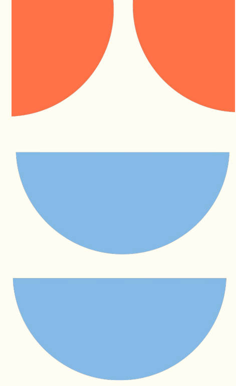
Case Study

Addressing Social Needs Reduces Readmissions



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Addressing Social Needs Reduces Readmissions

50%

of hospital readmissions list SDoH as a contributing factor.[3]

The Challenge

With over 860 beds, a large safety-net hospital discharged around 40,000 inpatients and had over 240,000 emergency department (ED) visits in fiscal year 2018. Its total operating revenue is over $1.4 billion, and significant third-party payors are the Medicare and Medicaid programs, which accounted for gross charges of approximately 16% and 30%, respectively, in FY 2018.

This hospital provided over $1 billion in uncompensated care during FY 2018, a figure up 16% from the previous year. The recipients of this care are uninsured patients with family incomes of up to 250% of the federal poverty level (FPL). Twenty-five percent of Americans who meet this income threshold are uninsured.[1] Other recipients of the uncompensated care are patients whose incomes are unknown or exceed the FPL limit but who are also uninsured.

Low-income, homeless and uninsured individuals are often known as "frequent fliers", as they often call 911 or visit the ED or routine and non-emergent issues due to their lack of access to other care. By addressing the needs of these vulnerable populations, the hospital would be able to reduce its volume and costs of uncompensated care, free up the overutilized resources for more necessary cases, and improve the quality of life of low-income and otherwise vulnerable patients.

Recent research suggests that 80-90% of health outcomes are attributed to health-related behaviors, socioeconomic factors, and environmental factors, broadly referred to as social determinants of health (SDoH).[2] Moreover, a study from Connance found that SDoH contributed to more than 50% of hospital readmissions.[3] Thus, the hospital knew it needed to find an innovative way to address the SDoH in order to combat the issues of high-utilizers and uncompensated care.

64-75%

In 30-day readmissions were observed for Medicaid and Medicare patients.

80-90%

Of health outcomes are attributed to socioeconomic and environmental factors.[2]

3%

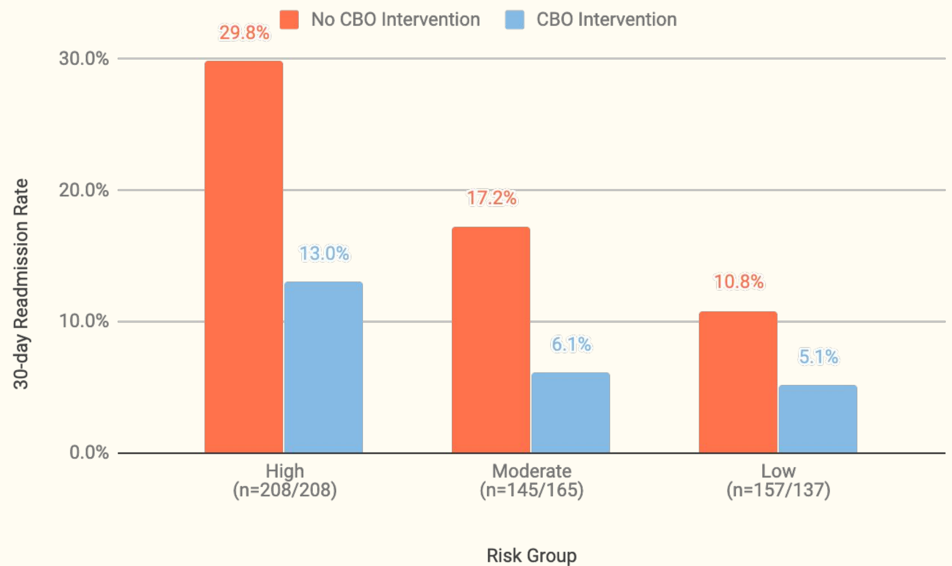
of hospital reimbursement for Medicare patient admissions can be eliminated by CMS as penalty for excessive readmissions.

The Approach

The hospital partnered with Pieces to connect patients with the resources necessary to meet their needs and decrease their cost to the hospital system. Pieces Connect is a bi-directional system of referrals, services, and resources between healthcare systems and community-based organizations (CBOs) that support vulnerable populations.

Over 100 CBOs in the greater metro area in which this hospital is located are utilizing the Pieces platform. The network includes a wide variety of organizations, including homeless shelters, food pantries, early childhood education, and mental health services. Their usage of the platform varies from engaging in full case management, which allows users to coordinate, monitor and manage progress, to connecting patients to organizations through the referral directory. There are also over 1,000 organizations that accept referrals through the platform.

Through a matching process, patients with an inpatient discharge over a 15-month period who also were enrolled in the Pieces Connect database as having connected with a CBO were identified. The readmission rate of patients who engaged with a CBO within 30 days of discharge was significantly lower than the rate of those who did not.



"The usage of community services registered with Connect was associated with a 50% reduction in 30-day readmissions across all risk groups."

The Impact

Readmission rates and patterns in CBO utilization were analyzed after matching patients on age, gender, comorbidity, and readmission risk. The usage of community services registered with Pieces Connect was associated with a 50% reduction in 30-day readmissions across all risk groups. Even larger reductions in rate (64-75%) were observed for Medicaid and Medicare patients.

Over 15-months, over 25% of adult inpatients who utilized a community service registered with Pieces Connect did so within 30 days of discharge. An average readmission is estimated to cost around $2,500 per day.[4] Had all of the patients who worked with community services during the study period done so within 30 days of discharge, the 50% decrease in readmission rate would have realized up to $3 million in savings for the hospital.

These results show that partnerships between health systems and CBOs in addressing clinical and social needs across a continuum can lead to improvements in healthcare outcomes.

By mitigating 30-day readmissions, not only does the hospital benefit from decreasing costs and overutilization, but also the patients enjoy more productive hours to contribute to society and an overall increased quality of life.

Looking Ahead

In this case, we focused on patients with an inpatient discharge who also engaged with a CBO registered with Pieces Connect. With full utilization, once a referral has been made, the network of CBOs would be able to monitor and address post-discharge clinical and social-service needs for vulnerable patients as part of the continuum of care. The monitoring capabilities of the Pieces Connect system close the loop so that the health system and providers can follow-up with the patient after a social-service referral has been made. The information is thus actionable, making it much more effective than an alert or post-discharge referral that is administered without recourse.

By creating a whole-person care plan, the Pieces Connect platform improves outcomes and connects patients to the community beyond the hospital walls. Once the hospital begins to utilize the Pieces platform to its full potential, the already significant decrease in readmission rates is sure to be even greater.

References

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