Using Point-Of-Care Anticoagulation Test Results to Improve Ambulatory Warfarin Management in a Large Academic Healthcare System

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Our presentation will focus on how North Shore LIJ Health System established Standardized Coagulation Management Programs in our Ambulatory practices, Coumadin Clinics and Patient Service centers. Our integrated system is the nations’ second largest, non-profit, secular healthcare system, servicing more than 10 million patients annually. The North Shore LIJ Health System was an early adopter of the ACO (Accountable Care organization) model which is strongly supported by the United States government. Accordingly, the system is aggressively shifting patient care to Ambulatory practices, Coumadin Clinics and Patient Service centers for Coagulation Management.

Until recently, Prothrombin Time/International Normalized Ratio (PT/INR) measurement has typically been used to monitor patients on Warfarin through institutional laboratories via venous puncture with a total processing time of approximately 5 hours for lab results from the time of collection to the time of result, and up to a day later for follow-up with patients. Point-of-Care Testing (POCT) devices have revolutionized the patient care process by allowing for laboratory testing outside of the central laboratory. This has allowed us to reduce turnaround times to 15 minutes, provide the opportunity for direct patient interaction which drives better outcomes with increased patient satisfaction, and quicker implementation of potential changes to their treatment regime based on the results obtained.

Prior to the implementation of the POCT devices in these clinic, Warfarin management was an extremely time consuming process for both the patient and the practitioner. North Shore LIJ Health System has designed new point of care approaches to be used as tools in concert with our health care providers for making real time decisions in improving patient outcomes in an affordable, timely manner. When caring for patients on Warfarin, associated costs for treatment can quickly rise if emergency room visits, readmissions, and hospitalizations are needed. By allowing for immediate changes in a patient’s treatment regime at the time of testing, this can reduce the potential for adverse events and the need for emergency treatments, as well as reducing associated costs for the care of these patients.

We will demonstrate the need for testing in ambulatory practices, faculty practices and patient service centers and how the process drives efficiency for patient impact. Our goal is to perform a retrospective analysis of patient data gathered from our point of care testing. Through this we hope to better understand the health profiles of our patient population and achieve better patient care and outcomes. We anticipate significant growth, as the System ACO model becomes embedded in our healthcare community.