Evaluation of Medical Respite Pilot Program – Final Report

Presented to:

forHealth® CONSULTING at UMass Chan Medical School

December 30, 2025

Report Outline

- Background
- Findings:
  - Profile of Program Participants
  - Respite Program Service Utilization
  - Healthcare Service Utilization and Cost
  - Program Participant Experiences
  - Grantee Feedback
- Summary of Findings
- Appendices

Background

Program Description
Grantees
Evaluation Goals, Measures, and Data

Background

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- A 2021 literature review by the National Institute for Medical Respite Care highlighted that medical respite programs effectively reduced hospitalizations, lowered the cost of care, and improved the health and well-being of those experiencing homelessness.[1,4]
- People experiencing homelessness are more likely to utilize emergency room (ER) services due to not having insurance, experience barriers to accessing healthcare like lacking transportation, and have heightened likelihood of having complex medical issues such as untreated HIV/AIDS.[2,5,6]
- MassHealth's Medical Respite Program (the "Program") was launched in November 2023 and ended in March 2025. It was a grant-funded* pilot that aimed to mitigate the risk of acute hospitalization or institutionalization and inpatient crises by providing safe settings to discharge patients currently experiencing homelessness who no longer needed hospital-level care.[3]

* The funding for the pilot was made available in part with federal funds from Section 9817 of the American Rescue Plan Act (ARPA) of 2021 to strengthen, expand, and enhance access to Medicaid home and community-based services.

Program Grantees

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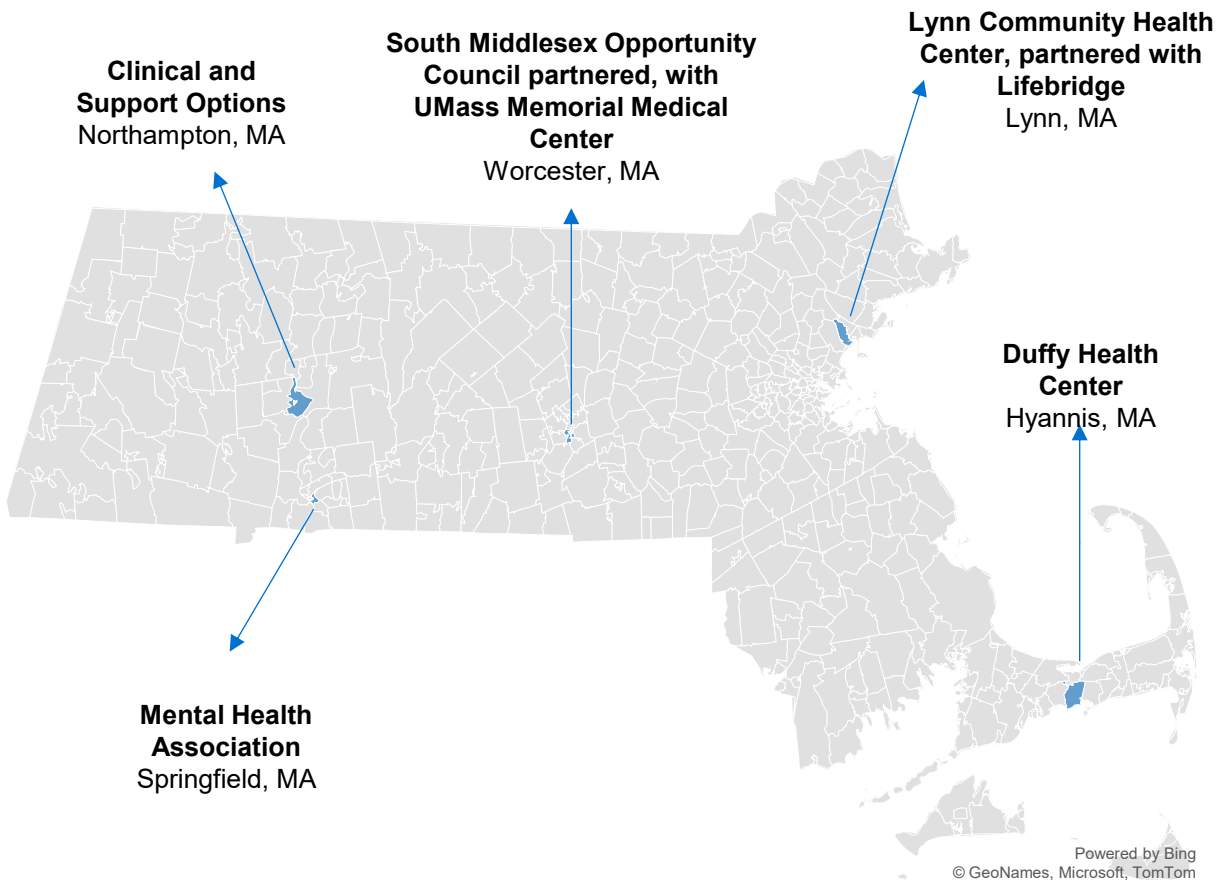
The Program had five grantees:

- Clinical and Support Options (CSO)
- Duffy Health Center (Duffy)
- Lynn Community Health Center, partnered with Lifebridge (LCHC)
- Mental Health Association (MHA)
- South Middlesex Opportunity Council (SMOC), partnered with UMass Memorial Medical Center



Measures, Data, and Analysis Period

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Evaluation Domains/Measures	Data Sources	Data Limitations	Study Cohort & Analysis Periods
Profile of Program participants (e.g., demographics, enrollment period, Program use)	Program participation* and discharge data collected from Research Electronic Data Capture (REDCap)	Relied on the grantees to input data in REDCap** and the data provided was not always complete, accurate, or timely	Program participants between Nov 2023 (Program start date) and March 2025 were included
Health service utilization and cost, e.g., • Inpatient/ED/outpatient visits • 30-day all-cause hospital readmission rate • Total and itemized cost	Medicaid administrative data: enrollment, eligibility, and medical claims/encounter	The lag in claims data limited the timeframe of the claims analysis and the number of Program participants in the final analysis	Program participants who are Medicaid members from Nov 2023 (Program started) to Sep 2024***
Program participant experience	Program survey data: admission, 3-month follow-up, and discharge through REDCap	Limited participation from the Program participants in the surveys	All participants who filled out the surveys
Stakeholder experiences	1 semi-structured interview with Program grantee staff and a focus group of 5 grantees	The study limited the evaluator's ability to visit and conduct interviews onsite with participants and grantees/staff	MassHealth staff and Program grantees

* By program entry, it means joining the date. When we refer the time period as “post program participation,” we meant post the program entry date.
**As part of the grant agreement, each grantee received $20,000 to support their participation in REDCap and the evaluation of the Program. Future studies may want to consider alternate strategies to increase participation in data collection.
*** The reason to only include Program participants up to Dec 2024 is because we downloaded claims data in March 2025. Given 6-9 months claims data run-out period, claims are most reliable up to Sep 2024 and potentially useable for those in the last quarter of 2024.

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Profile of Program Participants

Demographic Characteristics

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		All Program Participants (N=156)		MassHealth Members (n=152*)	
Characteristics	**Type**	**N**	**%**	**n**	**%**
Gender	Male	107	69	103	68
	Female	49	31	49	32
Marital status	Single	95	61	93	61
	Married	14	9	13	9
	Divorced/ Widowed	35	23	34	22
Preferred Language	English	141	90	139	91
Hispanic or Latino	Yes	32	21	30	20

- More than 50% of Program participants were males (69%), single (61%), English-speaking (90%), and Hispanic (21%).
- Almost all (97%) participants were on Medicaid.
- The pattern was quite similar among those participants on Medicaid.

Data Source: REDCap.
*One member participated in the same facility twice, and the other two members who were enrolled in two different facilities were counted twice in the table (only 150 unique MH members).
**"Unknown" includes "Choose Not to Answer, blank, unknown, or not listed."

Demographic Characteristics and Insurance**

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- Almost a third of the participants were between 55 and 64 years old, with a mean age of 53.
- Most Program participants' reported race was White (76.3.8%), followed by Black (12.5%).
- More participants were in Medicaid managed care (including dual eligible members) than non-managed care.

Age Group	MassHealth Members	
	N	%
21-40	30	19.7
41-50	26	17.1
51-54	26	17.1
55-64	43	28.3
65-80	27	17.8

Race	MassHealth Members	
	N	%
White	113	75.8
Black	19	12.8
Asian, Other, Unknown*	17	11.4

Coverage Type	MassHealth Members	%
FFS	44	29.5
ACOA-MassHealth	29	19.5
ACOB-MassHealth	54	36.2
ICO/SCO/Other	22	14.8

Data Source: REDCap enrollment data and Medicaid Enrollment/Eligibility data. The age is at the time of Program entry.
*"Unknown" includes "Choose Not to Answer, blank, unknown, or not listed."
**149 members had MH eligibility information

Living Situation Prior to Hospitalization

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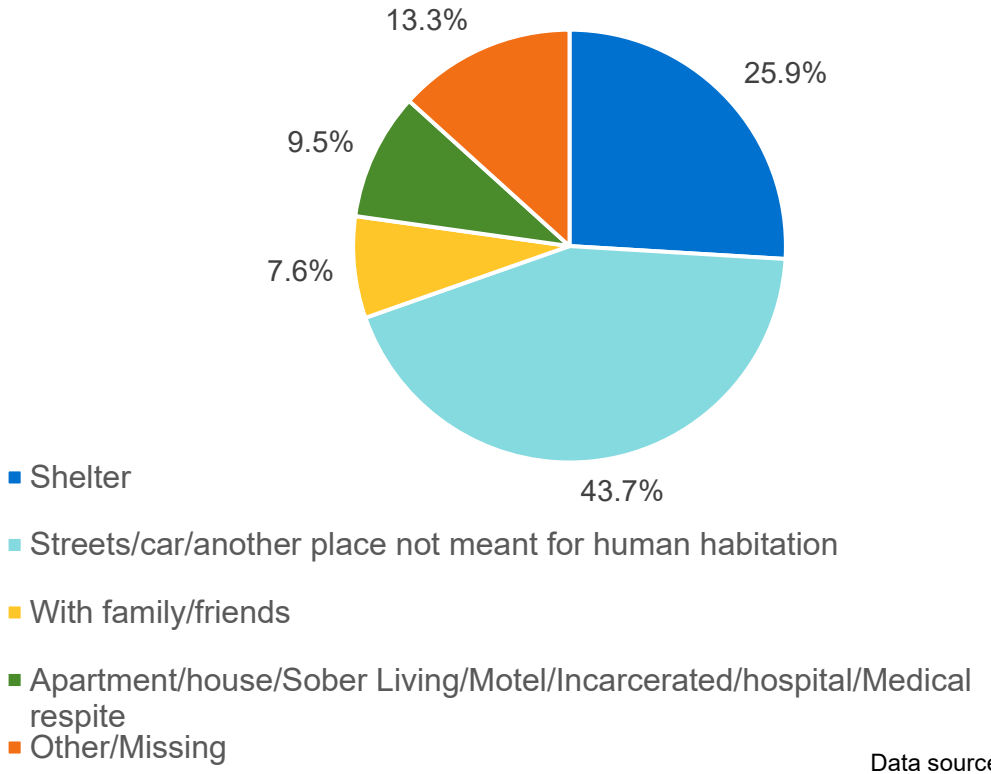
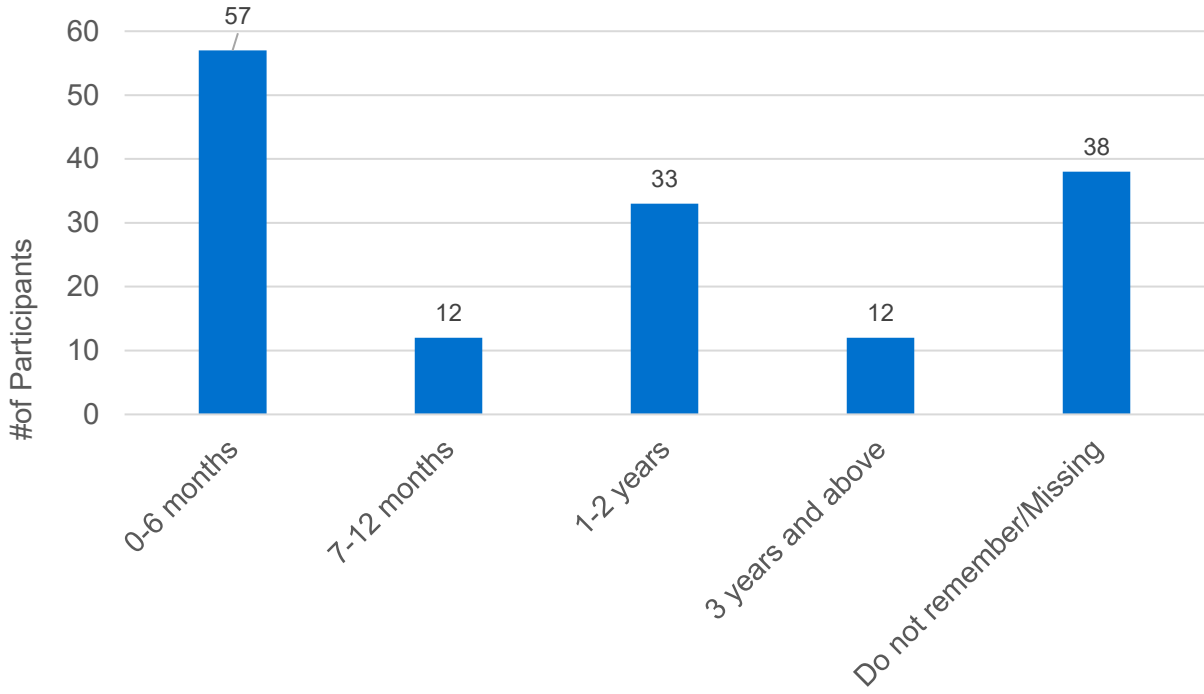
At least 69.6% of Program participants lived on the streets/in a car/place not meant for human habitation or a shelter at the time of Program entry. Approximately a dozen had been homeless for three to five years.

Living Situation Before Program Entry



Length of Being Homeless Before Most Recent Hospital Stay



Data source: REDCap enrollment form data.
*49 members (51 participations) had not completed the Admission survey. Missing data was later obtained from Grantees by MH.

Select Health Conditions Among People Experiencing Homelessness

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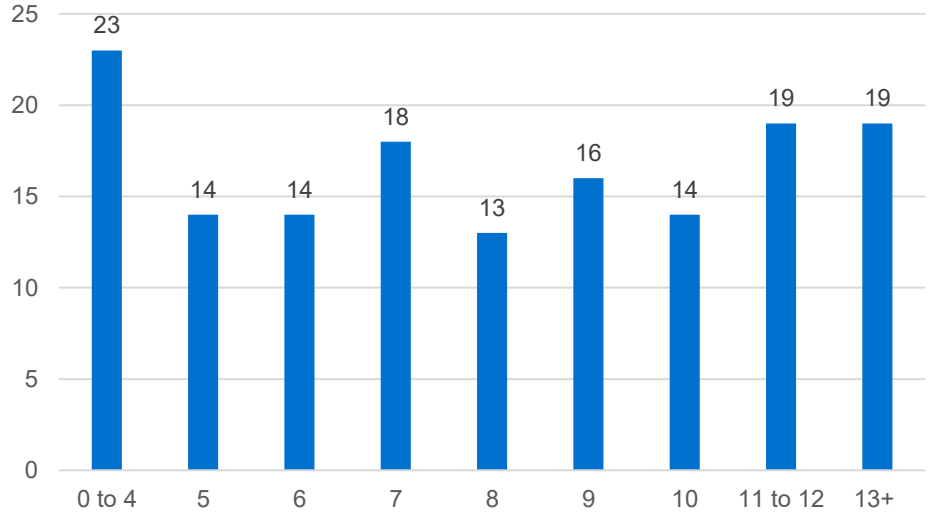
Pilot Program participants had a much higher percentage of chronic health conditions than other MassHealth member experiencing homelessness.

Health Conditions	General Homeless Medicaid Members not in Respite Program* (A)		Homeless People In Medical Respite (B)		Percent Diff (=B-A)**
	N	%	N	%	
Cardiovascular Disease	1,821	15.6	98	65.8	50.2
Hypertension	3,646	31.3	108	72.5	41.2
Open wound and wound care	2,636	22.6	90	60.4	37.8
Injury Poisoning	6,780	58.1	137	92.0	33.8
Mild Liver Disease	2,319	19.9	80	53.7	33.8
Depression	6,450	55.4	129	86.6	31.3
Diabetes	1,607	13.8	64	43.0	29.2
COPD	3,221	27.6	82	55.0	27.4
Alcohol Abuse	4,269	36.6	95	63.8	27.2
COVID-19	1,237	10.6	54	36.2	25.6
Moderate-Severe Renal Disease	554	4.8	43	28.9	24.1
Drug Abuse	5,549	47.6	102	68.5	20.9
Moderate-Severe Liver Disease	206	1.8	19	12.8	11.0
Hepatitis C	1,771	15.2	36	24.2	9.0
All***	11,667	100	149*	100	

- About **94% of Program participants** had **3 or more chronic conditions – 35% had 10 or more conditions –** upon Program entry

# of People with Selected Chronic Conditions upon Program Entry



Data Source: RDC, MassHealth Claims, REDCap, and Program data.
Note: Homeless status was co-determined by both RDC and Medicaid claims/encounter data. One member without enrollment record was found in MassHealth eligibility data file.
*People in column A may not have hospital discharges and are not statistically matched with Program participants in this table.
**All differences were significant (*p* value at least less than .01).
*** "All" does not include other health condition with <11 members.

Respite Program Service Utilization

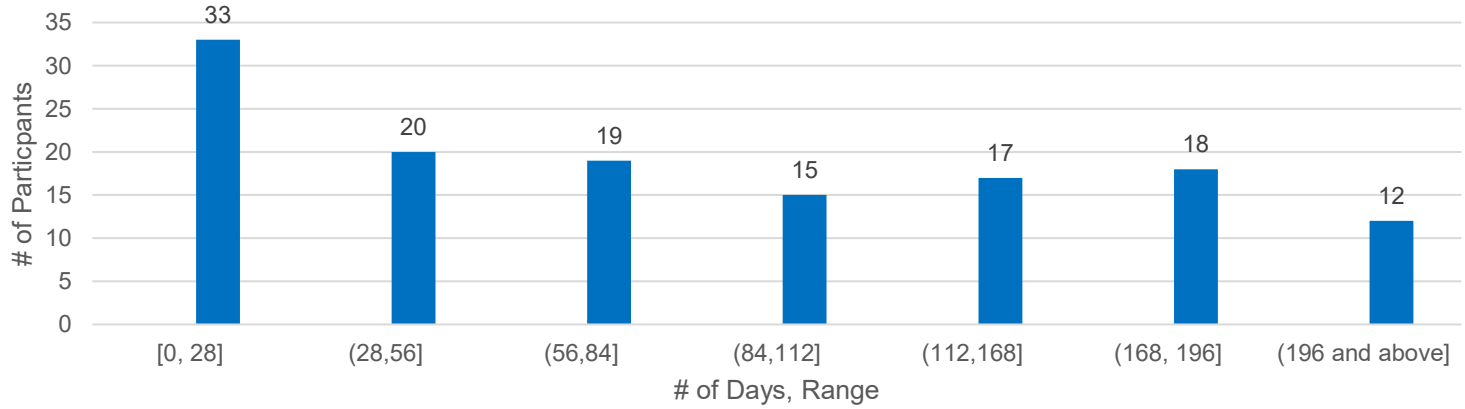
Location and Bed Size of Each Program Site

- CSO and LCHC had more participants than other grantees.
- The average length of stay (LOS) in the Program was 94 days, with 27 outliers (>180 days*).

Location and Bed Size of Each Program Site

Respite Program Site	Location	Total Respite Beds (A)	Total Enrollment (B)	Bed Refill Rate (=B/A)
Clinical and Support Options, Inc. (CSO)	Northampton	10	42	4.2
Lynn Community Health Center and Lifebridge (LCHC)	Lynn	10	43	4.3
Mental Health Association (MHA)	Springfield	8	25	3.1
South Middlesex Opportunity Council and UMass Memorial Medical Center (SMOC)	Worcester	7	24	3.4
Duffy Health Center (Duffy)	Hyannis	7	23	3.3

Program Length of Stay in Days



Data Source: REDCap data.
Note: n = 147. Participants missing from LOS data (n=2) are not included in the histogram above.
*The grant terms allowed for a LOS greater than 180 days.

Change of Housing Conditions

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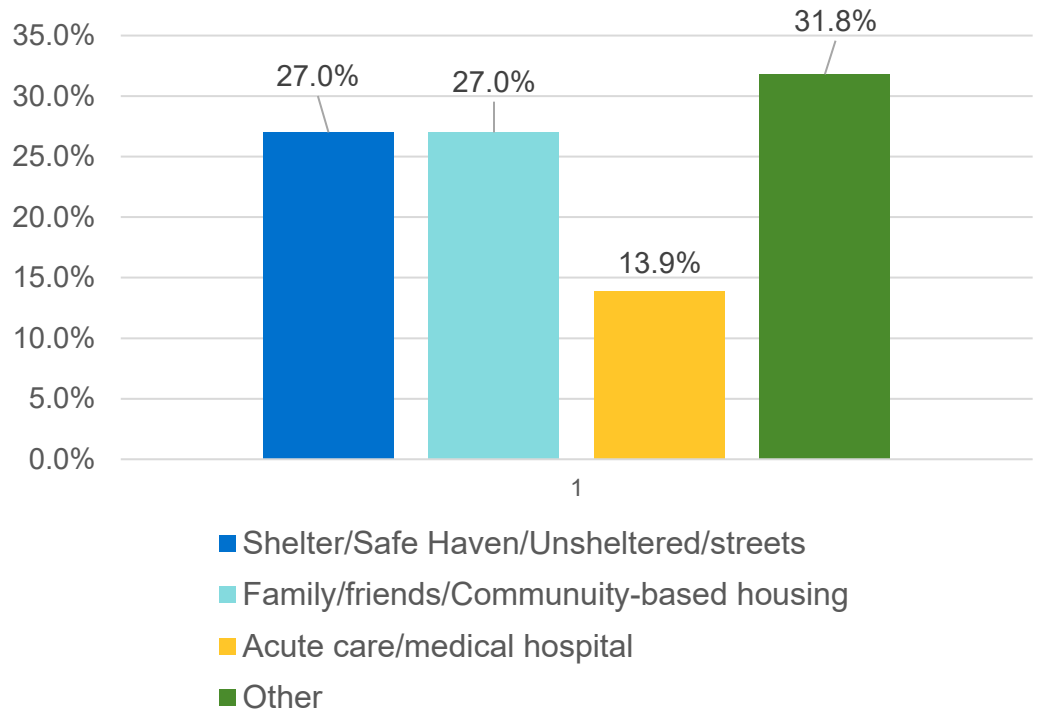
- Before the hospital stay leading to Program entry, 99 (> 80%) of participants lived on the streets/in a car/place not meant for human habitation or in a shelter.
- Among discharged participants, **72.7% did not return to homelessness** (i.e., streets/unsheltered/ shelter/safe haven), among whom, the top places of discharge were community-based housing, acute care/medical hospital, and family/friends.

Living Conditions Before Hospital Stay

Living Condition	N	%
Streets/car/another place not meant for human habitation	59	48.0
Shelter	40	32.5
Apartment/house/Sober living/motel/Incarcerated/hospital/other medical respite/with family/friends	24	19.5

Discharge Settings After Program Participation



Data Source: REDCap data.
Note: n = 123 for the table on the left.

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Healthcare Service Utilization (Claims Data Analysis)

D-D Analysis: Per Member Per Month (PMPM) Healthcare Utilization

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Compared to the matched members experiencing homelessness, **the number of ER visits, inpatient admissions, and 30-day all-cause hospital readmission have all reduced**. The **number of BH-related inpatient admissions and 30-day all-cause hospital readmissions statistically significantly reduced by 0.09 and 0.12 PMPM (or by 9 and 12 per 100 members per month),** respectively, among Program participants.

Measures (PMPM)	12 Months Before Program Entry			After Program Entry			D-D (=B-A)	P-value
	Program	Comparison	Difference (A)	Program	Comparison	Difference (B)		
# of Members	49	144		49	144			
# of Member Months	637	1,871		343	1,003	n/a		n/a
# of ER Visit	0.44	0.41	0.03	0.36	0.48	-0.12	-0.15 (↓)	0.9475
# of Inpatient Admission	0.32	0.26	0.05	0.26	0.35	-0.09	-0.14 (↓)	0.1220
# of BH Inpatient Admission	0.08	0.09	-0.02	0.03	0.14	-0.11	**-0.09 (↓)**	**0.0043****
# 30-Day All-Cause Hospital Readmission	0.16	0.13	0.03	0.11	0.19	-0.09	**-0.12 (↓)**	**0.0931***

Data Source: Medicaid claims/encounter data.
The D-D difference was based on descriptive statistics. The P-value was retrieved from the coefficient of the D-D regression model.
Significance level: *p<0.1, **p<0.05, ***p<0.01

D-D Analysis: PMPM Healthcare Cost

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Compared to the matched members experiencing homelessness, **the PMPM TCOC and inpatient costs declined**, and **the PMPM outpatient cost and pharmacy cost among Program participants had statistically significant increases by $353 and $266, respectively**, due to the Pilot Program; it also suggests better access to outpatient care through the Program.

PMPM Cost Items	12 Months Before Program Entry			After Program Entry			D-D (=B-A)	P-value
	Program	Comparison	Difference (A)	Program	Comparison	Difference (B)		
#of Members	49	144	NA	49	144	NA	NA	NA
# of Member Months	637	1,871	NA	343	1,003	NA	NA	NA
Total Cost ($)	5,063	5,306	-243	5,517	6,077	-560	-317 (↓)	0.1796
Inpatient Cost ($)	2,136	2,045	90	1,174	2,607	-1,432	-1,522 (↓)	0.3519
Outpatient Cost ($)	826	943	-117	1,322	1,086	236	**353 (↑)**	**0.0128****
Pharmacy Cost ($)	288	428	-140	412	286	126	**266 (↑)**	**0.0722***
BH-Inpatient Cost ($)	347	685	-338	117	1,081	-964	-626 (↓)	0.7812
BH-Outpatient Cost ($)	514	677	-163	807	853	-46	117 (↑)	0.4601

Data Source: Medicaid claims/encounter data.
The comparability of the Program and comparison group members is in the Appendix.
The arrows indicate the direction of cost changes.
The D-D difference was based on descriptive statistics.
The P-value was retrieved from the coefficient of the D-D regression model.
Significance level: *p<0.1, **p<0.05, ***p<0.01

Change in Total Cost of Care

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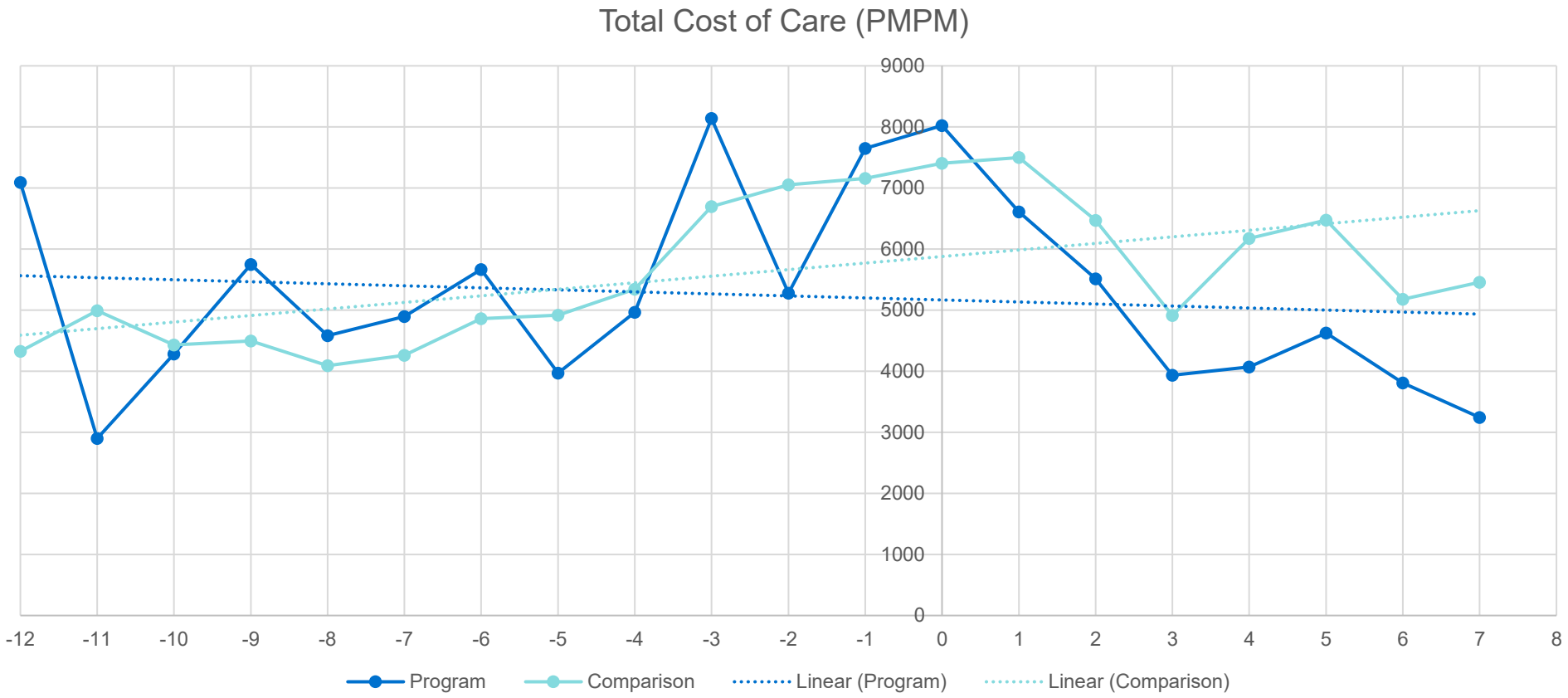
The graph illustrates that total cost of care was similar for both groups before Program participation, followed by a decline in both groups, with a more pronounced reduction among Program participants.



Data Source: Medicaid claims/encounter data.
This graphic reflects the change of average total cost of care before and after Program participation.

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Program Participant Experiences

3-Month Survey Results, Satisfaction with the Help Needed

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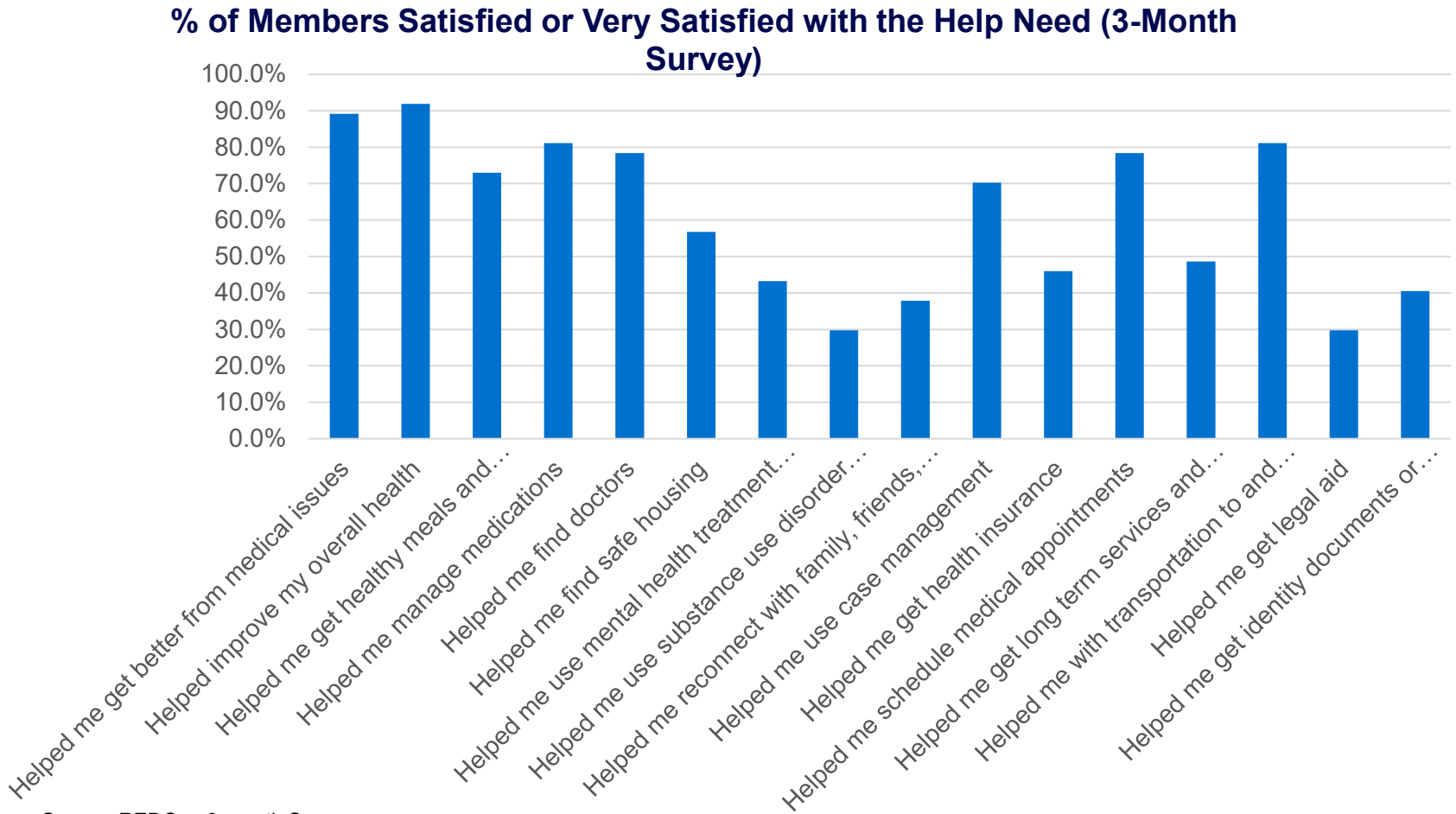

Source: REDCap 3-month Survey.
Note: n <= 37.

Survey respondents reported high satisfaction (≥60% agreed or strongly agreed) with support for medical recovery, overall health improvement, access to healthy meals, medication management, finding doctors, case management, scheduling appointments, and transportation. However, only about 30% expressed satisfaction with substance use disorder (SUD) treatment services or legal aid.

3-Month Survey Results

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Select quotes about “How has your life changed since starting the medical respite Program?”

“I have [multiple concurrent health issues]. In my condition the Program has helped take some of the pressure off myself so I can stay focused on [treatment] and not so much as everything all at once. If SMOC/UMass wasn't here I honestly think my overall health would end with me right back in the hospital.”

“I've managed to remain clean and sober the staff is easy to speak to in that manner. I have received support and good advice.”

“The Medical Respite has helped me build foundation; they have helped me put the broken pieces back together.”

Data source: REDCap 3-month survey.

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Grantee Feedback

Overlapping Themes across Grantees

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- Strengths:
  - The Pilot Program was seen to have successfully met a gap in the needs of homeless people in Massachusetts.
  - Grantees brought their unique personal experiences and connections to the medical respite Program.
  - Shared living helped in forming relationships during the respite stay.
- Remaining Challenges:
  - Managing the high medical complexity of participants, including substance use, was seen as a challenge.
  - Grantees had difficulty finding housing for participants due to availability, geographic location, and meeting the medical needs of participants.
  - Unique barriers existed for each grantee, e.g., the need for more staff, supervised environments, and support systems, plus less staff turnover.

Summary of Findings

Summary of Most Significant Findings

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Even though the evaluation was on a pilot program, there has been strong indication of program success, despite some Program challenges.

- **Program Participant Profile:** Participants were diversified but tended to be older, males, and had multiple chronic conditions and service needs. They typically have high healthcare costs related to complex medical conditions.
- **Program Service Use:** The average LOS in the Program was 94 days, with a handful staying longer than 180 days. The top places participants were discharged to were acute care/medical hospital, community-based housing, and shelter/safe haven. Of Program discharges, 72.7% did not return to homelessness.
- **Healthcare Utilization and Cost:** After joining the Program, Program participants appear to have shifted from emergency or acute care (e.g., inpatient, emergency room) to regular and preventive care (e.g., outpatient, pharmacy). Within a few months of Program entry, participants saw a reduction in total healthcare cost compared to a matched comparison group of non-participants.
    - Compared to the matched MassHealth members experiencing homelessness, Program participants had statistically significant fewer BH-related inpatient admissions and 30-day hospital readmission (9 and 12 per 100 members per month, respectively), with higher outpatient and pharmacy costs (by $353 and $266 PMPM, respectively).
- **Participant Experiences:** More than 60% of survey respondents were very satisfied or satisfied with half of the areas that they need help from the Program, but only about 30% expressed satisfaction with SUD treatment services or legal aid.
- **Grantee Feedback:** The Program was seen to have successfully met a gap in the needs of individuals experiencing homelessness in Massachusetts. The high medical complexity of participants was seen as a challenge, among other things. There are opportunities to build on the pilot's success and improve the model further.

Limitations

- The largest limitation was the small number of Program participants in the analysis due to claims run-out period and inadequate post-Program outcome data, as the evaluation ended three months after Program ended. As a result, the final analysis sample size was only a third of the entire population.
  - If resources permit, we suggest rerunning the analysis after six more months to fully utilize all Program participants' data for healthcare utilization and cost analysis.
- Survey response rate might be a challenge of working with this population, especially after they are discharged from the Program.
- More than a third of participants were duals with some services covered by Medicare. Our use of Medicaid data to estimate healthcare utilization and cost analysis did not capture the full cost for these people.

Evaluation Team Contact

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- We also extend our appreciation to our UMass Chan colleagues, Jack Gettens, PhD, and Matt Alcusky, PhD, for their insightful feedback on the analyses. Special thanks to our marketing team for their support with copy-editing and formatting the report.

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Appendix

References

1. (2021). "Medical Respite Literature Review: An Update on the Evidence for Medical Respite Care." National Institute for Medical Respite Care.
2. Buchanan, D., et al. (2006). "The effects of respite care for homeless patients: a cohort study." Am J Public Health 96(7): 1278-1281.
3. Daaleman, T. P., et al. (2024). "Protocol of a mixed method research design to study medical respite programs for persons experiencing homelessness." PLOS ONE 19(1): e0295543.
4. Doran, K. M., et al. (2013). "Medical respite programs for homeless patients: a systematic review." J Health Care Poor Underserved 24(2): 499-524.
5. Hadenfeldt, C., et al. (2024). "Medical respite post-hospitalization for adults experiencing homelessness." Nursing 53(3): 47-52.
6. Zerger, S. (2006). "An Evaluation of the Respite Pilot Program."

Method for Analyzing Healthcare Services Utilization

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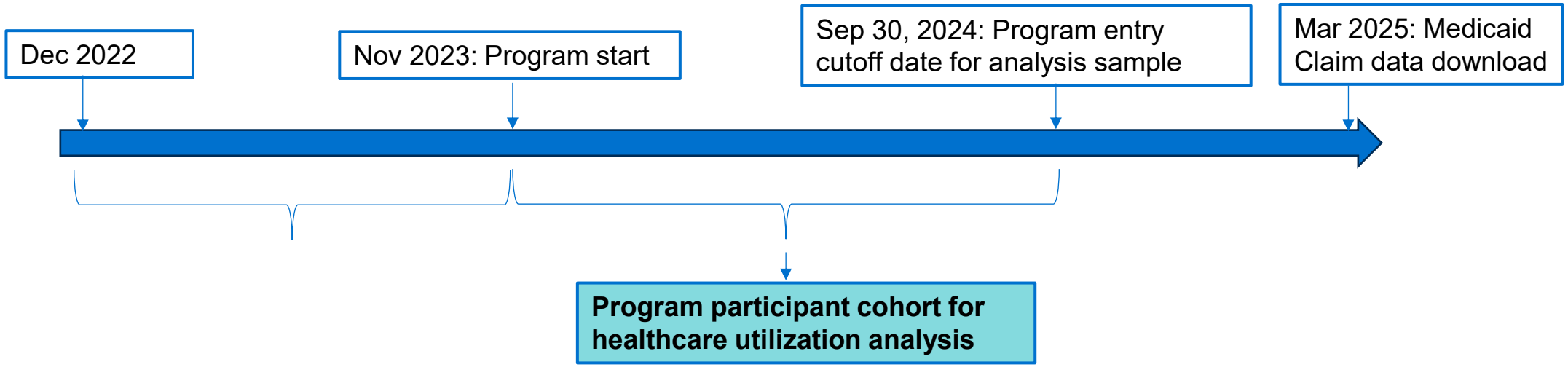
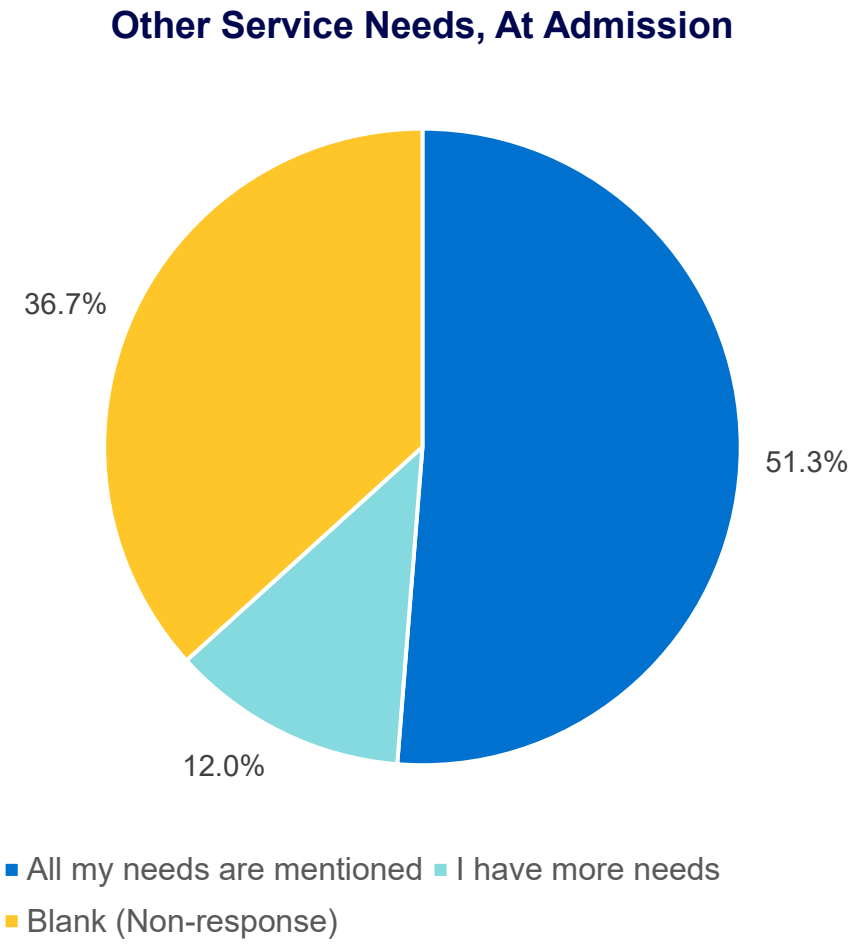


Member inclusion/exclusion rules:

1) Included Medicaid members who participated in the Program at least once, using the first Program entry date as the index date.
2) Included Medicaid members in the Program who have been continuously enrolled in Medicaid for at least 3 months before Program participation and at least 3 months after enrollment as the minimal requirement. There requirement of participation time is different base on type of analysis*.
3) Excluded Medicaid members who enrolled in MassHealth after Program entry, or who enrolled in MassHealth less than 3 months before Program participation to ensure there is a sufficient number of months of pre- and post-Program claims data for analysis**.

*Note: For the analysis with comparison group, Medicaid members in both the Program and non-Program were restricted to continuously enrolled in Medicaid for at least 12 months before Program entry and at least 7 months after program entry.
**Note we downloaded Medicaid claims/encounters in March 2025; there was a 6-month data runout period.

Admission Survey



- As mentioned earlier, participants' biggest needs appeared to continue to align with what the Medical Respite Program offers (physical health recovery, identifying housing support, and case management).
- About 51% of enrollees said that all their needs are met (4% less than at the interim evaluation); 12% of participants said that they had more needs, and about 37% did not respond to the question.

Data Source: REDCap admission survey
Note: N = 158