Children’s Hospital Of Michigan

“Its Not Just About The Bricks And Mortar”

A New Way Of Doing Business
Objectives

• Understand the need for cultural transformation in healthcare
• Share learning from Integrated facility Design (IFD) and lean processes
• Understand need for operational efficiencies in today's healthcare settings
• Increase knowledge base of Daily Management Systems
• Share lessons learned from designing 2 hospitals at same time.
Children’s Hospital Of Michigan - Troy
Established 130 years ago
Michigan’s first and oldest hospital entirely for kids
Opened the new outpatient facility – Feb. 1, 2016
Open New Hospital downtown 2017
Serving Children from Near & Far

- Destination for Pediatric Specialty Care
- More than 250 International Patient Encounters Annually from 22 Countries
- More than 500 Encounters Annually from 39 States Outside of Michigan
- See Children from 73/83 Michigan Counties
Pediatricians We Train
Practice Throughout Michigan and Beyond
Children’s Hospital of Michigan

• Most Advanced Care
  – PANDA One
  – Level IV NICU
  – Level 1 Pediatric Trauma Center
  – Pediatric Burn Center
  – Heart, Kidney, Liver & Bone Marrow Transplants
  – Michigan’s Poison Control Center

• Nationally Recognized
  – US News & World Report Best Hospital Rankings
  – Parent Magazine: Best Emergency & Preemie Care
  – Top 25 NIH Pediatric Research Funding
Key Elements for Successful Healthcare

- Provide patients and families with best known options to improve health
- Delivery clinical quality
- Provide patients and families an exceptional service experience

Advanced lean in Healthcare: Albanese, Aarby & Platchek 2014
Children’s Hospital of Michigan Responded

- Challenges viewed as opportunities
- “Go see what good looks like”
  - Study trips
- Lean transformation at infancy level
- Mile wide inch deep approach
Next Steps

• Take our Lean transformation to the next level
• Construct a building utilizing Lean principles
• Commitment to do things differently
• Executive leadership buy-in
• Project champions
• Gain synergies from Troy facility to Critical Care Tower
• Customer is “The Patient”
Why a Lean Operating System?

- Day to day issues take up time and resources - fire fighting
- Inability to focus on growth, engagement, research, joint ventures, education etc.
- Stable operating system needs to support management's long term and short term goals
- Need to support patient needs and improve their experience
- Need to support and improve the workplace experience

Advanced lean in Healthcare: Albanese, Aarby & Platchek 2014
Children’s Hospital of Michigan
Lean Journey

PATH TO THE TOP

WHERE WE’RE GOING:
Top 15 academic health system

HOW WE’LL GET THERE:
Empowering our people so that collectively we make a difference

WHAT DRIVES US:
Our purpose: Improving the quality of life for every person who comes through our doors and elevating the communities we touch
Integrated Facility Design (IFD)

- Design process
- Applies Lean Principles
  - Guiding principles (line of sight, flow, work cells, point of use)
- Concurrent integration of all experts/stakeholders
- Achieve breakthrough performance
- Includes:
  - Workflow analysis using the seven flows of healthcare
  - Cycle time and Takt time analysis
  - 5S (workplace organization)
    - optimal layout furniture, equipment, supplies-rooms/workspaces.
  - Standardized work planning
    - optimal work sequences/timing for optimal use of space
  - Visual management principles
    - define locations/content for visibility
    - essential for practicing Lean management
Traditional Build Process - Division of Specialists

- Administration
- Design Engineering
- Production

Compromised Requirements
Excessive Documentation
Re-engineering

Over the Wall

Re-tooling

Over the Wall

Poor Yield
Poor Quality
Excessive Design Change

Poor Feedback
Case for IFD

• For 100 years we have built buildings the same way
  – Silos: Architect, Engineers
  – Finger pointing when things went wrong
• New way
  – Collaboration: Various groups of people designing the building; Front line staff - Nurses, Clerks, Patient Care Associates, and Doctors
  – Architects and general contractors in background assisting as needed
  – Patients and families are also part of the design process

• All based on “The Patient” and how they move through and experience a “no wait” environment.
Case for IFD

• Build a facility that meets customer demand
• Occupies a smaller footprint
• Uses fewer RFI’s post construction
• Reduce cost
• Long term plans need to address 3 key factors:
  • Methods: LDM, Standard work, Level loading
  • Mindset: Continuous improvement
  • Management System: Strategy Deployment, Visual controls operational stability

Advanced lean in Healthcare: Albanese, Aarby & Platchek 2014
Investment Strategy Assumptions

Typical Organization

Traditional Improvement
With Traditional Investment Strategy

Lean Waste Reduction

Original Lead Time

Minor Improvement

Major Improvement

- Speed up value added steps
  - Add capacity

NVA
Improving Functionality & Capability

- Ability to Impact Cost and Functional Capabilities
- IFD Costs
- Traditional Costs
- Cost of Design Changes

<table>
<thead>
<tr>
<th>Pre-Design</th>
<th>Schematic Design</th>
<th>Design Development</th>
<th>Construction Documents</th>
<th>Agency Permit / Bidding</th>
<th>Construction</th>
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<tbody>
<tr>
<td>Conceptualization</td>
<td>Criteria Design</td>
<td>Detailed Design</td>
<td>Implementation Documents</td>
<td>Agency Coord / Final Buyout</td>
<td>Construction</td>
</tr>
</tbody>
</table>
Stages of IFD

• Governance
  - Charter/resource allocation/commitment

• Conceptual
  - Education/paper dolls/flows of healthcare
  - Building conceptually designed

• Schematic
  - Life size mock up/flow
  - Troy: 3 week long events/Tower: 5 week long events

• Detail
  - Life size mock up/room specifics
  - Troy: 3 week long events/Tower: 5 week long events

• Matching Capacity to Demand
  - Level loading schedules: week long event

• Daily Management System
  - Standard work/leader standard work
  - Confirmation of standard work
  - Hourly rounding
# Lots of Work to Do

<table>
<thead>
<tr>
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<tr>
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<td>Basic site, MRI building</td>
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<tr>
<td>Tower</td>
<td>IFD &amp; Conceptual Design Event</td>
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</tr>
<tr>
<td>Troy</td>
<td>Floor 1 &amp; Support Detail Event</td>
<td>Floor 2 &amp; Support Detail Event</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
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</tr>
<tr>
<td>Tower</td>
<td>PICU Functional Design Event</td>
<td>Surgery Detail Event</td>
<td>NICU Detail Event</td>
<td>ED/Imaging Detail Event</td>
<td>PICU Detail Event</td>
<td>Support Detail Event</td>
<td>Owner Sign Off</td>
<td>Interior Fit</td>
<td>D</td>
<td>D</td>
<td>D</td>
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<tr>
<td>Architect dates</td>
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</tr>
</tbody>
</table>
Involvement & Commitment

- Medical
  - Allergy
  - Cardiology
  - Diabetes
  - Emergency Services
  - Endocrine
  - Genetics/Metabolics
  - Hematology/Oncology-including infusions
  - Neonatal Intensive care- includes PANDA
  - Nephrology
  - Neurology
  - Radiology
  - RIM- PT/OT/Speech
  - Pediatric Intensive care
  - Pediatrics overall
  - PM&R
  - Pulmonary
  - Rheumatology

- Surgical
  - Anesthesia
  - Cardiovascular
  - General Surgery
  - GI
  - Neurosurgery
  - Ophthalmology
  - Orthopedics
  - Otolaryngology
  - Urology
Conceptual Events

- [https://vimeo.com/106000857](https://vimeo.com/106000857)
- Lean training
- Guiding principles
- Current state/future state mapping
- Out of box thinking exercises
Guiding Principles

• Start with the customer
• Too much space is an enemy
• Design based on flow optimization, not department optimization
• Use load leveling to reduce space requirements
• Reduce lead times to decrease space requirements
• Design to accommodate cellular layout
• Build tents, not castles - avoid monuments
• Create line of sight
• Prepare for point of use supplies
• Use the 7 Flows to test the design
• The source of teamwork is a common future: Engage everyone in Integrated Design Events
• Add natural light
• Design for acoustical environment
• Development of STD Work for every Process
• Flexible and Shared use of Space
• Perception & Reality of a “Safe Environment”
• Create on staging and off staging flows
• Bring resources to the patient
**Patient/Family Is Our Customer**

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### SURGERY DEPARTMENT CURRENT STATE

<table>
<thead>
<tr>
<th>Patient</th>
<th>Intake</th>
<th>Wait</th>
<th>Pre-Op</th>
<th>Transfer to OR</th>
<th>OR</th>
<th>Transfer to PACU I</th>
<th>PACU I</th>
<th>Transfer to PACU II</th>
<th>PACU II</th>
<th>Discharge</th>
<th>Lead time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CT: 20 minutes</td>
<td>CT: 30 minutes</td>
<td>CT: 40 minutes</td>
<td>CT: 5 minutes</td>
<td>CT: 80 minutes</td>
<td>CT: 10 minutes</td>
<td>CT: 64 minutes</td>
<td>CT: 10 minutes</td>
<td>CT: 60 min</td>
<td>CT: 10 min</td>
<td>324 minutes</td>
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</table>

### SURGERY DEPARTMENT FUTURE STATE

<table>
<thead>
<tr>
<th>Patient</th>
<th>Intake</th>
<th>Pause</th>
<th>Pre-Op &amp; Induction</th>
<th>OR</th>
<th>Transfer to PACU I</th>
<th>PACU I</th>
<th>Discharge</th>
<th>Lead time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CT: 5 minutes</td>
<td>CT: 30 minutes</td>
<td>CT: 25 minutes</td>
<td>CT: 50 minutes</td>
<td>CT: 5 minutes</td>
<td>CT: 25 - 90 minutes</td>
<td>CT: 5 minutes</td>
<td>165 minutes</td>
</tr>
</tbody>
</table>

**Lead Time:** 324 min. to 165 min.

**# Steps in process:** 10 to 7
Mapping the Flows
### NICU Paper Doll Scorecards

<table>
<thead>
<tr>
<th>ROUNDS</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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</thead>
<tbody>
<tr>
<td>PT. DISTANCE TRAVEL ED</td>
<td>109</td>
<td>102</td>
<td>92</td>
<td>94</td>
<td>85</td>
<td>105</td>
<td>105</td>
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<tr>
<td>PROVIDER TRAVEL</td>
<td>90</td>
<td>44</td>
<td>54</td>
<td>59</td>
<td>49</td>
<td>64</td>
<td>64</td>
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<tr>
<td>NURSE TRAVEL</td>
<td>297</td>
<td>67</td>
<td>36</td>
<td>56</td>
<td>22</td>
<td>50</td>
<td>50</td>
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<tr>
<td>FLOOR TOTAL SQ. FT.</td>
<td>30,000</td>
<td>24,006</td>
<td>23,384</td>
<td>25,340</td>
<td>25,340</td>
<td>23,300</td>
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<tr>
<td>PROGRAM TOTAL SQ FT</td>
<td>28,350</td>
<td>24,000</td>
<td>23,840</td>
<td>25,340</td>
<td>25,340</td>
<td>23,300</td>
<td>23,300</td>
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</table>

### 2nd Floor Paper Doll Scorecard (ED/Radiology/Clinic)

<table>
<thead>
<tr>
<th>ROUNDS</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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</thead>
<tbody>
<tr>
<td>PT. DISTANCE TRAVEL ED</td>
<td>408</td>
<td>204</td>
<td>207</td>
<td>207</td>
<td>288</td>
<td>208</td>
<td>208</td>
</tr>
<tr>
<td>PROVIDER TRAVEL</td>
<td>20</td>
<td>0%</td>
<td>20</td>
<td>0%</td>
<td>20</td>
<td>0%</td>
<td>20</td>
</tr>
<tr>
<td>NURSE TRAVEL</td>
<td>20</td>
<td>0%</td>
<td>20</td>
<td>0%</td>
<td>20</td>
<td>0%</td>
<td>20</td>
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<tr>
<td>FLOOR TOTAL SQ. FT.</td>
<td>25,000</td>
<td>21,960</td>
<td>18,900</td>
<td>18,900</td>
<td>18,900</td>
<td>18,900</td>
<td>18,900</td>
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<tr>
<td>OTHER: PROGRAM 19,300 SQ FT</td>
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</table>

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*Children’s Hospital of Michigan*

**DMC Detroit Medical Center**

*Leading. Pediatric. Care.*
Buildings Takes Shape

Stacking the building

3rd floor conceptual design
Schematic Week Agendas

• Review of drawings
• Review/walk through of layouts
• Mock up of rooms
• Scenario testing
  • Routine/Emergency
  • Health care flows
• Scorecard validation
• Changes to design
• Tour preparation/route/questionnaire
• Review of tour feedback
• Changes to design
• Finalization of event
• Needs for next event
• Tear down for next event
## All About The Flow

<table>
<thead>
<tr>
<th>LIKES</th>
<th>PLEASE CONSIDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSP same floor</td>
<td>Making 1 big sterile supply room</td>
</tr>
<tr>
<td>Pre-op induction rooms</td>
<td>HCG testing &amp; restroom location</td>
</tr>
<tr>
<td>PACU rooms and windows for light</td>
<td>PACU rooms in line of sight</td>
</tr>
<tr>
<td>Like rooms and windows</td>
<td>Soiled utility in PACU</td>
</tr>
<tr>
<td></td>
<td>Removing hallway by case carts</td>
</tr>
<tr>
<td></td>
<td>2nd door on 2 bin room</td>
</tr>
<tr>
<td></td>
<td>Sound proofing for induction rooms</td>
</tr>
<tr>
<td></td>
<td>Move housekeeping</td>
</tr>
<tr>
<td></td>
<td>Add door to anesthesia workroom</td>
</tr>
<tr>
<td></td>
<td>Expand waiting room area</td>
</tr>
<tr>
<td></td>
<td>Family flow for long cases</td>
</tr>
<tr>
<td></td>
<td>Pyxis in fish bowl</td>
</tr>
<tr>
<td></td>
<td>Linen room</td>
</tr>
<tr>
<td></td>
<td>Flip flop PACU with nourishment &amp; equipment</td>
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</tbody>
</table>
### SURGERY VALUE ADDED ANALYSIS

<table>
<thead>
<tr>
<th>METRIC</th>
<th>CURRENT</th>
<th>FUTURE</th>
<th>% OF CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td># STEPS</td>
<td>17</td>
<td>7</td>
<td>↓62%</td>
</tr>
<tr>
<td>LEAD TIME</td>
<td>324 MIN</td>
<td>165 MIN</td>
<td>↓51%</td>
</tr>
<tr>
<td>% VA STEPS</td>
<td>1/17 = 6.1%</td>
<td>1/7 = 14%</td>
<td>↑8%</td>
</tr>
<tr>
<td>% VA TIME</td>
<td>.06 6.1%</td>
<td>.12 12%</td>
<td>↑6%</td>
</tr>
<tr>
<td># CHECKING STEPS</td>
<td>5</td>
<td>2</td>
<td>↓60%</td>
</tr>
<tr>
<td># HANDOFFS</td>
<td>5</td>
<td>2</td>
<td>↓60%</td>
</tr>
<tr>
<td>WORK IN PROGRESS</td>
<td>4</td>
<td>1</td>
<td>↓75%</td>
</tr>
<tr>
<td>DISTANCE TRAVELED</td>
<td>1,375 FT</td>
<td>150 FT</td>
<td>↓89.1%</td>
</tr>
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</table>
Detail Events

- Layout each individual room
- Placement/number of plugs
- Placement of doors/tables/scales/sinks/clocks
- Height of registration desks/play areas/computers
- Furniture/IT/Clinical Transformation walkthroughs
- General Contractor/Electrical/Mechanical engineer walk through
- Any changes to layout resulted in revalidation of scorecard
- Equipment planning
<table>
<thead>
<tr>
<th>LOBBY/REGISTRATION</th>
<th>PLEASE CONSIDER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LIKES</strong></td>
<td><strong>PLEASE CONSIDER</strong></td>
</tr>
<tr>
<td>Play area</td>
<td>Interactive board games</td>
</tr>
<tr>
<td>Tours</td>
<td>Involving child life in interior design</td>
</tr>
<tr>
<td>Plugs</td>
<td>Pods of chairs for families</td>
</tr>
<tr>
<td>Glass/natural light</td>
<td>Keys for locker cabinets - survey says</td>
</tr>
<tr>
<td>Lockers</td>
<td>Family bathroom</td>
</tr>
<tr>
<td>Hidden drinking fountain</td>
<td>Lower desk to be more open</td>
</tr>
<tr>
<td>Water feature if get</td>
<td>Shorten privacy walls</td>
</tr>
<tr>
<td></td>
<td>Process for step parents to see patient</td>
</tr>
<tr>
<td></td>
<td>Tables by chairs for belongings</td>
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<tr>
<td></td>
<td>Chair groupings</td>
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</table>

**INDUCTION**

<table>
<thead>
<tr>
<th><strong>LIKES</strong></th>
<th><strong>PLEASE CONSIDER</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural light in hallway</td>
<td>Sky light</td>
</tr>
<tr>
<td>Like TV</td>
<td>Add music to TV stations</td>
</tr>
<tr>
<td>Like chairs</td>
<td>Keep IV pump with child thru process</td>
</tr>
<tr>
<td>Family friendly design</td>
<td>Child friendly decor</td>
</tr>
<tr>
<td>Team design</td>
<td>Chairs</td>
</tr>
<tr>
<td>Sound proof walls</td>
<td>3 way light system</td>
</tr>
<tr>
<td>Family presence in OR</td>
<td>Nurse call on TV monitor</td>
</tr>
<tr>
<td></td>
<td>Soundproof hallway doors</td>
</tr>
</tbody>
</table>
Detail Mock Ups
Detail Mock Ups
Survey Said!!

![Survey Results](image)
Lean & Integrated Facility Design Results

**Results:**

Reduced OR Lead-Time by **51%**

Reduced Clinic Lead-Time by **40%**

30% decrease in RFI’s during construction

Designed two buildings (Ambulatory Specialty Center/Critical Care Tower) in less than **6 months**.

Reduced ER room requirements by **13%** from business plan

14% Reduction in Ambulatory building requirements from business plan

0 Waiting Rooms- small Pause areas
Matching Capacity to Demand

Leveling Concept
- volume
- variety

Clarify wastes

Max.
Min.

Resources Required

Patient Requests

Max.
Min.

OR Service Requirement

Children’s Hospital of Michigan
DMC DETROIT MEDICAL CENTER
Leading. Pediatric. Care.
Hockey to Ballet

Typical OR Schedule

After Level Loading

Flex Slot for Add-On

Children’s Hospital of Michigan
Leading. Pediatric. Care.
A level loaded schedule:
- Smooth’s out the daily demand for the Clinic resources
- Provides dimensions and a blend of categories based on:
  - Specialty
  - Appointment type
  - Provider
  - Room in Room out time
  - Volume
- Eliminates waste
- Incorporating level loading and flow improves patient and staff experience
- Appointments are arranged to best meet Takt time and reduce variation at the pace of registration or recovery room
- The thresholds and boundaries that are identified will be upheld to maintain a leveled schedule
- A system that provides safe, efficient care for add-ons (same day no delay)
- A system that incorporates no shows, cancellation rates
Benefits

- Better communication/teamwork
- Steady pace
- Efficient workflow
- Reduced space requirements
- Less frustration and pressure for staff
- Identifies quality problems upstream
- Assist in improving current specialty center
- Improved patient, family, physician and staff satisfaction
Level Flow makes standard work possible.

Example of leveled OR output:

- Each block represents 10 min cadence.
- PACU Beds.
- Inverted Leadership Triangle.
- Level patient flow (1 every 28 min).
- Nurse standard work (complete work in 20 min).
- Daily Management System (DMS) maintain process capability through immediate andon response.

OR Rooms and PACU:

- Mon Rm 1
  - GI
- Mon Rm 2
  - ORT
- Mon M/H
- Mon PACU 1
- Mon PACU 2
- Mon PACU 3
- Mon PACU 4
- Mon PACU 5
- Mon PACU 6

Mon Rm 1 GI GI GI GI ORT ORT ORT ORT ORT ORT
Mon Rm 2
Mon M/H
Mon PACU 1
Mon PACU 2
Mon PACU 3
Mon PACU 4
Mon PACU 5
Mon PACU 6
## Clinic and Emergency Room

### Ambulatory Clinic Schedule

<table>
<thead>
<tr>
<th>Floor 1 SVC.</th>
<th>Rm 1 ORT</th>
<th>Rm 2 ORT</th>
<th>Rm 3 ORT</th>
<th>Rm 4 ORT</th>
<th>Rm 5 GEN</th>
<th>Rm 6 GEN</th>
<th>Rm 7</th>
<th>MA's</th>
<th>Takt Time 13 min</th>
<th>Reg</th>
</tr>
</thead>
<tbody>
<tr>
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<td>8:05</td>
<td>8:10</td>
<td>8:15</td>
<td>8:20</td>
<td>8:25</td>
<td>8:30</td>
<td>2 0 3 2 2 2 0 2 3 2 3 2 2 3 3 3 2 3 1 0 0 2 2 2 2 2 2 0 0 1 3 3 3 1 1 1 1 1</td>
<td>2 1 1 2 1 1 1 1 1 1 1 1</td>
<td>3 1 4 1 2 1</td>
</tr>
</tbody>
</table>

### Emergency Room Takt Board

<table>
<thead>
<tr>
<th>Shift</th>
<th>ED 1</th>
<th>ED 2</th>
<th>ED 3</th>
<th>ED 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>C M R R P P R C</td>
<td>C M R R P P</td>
<td>CMRP R R RPR</td>
<td>C M R P P</td>
</tr>
<tr>
<td></td>
<td>R P P P P R R</td>
<td>R R R R R R R</td>
<td>RPRP RPR</td>
<td>R R R R</td>
</tr>
<tr>
<td></td>
<td>R R R R R R R</td>
<td>R R R R R R R</td>
<td>P R R P</td>
<td>R R R R</td>
</tr>
</tbody>
</table>

### Legend

- **Treat & Street**: 41 min
- **Low & Slow**: 134 min
- **Mid**: 246 min
- **High**: 191 min
- **Mental Health**: 269 min

**Takt Time**: Winter 64 min. Summer 96 min.
Ensuring Flow: Air Traffic Controllers

Unforeseen Variation

Air traffic control compensates for non-level flow in real time by moving resources where needed.

Airport level flow

X minutes  X minutes  Runway
Cultural Change: “Not Just a new Building”

33% Designing a building

33% Creation of a daily management system to ensure building functions as intended by design

33% Lean principles of matching capacity to demand integral
Daily Management System

Unit Targets

Standardized Work
Shift Readiness
Schedule & Cadence

Improvement Ideas
Leader Standard Work, Coaching, Visual Systems & Accountability
Principles
Core Elements

- Mindset/culture
- Visual management
- Patient access unimpaired
- Standard work
- Simple, direct & visible
- Materials staged at point-of-use
- Department right sized for maximum utilization of space
- Equipment at point-of-use
Core Element: Mindset/Culture

- Focus on on-going process improvement
- Focus on flow
- Patient is the customer
- Managers/Directors: deep knowledge of Lean principles
  - How do we continually improve?
  - How do we sustain results?
- GEMBA walks
- Teaching/coaching
- Real time problem solving
Core Element: Visual Metrics

Daily Management
• Operational metrics collected by department staff
  – Throughput metrics
  – Daily success metrics
  – Manage execution to plan
• Updated “real time” (hourly)
  – Trend charts updated daily

Metrics: Identify issues & rapidly improve
• Team sees trending
• Ability to problem solve real time
• Ability to take trends and be part of department improvement team
• Correlates with department strategies
Core Element: Visual Schedules

Visual Schedules

– Able to readily see where patients are at
– Visible throughput
Core Element: Standard Work

- The one best way to provide care to our patients and families
  - Done right the 1st time
  - Live documents
- Visual documents
  - Show patient flow
  - Depicts steps of process
  - Standard operations sheets
    - Defines steps
    - Job Element sheets
      - Defines details of each step
- Used for training
- Used to audit
Core Element: Leader Standard Work

- Leader Standard Work
  - Hourly rounding
  - Go to the GEMBA
  - Quality Audits
  - Confirmation of Standard Work
- Are people doing what they are suppose to be doing
- Front line leaders perform
- Higher level leaders confirm/coach/support performance of these tasks

Key points:
- Leader Standard Work is the engine that drives DMS
- It is essential if backsliding is to be stopped
# Core Element: Shift Readiness

| Methods Checks | Check existing policies and work standards: Red = need to revise or training process issue  
  • Anticipate & execute roll out of new policies and work standards: Red = behind, or plan (countermeasure) needed  
  • Check quality audits: Red = audits not performed, or not meeting standards |
|----------------|------------------------------------------------------------------------------------------------------------------|
| Equipment Checks | Check designated equipment, red if abnormal quantity, location, ready-to-use, calibration  
  • Anticipate need for equipment (higher or lower than normal use); red if too little or too much equipment for the need  
  • Check plans for maintenance or to roll out new equipment; red if unable to support |
| Supply Checks | Check designated supplies, red if abnormal quantity, location, ready-to-go; or if expired or under recall  
  • Anticipate shortages; red if a shortage may occur  
  • Check plans to roll out new supplies or remove obsolete supplies; red if unable to support or not meeting plan or need |
| Staffing Checks | Check staffing, red abnormal staffing to meet care or service needs; not fully trained for the standard work  
  • Anticipate changing needs during the shift and upcoming shifts, red if anticipate being unable to match staffing to demand  
  • Anticipate risk for fatigue, red if unusually extended shifts or overtime |
| Environment | Is the environment clean, any repairs |
Clinical Coordinators

- Hourly rounding
  - # of patients in department
  - # on time with cadence set for level of care
  - Issues that need immediate attention
  - Follow up on previous issues noted

- Huddle to include:
  - ATC/Clinical Coordinator
  - Manager if in building
  - Physician if available
  - Unit staff if available

- Communication with staff & providers
- Adjust schedule to meet flow
- No longer FIFO
- Utilize schedule board to make adjustments
Core Element: Materials Management

2 Bin KanBan System

• Visual control of supplies
• Just in time supplies where they are needed (Inventory control)
• Minimal storage in building
  – No cupboards in exam rooms, OR
  – Cart replenishment system
  – Supplies ordered when bin is empty; not counting every supply every day
• Backed up by a Plan For Every Part (PFEP)
Lessons Learned

• Go and see what good looks like
• Ensure value engineering does not impact design flow
• Communicate more than you think you should!
• Solidify commitments
  – Help ancillary staff see importance of participating in events
• Hospital representatives from design to be part of construction meetings right from the start
• Relationship building with construction team
  – Value of clinical input
• Same staff in subsequent events
• Trust the process and design
Credits

- Doug Dulin
  - Joan Wellman & Associates
- Use of slides, presentation material approved by D. Dulin JWA
Questions