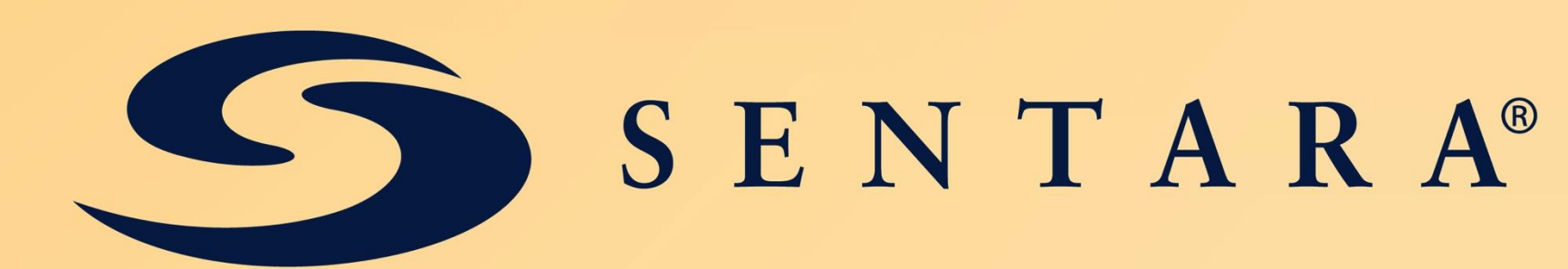


Reducing the ED Bottleneck Through Accurate Admitting Orders

Expediting ED Bed Placement

Pat Sears, BSN, RN & Susan C. Shpil, BSN, RN



BACKGROUND

One of the most frequent barriers to bedding patients from the Emergency Department (ED) has been reviewing placement orders for accuracy. Multiple calls to physicians to admit to the correct level of care delays patient admission from the ED.

A 2015 Sentara Healthcare study undertaken by Hospital eCare regarding ER to IMCU admission order accuracy revealed a 70% accuracy rate for Sentara Northern Virginia Medical Center (SNVMC).

A patient throughput improvement team comprised of ED and Admitting physicians, Vice President of Medical Affairs, Information Technology, and pro-active nursing team members was convened. Three levels of care were identified and agreed upon. Nursing leaders collaborated to re-define criteria for each level of care.

This project focuses on the quality improvement process employed to accurately and expeditiously complete orders necessary to assign the appropriate level of care for patients admitted from the ED to IMCU and seeks to improve patient throughput by admitting to the correct level of care in 90% or greater of all ED admissions to SNVMC.

CRITICAL CARE – The Critical Care Unit serves as a place for intensive monitoring and care of patients with potentially severe physiological instability requiring technical and/or artificial life support. The level of care in a CCU is greater than that available on the MEDSURG or Intermediate Care Unit. Recommended - patients with any of the following clinical indicators:

- Acute intubation/mechanical ventilation/initial ventilator weaning (complex airway support).
- Reasonable expectation for patient to stabilize with high tech critical care.
- Hemodynamic instability(acute/potential)
- Surgery- pre-op trauma/surgery/ post-op complications.
- Interventions/procedures/medications requiring monitoring/titration at least every 1-2 hours
- Frequent neurological assessment/monitoring
- Invasive monitoring / balloon pump/ urgent cardioversion/ urgent pacemaker insertion.
- Ability to initiate, monitor and titrate multiple /various intravenous medications

INTERMEDIATE CARE - patient population that does not require intensive care but needs more care than that provided on a MEDSURG unit. These patients may require frequent monitoring of vital signs and/or nursing interventions <2-4 hours, but usually do not require invasive monitoring

- Chronic mechanical ventilation with stable ABGs, extended weaning/ bipap initiation, high flow oxygen, close monitoring - high potential for obstructive airway conditions
- Hemodynamic stability.
- Interventions, procedures, medications requiring monitoring or titration < 2-4 hours
- Neurological assessment / acute neurological deficit (stabilizing or improving).
- Post-op/post-trauma with potential for instability, requiring monitoring at least every 2-4 hours.
- Maintenance vasoactive or antiarrhythmic infusions requiring manipulation for hemodynamics, labs or other protocol therapy as found on Wavenet under compliance 360 entitled, "Admission and Discharge Criteria to Intermediate Care".

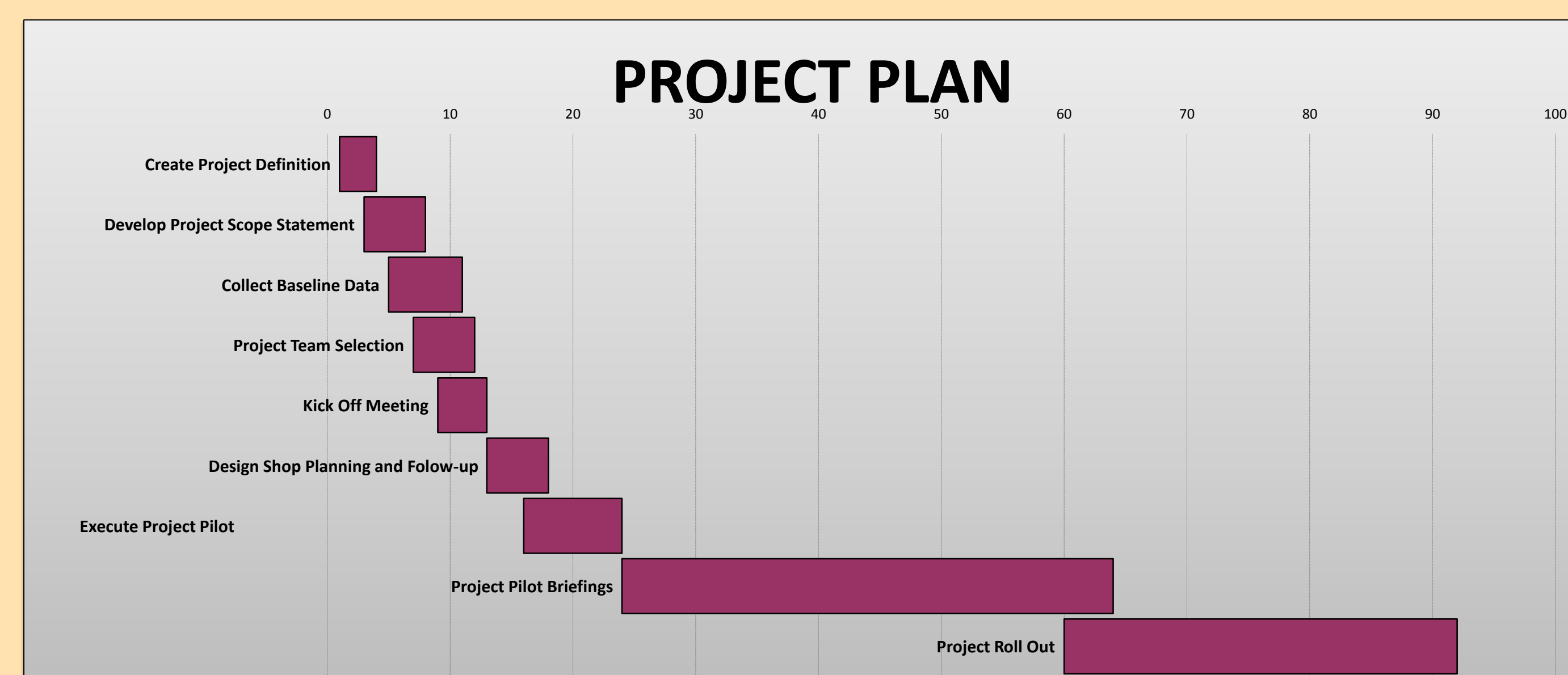
MEDSURG

- Hemodynamic stability
- Interventions, procedures, medications requiring monitoring at least every 4-8 hours.
- Designated inpatient post-op care.
- I.V. medications for initial therapy.
- Post ventilator weaning
- Post critical care requiring interventions every 4-8 hours

EXPECTED OUTCOME

ED to IMCU patient assignment will result in decreased ED boarding and increased patient satisfaction and safety. The expected results include reduced admitting order to bed assignment time, improved quality of care, reduced ED boarding times and costs, and improved patient and physician satisfaction.

METHODS



Key Enablers

- Creation of clear guidelines for accurate assignment of level of care.
- Implementation of physician training and tools to improve accurate, expeditious assessment and assignment of level of care.
- Enhanced communication process related to internal transfer of care from ED Physician to assist Admitting Physician assigning appropriate level of care
- Routine observation and assessment of process by Nursing Supervisor to reduce process variation and increase efficient and effective patient throughput.
- Design and implementation of performance metrics to measure and track accuracy of initial assessment of level of care by physician.

Key Behaviors

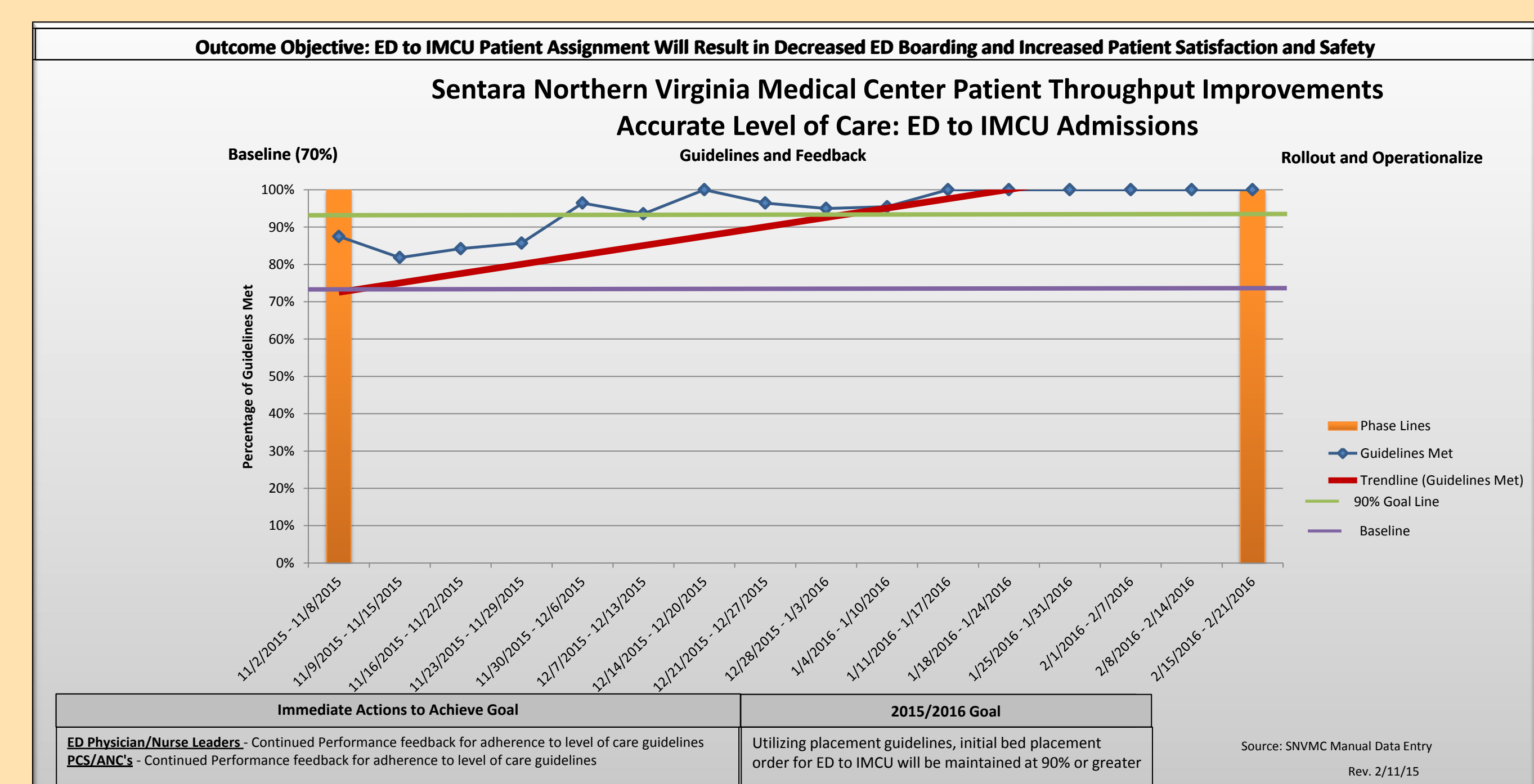
- Consultation between ED and Admitting Physician to review patient condition and assign correct level of care.
- Rapid identification by Patient Service Manager and Nursing Supervisor of inaccurate level of care assignments.
- Immediate feedback by Admitting Physicians of inaccurate level of care assignments.

Creating Shared Ownership of Patient Flow Goals

- Promotion of action plan to:
 - ED and Admitting Physicians
 - Nursing Supervisors and Patient Service Manager
 - ED Nurses

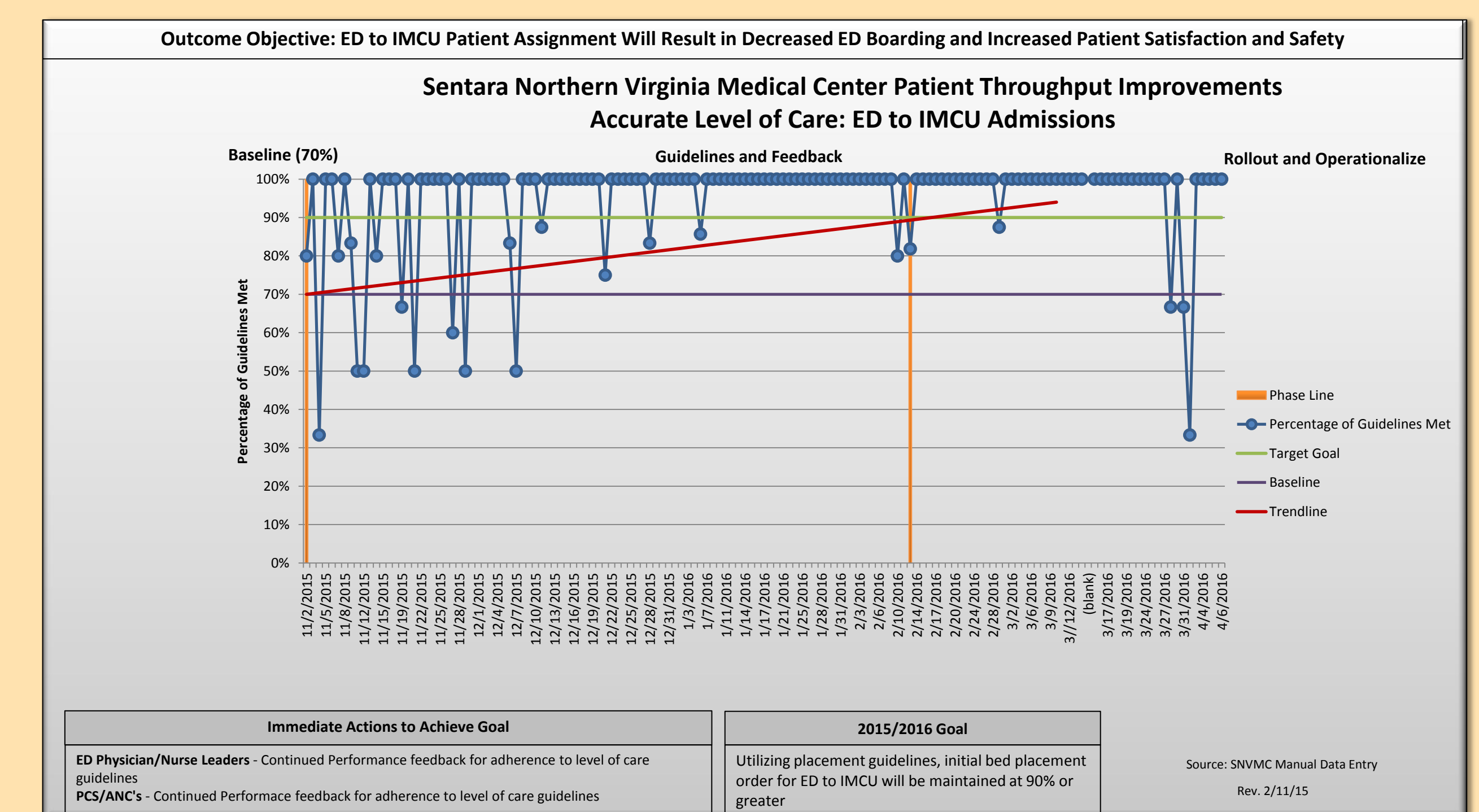
Implementing and Sustaining Change

- Conduct gap analysis of current state
- Identify key activities and tasks of future state
- Identify critical behaviors and required changes
- Measure baseline performance and key indicators
- Pilot augmented activities and roles
- Develop tools and techniques to support future state
- Collaborate with Information Technology to support documentation needs
- Evaluate and document final working solution
- Test to identify exceptions and customization needs
- Introduce augmented documentation activities
- Active surveillance of process and outcomes
- Ongoing physician and nursing staff education, communication, and feedback.



CONCLUSION

- 88% Accuracy of patient placement for all ED admissions in less than 2 months, quickly escalating to 94% accuracy.
- Increased patient throughput to IMCU, ICU, and MedSurg.
- Increased trust and collaboration between physicians and nursing.
- Increased patient satisfaction; decreased wait time/border hours, and decreased resulting costs.
- SNVMC has the highest accuracy rate in initial ER to IMCU placement order throughout the Sentara Healthcare systems at this time.



CONTACTS

Pat Sears, BSN RN
Patient Care Services and Bed Planning Manager
HPSEARS@sentara.com

Susan C. Shpil, BSN RN
Surgical Ortho Bariatric Clinical Manager
SCSHPIL@sentara.com

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- Dr. Thomas Kayrouz TMKAYROU@sentara.com
VPMA, SNVMC/PHYS EXEC, NOVA, Administration
- Dr. (Norman) Adam Brown NABROWN1@sentara.com
System Chief Emergency Medicine, SNVMC
- Dr. Driss Berrada DXBERRAD@sentara.com
Physician, Hospitalist
- Debbie Brown, BSN, RN DXBROWN5@sentara.com
Team Coordinator, Nursing Administration
- Beth Wise, BSN, RN RXWISE@sentara.com
Team Coordinator, Emergency Department
- Rosey Espiritu, MSN, RN, BSND SNVMC Professional and Evidence Based Practice RDESPIRI@sentara.com
- Glenn Sheffield, MSN RN GDSHEFFI@sentara.com
Process Improvement Engineer, Finance Operation Management
- Kim Houser, RN KXHOUSER@sentara.com
RN Unit Coordinator, Intensive Care Unit
- Stephanie Keithley, BSN, RN SLKEITHL@sentara.com
RN Unit Coordinator, Medicine Unit 1
- Paige Quick, MSN, RN JPQUICK@sentara.com
RN Unit Coordinator, Medicine Unit 4
- Celine Tran, PMTRAN1@sentara.com
Manager, Surgical Services
- Florence M. Pullo, MSN, RN FMPULLO@sentara.com
WCS Staff Development Educator, Nursing Research Forum

REFERENCES

Nowak, N. A., Rimmasch, H., Kirby, A., and Kellogg, C. Right care, right time, right place, every time. Healthcare Financial Management Association (April 2012) 1-7. Retrieved from <https://www.huronconsultinggroup.com/Insights/Perspective/Healthcare/~media/Insights-Media-Content/Right%20Care%20Right%20TimeHFM.pdf>