**Rapid Cycle Improvement in “Action”: Community Partnerships Addressing Social Determinants Reduces ED-Utilization**

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**Abstract**

**Background:** Two safety-net hospitals participated in a NYS DSRIP 8-month rapid-cycle improvement collaborative. Super-utilizer (SU) patient cohorts were identified (89-patients at St. Luke’s, Cornwall, 125-patients at St. Joseph’s Medical Center). Each patient was assigned a care management “quarterback”. “Action” teams engaged diverse community partners to design and implement targeted interventions to address social determinants of health (SDH) and medical needs.

**Aim:** To reduce hospital and ED-utilization through intensive care management and community based linkages.

**Actions Taken:** Key drivers impacting ED-utilization and readmissions (food-insecurity and timely dialysis access), were addressed through collaborative partnerships with a local food bank and dialysis center. Implementation of new workflows facilitated appropriate diversion of SU patients to a newly established on-site food pantry or a community dialysis center when urgent dialysis was available when indicated.

**Results:** An intensive care management intervention and food bank partnership reduced ED-utilization by 33% for a SU cohort (89 patients). Implementation of new workflows enabled appropriate patients to be diverted to community-based dialysis programs for urgent care resulting in fewer admissions and a 20% reduction in ED-utilization for a 125-patient SU cohort.

**Introduction**

In April 2014, the Center for Medicare and Medicaid Services (CMS) granted New York State an $8 billion dollar Medicaid waiver called the Delivery System Reform Incentive Payment (DSRIP) Program. DSRIP’s goal is to fundamentally restructure the payment and delivery of New York State’s Medicaid healthcare system, and to ultimately achieve a 25% reduction in avoidable hospital admissions and Emergency Department (ED) utilization through the development of a culturally competent, patient centered integrated delivery system.

The Montefiore Hudson Valley Collaborative (MHVC) is one of 25 Performing Provider Systems in New York State guiding healthcare transformation through the NYS DSRIP Program. MHVC spans seven Hudson Valley counties: Westchester, Rockland, Orange, Sullivan, Dutchess, Ulster, and Putnam, and our partners include more than 250 organizations (more than 1,000 entities) representing the full care continuum (hospitals, FQHCs, BH and SU, Community Based Organizations and local county health departments.)

**Methods and Materials**

The Medicaid Accelerated Exchange (MAX) Series Program is an 8-month learning collaborative, modeled after the IHI Breakthrough series. Aligned with the NYS DSRIP goal of reducing ambulatory care sensitive readmissions and ED visits by 25%, multidisciplinary MAX “Action” teams, including internal stakeholders and community partners, use rapid cycle change processes to design, test and guide implementation of targeted interventions for an identified cohort of super-utilizer patients. The Series is organized into a preparation/assessment phase and three full day workshops with 8-week “action” periods between them. “Action” teams, guided by an expert facilitator who holds them to task, meet weekly to assess progress on Action Plans and determine next steps. Utilization data is collected and monitored. Two Montefiore Hudson Valley Collaborative “Action” Teams participated in the MAX Series: St. Luke’s Cornwall Hospital and St. Joseph’s Medical Center. The St. Luke’s team focused on high utilizers in the ED and St. Joseph’s on inpatient admissions.

**Results**

**St. Joseph’s Hospital**

- **2015 Outcomes**
  - ED Utilization by cohort group: 20%
  - 85% Engagement with Care Coordination Team

**St. Luke’s Cornwall**

- **2016 Outcomes**
  - ED Utilization by cohort group: 33%

**St. Joseph’s Hospital**

The MAX Series Program created institutional changes that improved processes and fostered collaboration across the hospitals. The “Action” teams, comprised of individuals from varying departments, successfully modified workflows to be more patient-centric and attuned to the SDH driving patient ED utilization and hospital admissions. The “Action” teams then partnered with diverse community stakeholders that impact key SDH needs identified among the SU population.

St. Joseph’s Medical Center, identifying an unmet need for timely dialysis appointments, partnered with a local provider that could offer flexible scheduling for urgent dialysis. Conversely, St. Luke’s Cornwall Hospital found that many individuals were coming to the ED for food; in response, they partnered with a local food bank to offer meals just outside the ED entrance.

The “Action” teams used a rapid cycle improvement strategy, called Plan-Do-Study-Act (PDSA), to implement and refine their MAX Series Programs. The PDSA strategy gave the “Action” teams the tools and momentum needed to develop a system of care that better meets the needs of their patients.

While DSRIP is a 5-year initiative, the ultimate goal is to bring providers and the community together to create a high quality and financially sustainable, integrated healthcare delivery system that will keep our communities healthy well into the future.

**Conclusions**

The PDSA strategy used to drive the MAX Series Program implementation was effective in engaging staff to redefine how care is delivered to improve outcomes for the SU population. Breaking down siloes, both within the hospitals as well as between the hospitals and their communities, sets the foundation for future innovative collaboration necessary for a value-based healthcare system.