

# Cultivating Roots of Quality Improvement

Session 3: What Tells the Story? How to Identify and Use Data

May 18, 2022

## Your Guides

*Barb DeBaun, MSN, RN, CIC*  
Improvement Advisor  
Cynosure Health

A rural Long Island, NY girl who grew up surrounded by corn and potato fields. Moved to San Francisco in the early days of the AIDS epidemic (1982) and has lived there ever since. Barb's joy is supporting infection prevention, patient safety and quality improvement in urban and rural settings especially in Montana.



*Jennifer Wagner, CPHQ*  
Rural Hospital Improvement  
Coordinator  
MT Flex & HQIC Programs

A rural Montana girl from birth with fifteen years of learning from and building relationships with rural healthcare providers has instilled a drive and passion in Jen to help fill foundational needs in quality improvement concepts and integration.

# Chat Box Roll Call



Bitterroot Health – Daly Hospital
Cabinet Peaks Medical Center
Central Montana Medical Center
Community Hospital Of Anaconda
Fallon Medical Complex
Frances Mahon Deaconess Hospital
Garfield County Health Center
Holy Rosary Health Care
Missouri River Medical Center
Pioneer Medical Center
Phillips County Hospital
St. Luke Community Hospital
Wheatland Memorial Healthcare

## Reminders

### Project Expectations

- Attend live sessions or view the recording.
- Complete assigned Practical Applications that will help support your learning.
- Engage in and contribute to group discussions.


### Education Session Expectations

- Please turn your camera on if you are able. Its really hard for facilitators and attendees to connect with black boxes.
- Speaking up is preferred over the chat for clarity and efficiency.
- Use the Raise Hand feature to speak up. We will watch and then 'call on' you.



# Definition of Data

da·ta

[ˈdada, ˈdāda] 

NOUN

facts and statistics collected together for reference or analysis: See also [datum](#).

"there is very little data available"

*synonyms:* [facts](#) · [figures](#) · [statistics](#) · [details](#) · [particulars](#) · [specifics](#) · [features](#) · [\[more\]](#)

- the quantities, characters, or symbols on which operations are performed by a computer, being stored and transmitted in the form of electrical signals and recorded on magnetic, optical, or mechanical recording media.
- *philosophy*  
things known or assumed as facts, making the basis of reasoning or calculation.

## Why do we collect data?

Improvement

- Used for learning

Reporting

- Used to judge

*"In God we trust,  
all others must  
bring data."*

W. Edwards  
Deming

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Collection of  
Data



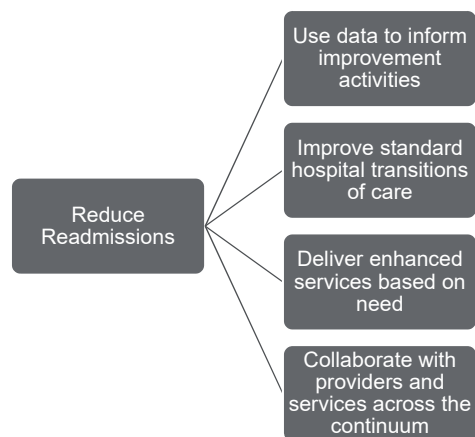
## Data Collection

- Who collects the data?
- How do they do it?
- Does everyone do it the same way?

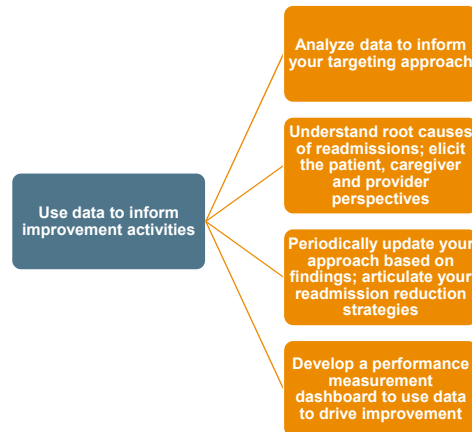
## Interrater Reliability



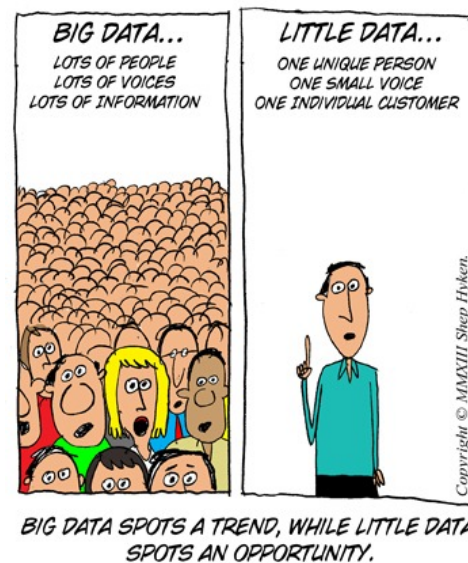
## Drivers for Improvement in Readmissions



## Driver #1: Use Data to Inform Improvement Activities



## Big Data, Little Data





# Big Data – What Coded Data Tells Us

1	Hospitalwide All-Condition, All-Payer, and Payer-Specific Readmission Analysis (adult, non-OB)					
2						
3	Table 1. Readmission Rate	All	Medicare	Medicaid	Commercial	Uninsured
4	# discharges					
5	# readmissions					
6	Readmission rate	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
7						
8	Table 2. Percentage of Discharges and Readmissions	All	Medicare	Medicaid	Commercial	Uninsured
9	% of total discharges by payer	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
10	% of total readmissions by payer	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
11						
12	Table 3. Days Between Discharge and Readmission	All				
13	# of readmissions within 0-4 days of discharge					
14	# of readmissions within 10 days of discharge					
15	# of readmissions between days 0-30 of discharge					
16	% of readmissions in 0-4 days	#DIV/0!				
17	% of readmissions in 0-10 days	#DIV/0!				
18	% of readmissions in 0-30 days	#DIV/0!				
19						

## “Little Data”: patient interviews

DESIGNING AND DELIVERING WHOLE-PERSON TRANSITIONAL CARE:  
THE HOSPITAL GUIDE TO REDUCING MEDICAID READMISSIONS



### TOOL 2: READMISSION REVIEW TOOL

#### Purpose

Readmission reviews are designed to elicit the “story behind the story”: going well beyond chief complaint, discharge diagnosis, or other clinical parameters to understand the communication, coordination, or other logistical barriers experienced in the days after a patient’s discharge that resulted in a readmission.

For the purposes of designing a data-informed portfolio of strategies, conduct 5 to 20 of these interviews to elicit the patient/caregiver perspective, humanize readmissions, and understand root causes that go beyond diagnoses or other “risk” categories. Be sure to interview at least 5 Medicaid patients and 5 caregivers.

For the purposes of improving transitional care for all patients, consistently conduct a “readmission review” for each readmitted patient, using the information about the person’s actual challenges, barriers, or root causes to create a better discharge plan.

#### Description

Adapted from the well-known Institute for Healthcare Improvement’s State Action on Avoidable Rehospitalizations



## What did the 'interview' of the patient tell us?

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Understand:  
Who, What,  
Where,  
When, Why

- Who is being readmitted?
- What medical conditions are contributing to the most readmissions?
- Where are the majority of readmissions coming from?
- How long after discharge are they returning?
- Why are patients returning? Determine the root cause of the unfulfilled need.
- What are we missing?
- Why, why, why, why, why?

Little Data:  
Why did the  
patient return?  
Like really?

“THE KEY TO GOOD  
DECISION MAKING IS  
NOT KNOWLEDGE. IT  
IS UNDERSTANDING.”

—MALCOLM GLADWELL

*BLINK*



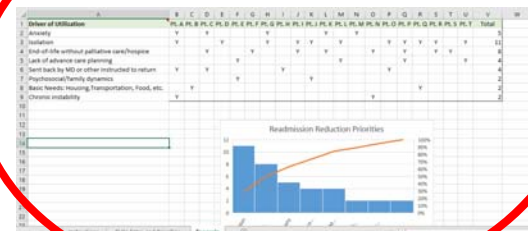
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## Little Data – What Our Patients Tell Us (The REAL Story)

### Readmission Discovery Tool



### Driver of Utilization Tool



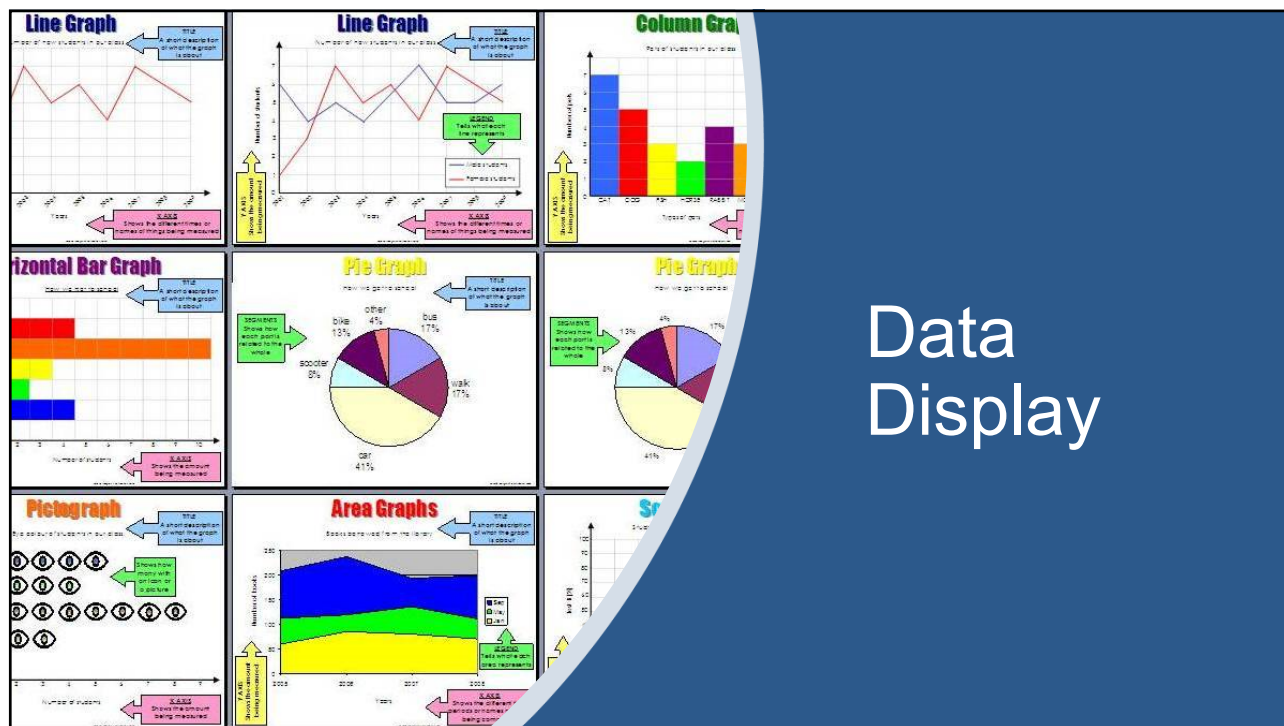
How Do We  
Tell The Story  
Of Our  
Improvement  
Journey?



## Data Display and Analysis

- How do you want to tell your story?
- Who are you going to tell your story to?





# Data Display



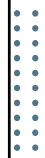
## Three Tips for Success



One size  
does not  
fit all



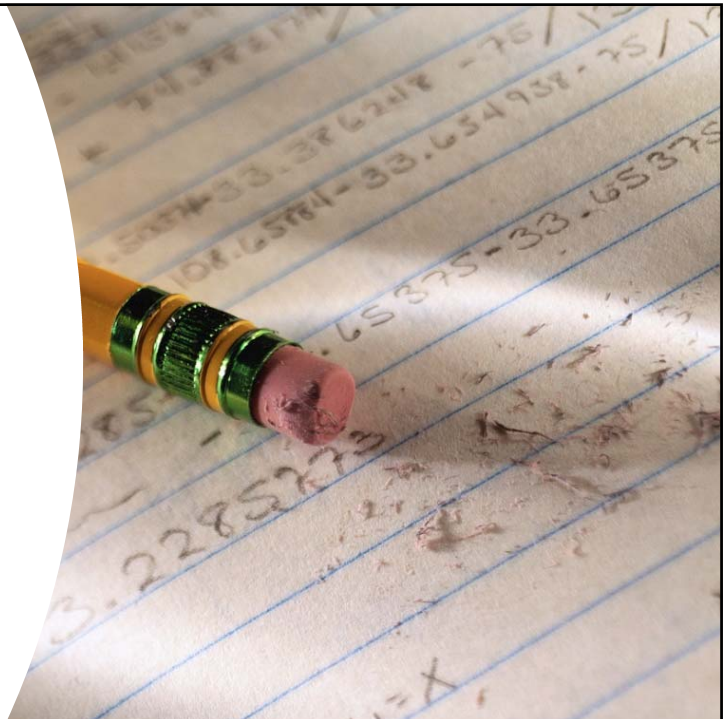




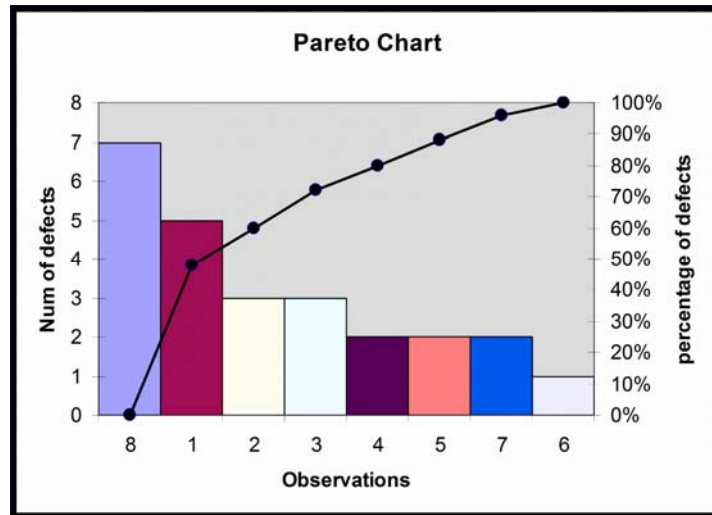
## Know Your Audience



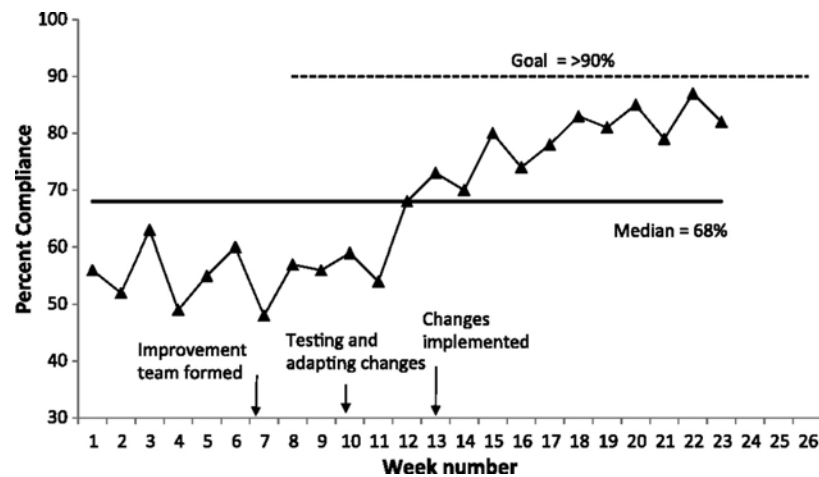
## Check for Accuracy



Pareto:  
where do I  
start?



## Annotate to narrate the story





## HH Compliance By Staff Category

Using Comprehensive Tracer Report – Summary by Questions

N = 14 Tracers

• Advance Practice RN/PA	4/5	80%
• Case Manager	3/3	100%
• Diagnostic Imaging	5/5	100%
• EVS	5/6	83%
• Food Services	3/3	100%
• Medical Staff	8/9	89%
• Nurse	40/41	98%
• Patient Visitor	1/7	14%
• PCA	9/9	100%
• Pharmacy staff	2/2	100%
• Lab	1/2	50%
• PT/OT/SLP	2/4	50%
• Respiratory Therapist	7/7	100%
• Technician	1/2	50%
• Transporter	1/1	100%
• <b>OVERALL</b>	<b>107/121</b>	<b>88%</b>

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## Performance Compared to the National Average?

HAI Category	FY2019 Baseline*	FY2020 YTD*
CLABSIs	22	21
CAUTIs	28	28
Colon SSIs	3	6
HYST SSIs	5	1
MRSA bacteremia	12	17
*Total Number of Reportable Infections	73	45

Red = Worse than National







Yellow = Similar to National

Green = Better than National

## CLABSIs (Central Line-Associated Bloodstream Infections)

## Neonatal Intensive Care Units (NMC/RMC)

Zero is the target every time for every baby!

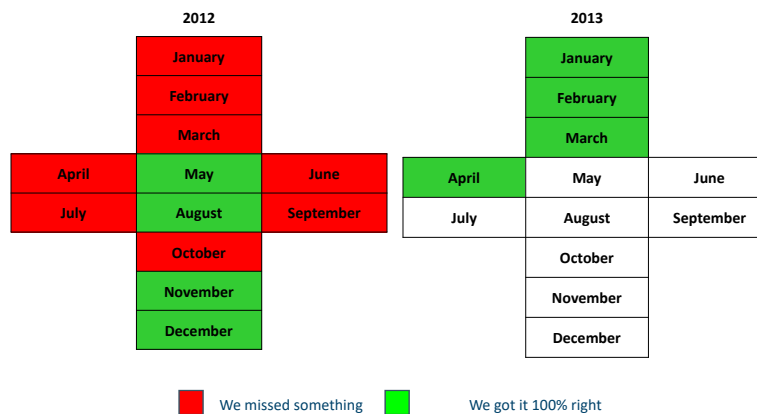
	2016 Baseline	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	2017 CYTD
< 750 g	6													4
751 - 1000 g	2													1
1001 - 1500 g	0													1
1501 - 2500 g	2													1
> 2500 g	2													0
Totals	12													7

5 high risk infants protected from a CLABSI.

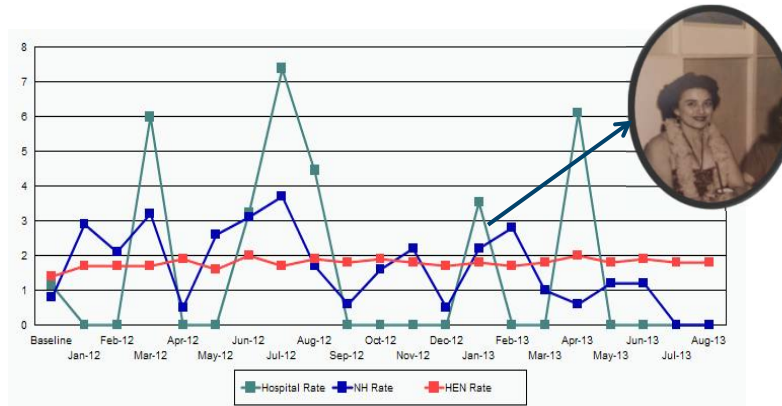


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## Connecting to the Core with Data



## It's not a rate: it's a human being



Courtesy of Martha Leighton; Eliot Hospital, Manchester, NH

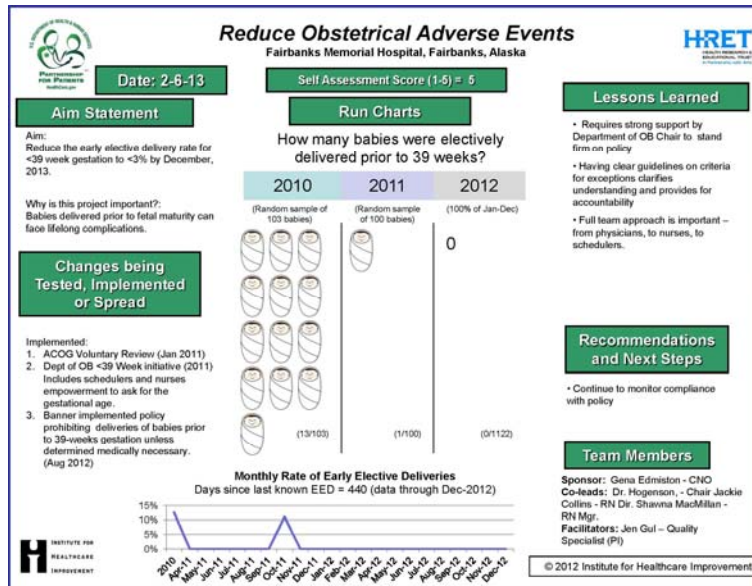
## The Number of People Harmed

Do you ever wonder if what you did made a difference in preventing injury from a fall?



Reference:  
Health Research Education and Trust (HRET) & Qeiosure Health Harm Cost Calculator  
\*Cost of fall with injury \$11,250 (not specified, thus includes anything greater than minor)  
National Quality Forum

Classification & definitions:  
No injury - no injuries  
Minor - contusions, bruises, scrapes, strains, sprain, etc. First aid required  
Major - fractures or injuries requiring more than first aid  
Death - cessation of life sustained from the injuries from a fall  
1 patient fall



## Front-line nurse engagement

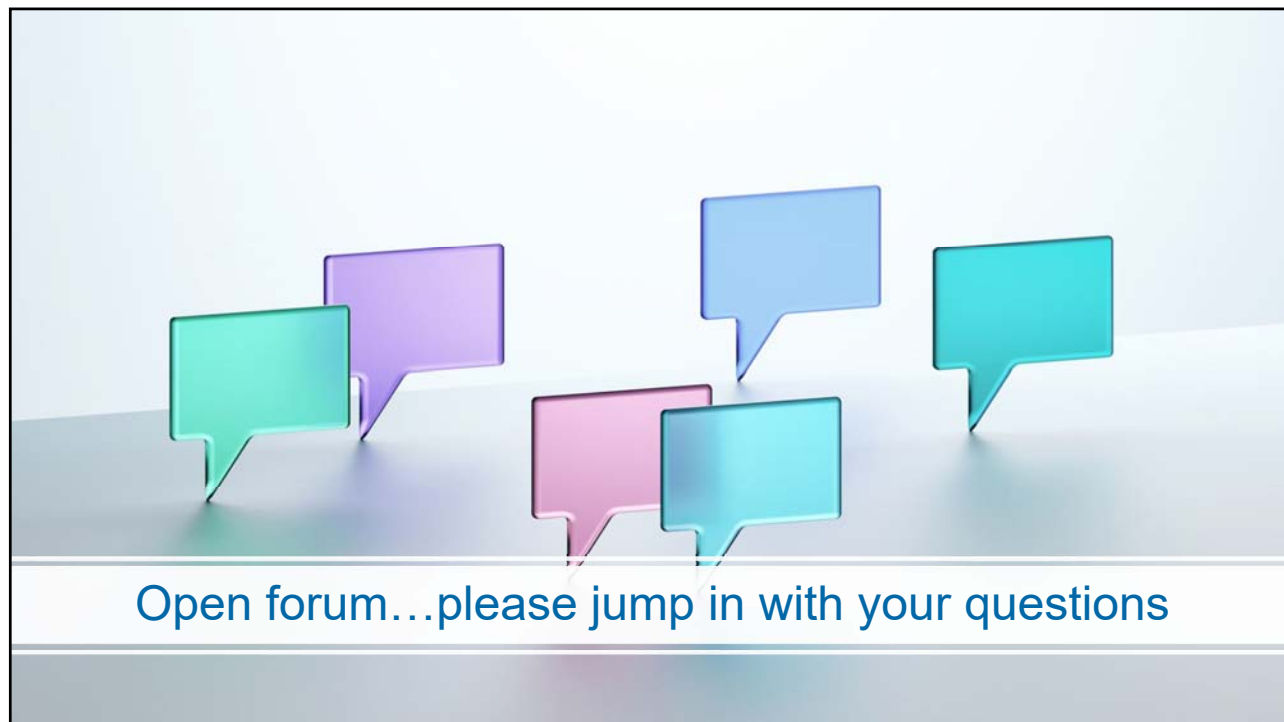


## A glass jar with a brown lid, filled with green, translucent, spherical objects resembling beads or small fruits.



- Tells the statistical story that you want to relay about a data set so receiver can see at a glance and come to some conclusion
- Very powerful
- Can be informative and effective
- Can be misleading and destructive





## Practical Applications – By 6/1

- ☐ Schedule Scope Coaching with Barb.
- ☐ Complete **Summary & Plan** in Project Summary tab in the Workbook.
- ☐ Complete **Plan** in PDSA Cycle 1 tab in the Workbook

**\*\*Formulas**  
**\*\*Data Eval**

PDSA			
PROJECT SUMMARY			
PROJECT START DATE:		PROJECT COMPLETION DATE	
PROJECT TITLE	Test		
PROJECT LEAD			
TEAM MEMBERS			
PLAN			
NAVIGATE TO SECTIONS (click to navigate to phase of the cycle)		pts ("X" all that apply):	
PLAN	DO	STUDY	ACT
PDSA CYCLE			
PROJECT SUMMARY			
PROJECT TITLE	(VALUE)		
CYCLE NO.	1	Is this cycle used to:	
		X	Develop an idea for change
			Test an idea for change
			Implement an idea for change
PLAN: What exactly are we going to do?			
PLAN & GOAL: This will automatically fill from the PROJECT SUMMARY tab. Do not delete the formula			
0			
DATA & MEASUREMENT: Use answers from Question 2 of "Three Questions"			
Data Collection Frequency	<-- select from drop down		
Who is collecting data?	What resources is the data coming from?		
Numerator Description:			
Denominator Description:			
How will data be collected?	Check Sheet	Data Collection Form	
	Interviews	Run Charts	
	Flow Charts	Written Surveys	
	Swim Lane Maps	Root Cause Analysis/PMEA	
	Other		
Results Reported to (check all):	P & T	AC/ER/DB	
	QMC	DB	
	Med Staff	Clinic Providers	
	OB/Trauma	Util	
	Other		

## Schedule

Date	Topic	Practical Application (assigned)
April 20	Getting Started: The Model for Improvement & How to Choose a Change	Tool: 3 Questions
May 4	Heart of the Matter: Tools to Determine the Problem	Tool: Project Summary
May 18	What Tells the Story? How to Identify and Use Data	Tool: PDSA Cycle 1 - Plan
June 1	Just Do It...and Do It Again! Small Tests of Change and the Do-Study-Act of the PDSA Cycle	Tool: PDSA Cycle 1 - Do
June 29	The Leader Mindset	Tool: PDSA Cycle 2 +
July 13	No Blame No Shame: Addressing Patient Safety and Adverse Events	Poster development
July 27	Changing the Perspective Changes the Experience: Involving Patients and Family Advisors in Quality Improvement	
August 3	Celebration & Sharing	



## Contact

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406-457-8000	415-823-7616 (cell)
Project Website	<a href="https://mtpin.org/qiroots/">https://mtpin.org/qiroots/</a>







*Thank You For Your Time*

*See you soon...and contact Barb if you have not  
already done so!!*