Nephrology Quality Improvement Series:

Session 2 – Identifying a Project & Measurements

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Medicine
UNIVERSITY OF TORONTO

Objectives

1. Understand the importance of problem formulation from a QI perspective before implementing change

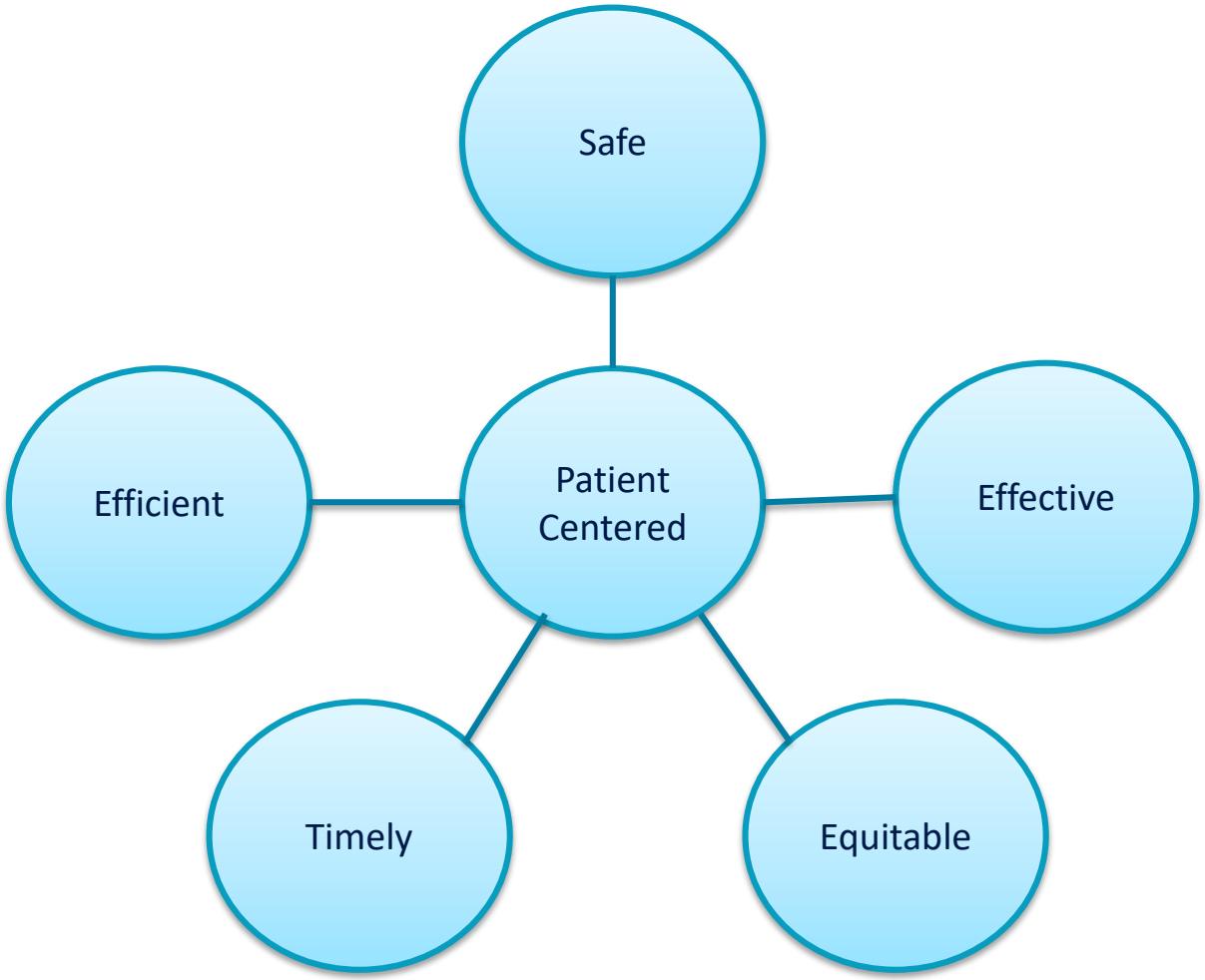
2. Apply problem defining techniques to focus the quality issues to be addressed

3. Understand basic family of measures in QI.

I have no idea where to start

Start by thinking of the six quality dimensions

To review…


Safe
Efficient
Patient Centered
Effective
Timely
Equitable

I have no idea where to start

Think of the six quality dimensions

Ask the front-line staff

I have no idea where to start

Think of the six quality dimensions

Ask the front-line staff

Think like a patient, act in your local environment

Models of QI

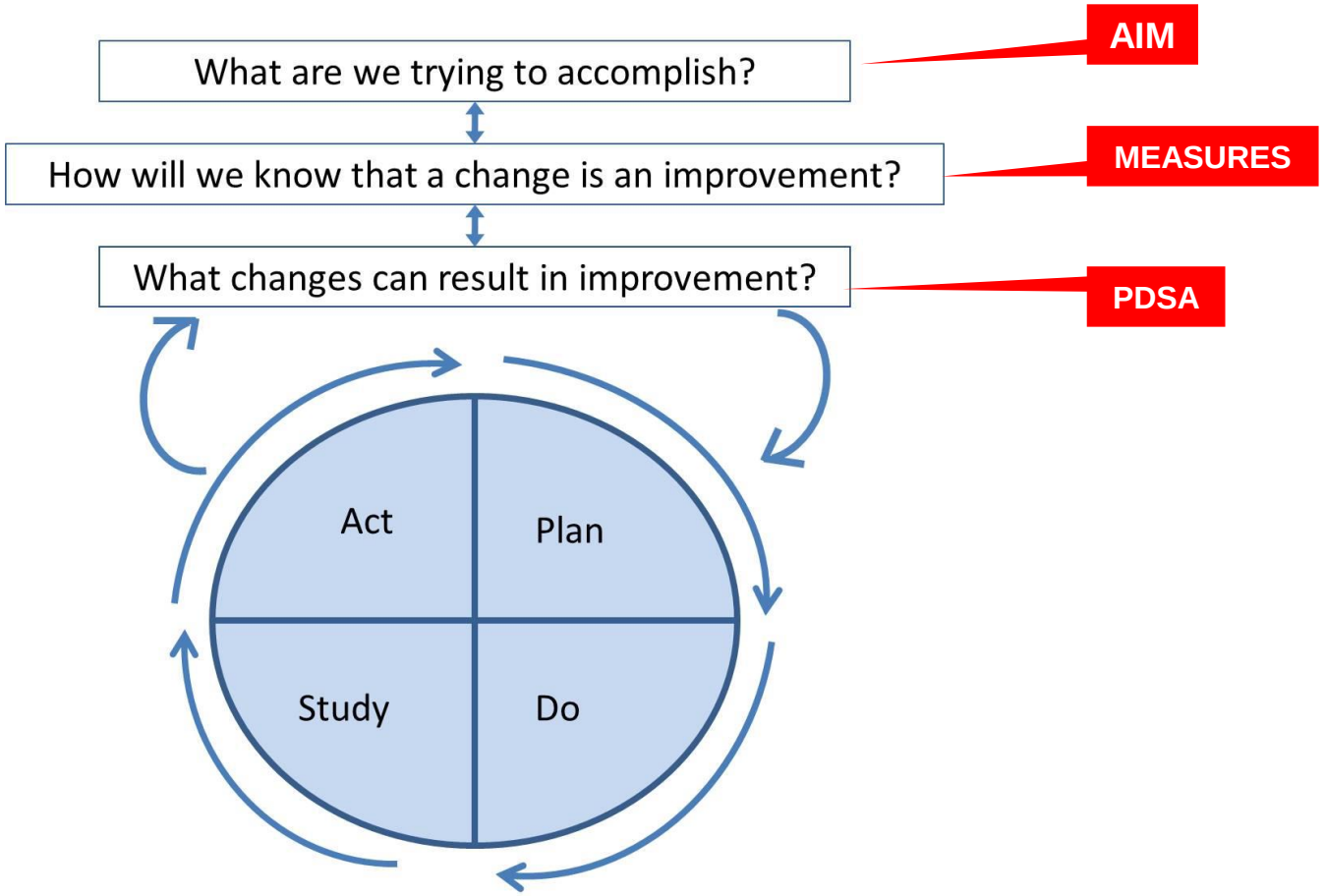
Lean (Toyota)

- PDSA (plan, do, study, act)
- IDEA (investigate, design, execute, adjust)

Six Sigma (Motorola)

- DMAIC (define, measure, analyze, improve, control)

Model for improvement



Is this a problem?

You CANNOT improve that which you cannot measure

- Must select measurable outcomes (next lecture)
- What performance standards are you seeking?
- What is baseline in quantitative terms?

Baseline….baseline…..baseline!

INCUBATION OVER IMPLEMENTATION

First steps…

Prioritize projects based on impact and alignment with department/institution plans

Change concepts vs. change ideas

Always start by “hearing the voice of the customer”

Voice of Customer Analysis

Take the role of every “customer”

- Patient
- Family
- Doctor
- Nurse
- Etc.

Identify their priorities, and then brainstorm ideas to meet those priorities

Working with a team ensures multiple perspectives are considered

Process Maps

- A graphic display of the steps of a work activity
- Can be simple or very detailed
- Again, multiple perspectives are needed to ensure you define the process in as high fidelity a representation as possible
- Important to understand where any change will fit into the workflow, ideally smoothly integrated

Example…a typical one

Holiday readmissions

It keeps happening

We need more MDT coverage during holidays!

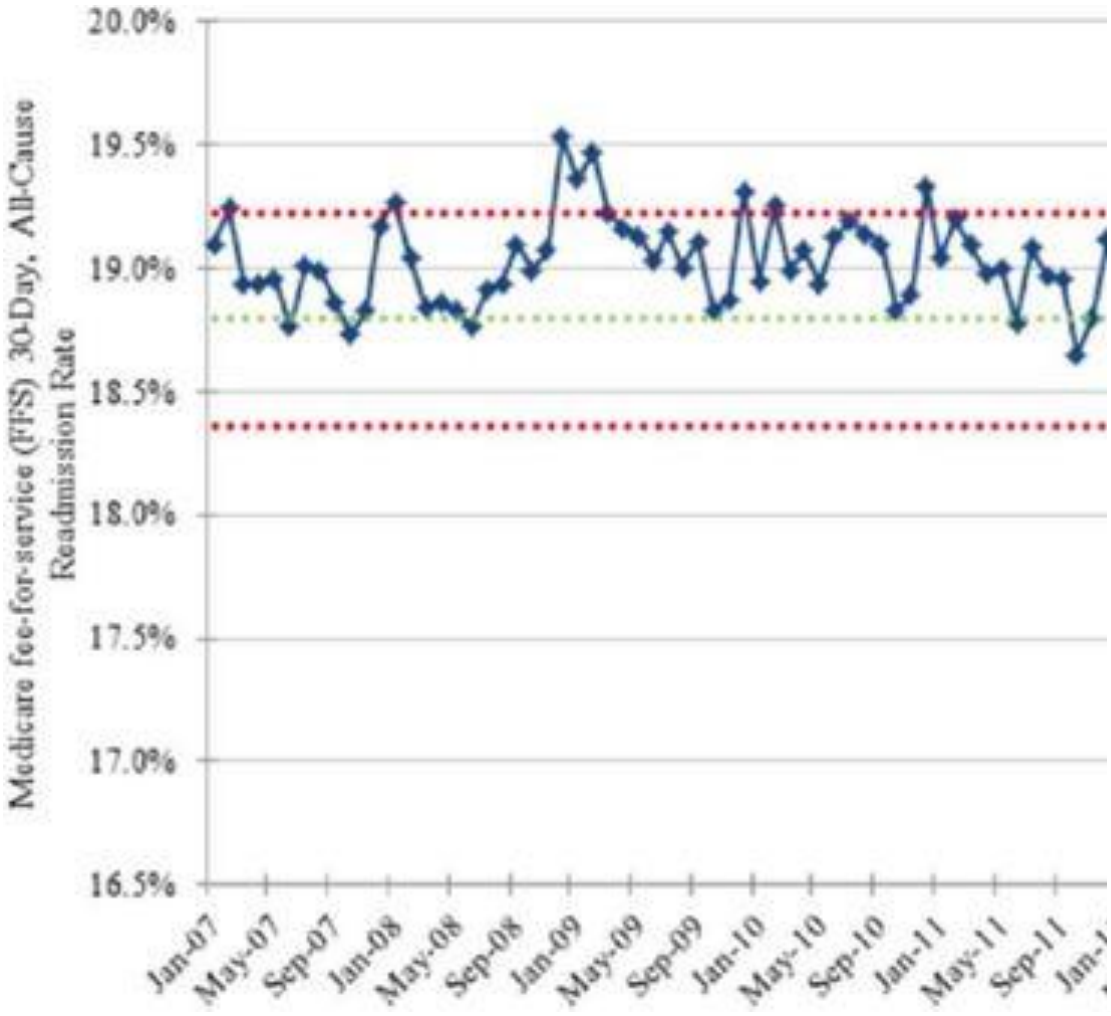
Do we solve it by…?

Throwing money at the issue

- More doctors, more nurses

Looking at upstream causes?

- Discharge process? LTC spots? Etc.


Medicare fee-for-service (FFS) 30-Day, All-Cause Readmission Rate
20.0%
19.5%
19.0%
18.5%
18.0%
17.5%
17.0%
16.5%
Jan-07
May-07
Sep-07
Jan-08
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CL
LCL
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Define Phase

Often overlooked

We think and act reflexively

Common sense solutions

Doctor Dilettantes

Define Phase

- What are we trying to accomplish? Is there a problem here?
- Who does this accomplishment serve?
- What is the scope? Wide enough? Narrow enough?
- What resources (time, materials, people) do we need to do this?
- Is the juice worth the squeeze?

Types of Measures

Outcome measures

Process measures

Balancing measures

Effects of healthcare delivery on patients or populations

Actions that make up healthcare delivery

Unintended consequences

Measurement Example

Aim: Decrease the weight time for PD catheter insertion by 50% within 12 months by establishing a new bedside catheter insertion program

Measure	Example
Outcome	% reduction in wait time for catheter insertion
Process	% of patients receiving bedside catheter insertion
Balancing	% of patients who need catheter surgical manipulation within 30 days of insertion

Fidelity

What you predict will happen (e.g., do checklists reduce surgical mortality?)

What actually happened (e.g. did teams actually use checklists as intended?)

It is important to have a process measure to track the fidelity of implementation

Change concepts vs change ideas

- **Change concept**: the general notion or approach to change

- **Change idea**: the specific idea or intervention you might implement in your practice, to lead to an improvement

Some common change concepts

- Eliminate waste – remove unnecessary steps
- Error proofing – forcing functions, standardization, reminders
- Manage time – reduce delays, wait times

MCKC Example

- Problem: Patients in the MCKC clinic are getting their modality education a lot later than usual (recommended at KFRE ~ 20-40%; happening at ~60-70%)
- Theory: No clear process in place as to when to initiate the education
- Change concept: Standardization
- Change idea: Have a reminder and standardized referral forms to notify clinicians when KFRE is at 40%

Questions/Discussion

Thank You.