TMF Health Quality Institute

Strategies to Reduce Preventable Hospital Utilization by Addressing Behavioral Health Needs

Issue 3 | Use Risk Stratification to Determine Resources Needed

This nine-part series developed by TMF Health Quality Institute explores the integration of evidence-based strategies that identify and address underlying behavioral health needs as an approach to reducing preventable hospital utilization.

What Is the Evidence:

4% Decrease in Heart Failure Readmission Rates

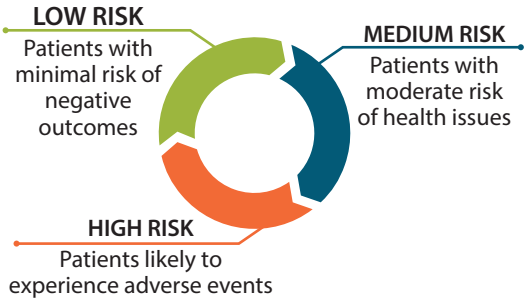
Facing high readmission rates and risking funding, Zuckerberg San Francisco General Hospital (ZSFG) launched a multiyear initiative using predictive artificial intelligence risk stratification and electronic health record automation to assess patient readmission risk using 70 clinical features. Its predictions were integrated into a decision-support tool, prompting providers to make timely, high-priority follow-up referrals. Following the implementation, ZSFG saw heart failure readmission rates drop from 27.9% to 23.9% by the end of 2023. ZSFG achieved one of the lowest readmission rates in the state by January 2023 (Bennett, D, Feng, F et al. 2025).

$7.2 M Funding Secured

From 2018 to 2023, ZSFG consistently met its readmission reduction metrics, securing $7.2 million in funding that was previously at risk (Bennett, D, Feng, F et al. 2025).

What Is It:

Risk stratification is a clinical process that categorizes patients based on their likelihood of experiencing adverse health outcomes, based on objective data (e.g., medical history, unmanaged chronic health conditions, behavioral health conditions, past substance use, prior hospitalizations, demographic factors) and subjective assessments (e.g., health literacy, functional limitations, social support, barriers to care) (Kripalani, Theobald, Anctil, & Vasilevskis, 2014). Patient information is gathered and integrated through electronic health records, which use a standard algorithm to classify patients into low-, medium- and high-risk categories (Dera, 2019). By prioritizing behavioral health within the risk stratification framework, care teams can more accurately identify at-risk patients, proactively intervene and tailor treatment plans that address mental health and substance use conditions, which may be undiagnosed or insufficiently managed. Care teams can more accurately identify at-risk patients who might otherwise be overlooked due to the episodic or less overt nature of mental health symptoms. Risk stratification facilitates proactive intervention, increased care coordination, timely referrals and ongoing monitoring, all of which contribute to reducing preventable hospital readmissions (Gurewich et al., 2020).



Where It's Happening:

Houston Methodist Hospital—a leading academic medical center in the Houston area—identifies high-risk patients. On average, their emergency department sees 1,000 visits per month, 100 of which involve patients who make multiple visits and have been flagged as high-risk and high-need due

What I Can Do:

- Develop an algorithm incorporating key risk factors, including behavioral health conditions, for your population
- Deploy predictive analytics to assess patient risk
- Use patient risk levels to make care management decisions and adjust staffing
- Train staff to use risk classification tools, comprehensive assessments and behavioral health assessment strategies
- Monitor patient outcomes and adjust risk categories accordingly

Resources:

- Risk Stratification: A Two-Step Process for Identifying Your Sickest Patients
- Designing and Delivering Whole-Person Transitional Care: The Hospital Guide to Reducing Medicaid Readmissions
- Reducing Avoidable Readmissions Gap Assessment Tool
- LACE Index for Readmission

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to non-emergent emergency department use. To address this, Houston Methodist Hospital created the Multi-Visit Patient (MVP) program.

Risk stratification is the first step to identify patients that could benefit from the MVP program. Criteria for admission to the program include patients with 10 or more emergency department visits or four or more inpatient visits within a 12-month span. Patients in the MVP program often have a combination of unmanaged chronic health conditions (e.g., diabetes, chronic pain, heart disease), chronic mental health disorders (e.g., post-traumatic stress, bipolar, cognitive disturbance), substance use disorders and social issues (e.g., financial issues, homelessness, food insecurity). All information is gathered during a comprehensive assessment completed at admission by a social worker.

Risk stratification allows the social worker, care manager and provider to identify the right level of care and services for a patient. Since patients in the MVP program fall within the highly complex category, they receive intensive, proactive care management that includes one-on-one support in managing medical, mental health, substance use, social and care coordination needs.