Peninsula Regional Medical Center
Todays Presentation
Peninsula Regional Medical Center

- PRMC’s Mission, Vision, Values
- Surgical Services Macro Value Stream
- Highlight PRMC Operating Room Efficiencies “Pain Points"
- Central Sterile Processing Improvements using Lean/Sigma Tools
Peninsula Regional Medical Center

- Peninsula Regional Medical Center (PRMC) in Salisbury, Maryland offers the widest array of specialty and subspecialty services on the Delmarva Peninsula.
- At 317 acute care beds, 30 transitional care beds and 28 newborn beds, PRMC is the region’s largest, most advanced care facility, and has been meeting the healthcare needs of Delmarva Peninsula residents since 1897. Its 3,300 physicians, staff and volunteers provide safe, compassionate and affordable care designed to exceed the expectations of the nearly 500,000 patients who rely on the Medical Center team each year for inpatient, outpatient, diagnostic, subacute and emergency/trauma services. It is the region’s oldest healthcare institution with the most experienced team of healthcare professionals.
Peninsula Regional’s Management System

Mission, Vision, Values

Culture of Always

Quality & Safety
Objective
To be in the top 10 percent of patient care and to do no harm

Service
Objective
To be in the top 10 percent of patient experience

People
Objective
To be in the top 10 percent of employee and physician engagement

Cost
Objective
To outperform other “A” rated hospitals

Growth
Objective
To provide regional integrated services to meet the full continuum of needs

Shared Leadership
Evidence Based and Patient & Family Centered Care
Performance Improvement/Value Stream Management

100% supported by Our Executive Staff and President
• PRMC Vision Statement

As the Delmarva Peninsula's referral medical center, we will be the leader in providing a system of regional access to comprehensive care that is interconnected, coordinated, safe and the most clinically advanced. We will deliver an exceptional patient and family experience, while fostering a rewarding environment for physicians and employees. Together, Peninsula Regional Medical Center and its physicians will be a trusted partner in improving the health of the region

• PRMC Mission Statement

  • Improve the health of the communities we serve

• PRMC Values

  • Respect for every individual
  • Delivery of exceptional service
  • Continuous improvement
  • Safety and effectiveness
  • Trust and compassion
  • Transparency

Strategic Scenarios
• PRMC Driving Strategies

1) Provide resources to expand the number and availability of physicians to fully support the needs of the region.
2) Evolve clinical integration across the Delmarva Peninsula to support Peninsula Regional's affiliated physicians.
3) Demonstrate and communicate superior performance on all dimensions of patient-centered care.
4) Invest in improving employee satisfaction, retention and recruitment.
5) Increase awareness, preference and utilization of Peninsula Regional and its affiliated physicians by investing in marketing and service lines.
6) Continue to advance the clinical and technological capabilities of Peninsula Regional and its affiliated physicians.

• In measurable terms, what do these mean to us over the next five to ten years?

• What breakthrough objectives do we hope to achieve?

Strategic Scenarios
Prior to beginning design work on this 50,000-square-foot surgery renovation and expansion master plan, the PRMC / HGA team employed a variety of Lean tools to identify key process-improvement opportunities in the current state. The focus included inventory management, standardization of anesthesia care, improvements in room turnover, and maximizing on-site case counts to improve throughput and patient satisfaction.

The design team developed seven alternative “ex期权” concepts. Each of these design alternatives explored a different approach to meeting the project objectives. The best ideas of each were brought forward into the development of a “hybrid” solution.
PENINSULA REGIONAL MEDICAL CENTER
Salisbury, Maryland

Prior to beginning design work on this 50,000-square-foot surgery renovation and expansion master plan, the PRMC / HGA team employed a variety of Lean tools to identify key process-improvement opportunities in the current state. The focus included inventory management, standardization of anesthesia care, improvements in room turnover, and maximizing on-time case starts to improve throughput and patient satisfaction.

The design team developed seven alternative "extreme scheme" concepts. Each of these design alternatives explored a different approach to meeting the project objectives. The best ideas of each were brought forward into the development of a "hybrid" solution.
Hybrid Schemes – Session 6

1. Developed hybrid options incorporating the best ideas from the extreme schemes
2. Evaluated hybrid options against design criteria
3. Selected base scheme for further development

Key inputs
1. Library in play
2. Lose staff corridor
The hill to climb

1. Outdated facility
2. Physician recruitment
3. Eroding market share
4. Not known for patient/family care
5. Employee satisfaction “lags”
Macro Value Stream Mapping

1. Mapped current processes
2. Diagrammed staff and patient flows on current floor plan
3. Identified process pain points
4. Located User Needs from the Patient Experience on the current state value stream maps
5. Added facility/infrastructure pain points to the current state value stream maps
6. Force ranked the biggest pain points
1. Interviewed patients, staff members, and physicians
2. Captured “headlines” describing their experiences (positive and negative)
3. Grouped headlines into common themes
4. Force ranked the themes to establish the top priority User Needs

The Patient Experience
Gemba Observation of Needs

1. Made cue cards for top Needs, color-coded by category
2. Teams went on scavenger hunt to document examples of User Needs, process pain points, and facility/infrastructure pain points
3. Shared findings with leadership
4. Validated Needs to address in planning
Speed Dating with Other Departments

1. Share process pain points with key ancillary departments
2. Identify root causes
3. Identify potential solutions
4. Maintain open communication
1. Identified key program adjacencies
2. Developed diagram of functional relationships to illustrate and prioritize adjacencies
3. Incorporated key adjacencies into plan development
2P Workshop

4. Developed “7 ways” solutions for key driver spaces
5. Created 2-dimensional mock-ups of driver spaces
6. Tested concepts in full-size “think aloud” scenarios
User Needs Big Ideas

1. Brainstormed ideas to address top User Needs
2. Evaluated against project metrics
3. Identified top Big Ideas for each User Need
4. Identified potential impacts on planning and process improvement
Extreme Schemes – Work on These Areas First

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Minimal Renovation</th>
<th>Minimal Renovation Expanded</th>
<th>Central CSP</th>
<th>Expanded</th>
<th>Central CSP</th>
<th>Expanded</th>
<th>Central CSP</th>
<th>Expanded</th>
<th>Central CSP</th>
<th>Expanded</th>
<th>Not of My Expertise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to Supplies / Instruments</td>
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<td>Department Flow</td>
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<td>Flexibility (Space / Staff)</td>
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<td>OR Size / Proportion</td>
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<tr>
<td>Staff Amenities</td>
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<tr>
<td>Project Cost</td>
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<td></td>
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<td></td>
<td></td>
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<tr>
<td>Staff / Physician Relation</td>
<td></td>
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<tr>
<td>Overall Cost</td>
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<tr>
<td>Low Impact Planning</td>
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</tr>
</tbody>
</table>

- Red Circle: Critical Areas
- Green Circles: Areas of Improvement

Legend:
- Central CSP
- Expanded CSP
- Not of My Expertise
A3’s for Process Improvement

1. Identified top process pain points
2. Assigned teams to research
3. Defined the problem
4. Established targets for improvement
5. Uncovered root causes
6. Proposed solutions

- **INSTRUMENTATION**
  - How it affects needs
- **EFFECTIVE / EFFICIENT TURNOVER TIME (both)**
- **CHART & PATIENT READINESS & MEDICAL CLEARANCE**
- **ROLL OUT LEAN, ENGAGE PEOPLE, HELP CHANGE**
- **ANESTHESIA STANDARD OF CARE**
- **IP ADD-ON SCHEDULING PROCESS**
- **BEDS DELAY**
**CSP Team**

Pain Points From Macro Value Stream

**Theme**
- Instruments not available
- Items on Needs List not complete.

**Background**
Instruments sets have caused issues for years by not being on time or missing. This has slowed and sometimes delayed start times. By not having the sets available, there is additional stress/confusion and extra work for the OR staff. They constantly look, call and expedite sets.

**Potential Causes**
- Slow process time
- Hidden Inventory
- Multiple locations
- Employee Schedule
- Schedule Changes in OR
- No Trust in CP due to past history and problems
- Mislabeled Sets
- Equipment Downtime
- No Tracking System so no inventory or locations.
- Items not on Preference cards
CSP History (Current State 2010)

Quality:

• No Visual Factory, Key metrics not posted, employees did not know the daily demand, or even the vacation schedule.
• No process for monitoring and analyzing quality problems to highlight target areas for improvement and corrective action
• No standardize processes or work instructions, each employee processed items differently; leading to debates over the correct method and process variation.
• There were no “One Point Lessons” (Quality Alerts) or department work instructions. Employees were verbally told how to things one time at a employee meeting, which was seldom held because it was just too busy.

Service

• There was only one phone line to the department so the phone consistently rang and the perception was that CP never answered the phone.
• Less then 50% of the instruments were processed less then 24 hours.
• **Zero Continuous Flow**, Case carts holding the dirty instruments were backed up upstairs, sometimes out in the hallway of the OR, and up to 10 case carts down in decontam.
• There was no rough-cut capacity planning for the week or a daily plan. (No Takt Time)
• There was no stand-by employee pool to cover case variation …34 to 65
• No huddle meetings between Lead Techs, which led to no communication between shifts.
Safety

- No visual expedite processes to move critical instruments through the department, just a phone call. This sometimes resulted in flashing in the OR.
- Large percentage of the inventory was expired.
- The department was dirty and dusty, it went on for so long that employees were used to working in that environment and only outsider visitors noticed how dirty it was. No time was allocated to employees for cleaning, or making improvement to the process.

People

- Only 3 certified employees (15%) and none of the Lead Techs were certified.
- Employees worked in an atmosphere of intimidation and stress; wondering what the next crises would be.
- Our assembly layout only accommodated only 3 assembly stations. Assemblers had to work next to each other, reaching into each other's space for count sheets and labels, sometimes bumping into their neighbor.
- “C” employees were not held accountable for their poor performance, this left the top performers to carry the department and burnt out..
- Leads Tech’s worked up to 20hrs of overtime per week fighting fires and often felt compelled to waved their vacation days to come to work to resolve problems.
- There was no employee recognition, no employee of the month, no lunch's and no music was allowed.

Cost

- No Key Performance Indicators or Critical Metrics being measured.
- No cost reductions identified
7am
Macro Value Steam

“Process BREAKTHROUGH”

What's the one thing that if we did it would have the biggest impact for our internal customer and “Wow” them.

“Have all the instruments processed by 7am every morning”
Macro Value Steam

“Materials BREAKTHROUGH”

What's the one thing that if we did it would have the biggest impact for our internal customer and “Wow” them.

“Reduce Inventory by 50%” No Stock-Outs
### Categories

#### LEAN TOOLBOX

*Remove Waste (Easy low risk)*
- 5S + (Safety) **Process to Organize**
- Value Stream Map **(See Waste & Select Improvement Targets)**
- Spaghetti map (See the “Go Gets”)
- Continuous Flow **(Identify Bottlenecks and stops)**
- Pull system (Always available send single for replenishment)
- Visual Controls (See Everything in Real-time)
- Takt Time (Process Pulse)
- Standard Work Instructions (Same way every time)
- One Point Lessons (Quality Contract)
- Stop The Line (Intense Problem solving)
- Equipment Downtime (OEE)

#### SIX SIGMA TOOLBOX

*Reduce Variation (Hard High Risk)*
- **Define** the problem with Data
- **Measure** variation “Yea But’s…”
- **Analyze** 80/20, Histogram, Scatter Chart, Cause and Effect, Flow Chart, Control Chart
- **Improve** Process Map / FMEA, problem solve using DOE
- **Control** Plan to Hold the Gains
Central Processing Value Stream Map
5’s  1st S = Sorting

- Sort
5’s  $2^{nd}$ S = Set-in Order
A place for everything
5’s : 3rd S = Shine

• Clean and Shine everything.
5’S  4\textsuperscript{th} S = Standardize

The exact same way, the exact same place every single time.
5’S      5⁰S = Sustain
Audits, Checklists and walk-about’s.
(Gemba)
Flow
Realigning resources to match demand, build add stand-bys pool to cover variation (Takt Time and continuous flow)

**Takt Calculator**

### TAKT TIME CHART

<table>
<thead>
<tr>
<th>Number of cases</th>
<th>43</th>
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<tbody>
<tr>
<td>Set average per</td>
<td>3.9</td>
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<tr>
<td>Total</td>
<td>167.7</td>
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</table>

Ortho Knee/Hip factor Cases?

<table>
<thead>
<tr>
<th>Cases</th>
<th>2</th>
<th>5</th>
<th>10</th>
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<tbody>
<tr>
<td>Todays Demand</td>
<td>177.7</td>
<td></td>
<td></td>
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</tbody>
</table>

Avg set assy min?

<table>
<thead>
<tr>
<th>Wip in ASSY</th>
<th>2</th>
<th>23</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grand total</td>
<td>179.7</td>
<td></td>
</tr>
</tbody>
</table>

Demand Minutes

### Power Shift

<table>
<thead>
<tr>
<th>Power Shift</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
</tr>
<tr>
<td>E. CONKLIN</td>
</tr>
<tr>
<td>C. MORRIS</td>
</tr>
<tr>
<td>M. BALLARD</td>
</tr>
<tr>
<td>A. STANLEY</td>
</tr>
<tr>
<td>K. GREEN</td>
</tr>
<tr>
<td>Y. HORSY</td>
</tr>
<tr>
<td>L. SMILEY</td>
</tr>
<tr>
<td>T. ALLEN</td>
</tr>
<tr>
<td>R. HOLT</td>
</tr>
<tr>
<td>P. PETERSON</td>
</tr>
<tr>
<td>O. KRUGER</td>
</tr>
<tr>
<td>M. WARREN</td>
</tr>
<tr>
<td>L. GROSS</td>
</tr>
<tr>
<td>M. EVANS</td>
</tr>
<tr>
<td>B. JACKSON</td>
</tr>
<tr>
<td>D. LEE</td>
</tr>
<tr>
<td>Z. MORRIS</td>
</tr>
<tr>
<td>P. RITCHEY</td>
</tr>
</tbody>
</table>

### TAKT (minutes)

| TAKT (minutes) | 19.14 |
| Takt (Hours)   | 3.1 |

### Employee GOAL

<table>
<thead>
<tr>
<th>Needs List</th>
<th>30.1</th>
</tr>
</thead>
</table>

### Today's Assy

| 12/2/2011 | Today's Assy | 23 Hrs | 11.55 |
Visual Demand Board

- **Today’s cases**
  - Coming down (Down)

- **Tomorrow’s cases**
  - to be picked (UP)

- **Major Case Type**
  - Hip Cases - 5
  - Knee Cases - 3
  - Cup Cases - 5
  - Hip Cases - 5
  - Knee Cases - 3
  - Ante Cases - 2
  - Neur Case - 1
  - Neur Case - 1

- **Takt Time Sheet**
- Assembler sets per hour

- **Hour by Hour OR schedule**

- **UP - 32**
  - Down - 54
  - 4/11
Takt Time at a Glance
Instrument Flow

• Our goal: Have all the instruments processed before 7am.

Before @ 7am 2010

Current State @ 7am 2012
Decontam Cell
Current State Value Stream
Assembly Constraint
Assembly Bench
Eliminate all the “GO GETS”
New assembly layout for “Power Shift” Continuous flow from 3 assy bench to 9
### Quality

**Monthly Prato and then problem solving. Blue Wrap Pinhole reduced by 75%**

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**FAILURE MODE & EFFECTS ANALYSIS**  
Holes in Blue Wrap

**Process:** All processes that may contribute hole in Blue Wrap  
**Process Type:** Sterrad and material Handling  
**Product Produced:** Instrument sets

**S.O.P. Reference No.:** OPL-006  
**Revision Date:** 3/1/2010

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#### EXISTING CONDITIONS

<table>
<thead>
<tr>
<th>Part/process</th>
<th>Failure Mode</th>
<th>Failure</th>
<th>S</th>
<th>E</th>
<th>O</th>
<th>D</th>
<th>R</th>
<th>P</th>
<th>Action Recommended</th>
<th>Responsible Person</th>
<th>Schedule Date</th>
<th>Action Taken</th>
<th>Actual Completion Date</th>
<th>Risk</th>
<th>Additional Actions Recommended</th>
</tr>
</thead>
</table>
| 1. Vendor Quality | Vendor cannot meet flexibility demands ofrapidity and efficiency | Vendor has faulty equipment and lack of experience | 2 | 3 | 4 | 4 | None | Eddie | No failure found | Vendor supplied lot control information | 0 | 0 | 0 | None

---

### Number of Reported Rejections (YTD) 2010

<table>
<thead>
<tr>
<th>Type of Defect</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holes</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>18</td>
</tr>
</tbody>
</table>

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**Diagram:** Bar chart showing the number of reported rejections by type of defect for the year-to-date in 2010.
One-Point Lesson
CP MAIL BOX

Date: 1/7/11
Part Number: 
Description: Continuous Improvement
Quantity: 
Concern: 
Approved: Eddie Conklin

Please help us improve our quality and processes in Central Processing.
Anytime you experience a problem with an instrument set or something causes you to bust open an additional set, please mark-up the count sheet and/or document the problem and attach the label. Place them in the mailbox located by the dirty dishwater.

Each incident we will conduct a one on one with our employees. So please include the name and as much information as possible. Examples include bad count-sheets, dirty instruments, holes in blue wraps, missing indicators, critical instrument missing.

Names are removed and each incident is covered at our monthly meetings, if necessary we bring in an expert for a in-service. We then group the data of all the incidents and track them monthly and work to resolve our biggest problems.

Quality Loop
OR to Central Processing

- Missing Instrument
  - Develop repair process
  - Weekly e-mail to managers
  - Peel Pack Combos
  - Lead Tech sign-off of C.S.
  - Lost and found basket

Example missing instrument was the biggest problem for nov.
Material Flow (Expectation)
Laura McIntyre
30 Years Healthcare Management
Material Kaizens

- Eliminate Combine Improve
- Locator Sheet/Count sheets (Excel Look-up staff desktop)
- Charge Stickers binder
- Parking Lots (L&D, EP lab, Specials, Endoscopy)
- Medic cart Sheets by drawer

- Fluid Cart (Shoulder cases)
- SCD Cart
- Right Size Locations (200 cases week)
- Locations identified with current/correct mfr catalog numbers to match preference cards NO GUESSING
- Materials moved to OR where made sense - more room for Instrument sets.
- Blue Bins created PARS
Process Side Inventory

Process Inventory reduced by space by 75% cut inventory time to 5 minutes, no stock-outs for over a year.
Case Cart Assembly

Percentage of case carts missing items from 50% to 95%

Case Cart Assembly Yield

![Graph showing Case Cart Assembly Yield from 2011 Week 1 to Week 14]
OR Single Instruments (Kanban)
Hey Eddie?

• What about the results?
Lean Assessment
(10/2009 19%) to (4/2011 59%) to (1/2012 71%)

A. Status of Lean Transformation:
This cursory assessment tags processes and results most critical to a location's lean transformation success. As an agenda between mentor and practitioner, this form highlights progress as well as any tactical or strategic gaps that require countermeasures or refocus.

Notes: Baseline audit @ PRMC in the Central Processing Department. They have just started making progress and don’t have metrics defined. They have an IE mapping the processes and have redesigned a few of the work cells.

B. PROCESS

<table>
<thead>
<tr>
<th>Category</th>
<th>Scored (Y/N)</th>
<th>Scored</th>
<th>Max Score</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety</td>
<td>Y</td>
<td>1.0</td>
<td>0</td>
<td>Only a small amount of safety signs posted, areas are not well defined</td>
</tr>
<tr>
<td>5S</td>
<td>Y</td>
<td>1.0</td>
<td>0</td>
<td>No 5-S in place, Areas are cluttered and messy</td>
</tr>
<tr>
<td>Visual Controls</td>
<td>Y</td>
<td>1.0</td>
<td>0</td>
<td>Operator instructions, paretos, plan to actual posted at every station</td>
</tr>
<tr>
<td>Takt Time</td>
<td>Y</td>
<td>1.0</td>
<td>0</td>
<td>Demand driven by case load analysis matrix could help.</td>
</tr>
<tr>
<td>1 Piece Flow</td>
<td>Y</td>
<td>2.0</td>
<td>0</td>
<td>Batches with WIP in between each station.</td>
</tr>
<tr>
<td>Pull</td>
<td>Y</td>
<td>2.0</td>
<td>0</td>
<td>Cycle time not defined or not visible</td>
</tr>
<tr>
<td>Standard Work</td>
<td>Y</td>
<td>0.0</td>
<td>1</td>
<td>Very little standard work, No standard work instructions.</td>
</tr>
<tr>
<td>Work Area Design</td>
<td>Y</td>
<td>1.0</td>
<td>2</td>
<td>Decontam area has been redesigned but not tweaked. Assembly area in progress</td>
</tr>
<tr>
<td>Material Flow Design</td>
<td>Y</td>
<td>0.0</td>
<td>2</td>
<td>Par levels being set high inventory in some places</td>
</tr>
<tr>
<td>Equipment Agility &amp; Reliability</td>
<td>Y</td>
<td>0.0</td>
<td>2</td>
<td>NO PM or validation that equipment is working properly (Water system un-hooked)</td>
</tr>
<tr>
<td>Information Flow and Level Loading</td>
<td>Y</td>
<td>1.0</td>
<td>0</td>
<td>Managed in the heads of the floor leadership no visual factory</td>
</tr>
<tr>
<td>Customer Focus</td>
<td>Y</td>
<td>1.0</td>
<td>2</td>
<td>Employees do not see the connection to the patient</td>
</tr>
<tr>
<td>Strategic Agility</td>
<td>Y</td>
<td>1.0</td>
<td>2</td>
<td>Privately owned, familiar with deployment, some elements posted</td>
</tr>
<tr>
<td>Kaizen Event Execution</td>
<td>Y</td>
<td>1.0</td>
<td>2</td>
<td>One event in Decontam</td>
</tr>
<tr>
<td>Kaizen Follow Through</td>
<td>Y</td>
<td>1.0</td>
<td>2</td>
<td>New flow is documented in Decontam</td>
</tr>
<tr>
<td>Kaizen Overall Participation</td>
<td>Y</td>
<td>1.0</td>
<td>3</td>
<td>Not sure… close to none</td>
</tr>
<tr>
<td>K.P.O. Leverage</td>
<td>Y</td>
<td>1.0</td>
<td>2</td>
<td>In high evidence of partial launch of lean principles</td>
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<tr>
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C. RESULTS

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Subtotal: 724

Subtotal: 42

Total: 100

First visit

Compare to Previous Assessment Score of:_______ (dated _10/_30/2009_) 42%
If everything seems under control, you're just not going fast enough. Mario Andretti
Improvement Results

- Inventory reduced $350 k the first year
- Service Levels 99%
- Obsolete reduced by 2% per year \((3\text{yr} \times 2\% = 6\%)\)
- Inventory touch time reduced by 4hr per day.
- 50% space saved by right sizing inventory storing it at the point of use.
ON Time 98%
(percent of sets complete by 7am)

Number of Sets (800 is Medium)
Flow Summary

Instrument Set Cycle time 72 hours to 8.29 hours

Start Date: 7/2/2012
End Date: 7/17/2012
Selected Cats: ALL
Selected Sets: All Sets at PRMC

Start Time: Dec/Res
End Time: Any/Stir

Number of Timings (Sets): 1184
Average Time (hrs): 5.21

25% Completed Processes (hrs): 3.57
50% Completed Processes (hrs): 5.30
75% Completed Processes (hrs): 6.12
50% Completed Processes (hrs): 12.77
Key Performance Indicators

QUALITY
- To be in the top Decile of performance in the Clinical Quality indicators

SERVICE
- To be in the top Quartile of performance in the Patient Satisfaction indicators

SAFETY
- To be in the top Decile of performance in the Patient Safety indicators

PEOPLE
- To achieve Employee Satisfaction levels above top Quartile

COST
- To maintain a healthy Operating Margin that furthers PRHC’s mission

Main KPI:
Organizational indicators that are relevant to unit – used to identify areas of opportunity for improvement

Sub KPI:
Unit specific data for 1 indicator plotted over time

Process KPI:
Breakdown of 1 indicator to identify opportunity for improvement

Problem Solving:
Action items, responsible party, due date
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<th>Stand-By Hours</th>
<th>OT Hours</th>
<th>Total Hours</th>
<th>Department Minutes</th>
<th>Percent Minutes</th>
<th>Assembly Productivity</th>
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**Weekly Report & Corrective Action**

- **Building Standby/Standby Quality**
- **OT Hours**
- **Assembly Productivity**
- **Quality Parts per million**

**Notes:**
- Tasha, Ronnie, Darrel covered all hours for Hurricane Sandy.
- Patrice out on FMLA, Mark resigned, Yolanda sick 2 days, Lisa 1 FMLA, Oliver 1 day.
- Blair OUT, Ronnie, Oksana vac 3 weeks, Buzzy weekend Standby's called in.
- Blair OUT, Yolanda vac, Eddie on sabb, Larry off Friday, Cindy out Monday, No quality.
The End
Improvement List

- RFID for wound vacs
- RFID Beds
- RFID Pumps
- New Gloves
- Brushes
- Inventory
- Instrument change orders
- Old Printers new flow
- BED FAX
- Noise Reduction Carts and pump wagons
- Build additional Assy stations
- Employee certification initiative
- New knight pumps (.25)
- 3M award for load monitoring
- Wound Vac’s ($23,000)

- Layout spaghetti flow
- Camera System for flow
- Biological
- To do charts
- Class Room training
- Poke a yoke
- Cart wash cycle time
- Water testing
- HVAC Clean Vents
- Sharps
- Sharps container ($10,000)
- One Source (MFG Instructions)
- E-mail tool repair
- Load balancing 3rd shift
- ETO Clock
- Initiated Steris recall of load release packs.