by walking in, around, and through them.

• Early involvement and engagement by the entire IPD team – greater ownership
• Having the right people involved for the right decisions to be made
• Check... and double check
• Responsibility and accountability
• It may take more effort, but we’re better together
Tested and Tried

• Ability to actually test design decisions provided real validity to the “why” during implementation documents
VALUE FROM THE OWNER’S PERSPECTIVE
Getting the staff involved & invested

- All positions represented
- Team Rules apply
- Everyone has an equal voice
- Time allotted for the work
- Understand the current state
- Keep the Patient First
- Give them the tools

- Look to the Future, what does the group see ahead?
- Communication Ambassadors of the process & space
- Have Plenty of Food and Fun!
Lean Boot Camp

**Everyone on the team goes to Boot Camp**

- 8 Wastes of Healthcare
- One Piece Flow
- First Time Quality
- 7 Flows of Healthcare
- Voice of the Customer
- Value Stream Knowledge
- What is pull? and when?
- Continuous Improvement
“I can get that cheaper at Staples”

- Room number calculations – what do we need?
- Can we use rooms in different ways – flex space
- Flexibility for the future – a whole new use?
- Do we need that wall?
- Testing the room size
- Needs, not wants
- Post unit costs on items
- This, maybe not that
- What is most important
Families help shape the future

- Family members are part of the team (1-2/team)
- Involved in all activities and meetings
- Help to shape the future state with different eyes

More Involvement
- Town Hall meetings
- Surveys and voting
- Parent mentor groups
- Department FACT groups
Support Services Drive the 7 Flows

- Safety Services/Security
- Laboratory
- Food Service & Nutrition
- EVS
- Pharmacy
- Social Work/Chaplain
- IT
- Materials Management
They listened and we did it!

Don’t forget to rent a bus!
LESSONS LEARNED
Lessons Learned

1. The true value of the full-scale cardboard mock-up
2. Importance of involving individuals from the entire value stream
3. Be prepared, but nimble with planning
4. Break up long days of meetings with various types of activities. Have some fun.
5. Identify opportunities for the user team members to lead
6. Break up large groups
Lessons Learned

7. Don’t underestimate the logistics of pulling off a big workshop – food, supplies, sound systems, etc.

8. Let the team establish workshop rules, and encourage them to enforce them throughout the process

9. When in doubt, ask for a vote

10. Involve support services EARLY
QUESTIONS?