Enrolled patients completed a series of questionnaires assessing individual anticoagulation knowledge and beliefs, literacy and numeracy skills. Only patients in the intervention arm had the information incorporated into the clinical chart used by the pharmacist to manage warfarin therapy. RESULTS: A total of 160 patients consented and were randomized into the study, representing a 69.2% enrollment rate. Variation in INR readings did not improve as a result of the inclusion of patient information sheets in the charts of the intervention group as compared to patients receiving standard of care (difference = 0.037; p = 0.58). Patient knowledge of anticoagulation therapy significantly improved in the intervention group as compared to patients receiving standard of care (difference = 0.8 points (measured on a 20-point scale); p = 0.04).

CONCLUSION: Systematic inclusion of information regarding patient knowledge and beliefs of oral anticoagulation therapy, literacy and numeracy skills did not improve INR control but improved patient knowledge of anticoagulation therapy. While patient knowledge can be improved by providing opportunities to individualize educational interventions, further studies are needed to identify effective interventions to improve INR control and patient outcomes.

HEART FAILURE GUIDELINES IN COMMUNITY HOSPITALS

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OBJECTIVE: To evaluate the effect of the voluntary implementation of heart failure guidelines on clinical outcomes, utilization and quality measures among group purchasing organization member hospitals. METHODS: Member hospitals were invited to participate in this guideline implementation study. Patients at each hospital presenting to the emergency department and hospitalized with the primary diagnosis of heart failure between October and November 2007 were randomly selected for inclusion. Data from five hospitals (67 patients) who implemented the guidelines (cases) were compared to seven hospitals (96 patients) that did not implement the guidelines (controls). RESULTS: There was no difference between male gender (51% vs. 43%, p = 0.34), age (74 vs. 74.7 yrs, p = 0.67) or past medical histories including heart failure (81% vs. 82%, p = 0.89), hypertension (76% vs. 84%, p = 0.25), coronary artery disease (54% vs. 61%, p = 0.37), and diabetes (47% vs. 54%, p = 0.39) in controls compared to cases except for history of ejection fraction less than 40% (28% vs. 13%, p = 0.03). Clinical presentation was consistent with volume overload in most patients with no differences between groups except for fatigue (18% vs. 33%, p = 0.03) and congestion on first chest x-ray (52% vs. 28%, p = 0.003) on admission. Time spent in the emergency department was significantly lower in the cases (4.3 ± 1.7 vs. 3.5 ± 1.4, p = 0.002), while hospitalization length of stay (LOS) (4.9 ± 3.1 vs. 4.3 ± 2.3, p = 0.09) and ICU LOS (2.9 ± 3.2 vs. 1.8 ± 1, p = 0.48) were not different. Use of IV vasoactive drugs was higher in the cases (11% vs. 27%, p = 0.003). Prescription for mortality-reducing oral medications were higher in the cases (p > 0.05). Joint Commission core measures for documentation of discharge instructions (86% vs. 91%, p = 0.10), prescribing of ACE inhibitor or angiotensin receptor blocker upon discharge (63% vs. 66%, p = 0.29) and smoking cessation education (38% vs. 64%, p = 0.41) was more common among cases. CONCLUSION: There was a trend for improvement in utilization and compliance with quality measures in hospitals where guidelines were implemented.