



## Statistical Brief #4

May 2023

# Characteristics of Managed Long-Term Care Members Assessed Before and During the COVID-19 Pandemic

*Kamalnain Siag, MPH; Kristi Roods, MPH; Sandra Richardson, MS, RN;  
Raina Josberger, MS; Victoria Wagner, MS*

## Introduction

The New York State (NYS) Managed Long-Term Care (MLTC) program provides services to chronically ill or disabled New Yorkers who are eligible for the program and want to stay in their homes and communities. Health plans (PACE, Partial Capitation, MAP) in the MLTC program use the Uniform Assessment System for New York (UAS-NY) Community Health Assessment (CHA) as a component in determining care planning for their members. This assessment is conducted at enrollment into the program and at specified intervals thereafter. The CHA provides information on members' demographic characteristics, functional ability, social supports, and other health related information<sup>1</sup>.

The first NYS case of COVID-19, an infectious disease caused by the SARS-CoV-2 coronavirus, was confirmed on March 1, 2020<sup>2</sup>. COVID-19 infection can be asymptomatic or result in sickness ranging from mild symptoms to severe illness leading to hospitalization and death. COVID-19 most often causes respiratory symptoms, but other organ systems may also be affected causing complications such as heart problems, blood clots, acute kidney injury, etc<sup>3,4</sup>. The risk of developing severe illness, hospitalization, and death from COVID-19 increases with age and is highest among older people with other health conditions.<sup>5-8</sup>

MLTC members are an older population, and existing literature shows higher prevalence of multimorbidity in older populations globally, especially those above the age of 65.<sup>9-13</sup> Thus, the MLTC population may be disproportionately impacted by COVID-19 due to the age and health status of program members. A moratorium on conducting routine reassessments was in place during the pandemic from early 2020 through July 2021 resulting in a backlog of pending assessments<sup>14,15</sup>. The impact of COVID-19 on the NYS MLTC program is unclear and this analysis sought to identify shifts in MLTC population demographics using assessments conducted before and during the pandemic.

## HIGHLIGHTS

- Differences between MLTC members' characteristics were evaluated using Before and During Pandemic assessment data.
- Members with During Pandemic assessments do not represent the whole MLTC population (< 60% of March, 2022 enrollment count).
- Demographic characteristics of MLTC members with a During Pandemic assessment differed from those with a Before Pandemic assessment.
- The reassessment moratorium impacted the completeness and quality of the During Pandemic assessment data, limiting result interpretation.
- Understanding the impact of COVID-19 on MLTC members' characteristics could be useful to stakeholders interested in targeting interventions for quality improvement, resource allocation, and improving emergency preparedness.

## Methods

MLTC members with a CHA conducted from January 1, 2019, through December 31, 2019, were identified. These assessments were then attributed to an MLTC plan based on Medicaid capitation payments to MLTC plans. MLTC members with a CHA conducted from April 1, 2021, through March 31, 2022, were similarly attributed. For both cohorts, the most recent attributed assessment for a member's plan enrollment was kept creating the "Before Pandemic" and "During Pandemic" assessment datasets, respectively.

The Before Pandemic and During Pandemic assessment datasets were merged to create the study cohort. This study cohort was linked to the UAS-NY and Medicaid data to retrieve member level demographic characteristics. Geographic regions were assigned based on member county of residence in the Medicaid data.

## Analysis

An analysis was performed to describe differences between MLTC members assessed Before and During Pandemic for the following characteristics: assessment reason (Discharge Assessment, First Assessment, Other, Return Assessment, Routine Reassessment, Significant Change Reassessment), region (Central, Hudson Valley, Long Island, New York City, Northeast, Western), age group (< 21, 21-54, 55-64, 65-74, 75-84, 85+ years), gender (female, male), race/ethnicity (Asian non-Hispanic, Black non-Hispanic, Hispanic, missing, other, White non-Hispanic), primary language (Chinese, English, missing, other, Russian, Spanish), payment source (dually enrolled in Medicaid and Medicare, Medicaid only), current location (community, hospital, nursing home, other), living situation (alone, with family/relative, with other), nursing home utilization in the last 90 days (no, yes), and level of care (LOC) score (0-10, 11-20, 21-30, 31-48). The LOC score is a measure of functional status with scores ranging from 0 to 48. A higher score indicates a higher care need. Chi-square tests were performed for categorical characteristics and a two-sample t-test was used to compare LOC means. Analyses were conducted using SAS 9.4. A p-value of  $p < 0.05$  was considered statistically significant.

## Results

There were 316,890 assessments Before Pandemic and 165,827 During Pandemic in the study cohort. The number of assessments During Pandemic was considerably less than enrollment (< 60% of March 2022 enrollment 281,571)<sup>16</sup>. Compared to the members assessed Before Pandemic, those assessed During Pandemic differed significantly in assessment reason, region, age group, gender, race/ethnicity, primary language, current location, living situation, nursing home utilization in the last 90 days, LOC score category, and mean LOC score (Table 1).

During Pandemic assessments had a higher percentage of assessment reason "Other" as compared to Before Pandemic assessments. The percentage of assessments in the New York City region was higher During Pandemic as compared to Before Pandemic. During Pandemic assessments had a slightly higher percentage of members in younger age groups, with Hispanic race/ethnicity, and Spanish as primary language, as compared to Before Pandemic assessments. During Pandemic assessments had higher percentages of members living in the community and living alone vs Before Pandemic assessments. During Pandemic assessments showed lower nursing home utilization in the last 90 days as compared to Before Pandemic assessments. The mean LOC score was also slightly lower among During Pandemic assessments vs Before Pandemic assessments.

## Discussion

The characteristics of MLTC members assessed Before Pandemic and those assessed During Pandemic differed significantly (Table 1). The reassessment moratorium and resulting backlog of assessments resulted in the number of assessments During Pandemic to be considerably less than number of MLTC enrollees, and therefore is an underrepresentation of the MLTC population.

Per New York State Department of Health (NYSDOH) moratorium guidance, telephonic/telehealth assessments were allowed and assessors were instructed to answer the “Reason for Assessment” question as “Other” and enter “Telephonic initial assessment COVID-19 protocol” in the corresponding comment box in the “Intake/Initial History” section of the CHA.<sup>17</sup> This resulted in a significant difference in assessment reason distributions between the two timeframes with a higher percentage of assessment reason “Other” During Pandemic. An analysis of assessment reason distribution at the plan level (data not shown) During Pandemic showed wide variation across plans. This points to differential implementation of moratorium guidance across plans.

In August of 2020, the NYSDOH implemented a coverage change for the long term nursing home care benefit in Medicaid MLTC partial capitation plans.<sup>18</sup> MLTC enrollees identified as long term nursing home resident (> 90 days) and financially eligible for nursing home Medicaid coverage were shifted from MLTC to Medicaid Fee-for-Service (FFS). This change could be a factor in lower nursing home utilization, lower percent with nursing home as current residence, the observed decrease in mean level of care score, and the shift towards younger age groups in the During Pandemic assessments.

The During Pandemic assessments had a higher percentage of Hispanic, Non-Hispanic Black, and Asian members compared to Before Pandemic assessments. The observed changes in race/ethnicity may be driven by the larger proportion of assessments being completed in the NYC region, by racial/ethnic differences in those newly enrolled in MLTC, and/or existing members needing a new assessment due to significant change in their health condition. The latter is noteworthy as existing research indicates that Non-Hispanic Blacks and Hispanics were disproportionately affected by the pandemic with higher rates of COVID-19 deaths, hospitalization, and test positivity compared to non-Hispanic Whites.<sup>19-21</sup> The observed higher percentage of those under 75 years of age and relatively lower LOC scores of members assessed during the pandemic may indicate increases in MLTC eligibility among these groups. The available data, however, cannot prove if observed shifts were due to COVID-19 or a product of how assessments of the MLTC population were impacted by the reassessment moratorium during the pandemic or due to coverage change for the long term nursing home care benefit in Medicaid MLTC partial capitation plans.

The reassessment moratorium and its differential implementation across plans, as well as the impact of shifting the long term nursing home care benefit to FFS limits the utility of this data to draw comparisons across different time periods. This analysis underscores the need to monitor demographic changes in the MLTC population potentially attributable to COVID-19 as assessment data gets caught up. This information may be useful to stakeholders interested in targeting interventions for quality improvement, addressing preparedness for emergency situations, and future resource allocation.

**Table 1: Comparison of Characteristics of MLTC Members Assessed Before (January 1, 2019 – December 31, 2019) and During (April 1, 2021 – March 31, 2022) the COVID-19 Pandemic**

Characteristics	Before Pandemic <sup>†</sup> % of N = 316,890	During Pandemic <sup>†</sup> % of N = 165,827
<b>Assessment Reason*</b>		
Discharge Assessment	0.0	0.0
First Assessment	17.5	14.8
Other	<b>1.5</b>	<b>54.5</b>
Return Assessment	3.7	2.4
Routine Reassessment	<b>74.3</b>	<b>13.2</b>
Significant Change Reassessment	3.0	15.1
<b>Region*</b>		
Central	<b>3.2</b>	<b>1.6</b>
Hudson Valley	5.6	4.4
Long Island	6.7	5.6
New York City	<b>76.0</b>	<b>82.1</b>
Northeast	2.5	1.4
Western	6.0	4.9
<b>Age group (years)*</b>		
<21	0.0	0.0
21-54	6.9	7.3
55-64	11.2	11.9
65-74	<b>27.7</b>	<b>29.5</b>
75-84	29.4	29.2
85+	<b>24.7</b>	<b>22.1</b>
<b>Gender*</b>		
Female	68.1	68.6
Male	31.9	31.4
<b>Race/Ethnicity*</b>		
Asian Non-Hispanic	14.7	16.3
Black Non-Hispanic	17.2	17.8
Hispanic	<b>24.2</b>	<b>28.2</b>
Missing	4.8	4.7
Other	10.2	11.9
White Non-Hispanic	<b>28.9</b>	<b>21.2</b>

**Table 1 (continued): Comparison of Characteristics of MLTC Members Assessed Before (January 1, 2019 – December 31, 2019) and During (April 1, 2021 – March 31, 2022) the COVID-19 Pandemic**

Characteristics	Before Pandemic † % Of n = 316,890	During Pandemic † % of n = 165,827
<b>Primary Language*</b>		
Chinese	11.5	12.7
English	42.7	40.2
Missing	2.5	1.2
Other	12.4	14.0
Russian	<b>9.4</b>	<b>6.7</b>
Spanish	<b>21.4</b>	<b>25.2</b>
<b>Payment Source*</b>		
Dually Enrolled in Medicaid and Medicare	84.5	82.8
Medicaid Only	15.5	17.2
<b>Current Location*</b>		
Community	<b>88.0</b>	<b>97.7</b>
Hospital	0.4	0.4
Nursing Home	<b>11.0</b>	<b>1.5</b>
Other	0.6	0.5
<b>Living Situation*</b>		
Alone	<b>33.8</b>	<b>39.4</b>
With Family/Relative	51.1	55.0
With Other	<b>15.0</b>	<b>5.6</b>
<b>Nursing Home Utilization in the Last 90 Days*</b>		
Yes	<b>12.5</b>	<b>4.7</b>
No	87.5	95.3
<b>Level of Care Score Category*</b>		
0-10	11.1	10.5
11-20	<b>53.2</b>	<b>56.5</b>
21-30	25.1	25.6
31-48	<b>10.5</b>	<b>7.4</b>
<b>Level of Care Score (mean)*</b>	<b>19.4</b>	<b>18.9</b>

\* Chi-squared tests were conducted on the characteristic group, not individual categories. A t-test was used to compare mean level of care scores. All characteristic groups in this table were significant at p-value of <0.05.

† Bolded values indicate individual categories within each characteristic that have the largest increase and decrease in percentage, when comparing MLTC members assessed before and those during the COVID-19 pandemic. Values for characteristics expressed as means are also bolded.

## References

1. 2019 Managed long-term Care report, New York State Department of Health.  
[https://www.health.ny.gov/health\\_care/managed\\_care/mltc/pdf/mltc\\_report\\_2019.pdf](https://www.health.ny.gov/health_care/managed_care/mltc/pdf/mltc_report_2019.pdf)
2. <https://oversight.house.gov/wp-content/uploads/2021/02/Cuomo-Cover-Up-Timeline.pdf> Accessed March 20, 2023.
3. <https://www.cdc.gov/coronavirus/2019-ncov/your-health/about-covid-19/basics-covid-19.html> Accessed March 20, 2023.
4. <https://www.mayoclinic.org/diseases-conditions/coronavirus/symptoms-causes/syc-20479963> Accessed March 20, 2023.
5. Risk for COVID-19 infection, hospitalization and death by age group. Centers for Disease Control and Prevention. Updated February 6, 2023. Accessed March 20, 2023.  
<https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-age.html>
6. Carothers JM. Insights into disparities observed with COVID-19. *J Intern Med*. 2021 Apr;289(4):463-473. doi: 10.1111/joim.13199. Epub 2020 Dec 6. PMID: 33164230; PMCID: PMC9325576.
7. Tisminetzky M, Delude C, Hebert T, Carr C, Goldberg RJ, Gurwitz JH. Age, Multiple Chronic Conditions, and COVID-19: A Literature Review. *J Gerontol A Biol Sci Med Sci*. 2022 Apr 1;77(4):872-878. doi: 10.1093/gerona/glaa320. PMID: 33367606; PMCID: PMC7799222.
8. Stokes EK, Zambrano LD, Anderson KN, et al. Coronavirus Disease 2019 Case Surveillance — United States, January 22–May 30, 2020. *MMWR Morb Mortal Wkly Rep*. 2020;69:759–765.  
DOI: <http://dx.doi.org/10.15585/mmwr.mm6924e2>
9. Nguyen H, Manolova G, Daskalopoulou C, Vitoratou S, Prince M, Prina AM. Prevalence of multimorbidity in community settings: A systematic review and meta-analysis of observational studies. *J Comorb*. 2019 Aug 22;9:2235042X19870934. doi: 10.1177/2235042X19870934. PMID: 31489279; PMCID: PMC6710708.
10. Ho IS, Azcoaga-Lorenzo A, Akbari A, Davies J, Hodgins P, Khunti K, Kadam U, Lyons R, McCowan C, Mercer SW, Nirantharakumar K, Guthrie B. Variation in the estimated prevalence of multimorbidity: systematic review and meta-analysis of 193 international studies. *BMJ Open*. 2022 Apr 29;12(4):e057017. doi: 10.1136/bmjopen-2021-057017. PMID: 35487738; PMCID: PMC9058768.
11. Chowdhury SR, Chandra Das D, Sunna TC, Beyene J, Hossain A. Global and regional prevalence of multimorbidity in the adult population in community settings: a systematic review and meta-analysis. *EClinicalMedicine*. 2023 Feb 16;57:101860. doi: 10.1016/j.eclinm.2023.101860. PMID: 36864977; PMCID: PMC9971315.
12. Marcel E. Salive, Multimorbidity in Older Adults, *EPIDEMIOLOGIC REVIEWS*, Volume 35, Issue 1, 2013, Pages 75–83, <https://doi.org/10.1093/epirev/mxs009>
13. Fried VM, Bernstein, AB, Bush MA. Multiple chronic conditions among adults aged 45 and over: Trends over the past 10 years. NCHS data brief, no 100. Hyattsville, MD: National Center for Health Statistics. 2012 <https://www.cdc.gov/nchs/data/databriefs/db100.pdf>
14. <https://coronavirus.health.ny.gov/system/files/documents/2021/10/guidance-for-the-authorization-of-community-based-long-term-services.pdf>
15. [https://www.health.ny.gov/health\\_care/medicaid/covid19/docs/2021-07-26\\_rescission\\_ltr\\_cbltss.pdf](https://www.health.ny.gov/health_care/medicaid/covid19/docs/2021-07-26_rescission_ltr_cbltss.pdf)
16. Medicaid Managed Care Enrollment Reports, New York State Department of Health. Accessed March 20, 2023. [Medicaid Managed Care Enrollment Reports \(ny.gov\)](https://www.health.ny.gov/health_care/medicaid/covid19/docs/2021-07-26_rescission_ltr_cbltss.pdf)
17. <https://coronavirus.health.ny.gov/system/files/documents/2021/10/guidance-for-the-authorization-of-community-based-long-term-services.pdf>

18. [https://www.health.ny.gov/health\\_care/medicaid/publications/docs/gis/20ma06.pdf](https://www.health.ny.gov/health_care/medicaid/publications/docs/gis/20ma06.pdf)
19. Risk for COVID-19 infection, hospitalization, and death by race/ethnicity. Centers for Disease Control and Prevention. Updated December 28,2022. Accessed March 20, 2023. <https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-race-ethnicity.html>
20. Vahidy FS, Nicolas JC, Meeks JR, Khan O, Pan A, Jones SL, Masud F, Sostman HD, Phillips R, Andrieni JD, Kash BA, Nasir K. Racial and ethnic disparities in SARS-CoV-2 pandemic: analysis of a COVID-19 observational registry for a diverse US metropolitan population. *BMJ Open*. 2020 Aug 11;10(8):e039849. doi: 10.1136/bmjopen-2020-039849. PMID: 32784264; PMCID: PMC7418666.
21. Vardar U, Ilelaboye A, Murthi M, Atluri R, Yong Park D, Khamooshi P, Ojemolon PE, Shaka H. Racial Disparities in Patients With COVID-19 Infection: A National Inpatient Sample Analysis. *Cureus*. 2023 Feb 15;15(2):e35039. doi: 10.7759/cureus.35039. PMID: 36942174; PMCID: PMC10023870.

## Contact Information

We welcome questions and feedback about this Statistical Brief. Please contact us at:

### Center for Applied Research and Evaluation

Office of Quality and Patient Safety  
New York State Department of Health  
Corning Tower, Room 1938  
Albany, NY 12237  
Phone: (518) 486-9012  
Email: [MLTC\\_OQPS@health.ny.gov](mailto:MLTC_OQPS@health.ny.gov)