Introduction

The following are highlights from an evaluation of the first two years of the Multnomah Intensive Transition Team (M-ITT). We examined M-ITT’s impact on service connections and hospital admissions, while controlling for other variables of interest. Results are only presented here if they were statistically significant, unless otherwise noted. A brief summary of the models and control variables used is at the end of this brief; for full details and further findings, see the full report.

Did M-ITT help clients connect to services?

Clients not previously affiliated with any non-acute services were 2.5 times more likely to connect to community-based treatment after discharge than those not met by M-ITT.

Do connections to treatment impact the risk of rehospitalization?

Accessing any lower level of care service* after discharge reduced a client’s readmission risk by over 40%.

*Any mental health or substance use service that was not acute care, crisis response, or care coordination only; included controls for past history of services, current service affiliations, and other relevant factors.

How did M-ITT clients fare before and after intervention, regardless of service connection?

The incidence rate of psychiatric hospitalizations after working with M-ITT decreased by nearly 65%, even while controlling for treatment connections and other factors. Connection to treatment within 7 days reduced the incidence rate by nearly 60%; however, connection to treatment within 30 days had no statistically significant effect on future hospitalisations.

In “real” numbers, unadjusted for other variables, total inpatient psychiatric hospitalizations dropped from 172 in the 6 months prior to intervention to 56 in the 6 months post-intervention.

The impact was not limited to just psychiatric hospitalizations, though. While the greatest benefit was seen in inpatient psychiatric, the other major forms of acute care—physical healthcare hospitalizations, emergency room visits, and Unity visits—also saw significant reductions.
Who was less likely to connect to services?

Beyond assessing M-ITT’s performance, we can also assess if there are any risk factors or systemic disparities we should further target. The following groups were significantly less likely to connect to services post-discharge:

- Hospitalized for schizophrenia or other delusions/paranoias: about 45% less likely.
- History of homelessness or housing instability: over 60% less likely.
- On disability: over 30% less likely.
- Discharged from hospitals outside the region: over 50% less likely.
- Asian clients: over 75% less likely to connect.

Meanwhile, those discharging from Legacy hospitals, those with bipolar disorder or depression, and those with a history of SPMI were all significantly more likely to connect to services.

What else predicted increased readmission risk?

Even while controlling for connections to treatment after discharge, the following indicated heightened risk of readmission to the hospital within 30 days:

- 3+ recent acute care events of any type: over 55% more likely.
- History of substance use: over 65% more likely.
- Young adults (18-29): nearly 40% more likely.
- Diagnosis of delusions/paranoias or schizoaffective disorder: over 80% more likely and over 100%, respectively.
- Discharged from Providence hospitals: about 16% more likely.
- History of SPMI: nearly 10 times more likely.

While some diagnostic and demographic groups also had a significantly lower readmission risk—clients discharging from hospitals outside the region, clients with anxiety or depression, and older adults—service connection was the primary variable that staff can influence that can help reduce risk. Length of stay had a significant but minuscule effect, with each additional day in the hospital predicting a 1.4% decrease in relative risk of readmission.

Notes: Results only included above if they met the statistical significance threshold (p < .10). Following is a brief overview of the models and variables used in this report. All data is from calendar years 2017 and 2018.

1. Treatment connection: logistic regression model examined 1,045 unaffiliated and other-affiliated members discharged from inpatient psychiatric. Model controlled for age, sex, race/ethnicity, primary language, housing, disability, substance use history, hospital, hospitalization length, primary diagnosis at discharge, and history of SPMI.
2. Risk of rehospitalization: Cox multiple-failure survival analysis examined 1,847 discharges by 1,266 clients, and controlled for all the same variables as above.
3. M-ITT pre/post: Poisson regression model, set for panel data, examined 153 clients who had Health Share coverage for at least 6 months before and 6 months after M-ITT intervention. Acute care events occurring on same or consecutive days were counted as single episodes (e.g., an ER visit immediately followed by hospitalization). Model controlled for all the same variables as above, except for adding connection to services as a distinct variable apart from M-ITT intervention.

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