Medicaid 30-Day Readmissions in a First-Year Safety-Net Home Hospital Program

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BACKGROUND

- Thirty years of randomized controlled trial data suggests that home hospital is safe and effective, reducing mortality and 30-day readmissions
- Prior to the CMS Acute Hospital Care at Home waiver announced in November 2020, patients with Medicaid traditionally did not have access to this safe and effective home hospital care model.
- Here, we describe first year program experience and 30-day readmissions in a first-year safety-net home hospital program designed around the principle of equitable access and care.

Program and Methods

- **Program Rationale:** UMass Memorial Medical Center (UMMMC) is the primary safety-net provider in central Massachusetts and has experienced mismatch between community demand and supply of hospital beds leading to prolonged emergency department waiting times for patients requiring inpatient level hospital care.
- **Program Development**: On August 3, 2021, UMMMC launched a CMS waiver-approved home hospital program to provide inpatient-level acute care for presents in central Massachusetts presenting to UMMMC with an acute medical complaint and requiring inpatient level hospital admission.
- **Methods:** We reviewed all UMMMC home hospital admissions from August 3, 2021, through August 2, 2022, in our electronic medical record and safety reporting system. Here, we report volume, patient demographics, safety events and 30-day readmissions for this period.

RESULTS

Patient Story - *MG is a 63-year-old male ('dual-eligible' with Medicare as primary payer and Medicaid as secondar payer) with history of hypertension, diabetes mellitus and chronic kidney disease status post renal transplant. He is admitted to UMMMC home hospital program with acute pyelonephritis (a severe kidney infection) and found to have previously unrecognized cognitive impairment with profound difficulties with adherence to his current immunosuppressing medication regimen. During his two week home hospital admission, his infection is treated, medication regimen simplified, community-resources are brought to bear on identified medication and economic challenges and he is discharged with close coordination with ambulatory care team. He does not experience a readmission in next year.*

Table 1. First Year Patient Demographics

Metric	Value
Home Hospital Admissions	486
Average Patient Age	66.1 years
Legal Sex	51% female, 49% male
Hispanic or Latino	19% (vs. 13% in Worcester County)
Black or African-American	8% (vs. 7% in Worcester County)
Preferred Language Non-English	17%
Primary Payer	45% Medicare (traditional) 22% Medicaid 19% Managed Medicare 9% Commercial 5% Other

RESULTS

Table 2. First Year Home Hospital Safety Events

Metric	Value (vs. Literature Benchmark)
Falls	3.2 (vs. 2.7-7.0) per 1000 pt days[1]
Falls with Major Injury	0.3 (vs. 0.1-0.4) per 1000 pt days[1]
Incident Central Line Infection	0.0 (vs. 0.9) per 1000 pt days[2]
Incident Catheter-Associated UTI	0.0 (vs. 3.1-7.5) per 1000 pt days[3]
Incident Clostridium Difficile	0.3 (vs. 0.8) per 1000 pt days[4]
Incident Venous Thromboembolism	0.3 (vs 2.5-5.1) per 1000 pt days[5]
Escalation back to brick/mortar	10.3% (vs. 7.1%)[6]
Mortality	0.28 (vs 0.93) observed/expected[7]

[1]https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1492485/
[2]https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8976505/
[3]https://www.cdc.gov/infectioncontrol/guidelines/cauti/background.html
[4]https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6991241/
[5]https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5034410/
[6]https://catalyst.nejm.org/doi/full/10.1056/CAT.21.0338#t3
[7]Internal UMMMC benchmark for admitted patients.

Table 3. Medicaid 30-Day Readmissions

Payer	Value (vs. Literature Benchmark)
Medicaid as Primary Payer	5.7% (vs. 14.0%)[1]
Medicaid as Secondary Payer	7.9% (vs. 21.5%)[2]

[1]https://www.hcup-us.ahrq.gov/reports/statbriefs/sb278-Conditions-Frequent-Readmissions-By-Payer-2018.jsp
[2]https://pubmed.ncbi.nlm.nih...

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- In its first year, th... program was eq... members prese... inpatient care.
- For patients with... secondary payer... favorably to litera...