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Coaching, Managing, and Teaching Quality Improvement



Institute for Healthcare Quality,
Safety and Efficiency

SCHOOL OF MEDICINE

UNIVERSITY OF COLORADO **ANSCHUTZ MEDICAL CAMPUS**

Disclosures

Financial: NONE

Slides and content co-developed with Dr. Katie Raffel

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Agenda

- 1 What is coaching?
- 2 Coaching Applied
 - Project Selection
 - Problem Understanding
 - Solution Generation

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Learning Objectives

1. Know when to **coach** vs manage.
2. Recite the four powerful coaching questions
3. Employ a framework for successful QI project coaching: problem selection, understanding, intervention.
4. List common pitfalls in Quality Improvement work.

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Session	Session Overview
Patient Safety	<ul style="list-style-type: none"> • Historical origins of patient safety movement • Safety Culture • Case Review • Second victim and how to support caregivers when errors occur
Applied Patient Safety	<ul style="list-style-type: none"> • Guide the development and participation in a systems-based case review conference.
Quality Improvement & Change Management	<ul style="list-style-type: none"> • Basics of Quality Improvement • Step-wise, practical implementation guide • Change Management framework overview for driving change
Acquiring Data to Drive Change	<ul style="list-style-type: none"> • Data sources to track improvement • Data analysis and organization • Data visualization
Spreading Change Locally and Nationally	<ul style="list-style-type: none"> • Diffusion of innovation framework • QI vs. research • Strategies for dissemination and publication • Grant opportunities
Coaching and Managing Quality Improvement	<ul style="list-style-type: none"> • How to coach QI teams • Identifying and troubleshooting common QI missteps



YOU ARE
HERE

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QI team sport, never alone – need to coach and manage

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What is (QI) coaching? Managing?

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John Whitmore

COACHING for PERFORMANCE

GROWing human potential and purpose

The principles and practice of
coaching and leadership

FOURTH EDITION



Coaching = “unlocking a person’s potential to maximize their own performance. It is **helping them to learn rather than teaching them.**”

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Whitmore J, Gaskell T. *Coaching for Performance: The Principles and Practice of Coaching and Leadership*. 6th ed. London: Nicholas Brealey Publishing; 2024.

What Does a Manager Do?



Repre

ited.

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COACHING

- 1 Influence and encourage
- 2 Empower and inspire
- 3 Listen and motivate

VS

MANAGING

- 1 Instruct and delegate
- 2 Request and recommend
- 3 Control and solve problem

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Breakout #1



10 minutes

1. Share who you are, where you work and what project you are working on (or problem you want to solve).
2. What is / will be your role on your project? Coach, manager, both? How do you know and how will you decide?
3. BONUS QUESTION: when have you experienced great coaching and/or managing?

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Most Managers Don't Know How to Coach People. But They Can Learn.

9 Essential Skills of an Effective Coach

- listening
- **questioning**
- **giving feedback**
- **assisting with goal setting**
- showing empathy
- **letting the coachee arrive at their own solution**
- recognizing and pointing out strengths
- **providing structure**
- **encouraging a solution-focused approach**

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COACH

- Connect with coachee
- Organize your coaching structure
- Align with existing priorities or efforts
- Challenge by asking questions and staying true to process improvement
- Harness both failure and success

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C: Connect

- Career aspirations
- Explore motivations
- Past experiences, skills, strengths
- Personal priorities

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O: Organize

- Define their desired skill development or outcome
- Define your coaching role and expectations
- Define your expectations of them

Organize: Define skill or outcome desired

Dermatology Clinic team opening a new clinic

- Project management?
- Quality and Safety structure?
- Building Business case?
- Provider retention.



Organize: Define skill or outcome desired

Junior faculty member interested in diagnostic safety

- Collab case review skills?
- Measurement of diagnostic accuracy
- Research fellowship - cognitive load.



Organize: Define skill or outcome desired

Role

- Support development of skillset
- Coach toward solving your problem effectively

Expectations

- Ask questions to help you understand the problem and generate powerful solutions
- Connect you with stakeholders and resources
- Coach tools of process improvement and change management
- Ensure you stay true to process



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Organize: Coachee Expectations

Expectations

- Be accountable to process and timeline
- Set agenda for meetings
- Report out progress
- Identify challenges, barriers, questions
- **Begin to develop next steps**



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DESIGN AND PLANNING OF IMPROVEMENT INTERVENTIONS

Challenge 1: Convince people that there's a problem

Use hard data and to secure emotional engagement by using patient stories and voices.

Challenge 2: If you do it, will it work? Convince people of the solution.

Come prepared with clear facts and figures, have convincing measures of impact and be able to demonstrate the advantages of your solution.

Challenge 3: Data collection and monitoring systems

This always takes much more time and energy than anyone anticipates. It's worth investing heavily in data from the outset. Assess local systems, train people and have quality assurance.

Challenge 4: 'Projectness' and ambitions

Over-ambitious goals and too much talk of 'transformation' can alienate staff if they feel the change is impossible. Instead match goals and ambitions to what is realistically achievable and focus on bringing everyone along with you. Avoid giving the impression that the improvement activity is unlikely to survive the time-span of the project.

ORGANISATIONAL AND INSTITUTIONAL CONTEXTS, PROFESSIONS AND LEADERSHIP

Challenge 5: Organisational context, culture and capacities

Staff may not understand the full demands of improvement when they sign up, and team instability can be very disruptive. Explain requirements to people and then provide ongoing support. Make sure improvement goals are aligned with the wider goals of the organisation, so people don't feel pulled in too many directions.

Challenge 6: Tribalism and lack of staff engagement

Overcoming a perceived lack of ownership and professional or disciplinary boundaries can be very difficult. Clarify who owns the problem and solution, agree roles and responsibilities at the outset, work to common goals and use shared language.

Challenge 7: Leadership

Getting leadership for quality improvement right requires a delicate combination of setting out a vision and sensitivity to the views of others. 'Quieter' leadership, oriented towards inclusion, explanation and gentle persuasion, may be more effective.

Challenge 8: Incentivising participation and 'hard edges'

Relying on the intrinsic motivations of staff for quality improvement can take you a long way, especially if 'carrots' in the form of incentives are provided—but they may not always be enough. It is important to have 'harder edges'—sticks—to encourage change but these must be used judiciously.

BEYOND THE INTERVENTION: SUSTAINABILITY, SPREAD AND UNINTENDED CONSEQUENCES

Challenge 9: Securing sustainability

Sustainability can be vulnerable when efforts are seen as 'projects' or when they rely on particular individuals.

Challenge 10: Side effects of change

It's not uncommon to successfully target one issue while also causing new problems elsewhere. This can cause people to lose faith in the project. Be vigilant about detecting unwanted consequences and be willing to learn and adapt.

"Staff may not understand full demands of improvement when they sign up"



Ten challenges in improving quality in healthcare: lessons from the Health Foundation's programme evaluations and relevant literature

Mary Dixon-Woods, Sarah McNicol, Graham Martin

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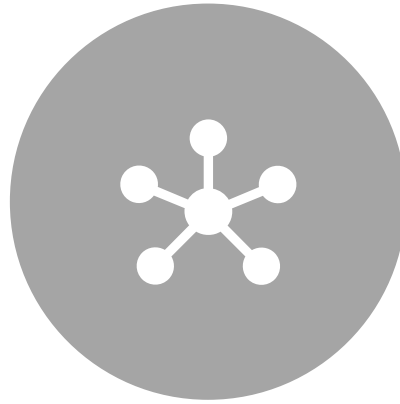
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Dixon-Woods M, McNicol S, Martin G. Ten challenges in improving quality in healthcare: lessons from the Health Foundation's programme evaluations and relevant literature. *BMJ Qual Saf.* 2012 Oct;21(10):876-84. Epub 2012 Apr 28.

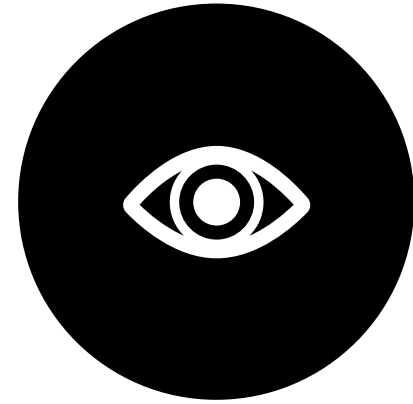
A: Align with Existing Efforts or Vision



**ENSURE LEADERSHIP
ENGAGEMENT**



**CONNECT WITH
EXISTING EFFORTS**



**TIE TO DIVISION OR
ORGANIZATION VISION**

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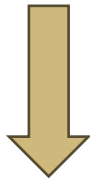
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C: Challenge = Ask questions

We have a predisposition to advice-giving



- Fails to affirm
- Disempowers the problem-solver
- Solve the wrong problem



THE Powerful Coaching Questions

1. What do you know?
2. How do you know it?
3. What do you need to know?
4. How can you find it?



THE UN-Powerful Coaching Questions

Why don't you just...?

What if you...?

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C: Challenge = Lean on their Expertise

Your expertise in topic area is not essential but rather in problem-solving methodology

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Ten challenges in improving quality in healthcare: lessons from the Health Foundation's programme evaluations and relevant literature

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H: Harness failure *and* success

Failure

- Early and Simulated
- Engaging stakeholders
- Usability testing
- Small tests

Institutional or cross-institutional knowledge



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“I think this idea that you learn the most from failures is wrong. It’s a good thing to say so that people feel better, but whenever you want to learn how to do something well, you start by studying people who are really good. **You don’t study all the failed sprinters to learn how to run fast; you study the person who’s really fast.”**

Ben Silbermann
Founder and CEO of Pinterest

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H: Harness failure *and* success

Success

- Recognize
- Celebrate
- Inspire



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COACH

- Connect with coachee
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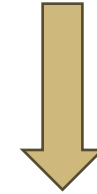
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Common Coaching Pitfalls



Working too hard



Define what you can do and what is expected of your coachees.

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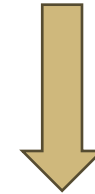
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Common Coaching Pitfalls



Wingin' it



Consistent meeting cadence;
Mapping out timeline of project
work

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Timeline	Coaching Review Topics	Assignment Due
Month 1	<ul style="list-style-type: none"> • Problem Statement • Voice of Customer 	<ul style="list-style-type: none"> • Guiding Coalition / Project Team • Problem Statement
Month 2	<ul style="list-style-type: none"> • Process Map • Affinity Diagram • Metrics 	<ul style="list-style-type: none"> • Voice of the Customer
Month 3	<ul style="list-style-type: none"> • Business Case 	<ul style="list-style-type: none"> • Process Map • Identify Process, Outcome Metrics • Affinity Diagram
Month 4	<ul style="list-style-type: none"> • Pareto Analysis • Hierarchy of Interventions • Positive Deviant • Design Thinking 	<ul style="list-style-type: none"> • AIM Statement • Business Case
Month 5	<ul style="list-style-type: none"> • Pre – mortem • Equity Analysis 	<ul style="list-style-type: none"> • Pareto Analysis • Identify Positive Deviant • Design 1 – 2 interventions
Month 6	<ul style="list-style-type: none"> • Vision & Logo • Run Charts & SPC 	<ul style="list-style-type: none"> • Complete Change Management Playbook • Implementation Plan • Data Collection Plan
Month 7	<ul style="list-style-type: none"> • How to give a great presentation 	<ul style="list-style-type: none"> • Review Communication Plan • Review Celebration of Wins • Data Collection
Month 8 – 9	<ul style="list-style-type: none"> • Scholarship in QI 	<ul style="list-style-type: none"> • Presentation

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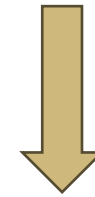
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Common Coaching Pitfalls



Finishing meetings without next steps



Build time for action item definition

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Part of coaching = giving feedback

- 5:1 ratio of “good” to “bad”
- Low inference = observable, actionable



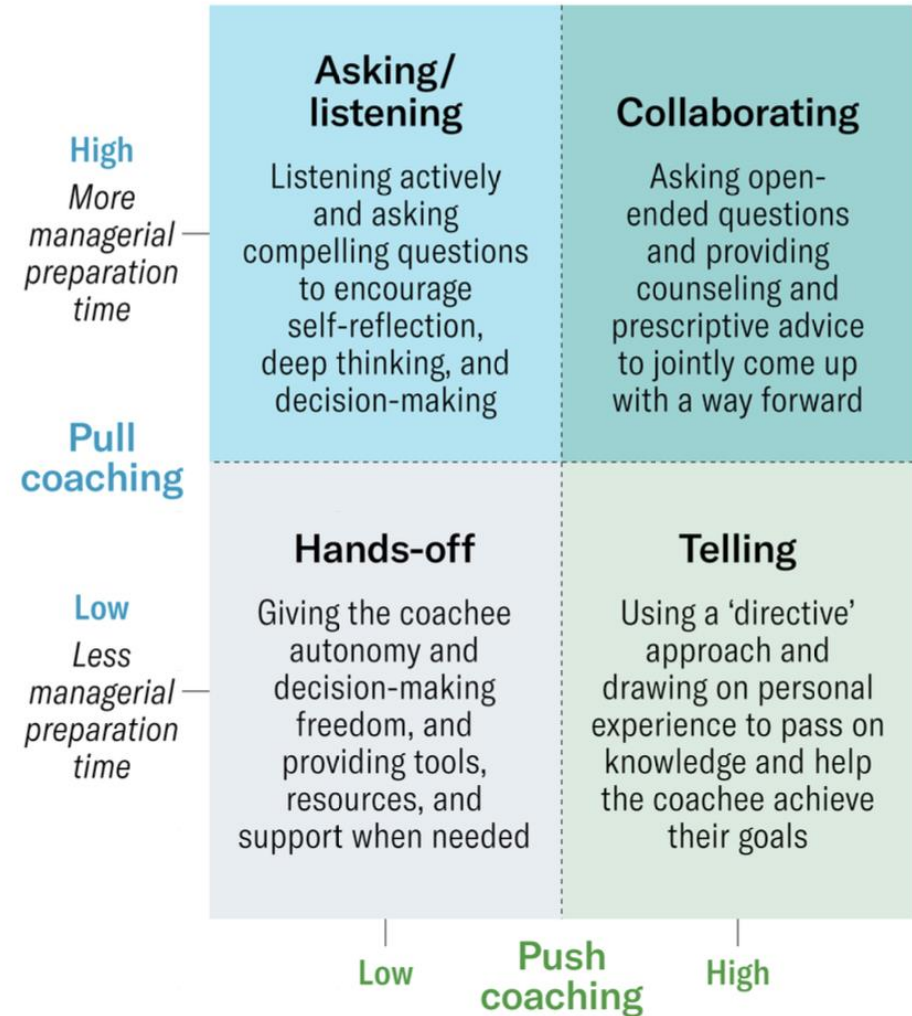
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Know when to flex to more coaching or managing

- Someone asking for help = coaching
- Leading the project = managing
- Learners = probably both



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Source: Adapted from *Coaching: The Secret Code to Uncommon Leadership*, by Ruchira Chaudhary



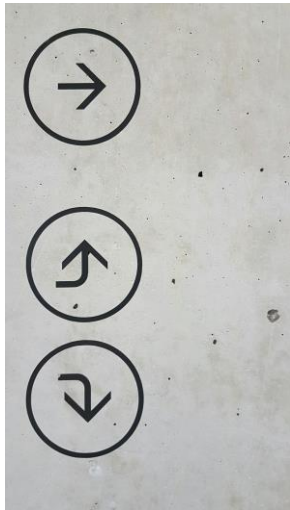
Coaching & Managing: Applied

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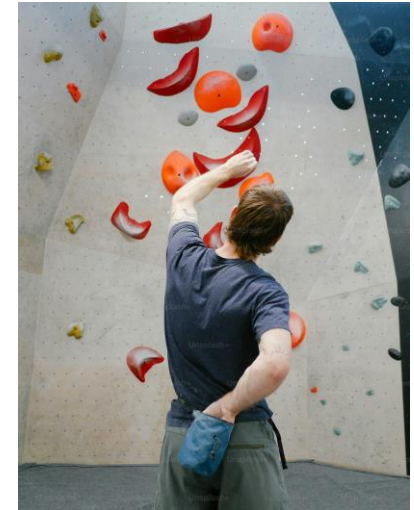




Project/Problem Selection



Problem Understanding



Solution Generation & Testing

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Framework:

Logistics:

Common Pitfalls:

Powerful Coaching Questions:

Revise or Get Rid OF



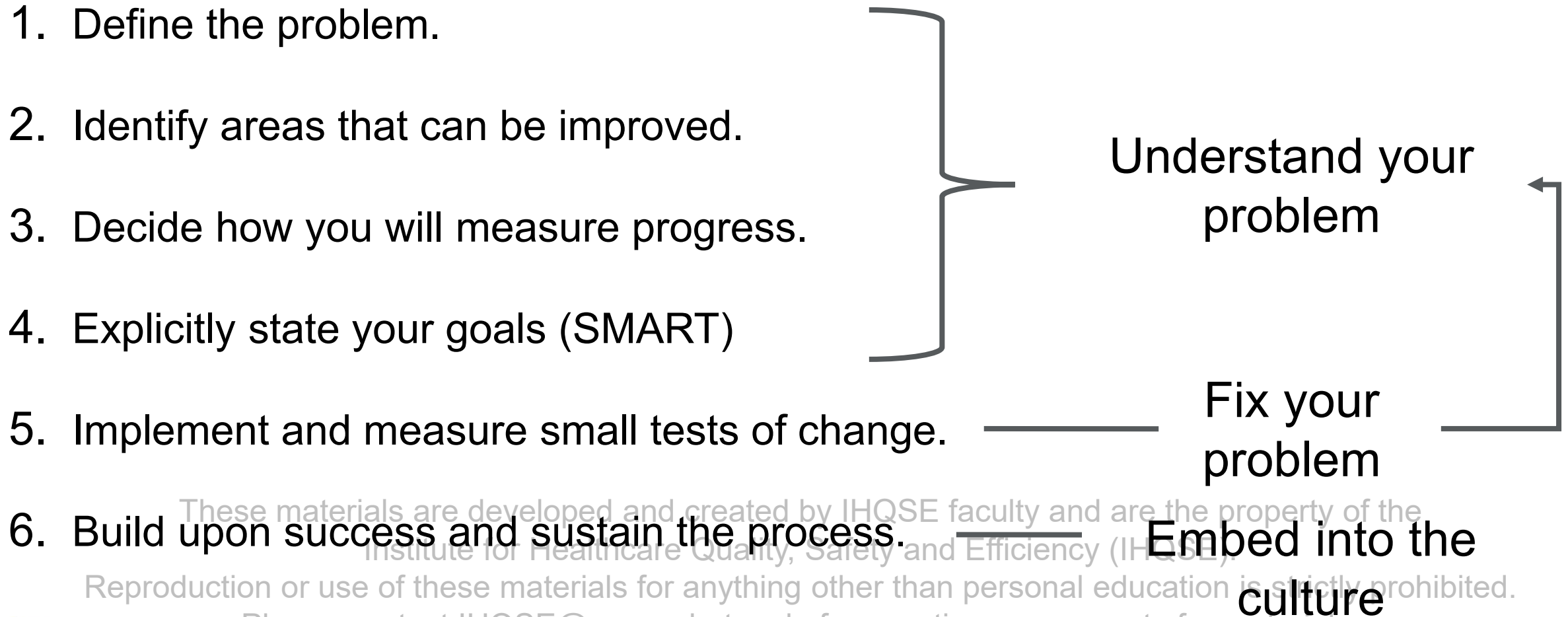
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Six Steps for a Successful QI Project



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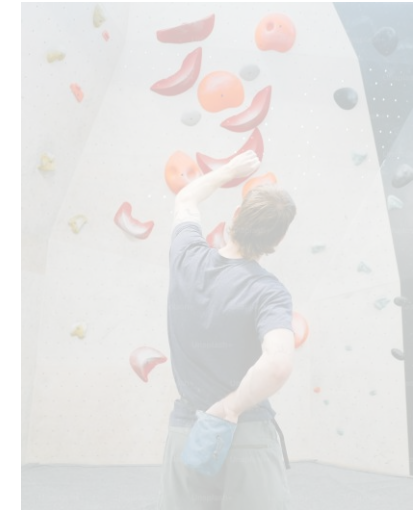
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Project/Problem Selection



Problem Understanding



Solution Generation & Testing

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Project/Problem Selection

Framework: value driven, existing resources, alignment, true problem, measurable, realistic timeline

Logistics: expand universe

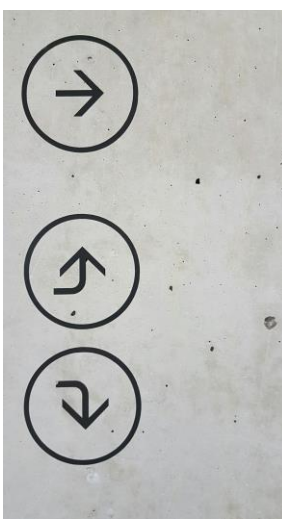
Common Pitfalls: expand universe, how to find/solicit project ideas

Apply powerful questions:

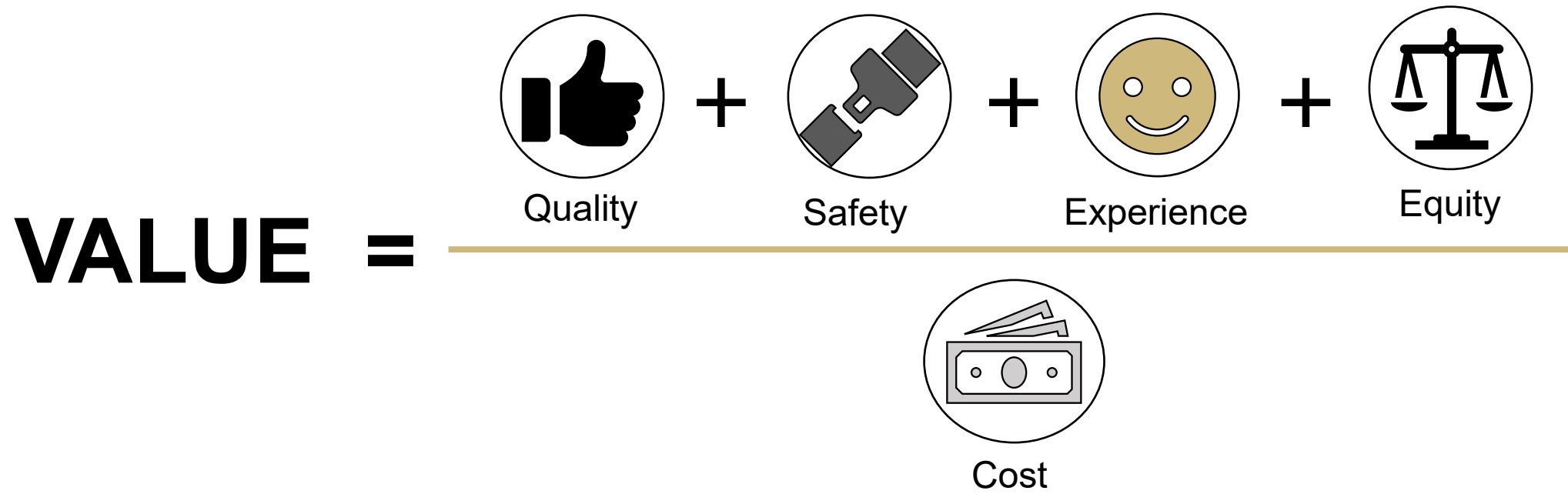
- **What do you know?**
- **How do you know it?**
- **What do you need to know?**
- **How can you find it?**

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VALUE = $\frac{\text{Quality} + \text{Safety} + \text{Experience} + \text{Equity}}{\text{Cost}}$



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改善

Eight Forms of Waste in Healthcare



Underutilization



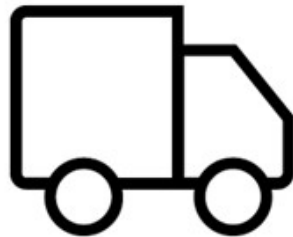
Inventory



Motion



Defects



Transportation



Waiting



Extra Processing



Overproduction

TI

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“PCPs need to refer patients with positive stool-based DNA test for colonoscopy.”

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100%

IE: NOT a (the)
problem.

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“I want to reduce the amount of blood drawn for routine blood draws to prevent anemia.”

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“I want to reduce the amount of blood drawn for routine blood draws to prevent anemia.”

What is your unit of measure?

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“I want to reduce the number of times patients get poked for non-urgent labs while admitted to the hospital...”

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“I want to reduce the number of times patients get poked for non-urgent labs while admitted to the hospital...

...and I graduate in 4 months.”

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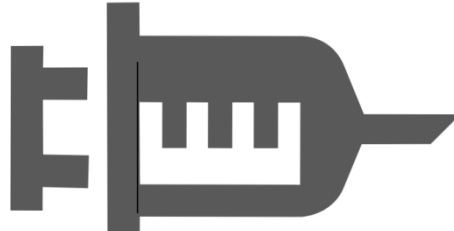
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6 months


3,077
patient-days between
January and August with
>3 venipunctures


47
patient-days between
January and August with
>7 venipunctures







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12 months

-  Collection batching
-  Auto add-ons
-  Order screen modification
-  Provider education
-  Lab-provider communication
-  AHT workflow management

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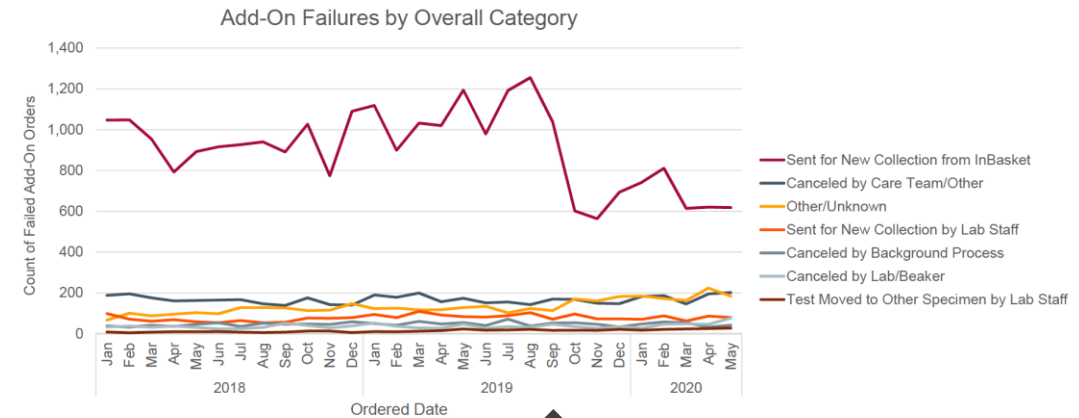
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3 years

Add-On Failures Over Time



uhealth

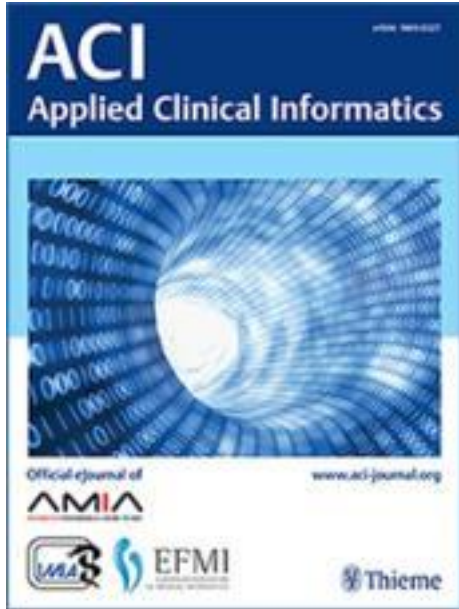
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4 years



CIC 2021

Dig Deeper: A Case Report of Finding (and Fixing) the Root Cause of Add-On Laboratory Failures

Tyler Anstett , Chris Smith , Kaitlyn Hess , Luke Patten , Sharon Pincus , Chen-Tan Lin , P. Michael Ho

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Project/Problem Selection

Framework: value driven, existing resources, alignment, true problem, measurable, realistic timeline

Logistics: expand universe, how to find/solicit project ideas

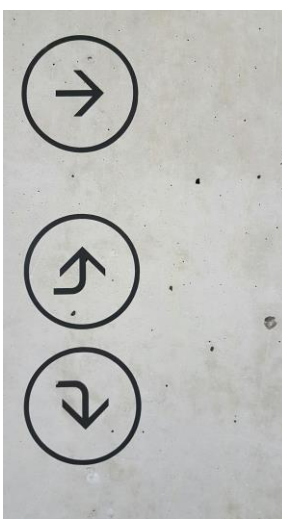
Common Pitfalls: expand universe, how to find/solicit project ideas

Apply powerful questions:

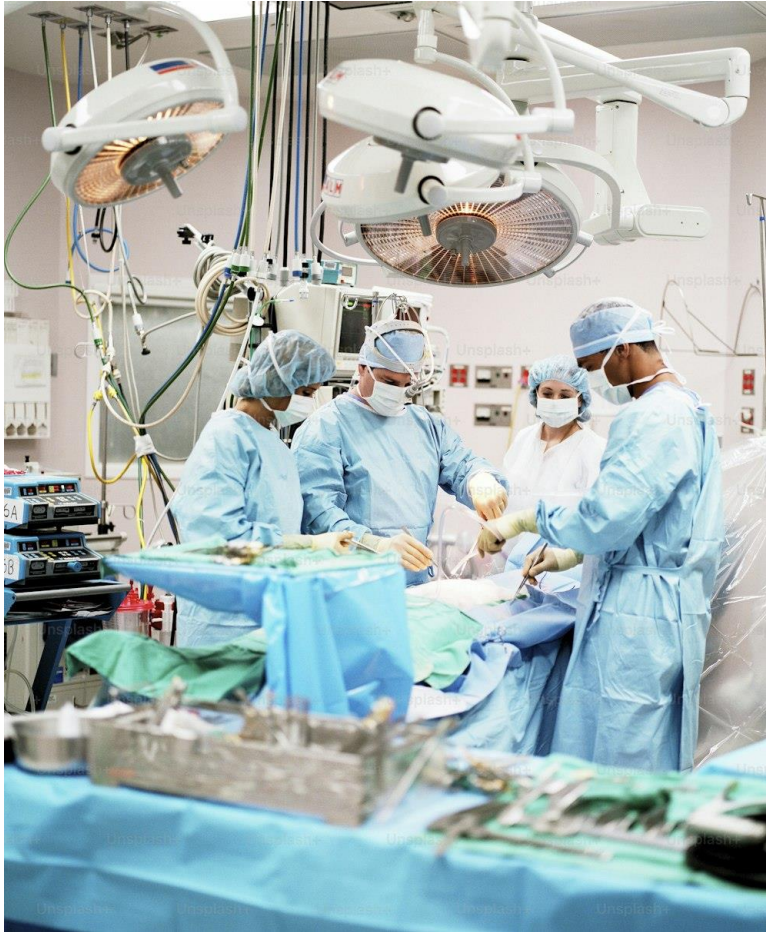
- **What do you know?**
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- **What do you need to know?**
- **How can you find it?**

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“I want to improve our post-operative blood clot rates.”



Coach response: “Eh...that’ll be really hard data to get. I recommend we focus *your* project on post-operative wound infections instead.

How does that make YOU feel?

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(Almost) everyone will propose a specific project or intervention...your job as the coach is to help them consider a broader universe!

Open

Explore many ideas

Coach's job is to keep discussion broad... "What else?"

Give examples of types of questions

Narrow

Organize information

Coach may elicit constraints

Give examples of types of questions

Close



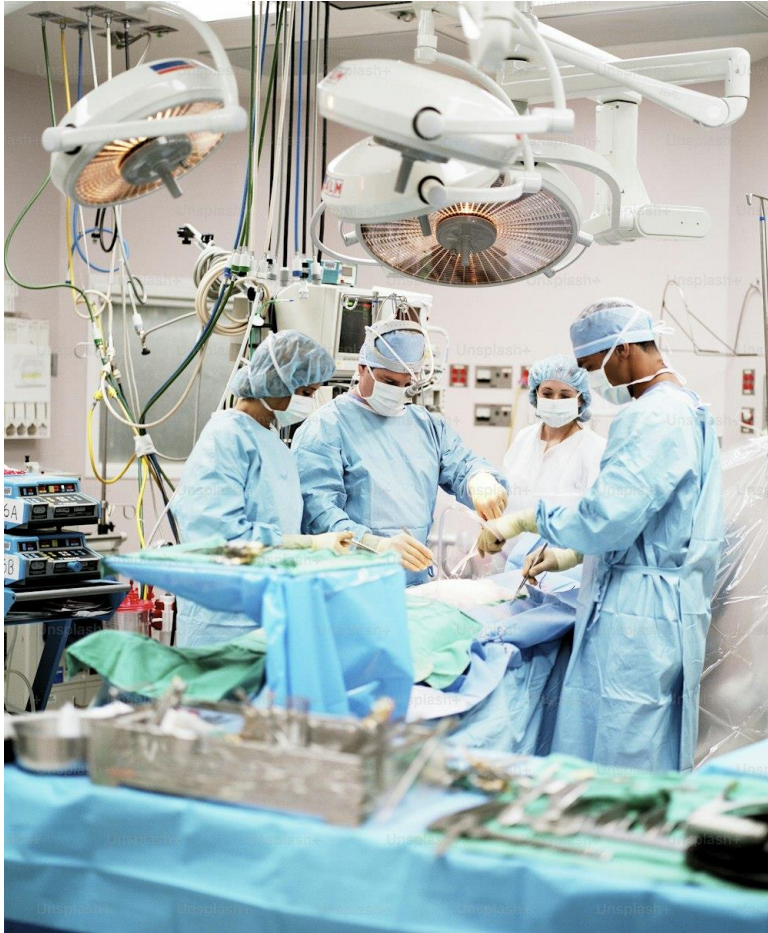
Next Steps

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“I want to improve our post-operative blood clot rates.”



Open
What other perioperative problems might we have?

Narrow
What are the three most common?

Close
Investigate which we have data for.

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Breakout #2



10 minutes

Expand the possibilities for your project / problem then close to something else.

Coach each other!

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Project/Problem Selection

Framework: value driven, existing resources, alignment, true problem, measurable, realistic timeline

Logistics: expand universe, how to find/solicit project ideas

(Other) Common Pitfalls: someone else is working on it

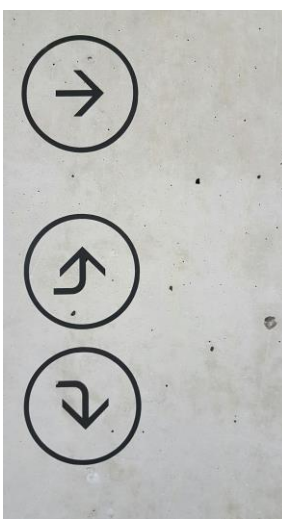
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“I want to improve our rates of inpatient glycemic control...”

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Preventable hypoglycemia metric in its **Quality and Accountability Scorecard.**

The metric tracks episodes of significantly low blood glucose, which are considered preventable patient harm.

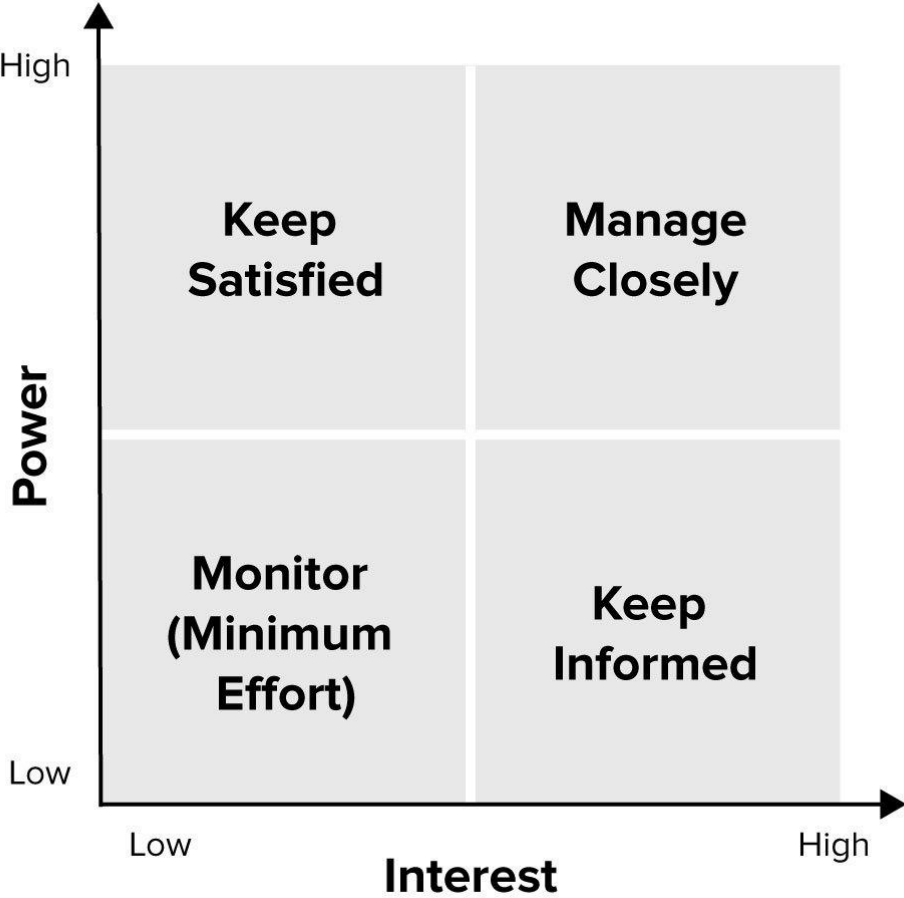
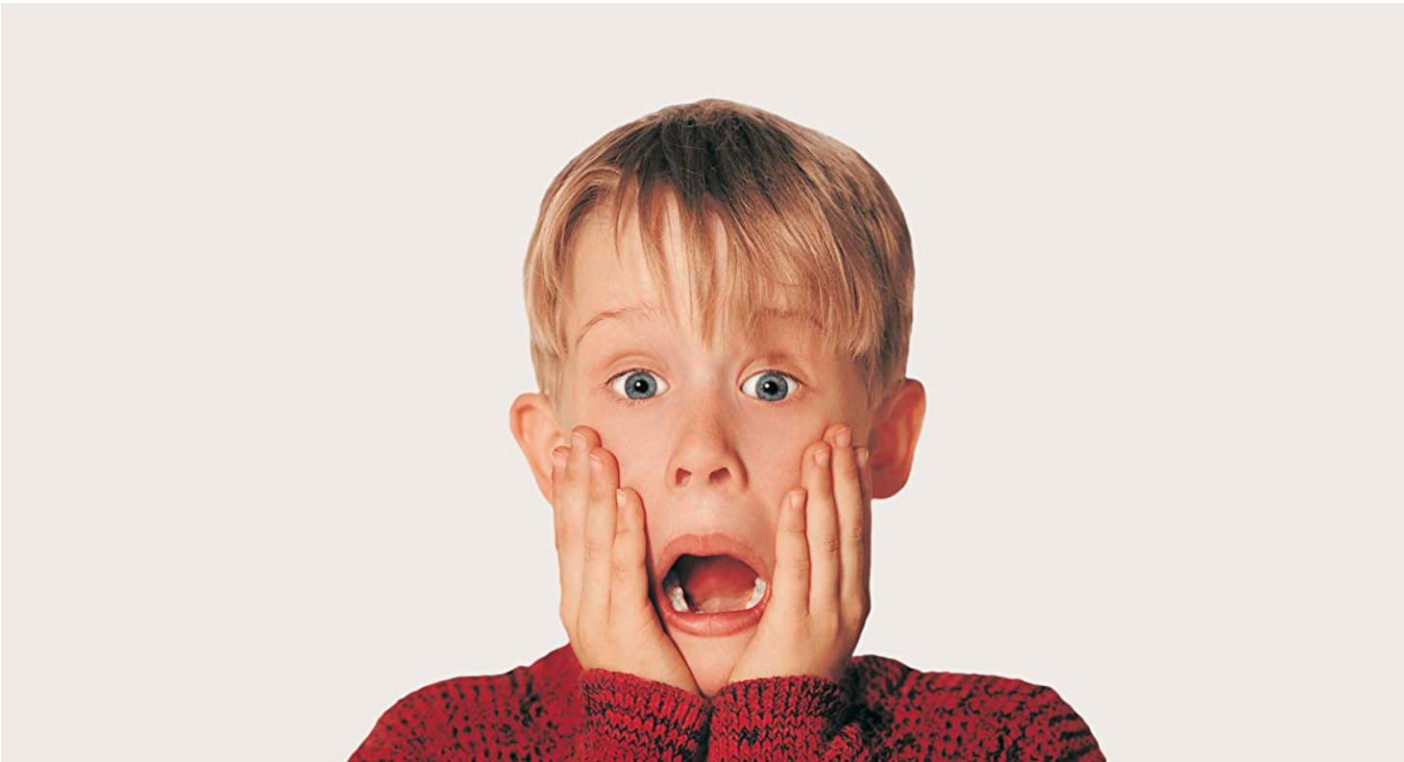
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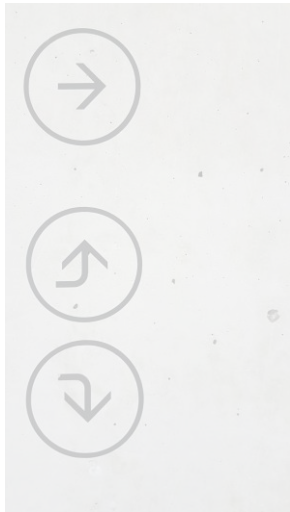
Key partner management



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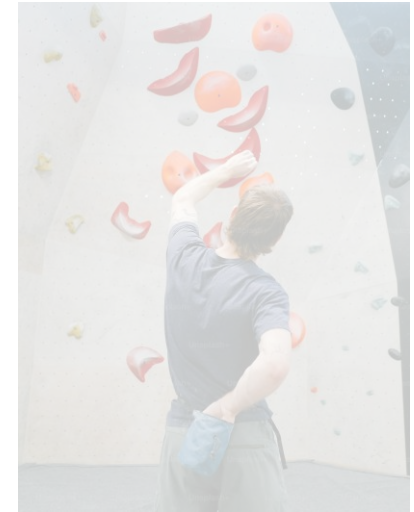
Coaching for Successful...



Project/Problem
Selection



**Problem
Understanding**



Solution Generation
& Testing

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Problem Understanding

Framework: root cause, right/enough people, data!

Logistics: required elements – voice of the customer, process map, data!

(Other) Common Pitfalls: survey is not an intervention

Apply powerful questions:

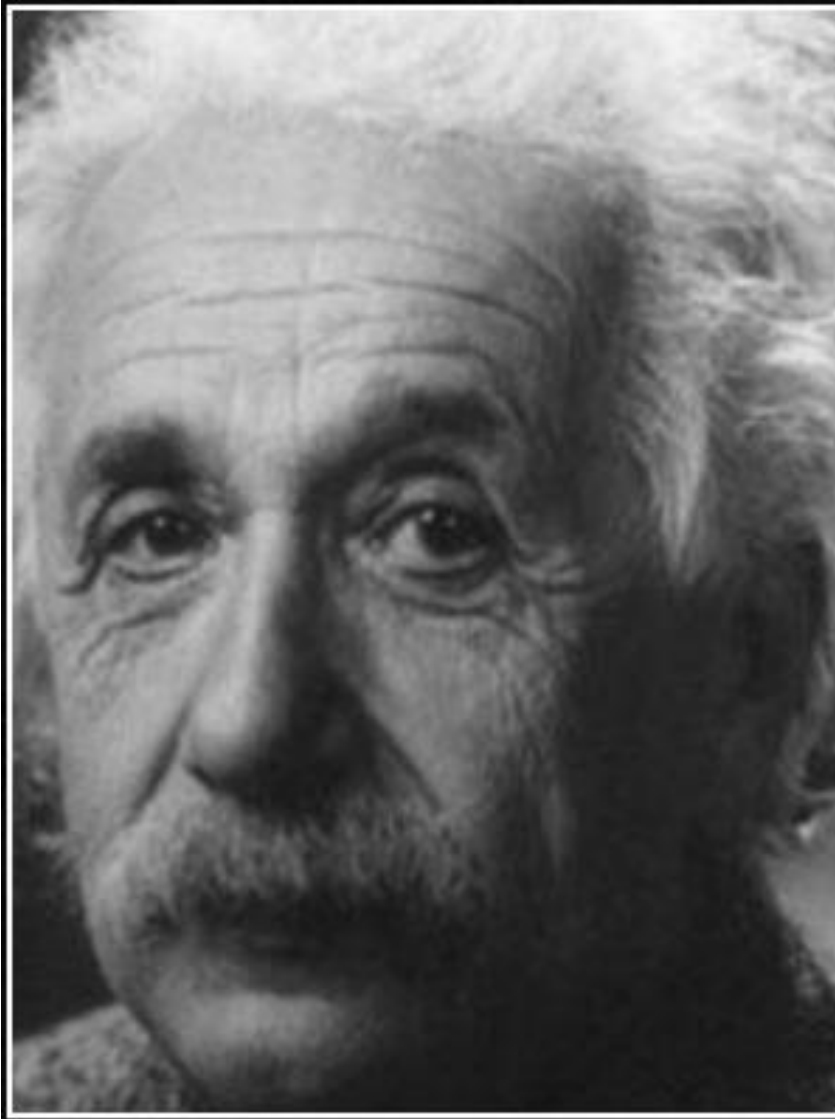
- What do you know?
- How do you know it?
- **What do you need to know?**
- **How can you find it?**



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If I had an hour to solve a problem
I'd spend 55 minutes thinking about
the problem and 5 minutes thinking
about solutions.

— *Albert Einstein* —

AZ QUOTES

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Walk a mile in his shoes...

Gemba
現場



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Walk a mile in his shoes...

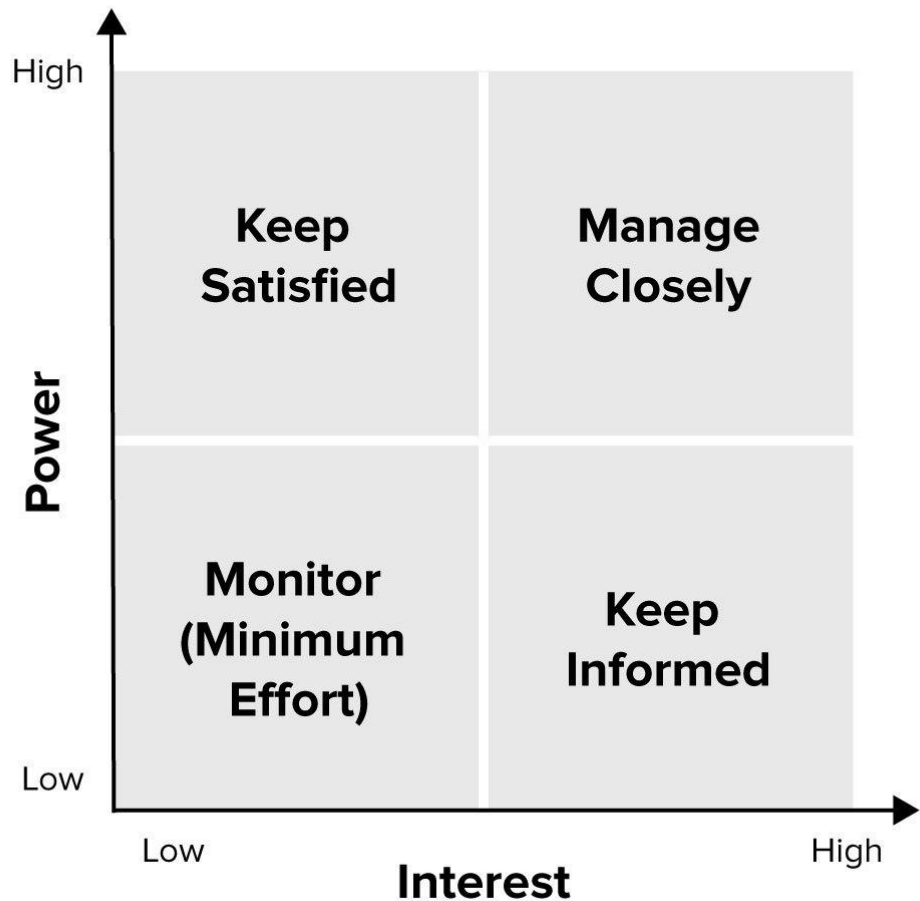


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- Involve/speak to customers, front line staff, patients... **everyone that touches or is affected by process**
- Don't assume you know, get their point of view
- Avoid hubris, expertness

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“In God we trust. All others must bring data.”

- W. Edwards Deming



“The goal is to turn data into information, and information into insight.”

- Carly Fiorina, former executive, president, and chair of Hewlett-Packard Co.

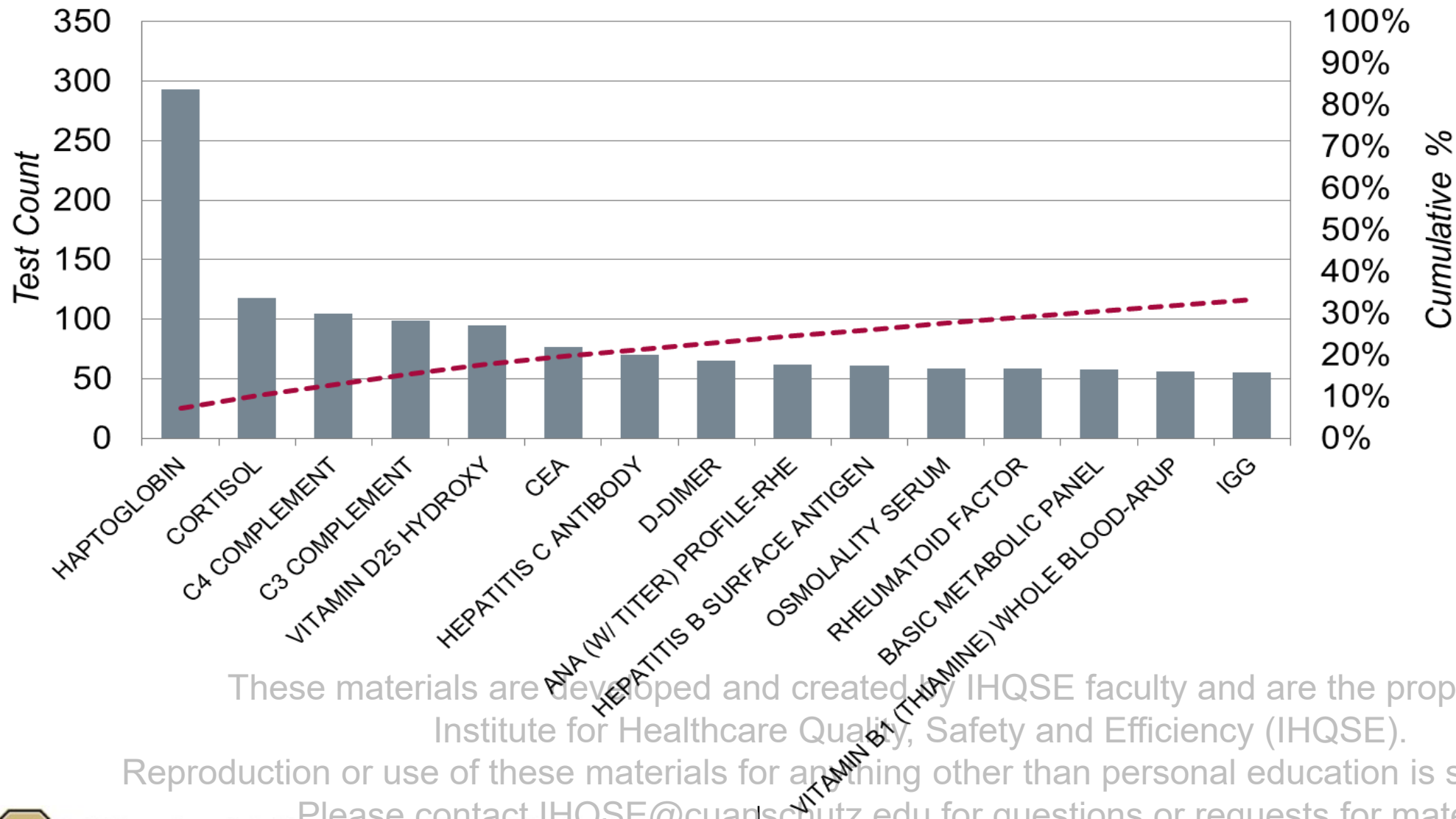
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Top 15 Add-On Failures: UCH Inpatient January – August 2017



Haptoglobin is the most failed add-on labs



Investigate haptoglobin (ask WHY?)

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Problem Understanding

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Logistics: required elements – voice of the customer, process map, data!

(Other) Common Pitfalls: survey is not an intervention

Apply powerful questions:

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- How do you know it?
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- **How can you find it?**

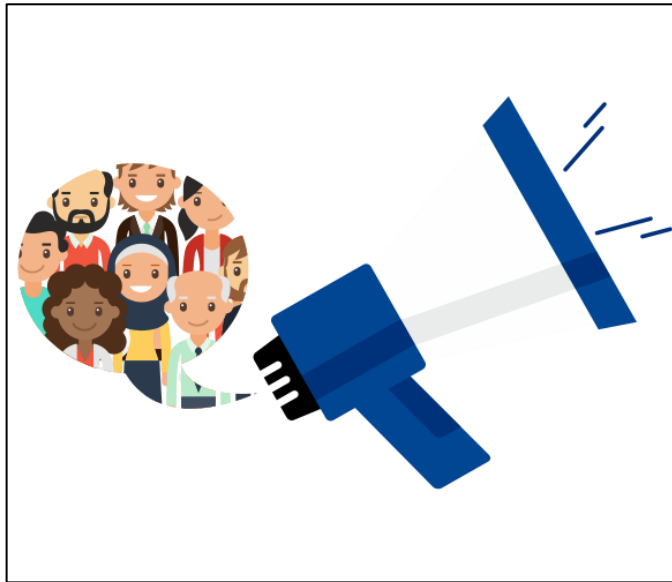


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Every project must include...



Voice of the Customer



5 Why's

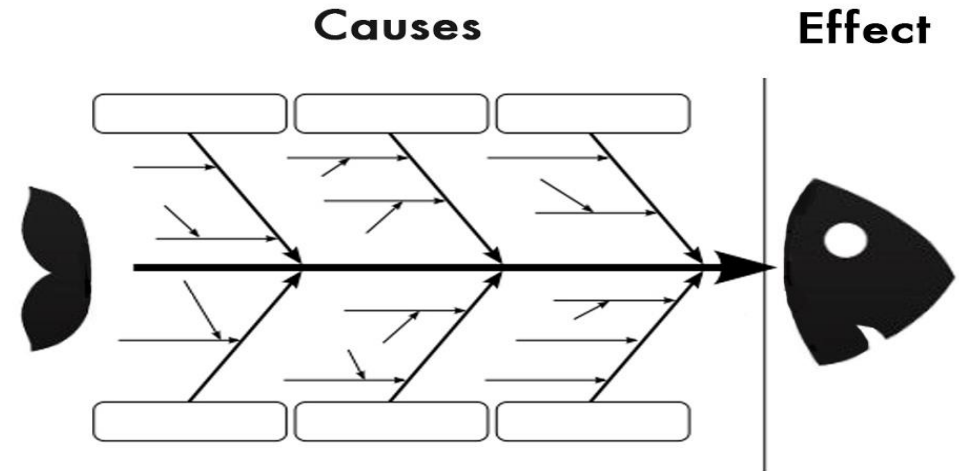
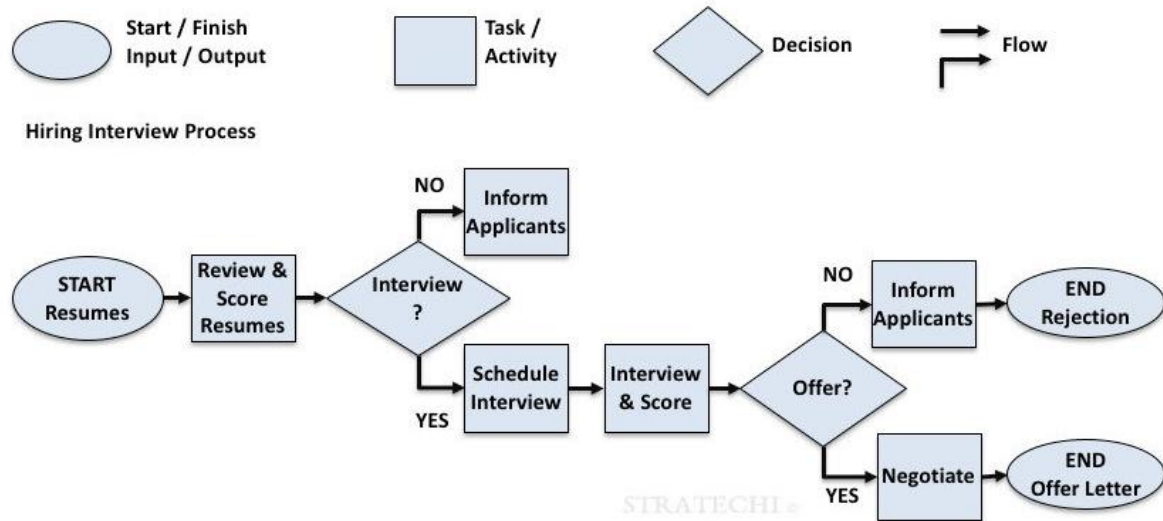
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Every project must include...



(Gemba derived) Process Map

Fishbone Analysis

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Every project must include...

DATA!!!

baseline performance

business case

process metrics

data over time

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Missing (or NO) data



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Problem Understanding

Framework: root cause, right/enough people, data!

Logistics: required elements – voice of the customer, process map, data!



(Other) Common Pitfalls: survey is not an intervention, manual chart review

Apply powerful questions:

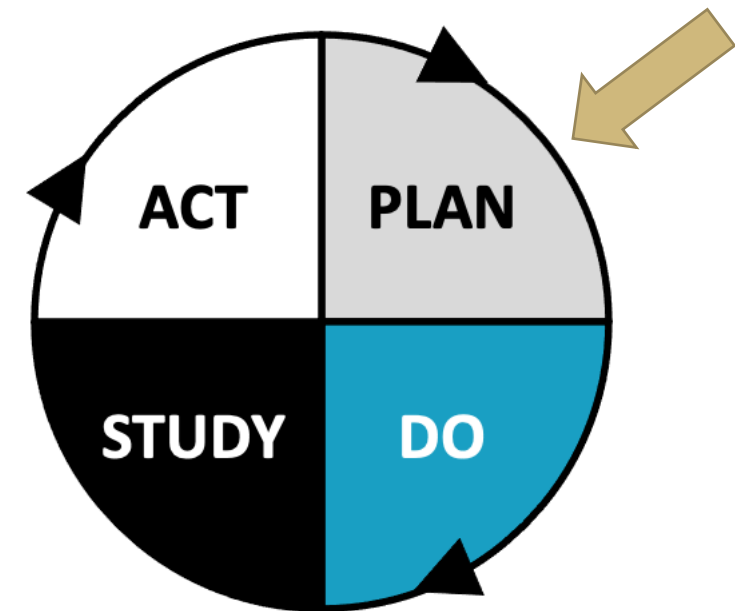
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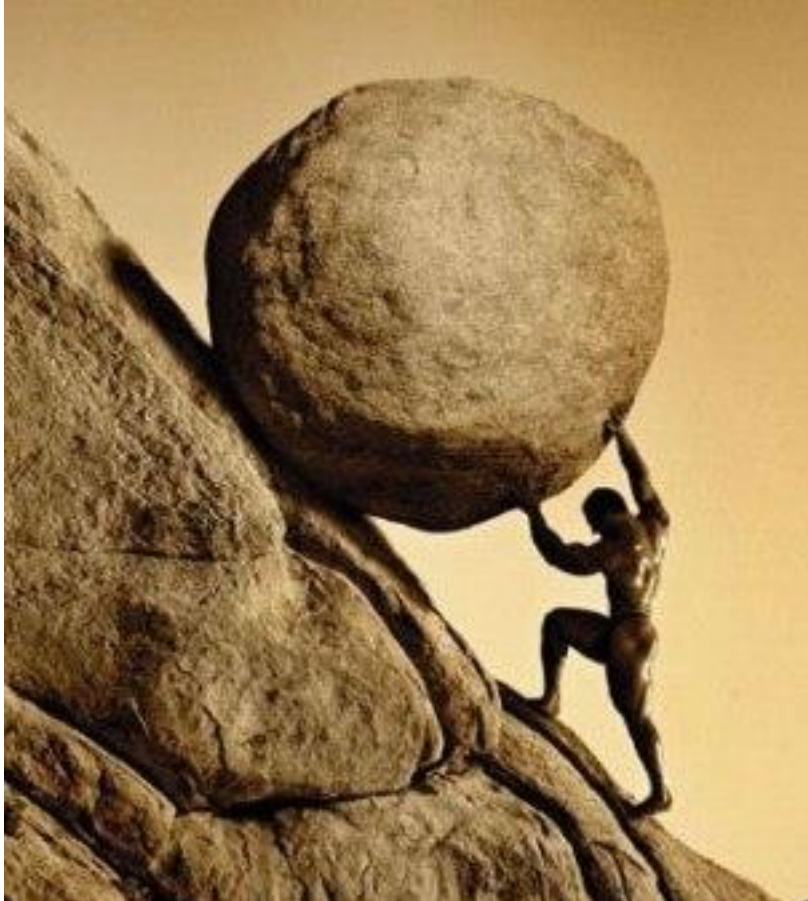


Designing, delivering, and analyzing a survey can be a lot of work...but it's **not** an intervention.



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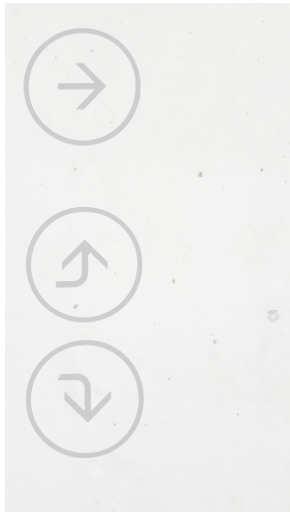
Manual chart review is
ONLY for identifying data
sources and validation.

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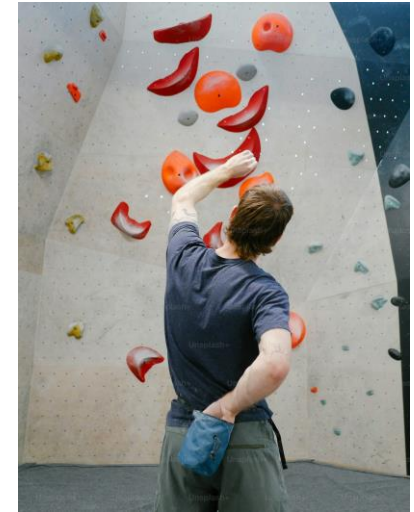




Project/Problem Selection



Problem Understanding



Solution Generation & Testing

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Solution Generation & Testing

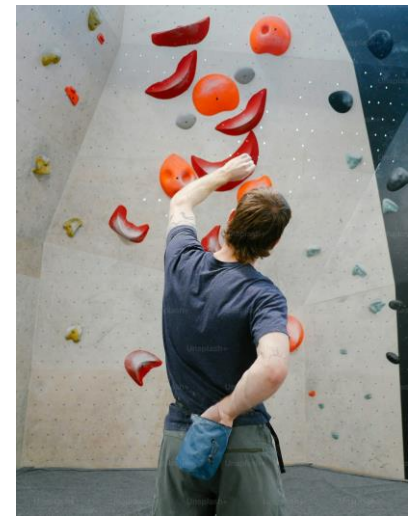
Framework: based on problem understanding, iterative

Logistics: must be tracked, designed WITH users

(Other) Common Pitfalls: predetermined PDSA cycles, over-reliance on EHR interventions, targeting the bottom of the hierarchy

Apply powerful questions:

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50% of IV antibiotics are wrong on discharge.



Create a standardized workflow in EHR to populate the orders.

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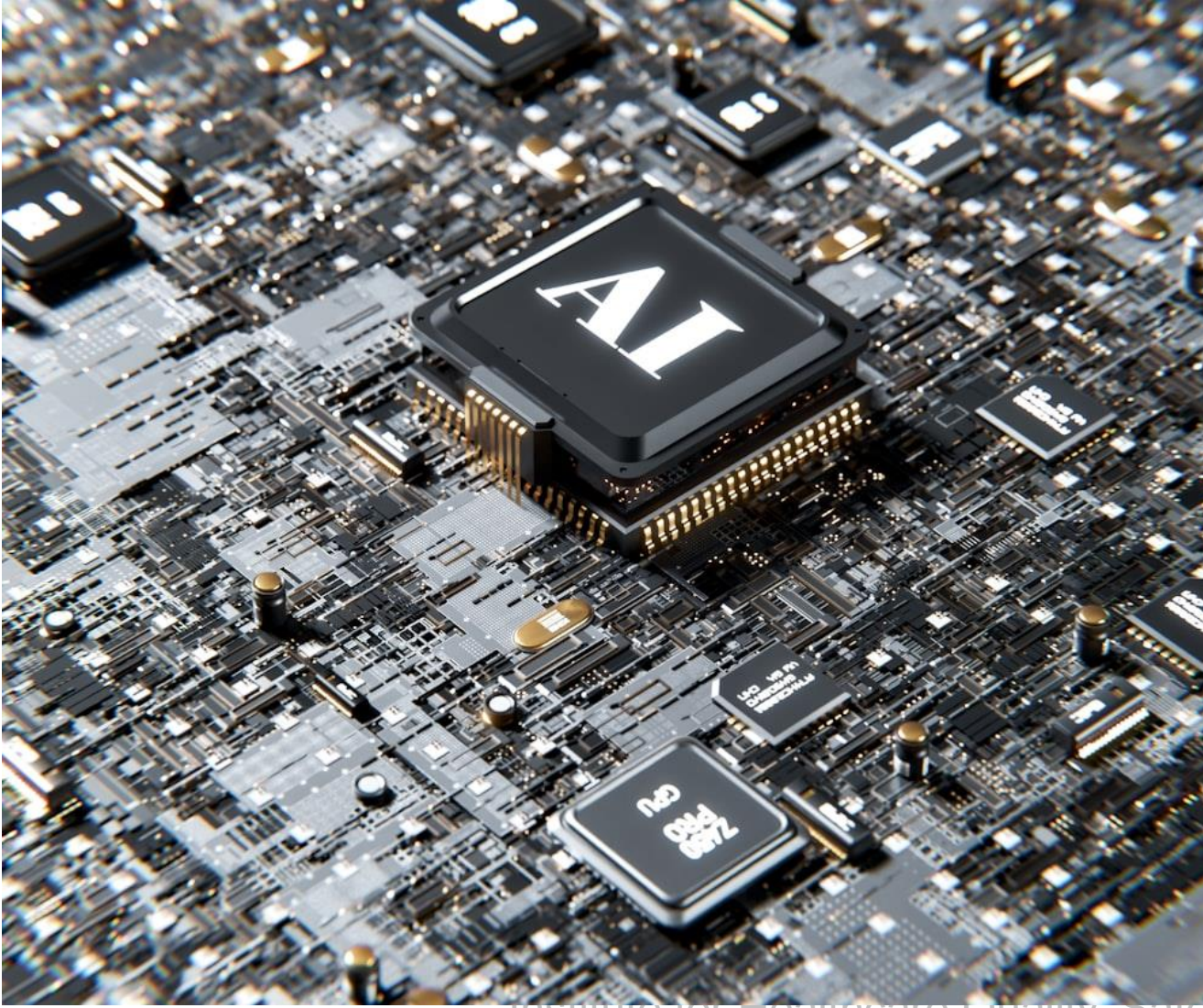


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“I want to use machine learning to identify patients at risk for deterioration.”

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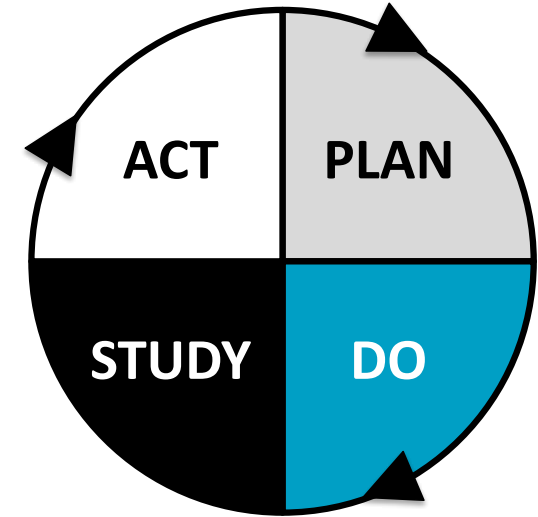
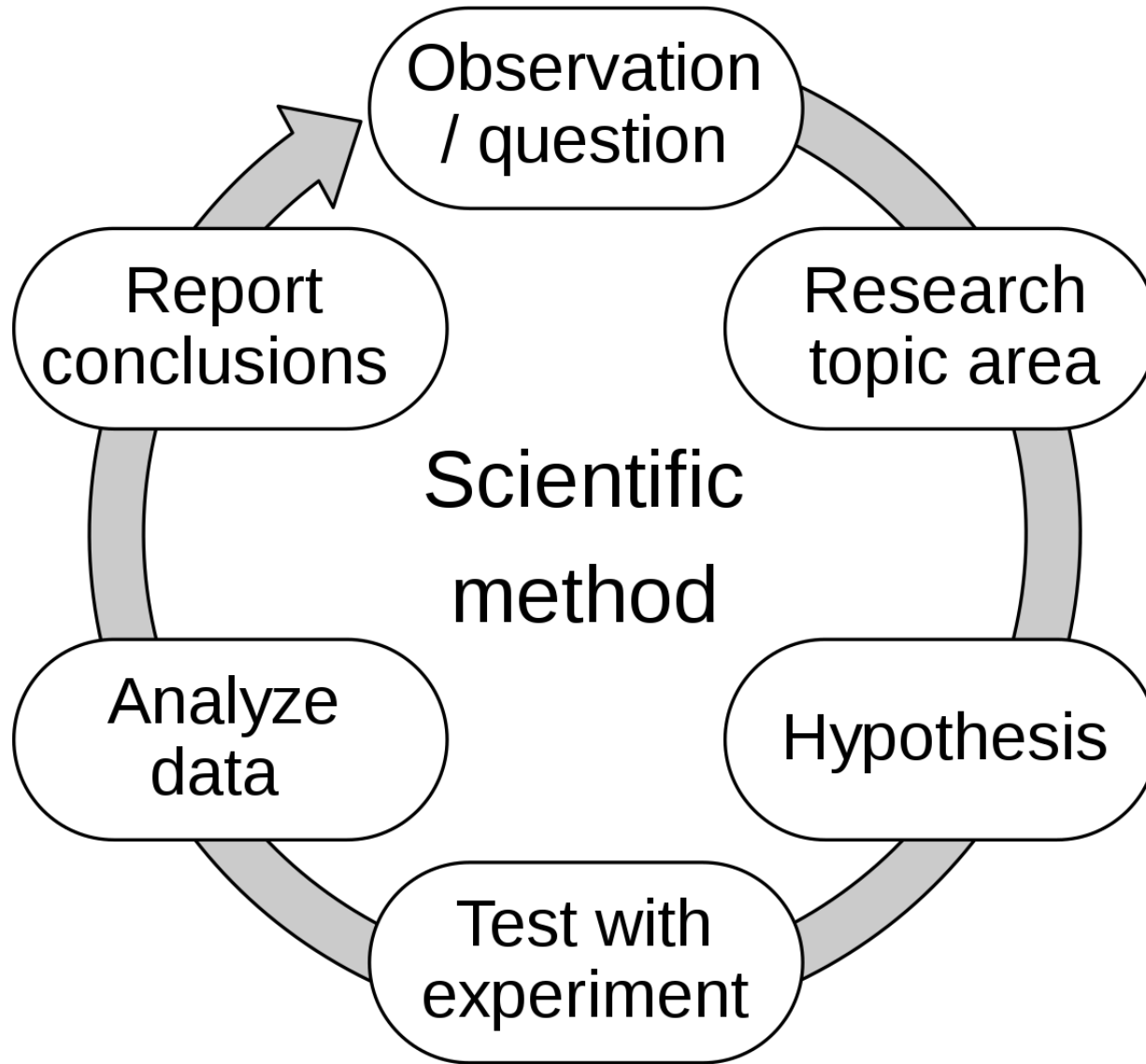
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D-M-A-I-C



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Solution Generation & Testing

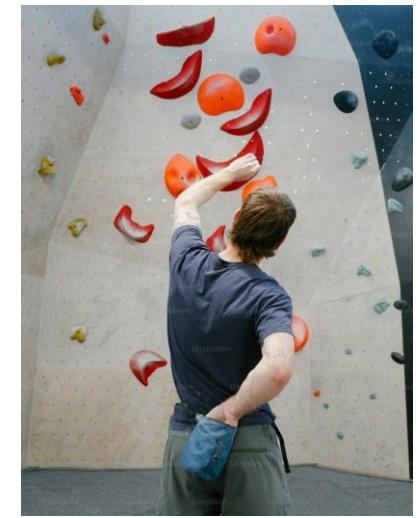
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Sense a problem



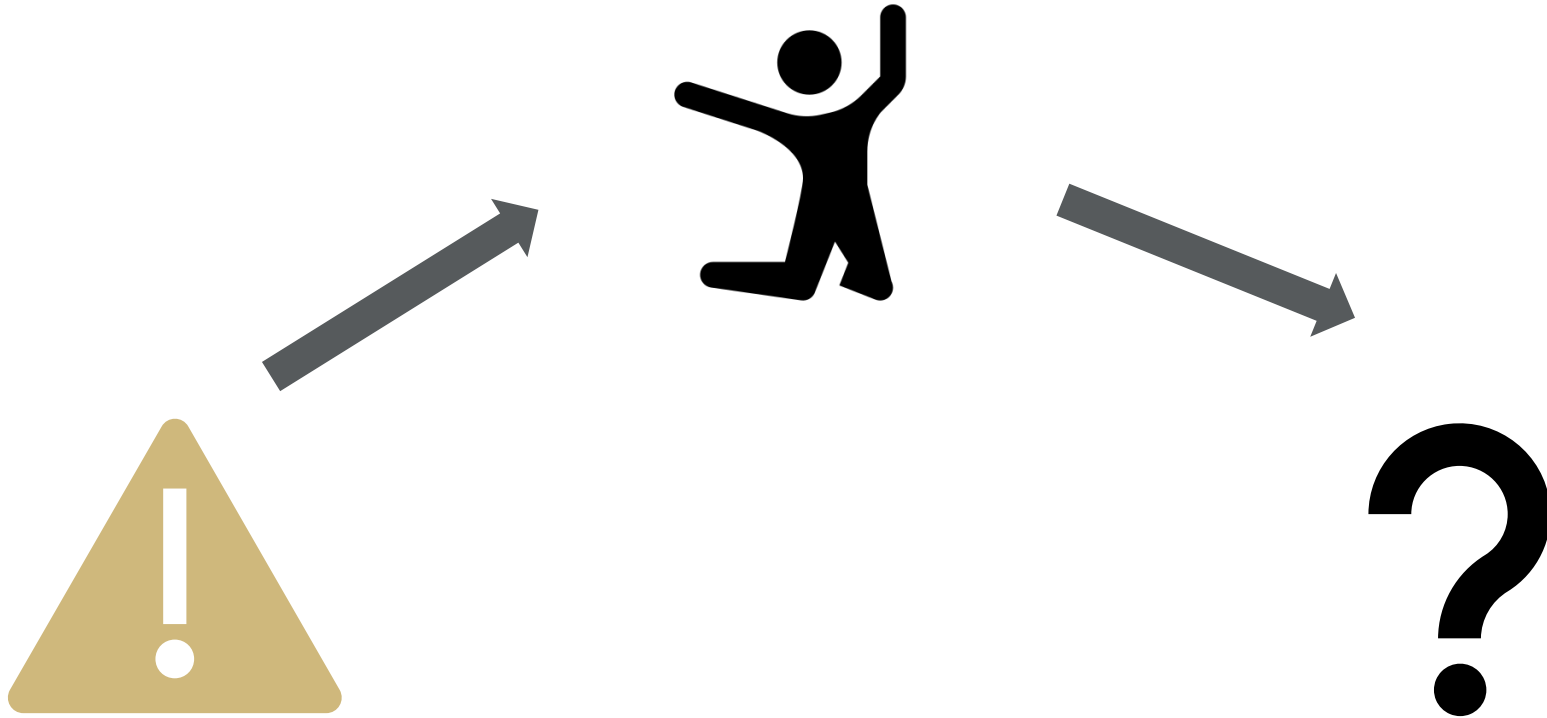
No improvement

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Sense a problem

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Sense a problem



Sustained improvement

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OUTCOME

Your (ultimate) measure of success.

PROCESS STRUCTURE

The things that lead to your outcomes **AND** are your interventions happening.

BALANCE

What you don't want to change.

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Pediatric Vaccination Schedules

OUTCOME

Percentage of patients (in a clinic) vaccinated
(NOTE: actual outcome is disease)

PROCESS

% of patients offered vaccine
% of patients declined

STRUCTURE

Intervention = pop-up reminder

- % of alerts ignored / followed

BALANCE

Provider alert fatigue

Less well-child exams for lower SES with a mistrust of vaccines.

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YOU ≠ USER

BestPractice Advisory - Roo, Koda

Attention (1)

 Hyperlipidemia (BPA # 89568)

Your patient may have hyperlipidemia based on an encounter or problem list diagnosis.

RECOMMENDATION: Consider starting a statin medication.

This is a best practice at our institution.

[Open hyperlipidemia treatment pathway](#)

Dismiss

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Pre-Mortem Analysis

- Comes at the beginning of a project rather than the end
- Unlike a typical problem identification session in which stakeholders are asked what *might* go wrong.

**Assumes that the project has been implemented and failed,
then asks “What did go wrong?”**

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Solution Generation & Testing

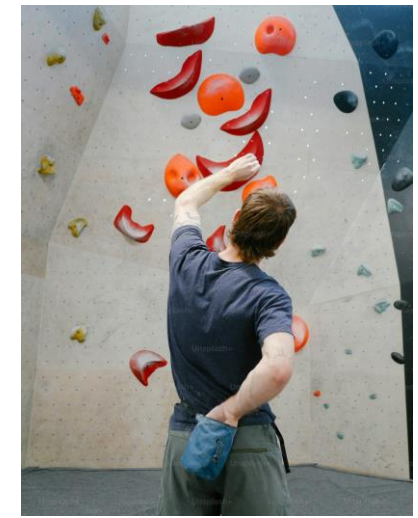
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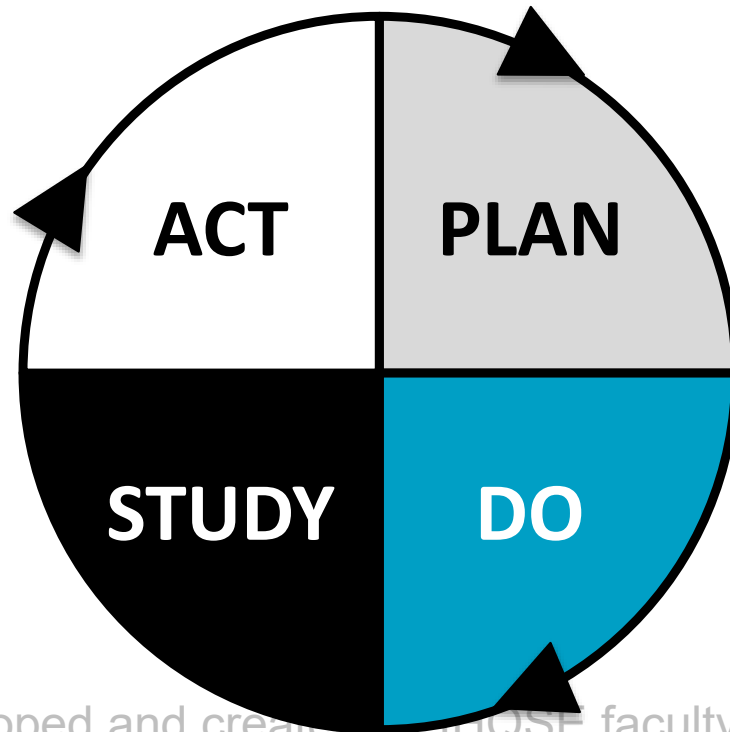
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Predetermined PDSA Cycles



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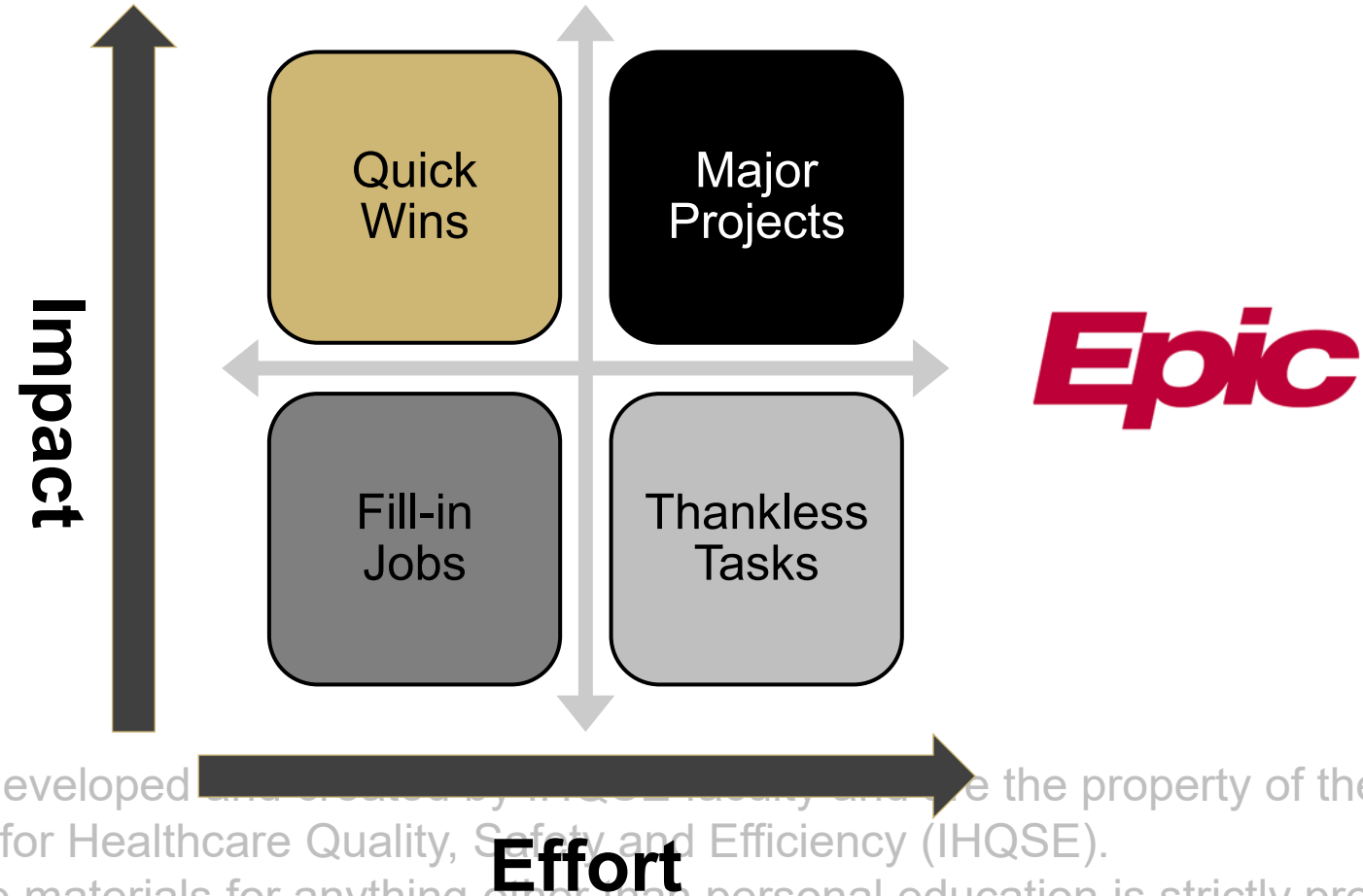
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Over reliance on EHR-based solutions



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reated
Quality,
anything

ited.

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- Defines surgical category by color

These materials are organized by color. Shelf labels indicate specific procedure in coordinating colors

Shelf liners help prevent tears in outer pouch, ensuring sterility and reducing waste. Property of the

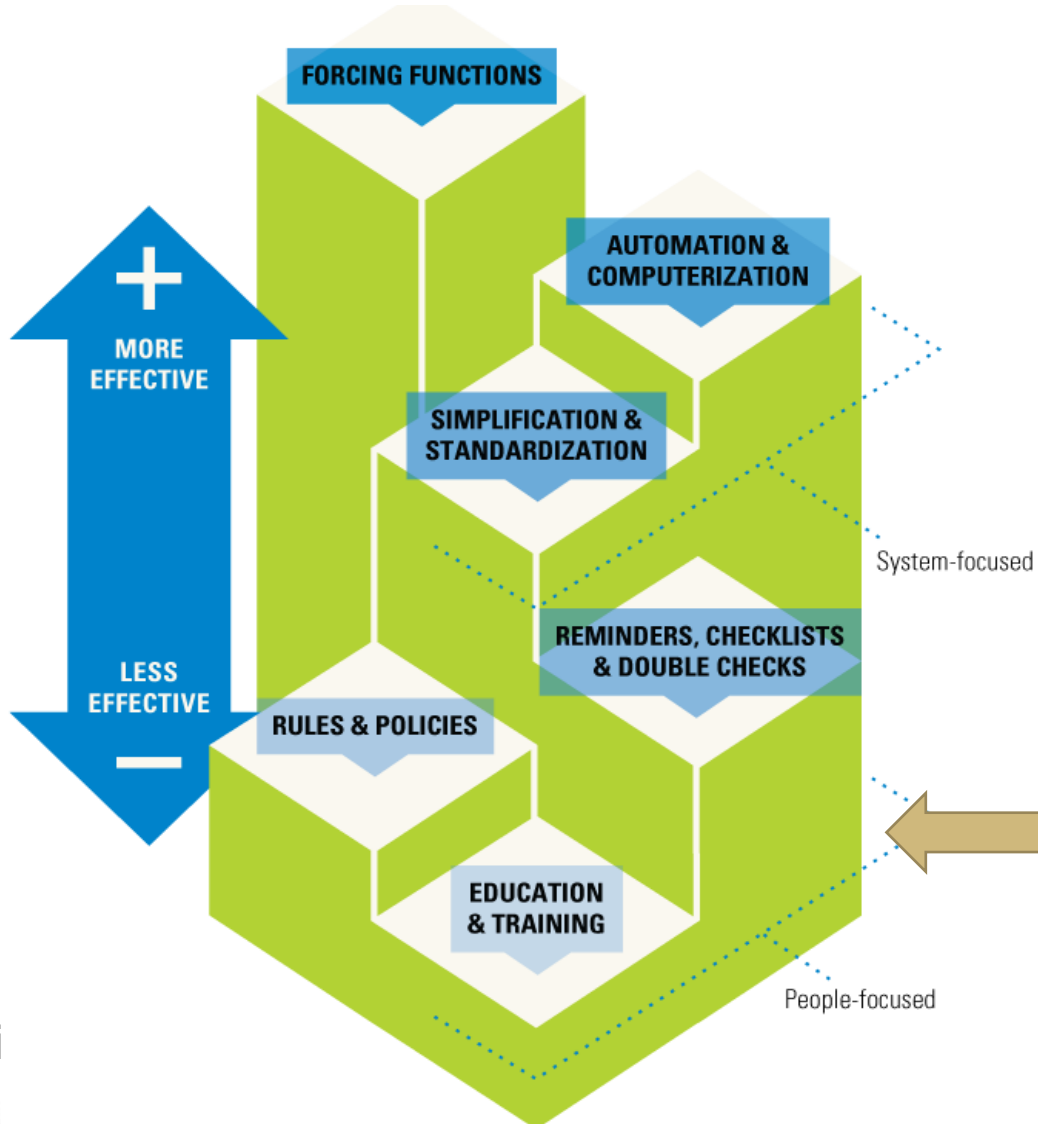
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Targeting the bottom of the hierarchy



Sometimes necessary,
but rarely sufficient

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Evaluating Quality Proposals

In reviewing the proposal, please consider the following elements:

1. **ALIGNMENT:** do/does the metric(s) align with the priorities of the hospital? Department?
2. **ACTIONABLE BY PARTICIPANTS:** can trainees improve or change the performance of the metrics selected?
3. **DATA:** does the program have access to data that accurately reflects performance on the metric? Can they reliably obtain the data?
4. **GOALS:** are the goals attainable? are they too easy?
5. **IMPACT:** will this improve patient care?

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Dr. QC, thanks so much for agreeing to be my mentor and QI project coach.

Ok I have this amazing idea for a QI project. I totally know that patients are on oxygen longer than then need to be. What we aim to do is to speed the time that it takes to wean patients off oxygen. I am using as a model the ICU initiative to speed time to weaning off ventilators and get patients extubated sooner. The plan is that we will put in place a process so the nurses will do a trial of reducing the oxygen concentration for all patients by 1 liter every four hours. If the sats drop the patient goes back up. If they hold greater than 90 then it is weaned further 4 hours later. I think if we are successful, we can cut the percentage of hospital days that patients are using oxygen by 10%.

I am ready to start I just need your help getting the Chief Nursing Officer to mandate that the nursing staff begin this weaning protocol.

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Perioperative hyperglycemia is correlated with an increased risk of postoperative infectious complications. To impact the rate of surgical site infections, a perioperative glycemic control protocol was recently established.

Compliance with this metric could improve glycemic control for a large swathe of patients undergoing surgery.

Aligned with hospital goal to decrease surgical site infections and CMS measure of Treatment of Hyperglycemia with Insulin.

Metrics:

Anesthesia provider compliance with intraoperative insulin protocol.

Proposed Intervention:

- 1. Education:** multi-faceted education campaign to help providers understand the protocol.
- 2. Data:** will be providing providers with frequent feedback on either their individual or collective adherence to the protocol.

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Powerful Questions: Problem Selection

- What do you know about this problem? How do you know it?
- What do you need to know about this problem? How can you find it?
- Who else may be interested or impacted by this problem?
- Why does it matter?

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Powerful Questions: Intervention

- Based on data, what are all of the potential interventions?
- Which of these interventions represents the best mix of effort and efficacy?
- What are your key partners reflections on this intervention?
- What barriers may you anticipate? Culture, resources, etc
- How will you know if your intervention is working?
- Let's pretend the intervention has failed. How/why might it have failed?

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