



Clinical Safety & Effectiveness Cohort # 27 Team #11

**Creation of ED Patient Abnormal Result Call Back
Process**



The Team

Division

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Sponsor Department

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What We Are Trying to Accomplish

Our AIM Statement

We aim to notify 75% of the patients discharged from the Emergency Department who require a call-back secondary to abnormal result not on the laboratory's mandatory call back list. These patients will receive a call within 3 days of result being posted. We will complete this by March 11th 2022.

Background

Standardize process for call backs of high risk results defined by UH lab. Does not include all labs

Currently there is no standardized process to call back patients who leave or are discharged from the emergency room to notify them of results

Call back processes can be time consuming so having a structured process to follow could maximize time and efficiency, especially when the reports are auto generated within the EMR.

- Originally all results ordered by a physician in the ED were categorized into one in-basket with normal and abnormal results
- Providers working in particular areas of ER order a lot of initial tests on patients, holding them liable for a lot of result reviews that can burden them during other oncoming shifts

Background

- Delayed communication of abnormal results has been recognized as a source of significant harm to patients
- NPSG.02.03.01 Improve staff communication: Get important test results to the right staff person on time
 - Identify critical tests and results and to develop policies for communicating those results
 - Encouraging consistency, documentation, and improvement for communication
- Successful communication of test results to patients is integral to high quality healthcare delivery, especially when they are abnormal results that could manipulate plan of care

How Will We Know That a Change is an Improvement?

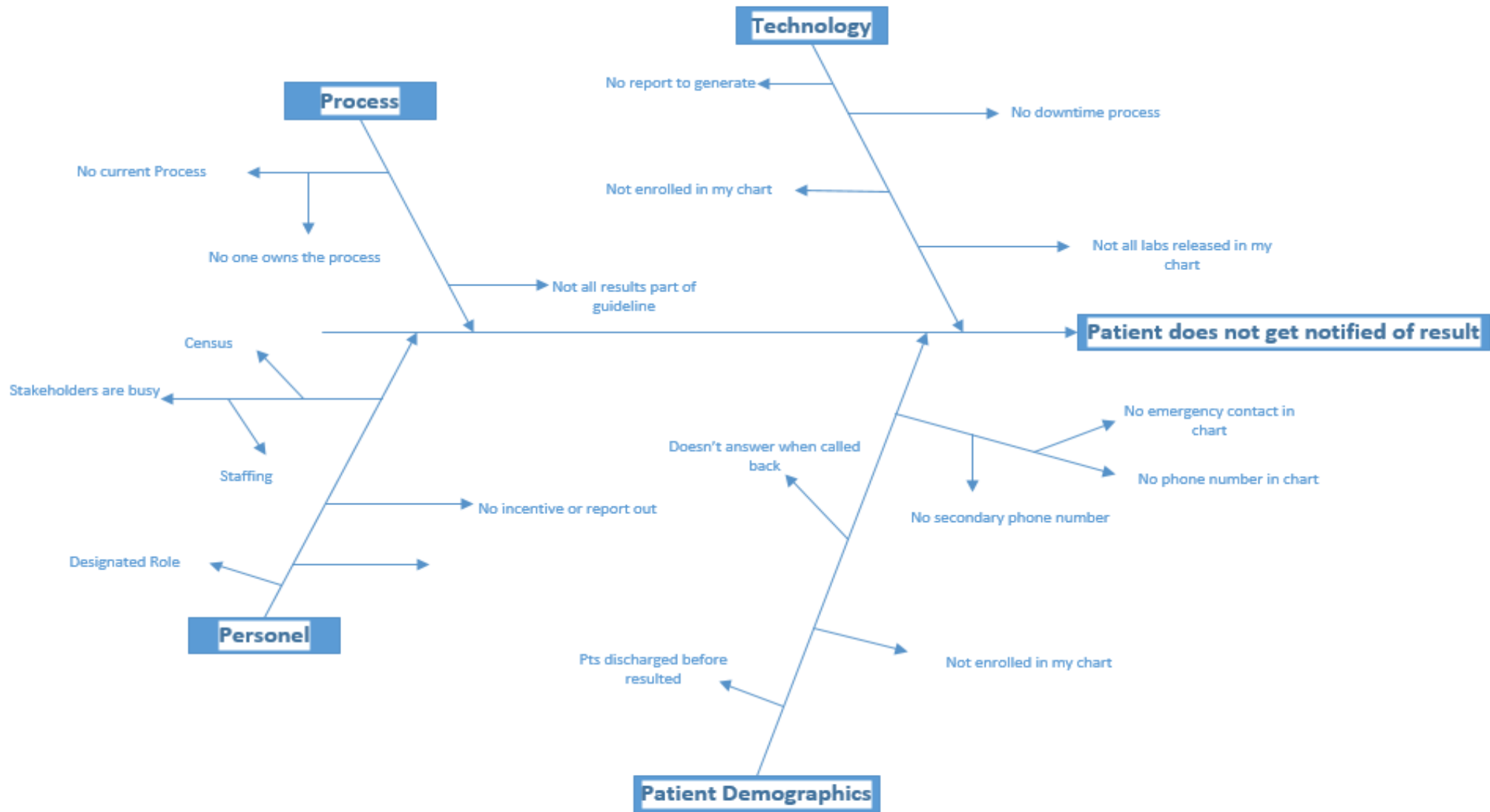
Currently not measured at all by our system/department

Any increase in call backs would be improvement within the department

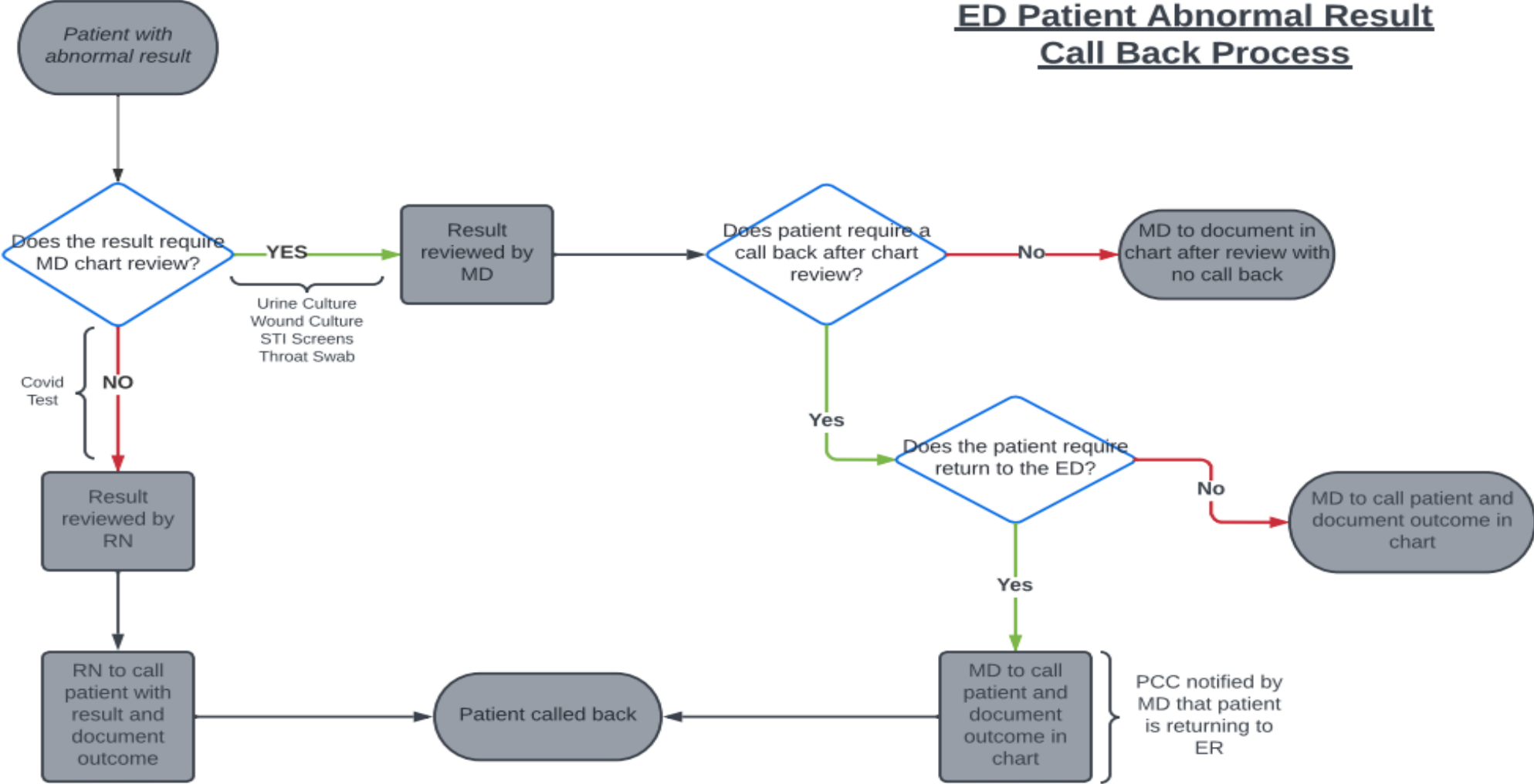
Selected Process Analysis Tools

- Brainstorming
- Affinity sort
- Flowchart
- Fishbone

Flowchart



ED Patient Abnormal Result Call Back Process



Data Collection Plan

Data reviewed from a shared in-basket through Epic (EMR) that is specific for the following lab values of patients discharged from ED:

- Urine Cultures
- Wound Cultures
- Covid Swabs
- STI Screens (gonorrhea, syphilis, chlamydia, HIV)
- Throat Swabs

Shared excel file used to log results reviewed, need for call back or other outcomes, and timeframes

Data Collection Plan

Type of measure	Measure	Data Elements	Data Category	Data Category	Data Source	Data Frequency	Data Steward
Outcome	Call backs	$\frac{\text{\# patients called back}}{\text{\# reviewed}}$	New	Manual	Abnormal results in-basket	Daily M-F	Leadership
Process	# results reviewed	# results # call backs	New	Manual	Abnormal results in-basket	Daily M-F	Leadership

Data Collection Plan

A	B	C	D	E	F	G	H	I
MRN	Result Type	Date Resulted	Call back necessary Y/N	Date Reviewed	Name of Review	Issues/Comments		Result Types
								Covid
								Strep
								Urine Culture
								STD (Syphilis, Gonorrhea, HIV, Chlamydia)
								Wound Cultures

A	B	C	D	E	F	G	H	I
Date	Name of Reviewer	Number of Results in Inbasket	Number of Results	Number of Results That Required Call Back	Number of Results Called Back	Reasons Unable to Complete Call Back		

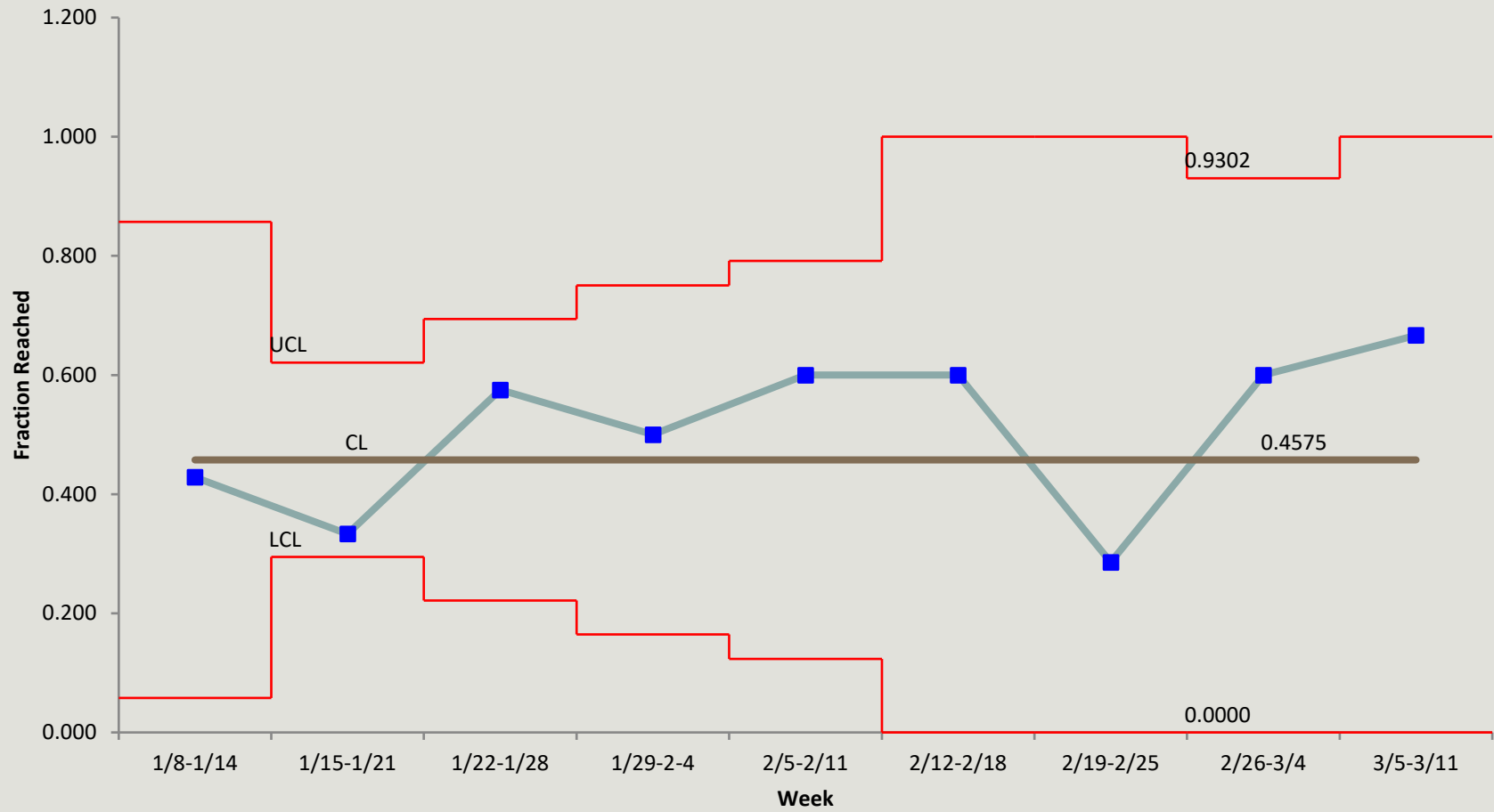
Driver Diagram

Goal	Primary Drivers	Interventions	Measure	Responsible
<p>Improve callbacks in the emergency department for those patients that are discharged with an abnormal result.</p> <p>Aim to notify 75% of patients discharged from the ED who require a call-back secondary to abnormal lab results not on the laboratory's mandatory call back list by Feb.1, 2021</p>	In-basket of abnormal results to reference	Specific in-basket created through the Epic team		Epic Team 3/1/2022
	Amount of time needed to complete process	Specific in-basket created through the Epic team	Results in created in-basket cleared as reviewed	Resident and ED Nursing Leader
		Division of results reviewed between RN and MD		
	Staffing/Acuity on the Unit	Planned timeframe for callbacks		Leadership
		Team members with access to in-basket to review Monday-Friday		
		Number of patients with abnormal labs requiring review and call back		
	Ability to contact patients	Registration complete/updated before patient is discharged	Results in created in-basket cleared as reviewed	Registration
		Correct patient phone # on file		
	Education on workflow/process	Educate members of workflow process		Leadership Staff
		Team members with access to in-basket to review Monday-Friday		MD Leader to complete before start of each new group
		Video created to demonstrate process		Residents

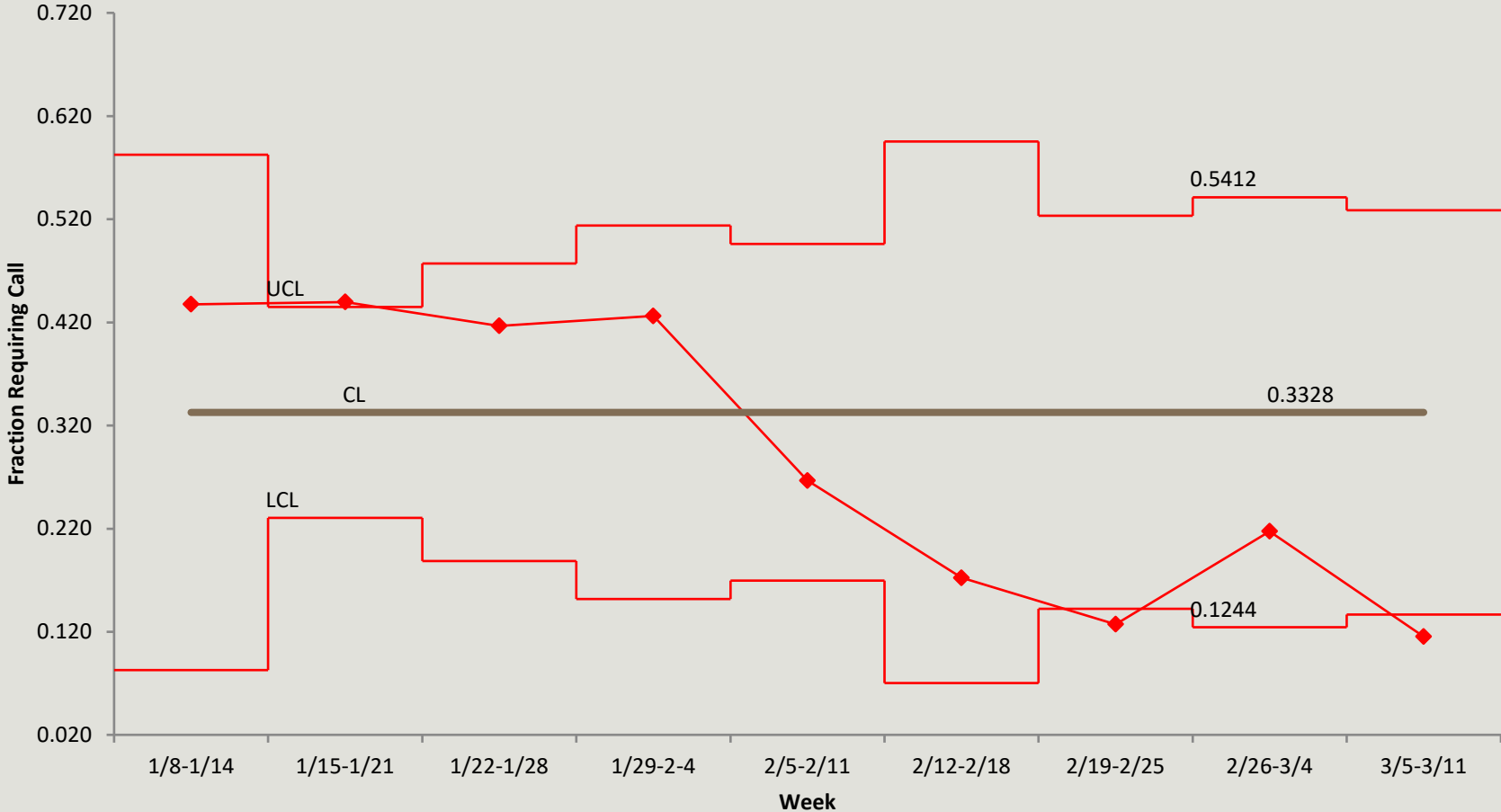
Implementing the Change

- Result in-basket created to only list abnormal values of predetermined labs for patients discharged from the emergency department
- In-basket reviewed Monday through Friday by ED nursing leadership and Emergency Medicine administration residents
- Data collection date range 1/8/2022 through 3/11/2022
- Multiple documentation review and callback locations
 - Standardization of review and documentation determined and disseminated to staff involved
- Data was separated between RN and MD's
 - RN called back all Covid results (2 personnel)
 - MD called back all other results due to needing MD review (4 personnel)

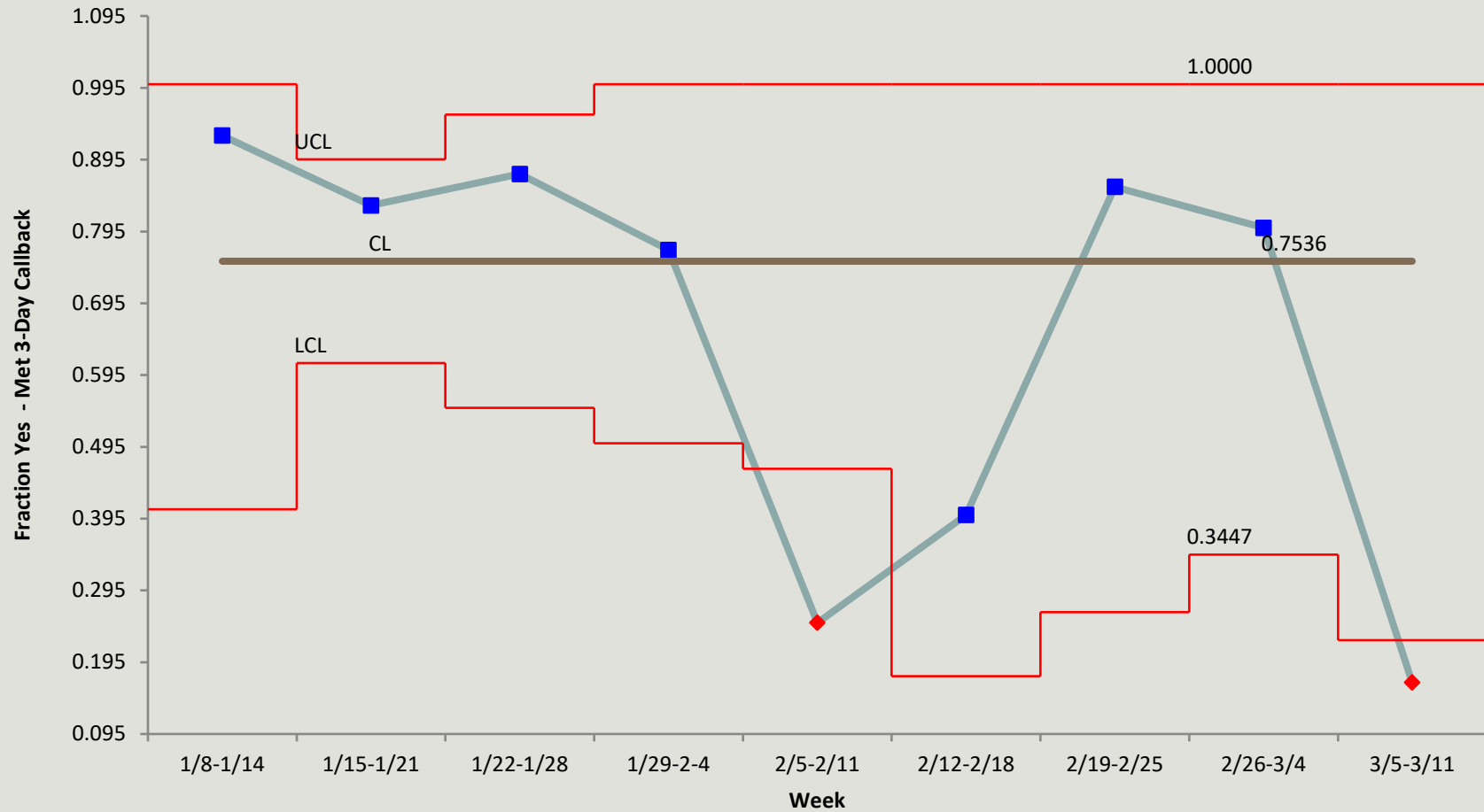
Fraction Reached of those Requiring Call



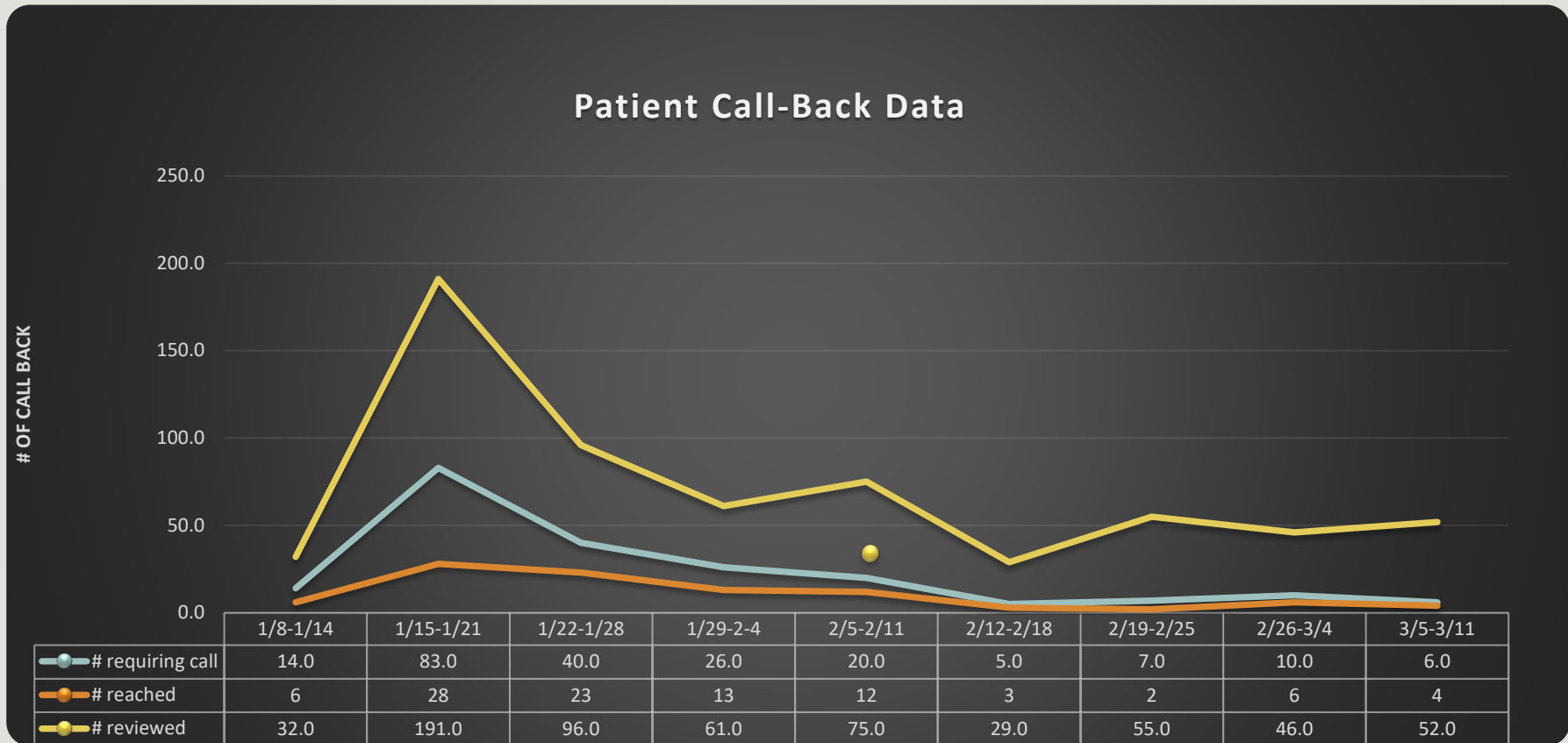
Fraction Requiring Call of those Reviewed



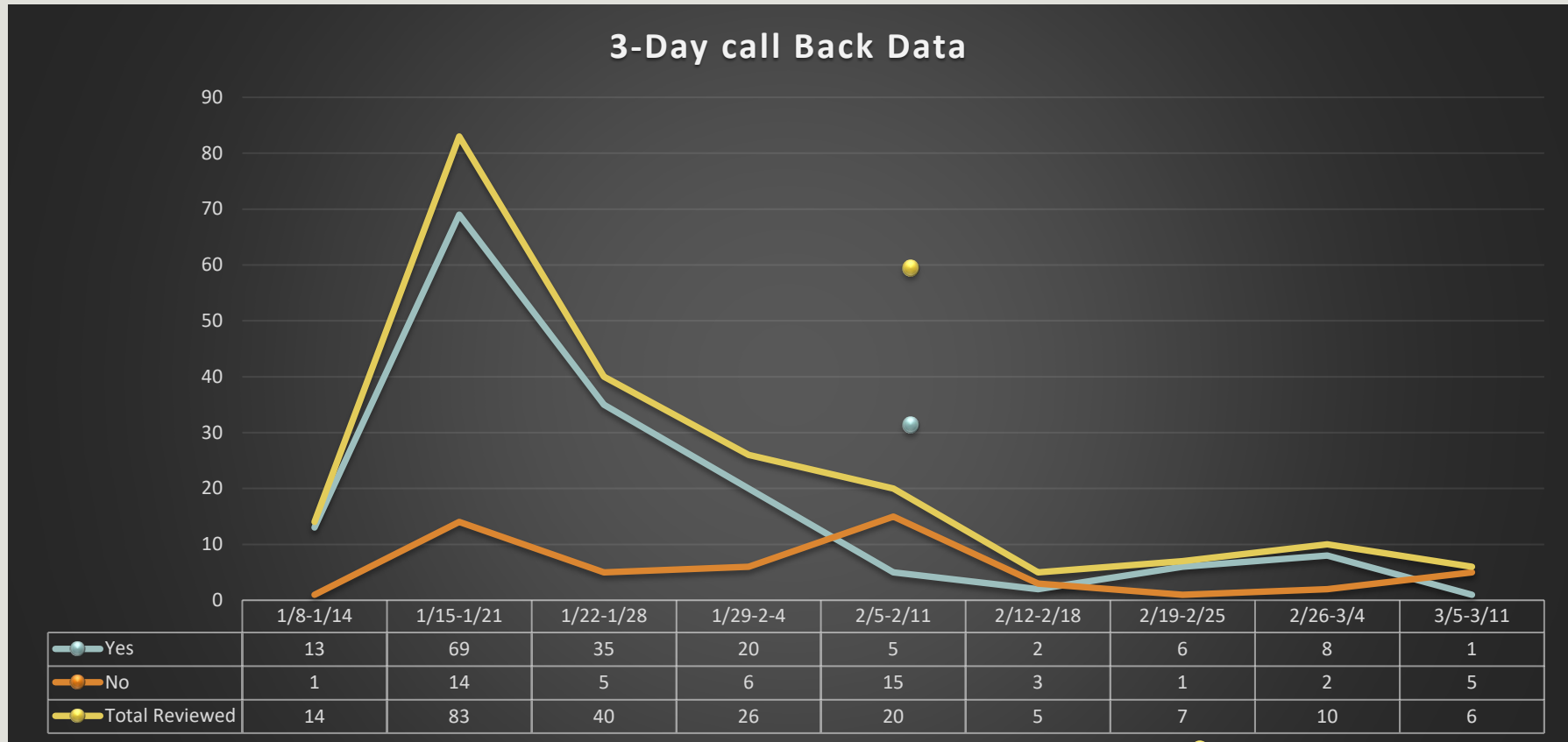
Fraction Met 3-Day Callback of those Total Reviewed



Results/Impact



Result/Impact



Results

Called in 3 days or Less	
Time	Median
1/8/22 - 3/11/22	80
Time	Average
1/8/22 - 3/11/22	65.20

Results

No Answer Categories													
Start Date: 1/8/2022-2/8/2022													
Number of Occurrences	20	No Answer/straight to VM				Wrong #/ # not working		Wrong #/ # not working		Language Barrier		called outside of iso window	
	19	No Answer/straight to VM				Wrong #/ # not working		Wrong #/ # not working		Language Barrier		called outside of iso window	
	18	No Answer/straight to VM				Wrong #/ # not working		Wrong #/ # not working		Language Barrier		called outside of iso window	
	17	No Answer/straight to VM				Wrong #/ # not working		Wrong #/ # not working		Language Barrier		called outside of iso window	
	16	No Answer/straight to VM				Wrong #/ # not working		Wrong #/ # not working		Language Barrier		called outside of iso window	
	15	No Answer/straight to VM				Wrong #/ # not working		Wrong #/ # not working		Language Barrier		called outside of iso window	
	14	No Answer/straight to VM				Wrong #/ # not working		Wrong #/ # not working		Language Barrier		called outside of iso window	
	13	No Answer/straight to VM				Wrong #/ # not working		Wrong #/ # not working		Language Barrier		called outside of iso window	
	12	No Answer/straight to VM				Wrong #/ # not working		Wrong #/ # not working		Language Barrier		called outside of iso window	
	11	No Answer/straight to VM				Wrong #/ # not working		Wrong #/ # not working		Language Barrier		called outside of iso window	
	10	No Answer/straight to VM				Wrong #/ # not working		Wrong #/ # not working		Language Barrier		called outside of iso window	
	9	No Answer/straight to VM				Wrong #/ # not working		Wrong #/ # not working		Language Barrier		called outside of iso window	
	8	No Answer/straight to VM				Wrong #/ # not working		Wrong #/ # not working		Language Barrier		called outside of iso window	
	7	No Answer/straight to VM				Wrong #/ # not working		Wrong #/ # not working		Language Barrier		called outside of iso window	
	6	No Answer/straight to VM				Wrong #/ # not working		Wrong #/ # not working		Language Barrier		called outside of iso window	
	5	No Answer/straight to VM				Wrong #/ # not working		Wrong #/ # not working		Language Barrier		called outside of iso window	
	4	No Answer/straight to VM				Wrong #/ # not working		Wrong #/ # not working		Language Barrier		called outside of iso window	
	3	No Answer/straight to VM				Wrong #/ # not working		Wrong #/ # not working		Language Barrier		called outside of iso window	
	2	No Answer/straight to VM				Wrong #/ # not working		Wrong #/ # not working		Language Barrier		called outside of iso window	
	1	No Answer/straight to VM				Wrong #/ # not working		Wrong #/ # not working		Language Barrier		called outside of iso window	
CATEGORIES / REASONS													

Results

No Answer Categories												
Start Date: 2/9/2022-3/11/2022												
Number of Occurrences	20											
	19											
	18											
	17											
	16											
	15											
	14											
	13											
	12											
	11											
	10											
	9											
	8											
	7											
	6											
	5											
	4											
	3											
	2											
	1											
		No Answer/straight to VM	No Answer/straight to VM				Wrong #/ # not working			Language Barrier		called outside of iso window
CATEGORIES / REASONS												

Return on Investment

- Customer satisfaction on follow up care from healthcare provider
 - Several patient comments on discharge feedback discussing appreciation of communication and opportunity to ask questions
- Reduction of personnel involved in patient call backs
 - From 27 faculty providers to 2 providers rotating monthly
 - 1 nurse for ED leadership
- Standardization of result communication, documentation, and timeframe
 - Decreased time taken to review results, increased number of patients, and results seen that required review

Expansion of Our Implementation

Hardwire this process with rotating administrative residents each month

Review selected labs for changes (addition or removal)

Work with registration team to increase number of patients with correct demographics on file

Getting other supplemental staff on board to the importance of correct and valid contact information in order to reach the patient about abnormal results and limit barriers.

Epic Text Messaging on status of care

Conclusion/What's Next

Emergency Department Callback systems have been utilized for some-time, although most processes consist of lots of man hours in searching the EMR and printing reports.

Creating a generated report within the EMR that pulls the data for you saves a lot of time that can be put elsewhere on the unit.

Develop plan for the non-english speaking patient

Develop plan for result call back to patient population that does not have a phone

Thank you!

