MILLIMAN WHITE PAPER

A comparison of nursing home usage in states with and without Medicaid Managed LTSS

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Introduction

The U.S. population is rapidly aging. The proportion of people age 65 and older is currently 15%, a record high, and is expected to reach 20% by 2027.[1] The number of people age 80 and over is expected to double between 2018 and 2037. With the oldest Baby Boomers recently reaching age 70, the impact on nursing home care—where the average age of residents is approximately 80—has just begun.

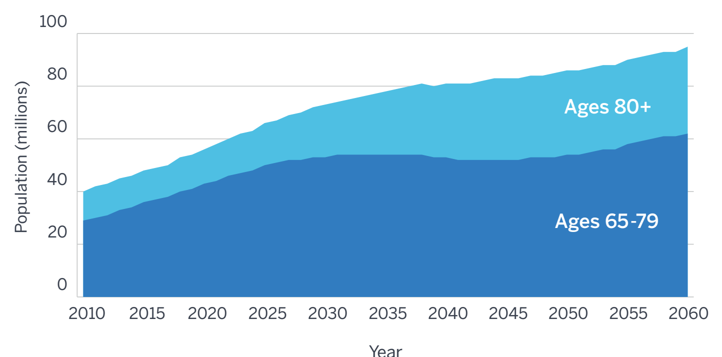
State Medicaid agencies are the primary payers of nursing home care for over 60% of nursing home residents in the United States,[2] and long-term services and supports (LTSS) already account for over 25% of Medicaid spending in most states.[3] Medicaid budgets will be even more strained by LTSS spending as Baby Boomers continue to age and require LTSS, which regularly exceeds $5,000 per month for beneficiaries requiring facility-based care and regularly exceeds $1,000 for other members requiring LTSS.

Over the last decade, many state Medicaid agencies have transitioned LTSS from a fee-for-service (FFS) reimbursement structure, where the agency pays LTSS providers for nursing home care and home and community-based services (HCBS), to managed LTSS (MLTSS), where the state Medicaid agency pays managed care organizations (MCOs) a fixed monthly payment to coordinate care and pay LTSS providers for the costs of serving eligible beneficiaries. States often structure MLTSS payments in a way that aligns financial incentives for MCOs with the goal of providing care in the community rather than in a nursing home. If MCOs provide sufficient HCBS to prevent beneficiaries from entering a nursing home and/or transition nursing home residents back into the community, then more beneficiaries will reside in community settings where costs are often lower. Successful MLTSS programs focus on providing person-centered care and offer a full range of HCBS such as personal care attendants, homemaker services, home-delivered meals, caregiver support, and adult daycare that help beneficiaries live more independent lives in community settings.

For many states that have not yet transitioned to MLTSS, the change may provide the opportunity to reduce nursing home utilization and cost of care over the next decade and beyond. For MCOs, MLTSS may provide the opportunity of financial reward for quality care management. As states consider implementing MLTSS programs and as MCOs consider participating in them, it is important to understand what level of savings from managed care may be achievable.

In this paper, we examine Minimum Data Set (MDS) frequency reports and U.S. Census Bureau American Community Survey (ACS) population data to compare nursing home usage in states with MLTSS to states without MLTSS. While Medicaid does not cover all nursing home residents, it is the largest single payer of LTSS, and we believe reviewing state-level data can reveal a correlation between Medicaid policy and nursing home usage.

FIGURE 1: U.S. POPULATION, AGES 65+



1 U.S. Census Bureau (March 13, 2018). 2017 National Population Projections Datasets. Retrieved July 26, 2018, from **https://www.census.gov/data/datasets/2017/demo/popproj/2017-popproj.html**.

2 Kaiser Family Foundation. Distribution of Certified Nursing Facility Residents by Primary Payer Source. State Health Facts. Retrieved July 26, 2018, from **https://www.kff.org/other/state-indicator/distribution-of-certified-nursing-facilities-by-primary-payer-source/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D**.

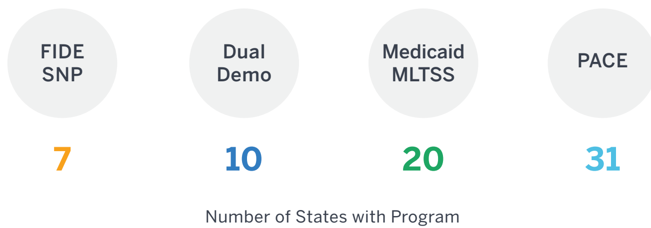
3 Kaiser Family Foundation. Medicaid and CHIP. State Health Facts. Retrieved July 26, 2018, from **https://www.kff.org/interactive/medicaid-state-fact-sheets/**.

Current MLTSS landscape

MLTSS programs can take many forms. Some states offer MLTSS that primarily focus on providing Medicaid LTSS benefits through MCOs. According to the National Association of States United for Aging and Disabilities (NASUAD), 20 states had Medicaid MLTSS programs as of 2017.[4] Other states have implemented MLTSS through partnerships with Centers for Medicare and Medicaid Services (CMS) using one or more of the following models, all of which integrate Medicare and Medicaid (including LTSS) benefits:

- Capitated Financial Alignment Demonstration (dual demonstration):[5] 10 states
- Medicare Advantage fully integrated dual special needs plans (FIDE SNPs):[6] 7 states
- Program for All-Inclusive Care for the Elderly (PACE):[7] 31 states

FIGURE 2: MLTSS PROGRAMS IN 2017



For the purpose of our analysis, we considered any state with Medicaid MLTSS, a dual demonstration, or a FIDE SNP as having MLTSS and refer to these states as "MLTSS states" throughout this paper. We excluded states with only PACE, as PACE sites typically serve a small number of members in need of LTSS. All other states are referred to as "FFS LTSS states."

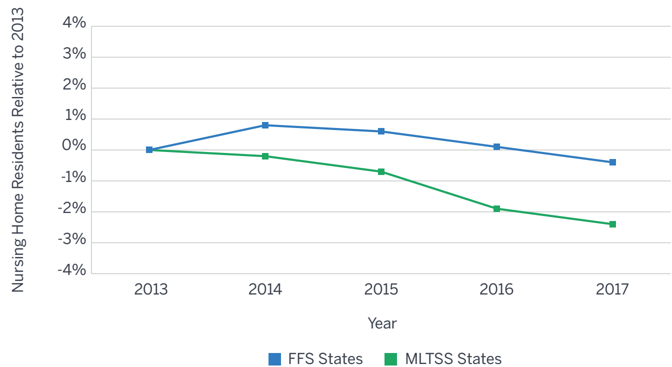
We acknowledge that MLTSS programs vary in eligibility criteria, covered benefits, voluntary and mandatory enrollment policies, launch date, geographic coverage, integration with Medicare, and other factors. These factors could limit each program's impact on state-level LTSS trends. Nonetheless, we believe this partition is reasonable for identifying differences in states with MLTSS compared to states without MLTSS.

Number of nursing home residents

A primary goal of MLTSS is to reduce the number of residents in nursing homes, so a logical place to begin comparing MLTSS states to FFS LTSS states is the change in nursing home residents over time.

Figure 3 shows the change in nursing home residents between 2013 and 2017, separately for MLTSS states and FFS LTSS states, based on the CMS MDS frequency data. As shown in Figure 3, the number of nursing home residents in MLTSS states has decreased by an average of 2.4% between 2013 and 2017, whereas average nursing home residents in FFS LTSS states decreased by 0.7% over the same time period.

FIGURE 3: PERCENTAGE CHANGE IN NUMBER OF NURSING HOME RESIDENTS



The table in Figure 4 shows the five states with the largest reductions in nursing home residents between 2013 and 2017. Figure 4 shows that four of the five states with the largest reductions in nursing home residents currently have MLTSS programs in place.

FIGURE 4: STATES WITH LARGEST REDUCTION IN NURSING HOME RESIDENTS (2013 - 2017)

	Wisconsin	Montana	Tennessee	Minnesota	Illinois
Reduction in Nursing Home Residents	-12%	-9%	-8%	-8%	-6%
MLTSS	YES	NO	YES	YES	YES

While Figures 3 and 4 seem to suggest that MLTSS states have reduced nursing home utilization at a higher rate than FFS LTSS states, we cannot necessarily conclude that MLTSS programs contributed to the difference. Many other factors—particularly differences in population growth and aging—could be driving differences in the total nursing home usage between MLTSS and FFS LTSS states.

4 NASUAD. MLTSS Map. Retrieved July 26, 2018, from http://www.nasuad.org/initiatives/managed-long-term-services-and-supports/mltss-map.

5 CMS.gov (May 11, 2018). Capitated Model. Medicare-Medicaid Coordination. Retrieved July 26, 2018, from https://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialAlignmentInitiative/CapitatedModel.html.

6 Integrated Care Resource Center (February 2015). State Contracting With Medicare Advantage Dual Eligible Special Needs Plans: Issues and Options. Technical Assistance Tool. Retrieved July 26, 2018, from http://www.chcs.org/media/ICRC-Issues-and-Options-in-Contracting-with-D-SNPs-FINAL.pdf.

7 National PACE Association. Find a PACE Program in Your Neighborhood. Retrieved July 26, 2018, from https://www.npaonline.org/pace-you/find-pace-program-your-neighborhood.

Nursing home utilization rates by age group

To account for two of the major drivers of total nursing home utilization, population growth and age demographics, and to better identify differences in MLTSS states and FFS LTSS states, we converted raw nursing home resident counts from the MDS frequency reports to nursing home residents per capita using population statistics from the ACS. Note that, while MDS data is available through 2017, ACS data is currently only available through 2016. Also note that MLTSS states in this section include only states that had MLTSS programs in place as of January 2016.

Figures 5, 6, and 7 show the relative changes in nursing home residents per capita for MLTSS and FFS LTSS states between calendar year (CY) 2013 and CY2016 for ages 65 to 74, 75 to 84, and over 85, respectively. These figures show that the number of nursing home residents per capita decreased at a faster rate in MLTSS states than in FFS LTSS states for all 65 and over age groups. While MLTSS states had more success in reducing NF utilization, it should be acknowledged that FFS LTSS states also reduced NF residents per capita; this may be attributed to LTSS state initiatives other than managed care that target lower NF utilization.

FIGURE 5: PERCENTAGE CHANGE IN NURSING HOME RESIDENTS PER CAPITA

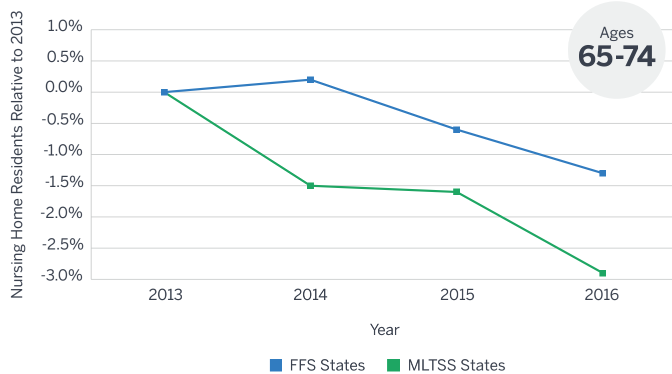


FIGURE 6: PERCENTAGE CHANGE IN NURSING HOME RESIDENTS PER CAPITA

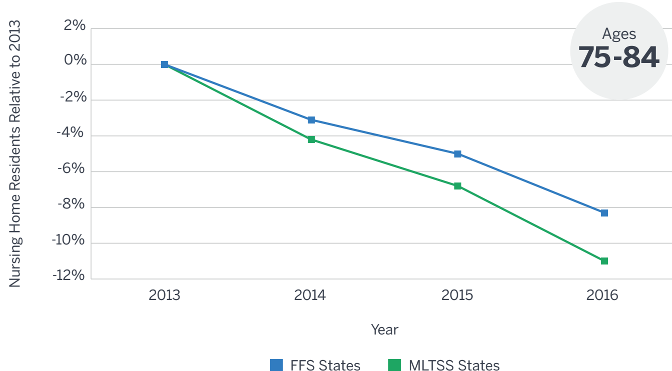
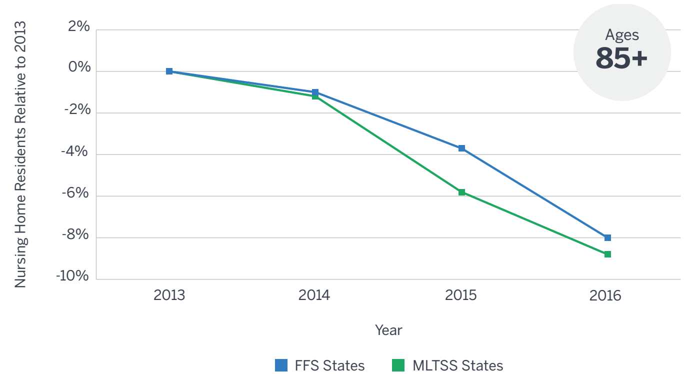


FIGURE 7: PERCENTAGE CHANGE IN NURSING HOME RESIDENTS PER CAPITA



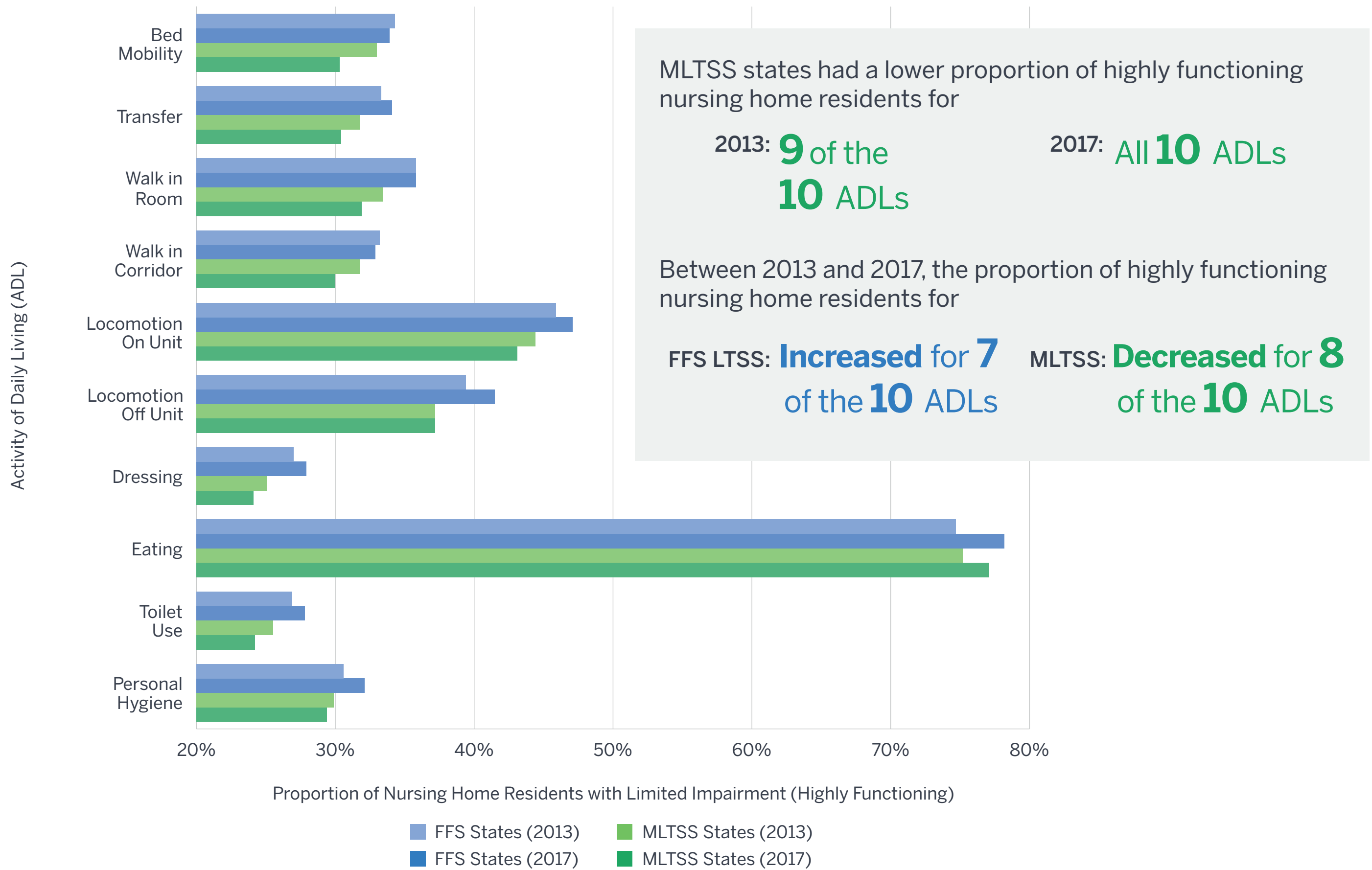
The number of nursing home residents per capita decreased at a faster rate in MLTSS states than in FFS LTSS states for all 65 and over age groups.

Low acuity members in nursing homes

Another indication of successful nursing home utilization reduction may be a high level of acuity of nursing home residents. MLTSS programs aim to provide HCBS to lower acuity (higher-functioning) members outside of an institutional setting. As low acuity members remain in the community longer or transition out of nursing homes, we would expect the remaining nursing home population to have higher acuity and more severe activities of daily living (ADL) impairments.

In the MDS data, nursing home residents are categorized as being independent, requiring supervision, requiring limited assistance, requiring extensive assistance, or as being totally dependent for each ADL. For simplicity, we categorized members into two levels of functional impairment: limited assistance (or less) and extensive assistance (or more). We then summarized the proportion of members in each state with limited impairment (highly functioning residents) for each ADL measured in the MDS. Figure 8 shows the proportion of nursing home residents requiring limited assistance or less for each ADL for 2013 and 2017, respectively. Figure 8 shows results separately for current MLTSS and current FFS LTSS states.

FIGURE 8: FUNCTIONAL STATUS OF NURSING HOME RESIDENTS (CY2013 VS. CY2017)



We also reviewed results on a state-by-state basis and classified states according to the number of ADL categories that showed an increased level of acuity (lower proportion of residents with limited impairment). The table in Figure 9 groups states based on the number of ADL categories with increased acuity between 2013 and 2017. Figure 9 illustrates the following:

- All five states that showed no improvement (same or increased proportion of residents with limited impairment) in any ADL categories are FFS LTSS states
- A majority of MLTSS states (19 of 23, or 83%) showed improvement in four or more ADL categories whereas a minority of FFS LTSS states (13 of 28 or 46%) showed improvement in four or more ADL categories
- States with long-standing MLTSS programs such as Arizona (seven ADL categories improved), New Mexico (five ADL categories improved), and Tennessee (nine ADL categories improved) continue to show improvement long after program implementation

FIGURE 9: CHANGE IN ACUITY OF NURSING HOME RESIDENTS (2013 - 2017)

NUMBER OF ADL CATEGORIES WITH INCREASED ACUITY	FFS LTSS STATES		MLTSS STATES	
	NUMBER	PERCENTAGE	NUMBER	PERCENTAGE
0	5	18%	0	0%
1-3	10	36%	4	17%
4-6	4	14%	10	43%
7-9	9	32%	8	35%
10	0	0%	1	4%

These findings suggest that the acuity level of nursing home residents in MLTSS states is increasing at a faster rate than the acuity level of nursing home residents in FFS LTSS states. The difference may be a result of MLTSS programs more effectively providing care for highly functioning members in the community rather than in the nursing home.

Conclusions and considerations

Each state will need to consider different priorities and potential obstacles before transitioning to MLTSS. Cost-effectiveness, quality of care, provision of care in the appropriate venue, staff burden during times of member transition, impact on nursing home reimbursement, and member choice are important considerations; not all of these items are easily quantifiable. We believe an in-depth, state-specific analysis of nursing home residents can assist with part of an MLTSS transition assessment. This analysis focused on general trends in summarized data. A more detailed, state-specific analysis could examine demographic trends in more detail, study ADL impairment on a patient basis rather than an aggregate basis, analyze nursing home readmission rates, and identify holes in the state's current level of HCBS delivery.

Likewise, any MCO considering contracting with a state to offer MLTSS coverage should study the state's current level of efficiency in order to understand what level of savings is achievable. Achievable savings should be compared to nursing home transition assumptions and managed care savings built into MLTSS capitation rates.

Our review of the MDS and ACS data, as outlined in this paper, considers one objective of MLTSS: providing LTSS care in the community rather than in nursing homes. Our analysis suggests that MLTSS states are outperforming FFS LTSS states on this objective. While it is not the only indicator of success, reducing nursing home usage through the provision of home and community-based care is extremely important to the financial viability of a Medicaid LTSS program.

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