



Helping Clinicians Practice at the Top of Their License through QI

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Disclosures

- The presenter has no financial disclosures.



Assumptions

Basic knowledge of process improvement methodology and tools – **not required.**

Without process improvement experience, still helpful.

WARNING: Jargon Ahead!



Learning objectives

- Describe how waste in healthcare operational and clinical practices leads to poor performance, poor outcomes and dissatisfaction
- Identify the common forms of waste
- Recognize activities that improve patient care, and those that do not
- Determine which team members need to be involved and when

What did Dr. Deming say?



“Funny how we don’t have the time to improve, but we have plenty of time to perform work inefficiently and resolve the same problems over and over.”

-- W. Edwards Deming



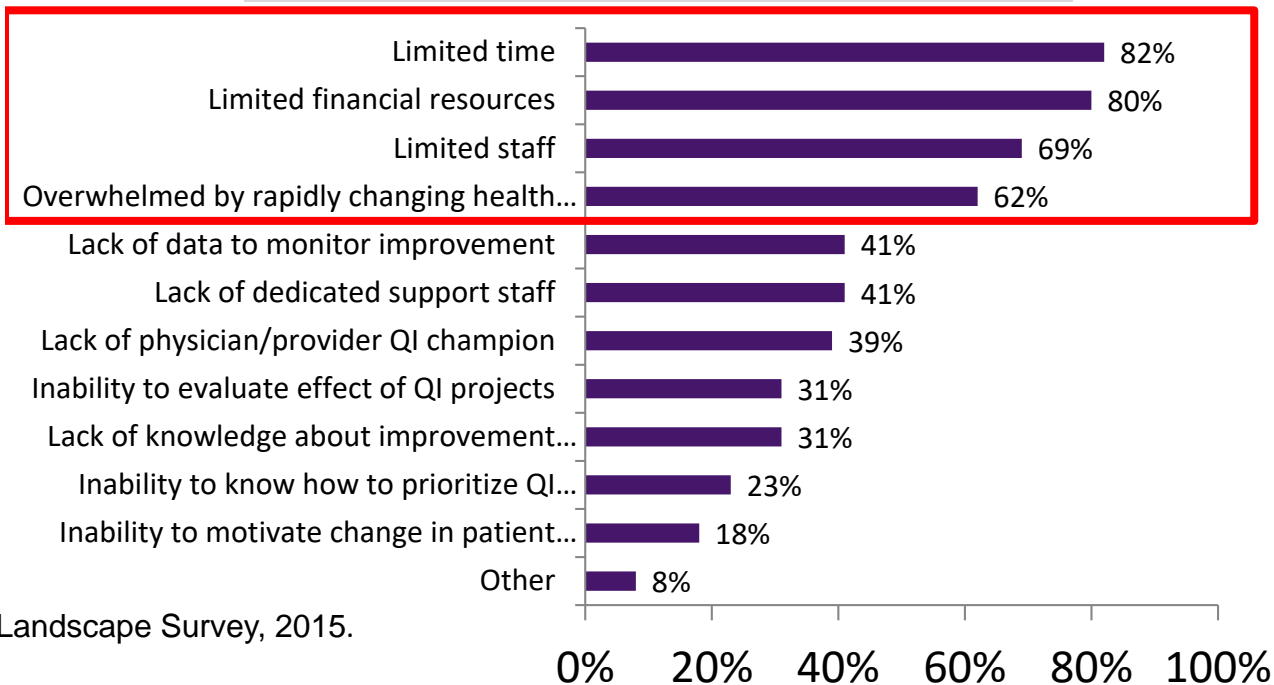
Scenario

“I can’t easily schedule my rounds or assist my patients when the needed supplies aren’t readily available. I am never quite sure whether or not the nurse is clear about what I need and often find myself asking multiple people for the same things. I’ve started carrying some of my own supplies on me.”



For organization members, the primary barriers to improving care are limited time and financial resources.

Organization Members' Barriers to Improving Care They Provide



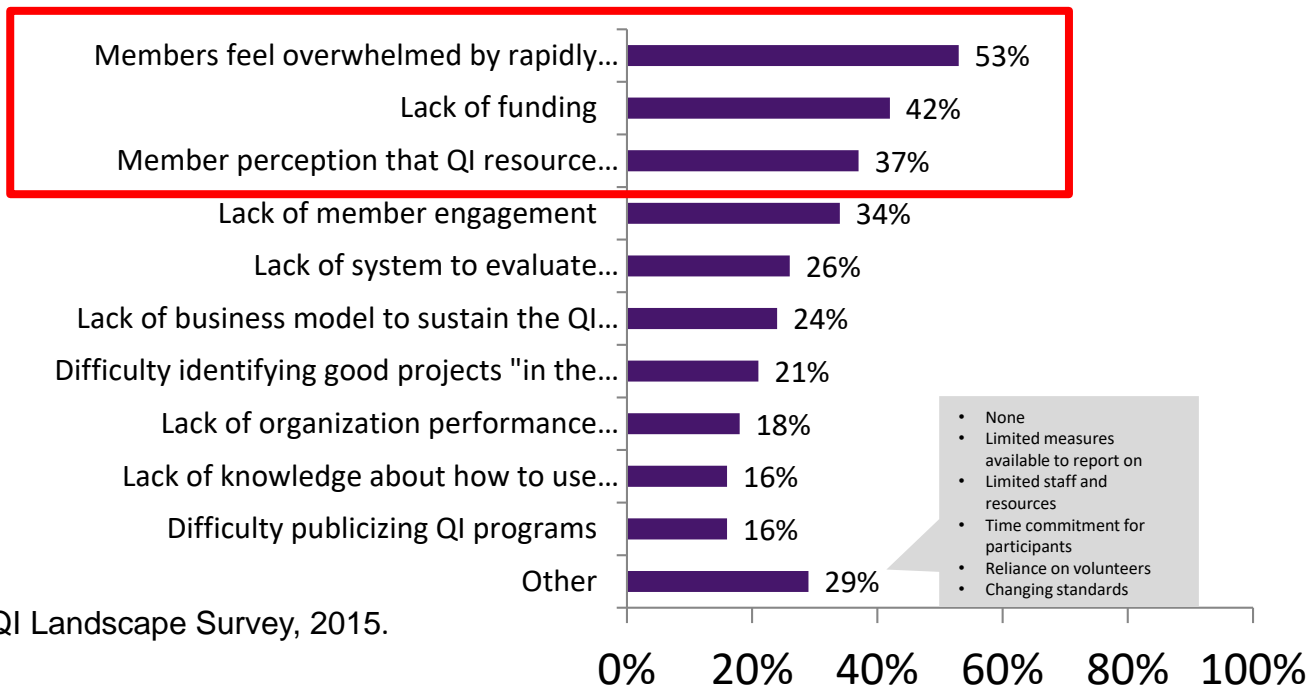
PCPI NQRN/QI Landscape Survey, 2015.

Q39: What would your organization's members say are the greatest barriers to improving the care they provide? Please select all that apply. (Base: Provide QI Activities, n=39)



Half of participants indicate the rapid pace of the health care field is a barrier to implementing and sustaining their organization's QI program

Barriers to Implementing & Sustaining QI Program



PCPI NQRN/QI Landscape Survey, 2015.

Q32: What are your organization's greatest barriers to implementing and sustaining your QI program? Please select all that apply. (Base: Provide QI Activities, n=38)



Agenda

- What does it mean to practice at the top of your license?
- What are value-added activities?
- What are non-value-added activities?
- What are forms of waste in everyday work?
- How do you identify waste and remove it?
- Who should be involved in improving work flow?
- Take-a-ways
- Q&A



What's does it mean to practice at the top of your license?

- What would that look like to you?



What's does it mean to practice at the top of your license?

- What gets in the way?



Where does this concept come from?

The Future of Nursing: Leading Change, Advancing Health, National Academies of Medicine.

- Nurses should practice to the full extent of their education and training.
 - Nurses should achieve higher levels of education and training through an improved education system that promotes seamless academic progression.
 - Nurses should be full partners, with physicians and other health care professionals, in redesigning health care in the United States.
 - Effective workforce planning and policy making require better data collection and information infrastructure.

The report was a response to the nursing shortage and the concept has been applied to physicians extensively.



General continuous quality improvement work flow

Common elements to Lean, Six Sigma, Model for Improvement, GE Workout, etc.

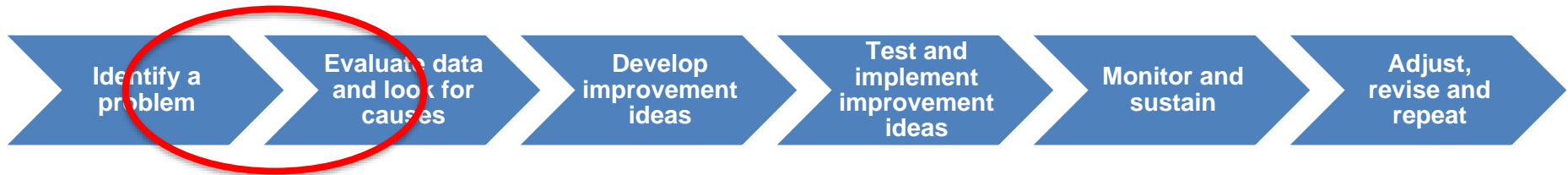
Where in the improvement process do you focus on creating your improvement ideas?



General continuous quality improvement work flow

Common elements to Lean, Six Sigma, Model for Improvement, GE Workout, etc.

Where in the improvement process do you identify waste and non-value added activity?



Start with wastes

- **D**efects
- **O**verproduction
- **W**aiting
- **N**on- or under-used staff
- **T**ransportation
- **I**nventory
- **M**ovement
- **E**xcess processing





So, what's that mean in everyday life?

- Patient safety problem or risk
- Complaints from patients
- Complaints from physicians or other employees
- Employee shortages
- Expanding or renovating facility space
- Routine extraordinary efforts by employees to keep things working – priority by crisis
- Systems that routinely require re-work in order to get things right
- Work flow issues – break downs, bottle necks, waiting
- Inventory challenges – too much or never enough
- Revenue growth opportunities (eliminating backlogs, improving utilization, or expanding services)



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What areas are natural starting places?

- Scheduling and registration
- Laboratory
- Pharmacy
- Materials management
- Outpatient clinics
- Outpatient surgery
- Food service
- Medical surgical units
- Sterile processing
- Emergency departments



Who should be involved in improvement?

Forming the team

- Right people on the team (those directly involved – process and process-step owners)
 - Clinical leaders
 - Technical experts
 - Day-to-day leadership and workers
 - Project sponsor and champion/leader



What is Value?

Principle	Hospitals Must
Value	Specify value from standpoint of end customer (patient)
Value Stream	Identify all value-added steps across department boundaries (the value stream), eliminating steps that do not create value
Flow	Keep the process flowing smoothly by eliminating causes of delay, such as batches and quality problems
Pull	Avoid pushing work on to the next process or department; let work and supplies be pulled as needed.
Perfection	Pursue perfection through continuous improvement

Adapted from Lean Enterprise Institute, Principles of Lean.

Value added vs. Non-value added: Examples

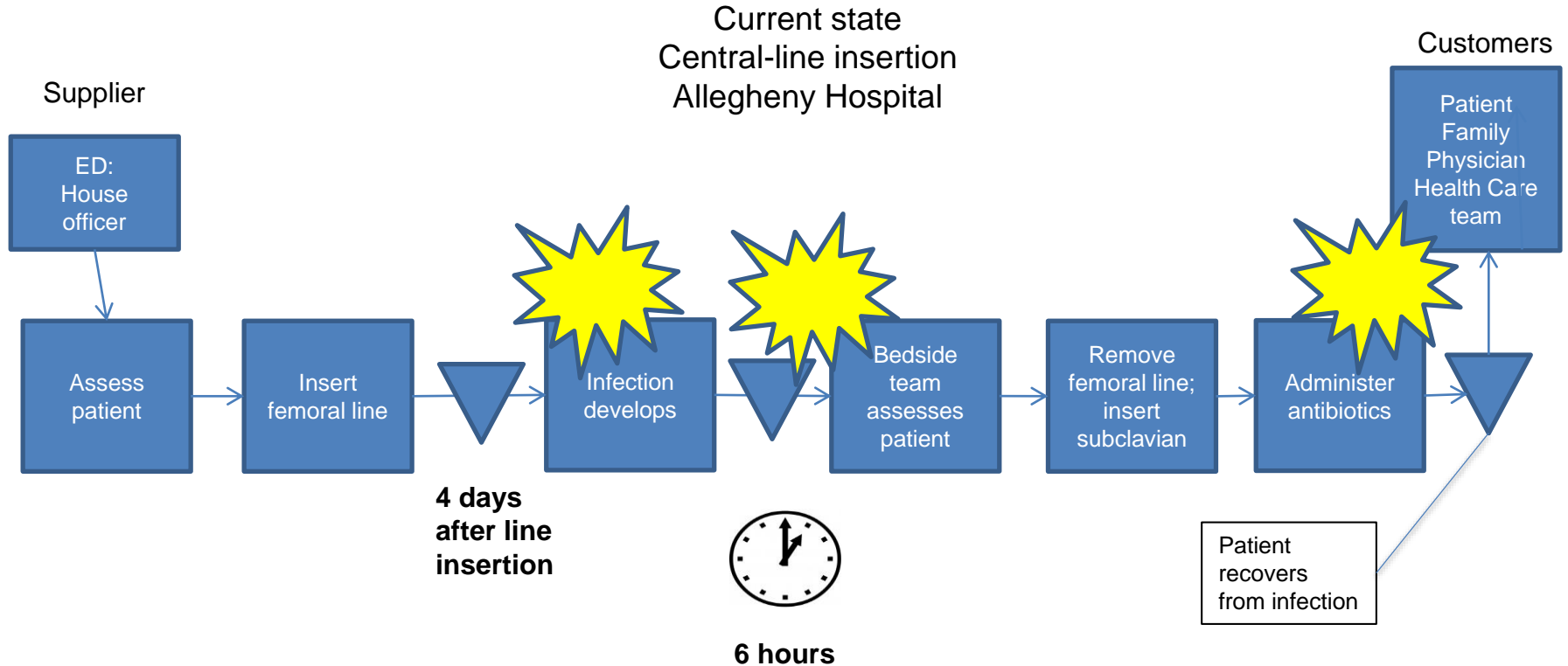
Department	Role	VA Activity	NVA Activity
Operating Room	Surgeon	Operating on patient	Waiting for delayed procedure or performing unnecessary procedure
Pharmacy	Pharmacy technician	Creating an intravenous formulation	Reprocessing medications that were returned from patient units
Inpatient unit	Nurse	Administering medications to a patient	Copying information from one computer system to another
Radiology	Radiology technician	Performing magnetic resonance imaging procedure	Performing medically unnecessary procedure
Laboratory	Medical technologist	Interpreting test result	Fixing broken instrument



Value added vs. Non-value added: Examples

Department	“Product”	VA Activity	NVA Activity
Emergency room	Patient	Being evaluated or treated	Waiting to be seen
Clinical laboratory	Patient specimen	Being centrifuged or tested	Waiting to be moved as a batch
Pharmacy	Prescription	Medication being formulated or prepared	Being inspected multiple times
Perioperative services	Sterilized instruments	Time when instruments are being sterilized	Instruments being sterilized repeatedly without ever being used from a standard kit
Nutrition services	Patient food tray	Time when food is being cooked and tray is being assembled	Being reworked because tray was done incorrectly

Example: Current state value stream map



Scenario: One anesthesiologist's story

- Surgery scheduled to begin at 7:15 a.m.
- Arrived in the operating room at 6:45 a.m.
- Looked around for a suction canister.
- Attached it to the anesthesia machine.
- Hooked up suction tubing.

Commentary: “This is a very important piece of equipment, as it may be necessary to suction secretions from a patient’s airway. It should take only moments to set up a functioning suction canister, but if one isn’t available in the operating room, you have to leave the room and scrounge for it elsewhere in a storage cabinet or case cart.”

Aside: “This isn’t an activity that requires an MD degree. An eight-year-old child could do it competently after being shown once.”



Scenario: The story continues...

Aside: “(Just for fun, I sent an email one day to the head of environmental services at my hospital, asking if the cleaning crew could attach a new suction canister to the anesthesia machine after they remove the dirty one from the previous case. The answer was no. His reasoning was that this would delay the workflow of the cleaning crew.)”

- Then checked the circuit on the anesthesia machine
- Assembled syringes and needles, and drew up medications for the case.
- To each syringe, attached a stick-on label with the name of the medication, and wrote by hand on each label the date, the time, and initials.

Commentary: “These tasks, as you might guess, don’t require an MD degree either. A pharmacy can issue pre-filled syringes, and clever machines can generate labels with automatic date and time stamps.”



Scenario: The story continues...

- At 7 a.m., moved on to the preoperative area to meet the first patient.
- Made introductions and started to interview her.
- Noticed that no one had started her IV yet.
- Asked the patient's nurse if he would set up the IV fluid, which had already been ordered via the electronic medical record. "If I have time," he replied.

Commentary: "The nurse, in fairness, was busy with his own tasks—few of which required a nursing degree. He was doing clerical data entry in the computer, recording answers to a host of questions such as whether or not the patient had stairs in her home. In between, he was answering the phone, as there is no desk clerk to pick up the phone or check for incoming faxes."



Scenario: The story continue...

- Got a liter bag of IV fluid. Attached sterile tubing to it. Flushed the air out of the tubing.
- Did first clinical care of the day, inserted an IV catheter into a vein in the patient's hand.

Aside: “For the record, IV starts are well within the scope of nursing practice and don't require a physician.”

- Finally, at 7:07: Began clinical assessment of the patient's readiness for anesthesia,

Commentary: “This was the first activity that approached working at the top of my license. Multiply the 22 minutes I had already spent doing lower-level tasks by hundreds of cases per year per physician, and you'll start to see what a colossal waste of resources is occurring every day.”



Scenario: The story analyzed

- Author clearly irritated about tasks he/she and nurse must do that get in the way of performing at top of their licenses
- One person's perspective; not team- or patient-focused
- Does not use established process improvement methodology or tools
- Suggests improvements without consulting the process step owner nor accounts for others' established processes and protocols
- Jumps to solutions and conclusions (e.g., request of environmental services and pharmacy)
 - Potential “solution” could have negative consequences elsewhere
 - “Improvement” in one area that negatively affects another is **not** improvement
- Shows a lack of standard work and check lists
- Does not represent a QI approach using established problem solving methods and tools



What should be done?

- Define a problem
- Use data to support impact of problem/gap
- Identify a project sponsor and departments involved in process
- Assuming so consensus on quick solution, create a project charter with scope of problem
- Convene a rapid improvement event (aka kaizen) with team members with range of technical and clinical expertise involved in process
- Facilitate event using process improvement methodology (e.g., A-3, DMAIC)
- Develop and test improvement ideas
- Finalize improvements with standard work to create improved future state
- Monitor and sustain improvements
- Adjust as necessary



A-3 template

Title: *What are we talking about?*

Date:

Owner:

Background

Of all our problems, why are we talking about this one?
Historical/organizational/business context...

Recommendations

What are your proposed countermeasures, strategies, alternatives?
Are they linked to the root causes? (Future state map)

Current Situation

What is our current performance?
Trend chart, current state value stream map

Plan

Who, What, When? What are the required activities that need to be implemented by whom, when? (Gantt)

The Gap – Clear Problem Statement

Goal

What is the target condition or performance improvement you want right now? Measureable, by when (SMART)?

Follow up

How will we know we had the intended impact (metrics)? What remaining issues can be anticipated? When/how will we follow up?

Analysis

What are the root causes of the problem? (Fishbone, 5 Whys, Pareto)
What requirements, constraints and alternatives need to be considered?

Reviewed by:

Date:



One physician's perspective

“What this concept is supposed to mean, I think, is that anyone with clinical skills should use them effectively and not spend time on tasks that can be done by someone with fewer skills, presumably at lower cost.”

“Not just at my hospital but also at hospitals nationwide, administrators have pared back support staff in an effort to cut costs. Their reasoning appears to be that lower-level support staff can't do more advanced tasks, but their work can be “rolled into” what physicians and nurses do.”

- Excerpts from The Healthcare Blog



Standard work

- The current best documented method to safely and efficiently organize work elements in a repeatable sequence to ensure the same outcomes within control limits.
- “We are what we repeatedly do.

Excellence, then is not an act, but a habit.”

– Aristotle



Value of standard work

- Defines the process
- Specifies:
 - Tasks
 - Sequence of steps based on any interdependencies
 - Responsibility
- Reduces variability (opportunity error)
- Sets stage for monitoring and control
- Gets everyone on the same page – literally
- Reduces frustration/irritation/stress



How does process improvement help physicians practice at the top of their license?

- Share responsibility with others
- Empowers the people who do the work
- Breaks down barriers
- Builds a sense of team and shared purpose for improved **patient care**
- Helps define goals and ways to achieve them
- Focuses on systems, not individuals – stop playing the “blame game”
- Improves care processes and outcomes
- Makes work more efficient
- Increases sense of control and professional satisfaction
- Shift from victim to problem solver
- Aligns roles and task so team members do more of what they are trained to do



What can you do?

- Include people involved in the daily work for issues under your control
- Advocate for change or build support for issues outside your control
- (Learn to know the difference!)
- Remember patient care and improvement work **are** both team activities
- Become comfortable with sharing or reducing your responsibility and involvement
- Learn to say, “Yes”, and then “No.”
 - Example: referral management
- Provide recognition where it belongs
 - Celebrate success and who contributed to it



Key barriers practicing at the top of the license

- Poor or broken systems not aligned with providing value to the patient
- Perfectionism – “I don’t need help.”
- Overwhelmed by chaos, variety of work requirements and regulations
- Lack of team focus and clarity on roles and responsibilities
- Improvement by edict
- Poor or lack of communication
- Challenge of letting go of old processes/ways and replacing with new, improved ones
 - “It’s the way I was trained.”
 - “We’ve always done it that way.”
- The perception that QI is just one more thing to do



Take-a-ways

- Move from ego-centric perspective to team- and patient-focused perspective
- Provides a structured approach to problem-solving
- Help us “see” when, where and why problems occur, rather than assume
- Allows us to produce real improvement instead of prematurely jumping to “solutions”
- Create improvements by those who actually do the work
- Process improvement is NEUTRAL – It’s about the systems, not blame
- Cross department lines and break down barriers
- Applies more brainpower – “Two heads [or more] are better than one.”
- Produce robust processes (lasting and sustainable)...
- ...that facilitate, rather than hinder professional performance and satisfaction



Thank you!

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