Certificate Training Program
Session 16

Welcome! Before We Begin:

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

Institute for Healthcare Quality,
Safety and Efficiency
SCHOOL OF MEDICINE
UNIVERSITY OF COLORADO **ANSCHUTZ MEDICAL CAMPUS**

Oasis

IHQSE Team Updates

Institute for Healthcare Quality, Safety and Efficiency
SCHOOL OF MEDICINE
UNIVERSITY OF COLORADO **ANSCHUTZ MEDICAL CAMPUS**

CALL FOR APPLICATIONS

CERTIFICATE TRAINING PROGRAM (CTP)

Learn | Develop | Lead

A professional development program for inter-professional leadership teams of outpatient clinics, hospital units, or multi-site clinical programs.

- Yearlong course combining classroom sessions, coaching, and completion of a process improvement project
- Focus on leadership, change management, team development, patient safety, quality and process improvement

Application & letters of support due April 14, 2025

CLINICAL EFFECTIVENESS & PATIENT SAFETY (CEPS) GRANT

Seeding Promising Ideas

Providing funding to faculty, staff, and trainees up to $25,000 for initiatives at CHCO or UCH with a focus on:

- Innovative process improvements
- Patient safety outcomes
- Increasing healthcare value
- Implementing evidence-based practices

Letter of Intent due April 14, 2025

Anschutz

Need help building your strongest application?
Contact us! IHQSE@cuanschutz.edu

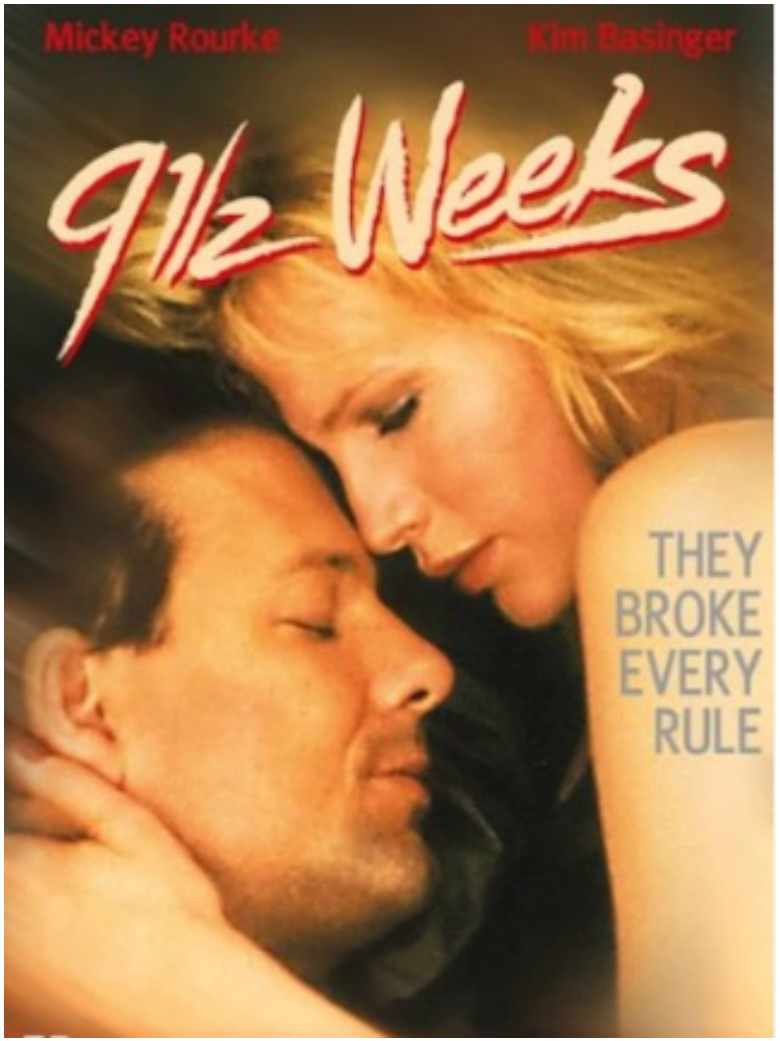
Visit ihqse.org for more information

KEY
Team Check-in
Inspiration
Background
Process Improvement
Leadership
Quality/Safety
Coaching
EMR

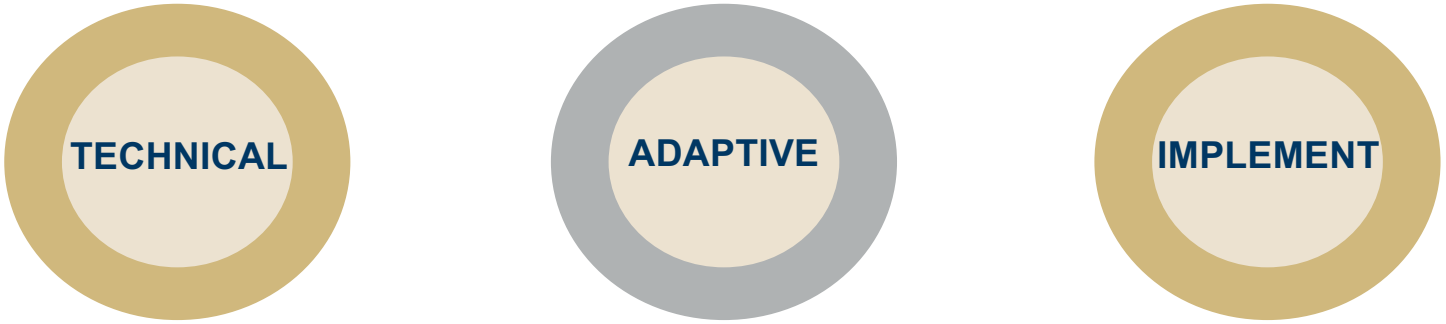
1/28	#12	UCH Sleep	Overcoming Resistance	Feedback to Improve Performance	Mid-year Report Practice Session	EMR Build
2/4		Coaching				
2/11	#13	Report Outs			Leading Change: Removing Barriers	EMR Build
2/18		Coaching				
2/25	#14	Report Outs			Running Effective Meetings	EMR Build
3/4		Coaching				
3/11	#15	Using AI for QI		Leadership Journey: Jena Hausmann	Second Victim	EMR Build
3/18		Coaching				
3/25		Coaching				
4/1	#16	DHA Antimicrobial Stewardship	Data to Understand Impact	Positive Organizational Design	Leading Change: Short-term Wins	Production
4/8	#17	CU Medicine Dermatology	Impact of Quality and Safety on Healthcare Finance	Leading through Complexity	Biases & Leadership	Refinement
4/15		Coaching				
4/22	#18	CHCO Nursery	Strategic Planning		QI Spread / Power & Influence	Refinement
4/29		Coaching				
5/13	#19	UCH Infectious Diseases	Burnout & Resilience	Innovation in Healthcare	Embed the Change	Data Extraction
5/20		Coaching				
5/27	#20	Leadership Journey: Dean Sampson	Report Outs			Data Extraction
6/3		Coaching				
6/10	#21	Report Outs				Data Extraction
6/17		Coaching				
6/24	#22	Reflecting on Why		Certificates	Closing Time	Data Extraction

Next steps

- Finalize your Interventions
  - Ideally launch in no later than 4 weeks
- Ensure you've completed all the steps
  - Review the binder and steps
- Adhere to the change steps
  - Focus on
    - Communication
    - Removing barriers
    - Celebration
- Coaches meeting
  - Determine plan for next 9.5 weeks
- Reach out to me if needed

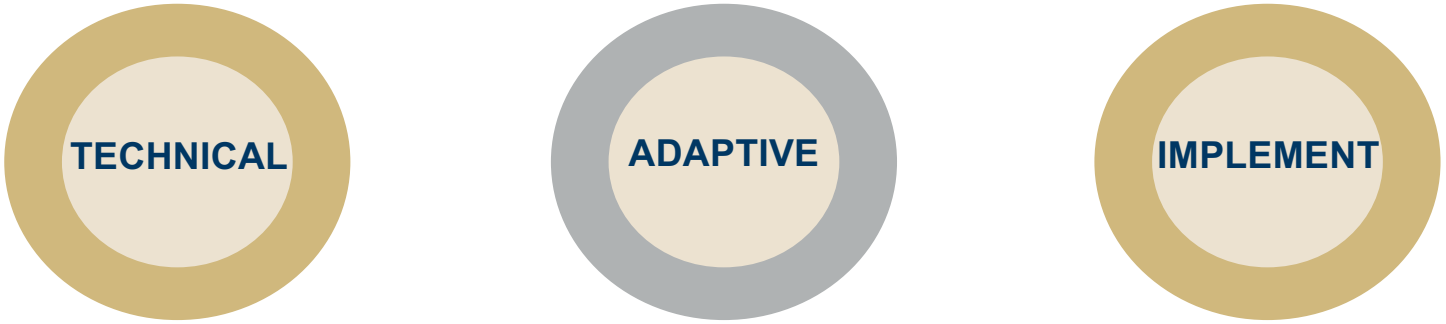


I H Q S E



Investigate	Hone	eQuip	Start	Embed
❑ Complete Literature Search ❑ Acquire Baseline Data ❑ Complete Voice of Customer ❑ Create Problem Statement ❑ Perform Stakeholder Analysis ❑ Complete Process Map ❑ Create Affinity Diagram ❑ Identify Key Metrics – outcome, process, structural, balancing ❑ Build a Business Case ❑ Create Aim Statement	❑ Apply Pareto Principle to Prioritize Factors to Target ❑ Determine Research or QI ❑ Assess Positive Deviants ❑ Consider Hierarchy of Interventions ❑ Perform Design Thinking ❑ Identify 2 - 3 interventions ❑ Create Effort/Impact matrix to prioritize interventions ❑ Complete Equity Analysis ❑ Complete Well-Being Analysis ❑ Create Data Plan ❑ Complete Pre-mortem ❑ Finalize Implementation Plan	❑ Create Sense of Urgency ❑ Align with the Vision ❑ Build Motivation Plan ❑ Create Diffusion of Innovation Plan ❑ Identify and Remove Barriers ❑ Address Sources of Resistance ❑ Create Awareness Campaign ❑ Create Logo ❑ Create Short-term Wins	❑ Implement Awareness Campaign ❑ Launch intervention ❑ Apply Motivation & Diffusion principles ❑ Track Data Refine ❑ Perform resistance analysis ❑ Celebrate Short-term Wins	❑ Track data w/ Run Charts, SPC ❑ Remove New Barriers ❑ Celebrate More Wins ❑ Reconcile the Business Case ❑ Present to Stakeholders ❑ Disseminate Project Work ❑ Create sustainment plan – handoff

I H Q S E



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KEY	Team Check-in	Inspiration	Background	Process Improvement	Leadership	Quality/Safety	Coaching

#15 Mar. 11	Leadership Journey: Jena Hausmann	What does it take to succeed in progressive leadership positions?		
	Second Victim	How should we act/react when things go wrong?		
	Using AI for QI	How will AI impact healthcare?		
Coaching	**Finalize barrier removal**			
#16 Apr. 1	Team Check-in: DHA Antimicrobial Stewardship	Who are my colleagues?	❑ **Create a series of short-term wins to support project** *Due April 22* ❑ **Update data plan to include current state data** *Due April 22*	
	Data to Understand Impact	How do I know if my project has made a significant change?		
	Positive Organizational Design	How do I build a high-performing culture?		
	Leading Change: Short-term Wins	How do I reward people as a way to build momentum for change?		
#17 Apr. 8	Team Check-in: CU Medicine Dermatology	Who are my colleagues?		
	Impact of Quality and Safety on Healthcare Finance	How does quality and safety impact clinical revenue?		
	Leading Through Complexity	How do we develop goals, tactics and plans to meet long-term strategic needs?		
	Biases & Leadership	How can we best address personal biases in medicine?		
Coaching	**Create series of short-term wins to support project, intervention implementation**			

Today's Learning Objectives

1. Understand ways to measure if your project has achieved significant change
2. Create a rewards program to support your project
3. Create a high-performing culture for teams to thrive

Development of an Infectious Diseases Laboratory Diagnostic Excellence Program at Denver Health

Tim Jenkins, MD
Maggie Cooper, PharmD
Brian Listy, MSN, RN, CIC
Kati Shihadeh, PharmD
Laura Triplett, MSc, M(ASCP)CM

DENVER HEALTH™
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FOR LIFE'S JOURNEY

DIAGNOSTIC EXCELLENCE

The Aim

To reduce microbiology tests that are unnecessary, low clinical value, or may lead to misdiagnosis or unnecessary antibiotic use

CSF PCR

- **Reduction in monthly volume by 40% by April 2025**

GI PCR

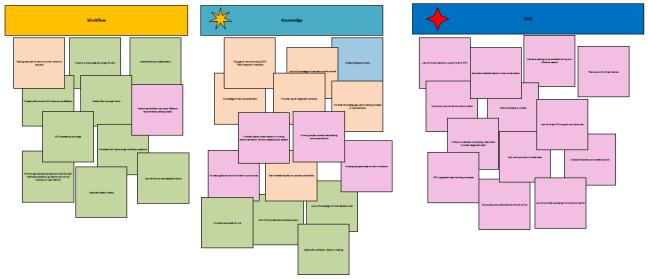
- **Reduction in monthly volume by 20% by June 2025**

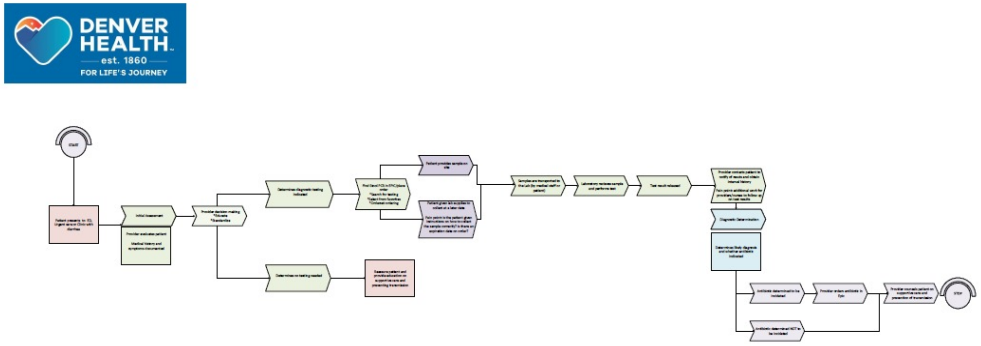
FLUVID

- **Reduction in overall volume by 10% from Oct 2024 – May 2025**
- **Reduction in overall volume by 80% from June – Sept 2025**

Voice of the Customer

- General agreement that overtesting is prevalent
- Guidance for diagnostic testing would be helpful
- Cost of testing should be more transparent
- Importance of workflow and patient throughput
- Importance of patient experience / ratings





Affinity Diagram, Process Map

- Workflow, **knowledge**, **EPIC**, and communication
- Different workflows for each area

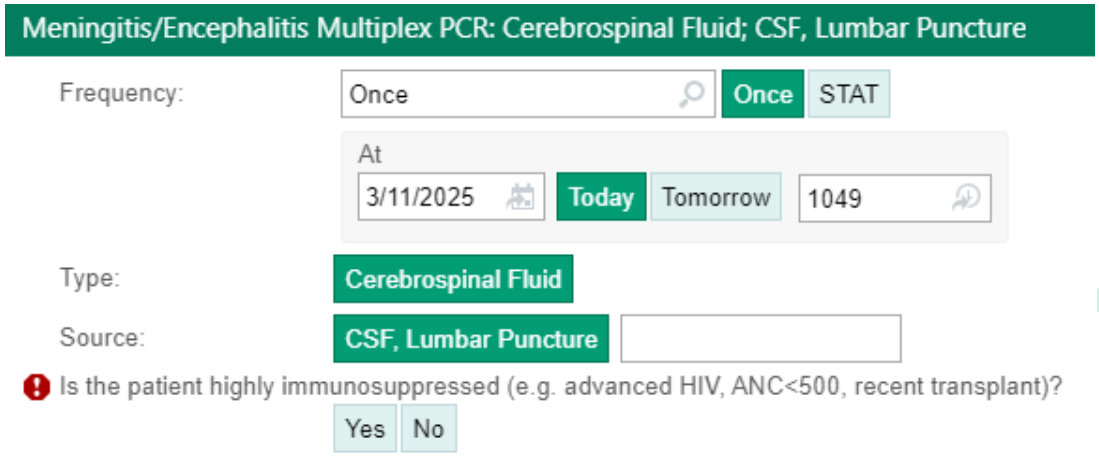
Pre-mortem

- Define immunosuppressed in the CSF PCR order
- Streamline in-order questions and BPA language
- Patients may drive over testing – need education
- Nurses may contribute to overtesting – need education
- Need override process for hard-stop interventions

Interventions - CSF PCR Panel

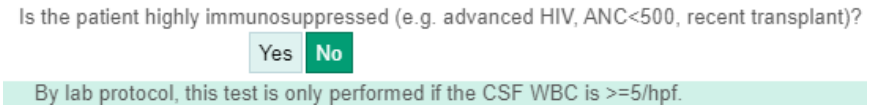
- Perform MEPs in abnormal CSF (WBC ≥5/hpf)
  - Excluding infants <60 days and immunocompromised patients

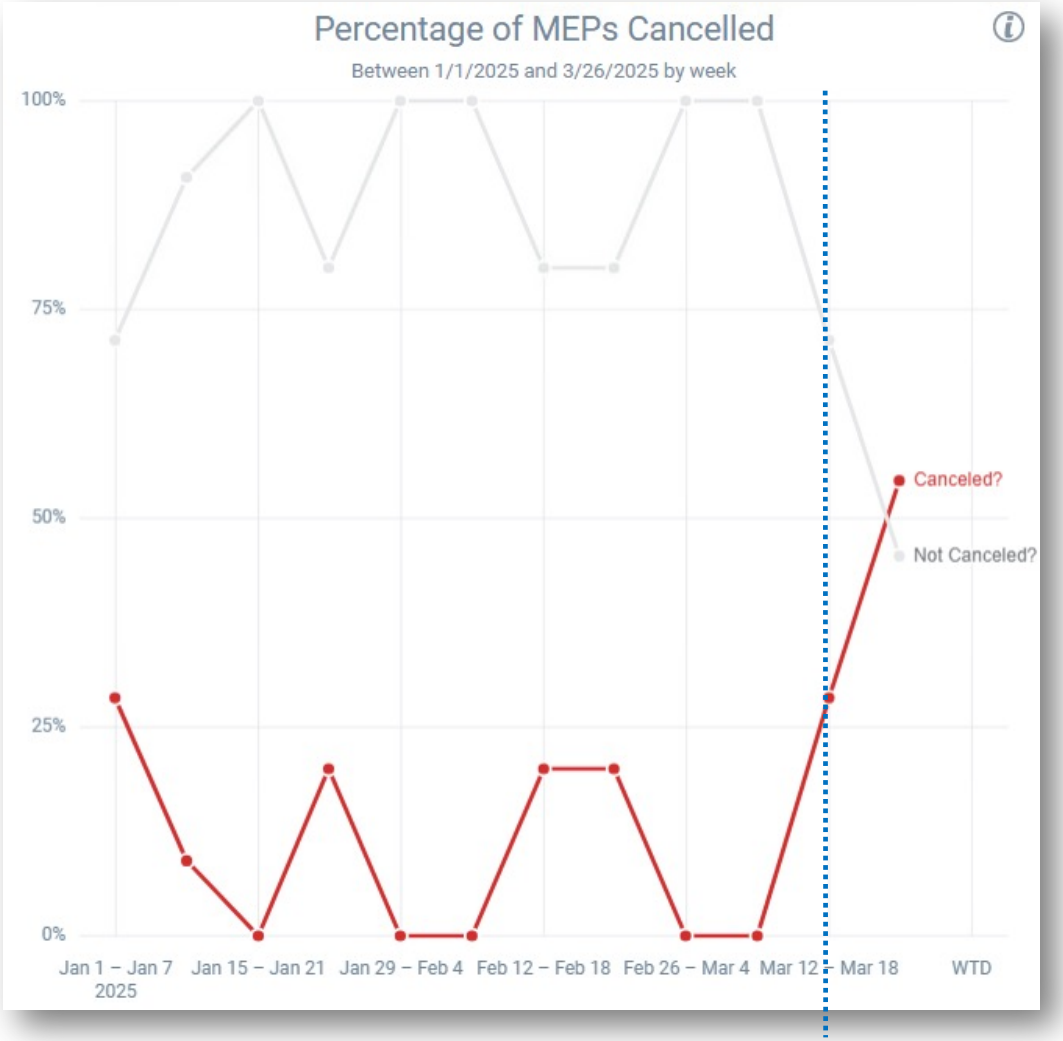
All orders for patients ≥60 days



If "yes" --> Lab is performed irrespective of the CSF WBC

If "no"





8 of 18 MEPs ordered were cancelled in first 2 weeks

First ME PCR on normal CSF averted!

Jenkins, Timothy MD

Reply | Reply All

To **DL_Lab Microbiology**; Penick, Amanda; Rocker, Jenna; Wilson, Michael MD; Wolfe, Marissa; Zwakenberg, Melody; Fish, Lindsey MD; Feijoo, Benjamin MD; Pippins, Michael; Pierce, Read

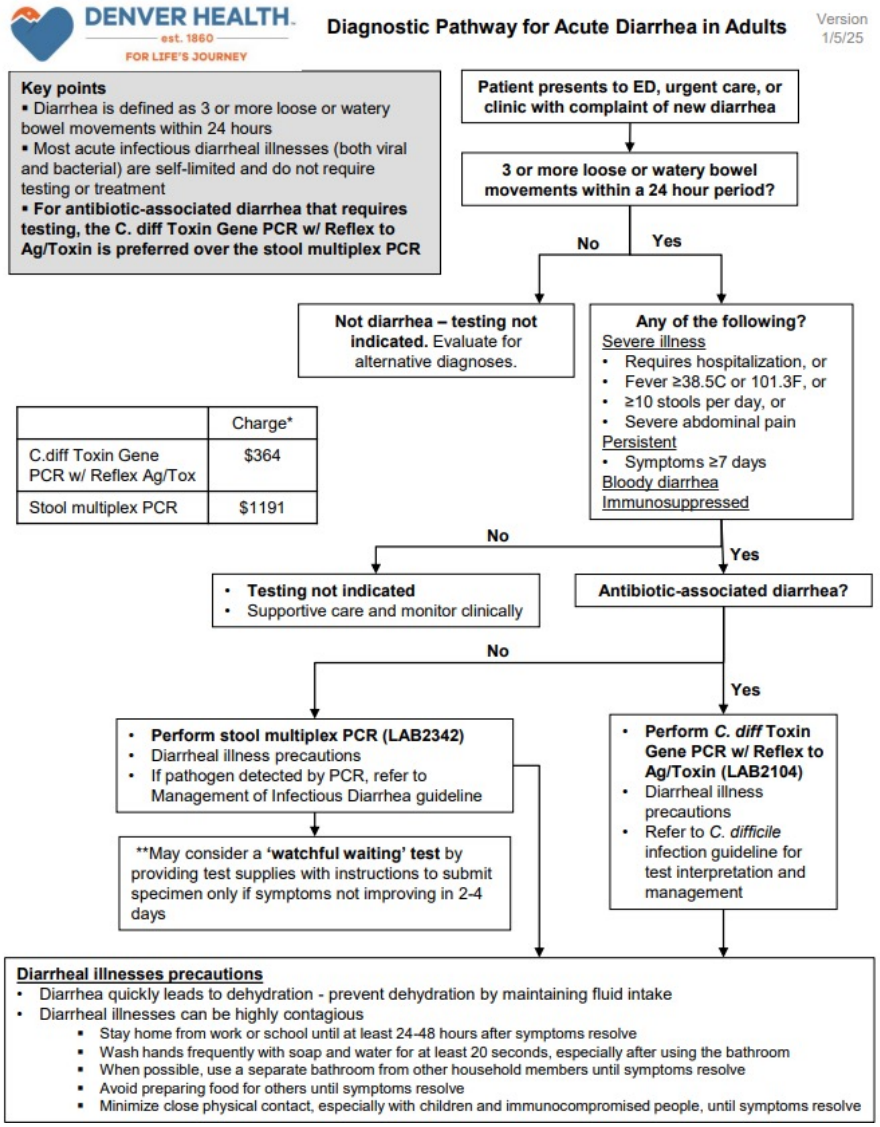
Cc Triplett, Laura; Cooper, Maggie; Shihadeh, Katherine; Listy, Brian RN; Glasheen, Jeffrey

Hi all,

Exciting news! The new micro lab protocol and Epic order for the ME PCR panel went live yesterd
**has already been applied on two CSF specimens where the ME PCR was ordered (thank you Sie
and Danka Iverson!), and we have already averted our first unnecessary ME PCR on normal CSF**
for everyone's input and assistance to operationalize this testing change that will contribute to hi
our patients – the first of many steps on Denver Health's journey toward diagnostic excellence.

Interventions - GI PCR panel

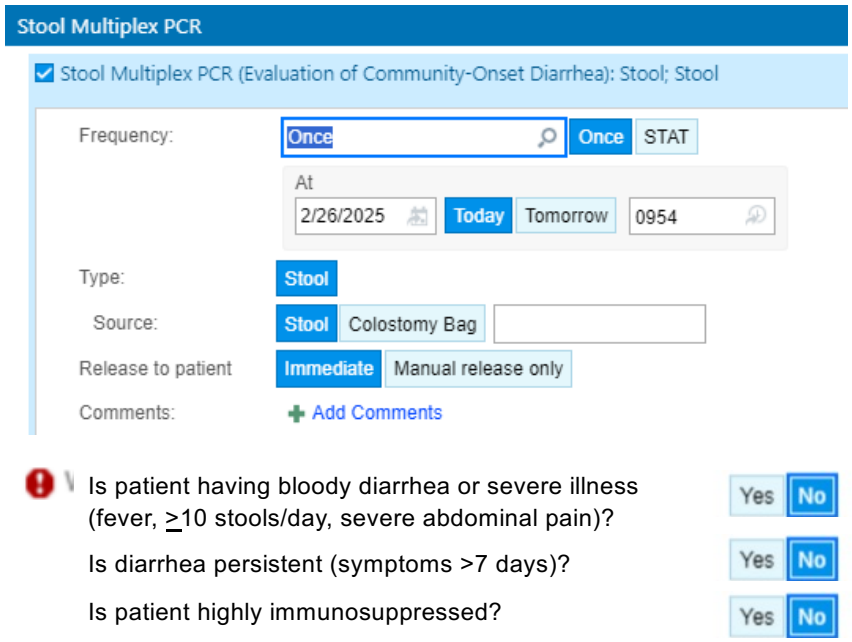
1. Diagnostic pathway for acute diarrhea



Tentative go-live in May

Interventions - GI PCR panel

2. (Outpatient orders) Clinical decision support with indications for stool PCR

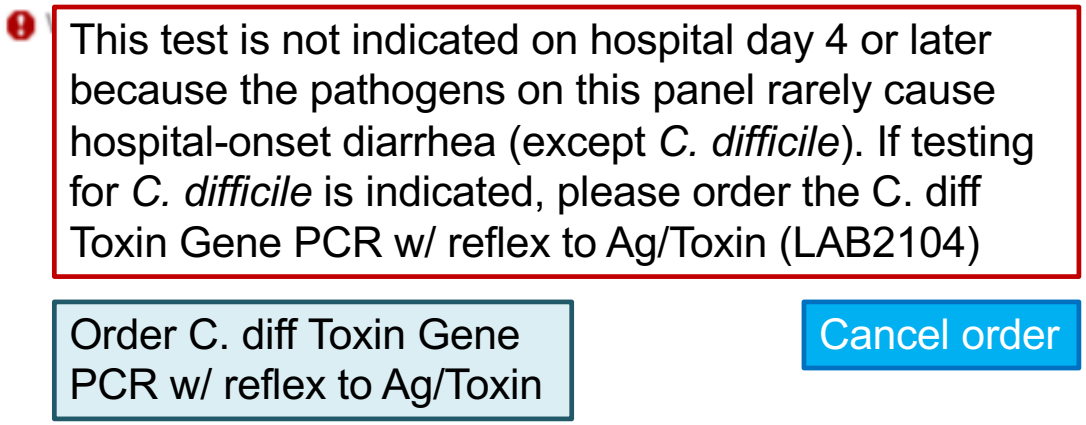


If the answer to all 3 questions is "no"
--> Soft-stop BPA alerts provider that test may not change clinical management

Tentative go-live in May

Interventions - GI PCR panel

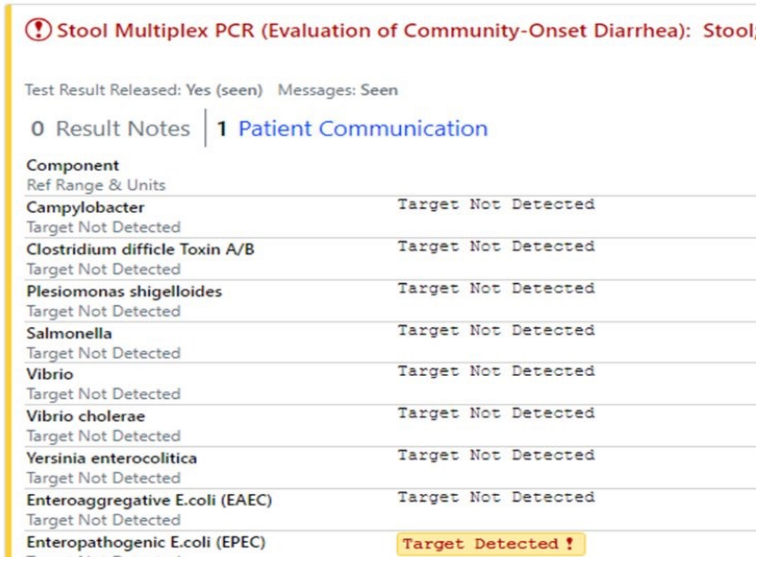
3. (Inpatient order) Hard stop if providers try to order stool PCR after 3 days of hospital admission



Tentative go-live in May

Interventions - GI PCR panel

4. (All order results) Nudge against treating non-pathogenic targets



Stool Multiplex PCR (Evaluation of Community-Onset Diarrhea): Stool

Test Result Released: Yes (seen) Messages: Seen

0 Result Notes | 1 Patient Communication

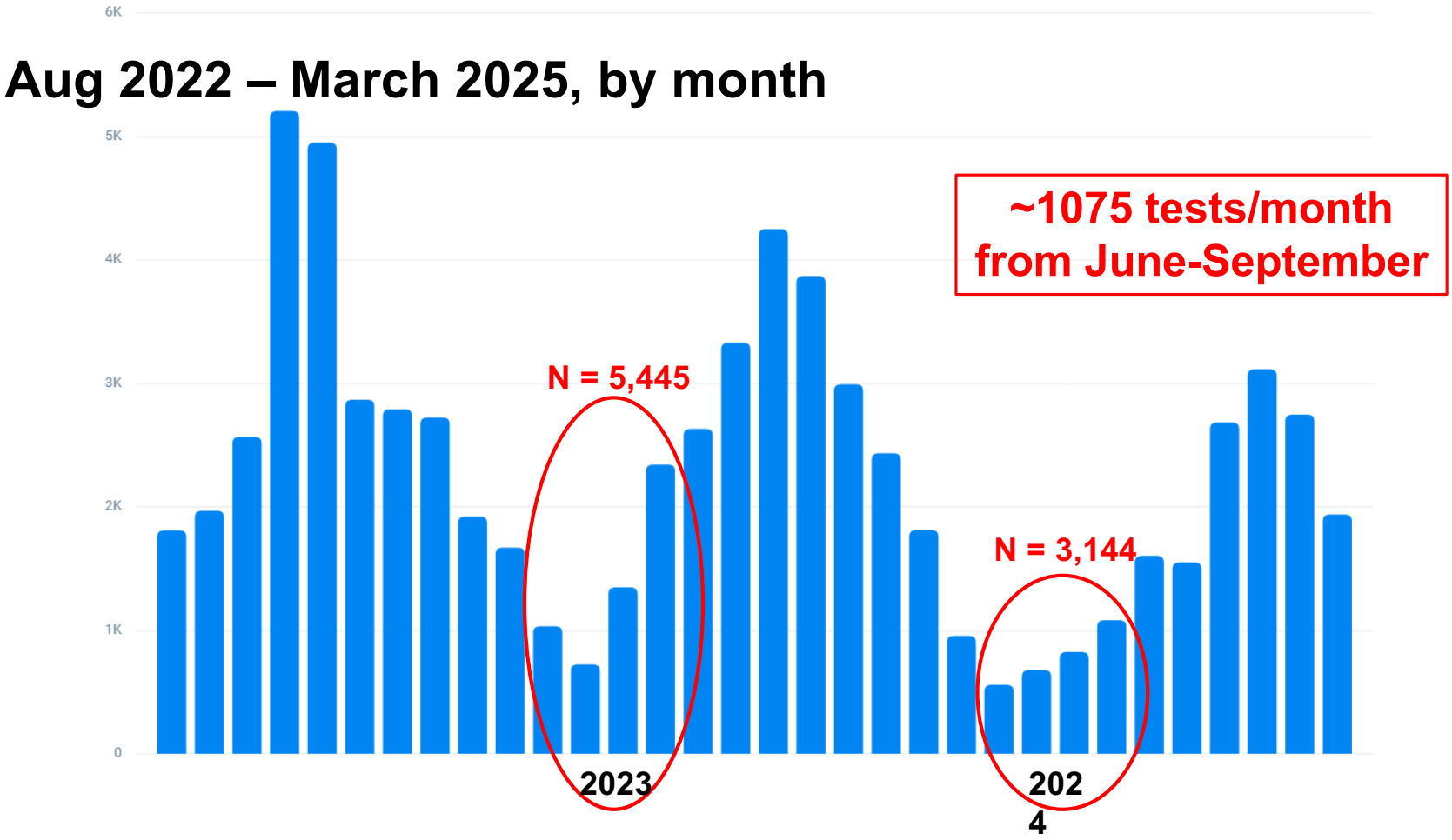
Component Ref Range & Units	
Campylobacter Target Not Detected	Target Not Detected
Clostridium difficile Toxin A/B Target Not Detected	Target Not Detected
Plesiomonas shigelloides Target Not Detected	Target Not Detected
Salmonella Target Not Detected	Target Not Detected
Vibrio Target Not Detected	Target Not Detected
Vibrio cholerae Target Not Detected	Target Not Detected
Yersinia enterocolitica Target Not Detected	Target Not Detected
Enteroaggregative E.coli (EAEC) Target Not Detected	Target Not Detected
Enteropathogenic E.coli (EPEC)	Target Detected !

Comment: Usually self-limiting infection. Treatment rarely indicated.

Interventions – FLUVID panel

- Revised institutional guidance limiting indications for Paxlovid (7/24)
- Communication campaign – ‘Test Only If You Would Treat’
  - Guideline dissemination
  - U.S. Antibiotic Awareness week
  - Respiratory season guidance document
  - Newsletter
- Epic order clinical decision support (nudge)

FLUVID utilization during summer months



Launch Party!!

Thank You

We Welcome
Your Feedback!

Data to Understand Impact

Tyler Anstett, DO

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Learning Objectives

1. Differentiate Process and Outcome Measures
2. Describe and analyze Run and SPC charts for detecting change
3. Differentiate Run and SPC Charts
4. Plan your results now!

"Set (your outcome metric)…and forget it!"

OUTCOME Your (ultimate) measure of success.

PROCESS

STRUCTURE

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

BALANCE What you don't want to change.

Inpatient DVT Prophylaxis

OUTCOME

Inpatient DVT rate per 1000 patients

PROCESS

STRUCTURE

- % of patients receiving appropriate prophylaxis
- SCDs and pumps in room
  - and applied to patient?

Intervention = EHR guidance based on risk

- Risk score completion in EHR

BALANCE

Bleeding rates.

Pediatric Vaccination Schedules

OUTCOME

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

PROCESS

STRUCTURE

% of patients offered vaccine
% of patients declined

Intervention = pop-up reminder

- % of alerts ignored / followed

BALANCE

Provider alert fatigue
Lower well-child exams for lower SES with a mistrust of vaccines.

Post-Surgical Infections

OUTCOME

Absolute number of post-op wound infections

% compliance with pre-anesthesia antibiotics

PROCESS

STRUCTURE

Intervention: chlorhexidine only in all ORs

- Stock of chlorhexidine

Intervention: chlorhexidine scrub education

- % of techs who attended sessions
- Demonstration of proper scrub technique

BALANCE

Allergic reactions to antibiotics or skin prep

How do you KNOW your intervention is happening?

#squadgoals

- AIM: By 6/1/22, we aim to increase percentage of BMT chemotherapy admissions by 1200, from 4.2% to 60%.
- How: transform chemotherapy admission process
- Vision: Cancer sucks and chemo is scary. We owe it to our patients to try to make the process of receiving treatment as reliable, efficient, and pleasant as possible.

How do you KNOW your intervention is happening?

Breakout

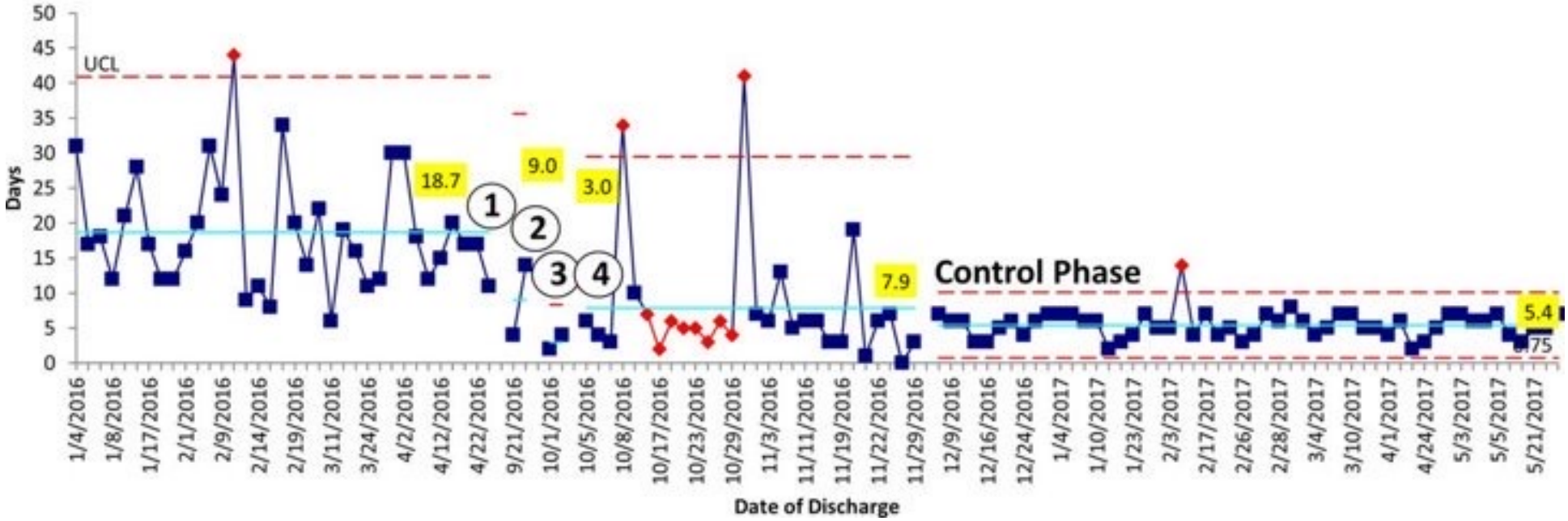
5 minutes

What is/are your process metrics?

Are they happening?

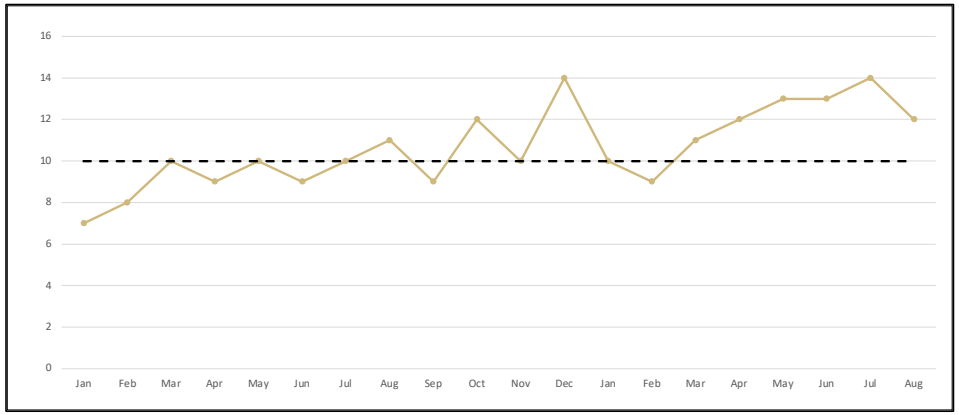
How do you KNOW your intervention is working?

Days from Hospital Discharge to First Scheduled Outpatient Cardiac Rehabilitation Appointment

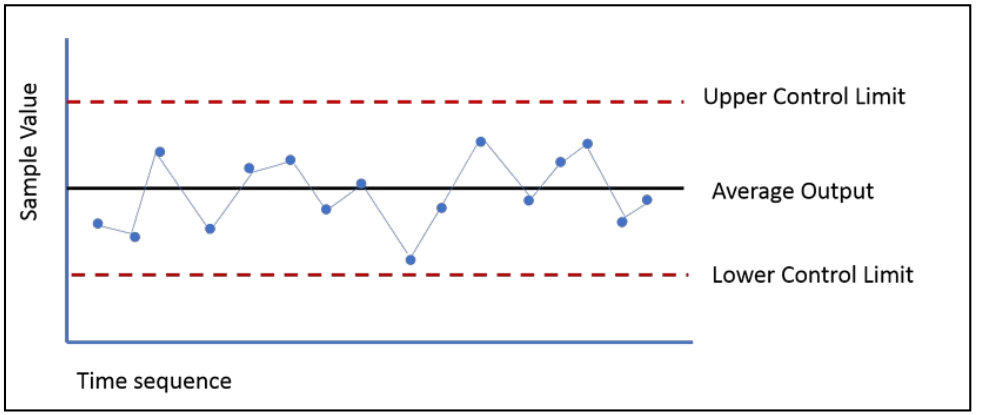


Measuring that a change has occurred
(IE: data over time)

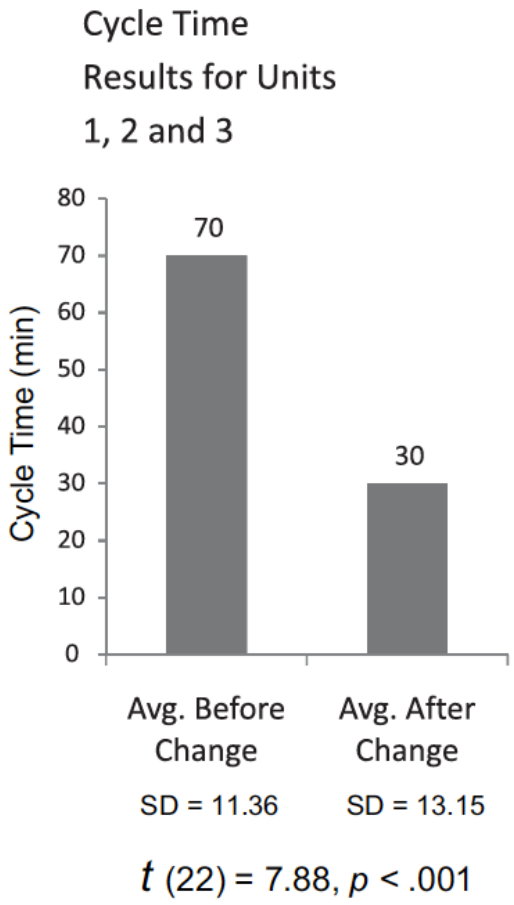
Run Chart

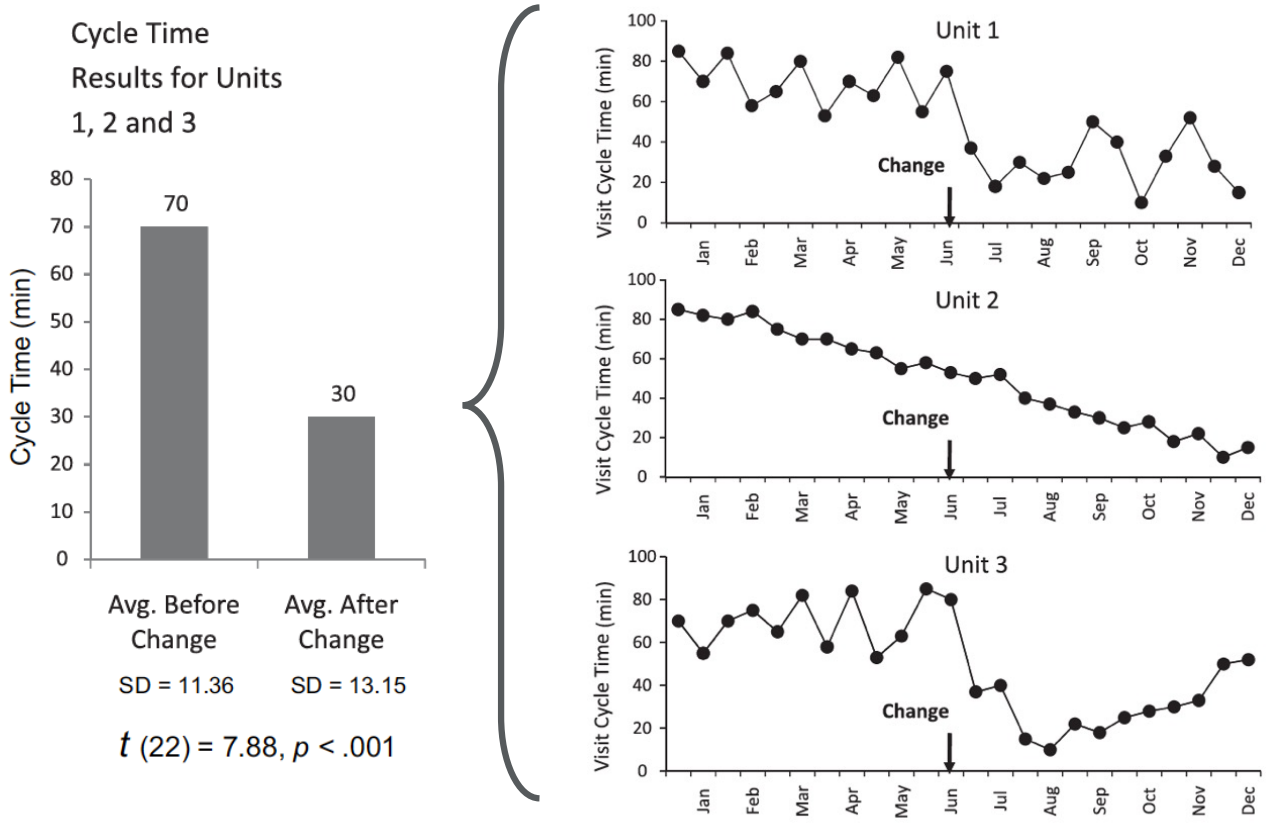


SPC Chart



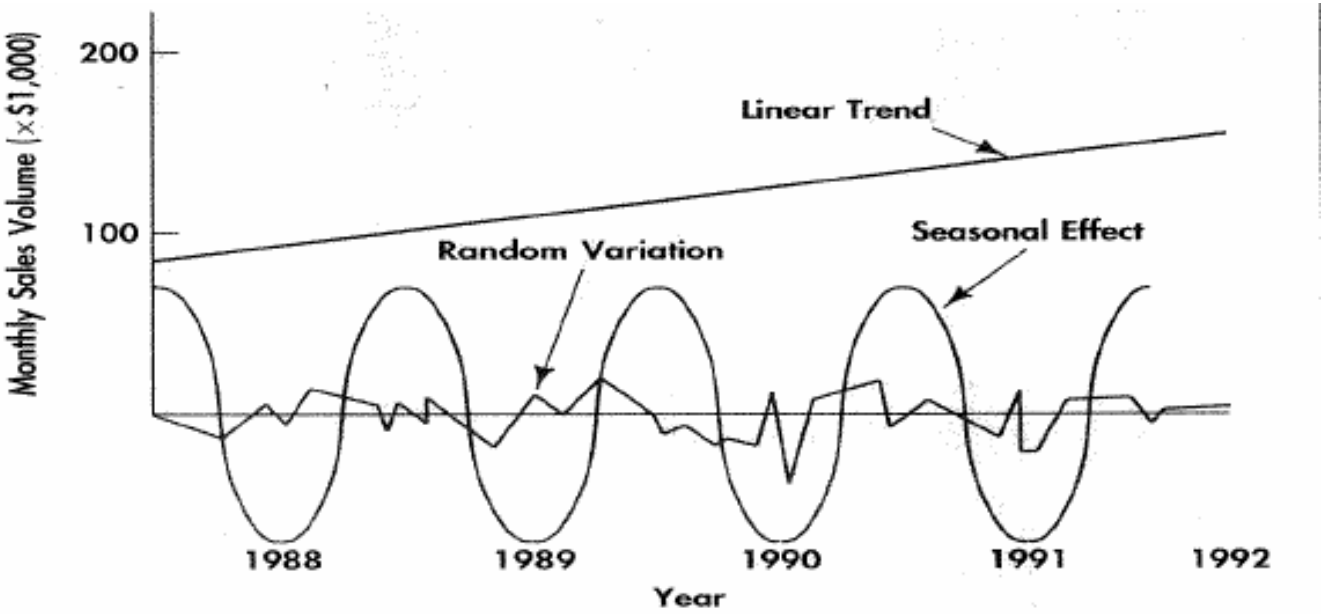
You implement a QI project across three different units. You analyze the results using traditional summary statistics and find the following…

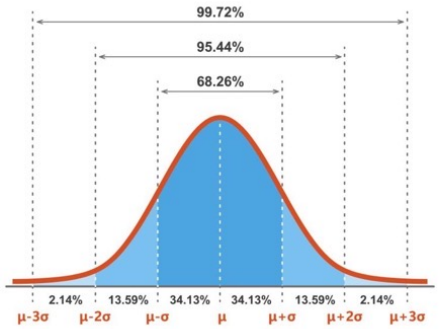




"Viewing data over time rather than in summary statistics yields richer data and more accurate conclusions for improvement projects."

Detecting and Determining Non-Random Change





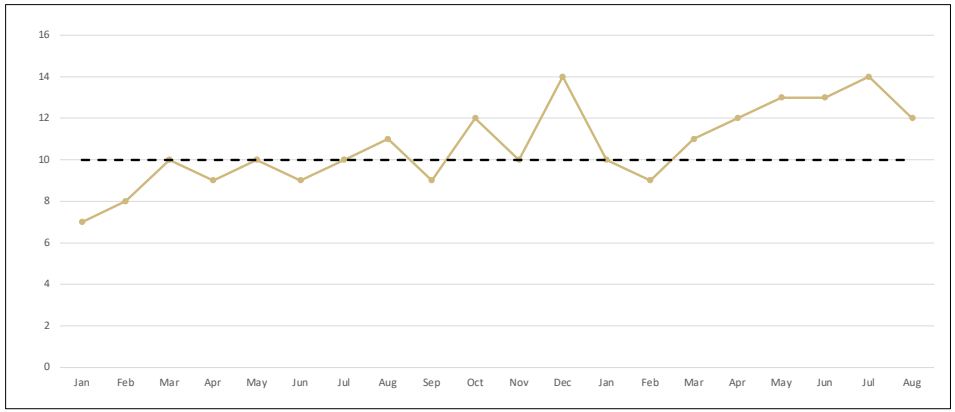
https://www.researchgate.net/figure/An-example-of-a-time-series-with-a-long-term-trend-a-seasonal-e-ect-with-superimposed_fig6_2797556

https://www.simplypsychology.org/normal-distribution.html

Uses of Detecting Non-Random Change

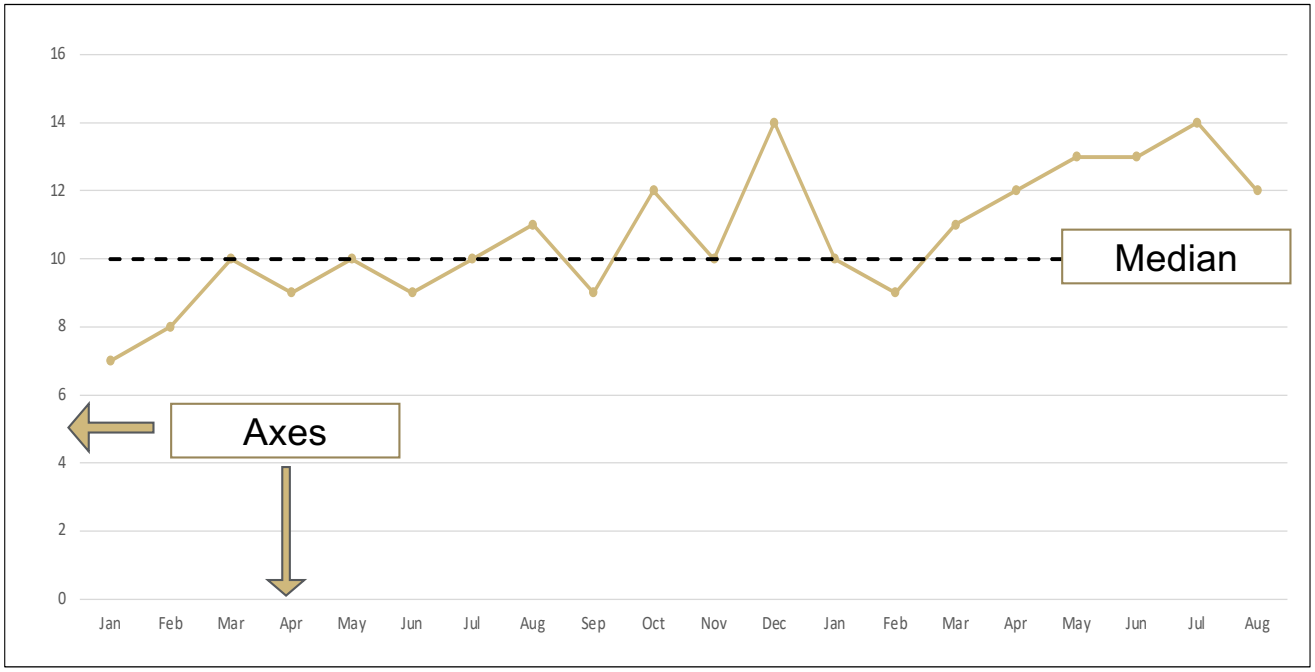
- Visualize the performance of your process for easier communication
- Determine whether changes you made to your process resulted in an improvement
- Determine whether improvements introduced to your process are sustained
- Determine what course of action to take

Run Chart



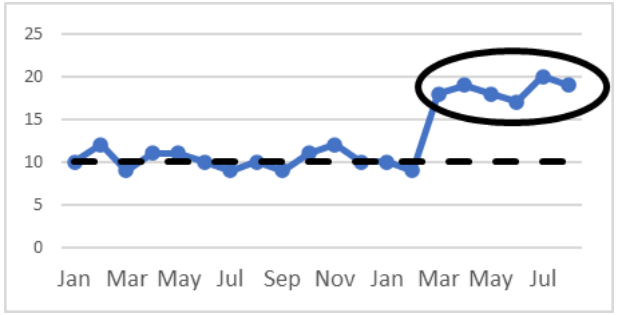
- ☑ Easy to construct
- ☑ Easy to interpret
  (no advanced stats required)
- ☑ Understand the inherent variation within data
  (10-15 data points)
- ☑ Assess the impact of process changes
  (AKA something happened)

Run Chart - Anatomy

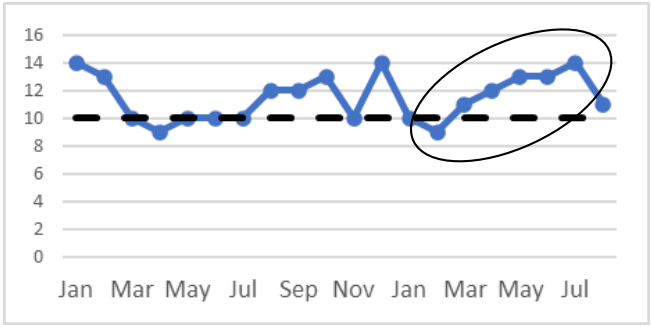


Detect “non-random” change

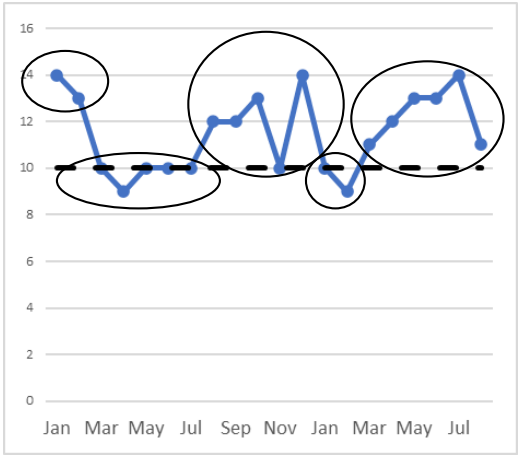
Shifts



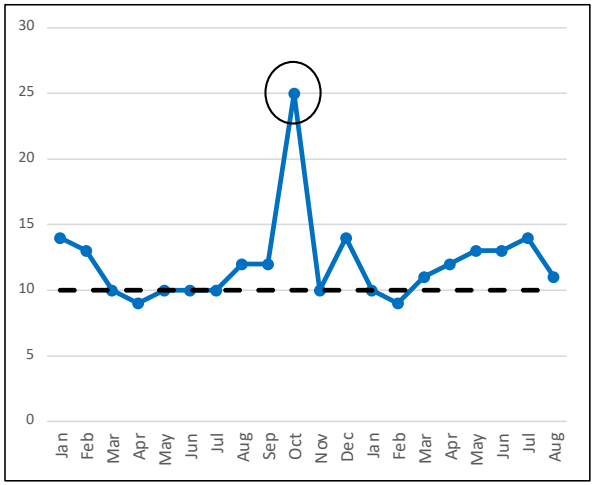
Trends



Runs (too many or too few)

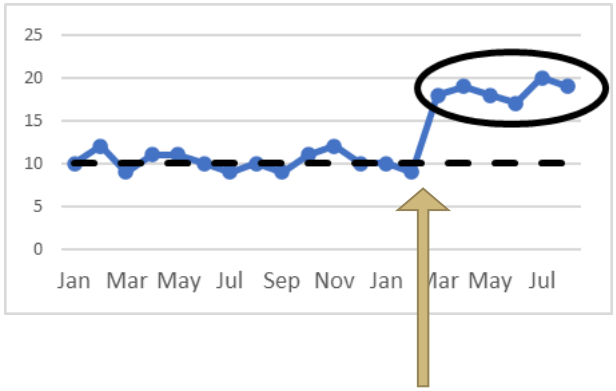


Astronomical Data Points



Run Chart – Interpretation (Non-Random Change)

Shift



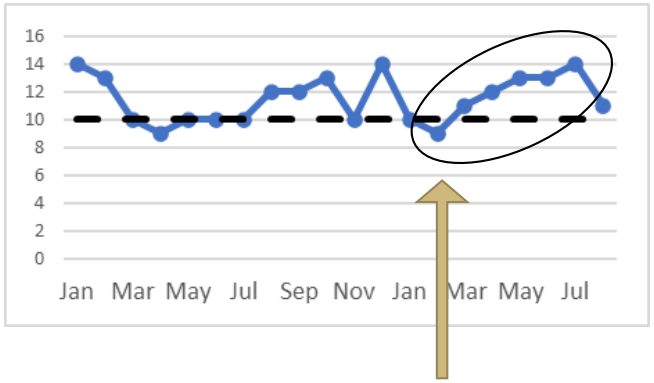
Intervention

Six or more consecutive points all above or all below the median.

(p = 0.03 for 6 points)

Run Chart – Interpretation (Non-Random Change)

Trend



Intervention

Five or more consecutive points all increasing or decreasing.

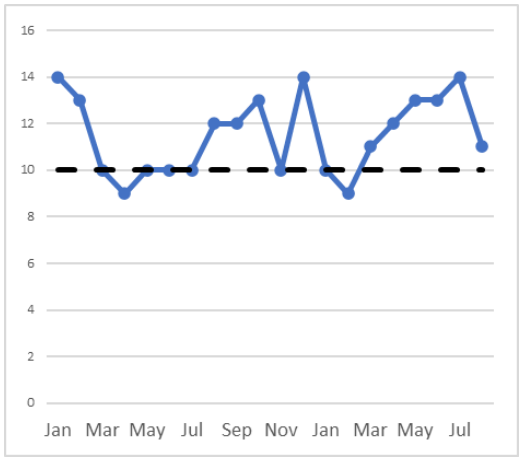
p = 0.031

NOTE:

- Can include points ON the median
- Count equal points as ONE

Run Chart – Interpretation (Non-Random Change)

Number of Runs

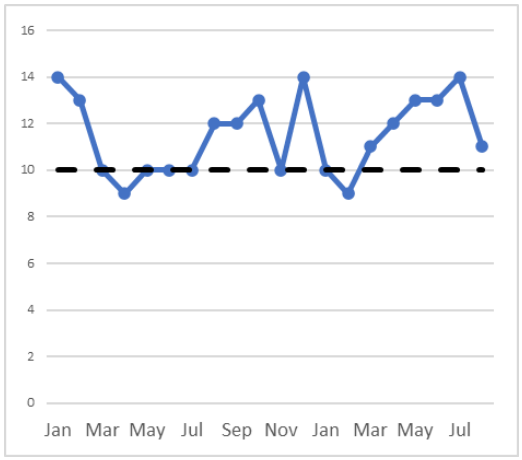


A run is a series of points on one side of the median. The trendline must cross the median before a new run begins. You can quickly calculate the number of runs by counting the number of times the trendline crosses the median and adding one.

The number of runs in a series should be between a lower and upper limit determined by the number of data points in the data set. Anymore, or any fewer, and the series is likely to be non-random.

Run Chart – Interpretation (Non-Random Change)

Number of Runs

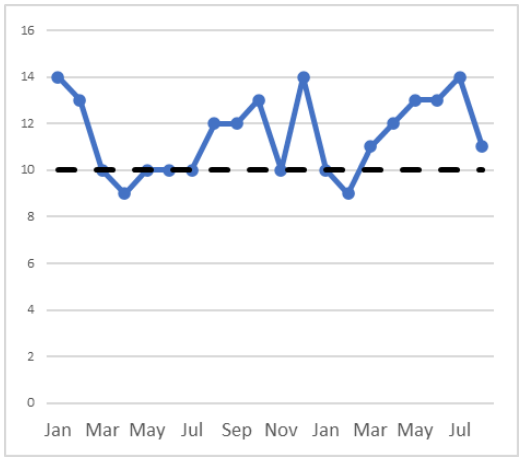


Number of Useful Observations	Lower Number of Expected Runs	Upper Number of Expected Runs
10	3	9
11	3	10
12	3	11
13	4	11
14	4	12
15	5	12
16	5	13
17	5	13
18	6	14
19	6	15
20	6	16
21	7	16
22	7	17
23	7	17
24	8	18
25	8	18
26	9	19
27	10	19
28	10	20
29	10	20

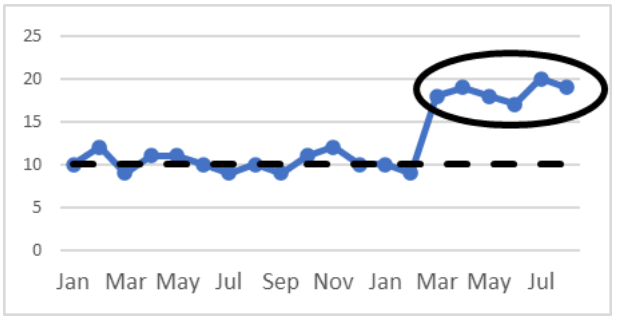
Reference Table

Run Chart – Interpretation (Non-Random Change)

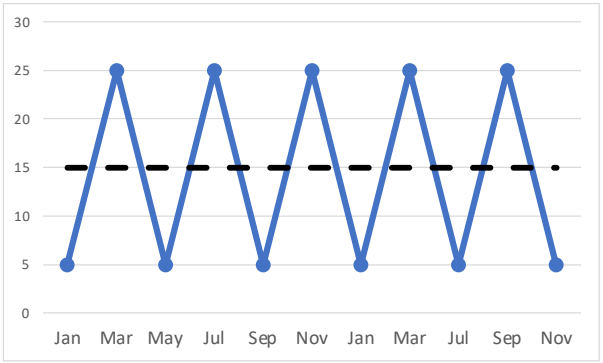
Number of Runs



Too few

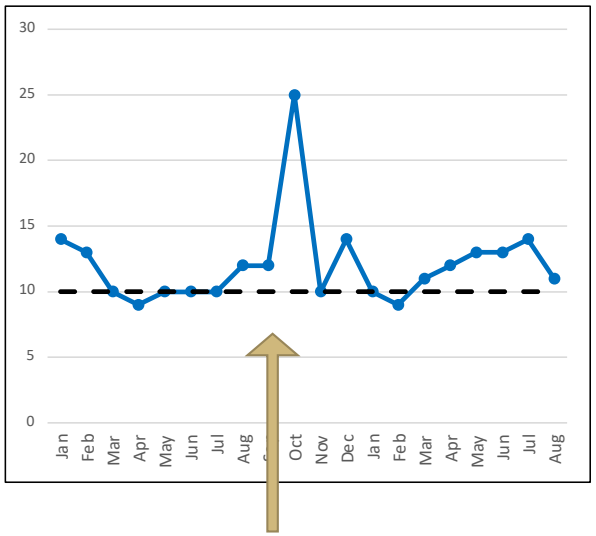


Too many
(10 runs)



Run Chart – Interpretation (Non-Random Change)

Astronomical Data Point



Intervention

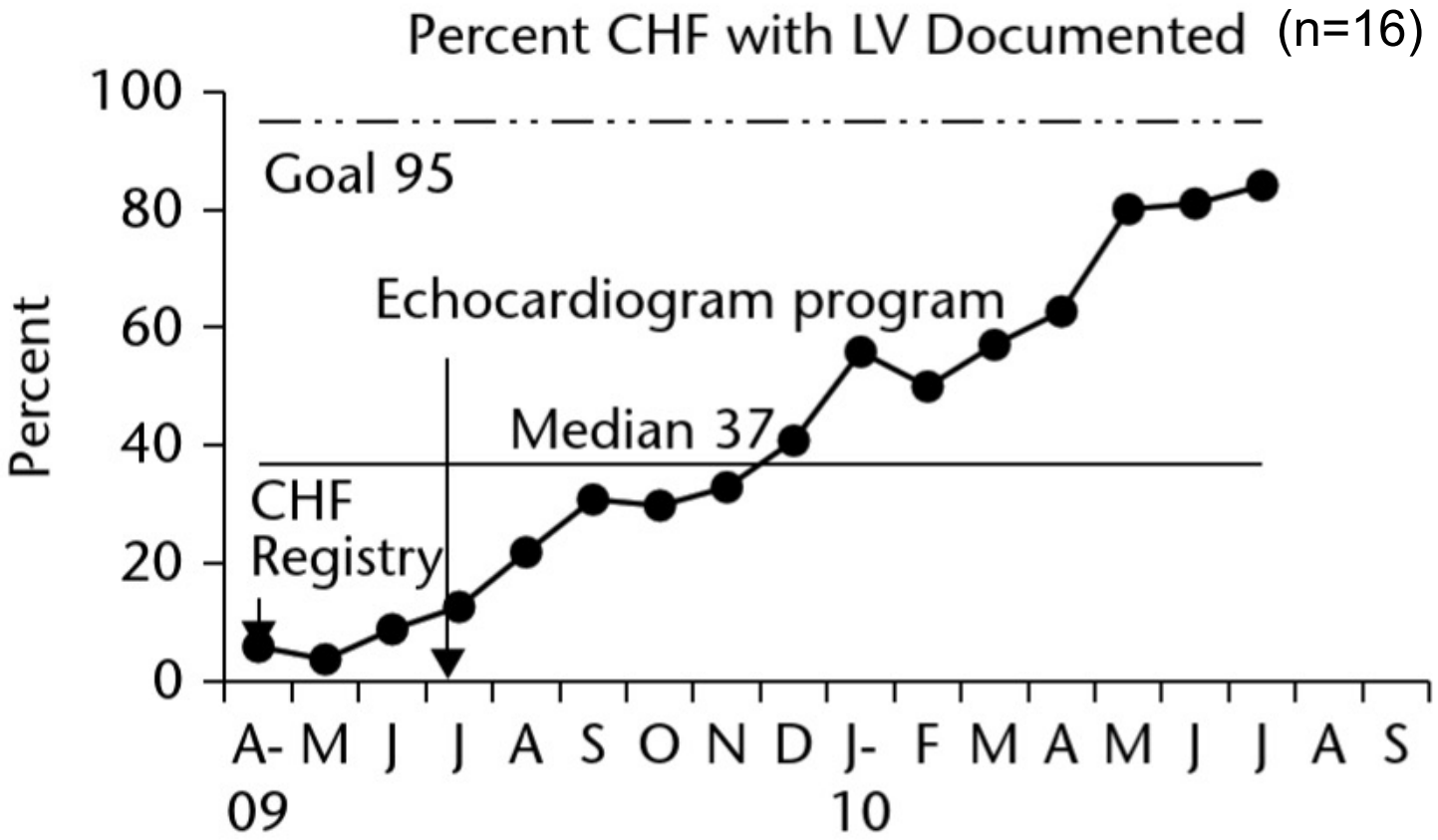
Data points that are obviously outside of normal variation.

Seek consensus from the team to determine whether a point is “astronomical” or just the high or low point in the data set.

Trends (5 or more)

Shifts (6 or more)

EXERCISE 1

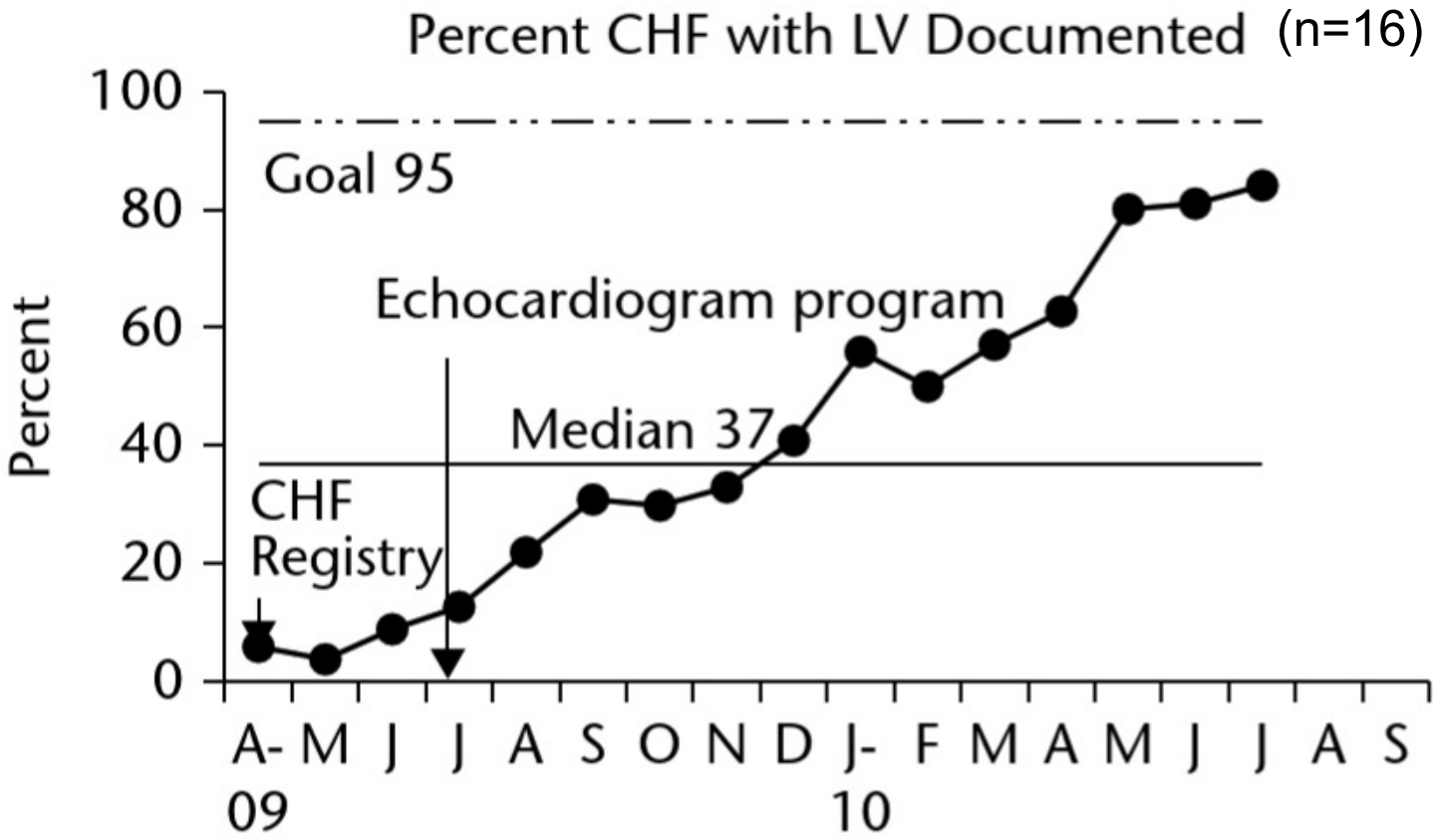


Expected Runs
Lower limit: 5
Upper Limit: 13

Trends (5 or more)

Shifts (6 or more)

EXERCISE 1



Expected Runs
Lower limit: 5
Upper Limit: 13

- **Shift**
- **Trend**
- **Too few runs**

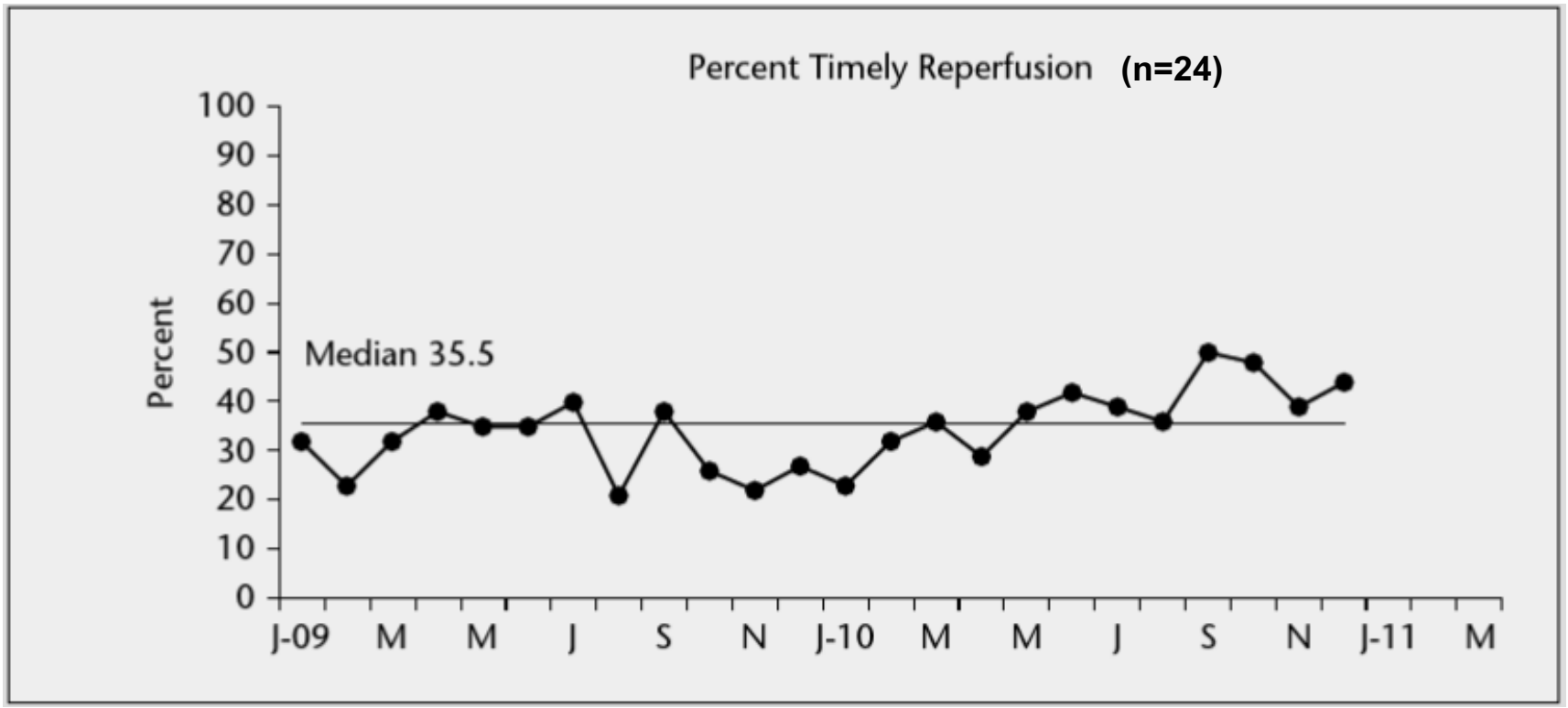
Trends (5 or more)

Shifts (6 or more)

EXERCISE 2

Expected Runs

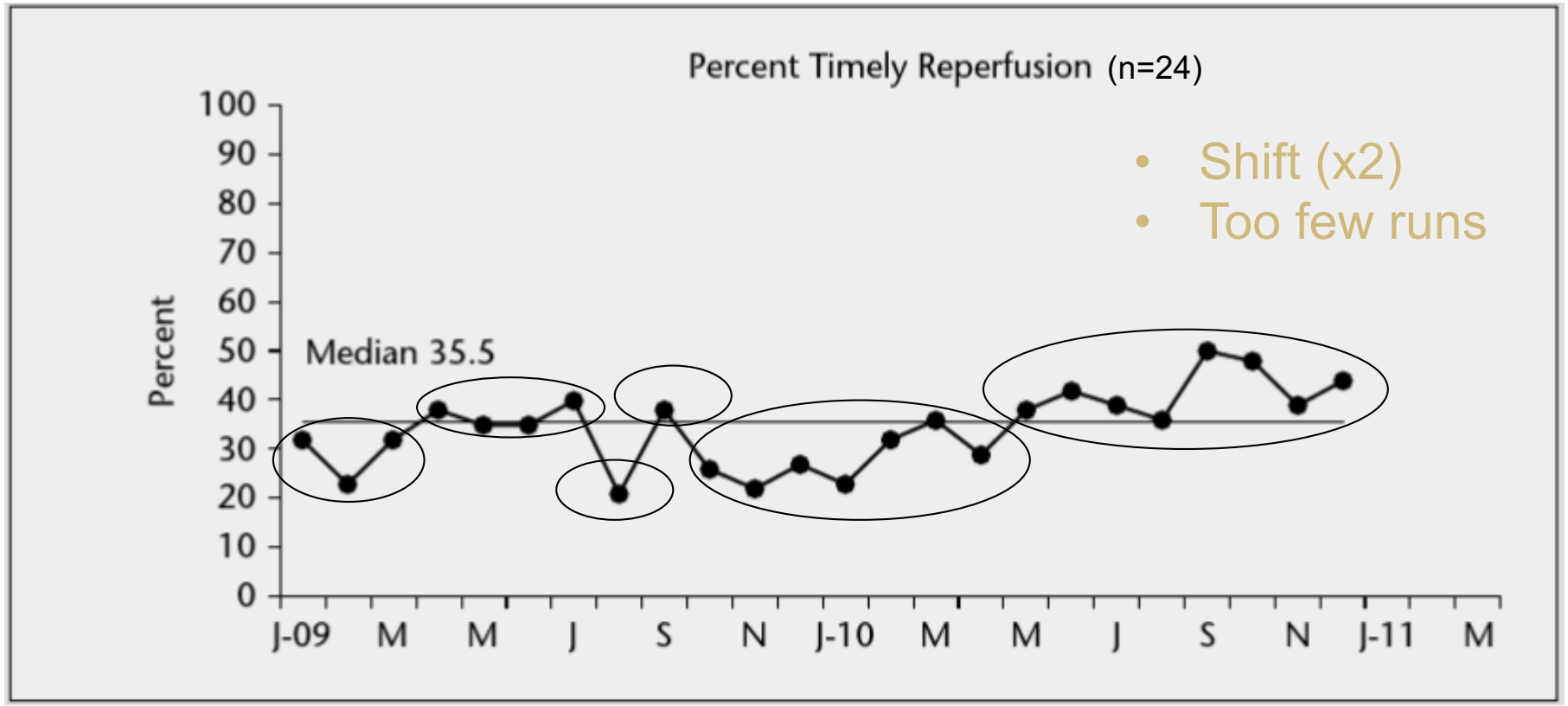
Lower limit: 8
Upper Limit: 18



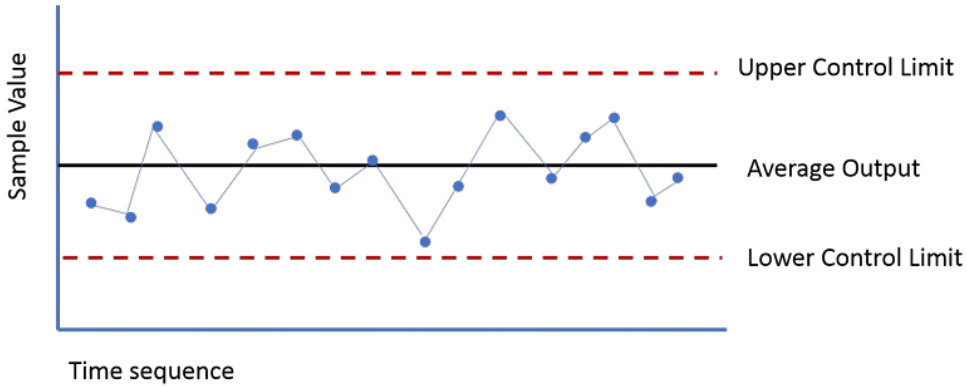
EXERCISE 2

Expected Runs

Lower limit: 8
Upper Limit: 18



Statistical Process Control (SPC) Chart

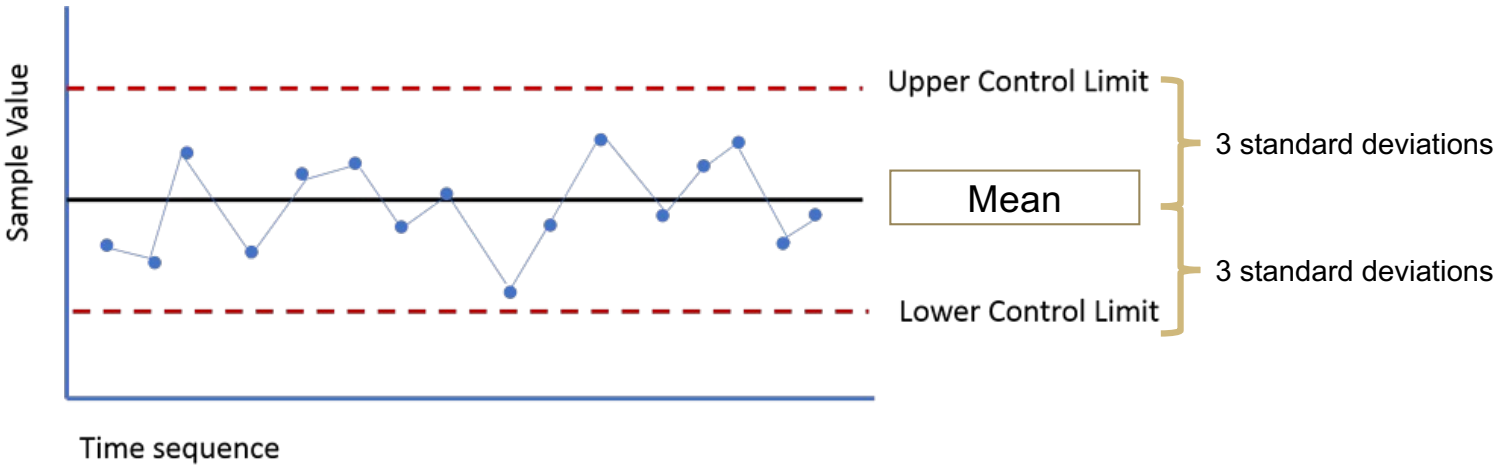


☑ Make informed decisions about which processes to leave alone and which to subject to an improvement cycle.

☑ Predict future performance if the system is stable and in control.

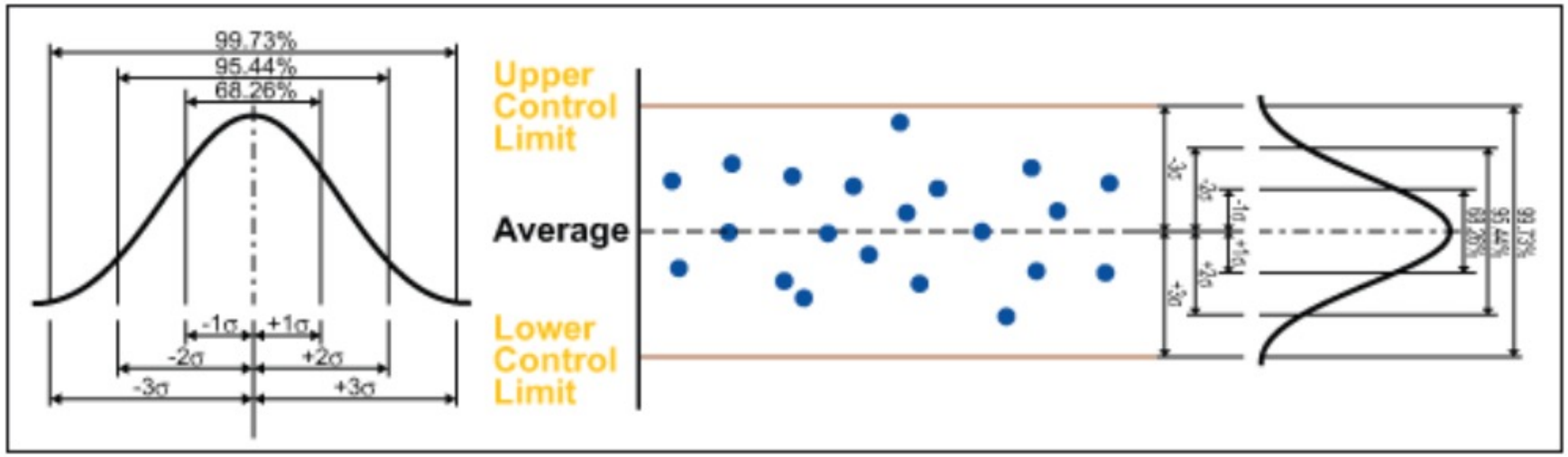
☒ Easy to construct

Statistical Process Control (SPC) Chart - Anatomy



Detect “special vs. common cause variation”

Statistical Process Control (SPC) Chart



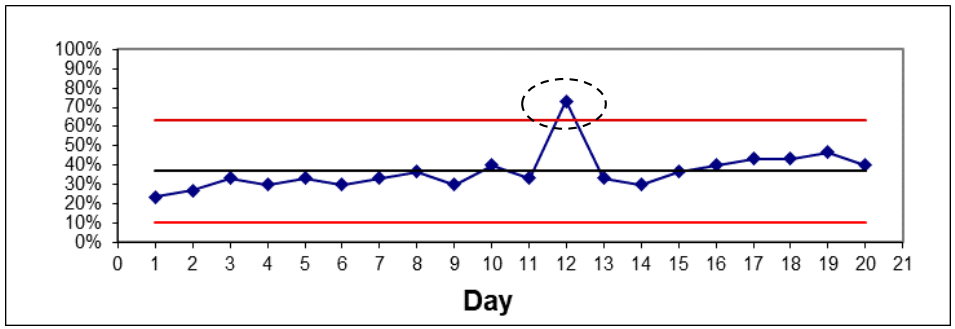
Statistical Process Control (SPC) Chart

But…there are many types

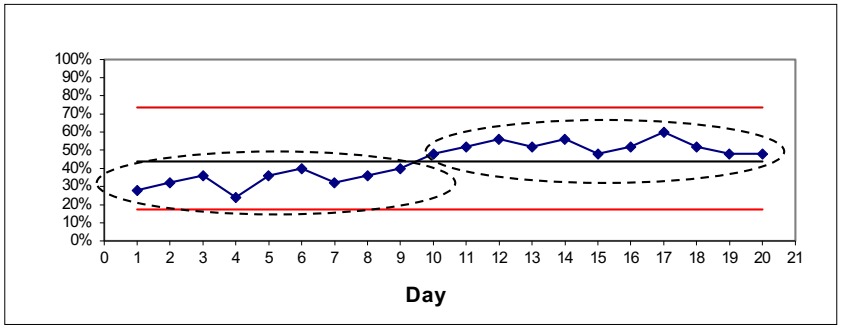
Data Type	Defect Definition	Subgroup Size	Chart Type
Attribute Data Counted as Discrete Events	Defect Data -Number of defects, not number of defective units	Constant Subgroup Size	c Chart Number of Defects
		Variable Subgroup Size	u Chart Defects per Unit
	Defective Unit Data	Constant Subgroup Size, Usually >= 50	np Chart Number of Defective Units
		Variable Subgroup Size, Usually >= 50	p Chart Fraction of Defective Units
Variable Data Measured on a Continuous Scale		Subgroup Size = 1	X and R_m Moving Range
		Subgroup Size < 10	$\bar{X}$ and R
		Subgroup Size >= 10	$\bar{X}$ and s

https://www.moresteam.com/toolbox/statistical-process-control

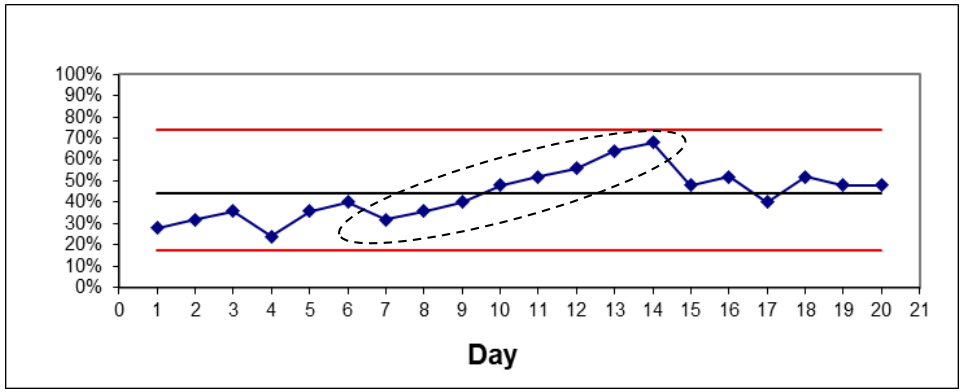
Rule 1: A single point falling outside of the control limits.



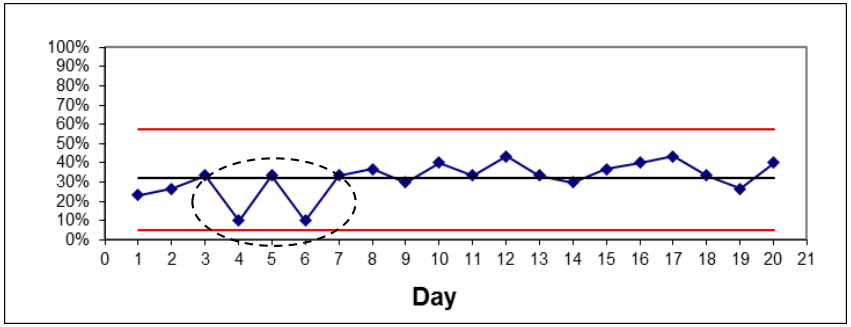
Rule 2: A shift of 8 or more consecutive points above or below the center line



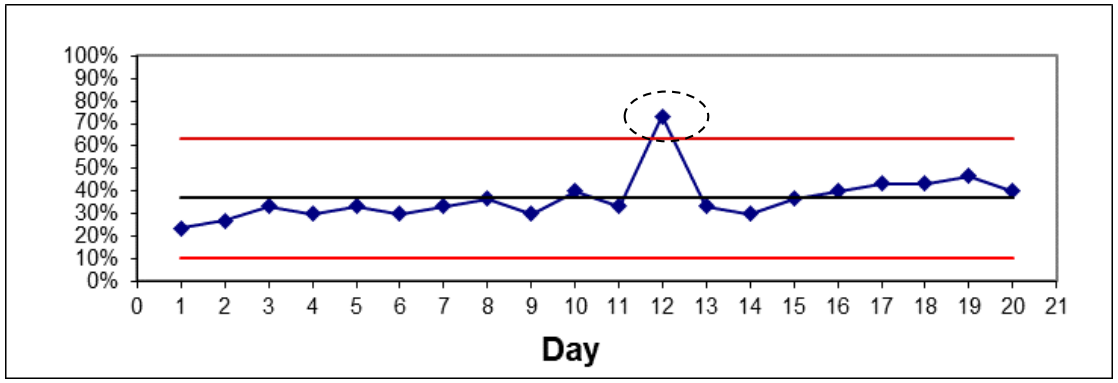
Rule 3: A trend of 6 or more points in one direction, up or down (two consecutive points of equal value count as one).



Rule 4: Two out of any three consecutive points falling in the outer one third of the control limit.

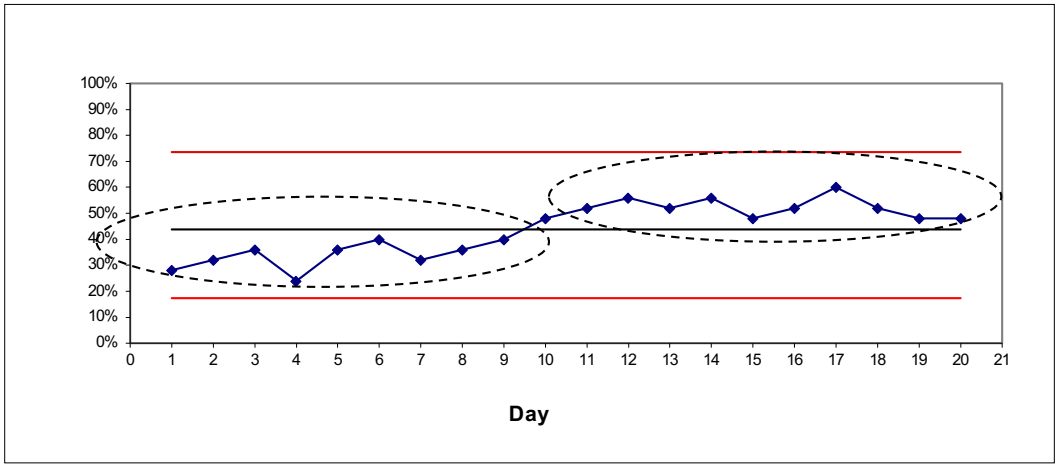


SPC Chart – Interpretation (Special Cause Variation)



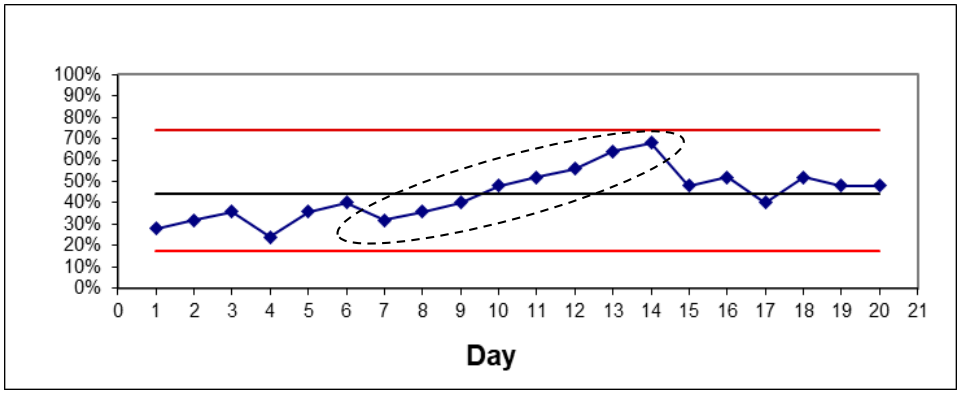
A single point falling outside of the control limits.

SPC Chart – Interpretation (Special Cause Variation)



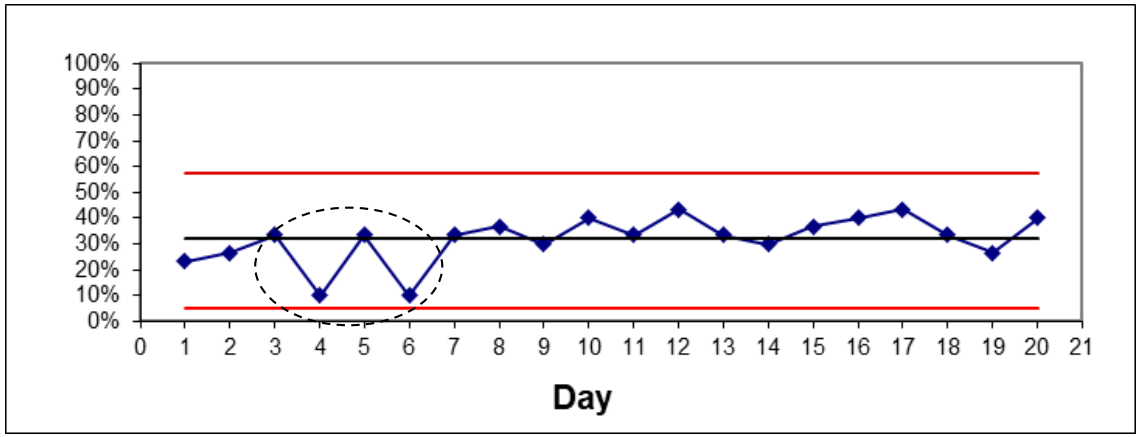
A shift of 8 or more consecutive points above or below the center line.

SPC Chart – Interpretation (Special Cause Variation)



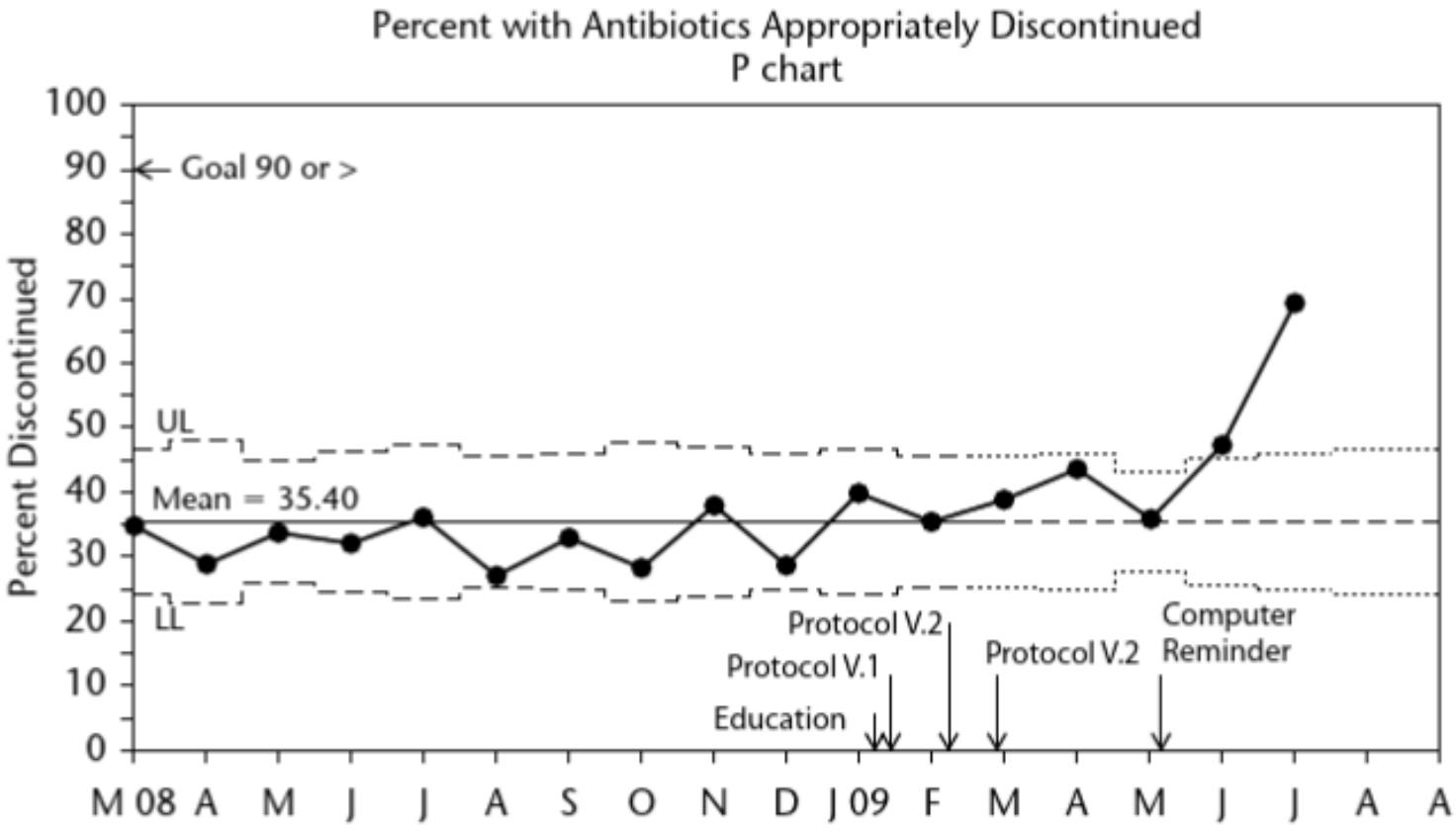
A trend of 6 or more points in one direction, up or down (two consecutive points of equal value count as one).

SPC Chart – Interpretation (Special Cause Variation)

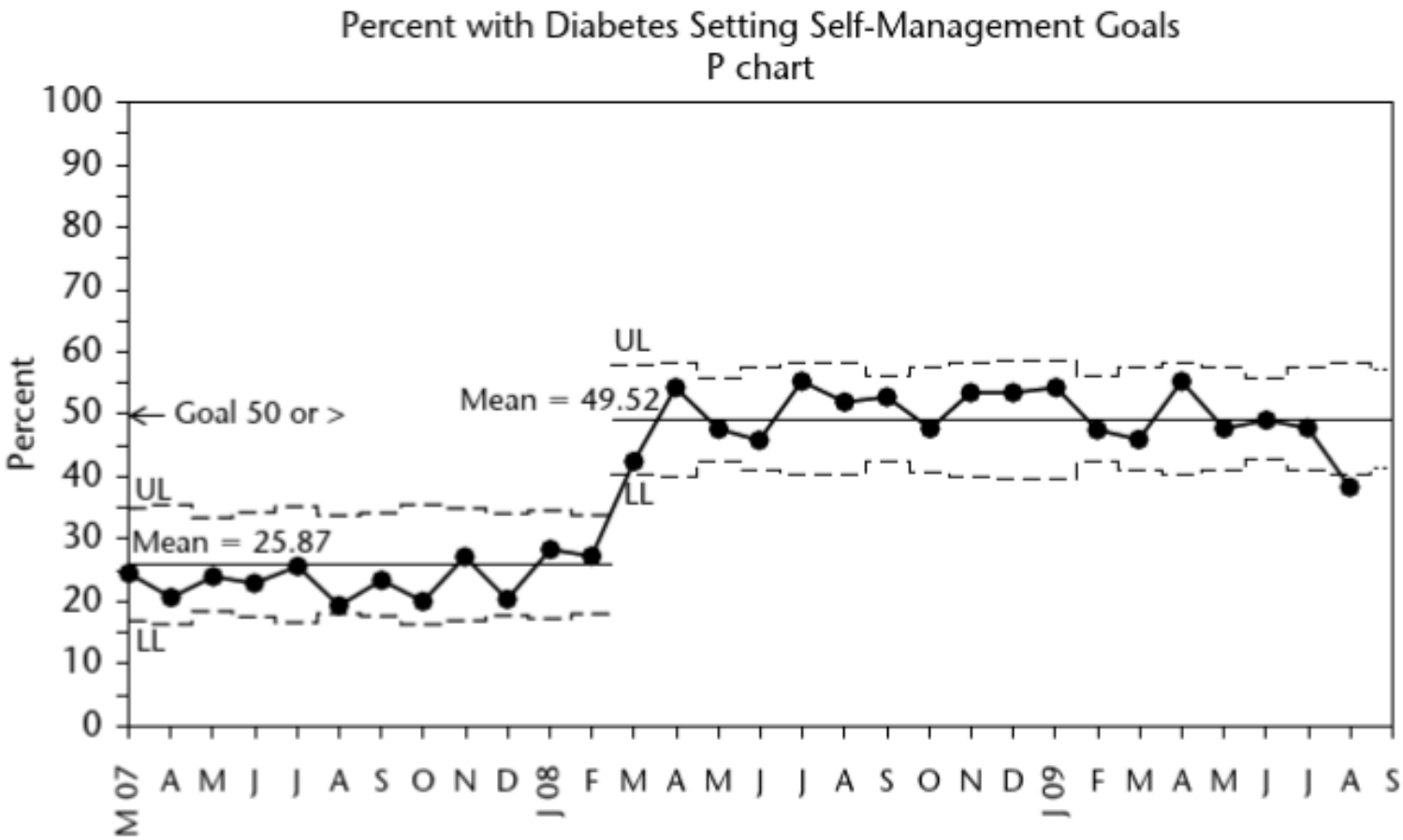


Two out of any three consecutive points falling in the outer one third of the control limit.

EXERCISE 3


Percent with Antibiotics Appropriately Discontinued
P chart
Percent Discontinued
100
90
80
70
60
50
40
30
20
10
0
← Goal 90 or >
UL
Mean = 35.40
LL
Education
Protocol V.1
Protocol V.2
Protocol V.2
Computer Reminder
M 08 A M J J A S O N D J 09 F M A M J J A A

EXERCISE 4


Percent with Diabetes Setting Self-Management Goals
P chart
Percent
100
90
80
70
60
50
40
30
20
10
0
Goal 50 or >
UL
Mean = 25.87
LL
UL
Mean = 49.52
LL
M 07 A M J J A S O N D J 08 F M A M J J A S O N D J 09 F M A M J J A S

Making Decisions

ONLY Common Cause (random/normal) Variation Present = System is “in-control”

Special Cause (non-random) Variation Present = System is “out of control”

Making Decisions

Assuming you are not at goal…

ONLY Common Cause (random/normal) Variation Present

System is “in-control”

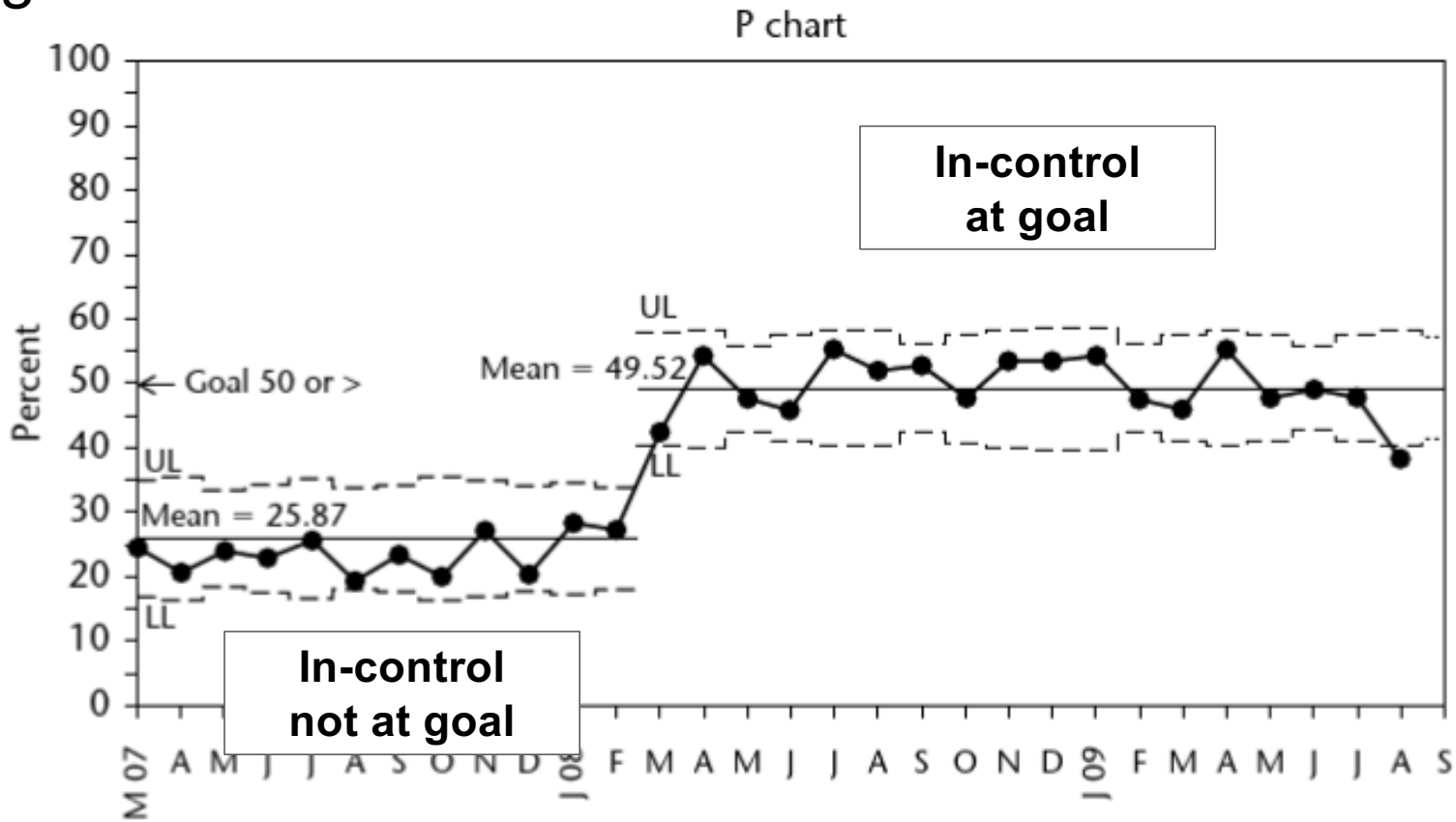
Overhaul the system

Special Cause (non-random) Variation Present

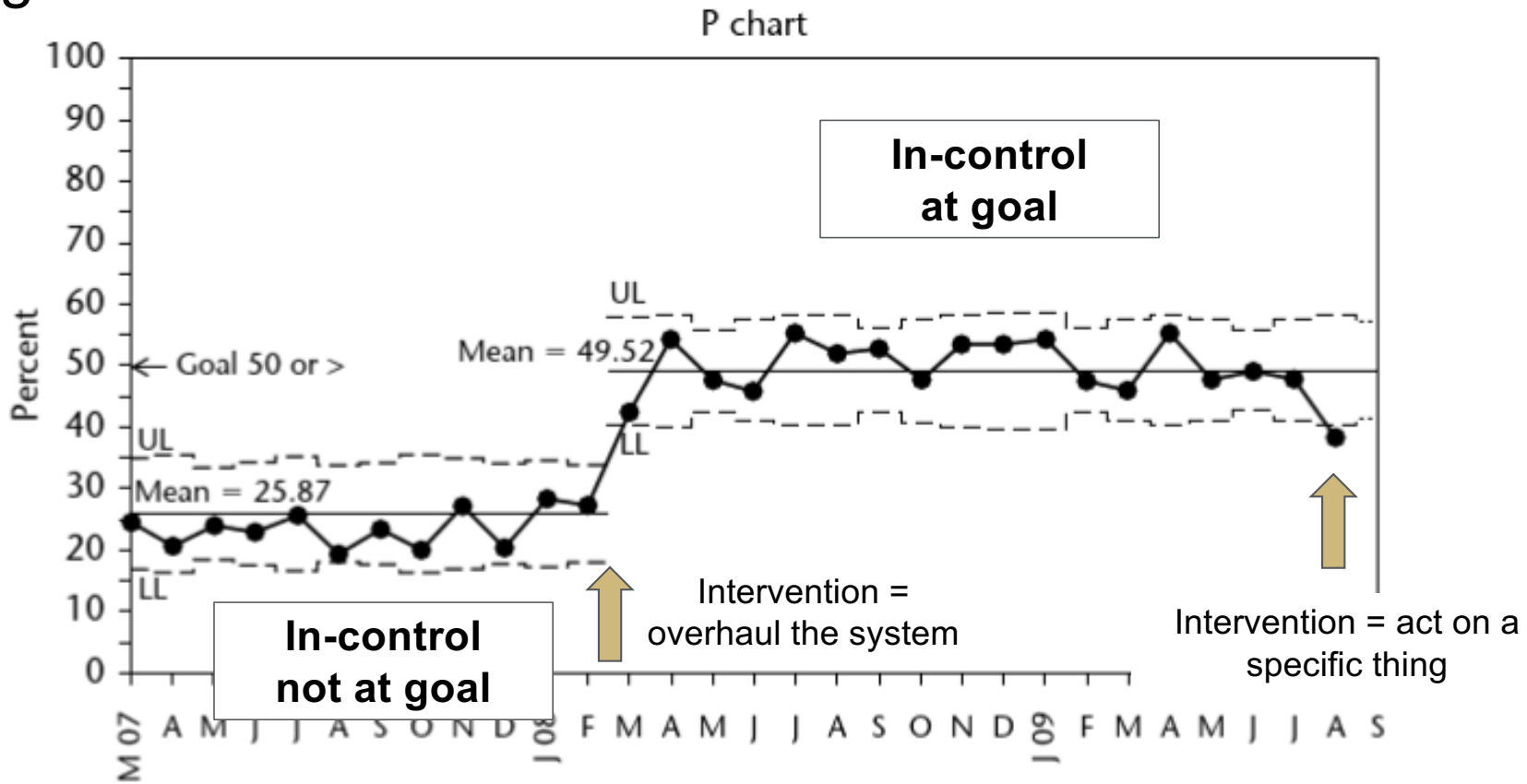
System is “out of control”

Act on a *specific part* of the system while leaving the system fundamentally intact.

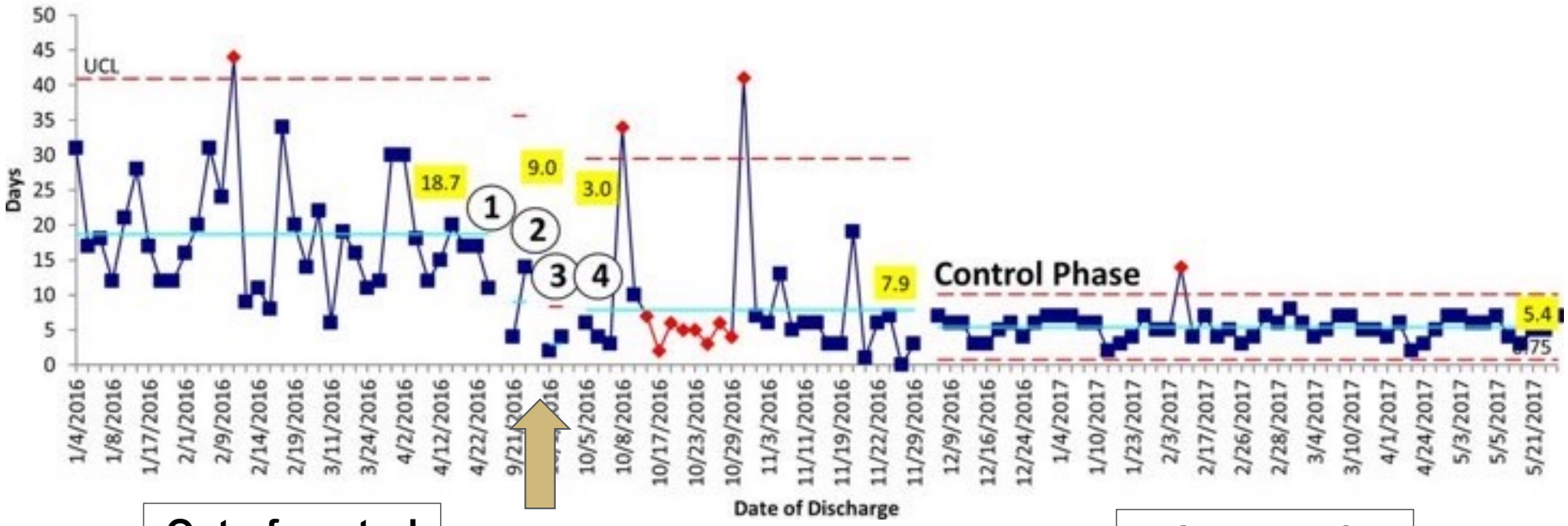
Making Decisions



Making Decisions



Making Decisions

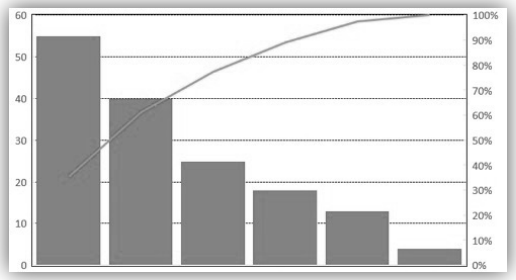


Out-of-control not at goal

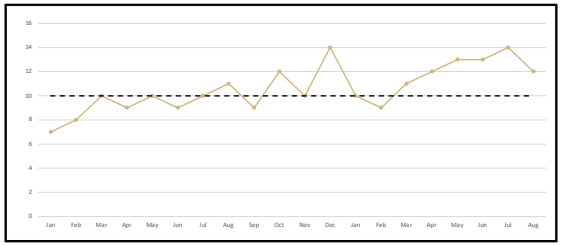
Intervention = act on specific thing(s)

In-control at goal

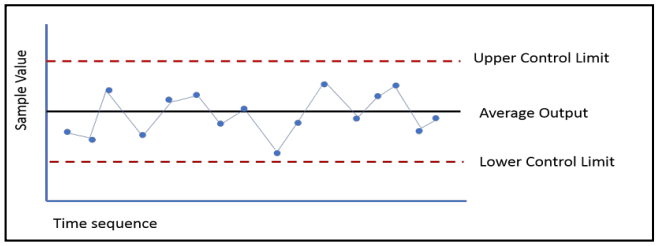
Building QI Charts



Pareto



Run Chart



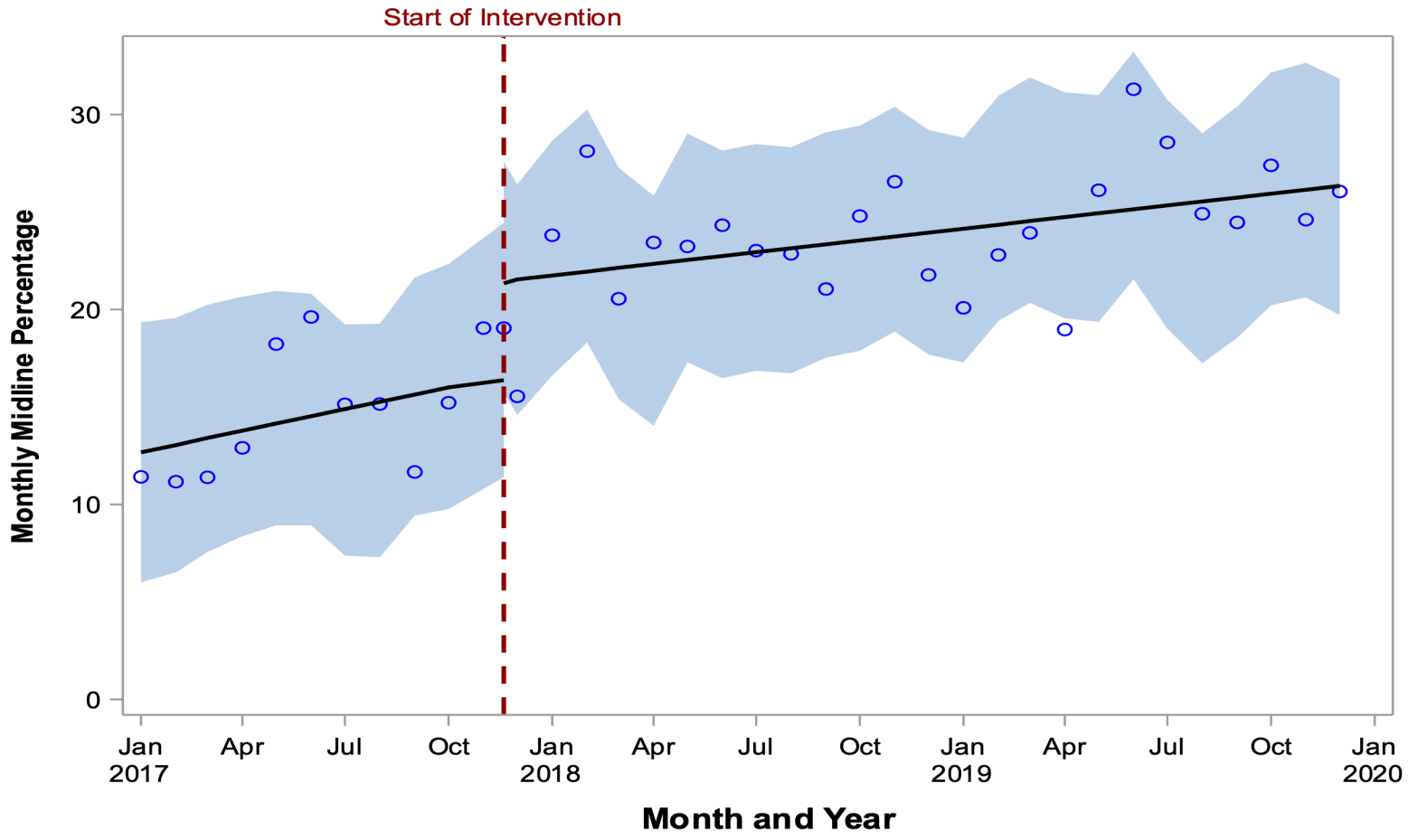
SPC Chart

QI Macros

QI Macros
Expert Help

Intervention Data

- Other methods: interrupted time-series, stepped-wedge design


Start of Intervention
Monthly Midline Percentage
30
20
10
0
Jan
2017
Apr
Jul
Oct
Jan
2018
Apr
Jul
Oct
Jan
2019
Apr
Jul
Oct
Jan
2020
Month and Year

- Insert graph from Mike Tchou from Jon Roach – T chart

“Happiness is there when expectations meet the reality.”

Debasish Mridha, MD

Breakout

15 minutes

DRAW your (expected) results now

Using a run chart – draw what you hope your interventions will show when you are done.

- Outcome or process metric (or both)
- Don’t forget to include your baseline data!

Evaluation


BREAK-TIME
Come back at 2:30!

Leading Change: Short-term Wins

Jeff Glasheen, MD

Institute for Healthcare Quality, Safety and Efficiency

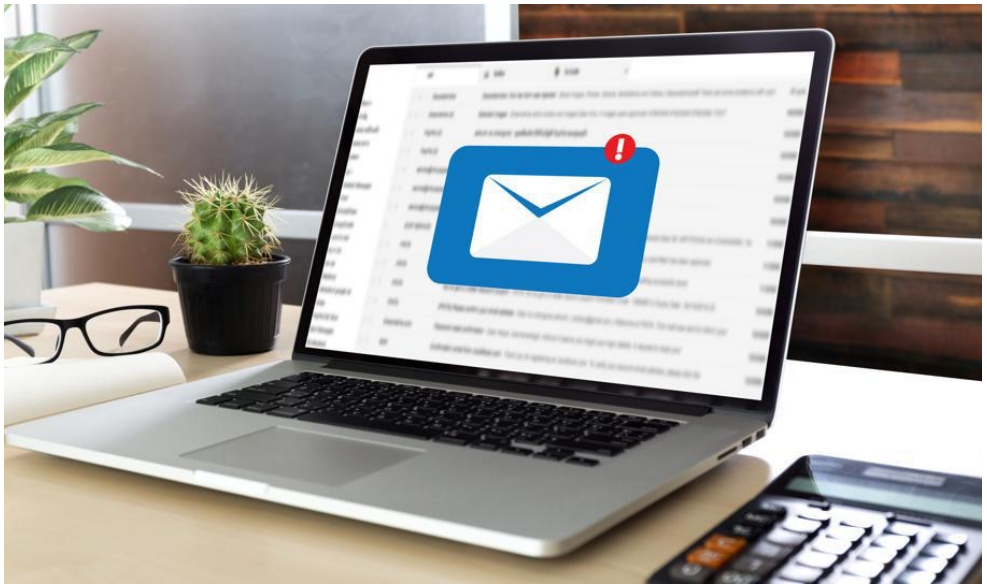
SCHOOL OF MEDICINE

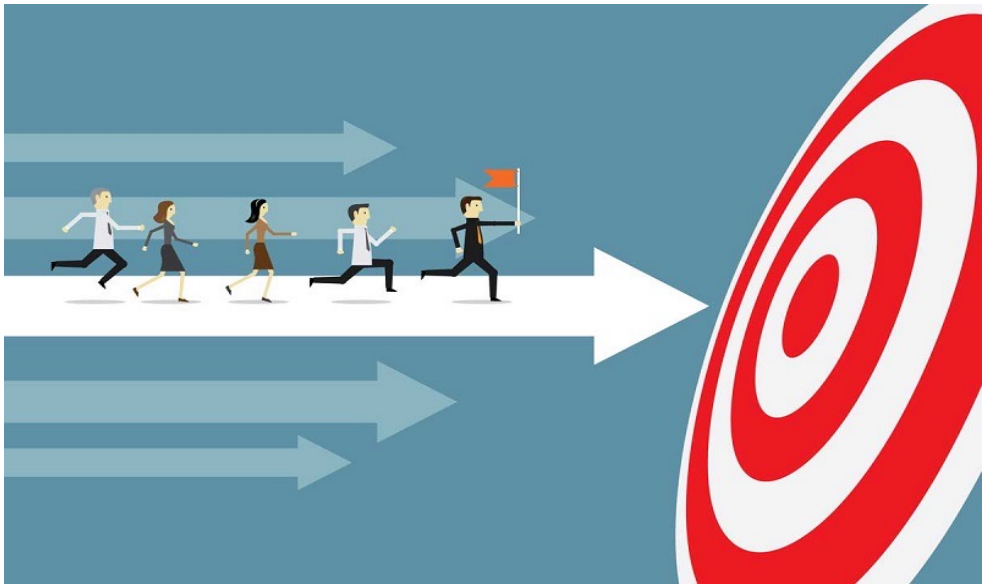
UNIVERSITY OF COLORADO **ANSCHUTZ MEDICAL CAMPUS**

The Change Process

- Establish a sense of urgency
  - People need to think there is a problem
- Creating a guiding coalition
  - Find the thought leaders and engage
- Develop a vision and strategy
  - “Where” going and “how” things will change
- Communicate the change vision
  - Must be dogged & constant: coalition on board
- Empower broad-based action
  - Remove obstacles
- Generate short-term wins
  - Plan and create these; reward the “changers”
- Consolidate gains, produce more change
  - Use credibility for more change
- Anchor new approaches in culture
  - Make this part of the culture going forward

Awareness Campaign





Awareness Campaign

- Public launch to the project
  - Must be an event!
  - Leader's public decree of support—CMO/CNO, Department Head, Johnny's and Sarah's
  - Be specific about the goals and how it ties back to the vision
- Visible interventions and actions
  - Share how you'll achieve the goals (interventions); what you need the group to do (actions)
  - Must convince them that your interventions/actions can lead to achieving the goal
- Consistent communication
  - Must communicate—10 different ways, 100s of times!
  - Should be hearing from you daily-to-weekly

Novel Communication Strategies

- Guerilla Marketing
  - Novel way to gain interest on a low budget
  - Often use intrigue/unknown
- Flash Mobs
  - Announce morning of event
  - 30-minute sessions with food/coffee
  - Engage in discussion of core topic
- Swag
  - People like getting stuff
  - Acts as a reminder, builds community
- Tracking Board
  - Reminder, score keeper, competition
- Celebration
  - Awards
  - Milestones

Who	How/Where	What Message
Department Chair	1-on-1 Meeting	Program Overview
CEO	Email	Sense of Urgency
CMO	Grand Rounds	Case Review Conference
CNO	Division Meeting	Business Case
CQO	Department Meeting	National Data
CFO	Nursing Huddles	Local Data
Director of Quality	Educational Conference	Interventions
Patient Safety Officer	Poster/Flyer	Improvements
Physicians	Swag	Best Practices
Nurses	Town Halls	Education
Residents	Social Media	Celebrations
APPs	Flash Mob	Patient Stories
Division Head	Guerilla Marketing	
Other clinicians	Newsletters	
	Tracking Board	
	Cake!	

Awareness Campaign

- Public launch to the project
  - Must be an event!
  - Leader's public decree of support—CMO/CNO, Department Head, Johnny's and Sarah's
  - Be specific about the goals and how it ties back to the vision
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  - Must convince them that your interventions/actions can lead to achieving the goal
- Consistent communication
  - Must communicate—10 different ways, 100s of times!
  - Should be hearing from you daily-to-weekly
- Celebrate short-term wins
  - 'Remind' people of the effort; feel like change is happening
  - Celebrate daily-to-weekly in the beginning; transition to weekly-to-monthly after success
- Build on short-term wins
  - Builds credibility
  - Builds momentum to ultimate goal

Dear members of the CTICU family,

Next week, on **Wednesday, March 12th**, we will have our **3rd Annual Wean-er Party** to celebrate our collective effort in implementing the ABCDEF bundle, applying evidence-based sedation, delirium, and early mobilization practices to some of the sickest patients in the hospital. As with previous years, we will prepare a variety of hotdogs (including a vegetarian option) with a new addition of corn dogs this year! Food and drinks will be available for **both lunch and dinner**—a huge thanks to Evelyn.

The SOAR (Sedation Off Awake Rehabilitate) team is committed to supporting the ABCDEF bundle, which aims to promote patients who are more awake, cognitively engaged, and physically active while ensuring their safety. This requires critical thinking and a personalized approach, as the risk-benefit ratio changes from patient to patient, from moment to moment. I am proud to be a part of the unit capable of providing this complex intervention to improve patients' lives. I hope many of you will join us in celebrating the **2024 Wean-er Award recipients** and the teamwork we have cultivated over the years.

CERTIFICATE
OF COMMITMENT

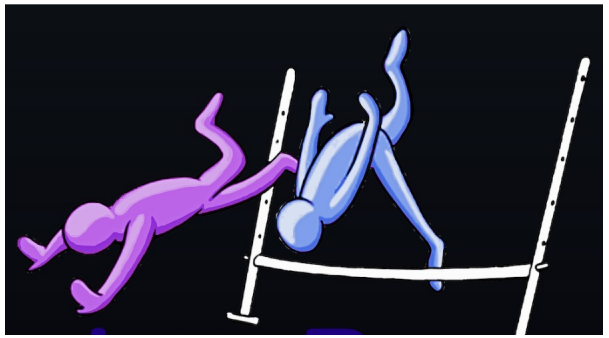
This a

COMMITTE
RISKY I

Signature

RISE Rais

Create Short-term Wins



- Short-term wins keep people engaged and excited about the project.
- Reminds them of what you are doing (communication).
- Builds credibility, especially amongst the resisters
- These must be planned prospectively as best you can.
- Ensure the bar is so low people will trip over it and feel success.
- Plan 8-10 short terms wins…these also count toward communication!
- First win should come within 48 hours after launch!

Celebrate Early and Often!

Hello Everyone!

It has been 2 days since we rolled out the pathway for inpatient penicillin allergy delabeling in patients determined to be low-risk.

I want to publicly recognize ***HMS-11: Ben Vipler and Kirsten Deroode*** for successfully delabeling one of their patients!!

I was on service (HMS-8) this week, and we were also able to successfully delabel a patient. I was fortunate to have a resident, Nick Bianchina, working with me who stated something along the lines of "It is very satisfying to remove unnecessary allergies!"

Some feedback we have received on the pathway:
Under low risk (PENFAST < 3), it is NOT required to contact Allergy/Immunology to receive their blessing to proceed with the direct amoxicillin challenge. Only contact

Hi Everyone!

It has already been 1 month (time flies!) since we rolled out the **PCN delabeling pathway** to delabel low-risk penicillin allergies in hospitalized patients. I have some exciting news to share with the group!

We have delabeled **17 patients** in the past month!!! **Round of applause**

When I reviewed the pre-intervention data from 1/2023 - 1/2024, only 7 patients were delabeled in the WHOLE year. **THIS IS INCREDIBLE WORK.** Tara, Anjeli, Misha, and I recognize your efforts to incorporate this workflow and new skillset into your already busy workdays. We appreciate you being amazing anti-microbial stewards.

Hi team,

It has been 2 months since we rolled out the **PCN delabeling pathway and orderset** to delabel low-risk penicillin allergies in hospitalized patients.

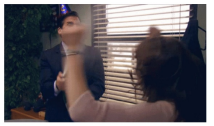
We have delabeled an additional **15 patients** in the past month, making that a total of **32 patients** since our project roll out!!! Once we reach 50 patients, we will be celebrating with food for the group! Let's try and reach it during May!
Out of our 32 successfully delabeled patients so far, this has changed treatment for **12 patients** allowing them to be switched to the appropriate penicillin antibiotics for their infections.

Hi team,

It has been 3 months since we rolled out the **PCN delabeling pathway and orderset** to delabel low-risk penicillin allergies in hospitalized patients.

We have delabeled an additional **11 patients** in the past month, making that a total of **41 patients** since our project roll out! Once we reach 50 patients, we will be celebrating with food for the group!

Out of our 41 successfully delabeled patients so far, this has changed treatment for **16 patients** allowing them to be switched to the appropriate penicillin antibiotics for their infections.
Last month, there was a patient with ocular syphilis and a low-risk penicillin allergy who received and passed an amoxicillin challenge on the day of admission and was then able to receive appropriate therapy of IV penicillin that day!



We have heard your feedback regarding screening patients for appropriateness of notification to delabel. We are continuing to identify ways to improve this process, to

Celebration within 24 hours!

First ME PCR on normal CSF averted!

JT

Jenkins, T... Thursday, March 13, 2025 at 4:03 PM

To: DL_Lab Microbiology; +14 more

Hi all,
Exciting news! The new micro lab protocol and Epic order for the ME PCR panel went live yesterday. **The protocol has already been applied on two CSF specimens where the ME PCR was ordered (thank you Sierra Westmoreland and Danka Iverson!), and we have already averted our first unnecessary ME PCR on normal CSF!** Thanks so much for everyone's input and assistance to operationalize this testing change that will contribute to higher value care for our patients – the first of many steps on Denver Health's journey toward diagnostic excellence.

Who can beat 24 hours?

Four Characteristics of a Good Reward

Rewards trigger dopamine release in the hypothalamus

1) Tied to clear and specific outcome or action

2) Palpable token of appreciation

3) Have minimal financial value (pushes extrinsic > intrinsic motivation)

4) Visibly celebrated with others

Breakout: Short Term Wins

- Step 1: What will you celebrate?
  - First time someone does the action you want
  - First time they do it for a week/month
  - Patient story
  - Improved outcomes/data
- Step 2: Who/How will you celebrate?
  - List different ways you'll communicate each of the above elements
  - Have at least 3 creative/unique communication means.
  - Consider having some rewards (not for every action, but some).
- Step 3: When will you celebrate each element?
  - Make a timeline for when you'll celebrate each item
  - Make sure these are public, if appropriate.
  - Add to awareness campaign so have integrated communication plan.


BREAK-TIME
Come back at 3:45!

Positive Organizational Design

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Institute for Healthcare Quality,
Safety and Efficiency

SCHOOL OF MEDICINE

UNIVERSITY OF COLORADO **ANSCHUTZ MEDICAL CAMPUS**

Organizations:

What are they?

Who or what designs them?

Organizations 1.0:
Survival through collective resources

Organizations 2.0:
Optimization of capital input and output

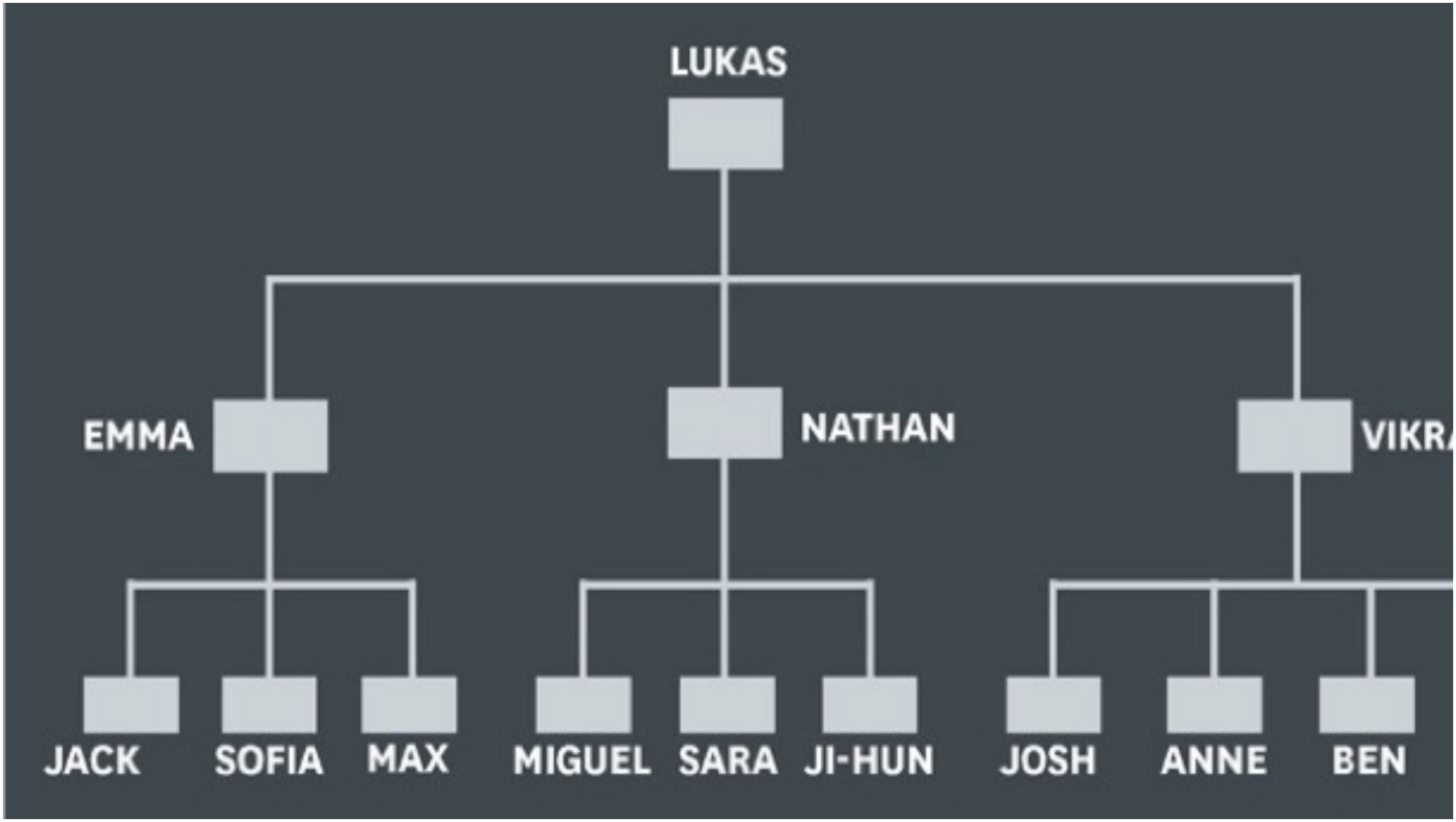
Organizations 2.1:
Engineered for High Reliability and Value

Organizations 3.0:

Generative Organisms made up of Complexity and Networks

https://brm.institute/relationship-centered-organization-system/

In all iterations organizations ultimately exist to synergistically enhance desired outcomes: The nuances of "success" and who gets to participate in that success may differ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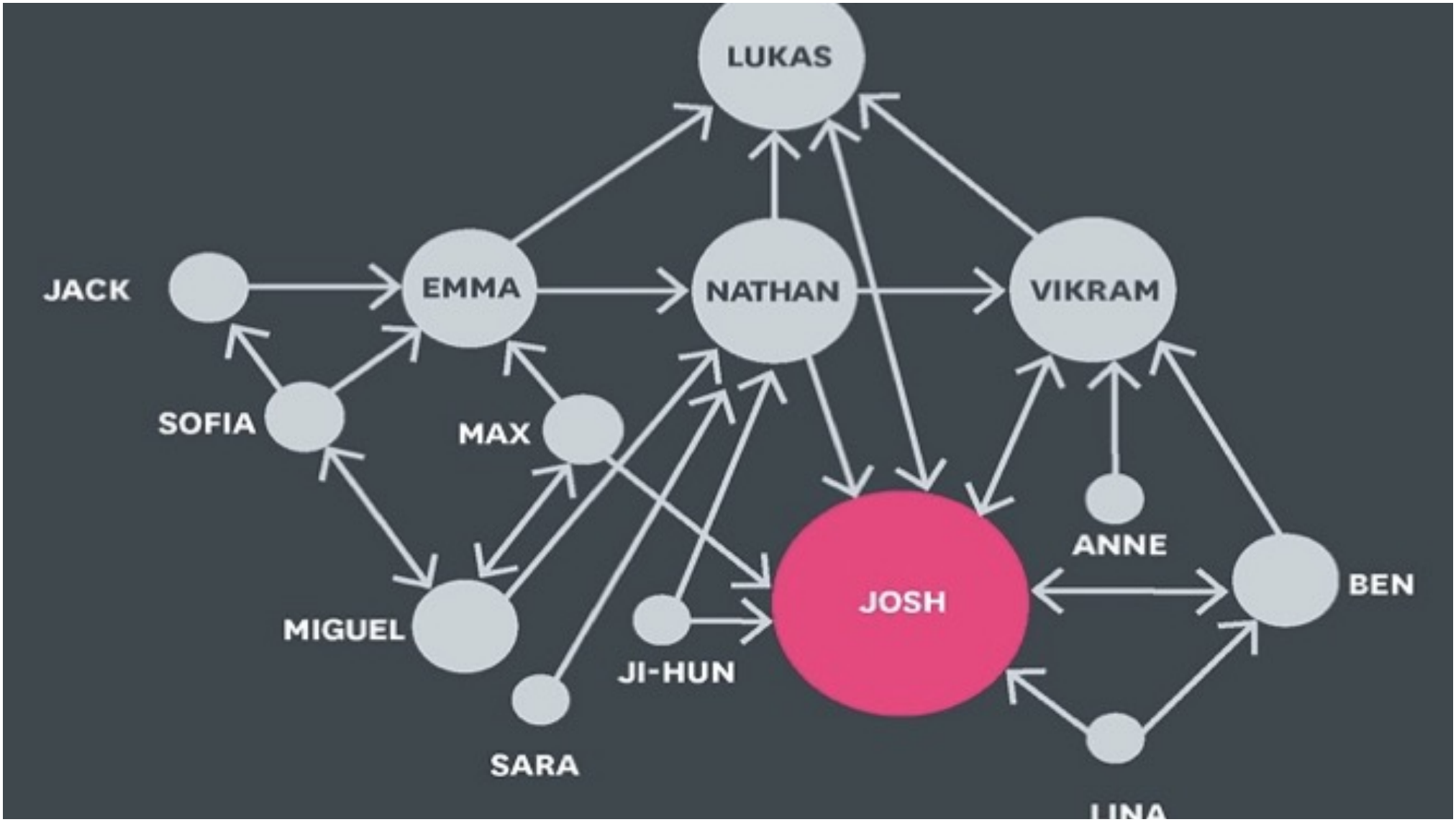
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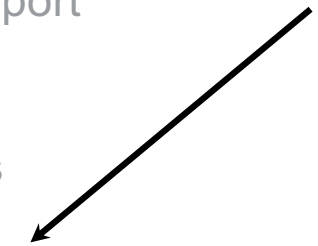
LINA

Herzberg Model

Satisfaction

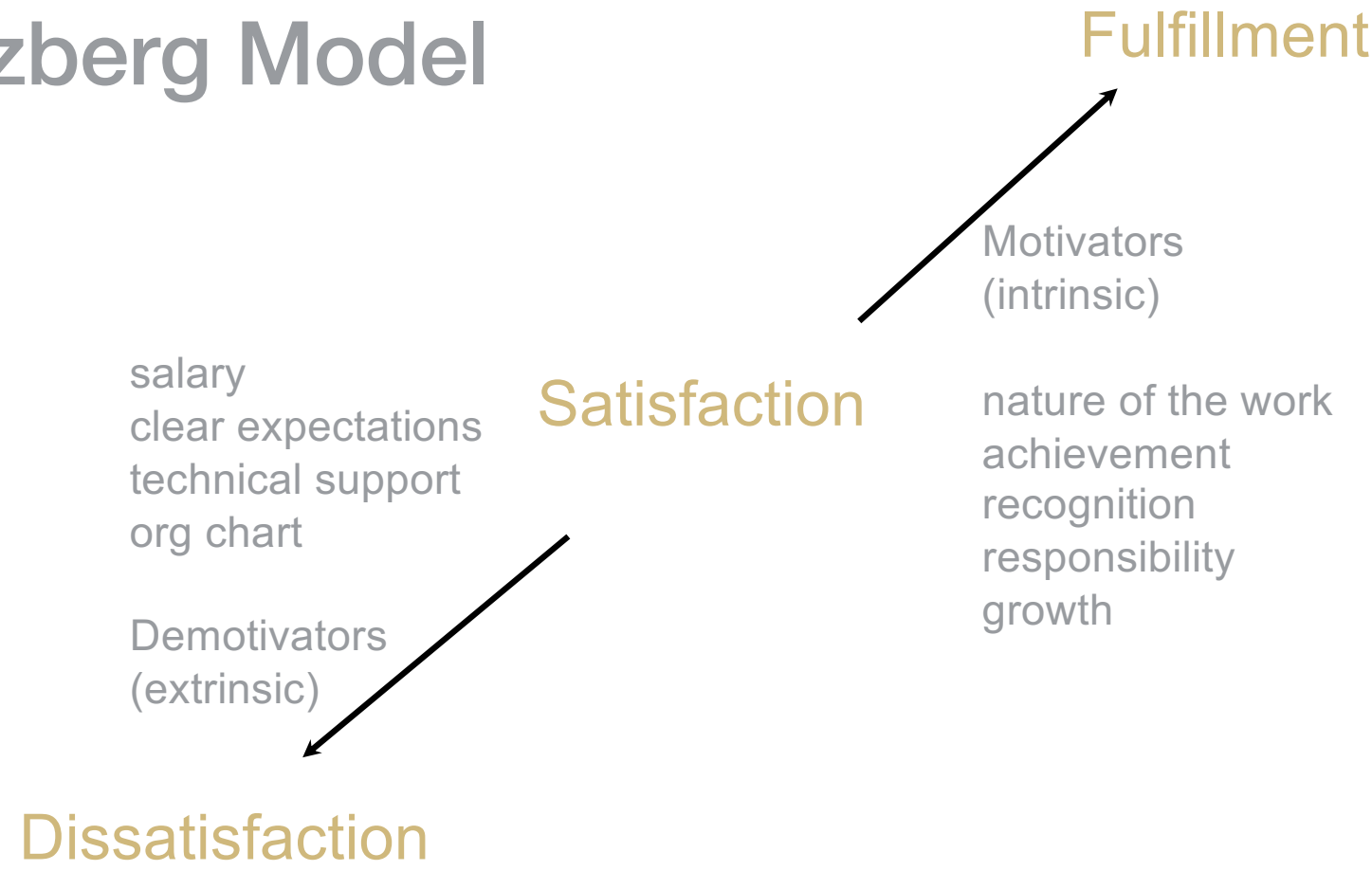
salary
clear expectations
technical support
org chart

Demotivators
(extrinsic)



Dissatisfaction

Herzberg Model



1.0

Primary Motivator = Survival or Loss Aversion

Leaders access by: Threatening survival (or a proxy)

2.0

Primary Motivator = Receive Rewards, Avoid Punishment

Leaders access by: Sticks (- incentives) and Carrots (+ incentives)

3.0

Primary Motivator = Attraction, Excitement

Leaders access by: tapping into—
• Autonomy • Mastery • Purpose • Connection • Play

(in the context of clear expectations, useful feedback, removing obstacles)

Getting More of Motivation 3.0

Primary Motivator = Attraction, Excitement

Tapping into —

• Autonomy • Mastery • Purpose • Connection • Play

Systems Change Matters . . .

Complexity Feels Overwhelming

Levers for Transformation

Individual Practices

Team Practices

Leadership Practices

System (re)Design

Designing for Motivation 3.0

What are the processes and artifacts in your environment that either motivate or demotivate people?

Examples:

- Morning safety huddles processes
- Monthly team/business meeting agendas
- Regular 1 on 1 agendas
- Interdisciplinary rounds processes
- Peer/Adverse event review processes
- Annual review process
- Quality meeting agenda; the quality scorecard

Designing for motivation 3.0

What are the processes and artifacts in your environment that either motivate or demotivate?

Pick 1: How might you redesign to bring more motivation 3.0 to life?

Autonomy • Mastery • Purpose • Connection • Play

Culture

(you don’t “roll it out”)

Culture

(you don’t “roll it out” – but deliberate practice and design matters)

PERSPECTIVES IN HOSPITAL MEDICINE

Optimizing Well-being, Practice Culture, and Professional Thriving in an Era of Turbulence

Read G Pierce, MD*; Manuel Diaz, MD; Patrick Kneeland, MD

Division of Hospital Medicine, Department of Medicine, University of Colorado School of Medicine, Aurora, Colorado.

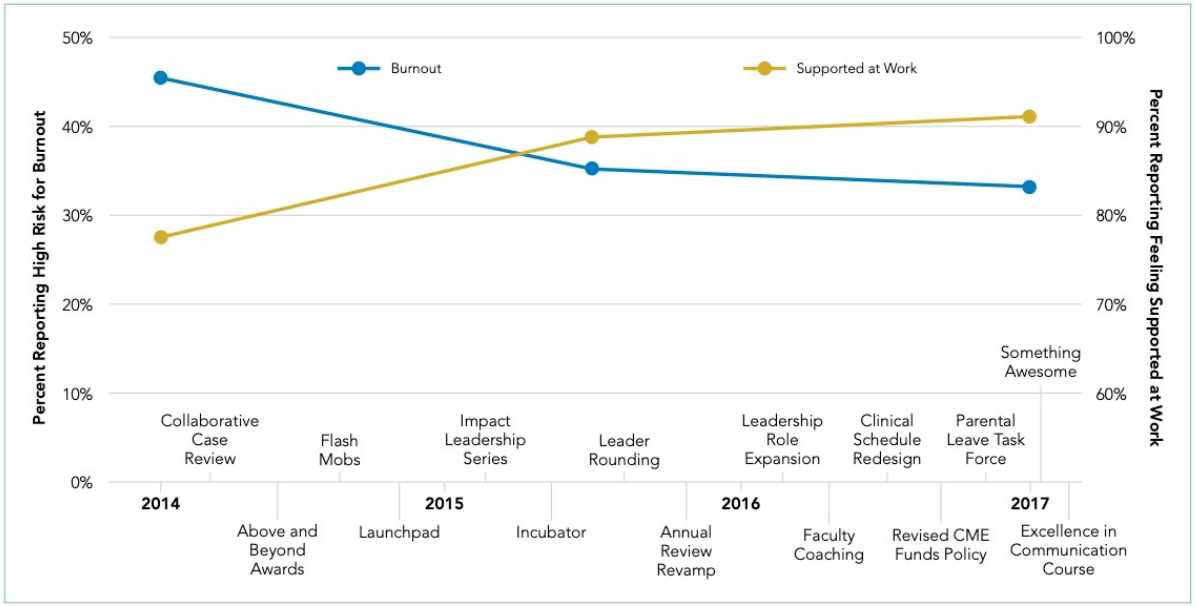
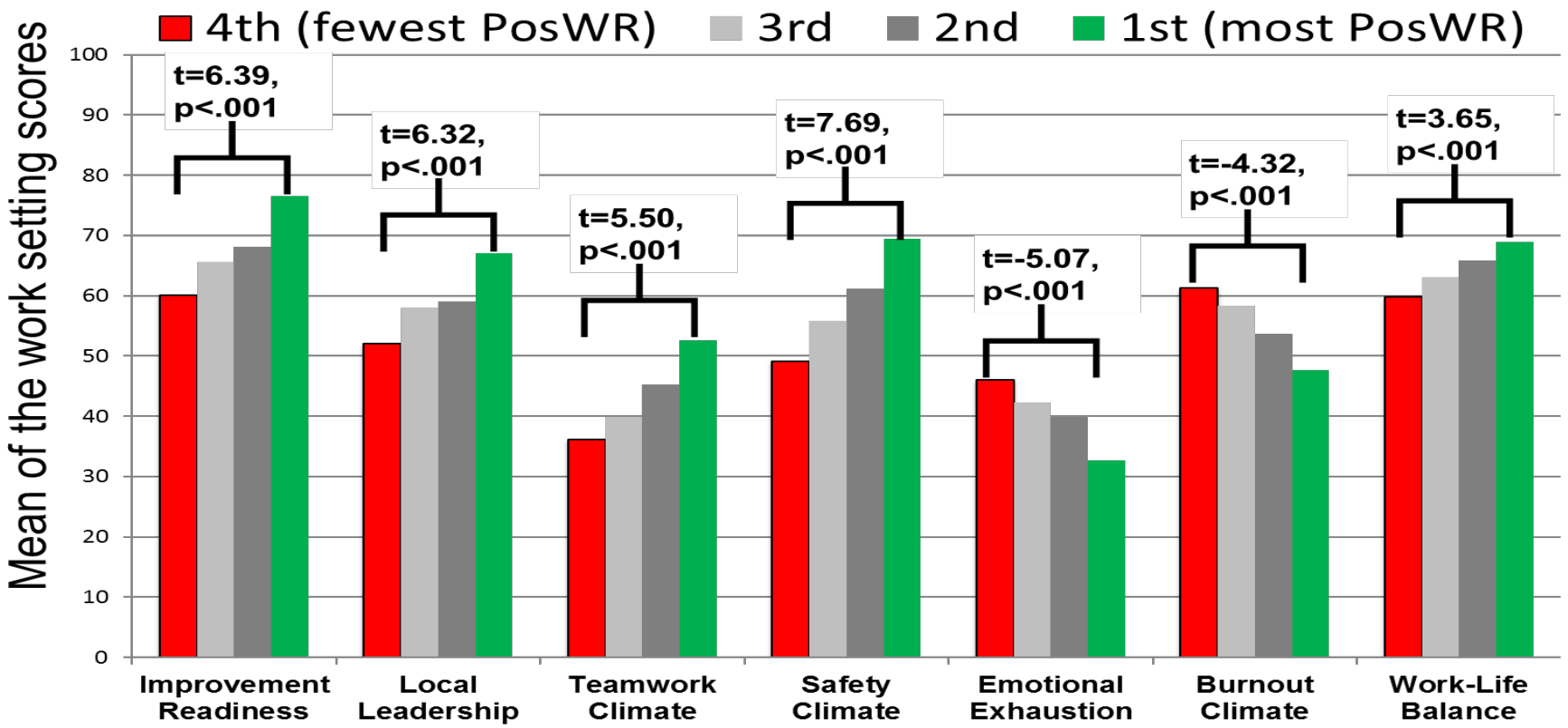


FIG. Interventions Made over Time to Enhance Resilience, Well-being, and Burnout.

Positive Leader Rounds:

"What are two things that are going well? And one thing that we need to address to get even better?"



Sexton et al. "Providing feedback following Leadership WalkRounds is associated with better patient safety culture, higher employee engagement and lower burnout. BMJ

The Context

- 18-bed med-surg unit
- Multiple admitting services – culturally complex!
- Low patient satisfaction scores
- High staff turnover
- Inexperienced staff

The Core Idea

Top-down implementation of Experience "Best Practices"

Engaging frontline stakeholders in Experience co-design

How?

Empathy-focused Intelligence gathering

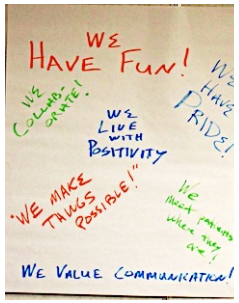
insights

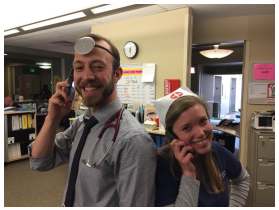
Interdisciplinary Design Day to generate "Always Event" prototypes

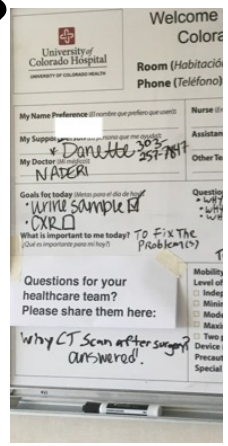
prototypes

Iterative Design On the Unit

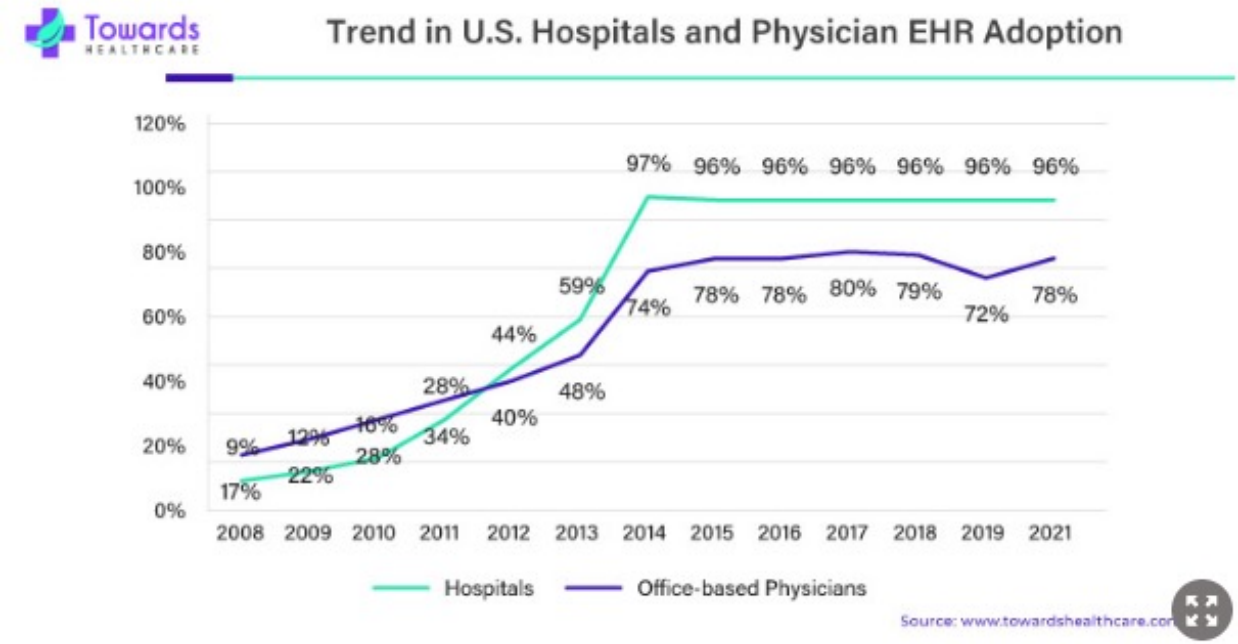
What Happened?

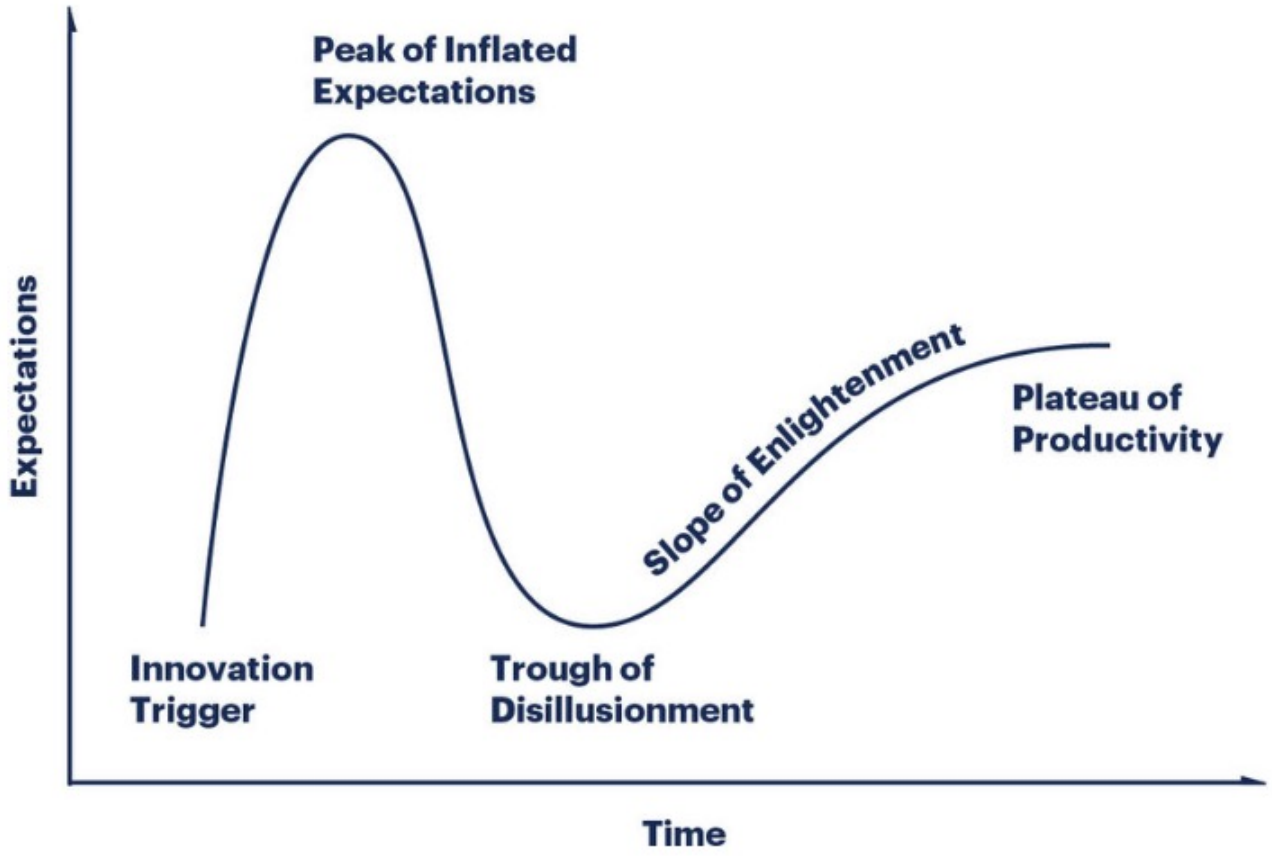




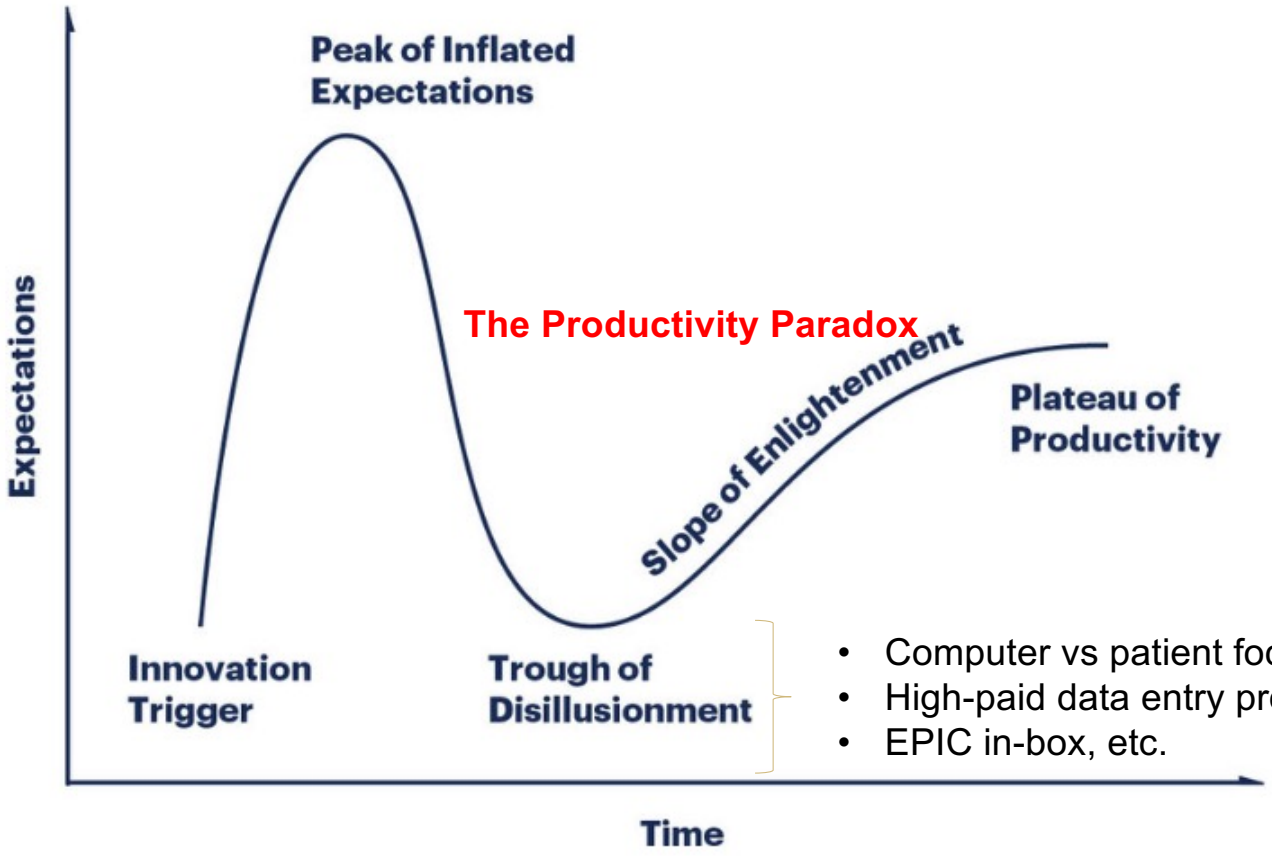


A Word on Tech Innovation + Organizational Design





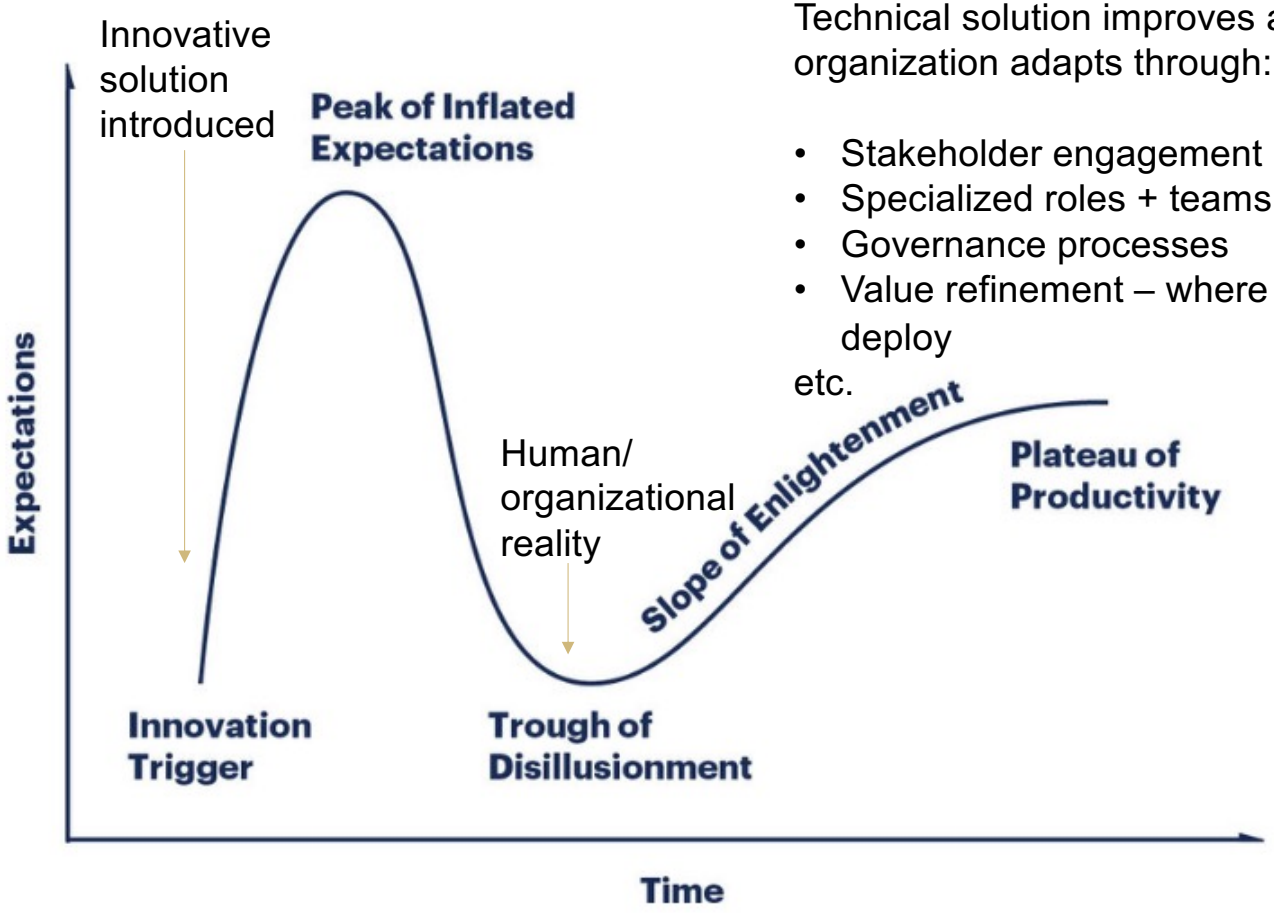
Gartner's Hype Cycle. [68]



- Computer vs patient focused
- High-paid data entry professionals
- EPIC in-box, etc.

Gartner's Hype Cycle. [68]

Brynjolfsson E. The productivity paradox of information technology. *Commun ACM*. 1993;36(12):66-77. doi:10.1145/163298.163309

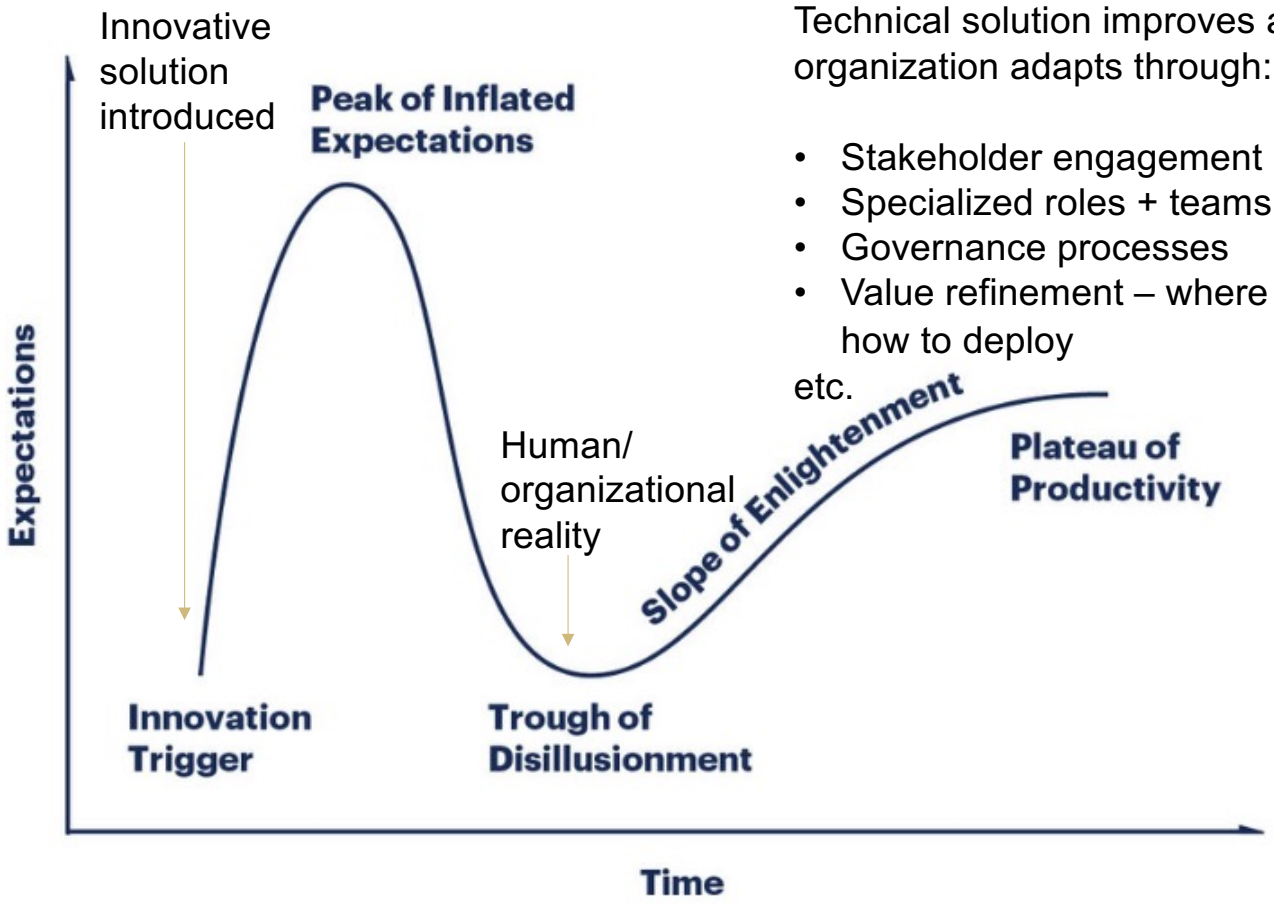


Gartner's Hype Cycle. [68]

Technical solution improves and organization adapts through:

- Stakeholder engagement
- Specialized roles + teams
- Governance processes
- Value refinement – where and how to deploy

etc.



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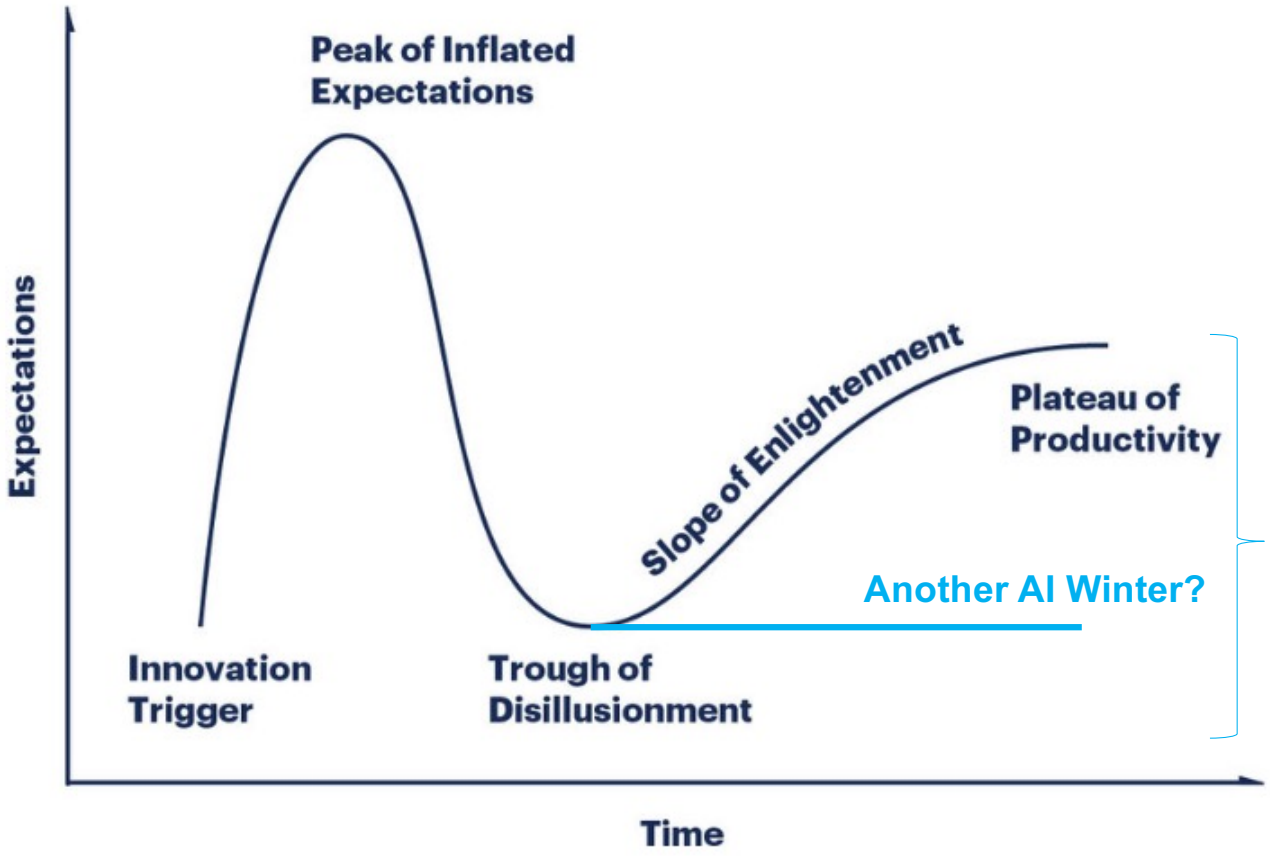
etc.

For all innovations, there is a technical piece that must be innovated, and also a human/social piece. i.e., the “socio-technical” reality.



Gartner's Hype Cycle. [68]

AI?

- We have a paradigm now for people trained in info systems due to EMRs and rise of big data – entire "informaticist" career paths
- The tech is better and doesn't need a ton of training
- Lots of promise for offloading undesirable tasks and logistics first
- But predictable and unpredictable problems will contribute to "trough of disillusionment"

Designing for motivation 3.0: Pro Tips

Designing for ***Autonomy***

- Delegate action items to willing participants with clear parameters and goals
- Review key performance metrics/targets on a regular basis and delegate improvement plans/solutions to people most familiar with the work
- Start performance review with open ended questions that invite self discovery first:
  What has been going well? What have you learned? Where would you most like to grow/improve?

Designing for ***Purpose***

- Invite story of success or where core values were lived out – build time into the meeting agenda (as a literal agenda item)

Designing for ***Connection***

- Invite and hardwire appreciation – such as an appreciative reflection at the beginning or debrief at the end of a meeting/event - build it into the agenda (as a literal agenda item)

Designing for ***Play***

- Are there opportunities for communal meals, scheduled breaks during the day?
- How do you celebrate small and big wins?
- Try a “walking meeting”

Appreciative Debrief

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

Next Steps

- Due April 22 –
  - Create a series of short-term wins to support your project
  - Update data plan to include current state data

Next session back in our usual location –
Krugman Conference Hall

Date Assigned	Assignment	Due Date
#13 – Feb. 11, 2025	• Create plan for removing barriers to success	#15 – Mar. 11, 2025
#14 – Feb. 25, 2025	• No new assignments	
#15 – Mar. 11, 2025	• No new assignments	
#16 – April 1, 2025	• Create series of short-term wins to support project • Update data plan to include current state data	#18 – Apr. 22, 2025
#17 – Apr. 8, 2025	No new assignments	
#18 – Apr. 22, 2025	• Develop plan for sharing/spreading your work	#21 – June 10, 2025
#19 – May 13, 2025	• Plan for putting project into embed phase • Develop final report out	#20 / #21 – May 27 / June 10, 2025
#20 – May 27, 2025	No new assignments	
#21 – June 10, 2025	No new assignments	
#22 – June 24, 2025	No new assignments	

Evaluation

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