Abstract

Until recently, Prothrombin Time/International Normalized Ratio (PT/INR) measurements have typically been used to monitor patients on warfarin through institutional laboratories via venous puncture. The Point-of-Care Testing (POCT) device has revolutionized the patient care process by allowing for laboratory testing outside of the central laboratory. Objective: To analyze humanistic and clinical outcomes in patients currently treated with warfarin and monitored through a pharmacist-managed anticoagulation clinic using point-of-care testing (POCT) device versus venipuncture within ambulatory care clinics at our institution. Methods: All patients currently treated with warfarin therapy who were managed by clinical pharmacists for anticoagulation monitoring at the Medical University of South Carolina (MUSC) Family Medicine Center and University Diagnostic Center, were enrolled. Patients were asked to complete a satisfaction survey regarding their anticoagulation monitoring. In addition, data related to emergency department (ED) visits, hospitalizations and percent of time in the INR therapeutic range for 6 months pre- and post-implementation of POCT device was collected. This information was obtained through an electronic patient information database, Oacis. Results: A total of 145 patients were included in the data collection from the two clinics. The majority (41%) of these patients were taking warfarin for atrial fibrillation. Satisfaction surveys were completed by 86 (59 %) of patients. The surveys revealed that POCT device was preferred over venipuncture in 95% of patients. Reasons for the preference included more face-to-face interaction, less wait time, less pain, less blood needed, and quicker results. Of the 145 patients who were included in the objective data analysis, no significant differences were found in the number of hospitalizations, ED visits, or percent of time in the INR therapeutic range pre- and post-implementation of POCT device. Conclusion: The results of this study demonstrate improvement in patient satisfaction with POCT compared to venipuncture, with limited value in clinical outcomes.

Keywords

Point-of-Care Systems, Patient Satisfaction, Pharmaceutical Services, United States.