TURNING YOUR RESIDENT SURVEY STUMBLING BLOCKS INTO STEPPING STONES: USING A COLLABORATIVE QI FRAMEWORK TO MAKE A DIFFERENCE IN RESIDENT EDUCATION

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Disclosures

The workshop facilitators have nothing to disclose.

Objectives

- Describe the Solutions for Patient Safety (SPS) model
- Discuss quality and process improvement methodology
- Apply the SPS collaborative and quality and process improvement methodology to resident education issues identified in the ACGME survey

Agenda

- Introductions
- Review SPS and quality and process improvement
- Group work process improvement #1
- Group work process improvement #2
- Gallery walk
- Wrap-up

Quality and Process Improvement Fundamentals

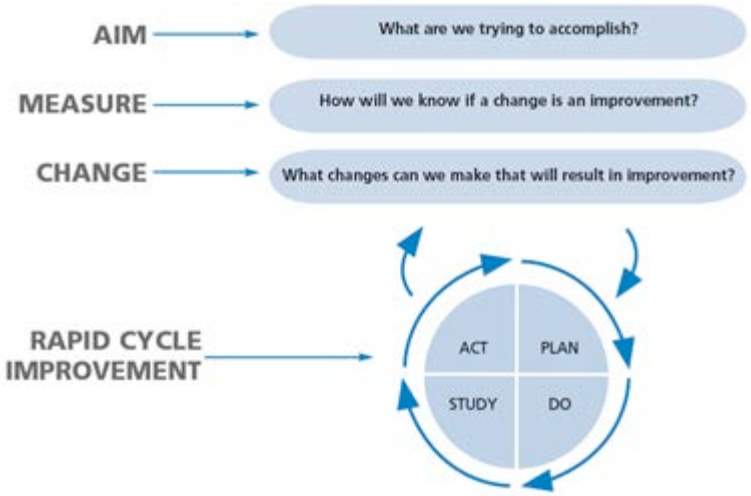
Multiple Methodologies for Creating Change in QI/PI

- **Model for Improvement**
- **LEAN**
- Six Sigma
- FADE (Focus, Analyze, Develop, Execute)

IHI Model For Improvement

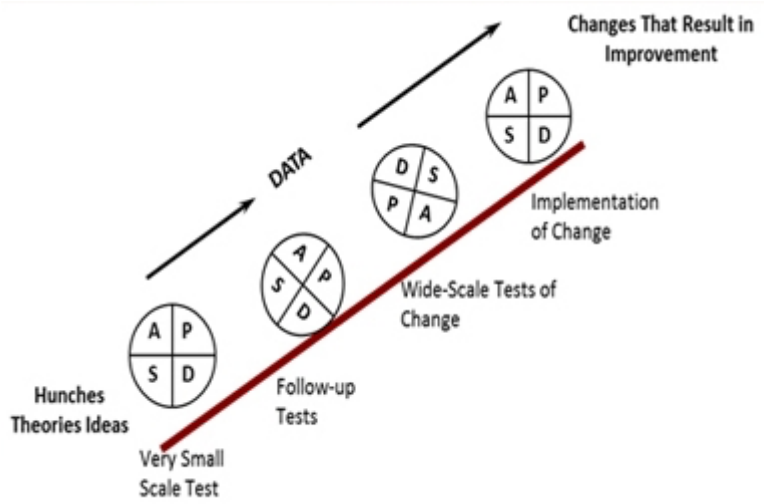
- Developed by Associates in Process Improvement in partnership with Institute For Healthcare Improvement
- Model has two parts
  - 3 Fundamental Questions
  - Plan-Do-Study-Act (PDSA) Cycle

IHI Model For Improvement



Institute *for* Healthcare Improvement

IHI Model For Improvement



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LEAN Improvement

- The core idea is to maximize **customer value** while minimizing waste. Simply, lean means creating more value for customers with fewer resources.
- Toyota leading LEAN example in the world

A3 Model

- Practice of getting a problem, an analysis, a corrective action, and action plan on one sheet of paper
  - Classically 11x17 sheet of paper
- A way of structured thinking
- Problem solving approach built around PDSA cycle
- Meant to be a visual representation of QI process that is a living breathing document

An A3 Problem Solving Template

Date: Owner:
Sponsor:

Title: What we are talking about

Background

Of all our problems, why this one?

Tell the "ugly story"…

Current State

Where do we stand? (Just the facts.)

Break Down the Problem.

Problem Statement	*What specific problem?*

Aim/Goal

What is the specific change we want to accomplish?
By when? What are the measures?

Analysis of Problem

What are the root causes, requirements, constraints?

Recommendations/Proposed Changes

What are your proposed countermeasures, strategies, alternatives? How much does each cost?

Action items

What activities are required?

What , Who, When?

Measures and Follow-up

What are the outcomes?

Is this a new standard? How do we spread it?

What issues remain?

How do we honor success?

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Components of a Aim Statement

- Specific
- Measurable
- Achievable
- Relevant/Realistic
- Timely

Aim Statement

- What are we *ultimately* trying to accomplish?
  - **We aim to** *(improve, decrease, etc.)*_____
  - **by** *(outcome measure/goal)* _____
  - **for** *(pt population/professionals)* _____
  - **in** *(location/department)*_____
  - **by** *(x%, x#, specific amount)* _____
  - **by** *(specific date)* _____.

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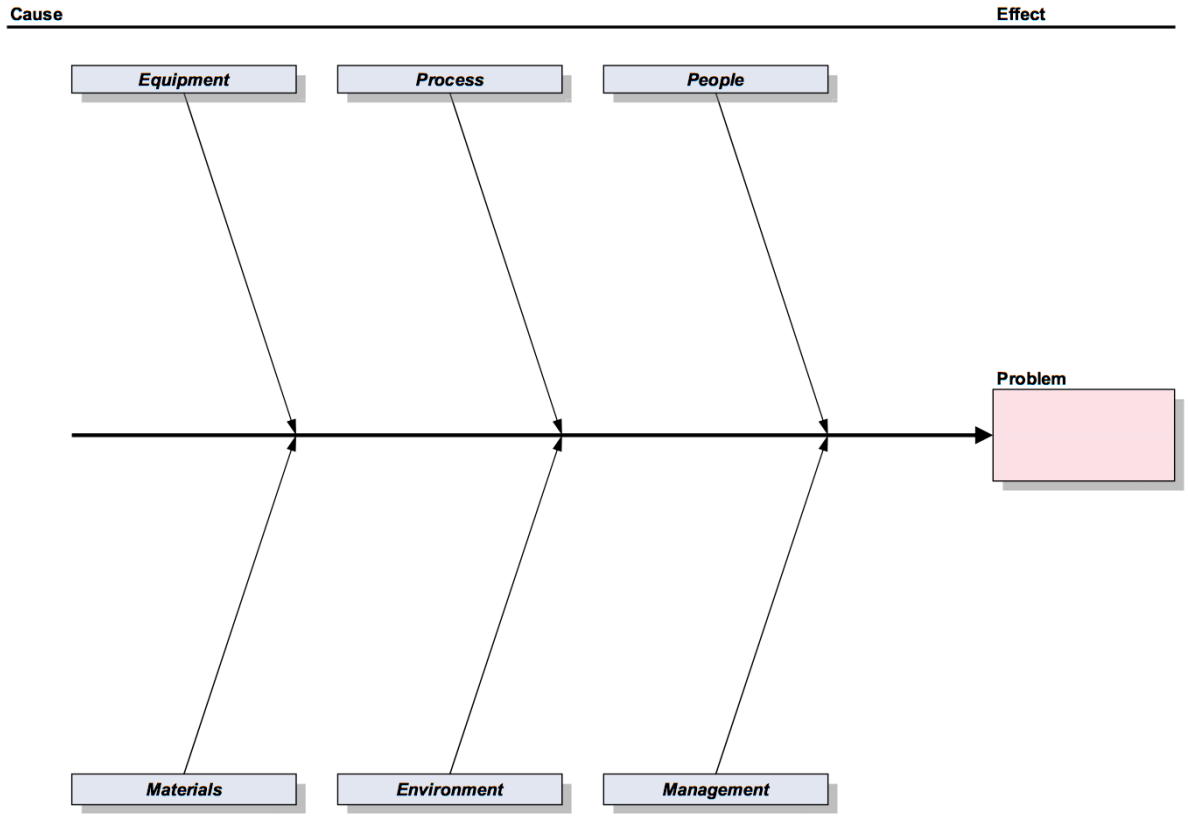
Tools Used in QI for Visual Representation of Analysis

- Cause and Effect Diagrams
  - Fishbone or Ishikawa diagrams
- Tally (Check) Sheets
- Pareto Charts
- Control Chart
- Flow or Process Maps
- Driver Diagram
- Scatter Diagram
- Stratification (flow or run chart)

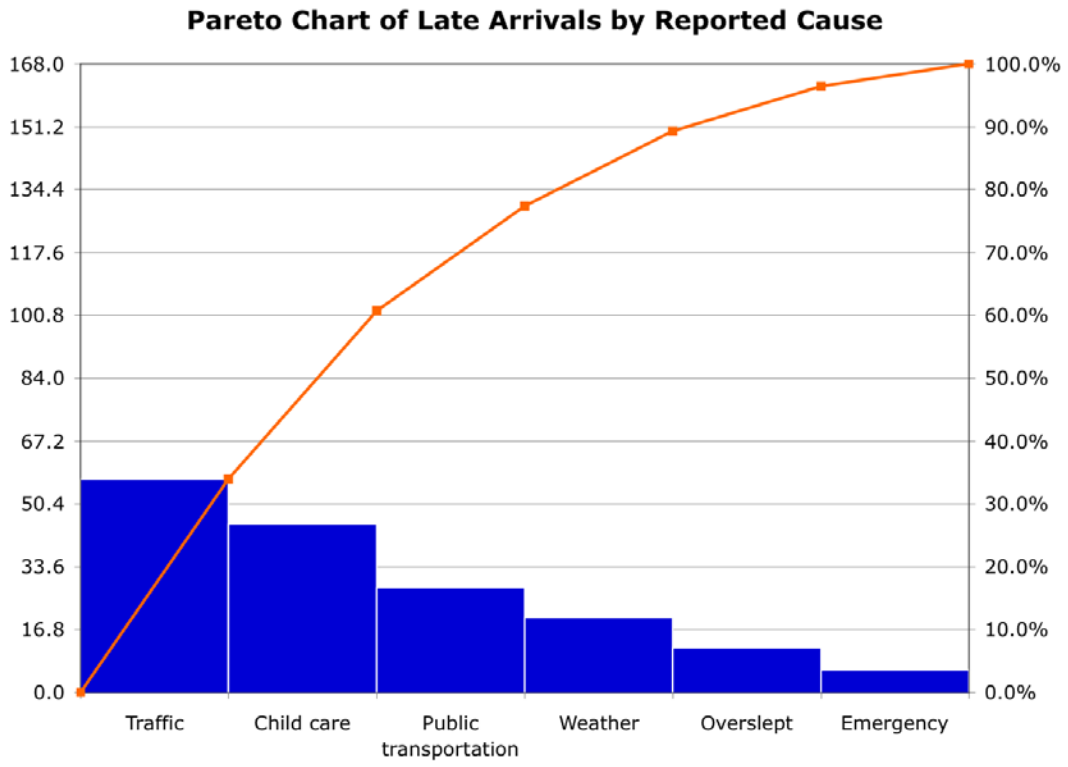
Cause and Effect Diagrams



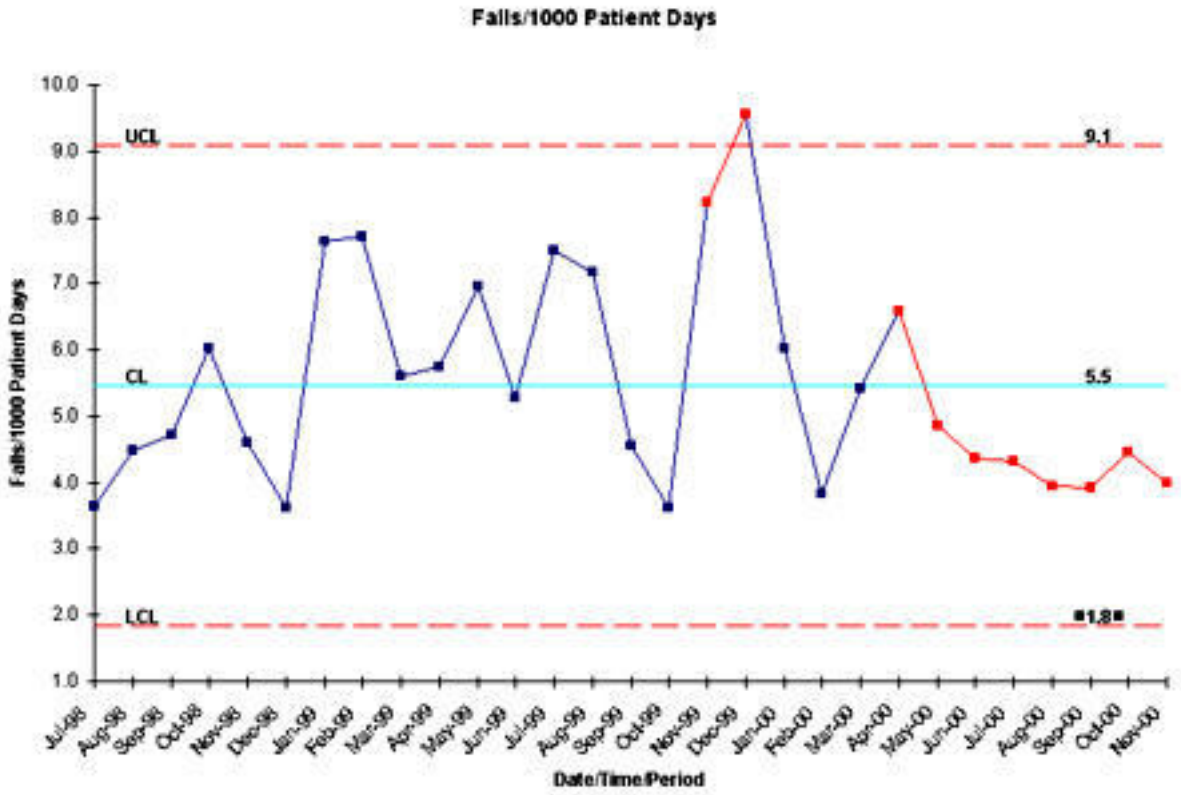
Tally Sheets

Formula Given	MON	TUES	WED	THURS	FRI
Maternity Day Shift	IIII				
Maternity Night Shift		II	II	IIII II	IIII
Newborn Nursery	I		I		
Labor and Delivery		I			
Hospital Day One	II	III	II	I	II
Hospital Day Two	I			II	I
Hospital Day Three	II		I	II	I

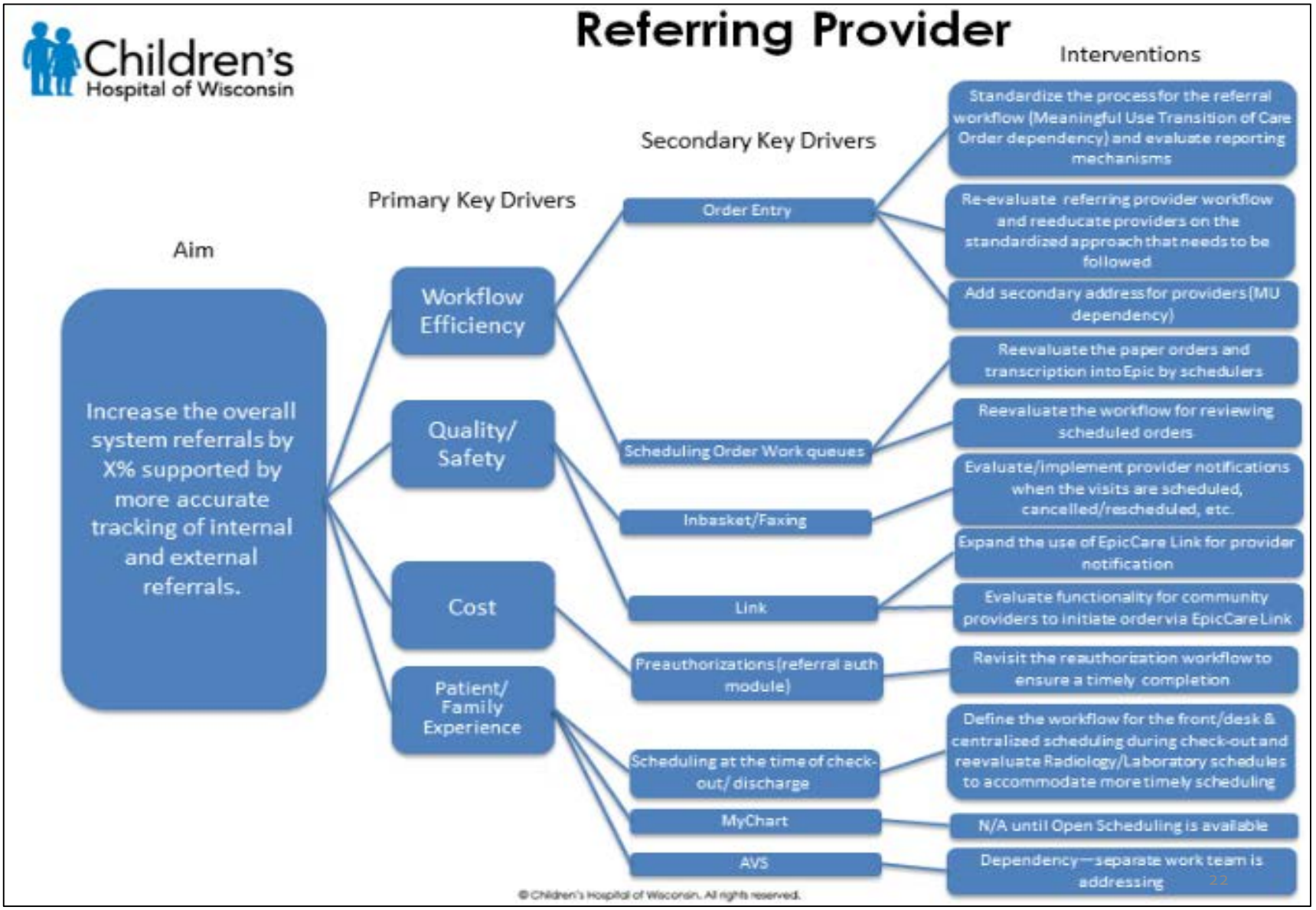
Pareto Charts



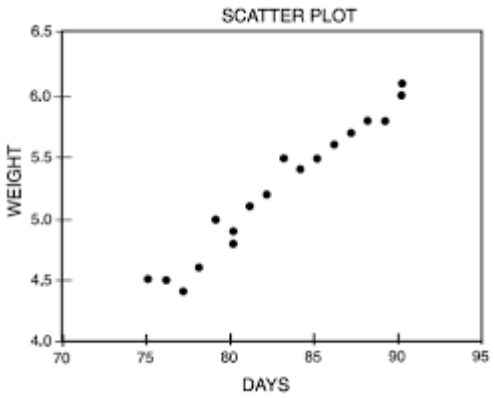
Control Chart



Driver Diagram



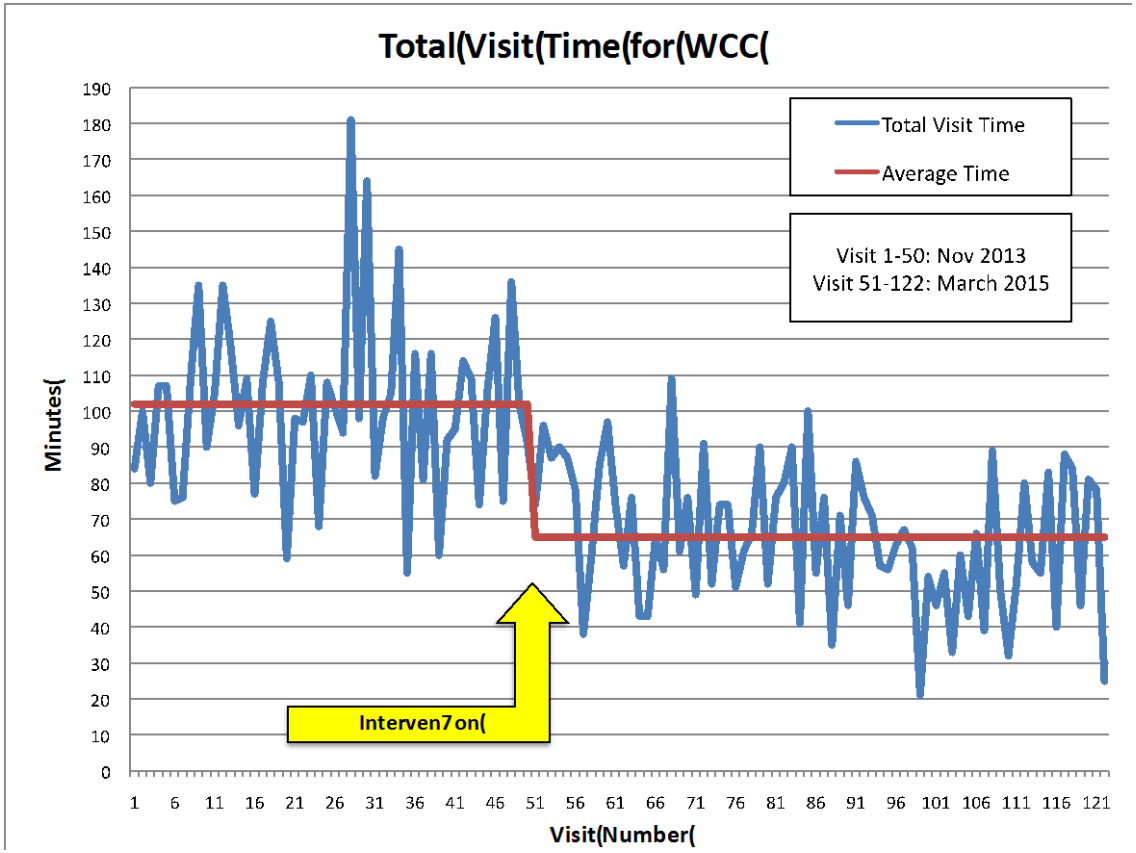
Scatter Diagram/Plot



Flow Charts


Patient Arrives and Checks In
Start rooming patient 15 mins before appt time
If patient more than 15 mins late notify MD
Labels Print And MA Builds Chart
MA Obtains Vitals, Hearing, Vision, and Rooms Patient
If fails vision or hearing notify MD and place sticker on rooming sheet
If MD has 2 rooms, room next patient as soon as check in complete
Set Timer on Door for 10 Minutes
If Timer goes off before MD enters room, notify MD or attending
MD Stops Timer and Enters Room
Turn in Vaccines and Orders
Resident Staffs Patient with Attending
Nurse Prepares Vaccines
MA Obtains Hemoglobin and Lead
Attending and Resident Examine Patient and give orange sheet
Nurse Administers Vaccines
Notify MD of Result
If Resident only has one room have patient wait in chairs
If Resident has two rooms patient can wait in room
If patient has orange sheet tell patient to check out
If patient does not have orange sheet have patient wait for MDs

Run Chart


Total(Visit(Time(for(WCC(
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106
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121
Visit(Number(
Total Visit Time
Average Time
Visit 1-50: Nov 2013
Visit 51-122: March 2015
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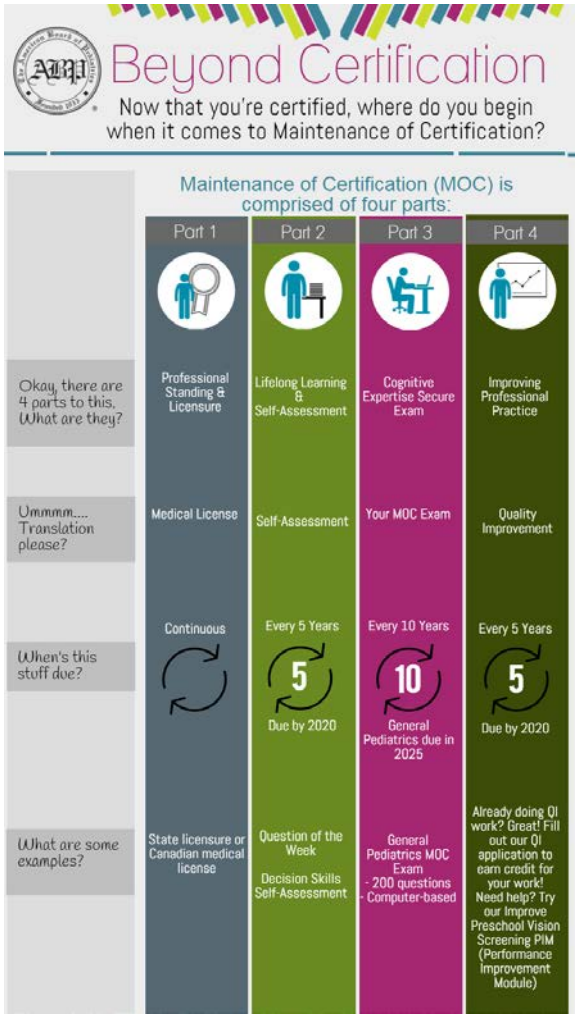
MOC and QI



- Ways to earn MOC Part 4
  - Part 4 MOC credit offered to PD, faculty, residents, and fellows who engage in QI to address areas that were identified during program annual review
  - ACGME requires annual program review and more comprehensive self-study every 10 years
  - ACGME Next Accreditation System (NAS) places greater emphasis on program self evaluation with goal of improvement

Solutions for Patient Safety

- Network of > 90 children's hospitals
- Shared goal of reducing and eliminating serious harm
- **SHARE** successes and failures
- **"All teach, all learn"**

Acknowledgments and Sources

- Lauren Destino MD, Nivedita Srinivas MD, Terry Platcheck MD, and Paul Sharek MD
- Lean Enteprise Institute (Lean.org)
- Institute for Healthcare Improvement (IHI.org)
- Sobek, Durward, Understanding A3 Thinking: A critical Component of Toyota's PDCA Management System