

ΡΠΕΥΜΟΝΙΑ



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Modified Early Warning System (MEWS): Reducing Mortality Through Early Intervention

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Objectives

- Identify problem
- Identify goal
- Develop multidisciplinary team
- Determine metrics
- Implement PDSA cycle
- Develop system implementation plan
- Future state

- In FY 2015 at Vidant Health, **twenty percent (20%) of serious safety events** were the result of a failure to recognize signs of clinical deterioration which caused a **delay in treatment of care.**

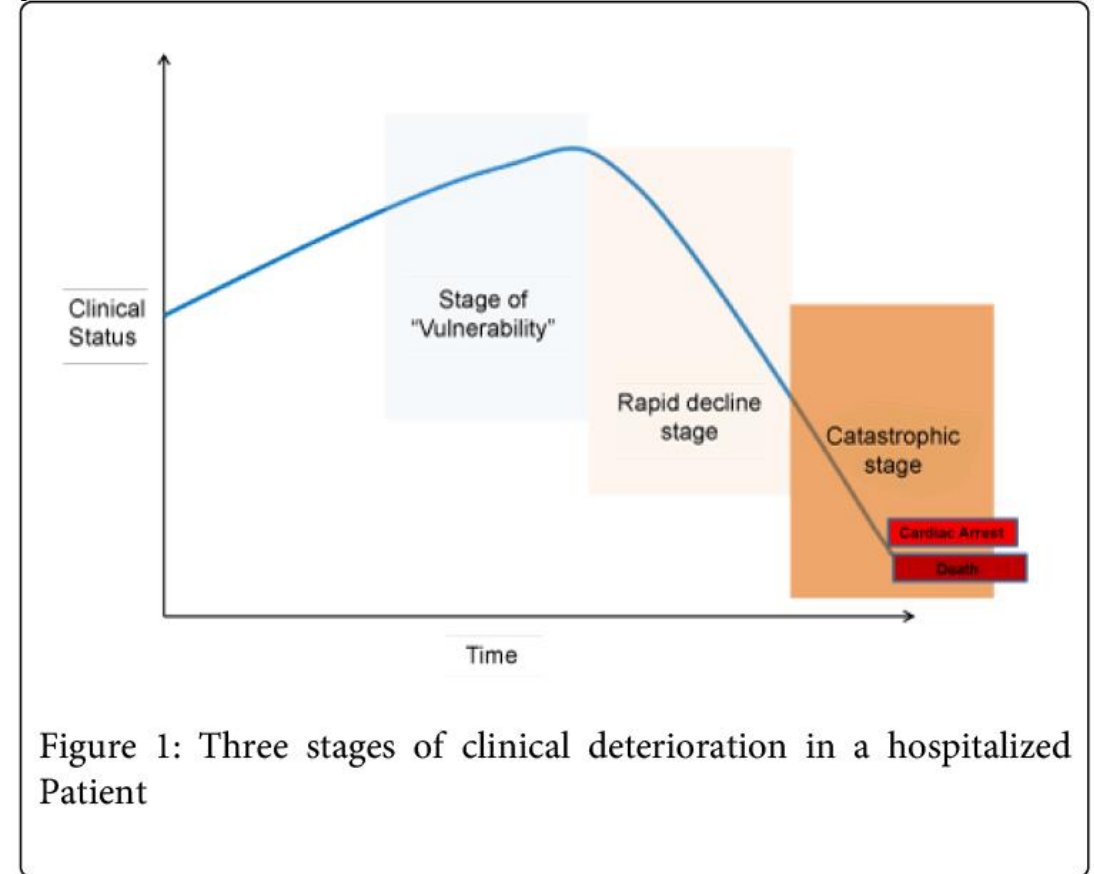
Time to Take a Poll



Intended Goal

Improve patient outcomes by 10% through earlier implementation of interventions during the stage of vulnerability instead of at the catastrophic stage.

The earlier we intervene the higher the chances of rescuing patients



Kodali, S. "Situational Awareness and Emergent Response Systems in the Context of Stages of Clinical Deterioration in the Hospital." *J Nurs Care* 3.171 (2014): 2167-1168.

- Form MEWS Multidisciplinary Committee
- Choose an Early Warning System
- Perform Density Analysis
- Determine Metrics
- Identify Pilot Units

MEWS Protocol

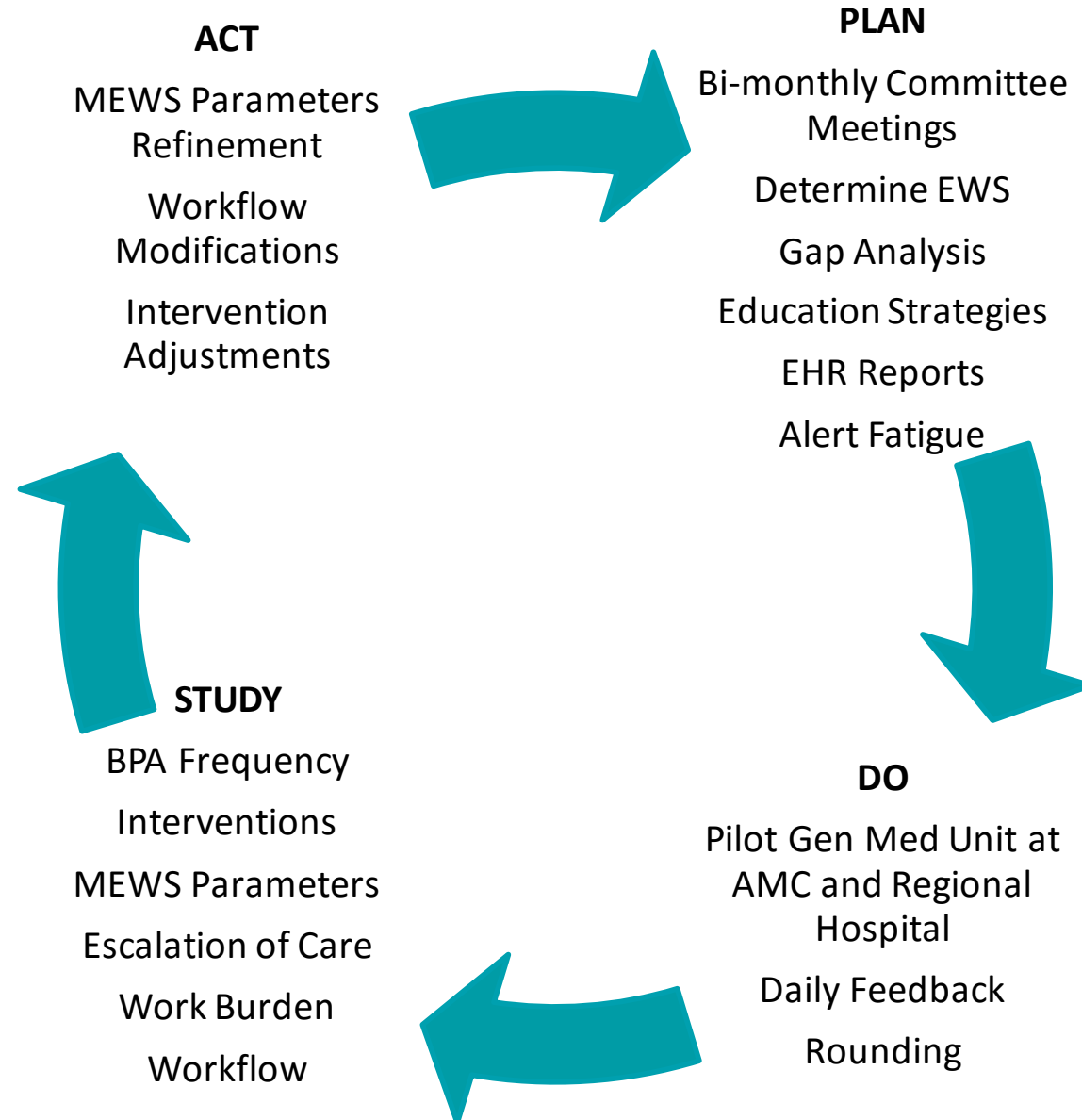
MEWS Score	Actions
0-2	<ul style="list-style-type: none">Continue routine/ordered monitoring and AVPU* assessment
3	<ul style="list-style-type: none">Increase VS frequency and AVPU assessment to every 1 hour x 3, confirm MEWS score each timeIf a patient remains at a MEWS score of 3 for 3 consecutive sets of Vital Signs, the nurse should resume routine vital signs. If there is an escalation in the MEWS score, the MEWS protocol should restart.
4	<ul style="list-style-type: none">Actions for MEWS 3Apply pulse oximeterApply cardiac monitorInform provider and develop plan of care
➤ 5	<ul style="list-style-type: none">Increase VS frequency and AVPU assessment to every 30 minutes x 4, confirm MEWS score each timeActions for MEWS 4Notify ERT and/or Nursing Supervisor
Fluctuating MEWS Score	<ul style="list-style-type: none">Implement protocol each time BPA is triggered.

Determining Metrics



- Pilot Metrics
 - BPA Frequency
 - Escalation of Care
- Final Metrics
 - Codes Outside ICU
 - ERT Activations
 - Mortality

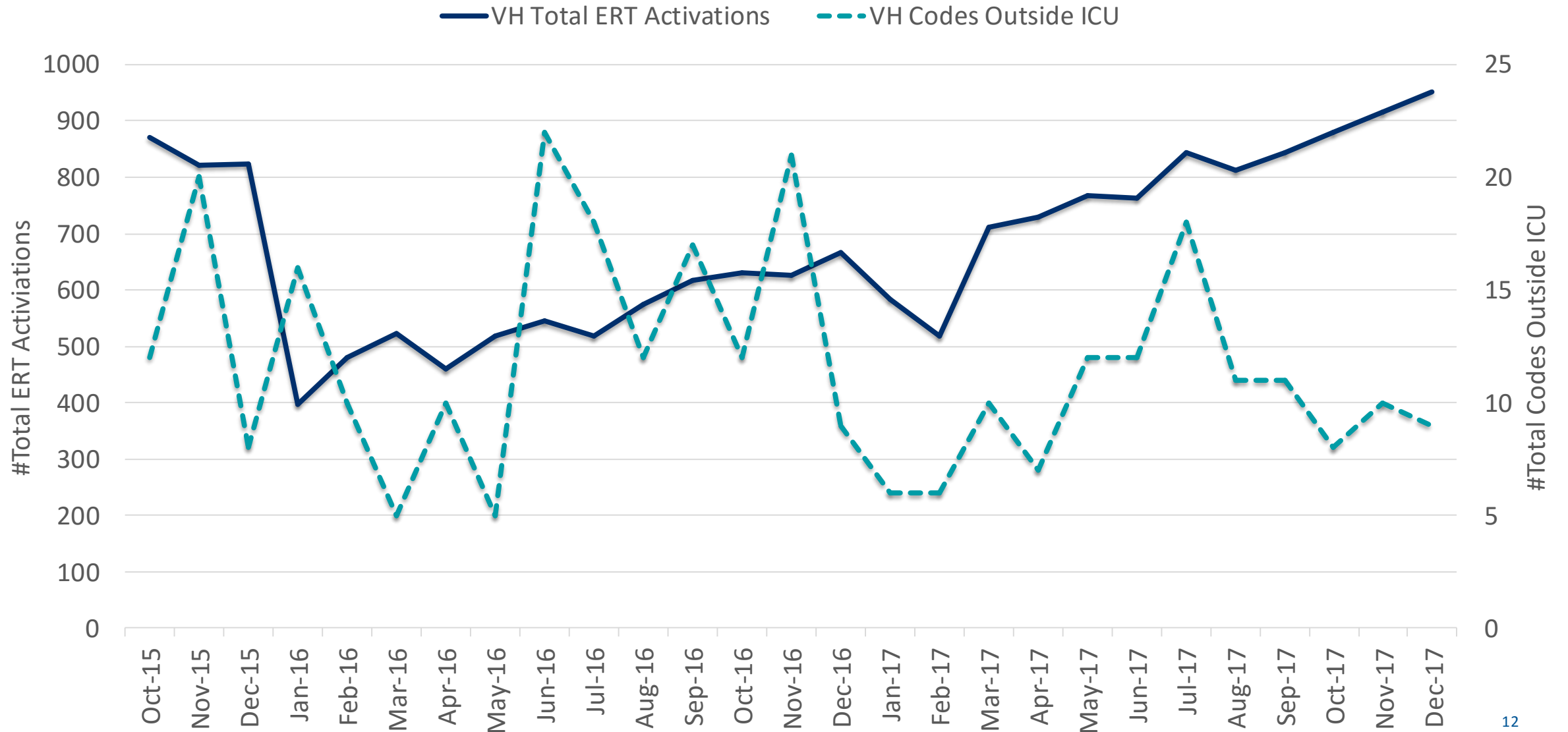
PDSA Cycle



- Pilot
- Regional Spread
 - Daily Feedback
- Academic Medical Center Spread
 - Real time Coaching

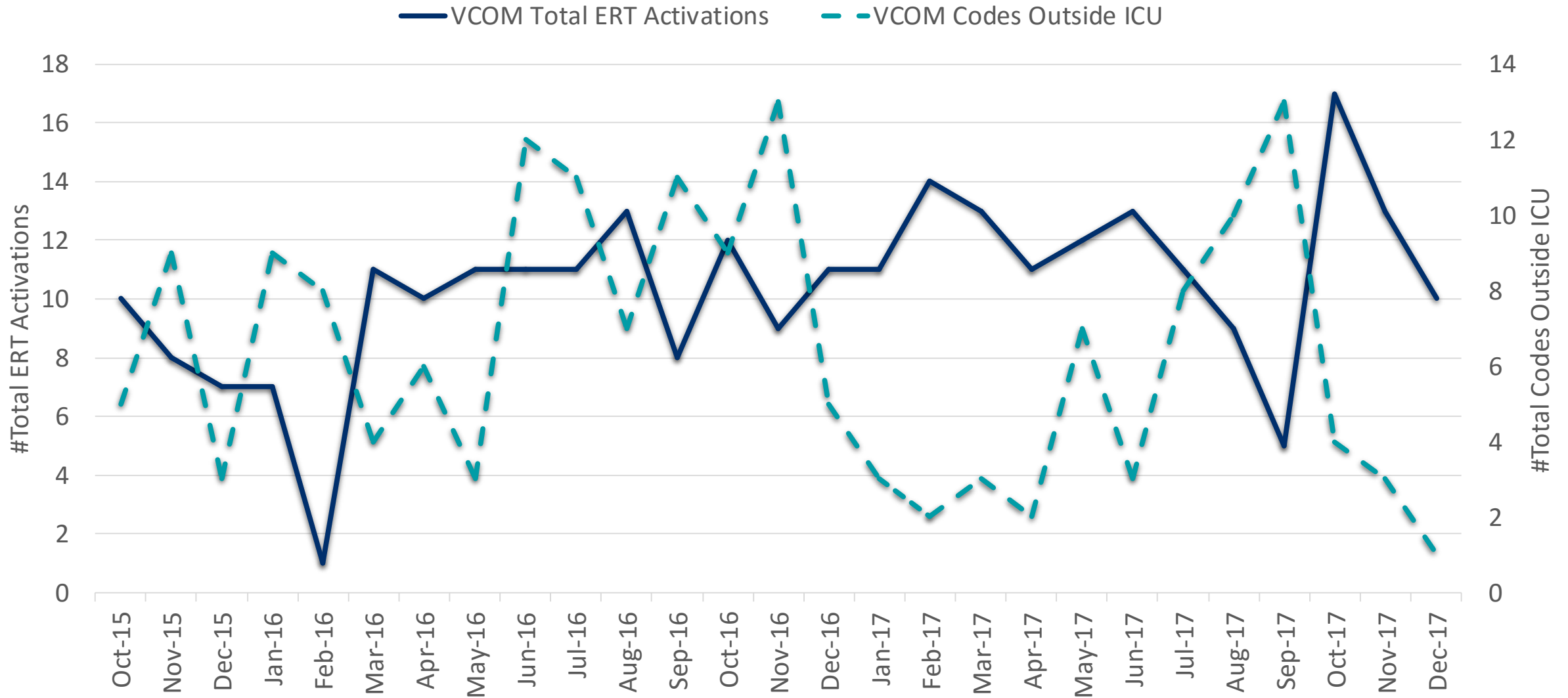
Vidant Health

Current Outcomes

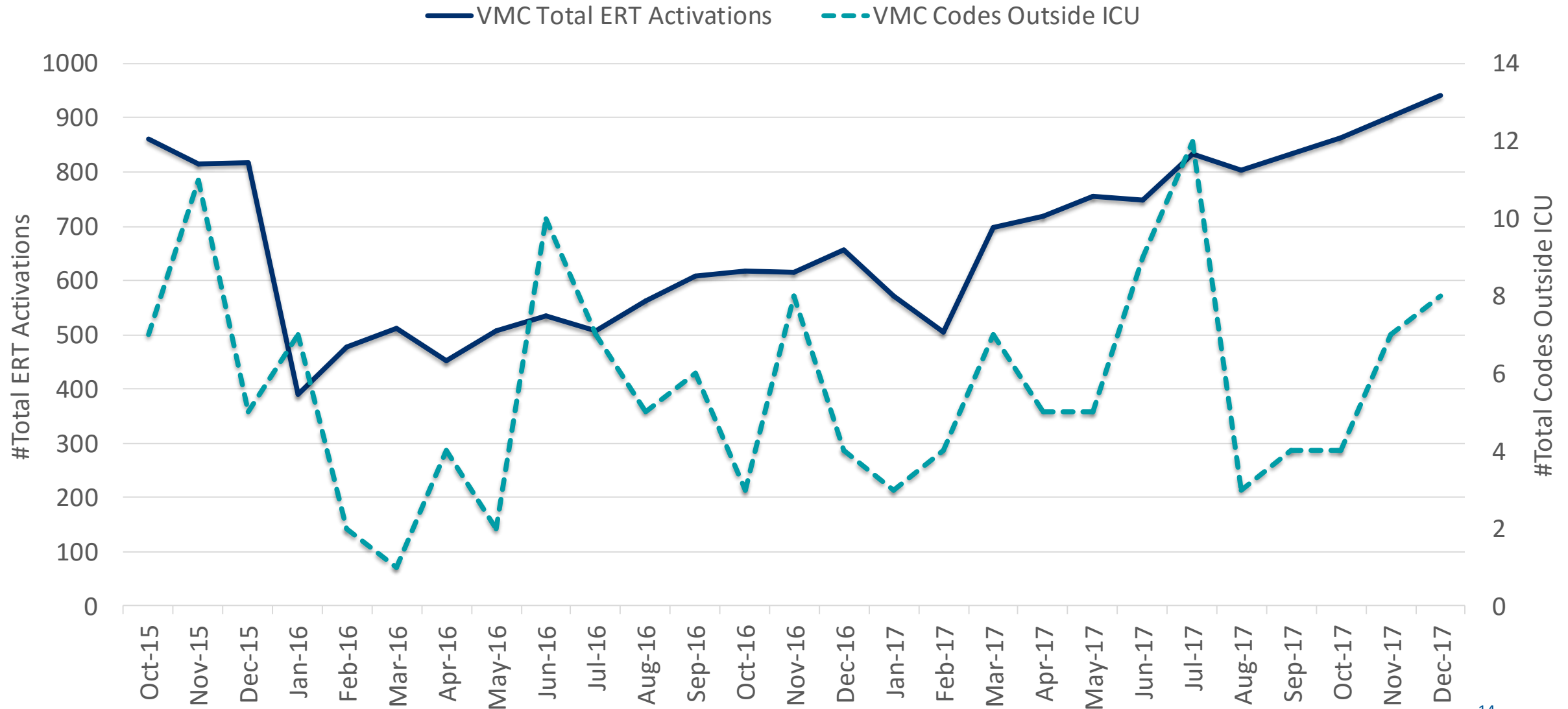


Vidant Community Hospitals

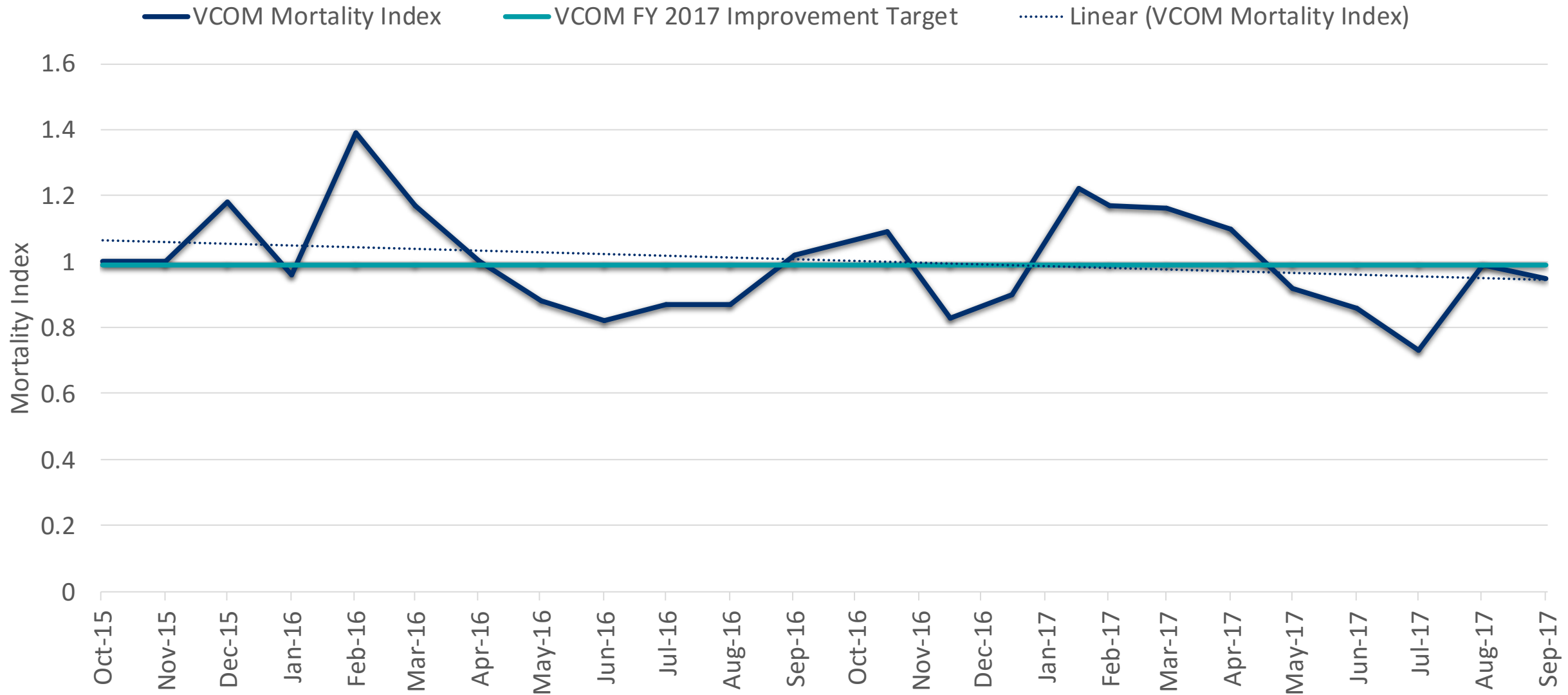
Current Outcomes



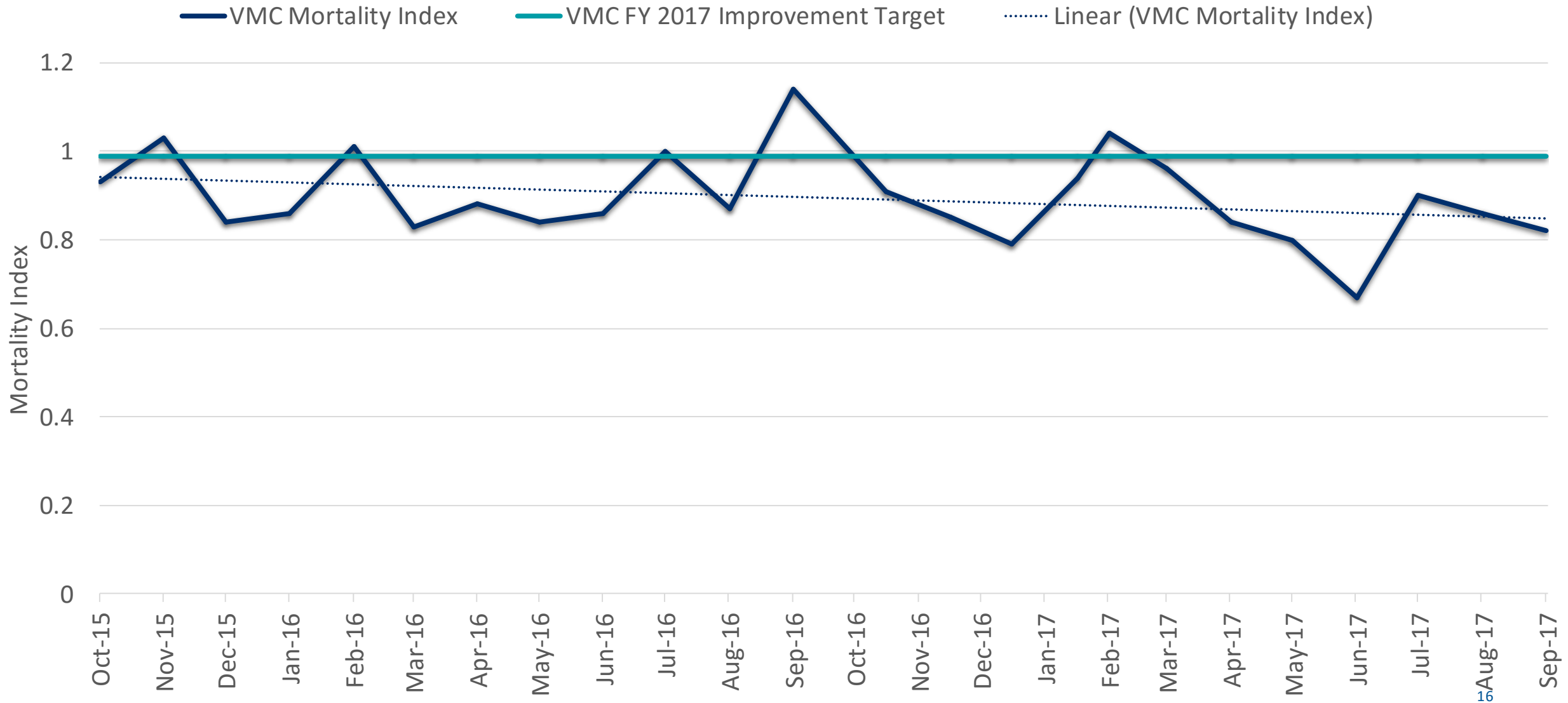
Vidant Medical Center Current Outcomes



Vidant Community Hospitals Mortality Index



Vidant Medical Center Mortality Index



- Set specific expectations
- Implement multiple education strategies
- Message EHR as communication tool
- Define communication channels

- Combine inpatient Systemic Immune Response Syndrome (SIRS) Best Practice Advisory (BPA) and MEWS BPA
- Discontinue 36° post-operative snooze
- Include in Adult Admission Order Sets
- Timely Vital Sign Documentation Report

Questions?

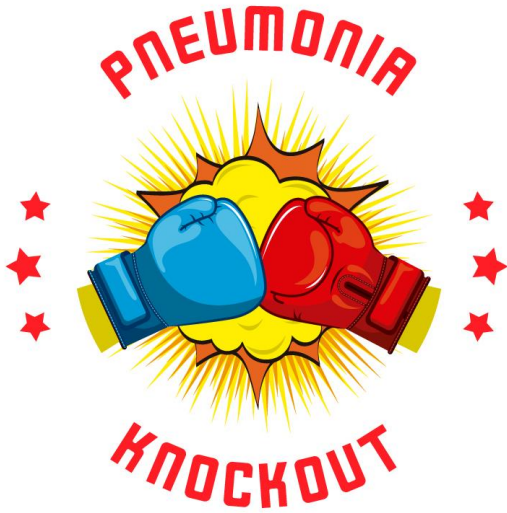
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