Title: Results from a multidisciplinary transitions of care pilot for medicine and heart failure patients at high risk of readmission

Abstract:

Statement of problem: Reducing hospital readmissions has increasingly become a priority for hospitals. We developed and pilot tested a multidisciplinary transitions of care (TOC) bundle targeted to patients at high risk of readmission intended to reduce hospital readmissions and emergency department (ED) visits.

QI approach: Patients on pilot services were identified upon admission as high risk for readmission using the Parkland readmission risk score embedded into our electronic health record. Enrolled patients received a TOC bundle which included: medication history, medication reconciliation on admission and discharge and medication counseling at discharge by a pharmacist, early assessment of discharge needs by a case manager/social worker team, a post-discharge pharmacist phone call, and primary care follow up within 7 days of discharge. Readmissions and ED visits within 30 and 90 days of discharge were compared to controls. This pilot initiated in August 2014, with the first month designated for rapid process improvement and PDSA cycles. Outcome evaluation began in September, 2014 and continued through July, 2015.

Outcomes: We enrolled 34 pilot patients and matched 34 controls to pilot patients by readmission risk score and month of discharge. 30-day readmission rates were 17.6% for pilot versus 23.5% for non-pilot patients; 90-day readmission rates were 23.5% for pilot versus 35.3% for non-pilot patients. 30-day ED visits not leading to an admission were somewhat higher for pilot patients versus non-pilot patients (14.7% versus 8.8%) and 90-day ED visits were equivalent in pilot and non-pilot patients (23.5% in both groups). Composite outcomes of 30- and 90-day readmissions or ED visits were both lower in the pilot patients compared to non-pilot patients (30-day composite: 23.5% vs. 32.4%; 90-day composite: 32.4% vs. 47.1%). Length of stay was comparable between groups (6.3 days pilot versus 6.0 days non-pilot). No differences between groups were statistically significant.

Next Steps: A multidisciplinary TOC bundle for patients at high risk of readmission shows promise for reducing 30- and 90-day readmissions and a composite outcome of 30- and 90-day readmissions or ED visits. Although this program was implemented in a small group of patients, results suggest a role for dissemination of program components to reduce hospital readmissions.