# Certificate Training Program Session 3

**Welcome!: Before We Start** 

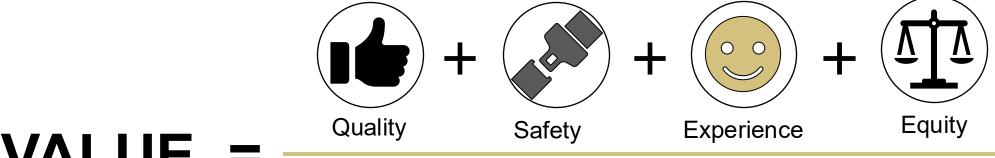
Sign-in at the back
Pick up handout packet
Sit with your CTP team at your assigned table

# Oasis



## Curriculum Overview

KEY	Team	Check-in Ins	spiration	Backgrour	nd Proce	ss Improveme	nt l	.eadershi <sub>l</sub>	o	Quality/Safet	у	Coaching		EMR
8/19	#1	Welcome	Be	ginning with th End in Mind		ectives & oductions	Ove	erview	Lead	ership Defined	Te	eam Norms		Understand Process
8/26	#2	CHCO Inpatie Pediatric Reh		riving as a Lead Imperative		ue Defined In		tion to Qu rovement	ality	IHQSE Mod Chang		Coaching		Understand Process
		Coaching												
9/9	#3	UCH Whole Blo Program	nvestigate the Problem	Problem Statement	Voice of the Customer	⊢ Pr	Process Mapping Stakeholder A			Analysis Coaching			Baseline data	
		Coaching												
9/23	#4	UCH Rheumatology Clinic		vestigate the Problem		anding Root auses	Bas	eline Data	ne Data EMR Proce		Data Business Case			Baseline data
		Coaching												
10/7	#5	CHCO Digesti Health	CHCO Digestive Health QI vs. Research				Leading Change							Baseline data
		Coaching												
10/28	#6	UCH Pre-Proce Services	dure	Leading Change: Vision			QI and Health Equity					Wellness		Process Optimization
11/4	#7	DHH OB/GYN Clinics Data Collection Plan				Myers Briggs							Process Optimization	
		Coaching												
11/18	#8	UCH ED & Radio	ology	Hone the ntervention		ace Called Idemia	Negotiating for what You Ne		vhat You Need		Finalize Need			
		Coaching												
12/9	#9	CHCO Health C & Dev. Peds	l)e	sign Thinking		nce	Leading Change: Sense of Urgency			Coaching			Finalize Need	
12/16	#10	UCH Antimicro Stewardship		eading Change Buiding Coalitic				Optimizing EMR Requests Overcoming Resist		tance Team Logo			Submit Ticket	
		Coaching												
1/13	#11	CHCO Inpatie Pediatric Reh		Storytelling	Alumni Presentation		1	Leading Change: Awareness Campaign		Mic	Mid-year Report Overview		EMR Decision	

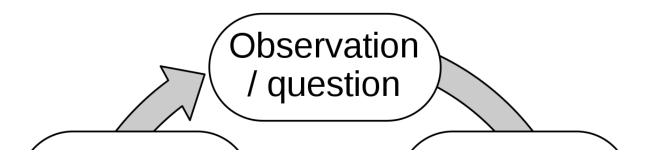




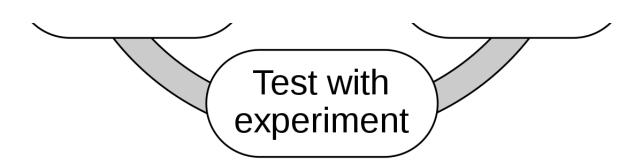


# Value QI = Quality Improvement

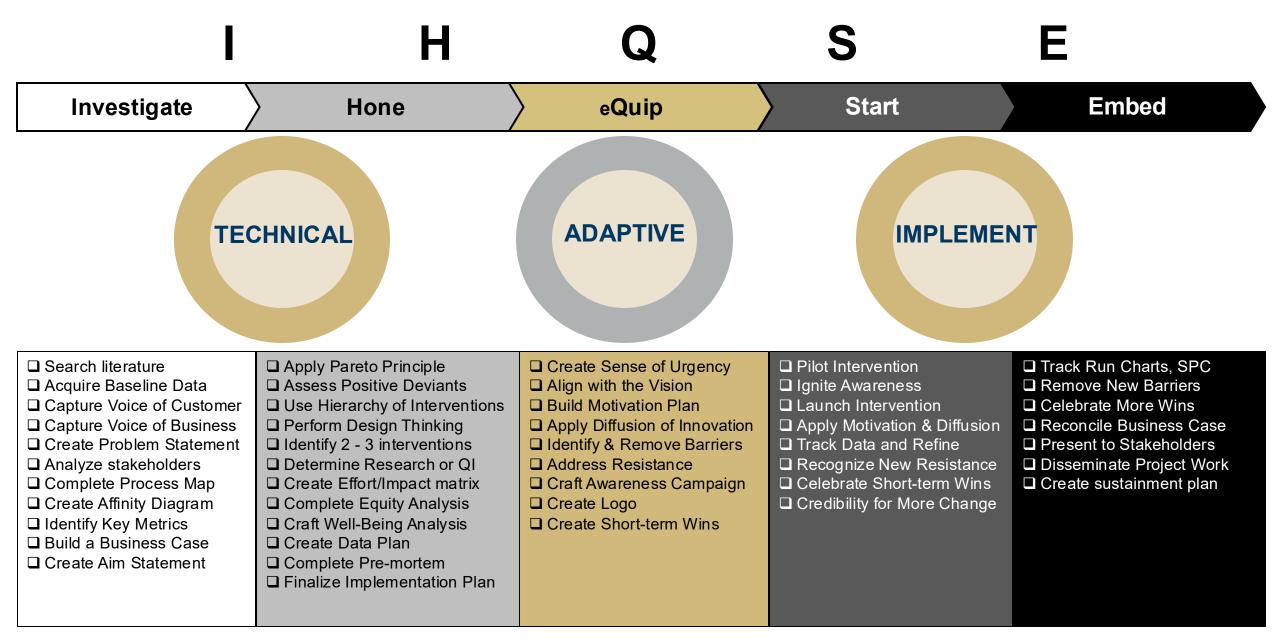
Systematic and continuous actions that lead to measurable improvement in health care services and the health status of targeted patient groups.



# UNDERSTAND YOUR PROBLEM FIRST !!!







# What Emotions Are We Talking About?

**Tiny Engines** 



Joy Hope Gratitude Inspiration Awe Interest Amusement Pride Serenity Love

**Undoing Effect** 



# Today's Objectives

- Create an understanding of and scope of a problem
- Understand what your customers wants
- Recognize the people who will impact and be impacted by your project work
- Define the key steps in your current process

# Syllabus

	Team Check-in: CHCO Inpatient Pediatric Rehab Who are my colleagues?				
	Thriving as a Leadership Imperative	How can leaders and systems improvement work improve well-being?			
#2	Value Defined	How is healthcare value defined?			
Aug. 26	Introduction to Quality Improvement	What are the common methods for improvement work?			
	IHQSE Model of Change	What is the IHQSE framework for change?			
	Coaching				
Coaching	Ground rules. Leadership defined				
	Team Check-in: UCH Blood Bank	Who are my colleagues?			
	Investigate the Problem	How do I understand the problem I'm trying to solve?	┛	Complete Voice of Customer, Build Stakeholder analysis, and Develop a problem statement	
	Problem Statement	How do I quantify and scope the problem to solve?			
#3	Voice of the Customer and Stakeholder Analysis	What does your customer/business want?			
Sept. 9	Stakeholder Analysis Who are the key people who will be impacted/impact my project?			Due Oct. 28  Complete a Process	
	Process mapping	How do I understand the steps in my current process?		Map Due Nov. 4	
Coaching	Coaching				
Coacning	Voice of the customer, process management of the customer of t	nap, problem statement		Complete Affinity	
	Rheumatology Clinic	Who are my colleagues?	_	Diagram	
	Baseline Data	How do I identify key metrics?		Due Dec.9  Reading for next session: Kotter, John. Leading Change: Why	
	Investigate the Problem	How do I understand the problem I'm trying to solve?	u		
#4 Sept. 23	EMR and Process Data	How does the EMR enable data attainment? What EMR changes do I need to make to complete my project?		Transformation Efforts Fail  Meet with Dr. Moksha Patel	
	Understanding Root Causes	What tools can I use to organize information about my process?			
	Business Case	How do I make the financial case for my improvement work?		Due Nov. 4  Draft Business Case Due Nov. 18	
Coaching	Baseline data, root causes, busin	ess case			

# **UCH Whole Blood Program**

- 1) Introduce your team
- 2) Tell us about your program
- 3) What is the problem you think you will focus on?
  - E.g., What are the pain points for you, your staff and customers?
  - E.g., Do you have any data to understand your problem?



### The University of Colorado Hospital Whole Blood Program

CU Institute for Health Care Quality, Safety and Efficiency School of Medicine University of Colorado Anschutz Medical Campus





#### The Team

#### **Stephanie Bates, MD**

Transfusion Service Associate Medical Director Assistant Professor, Department of Pathology

#### Angela Wright, MD

Medical Director of EMS and Pre-Hospital Care Associate Professor, Department of Emergency Medicine

**Desi Harris, NRP**EMS Clinical Quality Manager

Regina Krell, MS, BSN, RN
Sr. Director of Trauma and Burn Services





### The Problem

#### WHOLE BLOOD IS BETTER FOR HEMORRHAGE BUT...NOT USED IN ALL HEMORRHAGING PATIENTS

#### Currently only used in Trauma Patients



### The Solution

WHOLE BLOOD IS USED IN ALL HEMORRHAGING PATIENTS

Whole blood is a better value overall

- Quality
- Safety
- Experience
- Equity
- Cost





# Investigate your Problem Part I



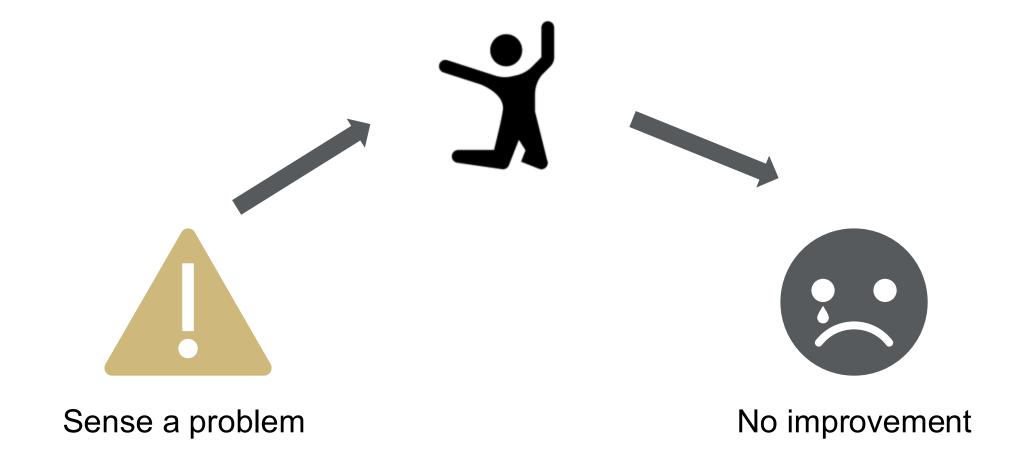
# Investigate the Problem

WHAT is your problem?

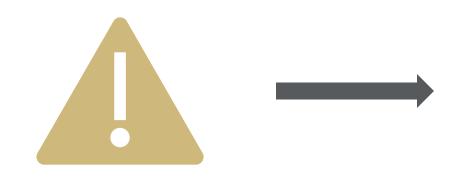
# Investigate: WHAT is your problem

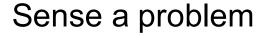
- ☐ Create Problem Statement
- □ Perform Stakeholder Analysis
- ☐ Complete Voice of Customer
- □ Complete Process Map
- ☐ Complete Literature Search
- □ Acquire Baseline Data
- ☐ Create Affinity Diagram
- ☐ Identify Key Metrics outcome, process, structural, balancing
- Build a Business Case
- ☐ Create Aim Statement

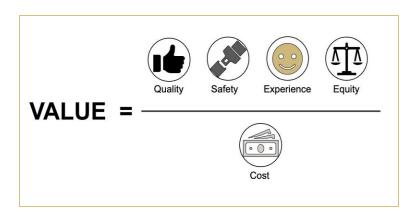
Patients are not happy with their experience in the ED.



# Investigate - WHAT

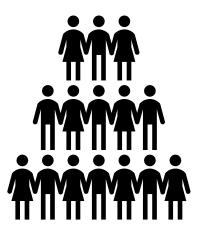












Understand stakeholders – Voice of Customer

Stakeholder Analysis

# **Tool:** The Problem Statement

### The SPARK



Patients are not happy with their experience in the ED.



What are you addressing?

What is your scope?





# The SPARK – A Deeper Dive

ER patient satisfaction in the 25th percentile

There have been several complaints regarding ER Triage

Data review shows excessive wait times at triage

Door to Doctor time was nearly 80 minutes

Longer wait times for Non – English Speaking

Excessive 'Left Without Being Seen' is leading to loss of patients and patient safety concerns













### Problem Statement

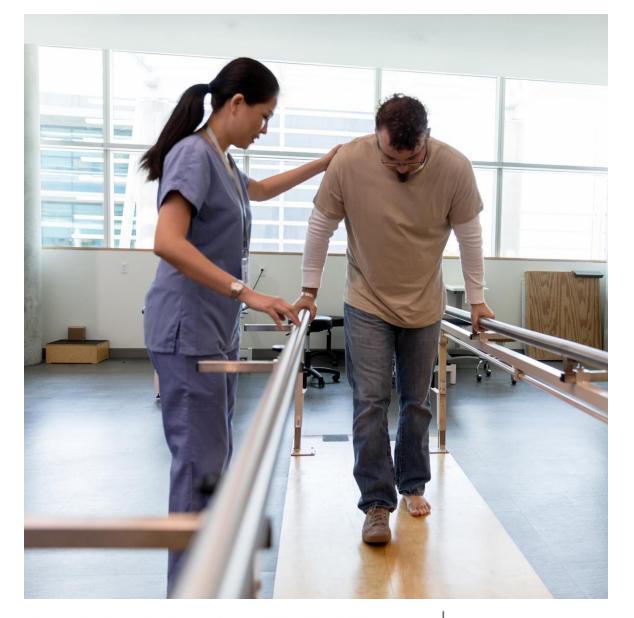
Our patients wait too long in the Emergency Room before they see a provider (an average of 80 minutes), resulting in patients leaving the ER without being evaluated.

### The SPARK



Sense a problem

Inpatient rehabilitation therapists (PT, OT) aren't satisfied with their day- to - day work, reporting rising rates of burn out.



37% of Physical Therapy Consults are inappropriate, leading to 10,000 hours of wasted therapist time per year.

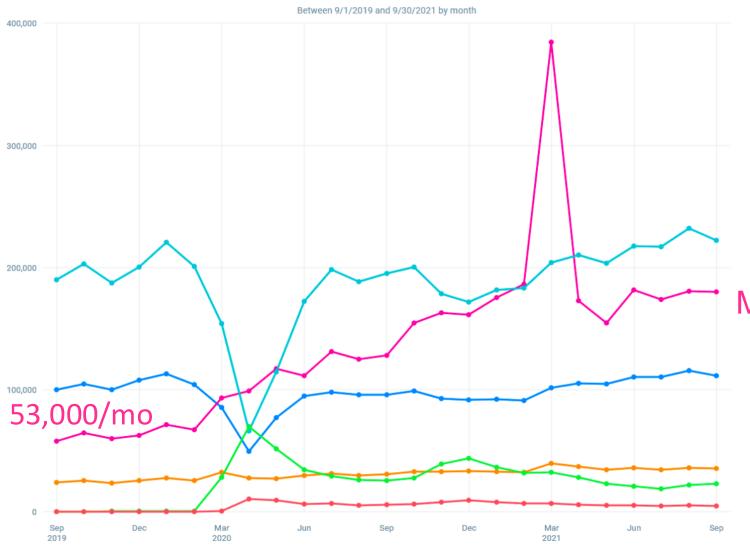
### The SPARK



Sense a problem

Outpatient providers have a high turnover rate, difficult to hire for empty positions.





Patient Messages increased from 59k to 183k / month over the last 2 years for same number of providers.

My Chart Messages 183,000/mo

### The SPARK



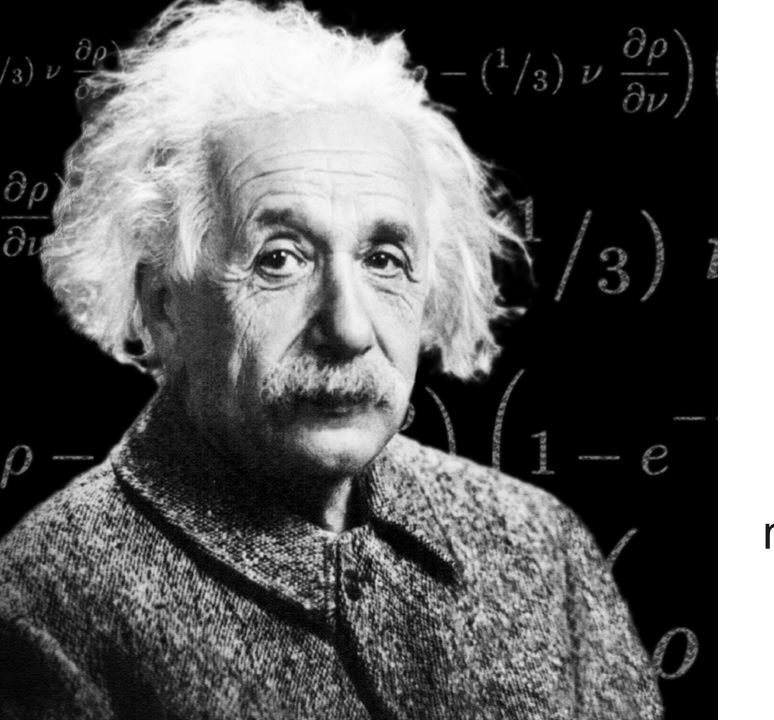
Sense a problem

There are too many surgical nurse travelers.



Sense a problem

We have a high rate of RN turnover, with 41% of surgical nurses report plan to leave their position within 2 years due to physical pain, specifically shoulder and back pain.



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

# Define the problem

Is it a problem?

PROVE IT.

How do you know?

Who is affected?

By how much?







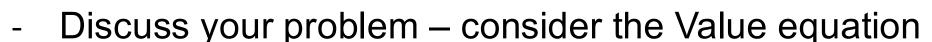


### VALUE =



# Coaching / Breakout:

### Problem Statement Workshop



- What do you know that proves you have a problem?
- Identify missing information and how you many acquire it
- Move from Value assessment to Problem Statement.
- Assignment: Problem Statement due October 28th.

### 25 minutes





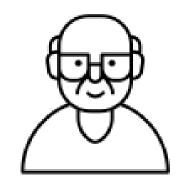


# **Tool:** Voice of the Customers



# A Story











Waste of time

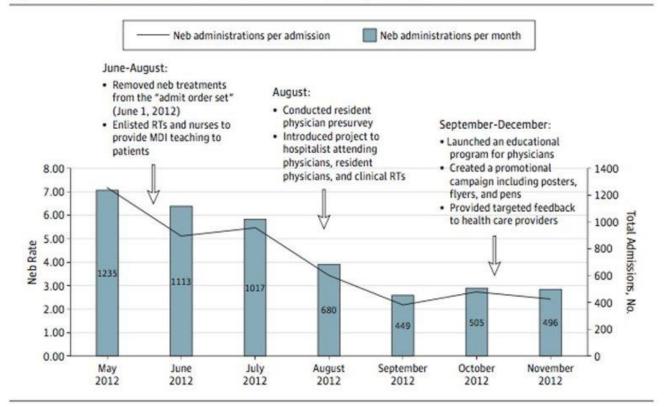
Why can't you give me an inhaler?

Inhalers = Nebulizers

20%
readmission
rate within 30
days

One Million Dollars

### Figure. Multifaceted Intervention and Nebulizer Rates on a High-Acuity Medical Ward



Decreased labor cost

Less resource use

Happier RTs

Fewer readmissions

# A Story

# **Voice of the Customer**



Who are your customers? What are their needs, perspectives? **Patients** 

Staff

**Providers** 

Business

# The ER Triage Problem

# Patients, Providers & Nurses

I get more worried the longer I wait to see a doctor – the reason I came here is to see a doc. I just wanted some reassurance that I was OK – after 2 hours of waiting, I assumed I was and left.

It is so stressful to know that patients are waiting - and may be having heart attacks, strokes, or other lifethreatening illnesses.

It's hard to be in pain, and in a noisy, crowded waiting room until help arrives.

I could easily triage within 5 minutes how sick my patients are!

# The Business – Hospital Leadership

Other hospitals are marketing shorter wait times!

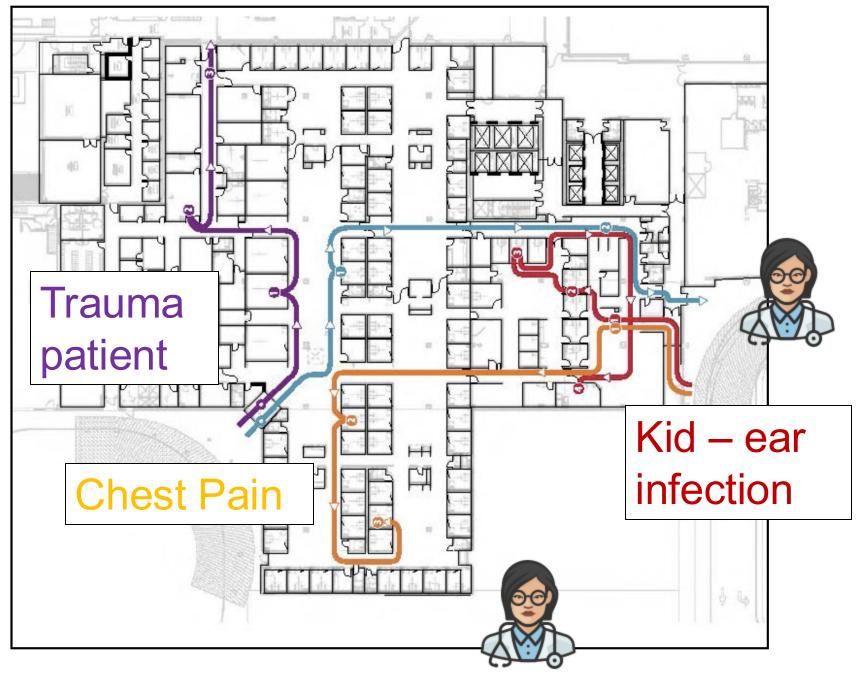
If we require EMS to go on divert, we will lose patients.

We get dinged for high rates of 'left without being seen'

We won't achieve Level 1 Trauma accreditation.

# Redesign





### The Outcome

**Patients** 

Care for non-urgent patients under 30 minutes

Business

Door to provider time less than 7 minutes

Developed a supertrack team – RN, APP - to assess patients immediately

**Providers** 

# Capturing your Voices

**Step 1:** Who are your people?

**Step 2:** What do you want to learn more about from them?

**Step 3:** How will you engage with them?

**Step 4:** How will you feedback what you learned?

# **VOC** in Action





# Problem -Surgery Admin Team

It's hard to schedule surgeons based on late vacation requests, late cancellations, and variability amongst providers!



### **Problem Statement**

It can take over 30 minutes and cost > \$1000 to reschedule a single case, and we reschedule ~500 cases per year, accounting for 250 hours of wasted time and half a million bucks!



### Voice of the Provider

### **Current state**

- Variable
- Inequitable

or transparent – there should be set rules on how the schedule is made that we are all aware of."

"Currently, it is not very equitable

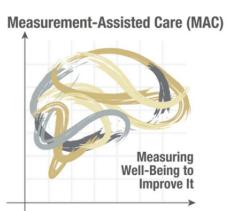
### **Ideal State**

- Requests 6 months in advance
- Schedule release 2 months

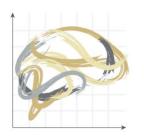
"What if we asked for schedule requests 6 months in advance, and released the final schedule 2 months in advance?"

# Measurement Assisted Care





# Voice of the Provider -Measurement Assisted Care



20%

5%

91%

**78%** 



MAC in past month MAC at each visit

**Importance** 

Workflows

An identified symptom measure completed in EPIC flowsheet in past 1 month

Proportion of all encounters with **EPIC** flowsheet completed for identified measure

Perceive that gathering measures of patient outcomes is important or very important

Perceive that establishing efficient workflows is the best way to support implementation of **MBC** 



# What do all these things have in common?

Join us in a listening session to learn more!











SEDATION OFF AWAKE REHABILITATE

# Perils of Deep Sedation



### **Death**

11 to 24% increase in mortality<sup>1</sup>



### **Delirium**

50% increase<sup>2</sup>



### **Psych Disturbance**

Anxiety, Depression, PTSD<sup>3</sup>



# Immobility-Acquired Weakness

48-96% experience myopathy up to 2 years following discharge<sup>3</sup>

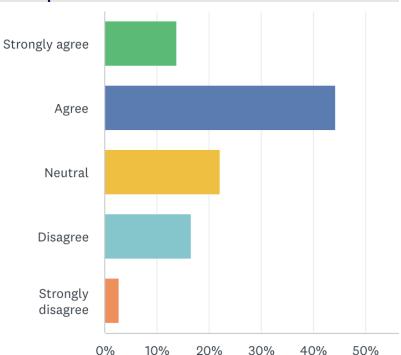


### **Cognitive Impairment\***

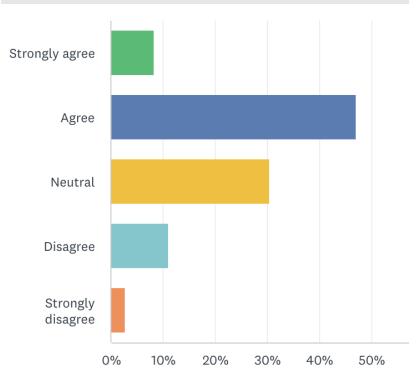
78% at hospital discharge 46% 1 year after discharge 25% 6 years after discharge<sup>4</sup>

# Survey on Sedation Practices – RN, CNA

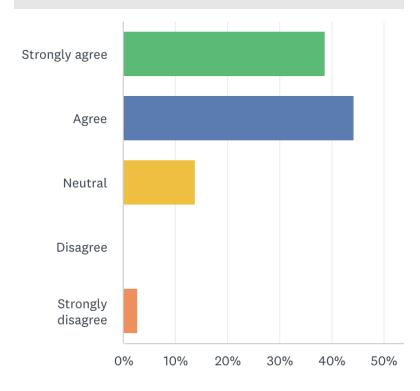
Q1. Sedating mechanically ventilated patients is necessary for patient comfort.



Q5. Being awake and alert on the ventilator is uncomfortable for patients.



Q7. I would prefer to be sedated if I were mechanically ventilated.



# Interviews and Focus Groups

### **SUMMARY KEYWORDS**

Sedation, patient, ventilator, people, precedents, practice, nurses, day, ICU, wean, bedside, unit, educating, opportunity, fentanyl, add, mentioned, shift, PT, OT, trauma surgeons

#### **SPEAKERS**

Mikita Fuchita, Intensivist A

### Mikita Fuchita 00:00

Cool. So the purpose of this interview is just to try to understand what we do for sedation management and patients on the ventilator. Because what we noticed is that, especially someone who's needs to be intubated for longer than the initial post op period, they tend to be on some sort of sedation sometimes have issues, we need sedation, and eventually have delirium. And that makes it even harder for us to wean sedation. So the first question is like to ask you, how you consider our sedation practices like that. That's kind of describing what we do for each patient. And how you make decisions on which patients might require sedation. Or from a physiologic standpoint, versus someone that you think are more appropriate to be on less sedation or off sedation?

### Intensivist A 01:02

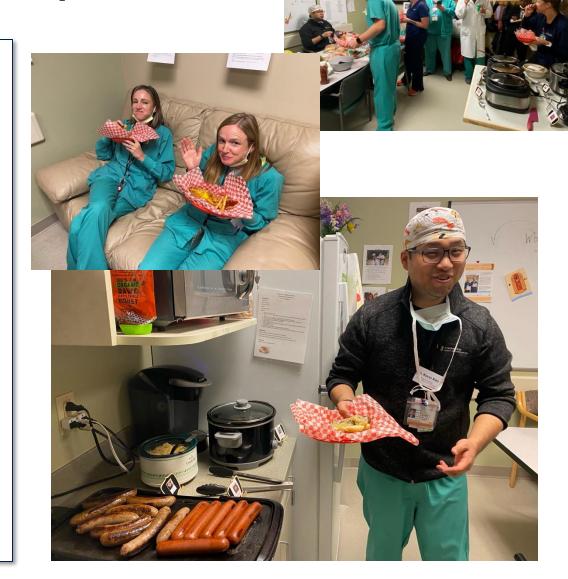
Like my individual practice, or like our practices,

#### Mikita Fuchita 01:05

the both Yeah, yeah.

#### Intensivist A 01:07

I didn't get as a unit. I feel like we're probably somewhere in the middle of the bell curve. I don't I don't know if there's numbers to back that up or not. But I feel like we're probably pretty down the middle in terms of sedation, I don't think at least I think as a group, we tend to practice pretty similarly to from each other, which is good. Because it kind of keeps things consistent week in week out. So that would be my sense, without looking at objective data is that we're somewhere in the middle, you tend to use



# Prompts to Consider

Tell me more about ....

What does a bad day look like, with respect to ....

What does a perfect day look like, with respect to ...

If you had a magic wand, how would you make it better...

# Connecting with your people . . .

Relies on empathy at its core

Allow you to capture key insights, pain points

Allows for the big ideas (ie interventions)

# Ta Da – The Power of VOC



# Coaching / Breakout: Voice of the Customers



- Identify your Customers (Patients, Providers, Staff, Business)
- What do you want to learn from them?
- Discuss how to facilitate a VOC event for your project
- Format Huddle? Meetings? Survey? Qualitative interviews?
- Consider what tools you may use, how you will document
- Assignment: VOC Due October 28th

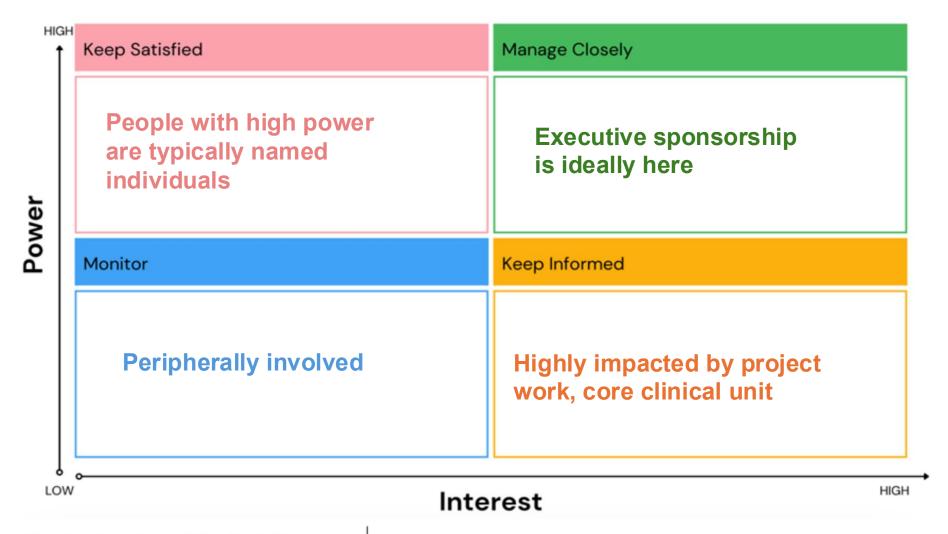
25 minutes



# Stakeholder Map

- Plot of people who may influence your work or be impacted by it
- Stratified by degree of power and interest
- Guides your degree of engagement with various stakeholders
- Hint everyone you talk to in VOC will be on your stakeholder map!

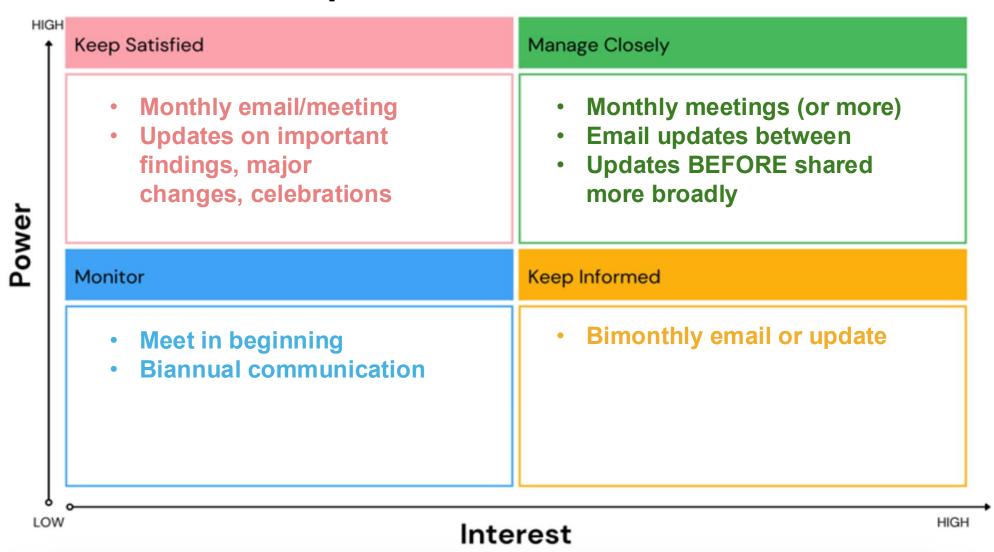
# Stakeholder Map





# If in doubt, don't leave them out...

# Stakeholder Map



# Coaching: Build a Stakeholder Map



- Step 1: List all relevant stakeholders
- Step 2: Classify them based on power and interest
- Step 3: Develop a plan for engaging each group

Assignment Due: October 28

# Investigate your Problem Part 2



# Investigate

WHAT is your problem?

WHY is it happening?

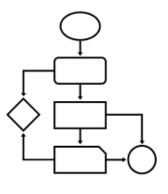
# Investigate – WHY



**Problem Statement** 



Gemba – The Place, The Walk



**Process Map** 

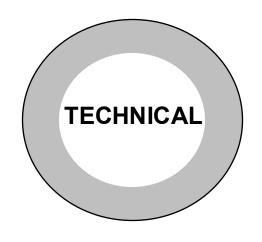


#### **Definition**

Technique for creating a visual representation of a workflow from start to finish. A process map uses standardized symbols to outline tasks, decisions, and the flow of work across people or systems.

### **Purpose**

- Communicate how a process works in a simple, clear way.
- Investigate what is working and what is not
  - Bottlenecks & Redundancies
  - Discover ways to optimize the entire process
- Build a common understanding



**Process Improvement** 



**Step 1:** Define your process & determine your entity

**Step 2:** List the steps involved – in sequence

**Step 3:** Create a flow chart

**Step 4:** Vet with others

**Step 5:** Identify pain points, positive points, and data points

### Step 1: Define your process & determine your entity

1. What is the name of this process?

2. What starts the process?

3. What ends the process?

### Step 1: Define your process & determine your entity

Entity = the *thing* moving through the process



**HUMAN** 

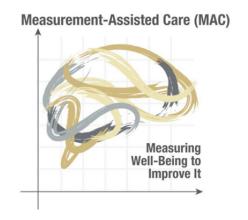


INANIMATE OBJECT

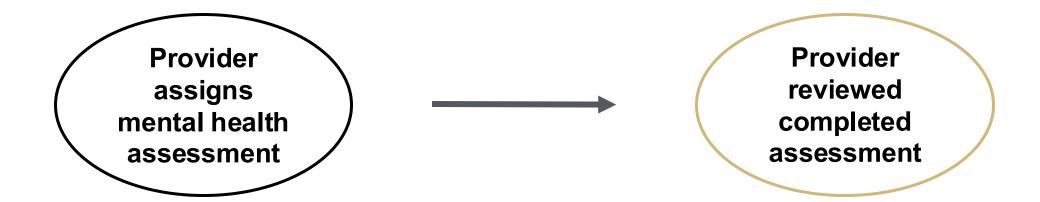


**INFORMATION** 

# **Example: Measurement-Assisted Care** (MAC)



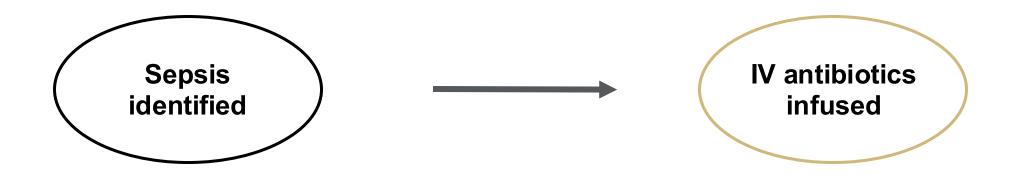
Process = standardized patient completed mental health assessments



Entity = information

### **Example: Antibiotics for Sepsis**

Process = antibiotics for inpatient sepsis



Entity = information + medication

### **Example: Universal germline testing**

Process = skin punch sample collection



Entity = human + skin sample

### Step 2: List the steps involved...in sequence



First, brain dump all of the steps involved

Then, start putting them in chronological order

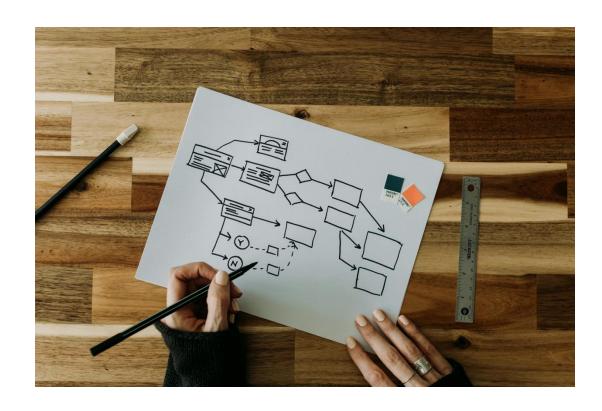
Consider, is this the same at all times, in all conditions

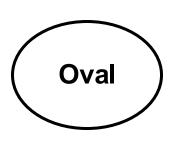


# Gemba 現場



### Step 3: Create a flow chart





= process START / END

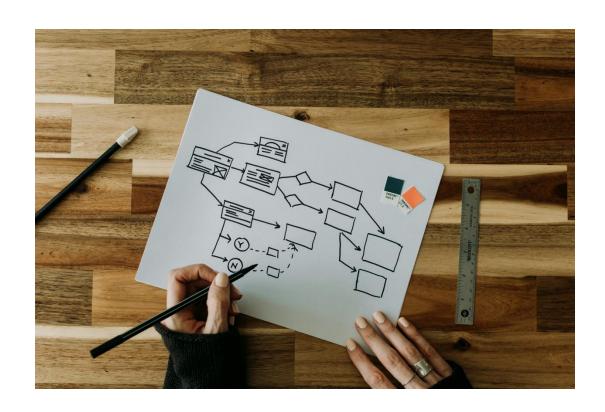


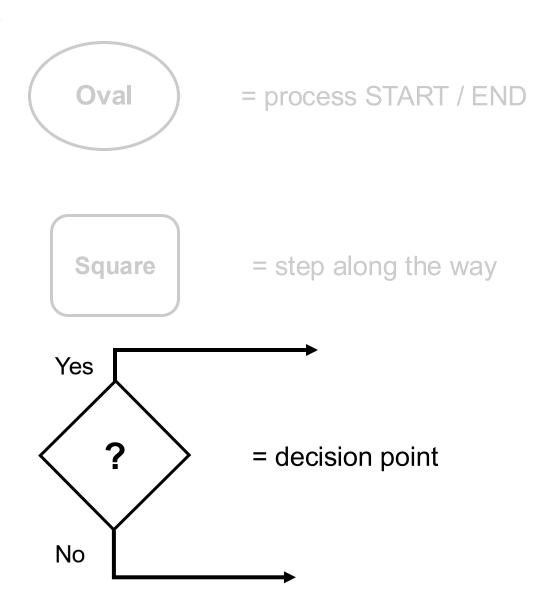
= step along the way



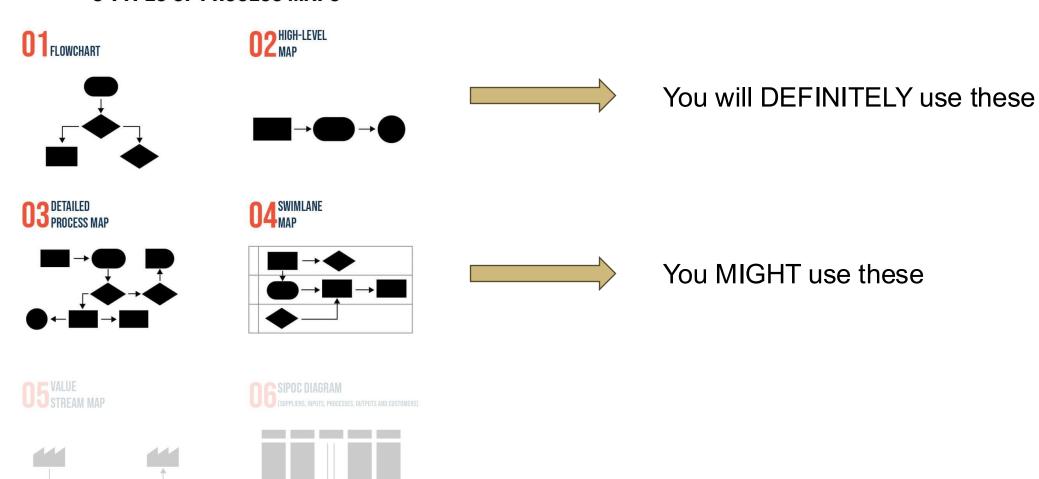
= decision point

### Step 3: Create a flow chart

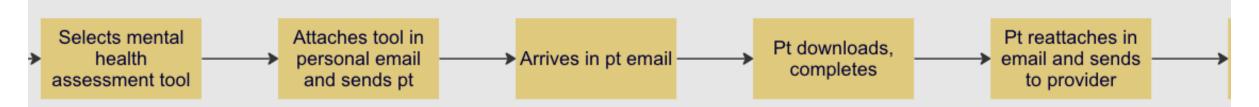


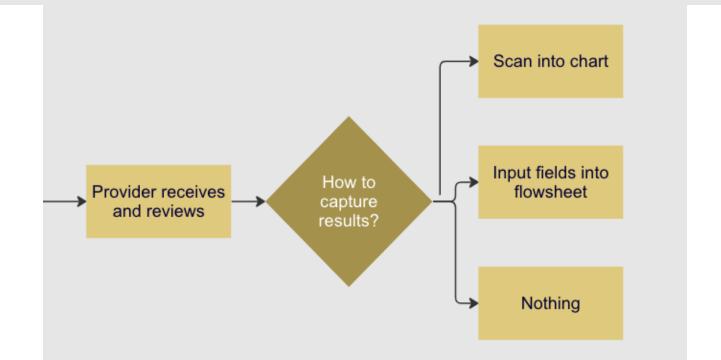


#### **6 TYPES OF PROCESS MAPS**

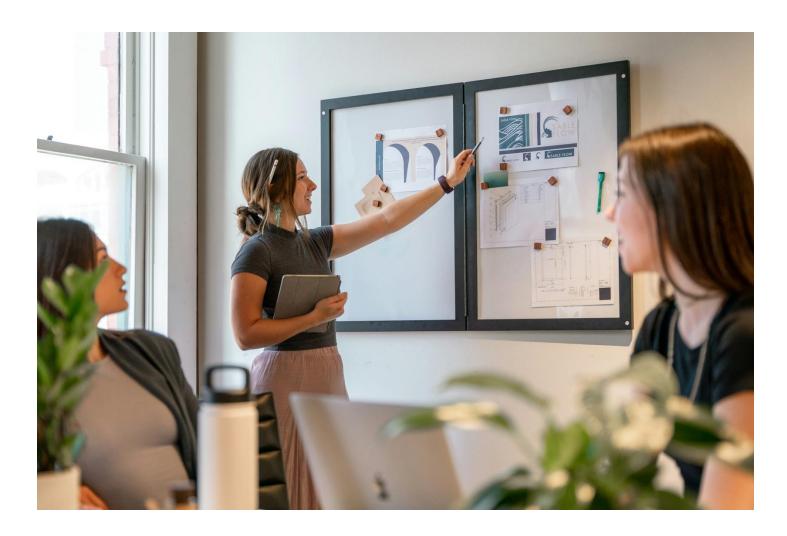


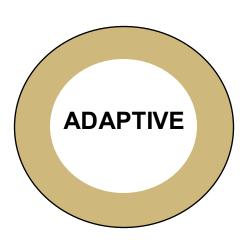






### Step 4: Vet with others





**Change Management** 

### Step 5: Identify pain, positive, and data points



#### **Pain Points**



#### **Positive Points**

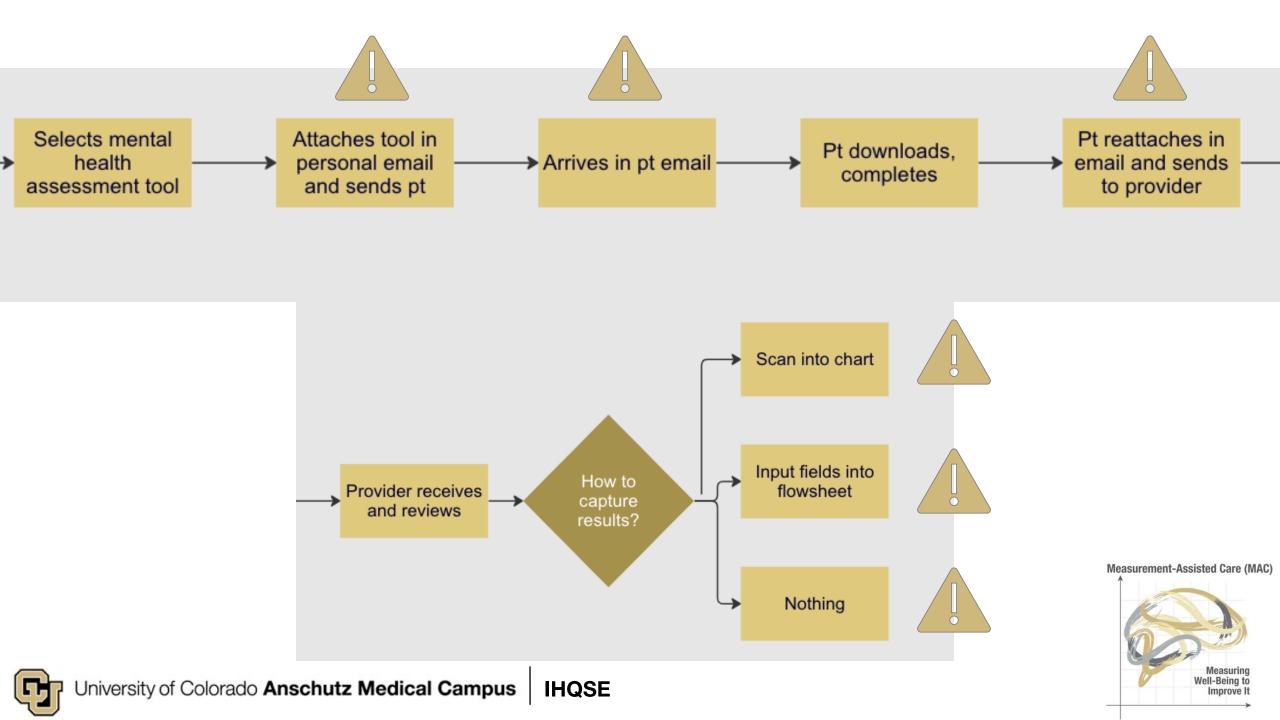


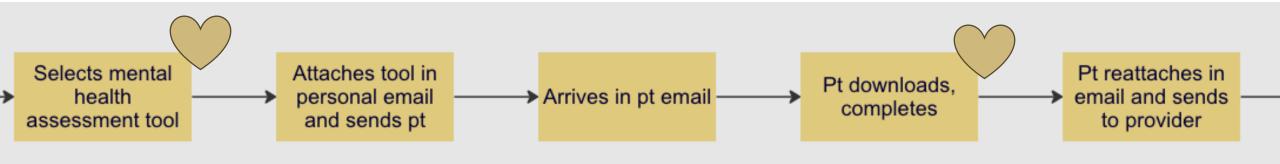
#### **Data Points**

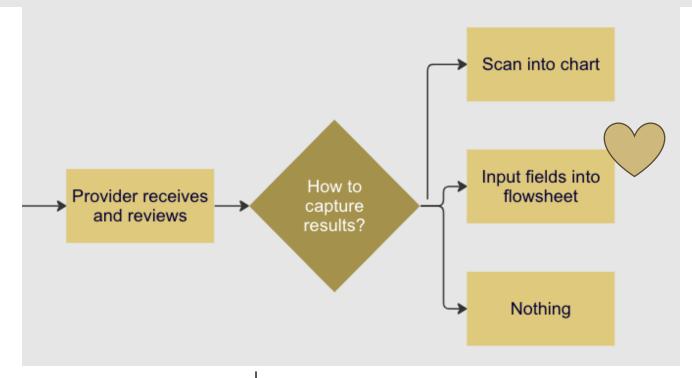
- 1. Confusion, variability
- 2. Waste, Inefficiency
- 3. Opportunities for improvement

- 1. Bring Joy
- 2. Enhance Connection
- 3. Add Value

- 1. Happening
- 2. Working
- 3. Duration



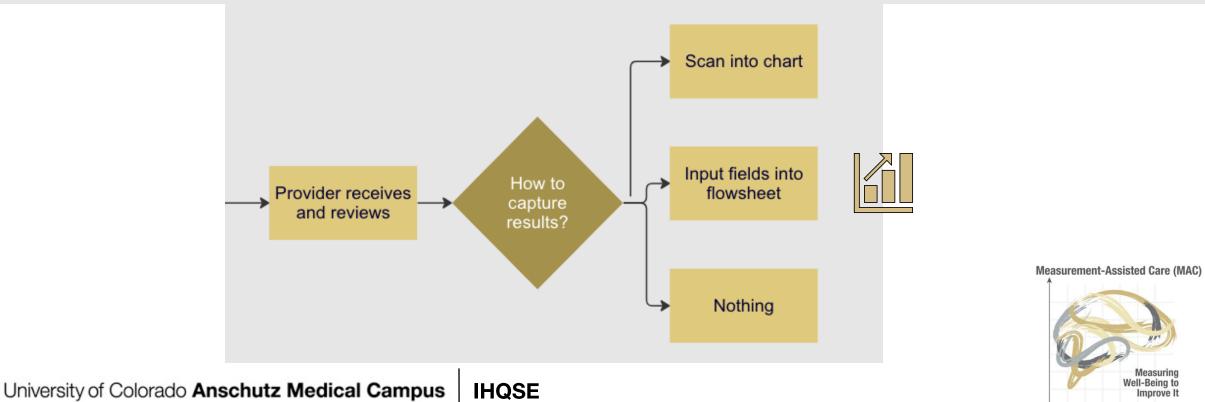






Measurement-Assisted Care (MAC)





# Principles of Process Mapping

- Process Mapping is a *Team Activity*
- Create a safe space what are people actually doing?
- Stickies are helpful / required!
- Current state should always come first
- Consider whether creating a future / optimal state is helpful



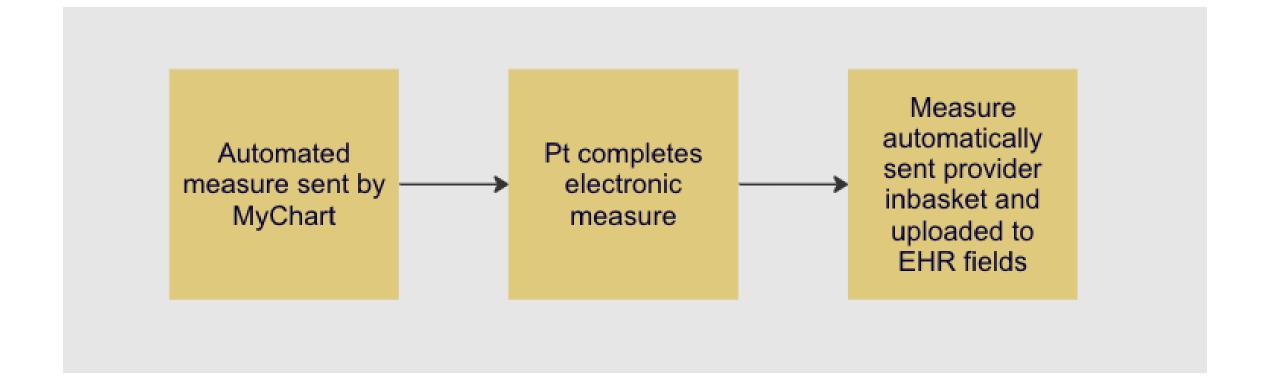
"What would this look like if it were easy?"

- Tim Ferris



"Perfection is achieved, not when there is nothing more to add, but when there is nothing left to take away."

- Antoine de Saint-Exupéry, French pioneering aviator, poet, aristocrat



# Coaching: Process Map







**Step 1:** Define your process & determine your entity

**Step 2:** List the steps involved – in sequence

Step 3: Create a flow chart

Step 4: Vet with others

Step 5: Identify pain points, positive points, and data points

#### **NOTES for PB&J**

- 1. Group consensus
- 2. Identify your customer IE: who are you making this for?
- Make decisions!

# Appreciative Debrief

Share with the group 1 thing you found most intriguing from this session

# Next Steps

#### Due – Session 6: October 28, 2025

- Complete Voice of the Customer
- Build Stakeholder Analysis
- Develop a Problem Statement

#### **Due – Session 7: Nov. 4, 2025**

Complete a process map

Date Assigned	Assignment	Due Date
#1 – Aug. 19, 2025	<ul> <li>Develop group ground rules</li> <li>Complete Leadership Defined Self- assessment</li> </ul>	#3 – Sept. 9, 2025
#2 – Aug. 26, 2025	No new assignments	
#3 – Sept. 9, 2025	<ul> <li>Complete voice of customer</li> <li>Build stakeholder analysis</li> <li>Develop a problem statement</li> </ul>	#6 – Oct. 28, 2025
	Complete a process map	#7 – Nov. 4, 2025
#4 – Sept. 23, 2025	Reading: Kotter, John. Leading Change: Why Transformation Efforts Fail	#5 – Oct. 7, 2025
	Meet with Dr. Moksha Patel	# 7 – Nov. 4, 2025
	Draft business case	#8 – Nov. 18, 2025
	Complete affinity diagram	#9 – Dec. 9, 2025
#5 – Oct. 7, 2025	Complete Myers-Briggs Assessment	Friday, Oct. 24, 2025
	<ul> <li>Complete literature review</li> <li>Complete Program Evaluation/QI/Research Tool</li> </ul>	#8 – Nov. 18, 2025
#6 – Oct. 28, 2025	<ul><li>Well-being Analysis</li><li>Health Equity Analysis</li><li>Develop/utilize current vision tying to project</li></ul>	#9 – Dec. 9, 2025
#7 – Nov. 4, 2025	Complete data collection plan	#10 - Dec. 16, 2025
#8 – Nov. 18, 2025	No new assignments	
#9 – Dec. 9, 2025	Finalize sense of urgency	#11 – Jan. 13, 2026
	<ul> <li>Complete Design Thinking Exercise</li> <li>Complete Positive Deviance Exercise</li> <li>Develop list of potential interventions</li> </ul>	#12 – Jan. 27, 2026
#10 – Dec. 16, 2025	<ul><li>Complete aim statement</li><li>Finalize guiding coalition</li></ul>	#11 – Jan. 13, 2026
	Finalize logo	#13 – Feb. 10, 2026
#11 – Jan. 13, 2026	Draft mid-year report out	#12 – Jan. 27, 2026
	Create and implement a communication plan	#14 – Feb. 24, 2026

### Evaluation



