



Institute for Healthcare Quality,
Safety and Efficiency

SCHOOL OF MEDICINE

UNIVERSITY OF COLORADO **ANSCHUTZ MEDICAL CAMPUS**

Quality Improvement & Change Management

Disclosures

NONE



Agenda

1 Introduction of Faculty

2 Intro QI

————— BREAK —————

3 Change Management





Session	2025 Dates & Times* (All sessions are 1-4 p.m. MT)
Quality Improvement & Change Management	January 9, 2025 January 15, 2025 August 14, 2025 August 27, 2025
Applied Patient Safety	January 23, 2025 August 21, 2025
Acquiring Data to Drive Change	February 20, 2025 September 11, 2025
Designing for Change	February 27, 2025 September 25, 2025
Spreading Change Locally and Nationally	March 5, 2025 October 1, 2025
Coaching and Teaching Quality Improvement	March 13, 2025 October 9, 2025

**(ALL sessions will be held virtually on Zoom from 1-4 p.m. MT)*





Quality Improvement



QI = Quality Improvement

Systematic and continuous actions that lead to ***measurable*** improvement in health care services and the health status of targeted patient groups.



Value

QI = ~~Quality~~ Improvement

Systematic and continuous actions that lead to measurable improvement in health care services and the health status of targeted patient groups.





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

Models of Quality Improvement

PDSA/Model for Improvement

Six sigma

Lean





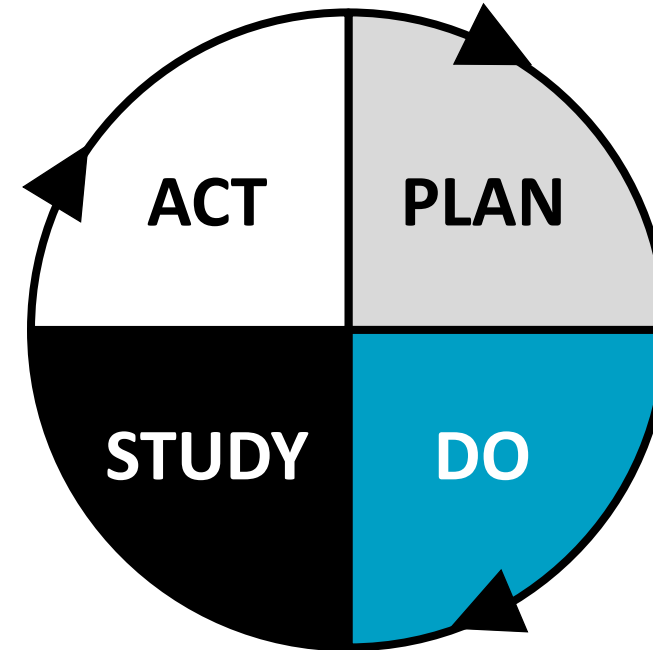
Institute *for*
Healthcare
Improvement

Model for Improvement

What are we trying to accomplish?

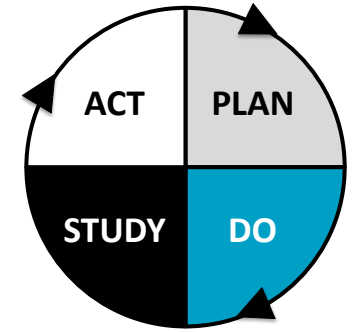
How will we know that change is an improvement?

What changes can we make that will result in an improvement?





Institute *for*
Healthcare
Improvement



Plan: identify your problem, analyze contributing factors, and determine an intervention

Do: implement the intervention

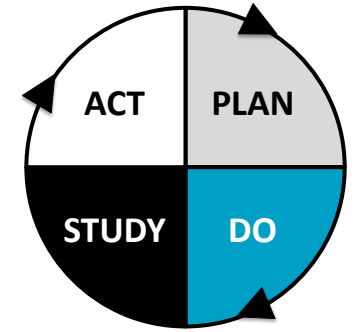
Study: evaluate the results of the intervention

Act: determine what to do next to sustain or improve





Institute *for*
Healthcare
Improvement



Plan: identify your problem, analyze contributing factors, and determine an intervention

**UNDERSTAND YOUR
PROBLEM FIRST !!!**



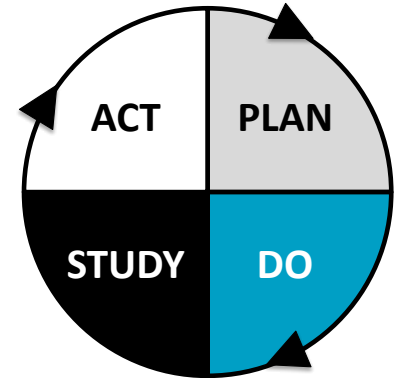
6σ

Six Sigma

“six” standard deviations from mean
(error rate of one per 3.4 per million)

DMAIC (*də-MAY-ick*)

Define, Measure, Analyze, Improve, Control



6σ

Six Sigma

“six” standard deviations from mean
(error rate of one per 3.4 per million)

**UNDERSTAND YOUR
PROBLEM FIRST !!!**



Lean

Maximize value while *through* minimizing waste.

改善

'improvement' or 'change for better' (from 改 kai - change, revision; and 善 zen - virtue, goodness) with the inherent meaning of either 'continuous' or 'philosophy'

Kaizen





Eight Forms of Waste in Healthcare



Underutilization



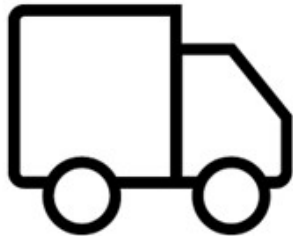
Inventory



Motion



Defects



Transportation



Waiting



Extra Processing



Overproduction

6σ

Six Sigma

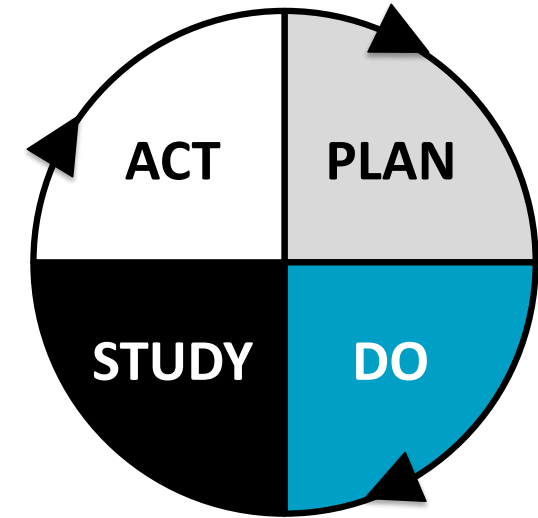
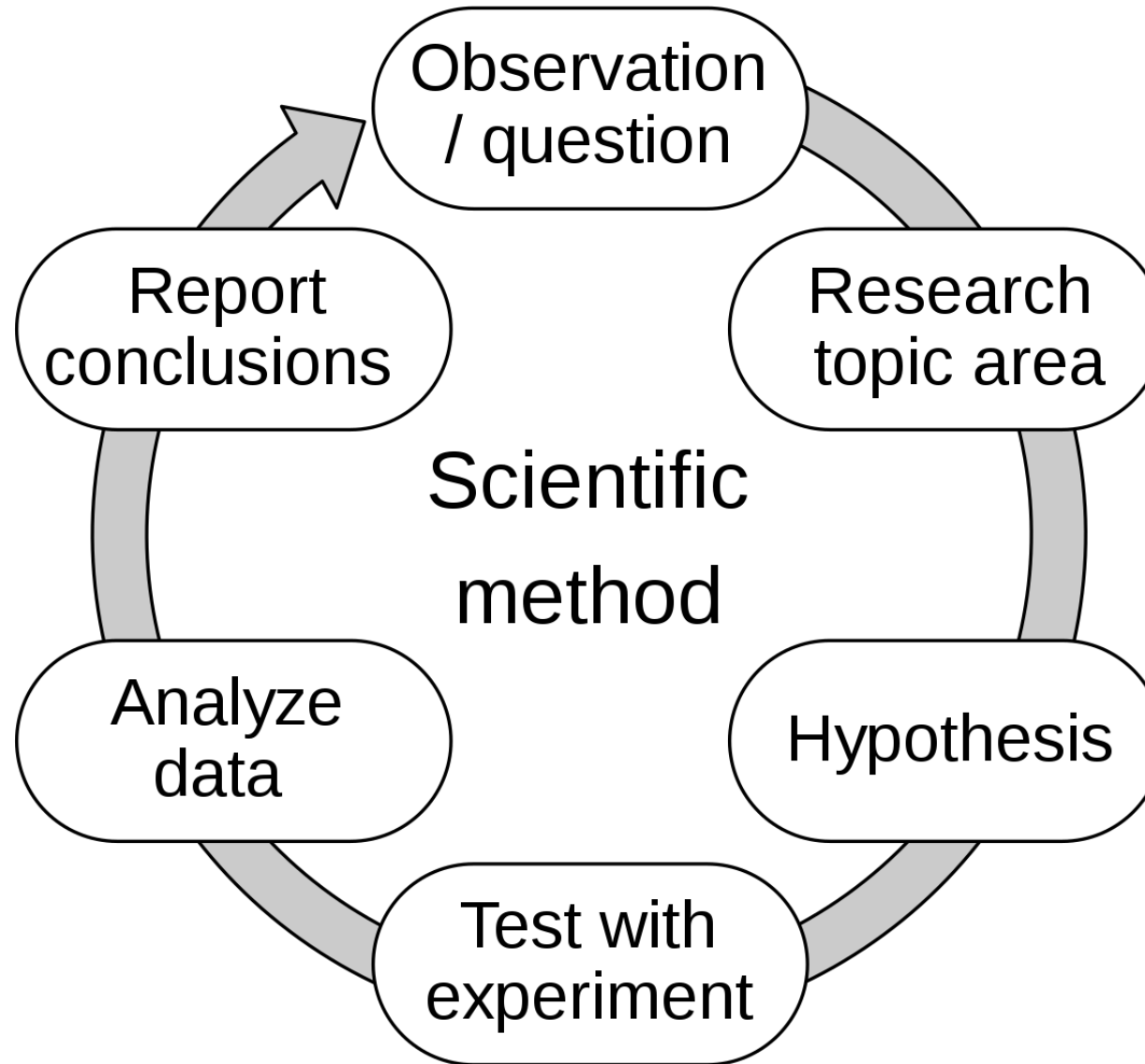
+

改善

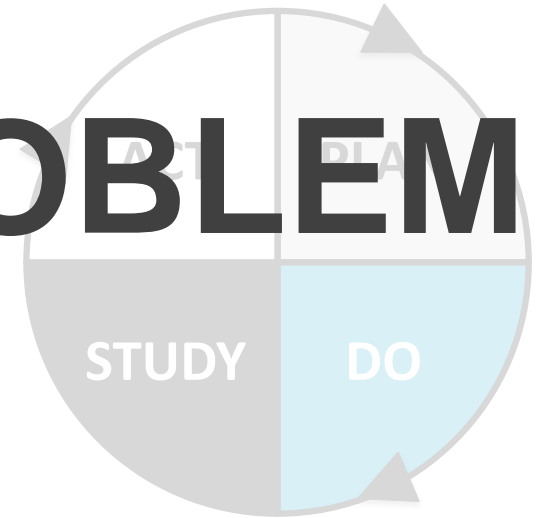
Lean

=



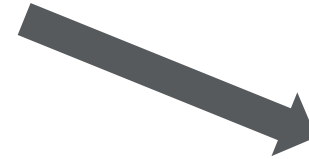


UNDERSTAND YOUR PROBLEM FIRST !!!





Sense a problem

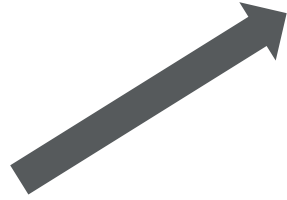


No improvement





Sense a problem





Sense a problem




Sustained improvement









Agency for Healthcare
Research and Quality



Order and Order Set Search

DELIRIUM 

[Browse](#) [Preference List](#) [Facility List](#)

 **Order Sets & Panels** 

Search order sets by user   (Alt+Shift+1)

Name	User Version Name	Type
  UCHS IP Delirium Assessment and Management		Order Set



Outcomes Following Implementation of a Hospital-Wide, Multicomponent Delirium Care Pathway

TABLE 3. **Unadjusted and Adjusted Clinical Outcomes for All Patients Combined and Medicine Unit Patients**

Clinical outcome	Unadjusted model result (95% CI)	P value	Adjusted model result (95% CI)	P value
All patients				
Length of stay proportional change ^a	1.00 (0.97-1.05)	.65	0.98 (0.92-0.99)	.0087
Total direct cost proportional change ^a	0.98 (0.96-1.00)	.17	0.99 (0.97-1.01)	.12
30-Day hospital readmission odds ratio	0.93 (0.86-1.00)	.039	0.86 (0.80-0.93)	.0002
Restraint rate ratio	0.83 (0.76-0.91)	<.0001	0.91 (0.71-1.16)	.45
Safety attendant rate ratio	0.51 (0.48-0.54)	<.0001	0.63 (0.41-0.97)	.034



Sense a problem



Sustained improvement



Six Steps for a Successful QI Project

1. Define the problem.
2. Identify areas that can be improved.
3. Decide how you will measure progress.
4. Explicitly state your goals (SMART)
5. Implement and measure small tests of change.
6. Build upon success and sustain the process.



Six Steps for a Successful QI Project

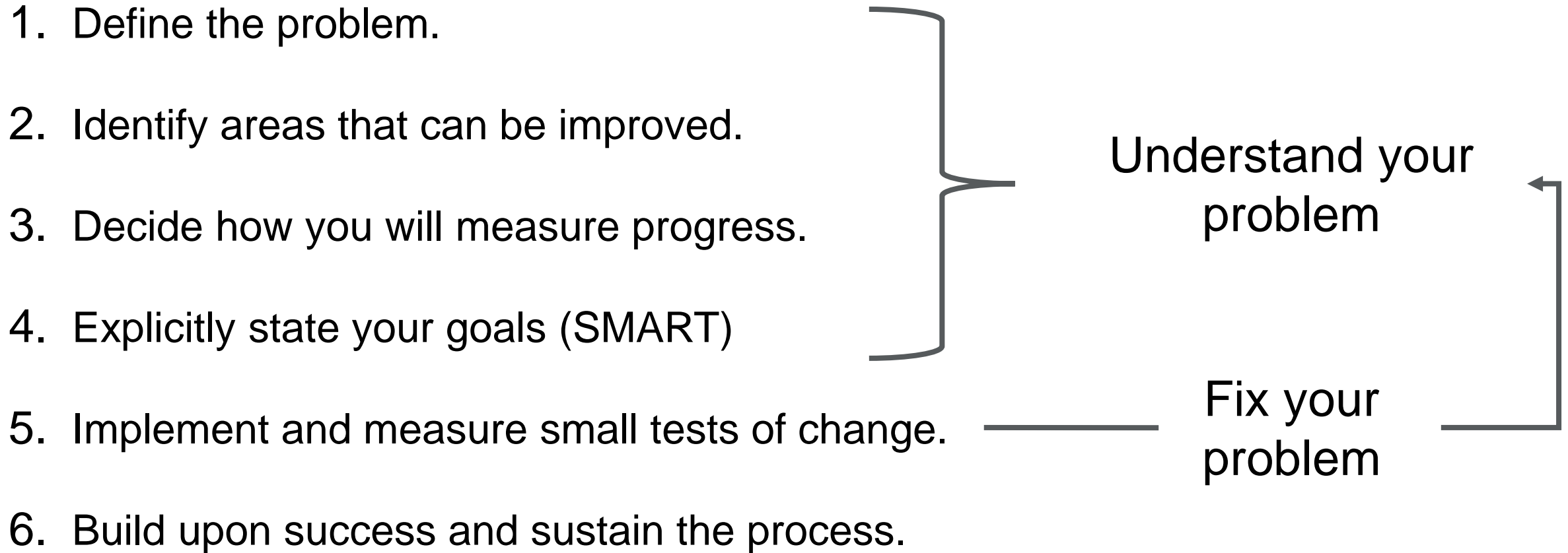
1. Define the problem.
2. Identify areas that can be improved.
3. Decide how you will measure progress.
4. Explicitly state your goals (SMART)
5. Implement and measure small tests of change.
6. Build upon success and sustain the process.



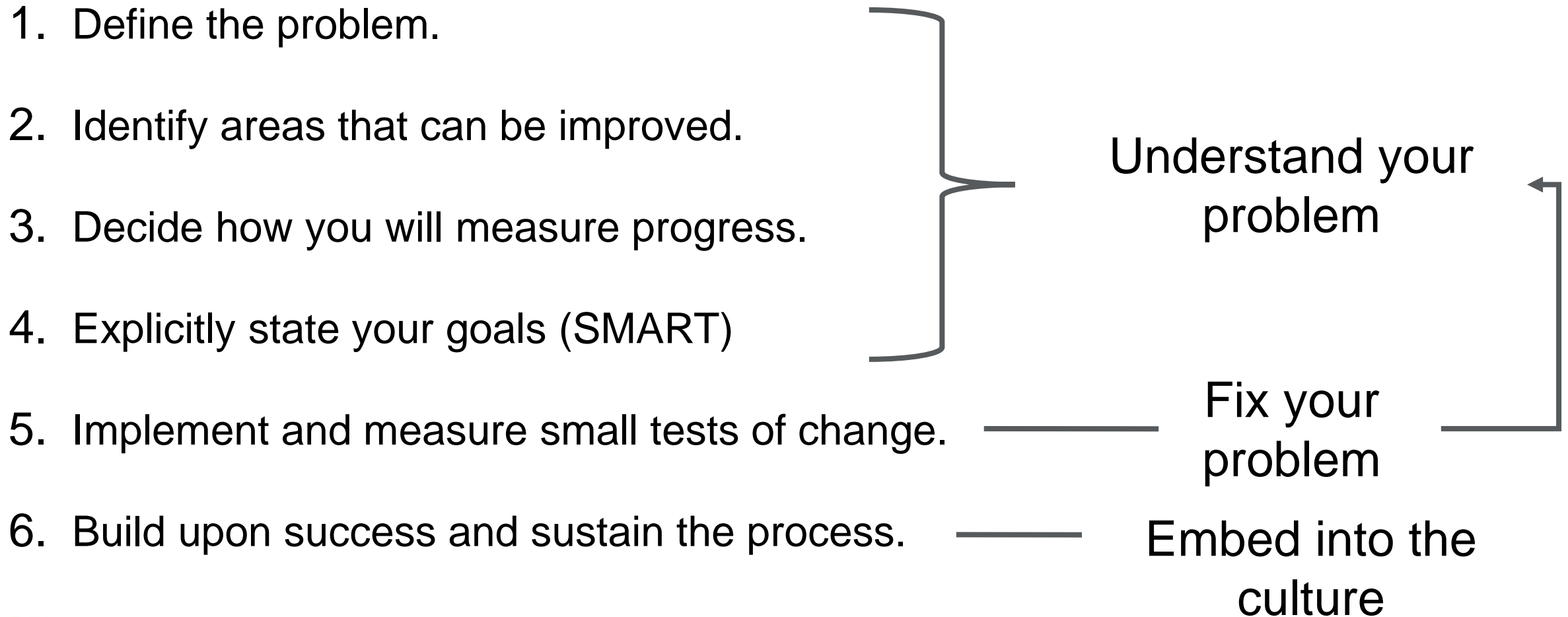
Understand your
problem



Six Steps for a Successful QI Project



Six Steps for a Successful QI Project





George: 69-Year-old man presents with acute onset chest pain.



69-Year-old man presents with acute onset chest pain.

HD 0: presents with STEMI

Taken emergently to cath lab – **stent placed to LAD**

HD 1: Echo reveals **reduced ejection fraction** of **35%**

HD 2: started on **diuretics**

HD 4: **doing-well**, preparing for hospital discharge

HD 5: discharged home on **5 new medications**

Instructed to **“follow-up”** with Cardiology

2 weeks later: found down at home suffering **cardiac arrest.**

On admission: critical hypokalemia to **1.8**

Prolonged hospitalization but eventually discharged to SNF for rehab therapy.

Six Steps for a Successful QI Project

1. Define the problem.

2. Identify areas that can be improved.

3. Decide how you will measure progress.

4. Explicitly state your goals (SMART)

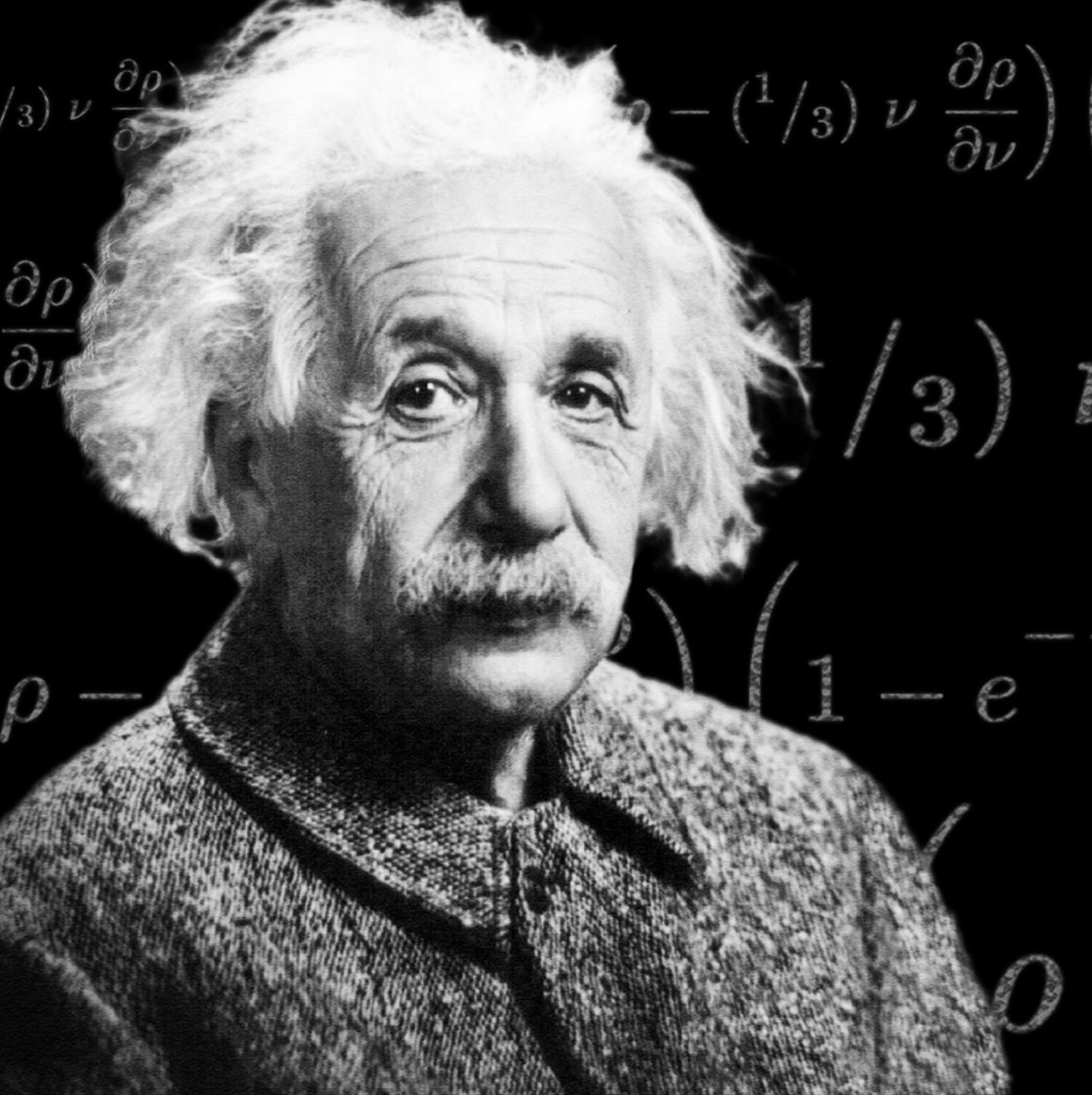
5. Implement and measure small tests of change.

6. Build upon success and sustain the process.



Understand your
problem





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

1. Define the problem.



Who is affected? By how much?

Are there guidelines to refer to?



1. Define the problem.

Frequency: Count, Percent, Frequency

Vaccination rates

CAUTIs

Wrong-site surgeries

Central Tendency: Mean, Median, and Mode

Mean and median length-of-stay

Dispersion/Variation: Range, Variance, Std. Deviation

a1c measures in a clinic population, amount of blood loss after surgery

Position: Percentile Ranks, Quartile Ranks

vizient.



1. Define the problem.

Frequency: Count, Percent, Frequency

Vaccination rates

CAUTIs

Wrong-site surgeries

Central Tendency: Mean, Median, and Mode

Mean and median length-of-stay

AKA Baseline data!

Dispersion/Variation: Range, Variance, Std. Deviation

a1c measures in a clinic population, amount of blood loss after surgery

Position: Percentile Ranks, Quartile Ranks

vizient.



1. Define the problem.

Consider the heterogeneity of your population....
Are some groups affected differently than others?

Patients with HbA1c > 8% are more likely to experience complications and comorbidities. At X clinic...

35% of ALL patients with diabetes are not under glycemic control as defined by an A1c < 8%.

40% of Hispanic and Latino patients with diabetes have not achieved glycemic control.





The American College of Cardiology (ACC) advocates patients with AMI schedule an initial outpatient cardiac rehabilitation appointment within 7 days of hospital discharge.

- In the past 4 months, 1/38 (2%) patients with MI were scheduled and seen within one week of discharge.
- The average duration of time from discharge to first appointment is 18.9 days.

Batten A, Jaeger C, Griffen D, Harwood P, Baur K. See You in 7: improving acute myocardial infarction follow-up care. BMJ Open Qual. 2018 Jun;7(2):e000296.

King M. Hospital-to-Home "See You in 7" Tools Updated for Cardiac Rehab Awareness Week. American College of Cardiology. 2013 <http://blog.acc.post/h2h-seeyou-in-7-tools-updated-for-cardiac-rehab-awareness-week/>





Breakout #1



15 minutes

- Introductions
- Your problem/project/thing you want to fix
- How do you know it's a problem? (IE: "Define")



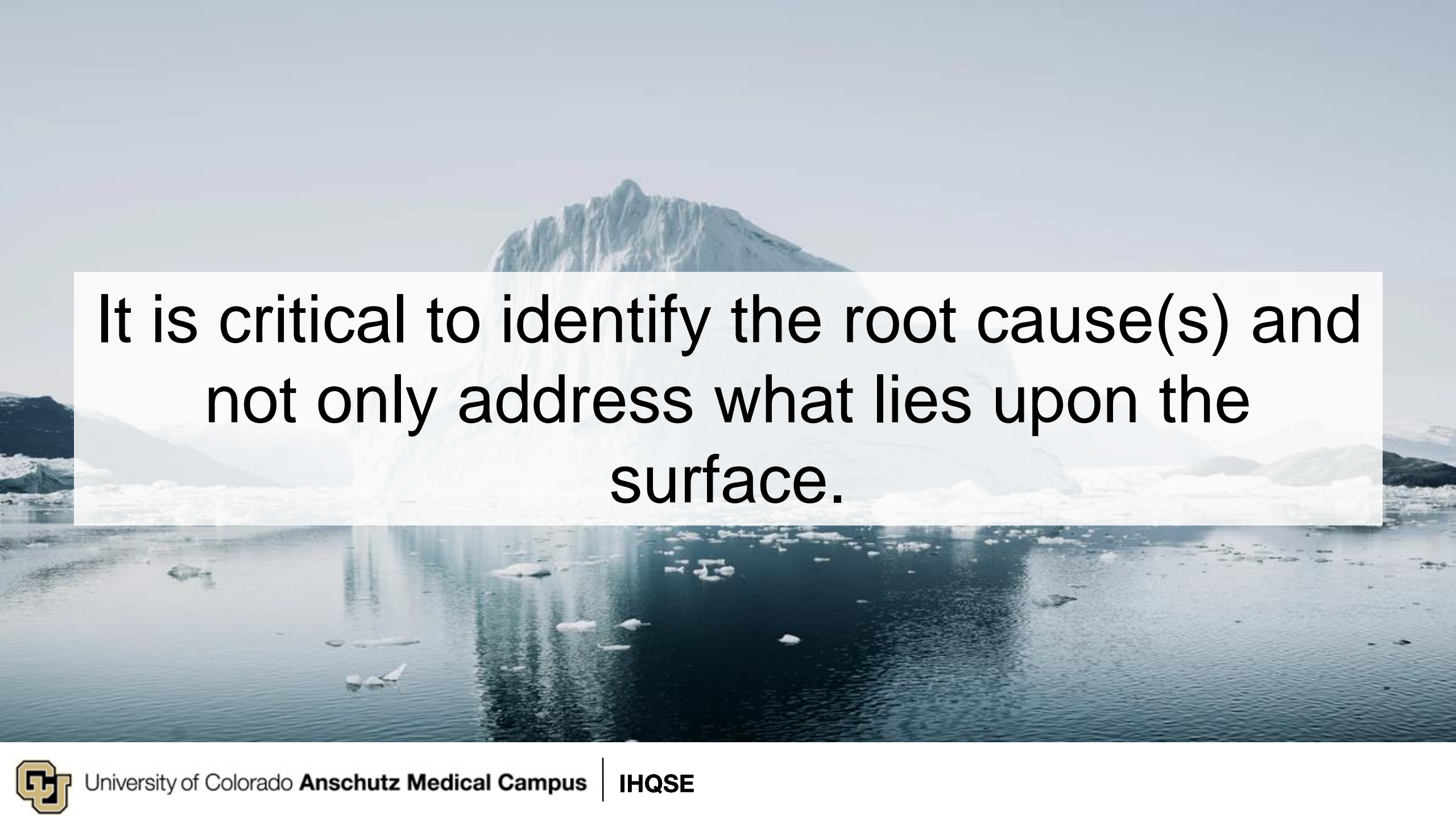
Six Steps for a Successful QI Project

1. Define the problem.
- 2. Identify areas that can be improved.**
3. Decide how you will measure progress.
4. Explicitly state your goals (SMART)
5. Implement and measure small tests of change.
6. Build upon success and sustain the process.



Understand your
problem





It is critical to identify the root cause(s) and not only address what lies upon the surface.



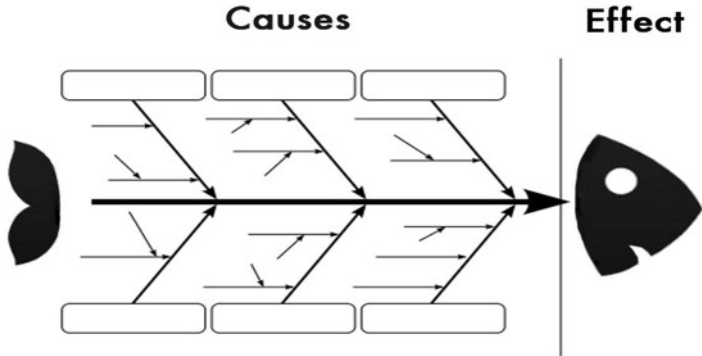
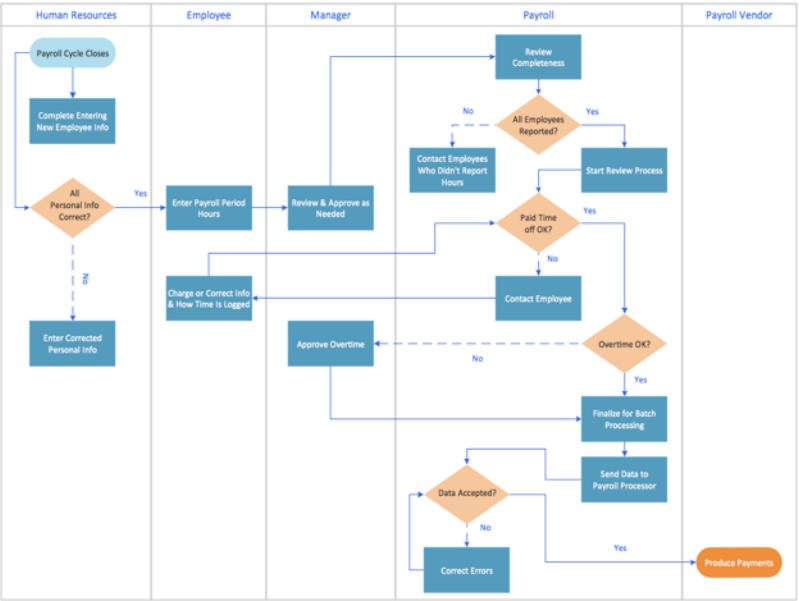
QI Tools



Gemba
現場



Go See.
Ask Why?
Show Respect.



2. Identify areas that can be improved.



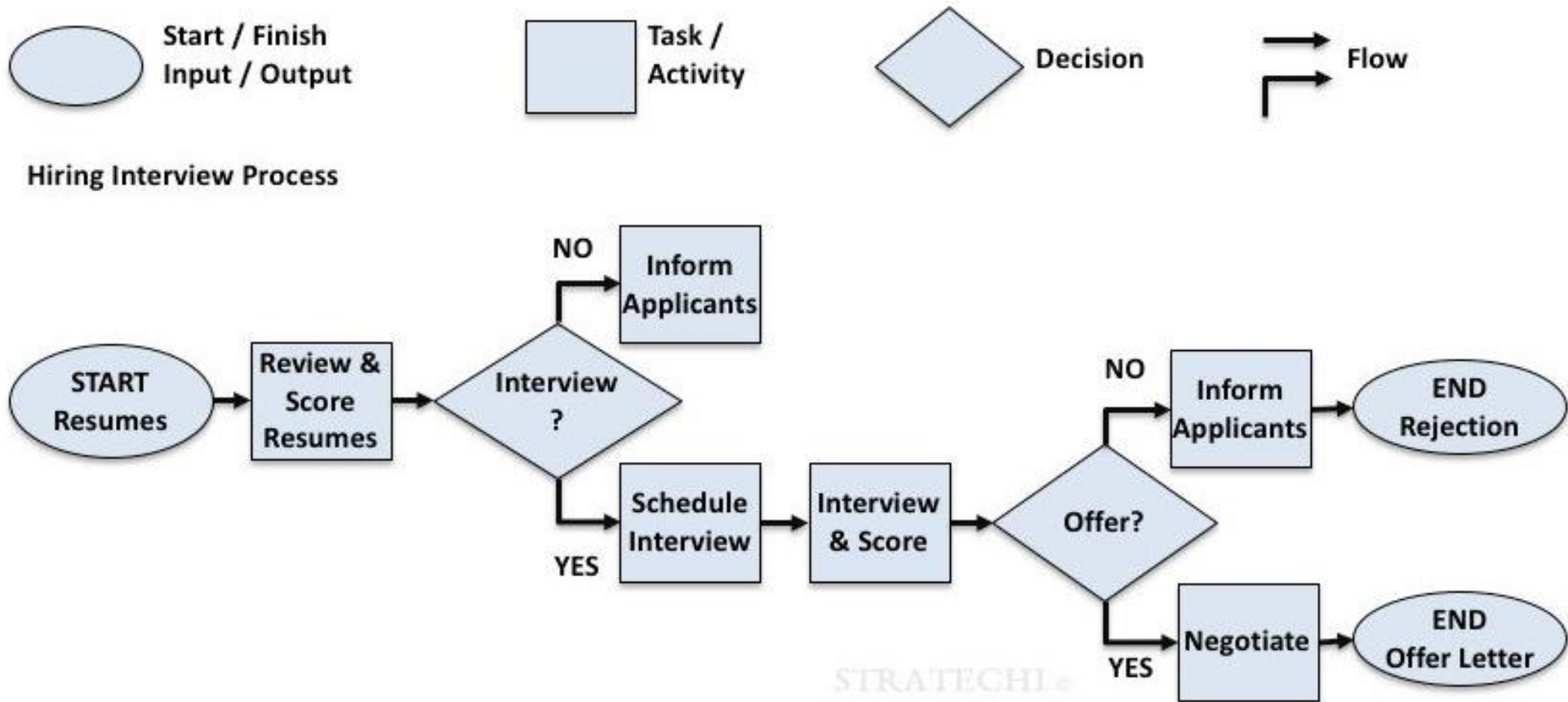
Gemba 現場 "the actual place"



2. Identify areas that can be improved.



Process Map



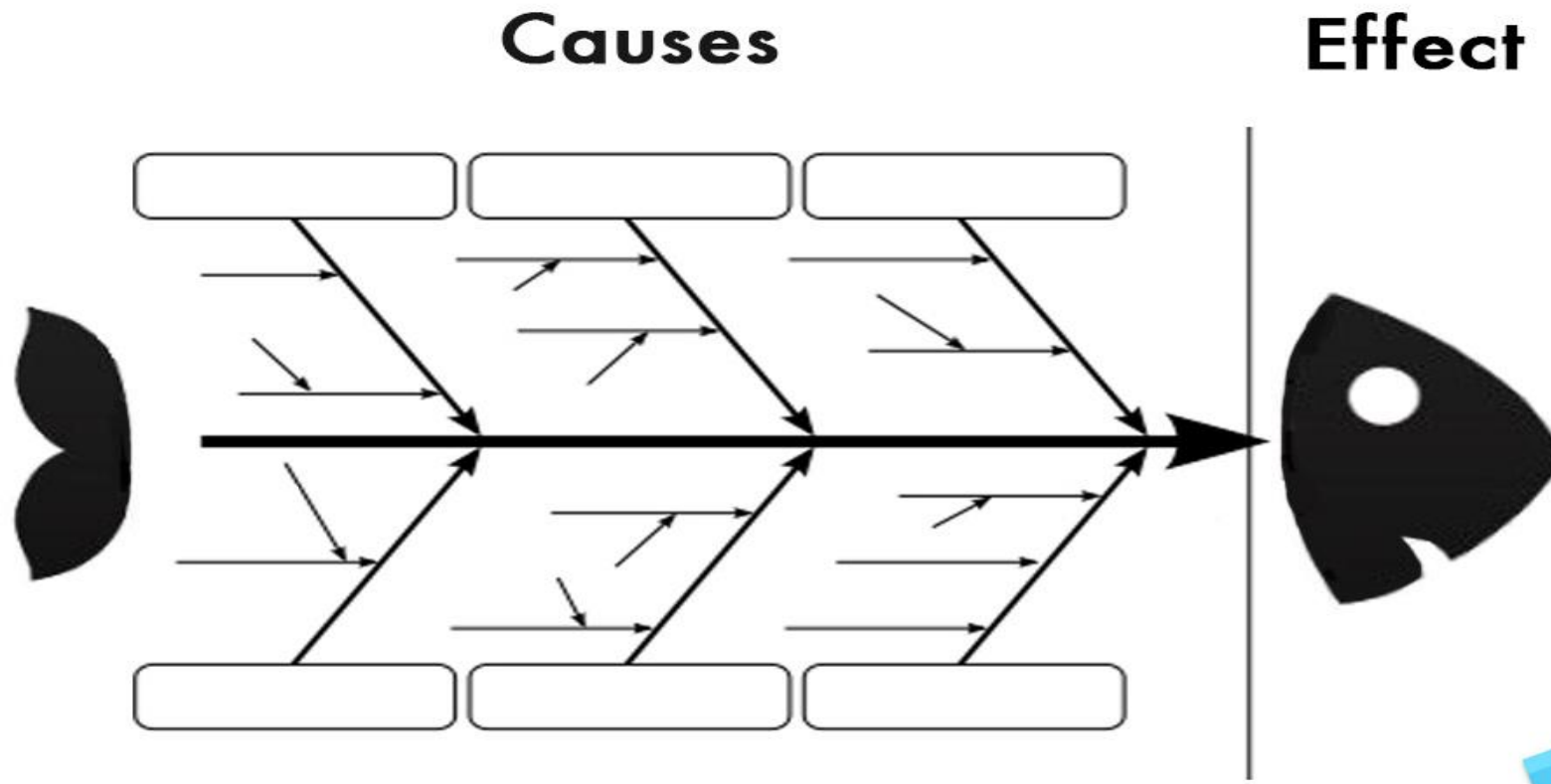
STRATECH



2. Identify areas that can be improved.

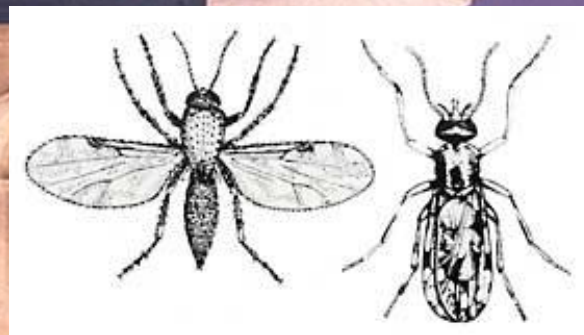


Fishbone “Ishikawa” Diagram





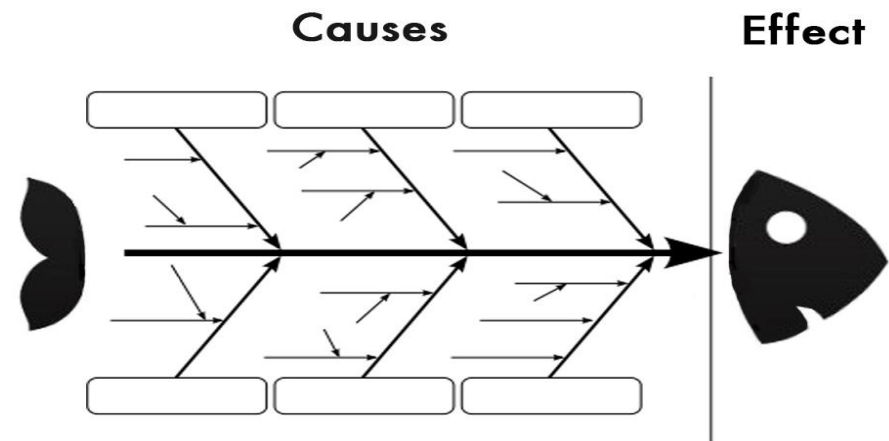
Five Why's



5 Why's (Linear)

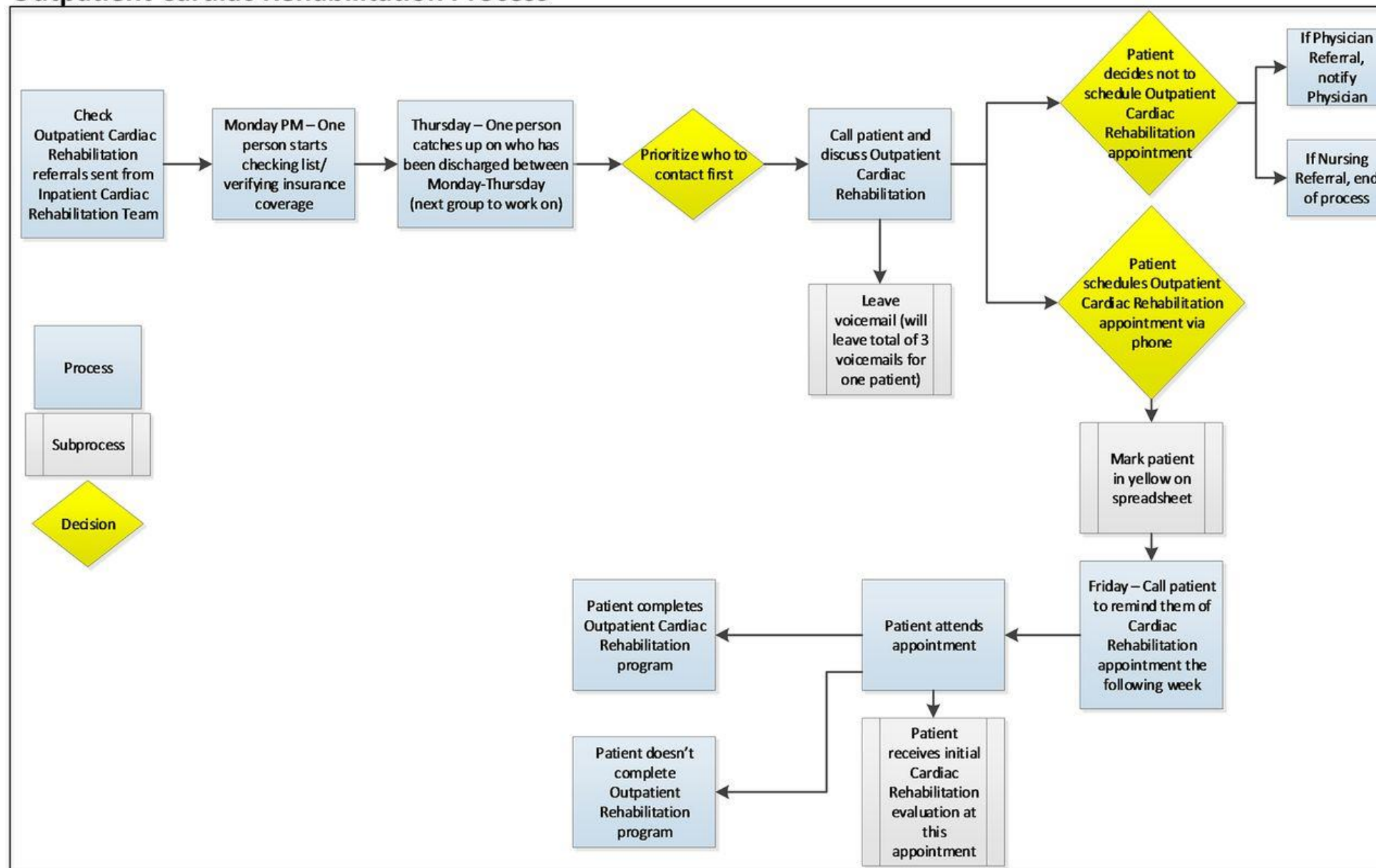


Fishbone (Branched)

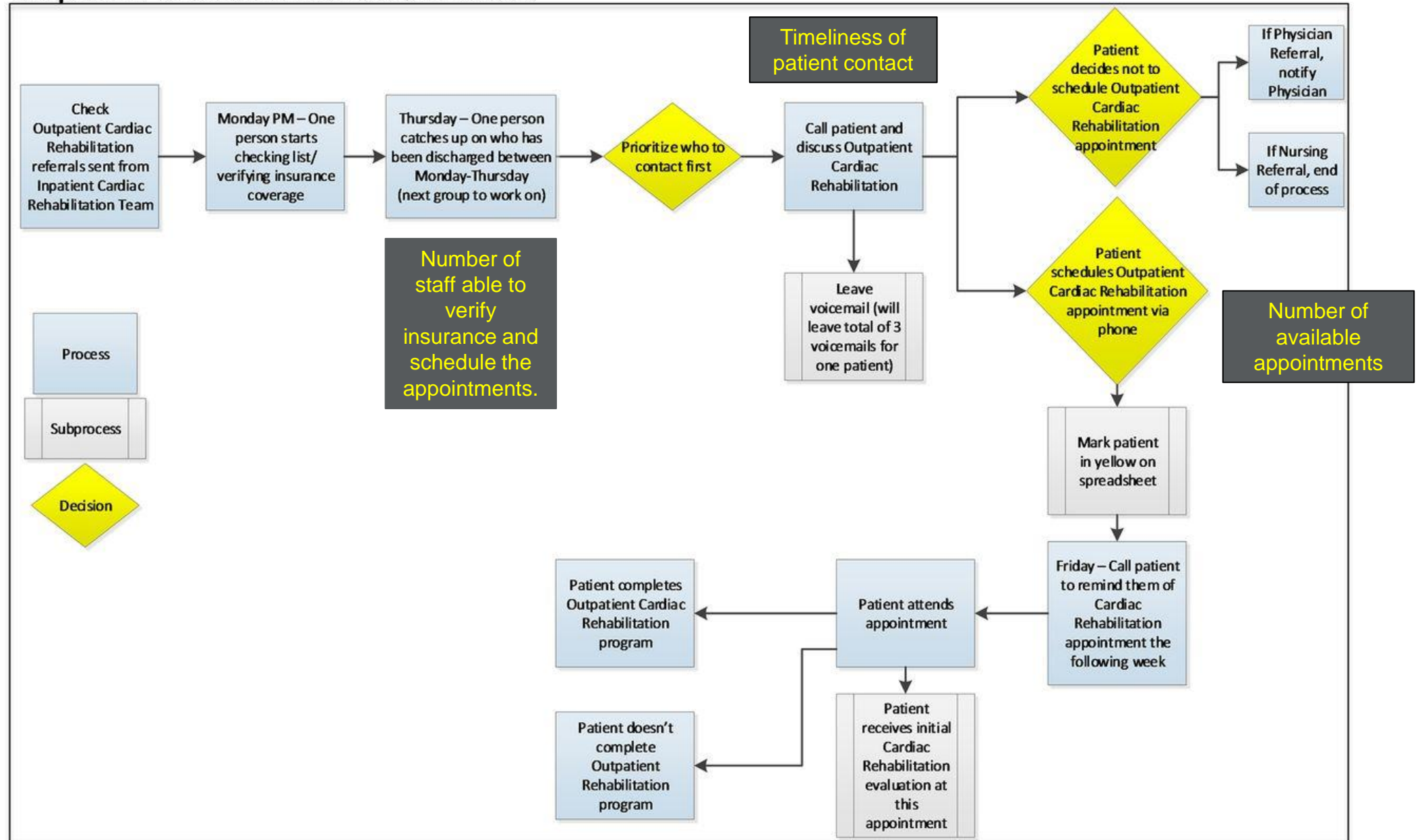


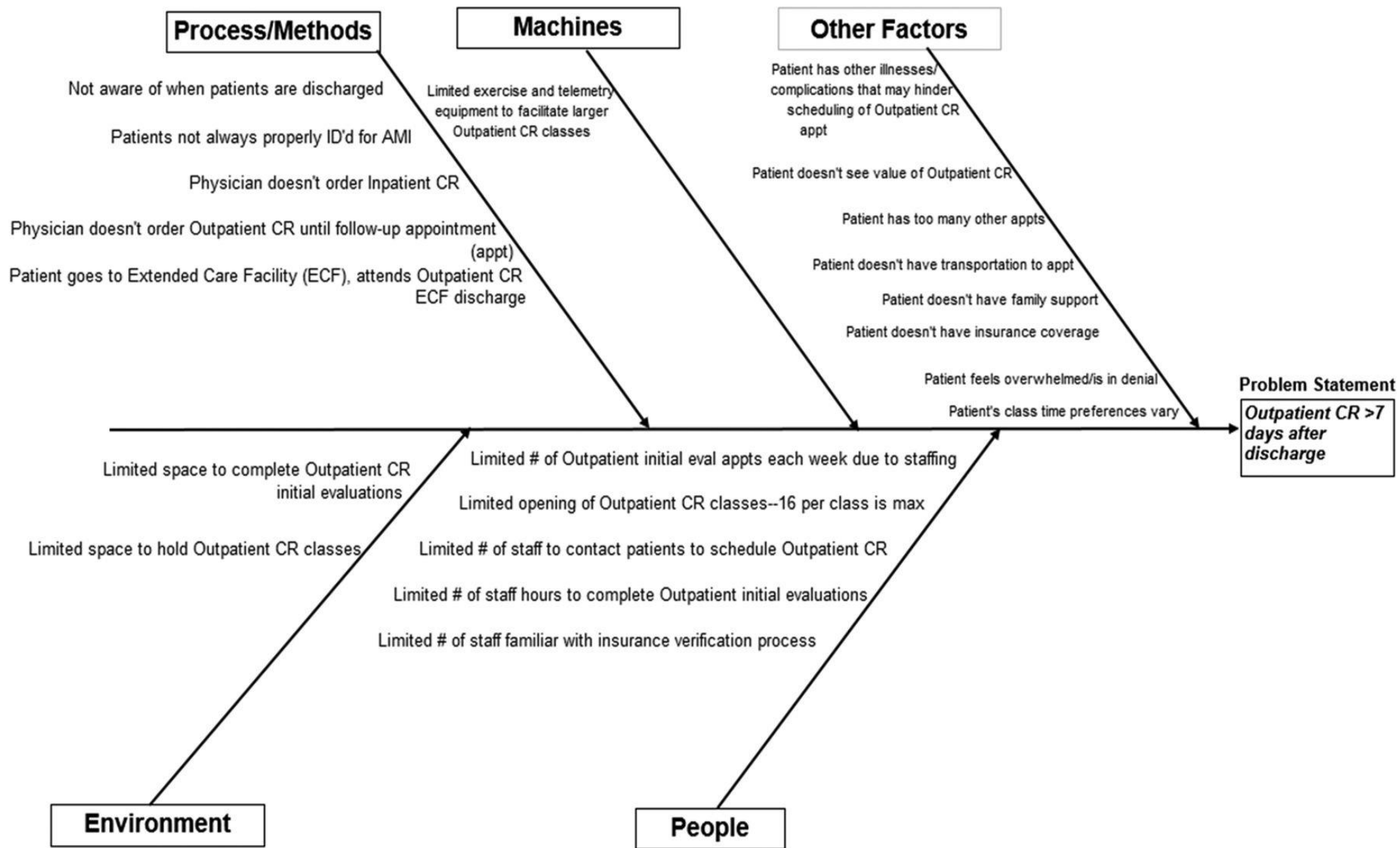


Outpatient Cardiac Rehabilitation Process



Outpatient Cardiac Rehabilitation Process







Breakout #2



10 minutes

- Ask “WHY?” 5x for your problem



Six Steps for a Successful QI Project

1. Define the problem.
2. Identify areas that can be improved.
3. Decide how you will measure progress.
4. Explicitly state your goals (SMART)
5. Implement and measure small tests of change.
6. Build upon success and sustain the process.



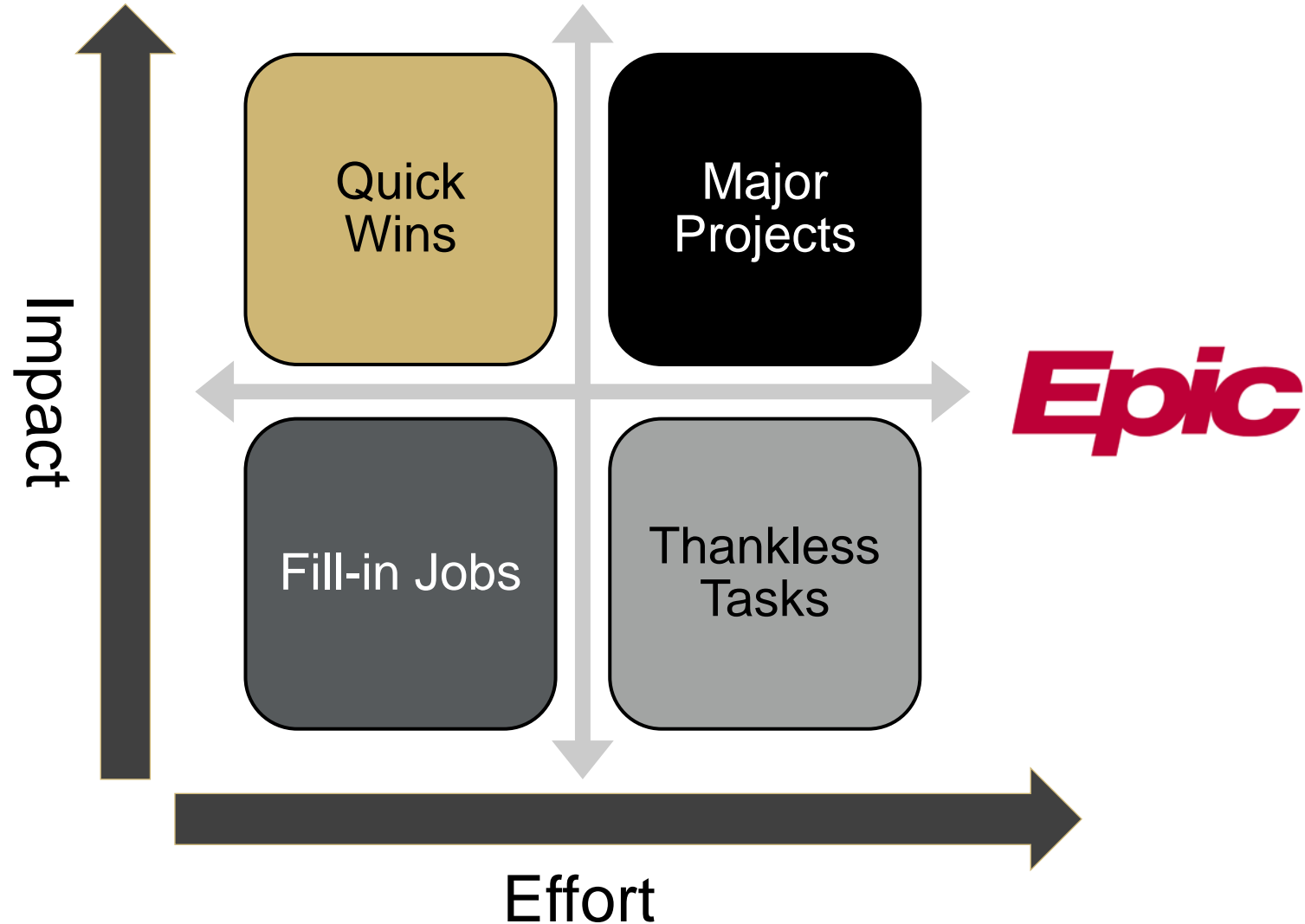
Understand your
problem



2. Identify areas that can be improved.

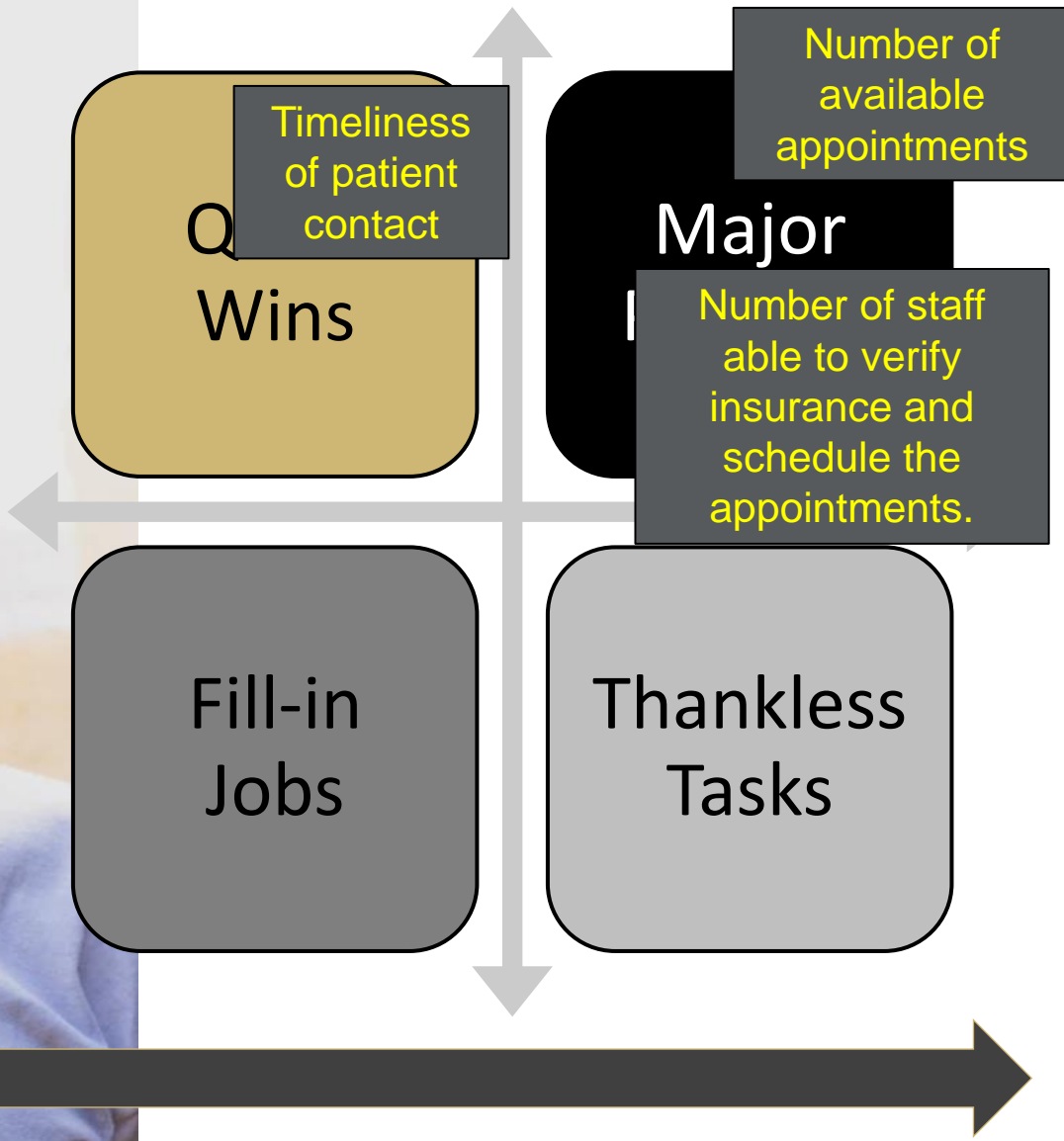


Action Priority Matrix





Impact



Effort

Six Steps for a Successful QI Project

1. Define the problem.
2. Identify areas that can be improved.
3. **Decide how you will measure progress.**
4. Explicitly state your goals (SMART)
5. Implement and measure small tests of change.
6. Build upon success and sustain the process.



Understand your
problem



QI Metrics

OUTCOME

PROCESS

STRUCTURAL

BALANCE



Matter to Patients
(or stakeholders)

OUTCOME

- Patient Satisfaction
- LOS
- Readmission Rate
- Adverse Events

Can act as proxy for
outcomes

PROCESS

- Use of checklists
- Lab orders

STRUCTURAL

- PPE
- Medications
- Hand sanitizer

I
N
T
E
R
V
E
N
T
I
O
N
S

BALANCE

BALANCE

Dependent
on
intervention

**Consider
health
equity.**

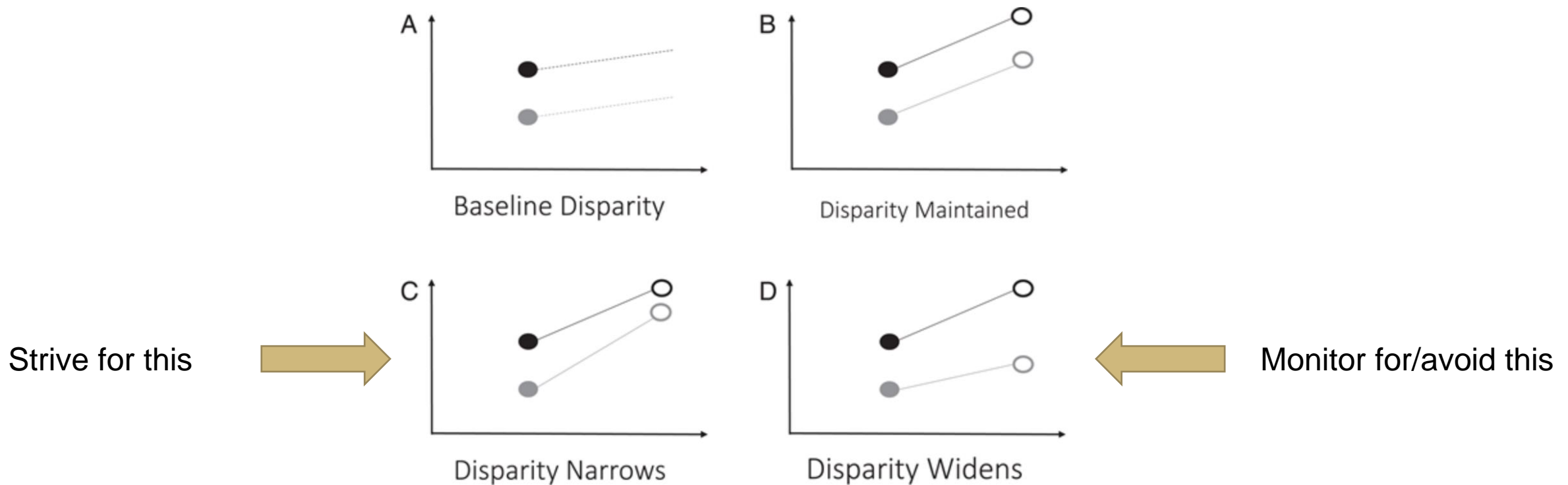
Experience shows that traditional QI methods can maintain or worsen health inequities across subpopulations.

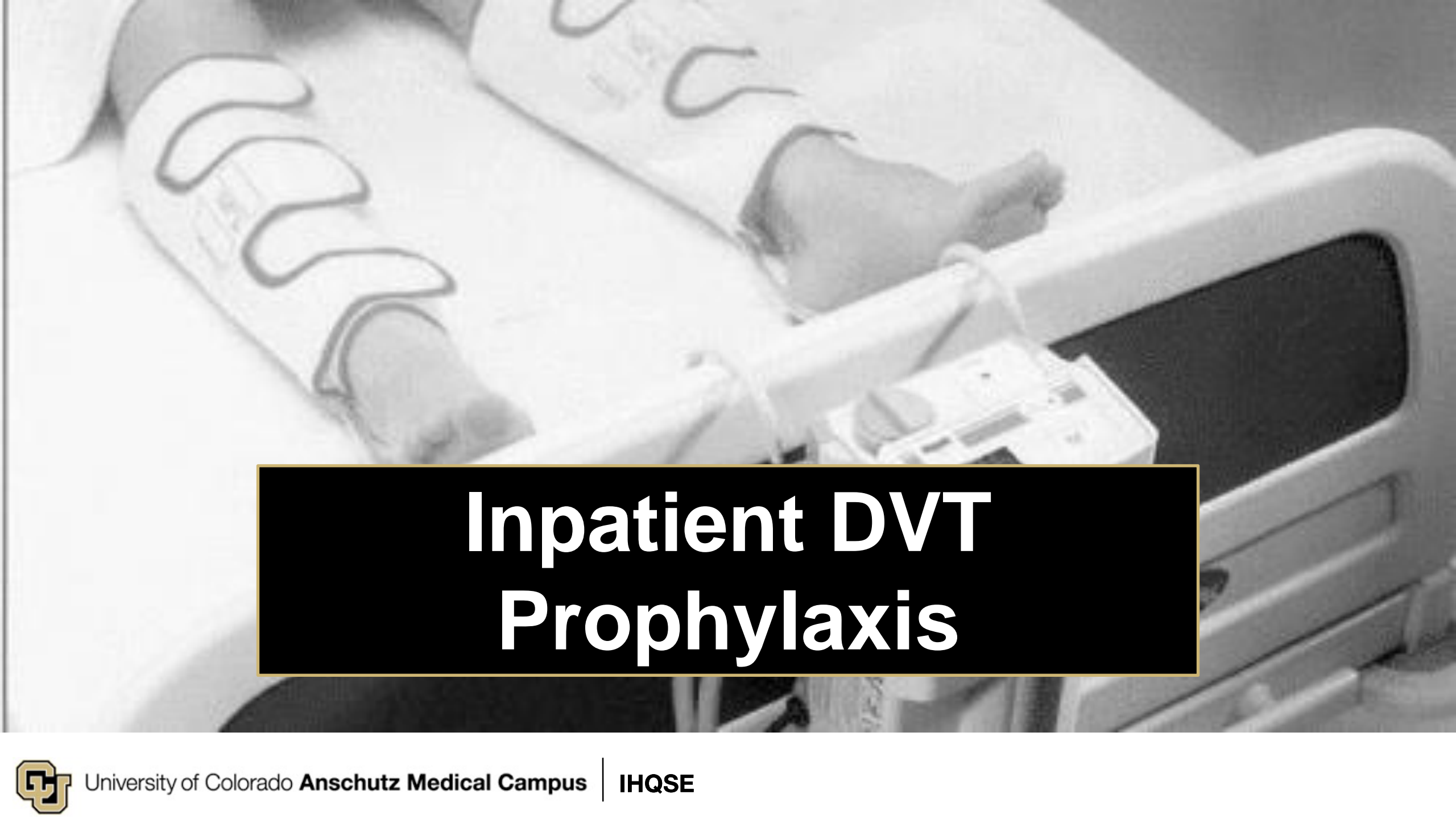


Look at disparities and solutions upfront among commonly disadvantaged subgroups such as wealth, race, and location.

Consider the heterogeneity of your population.... **Are some groups affected differently than others?**

FIGURE 1



A grayscale photograph of a patient's legs in a hospital bed. The patient is wearing white compression stockings with dark wavy patterns. A medical device, possibly a Doppler ultrasound, is positioned near the patient's feet. The background is slightly blurred, showing the bed's frame and a dark screen.

Inpatient DVT Prophylaxis



OUTCOME

- DVT rates
- PE rates
- Mortality

PROCESS

- Use of SCDs
- Use of Rx prophylaxis
- Risk scoring

STRUCTURAL

- Anti-coagulant stock
- RNs to administer

I
N
T
E
R
V
E
N
T
I
O
N
S

B
A
L
A
N
C
E

Bleeding
rate



Focus on the process, not the results. Take one step at a time. You don't climb a mountain by simply looking at the top.





OUTCOME

- Readmission rate
- 30/60/90-day mortality

PROCESS

- Outpatient appt. w/in 7 days of discharge
- Number of patients contacted
- Referrals placed before d/c

STRUCTURE

- Number of appointments
- Number of staff trained to verify insurance



Six Steps for a Successful QI Project

1. Define the problem.
2. Identify areas that can be improved.
3. Decide how you will measure progress.
- 4. Explicitly state your goals (SMART)**
5. Implement and measure small tests of change.
6. Build upon success and sustain the process.



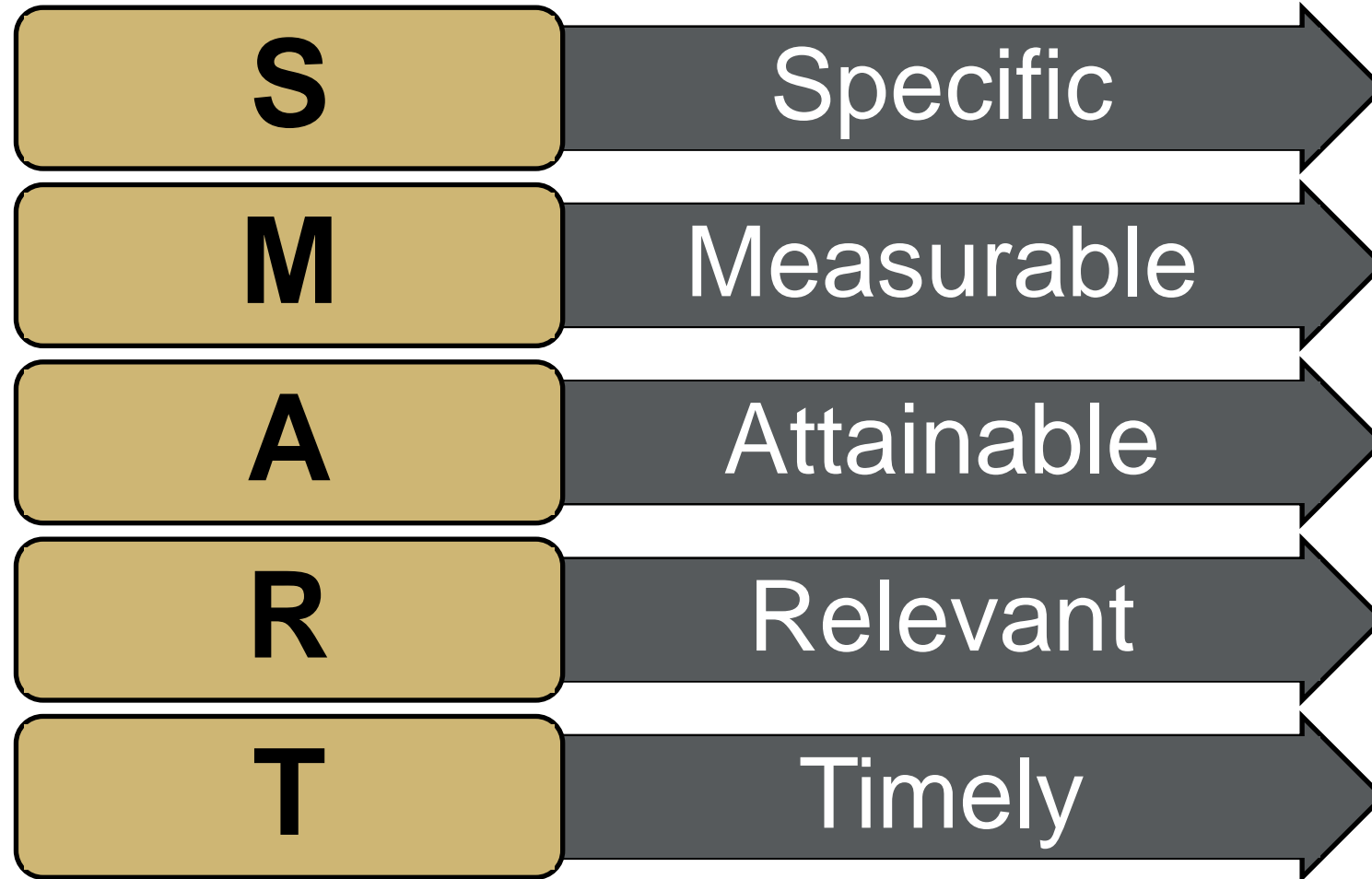
Understand your
problem




4. Explicitly state your goals



Aim Statement



“I want to be a better skier.”

A black and white photograph of a skier in a grey jacket and white helmet, leaning into a turn on a snowy slope. The skier is wearing gloves and holding ski poles. The background shows a vast, snowy mountain landscape under a clear sky.

“By the end of the 24/25 season, I will be able to make it down a double-black diamond slope without falling.”





S

Specific

M

Measurable

A

Attainable

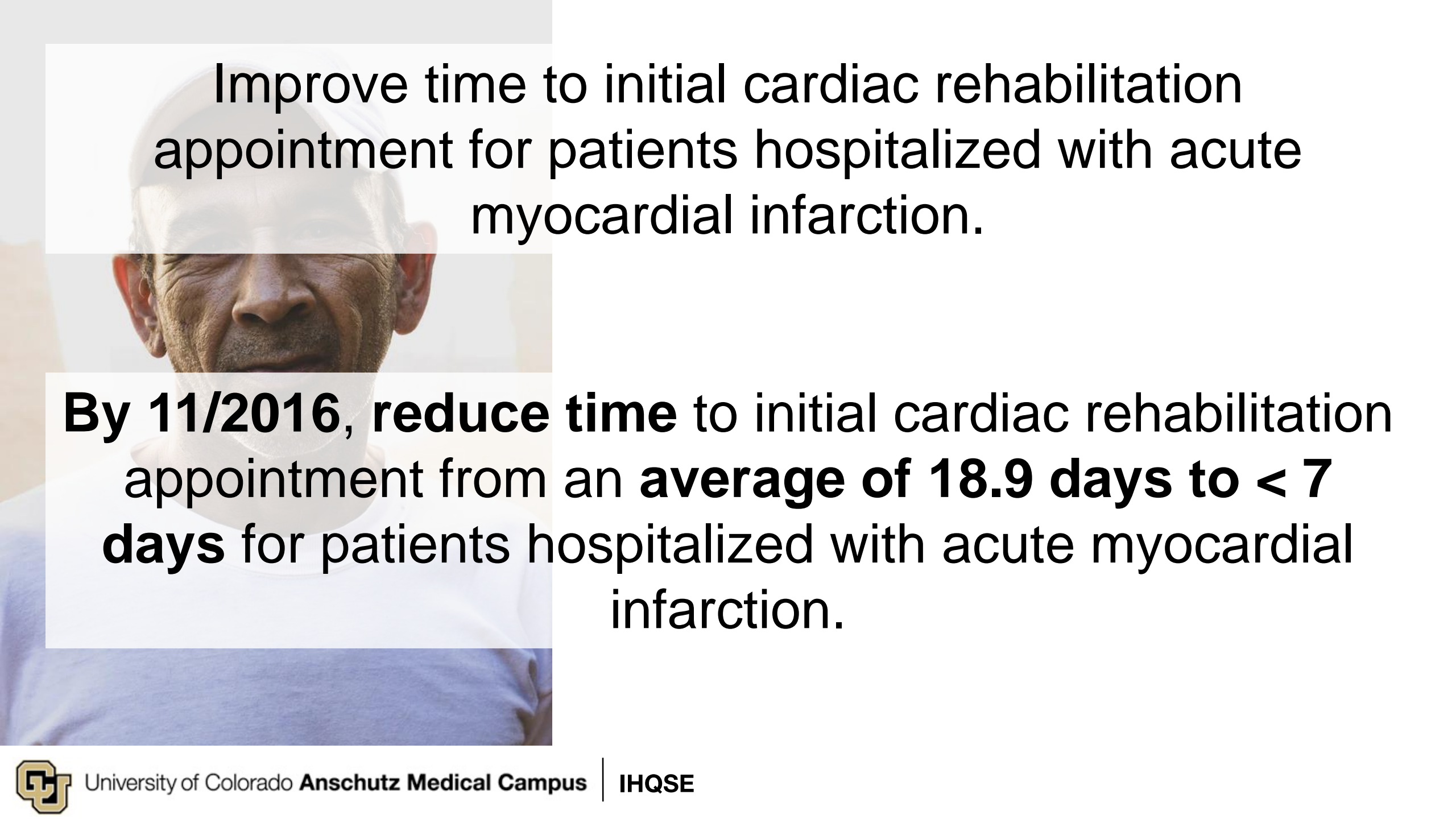
R

Relevant

T

Timely



A close-up, slightly blurred photograph of an elderly man's face, showing his eyes, nose, and mouth. He has a serious expression. The image is used as a background for the text.

Improve time to initial cardiac rehabilitation appointment for patients hospitalized with acute myocardial infarction.

By 11/2016, reduce time to initial cardiac rehabilitation appointment from an **average of 18.9 days to < 7 days** for patients hospitalized with acute myocardial infarction.



Six Steps for a Successful QI Project

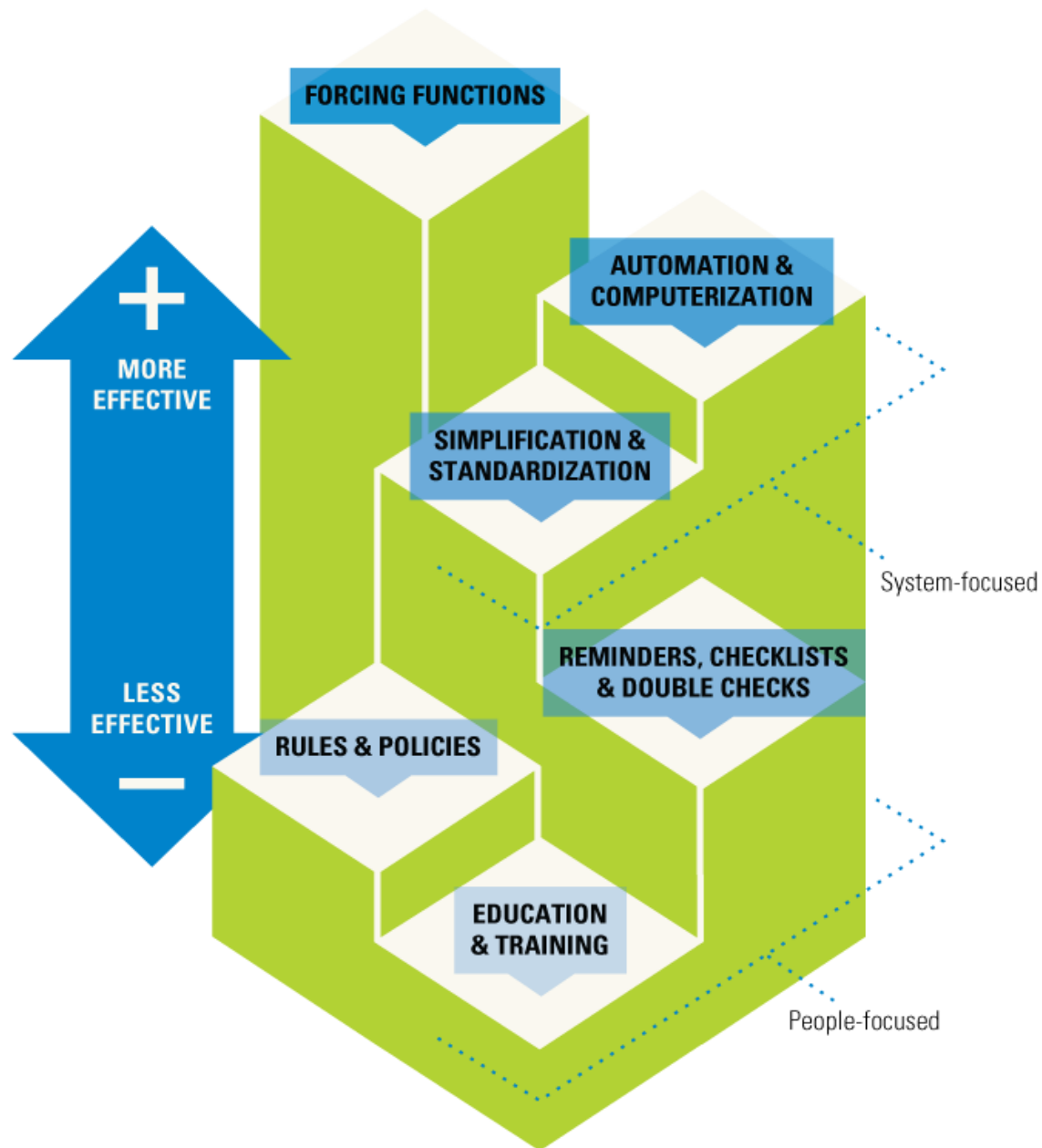
1. Define the problem.
2. Identify areas that can be improved.
3. Decide how you will measure progress.
4. Explicitly state your goals (SMART)



Understand your
problem

- 5. Implement and measure small tests of change.**
6. Build upon success and sustain the process.





✓ Please order contact precautions (BPA# 1183)

• Contact precautions until result is negative, if result is positive precautions will continue for duration of therapy.
 • Please refer to Gastroenteritis table on the [Infection Control](#) page on The Source for more information.
 • If you have questions regarding isolation precautions, please contact Infection Control at 720-848-6978.

Acknowledge Reason

WHO Surgical Safety Checklist

(adapted for England and Wales)

NHS National Patient Safety Agency
National Reporting and Learning Service

SIGN IN (To be read out loud) Before induction of anaesthesia	TIME OUT (To be read out loud) Before start of surgical intervention for example, Min incision	SIGN OUT (To be read out loud) Before any member of the team leaves the operating room
Has the patient confirmed his/her identity, site, procedure and consent? <input type="checkbox"/> Yes <input type="checkbox"/> No Is the surgical site marked? <input type="checkbox"/> Yes/not applicable <input type="checkbox"/> No Is the anaesthesia machine and medication check complete? <input type="checkbox"/> Yes <input type="checkbox"/> No Does the patient have a: Known allergy? <input type="checkbox"/> No <input type="checkbox"/> Yes Difficult airway/intubation risk? <input type="checkbox"/> No <input type="checkbox"/> Yes, and equipment/assistance available Risk of >500ml blood loss (7ml/kg in children)? <input type="checkbox"/> No <input type="checkbox"/> Yes, and adequate IV access/fluids planned	Have all team members introduced themselves by name and role? <input type="checkbox"/> Yes <input type="checkbox"/> No Surgeon, Anaesthetist and Registered Practitioner verbally confirm: <input type="checkbox"/> What is the patient's name? <input type="checkbox"/> What procedure, site and position are planned? Anticipated critical events Surgeon: <input type="checkbox"/> How much blood loss is anticipated? <input type="checkbox"/> Are there any specific equipment requirements or special investigations? <input type="checkbox"/> Are there any critical or unexpected steps you want the team to know about? Anaesthetist: <input type="checkbox"/> Are there any patient specific concerns? <input type="checkbox"/> What is the patient's ASA grade? <input type="checkbox"/> What monitoring equipment and other specific levels of support are required, for example blood? Nurse/ODP: <input type="checkbox"/> Has the sterility of the instrumentation been confirmed (including indicator results)? <input type="checkbox"/> Are there any equipment issues or concerns? Has the surgical site infection (SSI) bundle been undertaken?	Registered Practitioner verbally confirms with the team: <input type="checkbox"/> Has the name of the procedure been recorded? <input type="checkbox"/> Has it been confirmed that instruments, sponges and sharp counts are complete (or not applicable)? <input type="checkbox"/> Have the specimens been labelled (including patient name)? <input type="checkbox"/> Have any equipment problems been identified that need to be addressed? Surgeon, Anaesthetist and Registered Practitioner: <input type="checkbox"/> What are the key concerns for recovery and management of this patient?

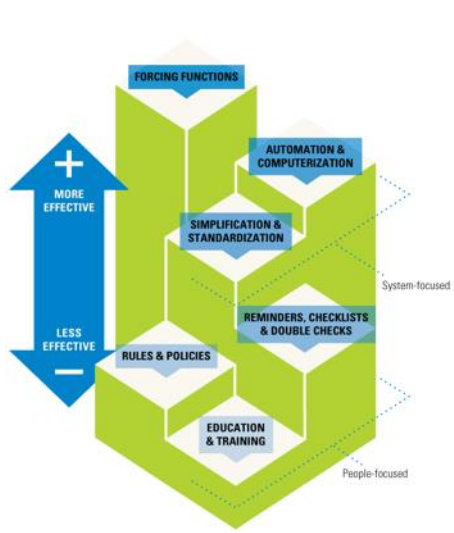
This checklist contains the core content for England and Wales



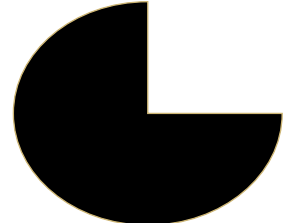
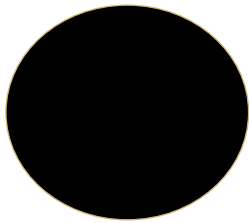
Education as a low-value improvement intervention: often necessary but rarely sufficient

Christine Soong ¹, Kaveh G Shojania²

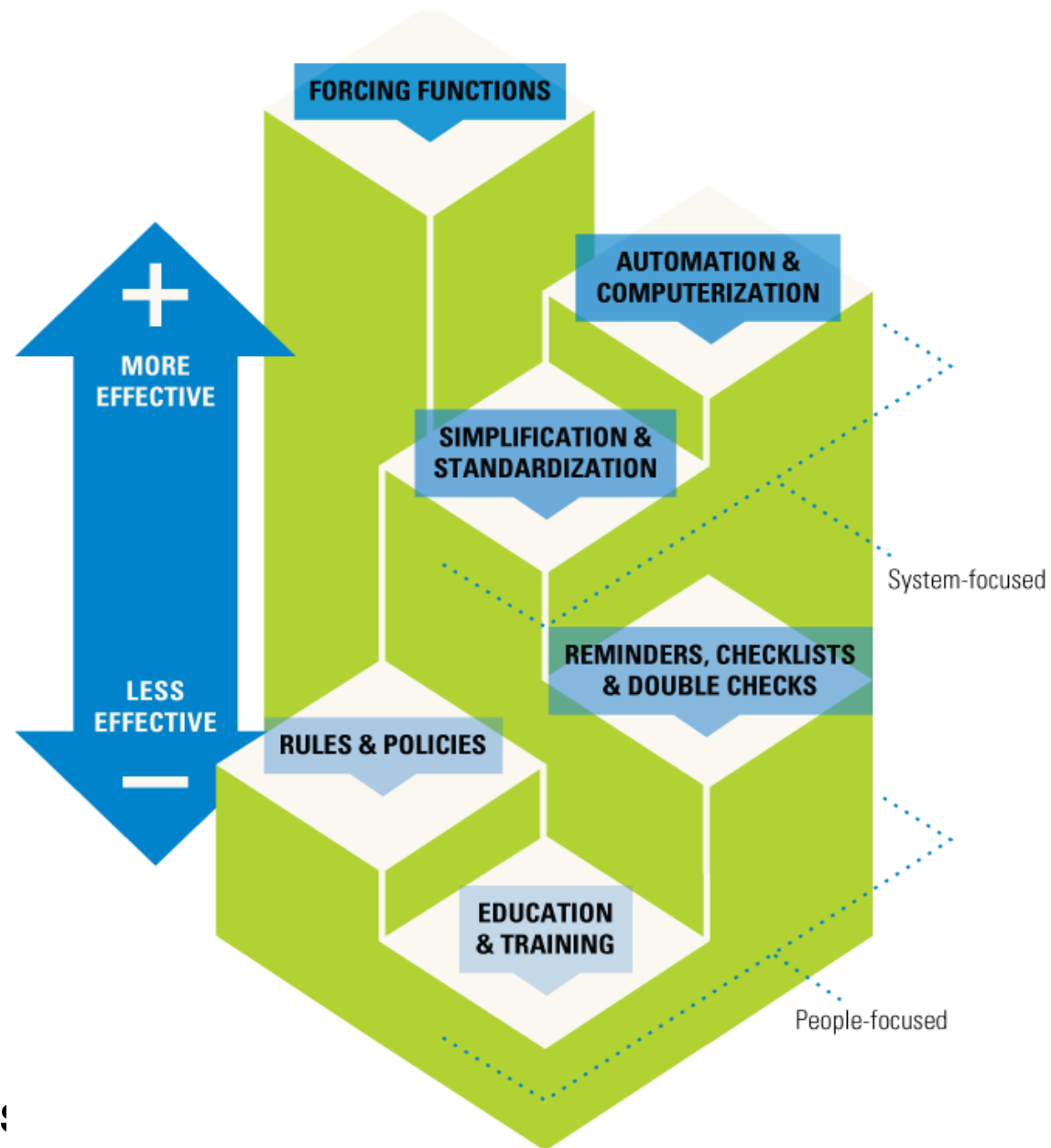




?





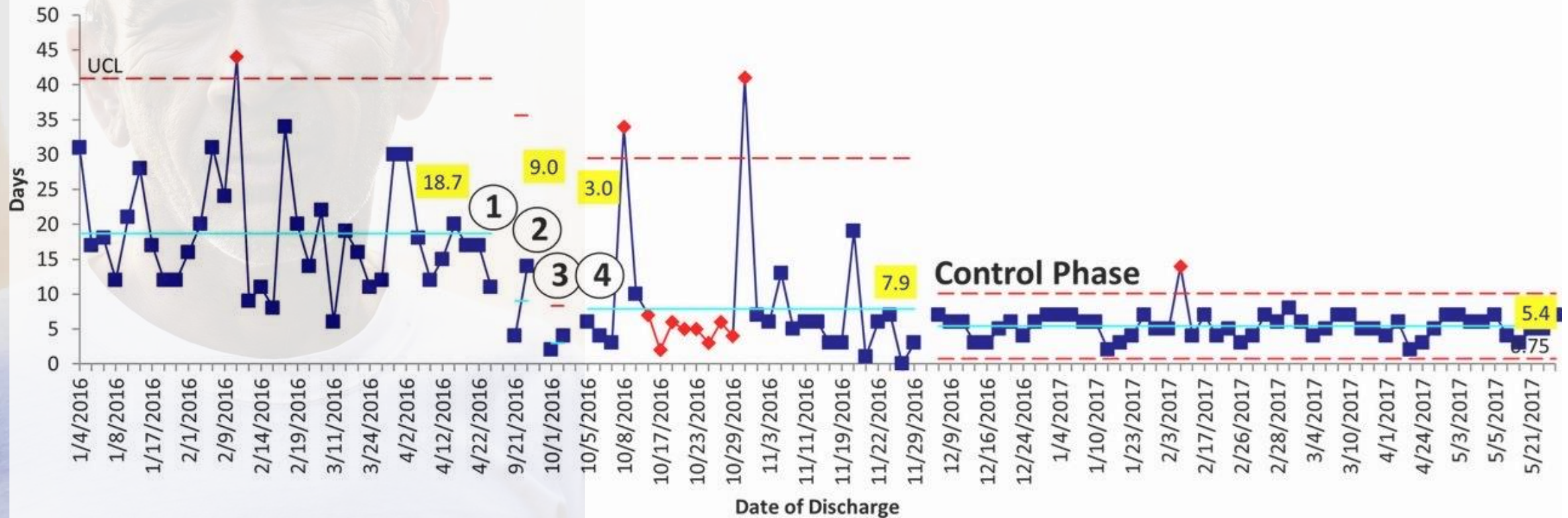




- 1) Add additional appointment slots.
- 2) Cross-train schedulers.
- 3) Cross-train insurance verification.
- 4) Schedule appointment prior to hospital discharge.



Days from Hospital Discharge to First Scheduled Outpatient Cardiac Rehabilitation Appointment



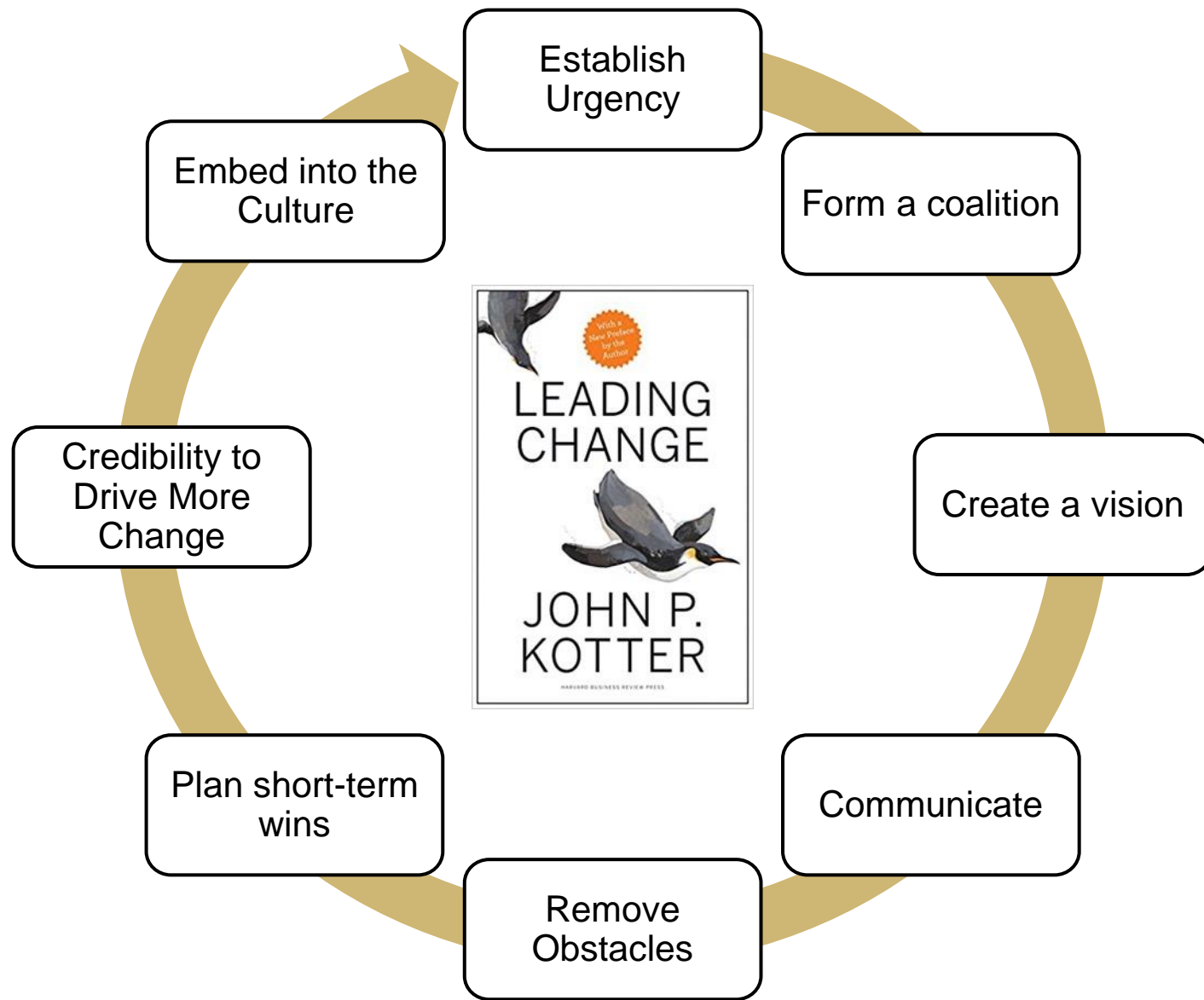
Six Steps for a Successful QI Project

1. Define the problem.
2. Identify areas that can be improved.
3. Decide how you will measure progress.
4. Explicitly state your goals (SMART)
5. Implement and measure small tests of change.
6. **Build upon success and sustain the process.**



Understand your
problem





A top-down photograph of two white coffee cups on a dark grey table. The cup on the left contains a latte with a thick layer of white foam. The cup on the right contains a darker coffee, possibly an espresso or a cortado. A hand is visible on the left side of the frame, holding the handle of the latte cup. Another hand is visible on the right side, holding the handle of the darker coffee cup. A small, crumpled black and white checkered cloth is in the upper left corner. A semi-transparent white rectangular box is centered over the image, containing the text 'BREAK-TIME' and 'Come back at 2:50 MT!'.

BREAK-TIME

Come back at 2:50 MT!



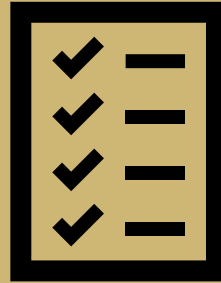
Change Management



AGENDA



**Change
Case**



Kotter's 8-Steps



Questions



A photograph of the University of Colorado Hospital, a large multi-story building with a curved facade. The building is primarily light beige with red brick accents. It has many windows, some of which are covered with white blinds. The name "UNIVERSITY OF COLORADO HOSPITAL" is visible on the upper part of the building. In the foreground, there are some trees and a glass-enclosed entrance area.

UNIVERSITY OF COLORADO HOSPITAL

A Local Story, 2008

Vancomycin Use in the ICU

Problem: Only **50%** of 1st vancomycin troughs within desired range of 10-20 mcg/mL

Solution: QI project to develop simple weight- and creatinine-based guide to dosing

- ICU and Pharmacy leadership buy-in
- Rolled out nomogram for the ICU
- Email sent to residents/faculty every month





Message

Options



Send



Paste



Calibri (Bo... ▾

11 ▾

A[^]

A^v

A[□]

≡ ▾

1 2 3 ▾

≡ ▾

≡ ▾

≡ ▾



B

I

U

~~ab~~

x₂

x²



A ▾

≡

≡

≡

≡



Attach
File



Insert
Link



Table



Pictures



Signatur



I wanted to make everyone aware of the ongoing QI initiative in the MICU addressing initial vancomycin dosing. The standard 1 gram every 12 hours is not appropriate for many ICU patients and the first troughs have been in the therapeutic range of 10-20 mcg/mL only about 50% of the time. We have developed a very simple dosing nomogram (attached) that also includes guidelines on dosing for HD and CVVH, and when the troughs should be checked. Based on the existing data, we expect this nomogram to eliminate about 75% of subtherapeutic troughs and 50% of supratherapeutic troughs.

The nomogram requires only the patient's actual body weight and MDRD-estimated GFR with age, gender, race, and serum creatinine (online at www.mdrd.com).

We rely primarily on you as treating physicians to follow the nomogram and correctly order the antibiotics, decreasing the risk of under- or over-dosing your critically ill patients in the crucial initial 24-72 hours of therapy until the first trough is obtained. The MICU pharmacists will be helping you with the nomogram as well.

Thank you in advance for your help and your hard work. We welcome all questions and feedback on this quality improvement initiative.



Vancomycin use in the ICU: Outcomes

Pre-intervention trough (10-20) 50%

Post-intervention trough (10-20) 50%

Protocol adherence rate 20%!





Why didn't the providers change their behavior?

What was wrong with this approach to leading change?



Message

Options



Send



Paste



Calibri (Bo... ▾

11 ▾

A[^]

A^v

A[◇]

≡ ▾

1 2 3 ▾

← ≡

→ ≡

¶

B

I

U

~~ab~~

x₂

x²

 ▾

A ▾

≡

≡

≡

≡



Attach
File



Insert
Link



Table



Pictures



Signatur



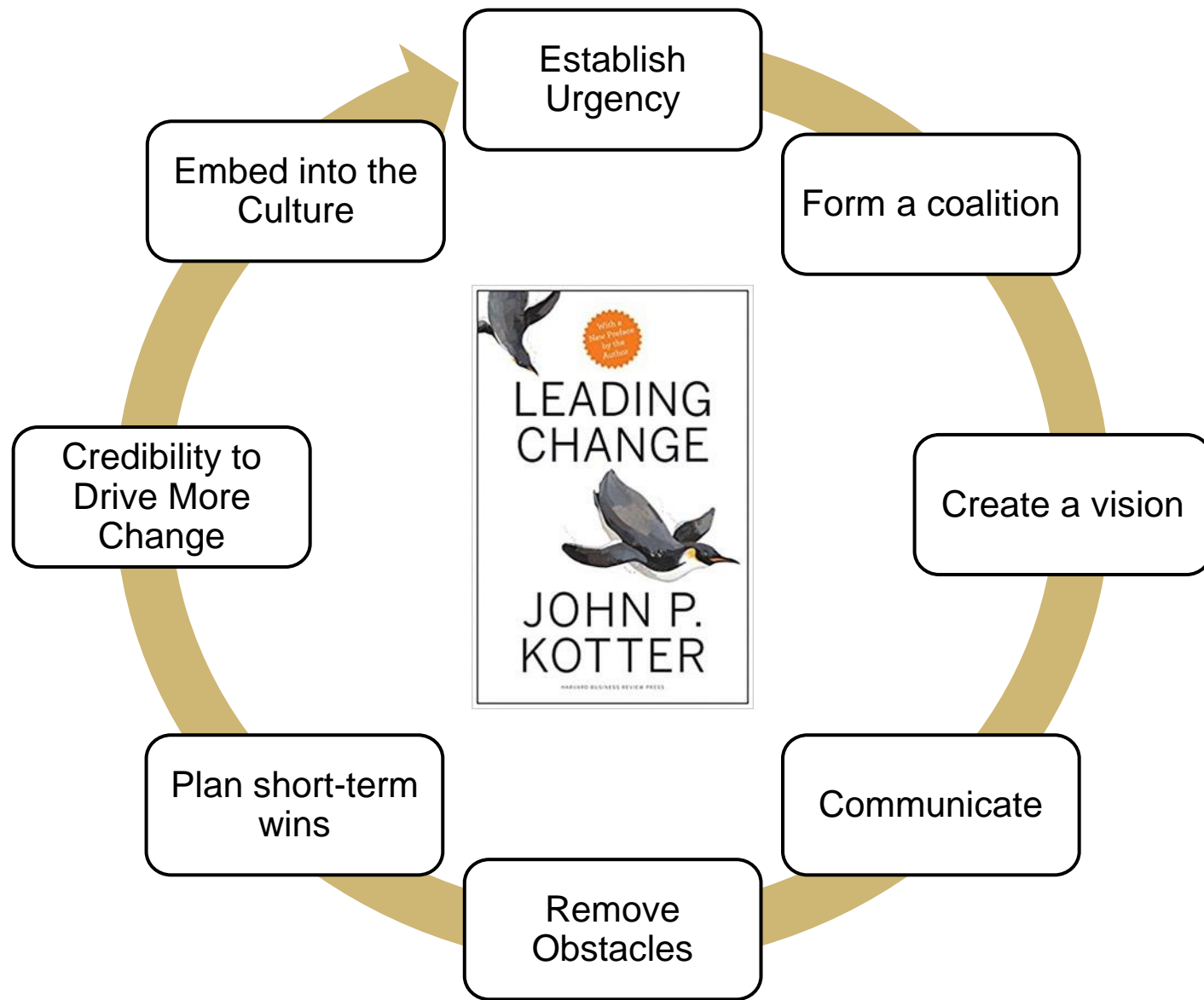
I wanted to make everyone aware of the ongoing QI initiative in the MICU addressing initial vancomycin dosing. The standard 1 gram every 12 hours is not appropriate for many ICU patients and the first troughs have been in the therapeutic range of 10-20 mcg/mL only about 50% of the time. We have developed a very simple dosing nomogram (attached) that also includes guidelines on dosing for HD and CVVH, and when the troughs should be checked. Based on the existing data, we expect this nomogram to eliminate about 75% of subtherapeutic troughs and 50% of supratherapeutic troughs.

The nomogram requires only the patient's actual body weight and MDRD-estimated GFR with age, gender, race, and serum creatinine (online at www.mdrd.com).

We rely primarily on you as treating physicians to follow the nomogram and correctly order the antibiotics, decreasing the risk of under- or over-dosing your critically ill patients in the crucial initial 24-72 hours of therapy until the first trough is obtained. The MICU pharmacists will be helping you with the nomogram as well.

Thank you in advance for your help and your hard work. We welcome all questions and feedback on this quality improvement initiative.





Establish Urgency



“Burning Platform”

Establish
Urgency



Establish Urgency



1.0 - Survival

2.0 - Extrinsic Motivation: reward, punishment

3.0 - Intrinsic Motivation

Burning Aspiration



Establish
Urgency

NEW YORK TIMES BESTSELLER

"Provocative and fascinating." —MALCOLM GLADWELL

Daniel H. Pink

author of *A Whole New Mind*

DRiVE

The Surprising Truth
About What Motivates Us

AUTONOMY

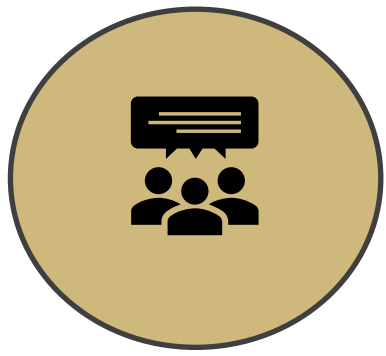
MASTERY

PURPOSE

PLAY

CONNECTION





Breakout



10 minutes

- What is your burning platform? (IE: SO WHAT?)



Form a Guiding Coalition



Key Partner Engagement

Who - *Anyone* impacted by your work

To Gain Trust, Expertise, Insight:

- Interprofessional
- Patients
- The Cool Kids

To Gain Resources:

- Various levels of organization
- The Bosses



Guiding Coalition

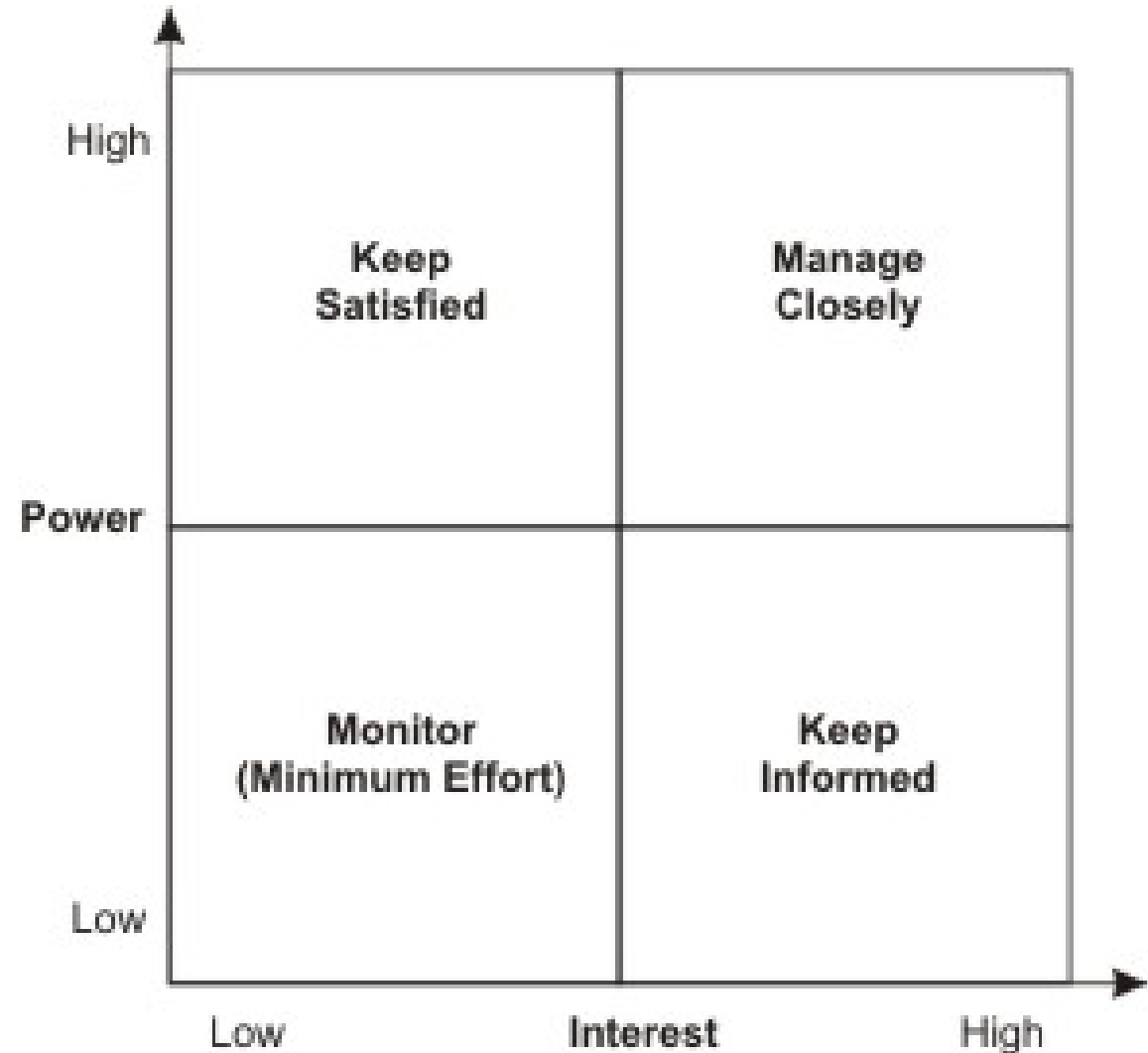


Stakeholder/**Partner** Map

Step 1: Identify

Step 2: Prioritize

Step 3: Understand



Write down one person who you will contact after this session to move your work forward.



Create a Vision



**Create
a Vision**



**Earth's most customer
centric company.**



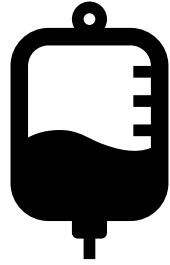
**A world without
Alzheimer's disease.**



**Eliminate all
preventable harm.**



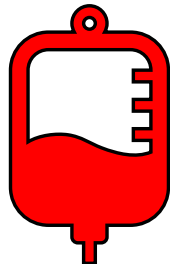
Create a Vision



Discharge instructions will accurately list medications for patients discharged on IV antibiotics



Patients will be admitted during day shift for planned chemotherapy.



**We will transfuse wisely.
Not a drop wasted.**



Communicate



CHANGE

WE CAN BELIEVE IN

Communicate



The Elevator Pitch

Communicate

Introduction: Who are you?

Hook: What is the problem or opportunity?

Solution: What are you doing about it?

Value proposition: How does this create value for him/her?

Call to action: What next?





Remove Obstacles



Remove
Obstacles



Remove
Obstacles

VANCOMycin IV + Pharmacy Consult		✓ Accept
✓	<div><div>ⓘ</div><div>VANCOMycin (VANCOCIN) in NS 500 mL IVPB Intravenous, Administer over 2.5 Hours, EVERY 12 HOURS, First dose today at 1146 Pharmacy Dosing Service to manage VANCOMycin therapy. Allergy/Contraindication: Vancomycin</div></div>	
✓	<div>Inpatient Consult to Pharmacy ASAP, ONCE, today at 1146, For 1 occurrence</div>	



Remove Obstacles

(Standard)
{hospital ward,
ICU}

(Standard)
{for observation,
for ongoing care,
for possible D/C
same day etc.}

(Standard)
{Keep NPO, Start a
clear liquid diet,
Resume previous diet}

(Standard){clear liquid
diet, regular diet...}

(Standard){PO, IV}

(Standard){Daily, BID, TID}

(Standard){Check
Healing, Evaluate
Response to Therapy,
Retreatment...}

Variceal UGIB

(Standard) designates default software selections

Recommendation

- ☒ *Culprit Lesion
- ☒ Return Patient
 - Return area -
 - Reason -
- ☐ Transfer Patient
- ☒ Diet, Sequential
 - Initial Diet -
 - Initial Duration - Today, Then Advance
 - Diet Recommendation -
 - *Duration - if stable
- ☐ Diet
 - *Cirrhotic UGIB Octreotide
 - *Cirrhotic UGIB Antibiotics
 - *Proton Pump Inhibitor
 - Route -
 - Frequency -
 - *Duration - Post-banding
 - *PPI Cessation (Stop PPI)
 - *Cirrhotic UGIB Post-banding General
 - Resume Anticoags / Antiplatelets - Single
 - *Rebleed General
 - *Rebleed Varices Blakemore/Minnesota
 - *Rebleed Specific
 - *Repeat UGI endoscopy
 - Repeat Reason -
 - *Repeat day - 8w GI to order

Post Op Orders

Patient Profile: This is a 30 year old male. Refer to note in patient chart for documentation of history and physical.

Medications:

Moderate Sedation:

Procedure: After obtaining informed consent, the endoscope was passed under direct vision. Throughout the procedure, the patient's blood pressure, pulse, and oxygen saturations were monitored continuously. The Olympus GIF H190 was introduced through the and advanced to the.

Findings: (Standard){Grade I/II/III} (Standard){Upper/Middle/Lower Esophagus...} (Standard){Diminutive, Small, Medium, Large...}

Varix grade varices were found [Site]. [Size].

Complications:

Estimated Blood Loss:

Impression: (Free Text)

Recommendation:

- Source of blood loss likely due to [Lesion].
- Return patient to [Return area] [Reason].
- [Initial Diet] today, then advance as tolerated [Diet Recommendation] if stable.
- Complete octreotide drip for 72h then stop.
- Complete antibiotic course for total 7 days for upper GI bleed in cirrhosis.
- Use a proton pump inhibitor [Route] [Frequency] for post-banding bleeding prophylaxis, until varices eradicated, then stop unless otherwise indicated.
- Avoid instrumentation of esophagus this hospitalization including NG and OG tubes given risk of dislodging bands.
- If hemodynamically significant rebleeding, please notify GI service.
- Repeat upper endoscopy in 8 weeks (GI to order) [Reason].

Additional Images:

Procedure Code(s):

Diagnosis Code(s):

Post Op Orders:

Patient Instructions:

CC Letter to:

Attending Dr. Participation:



Remove
Obstacles



Generate Short-Term Wins



**Short
Term
Wins**



Celebrating Wins: Wea-ner of the Month

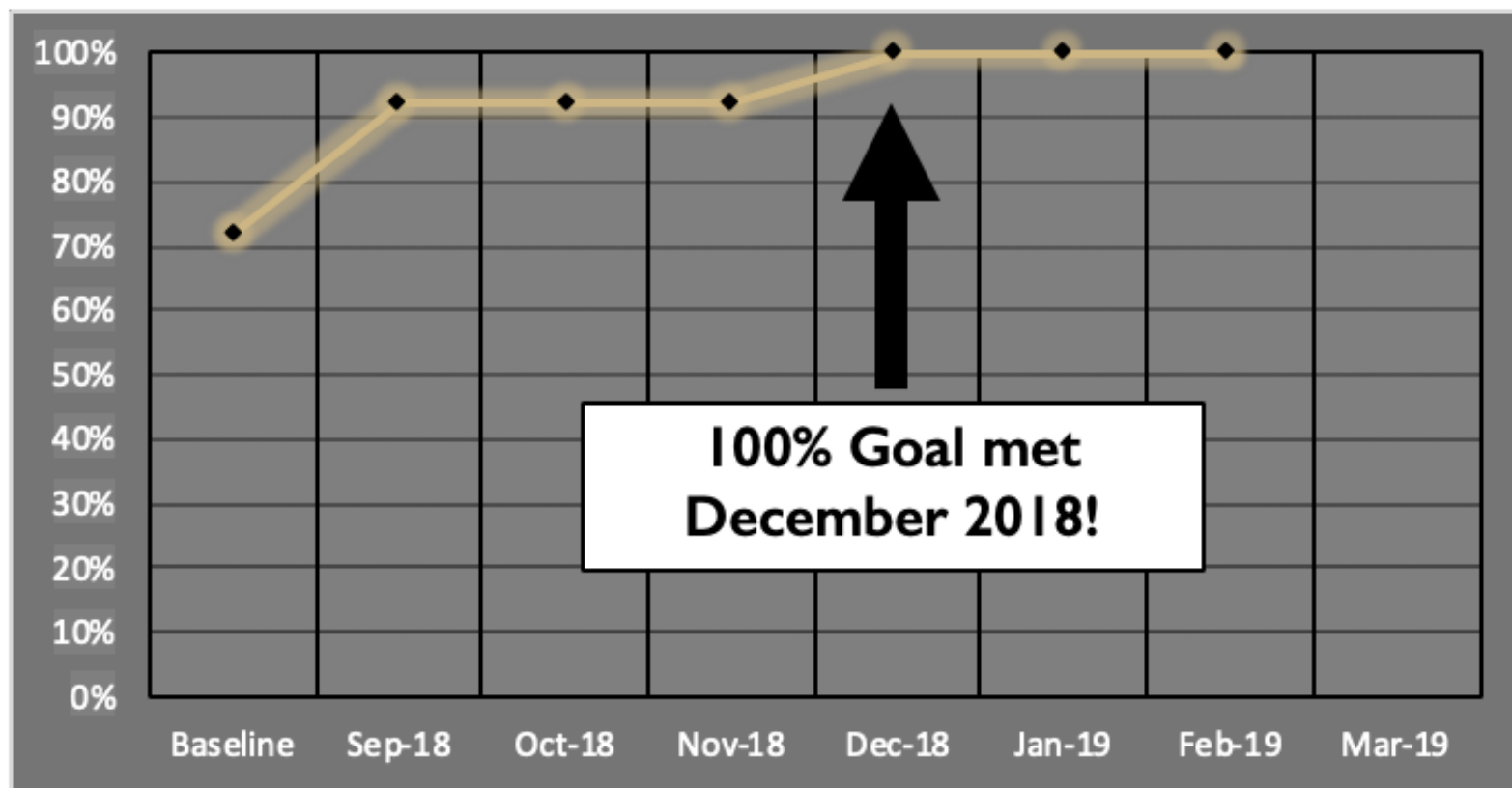


Use Credibility to
Drive More Change



Credibility Momentum

AY 18-19 Opioid Prescription for 7 days or less

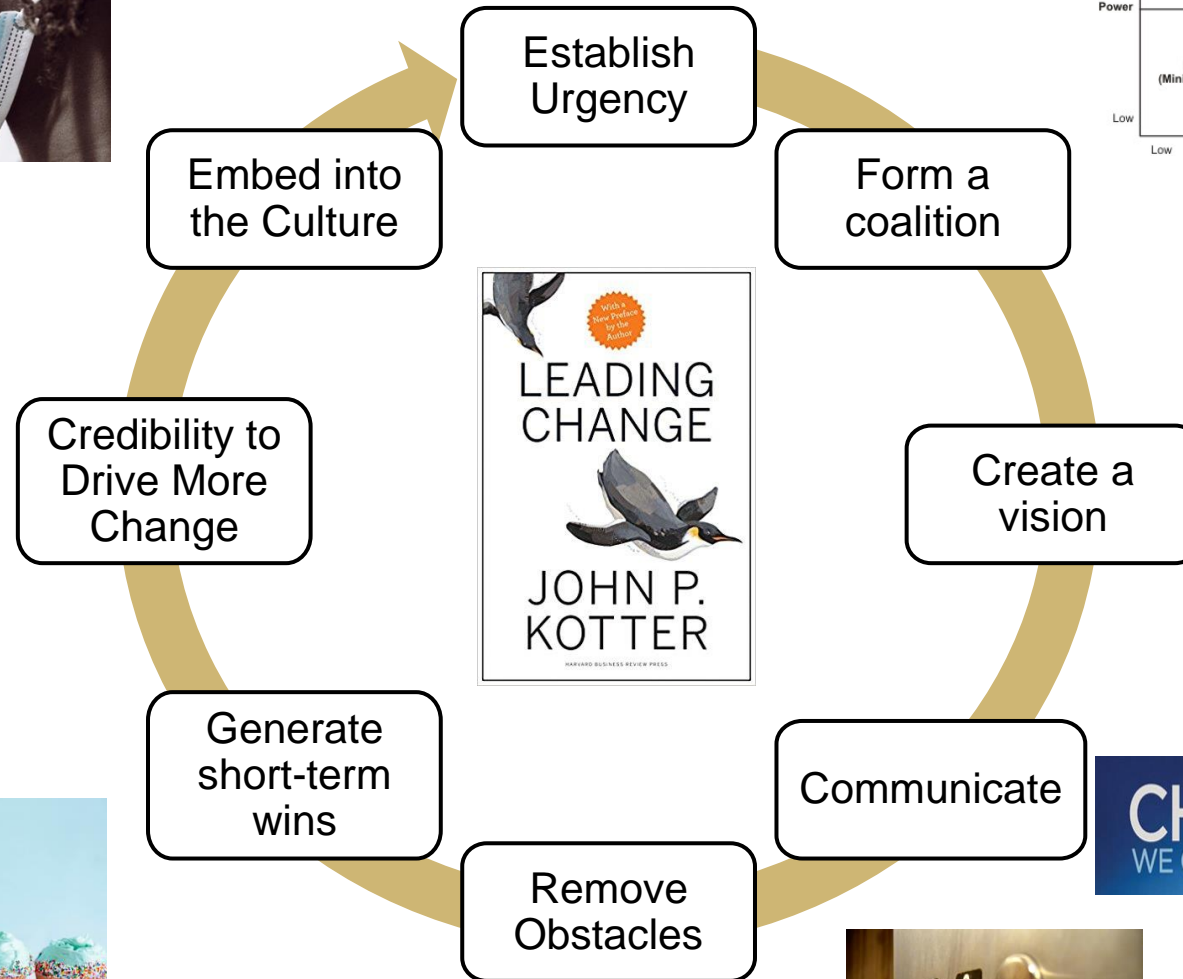
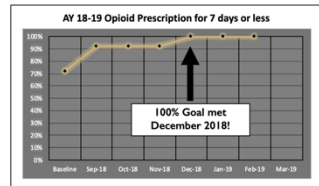
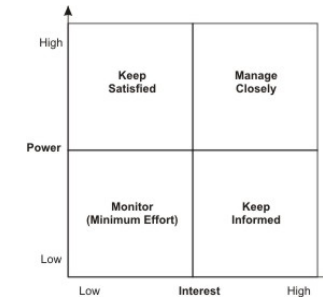
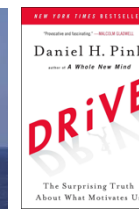
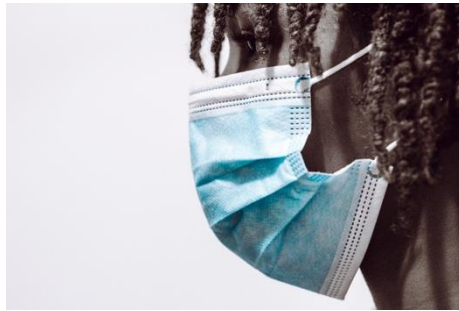


Embed it in the Culture



Culture Change





“Survival is optional. No one has to change.”



W. Edwards Deming



