# sentara nurse

Anticoagulation Therapy: Maximizing the Autonomy of the RN in Targeted Patient Population Management Cheryl Weimer, MSN, RN-BC, AGCNS-BC and Mary Morin, MSN, RN-BC, NEA-BC





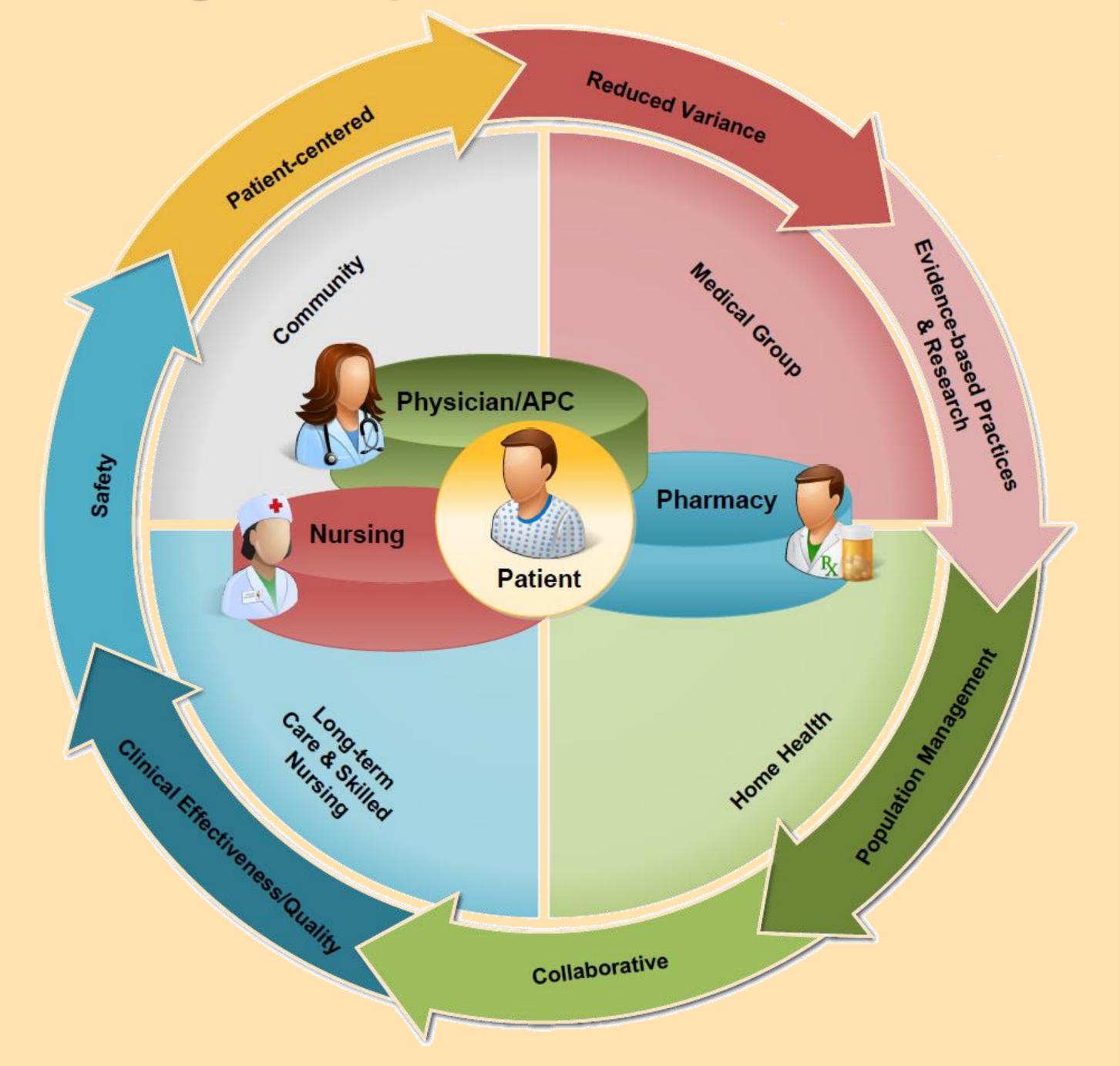


**Tools for Success** 

Sentara Healthcare is compromised of 12 hospitals, 7 extended care facilities, home care services and over 200 primary care and specialty care physician practices.

In 2012 two serious safety events occurred in less than one year within our healthcare system. One within a primary care practice, the other within an extended care facility. Both events were related to sub-therapeutic INRs.

Anticoagulants are ranked as one of the medications most frequently associated with adverse events. According to the CDC anticoagulants (warfarin, dabigatran, edoxaban, rivaroxaban and apixaban) account for 17.6% of all ED visits for outpatient adverse drug effects.<sup>1</sup>



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idditional note: If the patient has missed one dose of warfarin within the last seven days and the INR is 1.6 - 3.2 (in the absence of any										2	501/12 Repedie	n 2012 ADCP nec	commendations (	and guidelines. Ut	e of protocol and ;	guidelines ere na	d a substitute for	using clinical jud	igment based on	patient data.		

- Potential for harm can occur at sub-therapeutic and supra-therapeutic levels. Many factors affect anticoagulation therapy: dosage, drug-drug interaction, food-drug interaction, comorbidities, patient compliance and patient knowledge.<sup>2</sup>
- Management of anticoagulation patients within the physician practices was fragmented. Standardized processes and coordination of care were lacking throughout the healthcare system.

## **Objectives**

The goal of this initiative was to standardize anticoagulation processes within the non-acute care venues of our healthcare system.

Evidence-based Best Practice – Aligned with Sentara's goals caring for defined populations and improving health & safety.

Patient Centered – Providing care to meet the needs of the patient by offering access to 18 clinics across Virginia and Northeast North Carolina.

Collaborative – RN/Pharm D/Provider working across multiple healthcare venues.

Optimization of Clinical Resources – RN/Pharm D model reduces provider workload enabling them to focus on other important areas of patient care.

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## Results

This RN/Pharm D model for managing anticoagulation adopted by Sentara Healthcare has improved patient outcomes and provided this patient population with a safe, timely, patient centered, and cost effective alternative to traditional outpatient anticoagulation management.

As RN/Pharm D anticoagulation services expand to include new regions, the program is actively engaged in process improvement at every level to ensure the model reflects current evidence based practices and is delivering the highest level of quality care.

### **2017 Data**

#### **Areas of focus:**

Develop RN/Pharm D model for patient management

Develop and implement anticoagulation protocols for warfarin and the direct-oral anticoagulation medications

Provide staff education/training Provide patient/caregiver education Standardize documentation

Improve patient safety and compliance

Reduction of Variance – Reduces risk of error and ultimately potential for error.

Standardized Processes – Evidence based protocols, standardized patient education tools, standardized staff education and training, standardized documentation

Safety – No serious safety events related to management by the Anticoagulation Clinic.

**\*** TTR 65.2% Face to Face Patient Encounters: 53,769 Pharm D Consultations: 29,642 Virtual Patient Encounters: 38,753

## References

Institute for Safe Medication Practices. (2017, July 27). Part II: Oral anticoagulants - The nation's top risk of acute injury from drugs. Quarter Watch. Retrieved from https://www.ismp.org

Zhou, S., Sheng, X. Y., Xiang, Q., Wang, Z. N., Zhou, Y., & Cui, Y. M. (2016). Comparing the effectiveness of pharmacist-managed warfarin anticoagulation with other models: A systematic review and meta-analysis. Journal of Clinical Pharmacy and *Therapeutics, 41, 602-611.* 

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