Background: Anticoagulation patient self-testing (PST) represents an alternative approach to warfarin monitoring by enabling patients to use coagulometers to test their international normalized ratio (INR) values. PST offers several advantages that potentially improve warfarin management. Objective: To describe implementation and associated performance of a PST demonstration program at an Indian Health Service (IHS) facility. Methods: A non-consecutive case series analysis of patients from a pharmacy-managed PST demonstration program was performed at an IHS facility in Oklahoma between July 2008 and February 2009. Results: Mean time in therapeutic range (TTR) for the seven patients showed a small, absolute increase during the twelve weeks of PST compared to the twelve weeks prior to PST. Four of the seven patients had an increase in TTR during the twelve week course of PST compared to their baseline TTR. Three of four patients with increased TTR in the final eight week period of PST achieved a TTR of 100%. Of the three patients who experienced a decrease in TTR after initiating self-testing, two initially presented with a TTR of 100% prior to PST and one patient had a TTR of 100% for the final eight weeks of PST. The two patients not achieving a TTR of 100% during the twelve week PST period demonstrated an increase in TTR following the first four weeks of PST. Conclusion: Although anticoagulation guidelines now emphasize patient self-management (PSM) only, optimal PST remains an integral process in PSM delivery. In the patients studied, the results of this analysis suggest that PST at the IHS facility provided a convenient, alternative method for management of chronic warfarin therapy for qualified patients. More than half of the patients demonstrated improvement in TTR. Although there is a learning curve immediately following PST initiation, the mean TTR for the entire PST period increased modestly when compared to the time period prior to PST.

Keywords
Self Care, Anticoagulants, Warfarin, International Normalized Ratio, Drug Monitoring, United States.