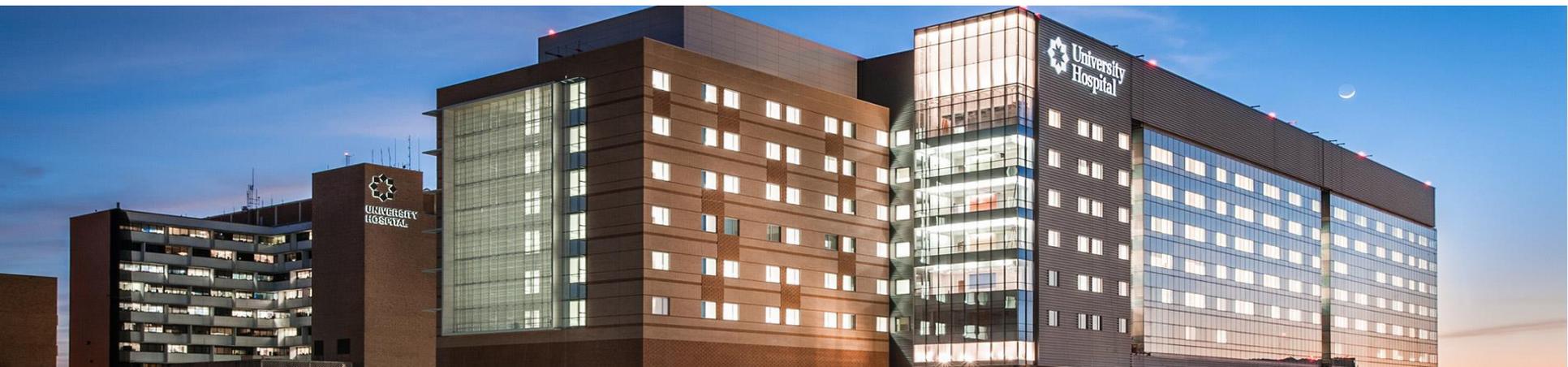# Clinical Safety & Effectiveness
Cohort 21 Team 1

"Reducing the Number of Patients Transferred From ACU to ICU"

Team Members

Team participants

- Daniel Coronado RN

Ad Hoc Team Members

- Gregory Bowling, MD
- Ronald Estrella Executive Director PCS MHA, BSN, CNML, CCRN
- Edna Cruz, RN Facilitator
- Yvonne Davila, RN Facilitator

Sponsors

– Luci Leykum, MBA MSC MD
– Gregory Bowling, MD

Background

Our focus is to determine the reasons a patient would be admitted to the ACU who, within a 24 hour period, is transferred to the ICU. This may lead to a less than desired outcome(s).

This can also lead to a delay in appropriate care and waste of resources which may lead to inefficiencies.

AIM Statement

To reduce the number of ER patients admitted to ACU who transfer to ICU within a 24 hour period from 1.8 patients per month to 0 by December 2017.

# How Will We Know That a Change is an Improvement?

- Types of measure(s): Length of Stay should decrease although will be marginal as low percentage of patient that do go from 5 ACU to 5 ICU within 24 hour period.

- How you will measure: Continue to utilize the tele-tracking reports that monitor those patients that go from ER to 5 ACU to 5 ICU within a 24 hour period.

- Specific target for change: Attempt to eliminate those patients that go from 5 ACU to 5 ICU in 24 hours or less.

- Increased awareness of those patients that have a change in status in ER but not noted and calling to move the patient to 5 ACU.

- 5 ACU nurses to question if they feel the patient is not appropriate for 5 ACU and is "too sick" to be there.

- Courage to speak up and stop report and consult with charge nurse and accepting team

Work Flow Diagram
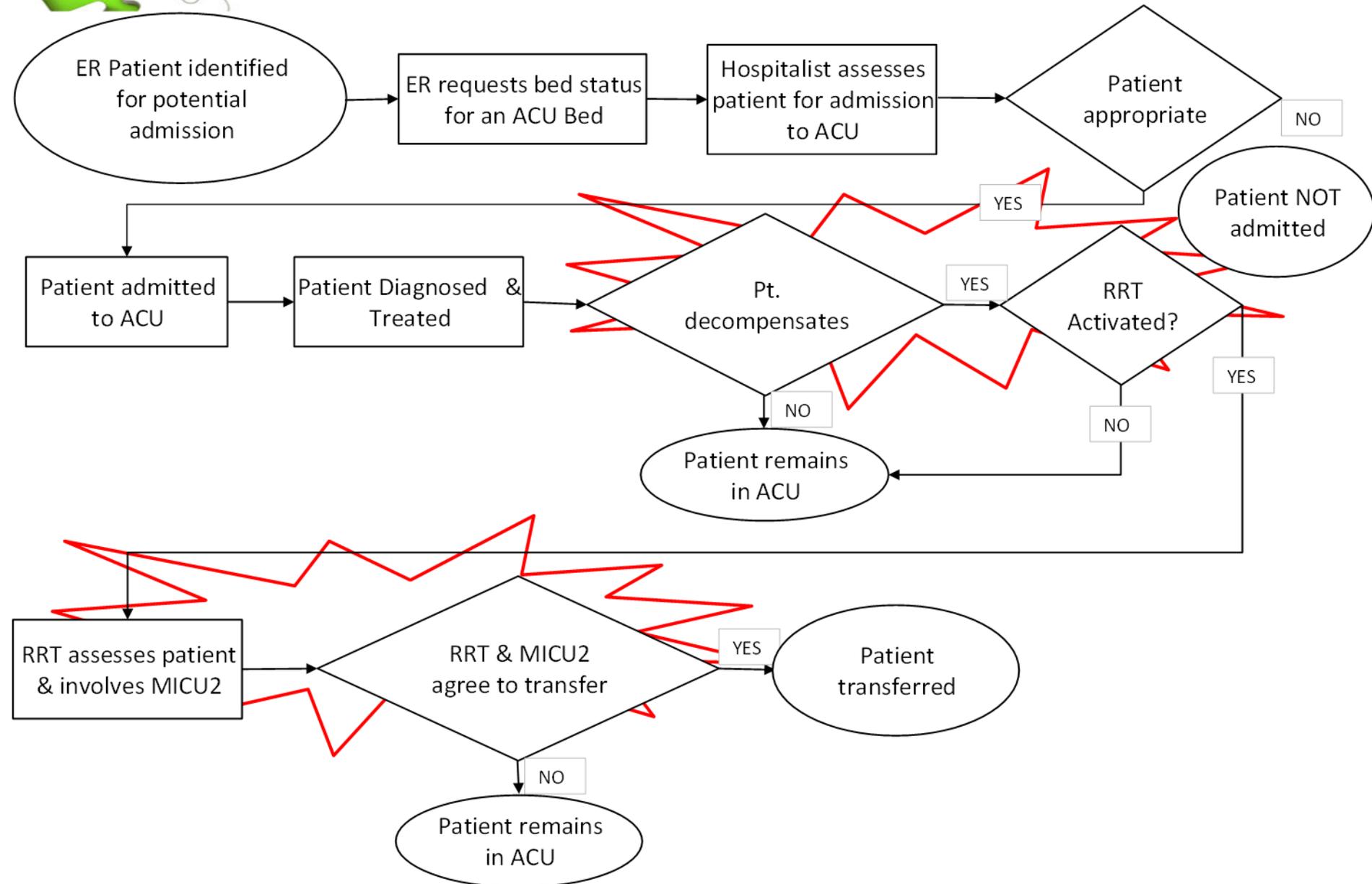
CAUSE & EFFECT

Causes

Process, Policies, Procedures

Higher acuity level than ACU can accommodate

Unpredictable change in patient condition (Abd pain to Stroke)

Inadequate Patient Assessment

Effect

Transfers ACU to ICU W/I 24 Hours

Patient decompensates

Spontaneous worsening of condition

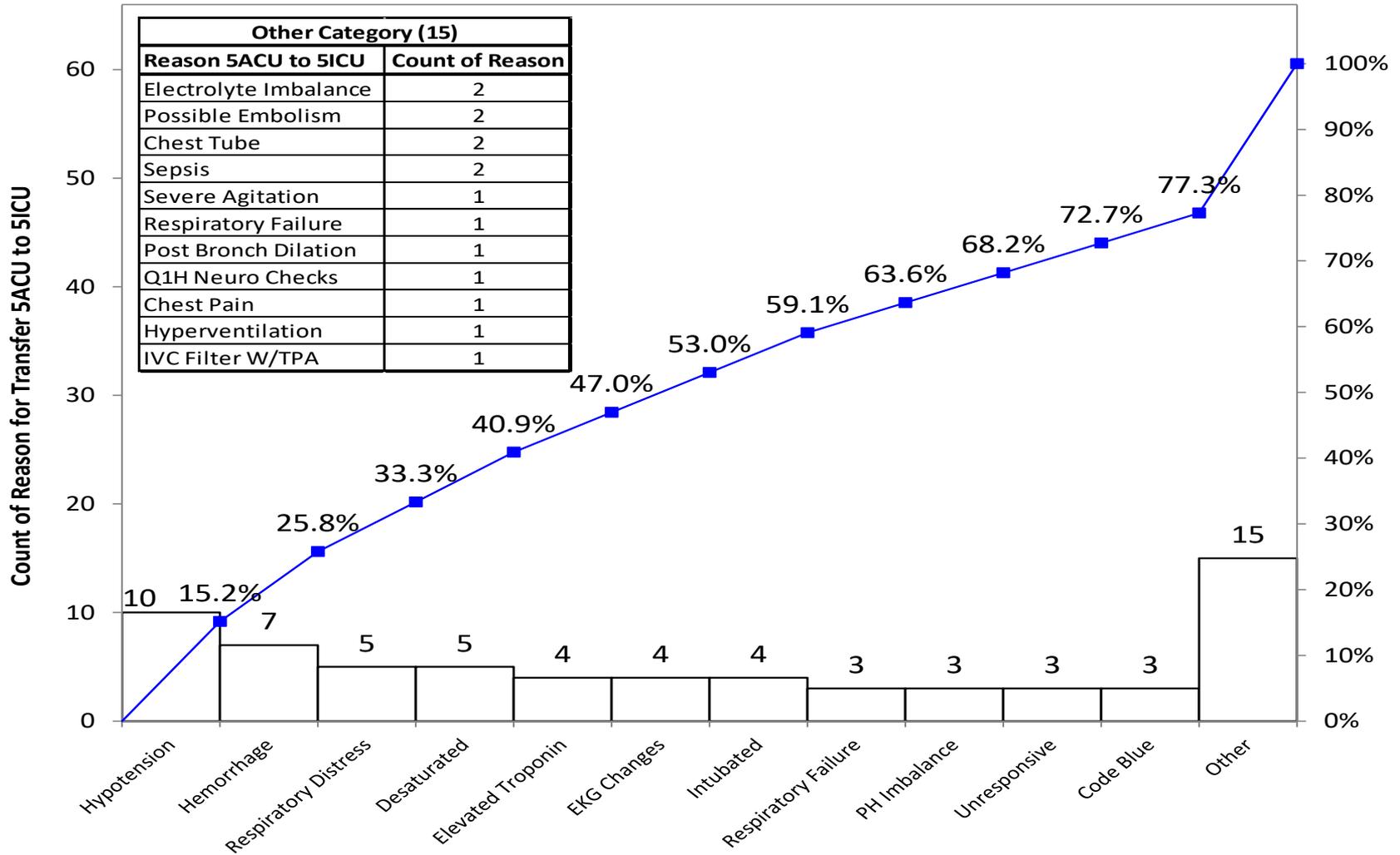Improper Rx in ER or ACU

Delayed Care in ER and/or ACU

People
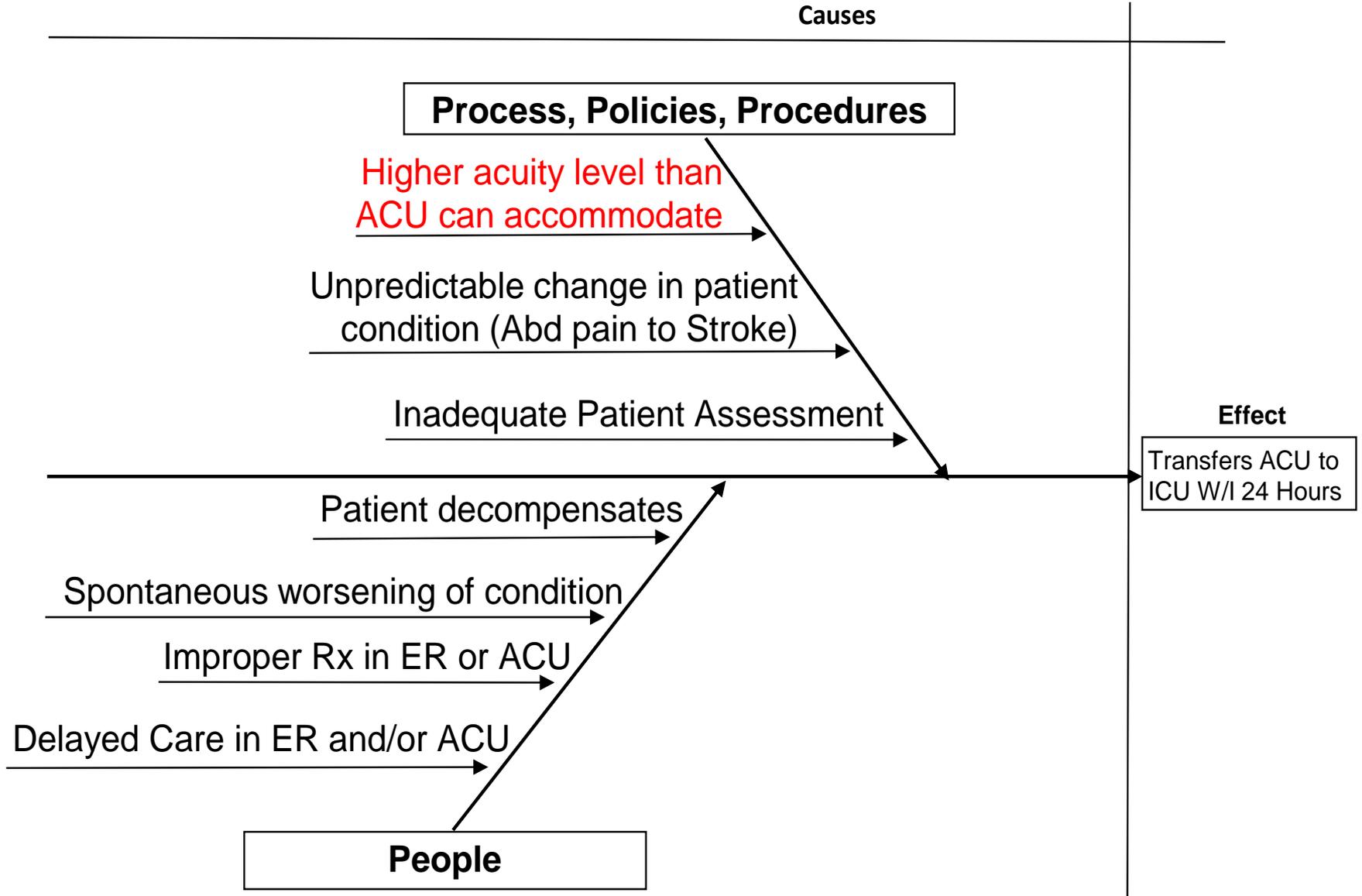
Pareto of Count of Reason for Transfer 5ACU to 5ICU

Count of Reason for Transfer 5ACU to 5ICU (y-axis)

Other Category (15)	
Reason 5ACU to 5ICU	**Count of Reason**
Electrolyte Imbalance	2
Possible Embolism	2
Chest Tube	2
Sepsis	2
Severe Agitation	1
Respiratory Failure	1
Post Bronch Dilation	1
Q1H Neuro Checks	1
Chest Pain	1
Hyperventilation	1
IVC Filter W/TPA	1

Bar values and cumulative percentages:

| Reason	Count	Cumulative %
Hypotension	10	15.2%
Hemorrhage	7	25.8%
Respiratory Distress	5	33.3%
Desaturated	5	40.9%
Elevated Troponin	4	47.0%
EKG Changes	4	53.0%
Intubated	4	59.1%
Respiratory Failure	3	63.6%
PH Imbalance	3	68.2%
Unresponsive	3	72.7%
Code Blue	3	77.3%
Other	15	100%

Action Plan

Aim Statement: To reduce the number of ER patients admitted to ACU who transfer to ICU (within a 24 hour period) from XX% to XX% by December 2017.

Action Strength (Strong, Intermediate or Weak)	Action Driver (Taken from Flow, Fishbone or Pareto)	Action	Who?	Why? (Choose One)	Start Date
Strong	Inconsistent Patient assessment	Improve Pt assessment by utilizing Guideline to determine Pt acuity	ED and Hospitalist MD's	Standardize Simply Reduce Waste Time Redesign the process	10/9/2017
Strong	Mis-communication MD to MD and/or RN to RN	Improve communication between MD's and RN's	ER and Hospitalist MD's and RN to RN and MD to RN and vice versa	Standardize Simply Reduce Waste Time Redesign the process	10/9/2017
Weaker	Higher acuity level than ACU can accommodate	Nurses to familiarize themselves with ESI score	5 ACU nurses	Standardize Simply Reduce Waste Time Redesign the process	10/9/2017
Strong	Failure to pick up change in condition from ER nurse or ACU nurse	Met with 5ACU PCC's and charge nurses to present process	5 ACU PCC/charge nurse and staff nurses	Standardize Simply Reduce Waste Time Redesign the process	10/30/2017

Number of Admission to ACU in <24 Hours

Number of Admission to ACU -- <24 Hrs
January 2015 to December 2017
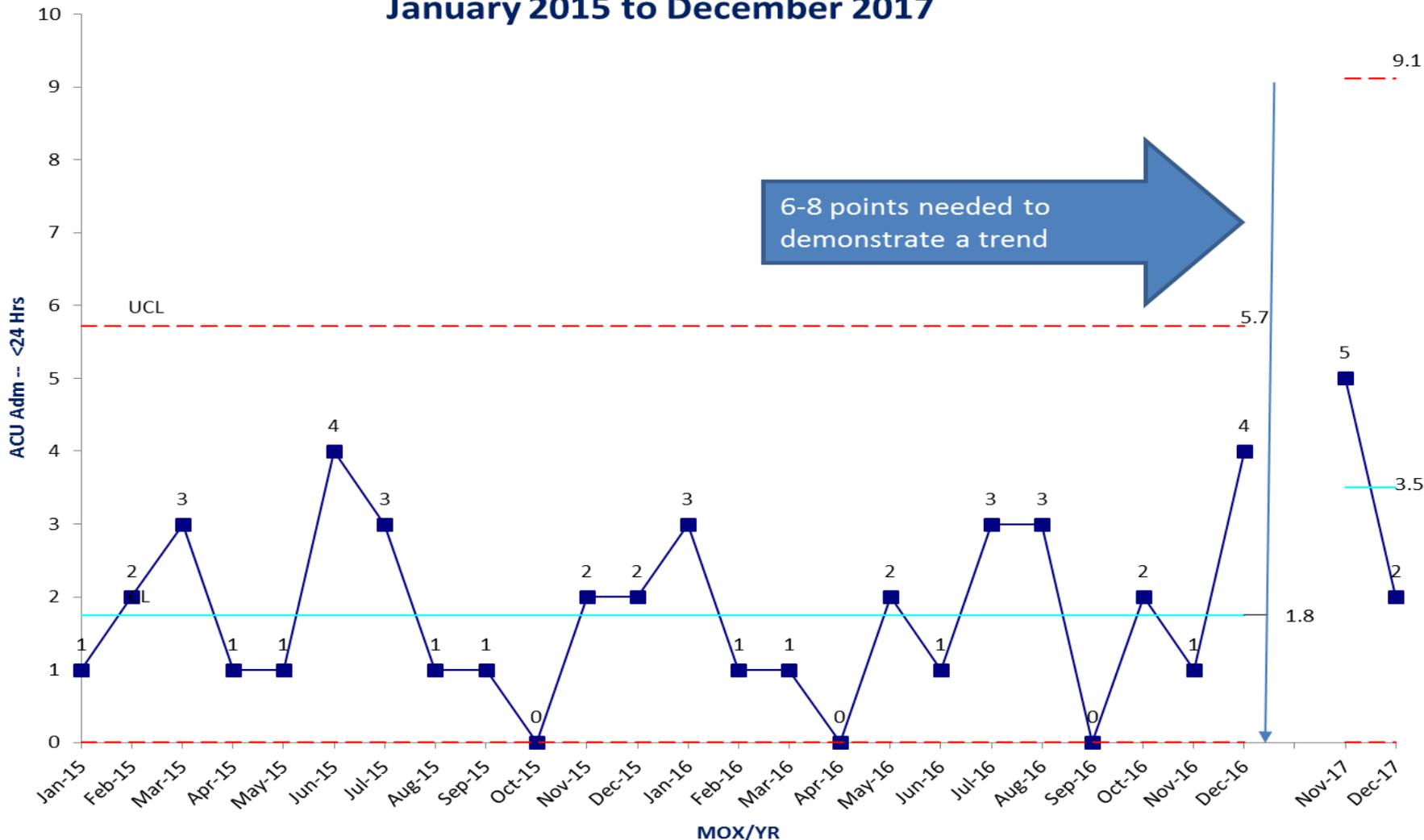
Mean (X) Wait Time in ER in Hours
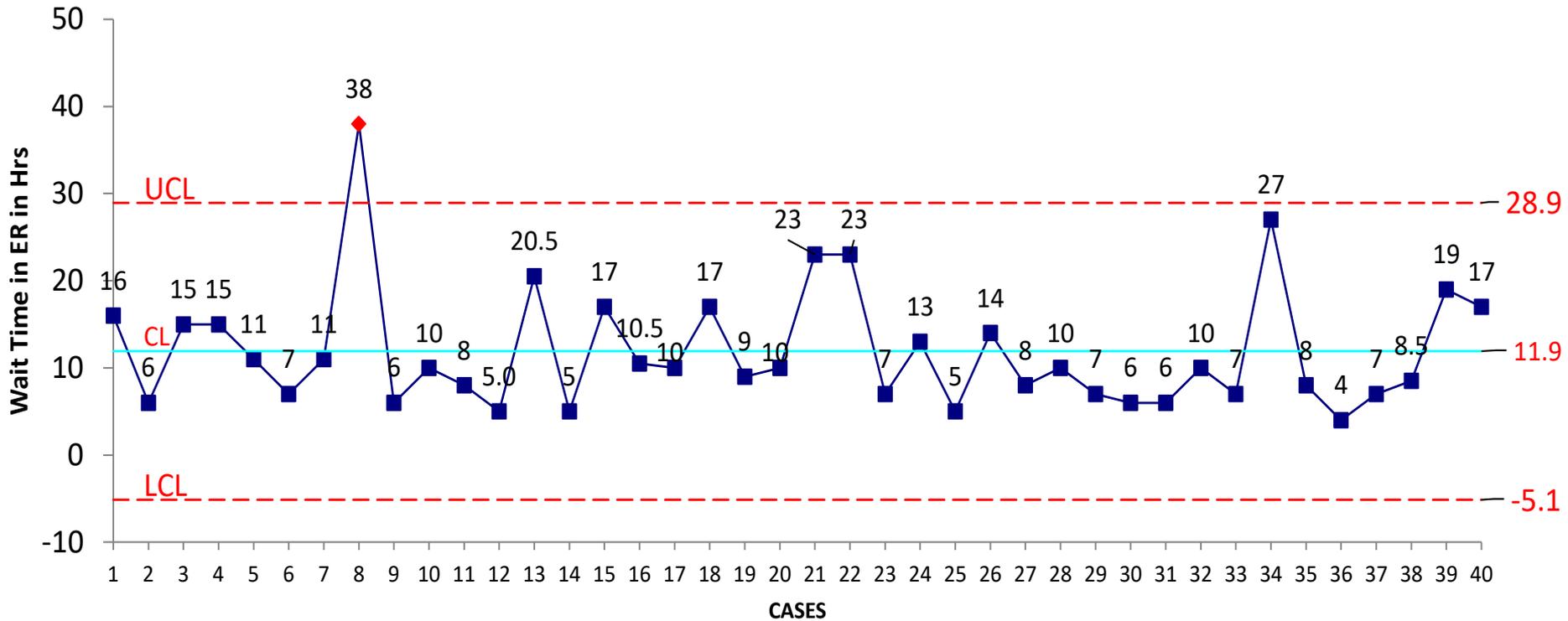
RETURN ON INVESTMENT

- Correct initial placement reduces wasted resources:
  - Multiple staff (RRT, Charge Nurse, primary nurse, techs) to transport the patient a second time
  - Unit clerk having to rework the paperwork
  - Staff having to physically move the patient from one location to another & the One Call Center also having to make changes to the location in the electronic system
  - 2 different teams of doctors to look after the same patient when 1 would have sufficed
  - EVS having to clean ACU bed shortly after arrival

- Improved patient and/or family satisfaction, knowing the patient went to the right place at the right time.

- Appropriate placement goal is to reduce the ALOS by 1 day. This process looks at reducing it from the beginning of admission and not towards the end of it.

Maintain the Gains

- Continue to monitor and report
  - Wait Time in ER for increase (aLOS)
  - Patients declined admission to 5ACU

- Continue to promote team approach to appropriate placements of ER patient

- Institute the Action Plan through out the system and educate those involved

What's Next / Conclusion

- **What's Next:** Elevate the results of this project to the appropriate multi-disciplinary group for further improvement as it will require a team to produce wanted outcomes. Establish the 6-8 points of data to see trend. Finalize the acuity tool guide to be used by physicians in regards to proper placement and educate them on it. Educate the nurses in regards to the acuity tool as well with the autonomy to question if they feel a patient is too high an acuity level for their floor.

- **Conclusion:** Although the number of patients affected is small, even a single digit change in the number of patients, could cause a dramatic impact to a facility. Using a standardized guideline and creating awareness regarding its use may reduce ALOS and the negative effects of sudden process change.

Thank you