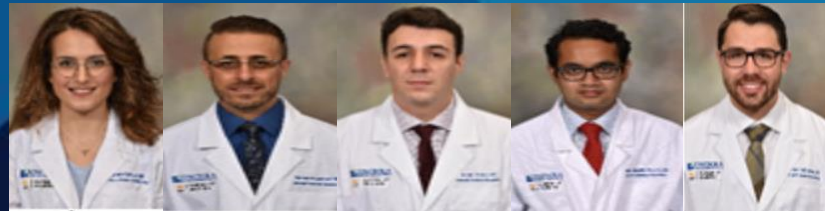


Optimizing Oxygen Therapy

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Area of Interest, Background Information, and Problem Statement

- Throughout history, oxygen has been one of the most used drugs. A “more is better” culture in hospitals persists even though the risks of liberal use of oxygen therapy have been proven.
- Hyperoxia induced hypercapnia among COPD patients is a very well studied phenomenon that leads to respiratory acidosis, increased mortality/morbidity, and increased length of stay.
- A prior QI project concluded oxygen is over utilized and inappropriately prescribed in our hospital setting. An oxygen use protocol was instituted to reduce this, but the implementation left much to be desired. We aimed to evaluate the present level of compliance with the oxygen protocol and implement nursing and physician interventions to rectify this

References:

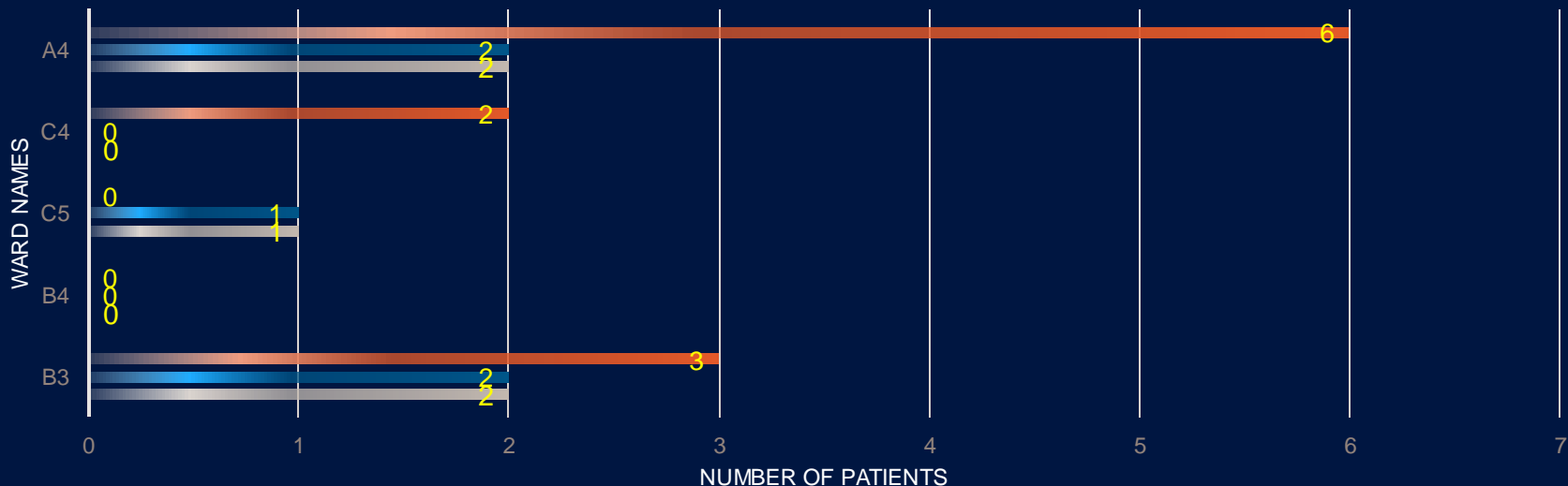
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Metrics Description

- Process Metrics:
 - Number of patient on O2 with an **active** oxygen order
 - Number of patients with weaning order placed
- Outcome Metrics:
 - Percent of patients **within** the desired oxygen parameters
- Balancing Metrics:
 - Amount of money spent on oxygen

Spot Check Data

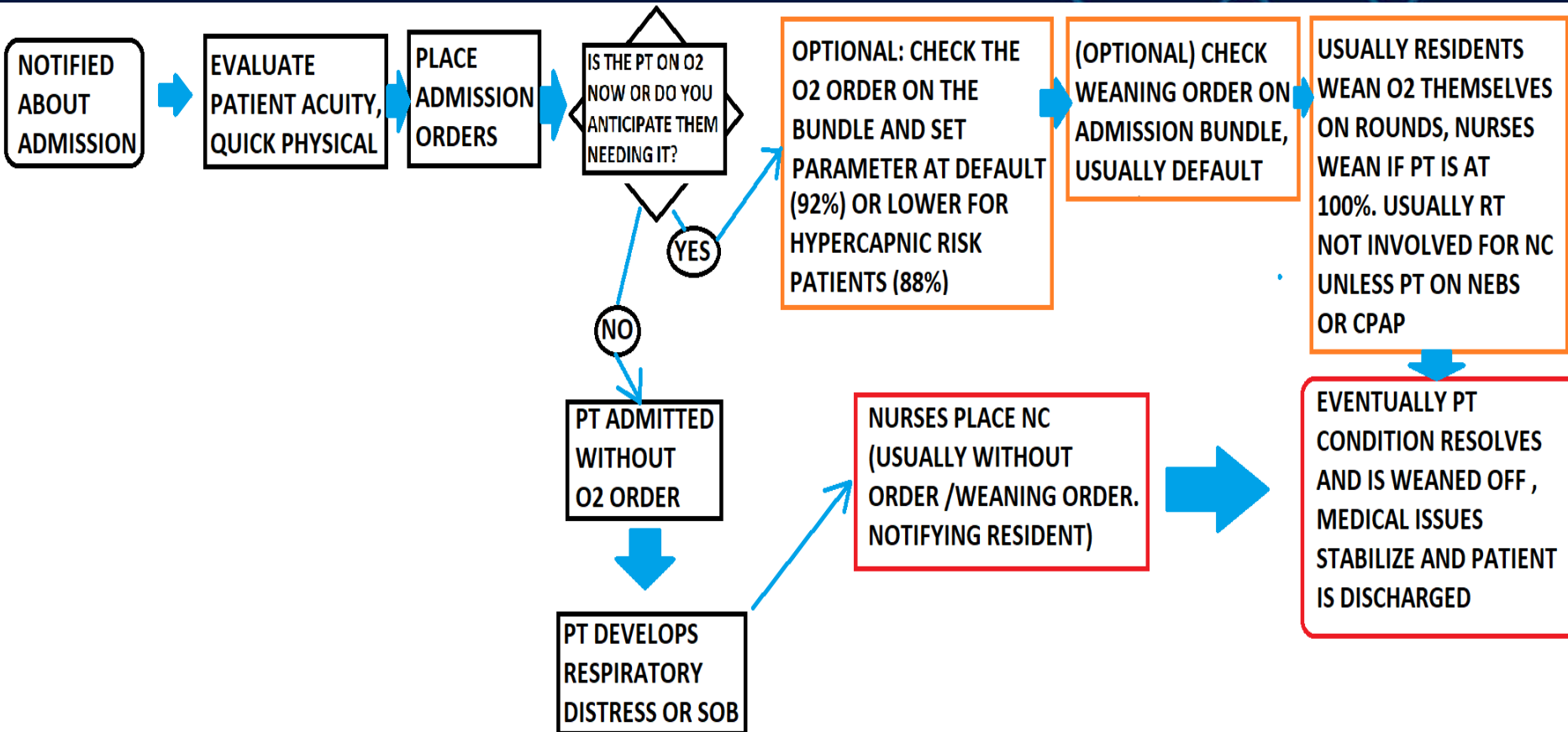
SPOT CHECK DATA MARCH 2021



- number of patients on oxygen
- number of patients with weaning o2 protocol entered
- number of patients with O2 orders entered

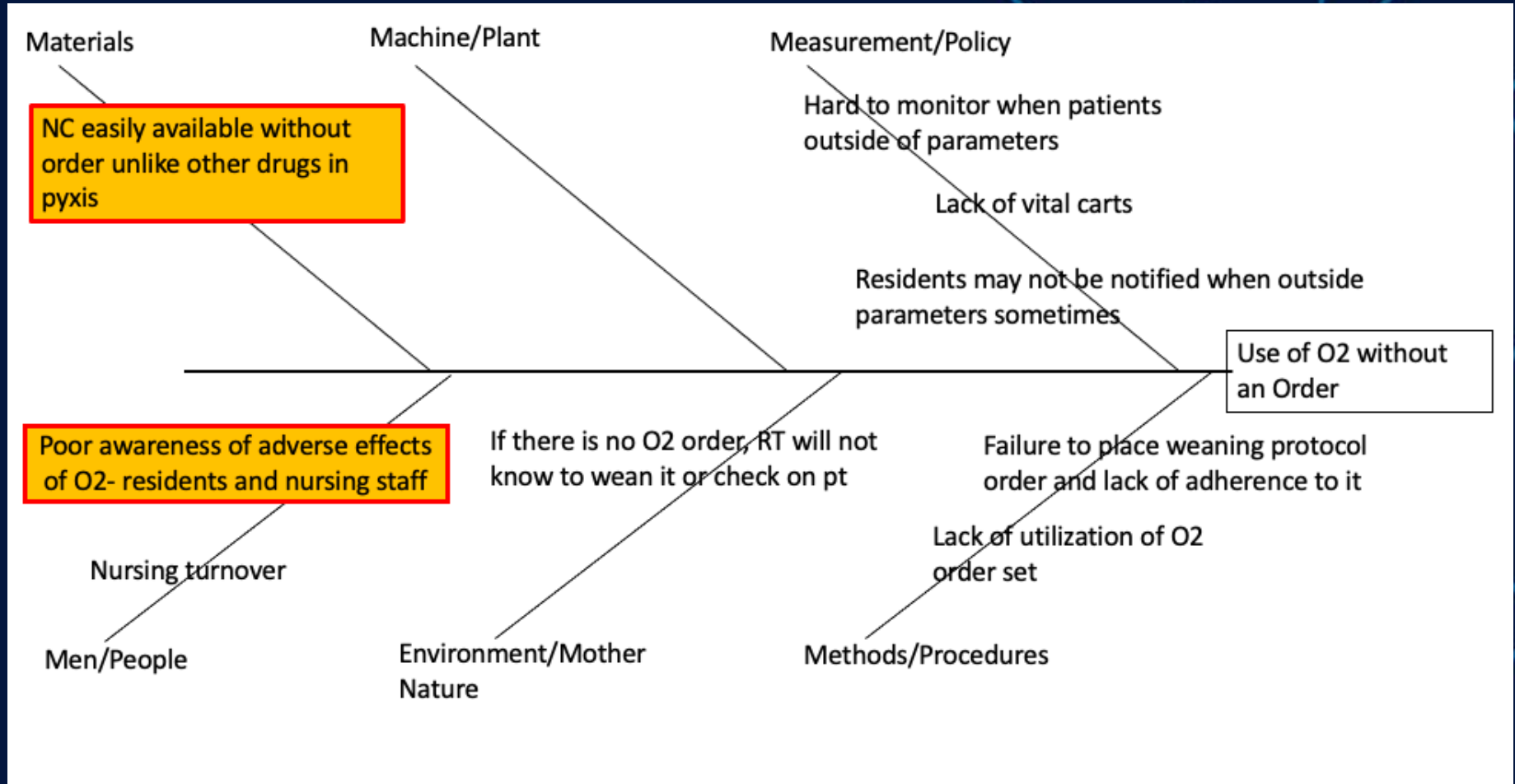
We looked at 42 patients (all GME, non-PUI floors) only 9 on O2, 5 had orders (55%)

Process Map



Areas of Implementation

Root Cause Analysis



Aim/Goal of Quality Improvement Project

- Increase the number of GME patients on O₂ with an order to 80% by 5/1/22. (for non-COVID patients)
- Increase the number of resident patients with a weaning O₂ order to 80% by 5/1/22. (for non-COVID patients)
- Thereby:
- Minimize cost of excess O₂ to patient and hospital
- Minimize risk of harm via excess O₂ to the patients

Interventions

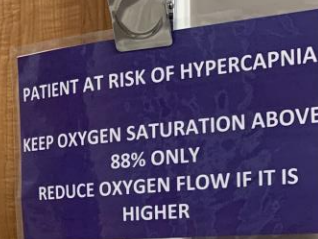
- **Primary Emphasis On Nursing and Resident Education**
 - **Readily accessible medical decision making tools/Protocol**
 - Oxygen parameters clearly defined on patient door
 - Laminated algorithm on supply room by nasal cannulas

We excluded COVID patients

Omicron surge in 12/21- 1/22

Took time to get signs approved (2 months +)

3/22: Printed signs but they were too big and interfered with function of the area



Results/Metrics

SPOT CHECK DATA

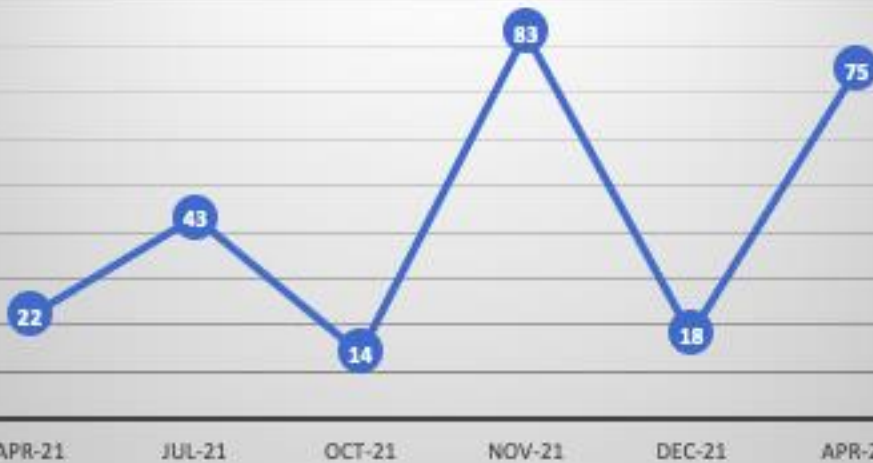


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% Order For O2/total # of patients on O2



% Order For Weaning O2/total # of patients on O2



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