To the Gemba and More: A Walk to See the Waste

Opening Your Staff's "Waste Eyes" with Waste Walks

Linda Dodge and Janell Vickers
Catholic Health Partners
March 27, 2014





Today's Program



- Welcome
- Introduction of MBB Webcast Series
 - Ellen Milnes, MoreSteam.com
- Presentation: Waste Walks
 - Linda Dodge and Janell Vickers, Catholic Health Partners
- Open Discussion and Questions





MoreSteam.com

- Founded in 2000
- Trained 400,000 Lean Six Sigma professionals
- Served over 2,000 corporate customers (including 50+% of the F500)
- First firm to offer the complete Black Belt curriculum online
- Courses reviewed and approved by ASQ and PMI
- Academic Partnerships with Ohio State University, Cal Poly and George Washington University





Today's Presenters



Linda Dodge

CHP/St. Rita's Medical Center

- 26 years health care experience
- Registered Respiratory Therapist
- Black Belt, Certified Lean Leader
- A.A.S. from James Rhodes State College, B.B.A. from Mount Vernon Nazarene College, and M.B.A. from Tiffin University



Janell Vickers

Catholic Health Partners

- Focused last 3 years on physician practices
- Prior experience: 32 years with Owens Corning
- Certified Lean Green Belt and Six Sigma Black Belt
- B.S. in Computer Science & Math and M.B.A. from Bowling Green State University





Who are we?

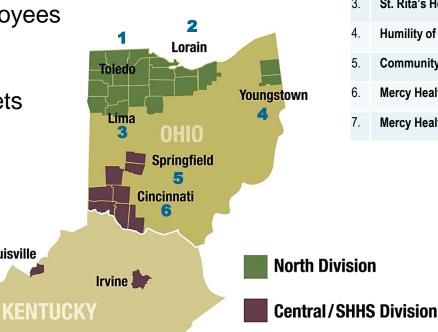
Catholic Health Partners

Louisville

- 23 hospitals
- Over 30,000 employees

Paducah

- 7 regions
- 2 states
- \$5.4 billion in assets



Catholic Health Partners Markets Mercy - Northern Market Mercy - Lorain St. Rita's Health Partners **Humility of Mary Health Partners Community Mercy Health Partners** Mercy Health - SW Ohio Market Mercy Health Partners - Kentucky



CHP Background

- Largest Healthcare System in Ohio
- 4th Largest Employer in Ohio
- Largest Healthcare System with Standardized Epic Platform
- Commitment to Community
- Faith-Based
- Founded by Nuns Over 150 Years Ago
- Teaching Facilities





CHP Mission

Extend the healing ministry of Jesus by improving the health of our communities with emphasis on people who are poor and underserved.

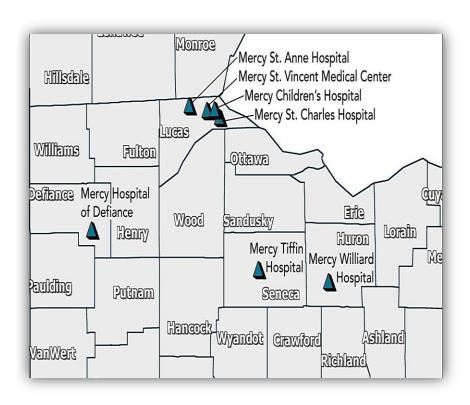
Committed to demonstrate behaviors:

- Compassion
- Excellence
- Human Dignity
- Justice
- Sacredness of Life
- Service



CHP Northern Market

- 7 hospitals & Mercy College
- 1500 medical staff members
- 300+ employed physicians and mid-level providers
- 200+ residents & medical students
- Over 7000 employees
- 2 Master Black Belts
- 2 Black Belts
- 10 trained Green Belts
- 200+ trained Lean Leaders





- 425 bed facility covering a 10 county area
- 1 Black Belt; 3 Green Belts
- 41 Certified Lean Leaders
- Two Waste Walks performed in 2012





Lean in Healthcare

...the relentless pursuit of the perfect process through waste elimination ...

What is Lean?

- "Increasing customer value by eliminating waste throughout the value stream"
- The goal is to remove or reduce "Non-Value added" activity from our work processes.

*Excerpted from *Lean Thinking*, Womack and Jones, 1996

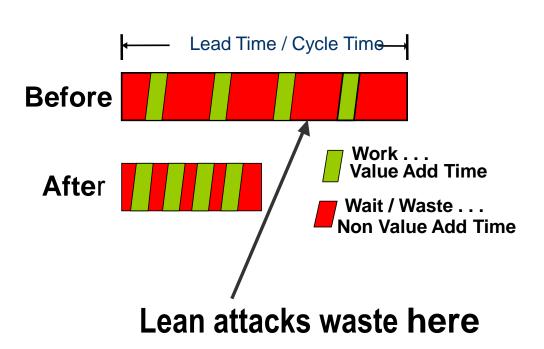
"In healthcare it is about shortening the time between the patient entering a care facility and the patient leaving by eliminating all non-value-added time, motion, and steps"

Based on definition in the book Lean Thinking, Womack & Jones, Simon & Schuster



Lean Concepts

. . . Any process or value stream



Benefits

- Higher customer satisfaction
- Reduced cycles
- Better delivery
- More capacity
- Better quality
- Productivity





Our Improvement Methodologies

6 SIGMA

LEAN

PDSA

Define

Identify Value

Measure

Understand the Value Stream

Analyze

Eliminate Waste

Improve

Establish Flow

Control

Enable Pull

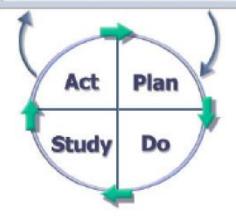
Pursue Perfection

Eliminates Waste

What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that will result in improvement?



PDSA - "Tests of Change"

Focuses on Variation





Waste Walk Goals

- Engage & educate staff to facilitate cultural change
- Must easily identify waste with minimal training
- Allows for rapid transition into lean projects
- Increase efficiency, safety and customer satisfaction while reducing the cost of care





The Beginning

- Assembled a team of Certified Lean Leaders
- Reviewed IHI's Waste Walk materials
- Modified the materials to fit St. Rita's Environment and needs
- Presented the concept to Lean Steering Committee
- Chose one nursing unit to trial concept and recruited RNs





Definitions of Waste in Health Care

| Defects | Time spent doing something incorrectly or fixing errors |
|-----------------|----------------------------------------------------------------------|
| Overproduction | Doing more than what is needed by the customer or sooner than needed |
| Transportation | Unnecessary movement of the patient |
| Waiting | Waiting for the next step to occur |
| Inventory | Excess inventory costs, spoilage, expiration, wastage |
| Motion | Unnecessary movement by employees in the system |
| Over processing | Doing work that is not valued by the customer |



Waste Modules Foci

| Ward Module | Room utilization and patient flow |
|----------------------------|-------------------------------------------------------------------------------------------------|
| Diagnosis Module | Testing that is viewed as "routine" |
| Patient Care Module | Unnecessary monitoring, tests, medications, therapies |
| Treatment Module | Order set utilization and best practice models |
| Patient Module | Patient interviews were conducted regarding patient's perception of delays in care or discharge |
| Process Module | Evaluated the process flow in the nursing unit |





Beds or patients with any waste identified

% of total beds and patients reviewed

TOTAL BEDS & PATIENTS REVIEWED

Documentation Example

| ard M | lodule: | | | | | | | | | | | | |
|--------|---------------|-------------|-----|------|----------------------------------|--------------------------------------------|----------------------------------------|--------------------------|---------------------------|--------------------------------|---------------|------------------------|----------|
| nit: | | Date & Time | w: | | | Reviewer(s |): | | | | | <u> </u> | |
| | | | Was | ste* | | | | WASTES | STREAMS | | | | |
| Room | Account No | Last Name | Yes | No | Bed Empty & Not Staffed | Bed Occupied or Used Inappropriately | Healthcare- Associated Infection | Adverse Drug Event | Procedure Complication | Unnecessary Hospitalization | Flow Delay | Clinical Care Delay | Comments |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | |
| TOTALS | | | | | | | | | | | | | |



Documentation Example

Hospital Inpatient Waste Identification Tool Worksheet: Process Module

| Area/Unit: | Date & Time of Review: | Reviewer: | Total Pts. Or Areas Reviewed: |
|------------|-------------------------|-----------|-------------------------------|
| mica/onic | Date & fille of Keview. | Neviewer. | Total F G. Of Al Cas Reviewed |

| Area or Room | Frequency | Severity | Type of Waste Noticed | Description: | Index Tota |
|--------------|-----------------------|-----------------|--------------------------------------------------------------|---------------------------|------------|
| | 1(occasionally) | 1(Low Impact) | | | S + F |
| | 5(5+ per day) | 5(Large Impact) | | | |
| | | , , , , | Over Production, Inventory, | | |
| | 1 2 3 4 5 | 1 2 3 4 5 | Over Processing, Motion, Defect, | | |
| | | | Waiting | | |
| | | | Over Production, Inventory, | | |
| | 1 2 3 4 5 | 1 2 3 4 5 | Over Processing, Motion, Defect, | | |
| | | | Waiting | | |
| | | | Over Production, Inventory, | | |
| | 1 2 3 4 5 | 1 2 3 4 5 | Over Processing, Motion, Defect, | | |
| | | | Waiting | | |
| | | | Over Production, Inventory, | | |
| | 1 2 3 4 5 | 1 2 3 4 5 | Over Processing, Motion, Defect, | | |
| | | | Waiting | | |
| | | | Over Production, Inventory, | | |
| | 1 2 3 4 5 | 1 2 3 4 5 | Over Processing, Motion, Defect, | | |
| | | | Waiting | | |
| | | | Over Production, Inventory, | | |
| | 1 2 3 4 5 | 1 2 3 4 5 | Over Processing, Motion, Defect, | | |
| | | | Waiting | | |
| | | | Over Production, Inventory, | | |
| | 1 2 3 4 5 | 1 2 3 4 5 | Over Processing, Motion, Defect, | | |
| | | | Waiting | | |
| | 1 2 3 4 5 | 1 2 3 4 5 | Over Production, Inventory, | | |
| | 12345 | 1 2 3 4 5 | Over Processing, Motion, Defect, | | |
| | | | Waiting | | |
| | 1 2 2 4 5 | 4 2 2 4 5 | Over Production, Inventory, | | |
| | 1 2 3 4 5 | 1 2 3 4 5 | Over Processing, Motion, Defect, | | |
| | | | Waiting | | |
| | 1 2 3 4 5 | 1 2 3 4 5 | Over Production, Inventory, Over Processing, Motion, Defect, | | |
| | 1 2 3 4 3 | 1 2 3 4 3 | Waiting | | |
| | | | Over Production, Inventory, | | |
| | 1 2 3 4 5 | 1 2 3 4 5 | Over Production, Inventory, Over Processing, Motion, Defect, | | |
| | 1 2 3 4 3 | 1 2 3 4 3 | Over Processing, Motion, Defect, Waiting | ▲ | |
| | | | Over Production, Inventory, | | |
| | 1 2 3 4 5 | 1 2 3 4 5 | Over Production, Inventory, Over Processing, Motion, Defect, | | |
| | 1 2 3 4 3 | 1 2 3 7 3 | Waiting | | |
| | | | Over Production, Inventory, | | |
| | 1 2 3 4 5 | 1 2 3 4 5 | Over Production, Inventory, Over Processing, Motion, Defect, | | |
| | 1 2 3 4 3 | 1 2 3 4 3 | Over Processing, Motion, Defect, Waiting | | |
| | L Areas with any w | | | ATIENTS OR AREAS REVIEWED | |



Work Unit Preparation

- Contacted the Unit Manager
- Met to explain the concept
- Reached out to staff for volunteers
- Set the date





Highest Rated Opportunities

- Test over utilization
- Staff interruptions from phone calls
- Order Sets not utilized consistently
- Excess motion to obtain patient supplies
- Level of care provided higher than required





Key Realizations of the Team

- Much more waste found than expected
- RN's involved were amazed at:
 - Amount of waste in the day to day work that they do
 - Impact to a patient's length of stay
 - how waste impacts St. Rita's financial well being
- Physician participation would have been beneficial
- This concept could be applied to other areas of St. Rita's Health Partners



Lean Walks

- St. Rita's Professional Services (SRPS) Lima
 - 20 Physician Practices
- Medical Physician Partners (MMP) NW Ohio
 - 90 Physician Practices
- Led by Black Belt and Lean Leaders
- Focus on Patient Experience and Wait Times





Lean Walk Structure

- Teams of 4-6
 - Black Belt, Lean Leaders, Certified Epic Trainer, Practice Peers, Staff
 - Time commitment 3.5 hours
- Pre-work and Follow-Up required:
 - Education, support and communication with Practice
 - Capture ideas before and after Walk
 - Time Commitment 1.5 hours
- Changes implemented using PDSA cycles
- Share best practices via newsletters





Lean Walk Schedule

Kick Off / Staff Training

- 1-2 weeks before event
- Education session utilizing Tri Fold Model
- 30 minutes duration

Lean Walk

- 1 hour for training and role assignment
- 1.5 hours for observation collection
- 1 hour debrief

Follow Up and Staff Training

- 1 week later and again in 2-3 weeks
- Provide finalized data with Lean Walk Team and staff input
- Prioritize work and make assignments
- Staff training on improvement methodology PDSA & Lean Management

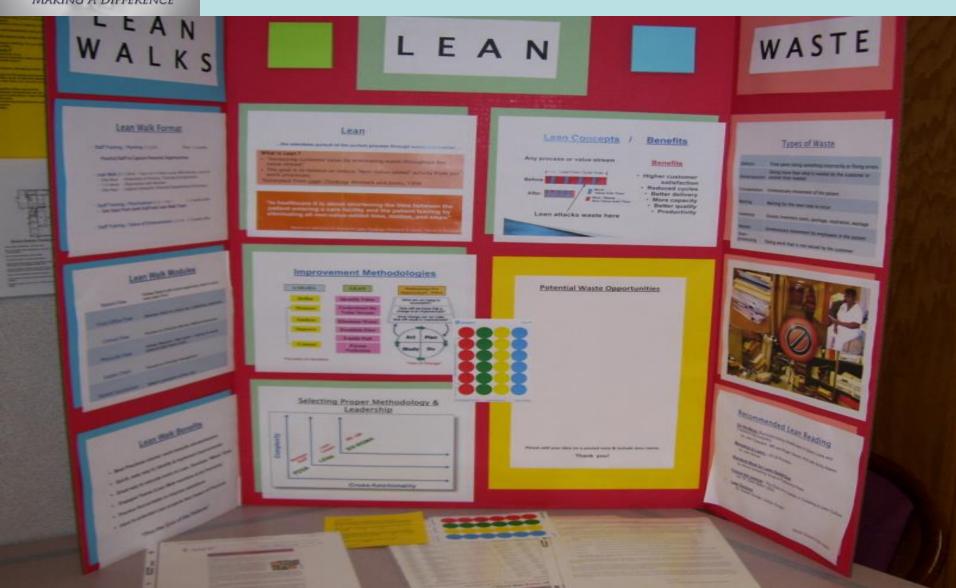
Results

Practice manager reports on progress of work and results





Lean Training Tri-Folds





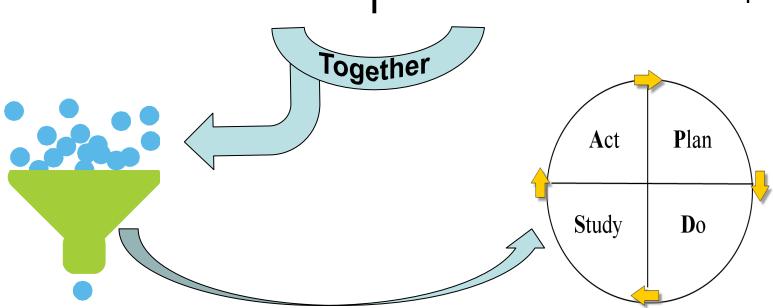
Results



Practice Staff Ideas



Lean Walk Team Input



Capture Potential Opportunities Prioritize & Focus on 3-5

Perform PDSA's Test of Change For Improvement



Lean Walk Modules

| Patient Flow | Follows Patient with entire experience; even in exam room (asks first) |
|----------------------|--------------------------------------------------------------------------------|
| Front Office Flow | Observes check-in, check-out, scheduling, collections |
| Clinical Flow | Focuses on Clinicians (Nurses, Medical Assistants) |
| Physician Flow | Follows Physician / Mid-Levels - looking for waste before & after Patient Exam |
| Supply Chain | Focuses on inventory management |
| Patient Satisfaction | Patient's perception of their visit |



Patient Satisfaction Cards

| Dear Patient, | |
|-------------------------------------------------------------------------|------------------------|
| We appreciate your feedback to l services. Please complete this fo | • |
| At any time during today's visit, expected? If yes, when and how long? | [_] No [_] Yes |
| Did anything happen during you | |
| address your concerns today? If yes, what was it? | |
| Did anything happen during you | r visit that would not |
| improve your health? If yes, what was it? | [_] No [_] Yes |
| How satisfied are you with your | visit today? |
| Not at all | Completely |
| [_] [_] How can we improve? | |
| Please return the card before | you leave. Thank you. |

- Bright Colored Card Stock
- Check-In provides card
- Collection basket at Check Out Point
- Feedback provided in the moment

** Redesigned process and form. Help from Mo Gotee, Vocumen LLC.





Documentation Example

Physician Office Waste Identification Tool Worksheet: Patient Flow Module

Physician Office: _____ Date & Time of Review: _____ Reviewer: _____ Total Pts. Or Areas Reviewed:

| Office: | | Date & Time of | f Review: | Re | eviewer: | Total Pts. Or Are | as Reviewed: |
|-----------|--------------------------|-----------------------------------------------|----------------------------------------------|-------------------|-----------|-------------------|----------------------|
| | Process | Frequency 1(occasionally) 5(5+ per day) | Severity 1(Low Impact) 5(Large Impact) | Type of Waste Not | iced | Description: | Index Total S + F |
| Check-In | Registration | | | | | | |
| Rooming | Nursing Assessment | | | Over Production | Inventory | | |
| Exam | Testing | | | Over Processing | Motion | | |
| Procedure | Scheduling | | | Defect | Waiting | | |
| Check-Out | Signage | | | Transportation | Clutter | | |
| Other | Best Patient Experience* | 1 2 3 4 5 | 1 2 3 4 5 | | | | |
| Check-In | Registration | | | | | | |
| Rooming | Nursing Assessment | | | | | | |
| Exam | Testing | | | Over Production | Inventory | | |
| Procedure | Scheduling | | | Over Processing | Motion | | |
| Check-Out | Signage | | | Defect \ | Waiting | | |
| Other | Best Patient Experience | 1 2 3 4 5 | 1 2 3 4 5 | Transportation C | Clutter | | |
| Check-In | Registration | | | | | | |
| Rooming | Nursing Assessment | | | | | | |
| Exam | Testing | | | Over Production | Inventory | | |
| Procedure | Scheduling | | | Over Processing | Motion | | |
| Check-Out | Signage | 1 | <u> </u> | Defect \ | Naiting | | |
| Other | Best Patient Experience | 1 2 3 4 5 | 1 2 3 4 5 | Transportation C | Clutter | | |
| Check-In | Registration | | | | | | |
| Rooming | Nursing Assessment | | | | | | |
| Exam | Testing | | | Over Production | Inventory | | |
| Procedure | Scheduling | | | _ | Motion | | |
| Check-Out | Signage | 1, 2, 2, 4, 5 | 4 2 2 4 5 | | Waiting | | |
| Other | Best Patient Experience | 1 2 3 4 5 | 1 2 3 4 5 | Transportation (| Clutter | | |
| Check-In | Registration | | | | | | |
| Rooming | Nursing Assessment | | | | | | |
| Exam | Testing | | | | Inventory | | |
| Procedure | Scheduling | | | | Motion | | |
| Check-Out | Signage | 1,2245 | 1 , , , , , - | | Waiting | | |
| Other | Best Patient Experience | 1 2 3 4 5 | 1 2 3 4 5 | Transportation C | Clutter | | |
| Check-In | Registration | | | | | | |
| Rooming | Nursing Assessment | | | | | | |
| Exam | Testing | | | | Inventory | | |
| Procedure | Scheduling | | | | Motion | | |
| Check-Out | Signage | 1,2245 | 1 , , , , , - | | Waiting | | |
| Other | Best Patient Experience | 1 2 3 4 5 | 1 2 3 4 5 | Transportation C | Clutter | | |

Patients, Processes or Areas with any waste identified

Total # Patients, Processes or Areas Reviewed

Best Patient Experience - Warm Greeting, Setting Expectations,
 Forms, Answering Phones 8 am-5 pm, Accessibility, Wait Times



Completed Module Example

| Physician | Office: | | | | Date | e & T | ime | of R | evie | w: <u>8</u> | /2/1 | 2 Reviewer: | | l Patients or Areas Rev | iewed: |
|------------|--------------------|---|-----|---------------------|-------|-------|-----|-----------------------|------|-------------|------|-----------------|------------|-------------------------------------------------------------------|--------------------|
| | Process | | (Oc | que casio per | nally | • | | Se L (Lov (Larg | | pact | • | Type of Was | te Noticed | Description | Index Total S+F |
| Check-in | Registration | | | | | | | | | | | Over Production | Inventory | 2 open lodicaine botles in | |
| Rooming | Nursing Assessment | | | | | | | | | | | Over Processing | Motion | room 15 - no date on | |
| Exam | Testing | 1 | 2 | (3) | 4 | 5 | 1 | 2 | 3 | 4 | 5 | Defect | Waiting | when to discard or when | 8 |
| Procedure | Scheduling | | | | | | | | | | | Transportation | | it was opened in a | |
| Check-out | Other | | | | | | | | | | | | | cupboard. 1 open | |
| Check-in | Registration | | | | | | | | | | | Over Production | Inventory | Patient 1: 1:38P brought pt in | |
| Rooming | Nursing Assessment | | | | | | | | | | | Over Processing | Motion | weighed by him, then to Rm 3. 1:50P - CMA out of room, 2:05P - | |
| Exam | Testing | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | Defect | Waiting | door open slightly, 2:19P Dr. | 5+ |
| Procedure | Scheduling | | | | | | | | | | | Transportation | | Vanan to see pt, 2:32P - Dr Vanan | |
| Check-out | Other | | | | | | | | | | | | | walked pt to surgery scheduling, 2:56P - pt left | |
| Check-in | Registration | | | | | | | | | | | Over Production | Inventory | 2:12P pt walked out by Dr. | |
| Rooming | Nursing Assessment | | | | | | | | | | | Over Processing | Motion | Vanan. 2:25P - discharge | |
| Exam | Testing | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | Defect | Waiting | instructions, follow up | 1 |
| Procedure | Scheduling | | | | | | | | | | | Transportation | | appt, left | |
| Check-out) | Other | | | | | | | | | | | | | | |



Waste Examples

- Frequent interruption for prescription refill calls
- Paper charts still utilized in EMR environment
- Batching of patient calls from physician
- Wheelchair inaccessibility
- Long lines at check in and check out point
- Date stamping incoming faxes





Other Opportunities

- Standardized Processes not being following
- Handicapped Items
- Safety / Privacy Concerns
- Supply Chain materials; expirations; process
- Marketing and Sign-Up Patient Portal
- Office Environment clutter, signage, warmth, cleanliness



30 days, 60 days, 90 days Reporting Example

| Potential WASTE - Area to Address | Priority (H-High M-Medium L-Low) | WHAT - Change to be made | WHO- Responsible for Change | WHEN - Targetted Completion Date | Status | Type - G-Go Do; C-Capital Needed; A-For All Practices; P-Planned P- Practice to decide | Impact / Benefits |
|--------------------------------------------------------------------------------------|-------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------|-------------------------------------------|----------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Front Office | | | | | | | |
| Front Office Printer Location | L | Move printer in between | Kathy G. (Gerdeman) | not changing | NC | Р | Minimal time |
| Scanning Driver's License so data auto populates | L | Patient's insurance card always needs scanning; at same time - ask for driver's license | Front office Staff | Immediately | Complete | G | Minimal time / revenue risk (since don't always ask for insurance card) |
| Pharmacy Questions re: Meds (mostly Physician errors-Epic Med List complex) | Н | Ask other practices if they receive the same and how they handle these. | Janell | 4/30/2013 | Complete | А | High amount of time; Patient risk |
| Obtain a wheel chair-have to walk across building to get one | М | Ask other practices if have extra; maybe a patient would donate one | Kathy G. | 3/13/2013 | Complete | С | Saves wasted travel time; immediate access to a wheel chair |
| Clinical / Patient Flow | | | | | | | |
| Using Smart Phrases more - Physician (ex. PCMH) | L | Clinical staff feels the Dr. has own, effective smart phrases | Dr. Klass | 4/1/2013 | Complete | Р | Ensures compliance with PCMH; consistent with other SRPS practices |
| Double Clicking for PCMH Questionnaire in Exam Room with Patient | L | WW Team shared the double clicking | Clinical staff | 3/11/2013 | Complete | G | Minimal |



Lean Walk Benefits

- Best Practices shared; work towards standardization
- Quick, easy way to identify & implement improvements
- Great way to educate more on Lean. Develops "Waste" Eyes
- Engaged Teams (Lean Walk members & the Practices)
- Practice Accountable to improve operations
- Input to potential Lean projects that impact all Practices

"Thru the *Eyes* of the Patients"



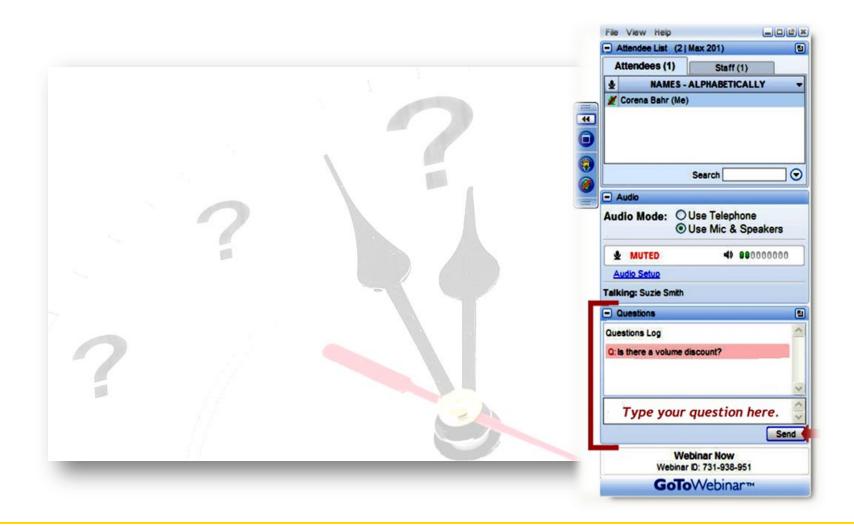


Our Next Steps

- Continue to include Staff Training
- Use PDSA's to implement change
- Share Best Practices Monthly Newsletters
- Include Lean Walk Team Pictures
- Initiate Lean projects across practices as surface



Questions





Master Black Belt Program

- Offered in partnership with Fisher College of Business at The Ohio State University
- Employs a Blended Learning model with world-class instruction delivered in both the classroom and online
- Covers the MBB Body of Knowledge, topics ranging from advanced DOE to Leading Change to Finance for MBBs





Thank you for joining us

Questions? Comments about today's program?

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Janell Vickers, Mercy Health Partners

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Ellen Milnes, MoreSteam.com emilnes@moresteam.com

Join us next month: April 29th – Remote Coaching

Archived presentations and other materials: http://www.moresteam.com/presentations/

