Mercer

Government Human Services Consulting

State of Connecticut Medicaid Long-Term Care Demand Projections

State of Connecticut
April 7, 2025

Contents

Section 1

Executive Summary

As part of an ongoing effort, the State of Connecticut (Connecticut, CT, or State) has been actively engaged in rebalancing their Medicaid long-term care (LTC) services from institutional nursing facility (NF) settings, toward more emphasis on home- and community-based services (HCBS) settings. In support of the State's rebalancing plan, the State has contracted with Mercer Government Human Services Consulting (Mercer), part of Mercer Health & Benefits LLC, to assist in the development of projections of the supply and demand of LTC services between 2030 and 2040.

The overarching process for developing this projection is as follows:

1. Project the population of the State by age and sex.
2. Project the proportion of the State population that is eligible for Medicaid as aged, blind, or disabled (ABD).
3. Project the proportion of the Medicaid ABD population that is designated as nursing facility level of care (NFLOC).
4. Project the proportion of the NFLOC population using HCBS services.

The HCBS/NF projection portion of the analysis was conducted at the Labor Market Area Level and aggregated at the statewide level. Projection counts are represented as average annual Medicaid recipient counts. NF projections across all payers were estimated using historical market share of Medicaid NF utilization relative to the statewide NF utilization.

This Report builds on prior analyses published intermittently between November 2012 and July 2021 with updates related to:

- Change in population projections
- Reassessment of the HCBS/NF mix target based on more recent data

Change in Population Projections

The data source utilized for the population projections was updated from projections developed by the Connecticut State Data Center based on the 2010 Census to projections developed by the Weldon Cooper Center for Public Service at the University of Virginia based on the 2020 Census. The projections developed by the Connecticut State Data Center were published on August 31, 2017, and included projections at a town level. An analogous data source rebalanced on the 2020 Census was not available at the time of this Report. As a result, statewide projections developed by the Weldon Cooper Center for Public Service at the University of Virginia are utilized in conjunction with the State's Annual Town and County Population report to complete the analysis.

A comparison between the two population projection sources is shown below.

Ages	Historical Projections based on 2010 Census			Revised Projections based on 2020 Census		
	2030	2035	2040	2030	2035	2040
0–64	2,983,779	2,992,047	3,020,867	2,826,815	2,768,322	2,717,464
65–69	195,066	181,621	166,735	229,490	200,479	175,137
70–74	151,746	148,320	136,104	204,856	192,385	180,671
75–79	120,850	128,614	125,522	156,841	166,038	175,775
80–84	93,936	97,309	103,525	114,068	127,346	142,172
85+	88,605	97,479	101,201	97,898	112,766	129,901
Total	**3,633,982**	**3,645,390**	**3,653,954**	**3,629,968**	**3,567,336**	**3,521,120**

Reassessment of the HCBS/NF Mix Target

The July 2021 statewide HCBS ratio target for 2040 was 81.5%, which was calculated using the 2018 ABD Medicaid population prevalence by demographic category. New targets were established for 2040 in response to a review of more recent population data following the Coronavirus Disease 2019 (COVID-19) public health emergency and updated population projections. The revised target for 2040 is 78.4%. Details are illustrated in Appendix C.

Comparison of Results[1]

The table below shows the change in HCBS Medicaid ABD, NF Medicaid ABD projections, and NF projections across all payers reflective of continuing the State initiatives supporting LTC rebalancing efforts, from the prior report published July 2021 to the current Report. A comparison to the prior report is not available for the NF projections across all payers as this Report represents the first time these projections are developed.

Ages	HCBS Projections — Medicaid ABD					
	Prior Report			Current Report		
	2030	2035	2040	2030	2035	2040
0–64	15,323	15,628	15,926	13,787	13,613	13,458
65+	20,714	22,519	23,569	20,386	22,180	24,250
Total	**36,037**	**38,147**	**39,495**	**34,173**	**35,793**	**37,708**

[1] Totals in the table may differ due to rounding.

Ages	NF Projections — Medicaid ABD					
	Prior Report			Current Report		
	2030	2035	2040	2030	2035	2040
0–64	832	629	478	937	806	695
65+	10,221	9,454	8,480	10,231	9,906	9,706
Total	**11,053**	**10,083**	**8,958**	**11,168**	**10,712**	**10,401**

Ages	NF Projections — All Payers					
	Prior Report			Current Report		
	2030	2035	2040	2030	2035	2040
Total	**N/A**			**15,691**	**15,054**	**14,620**

Section 2

Project Overview

As part of an ongoing effort, the State has been actively engaged in rebalancing their Medicaid LTC services from institutional NF settings, toward more emphasis on HCBS settings. In support of the State's rebalancing plan, the State has contracted with Mercer Government Human Services Consulting (Mercer), part of Mercer Health & Benefits LLC, to assist in the development of projections of the supply and demand of LTC services between 2030 and 2040. The State's goal is to enhance the awareness of setting choice among LTC consumers and LTC service providers by providing these stakeholders with relevant information as they navigate through the options available to them. The analysis presented in this Report is expected to be updated periodically as more current information becomes available.

Success in rebalancing LTC services is commonly measured by the proportion of HCBS users out of all recipients eligible for NF services; the higher the proportion, the more successful the rebalancing.

Progress Since the July 2021 Report

The State has invested a significant amount of resources toward creating an environment where Medicaid recipients with a nursing facility level of care (NFLOC) designation are aware of their options, including the option of receiving HCBS. The State aspires to be a leader at the national level in terms of providing LTC services in the home. Since the previous report (released July 2021 and using cost year 2018 cost reports), the State has seen a 3.23% increase in the ratio of HCBS users to all Long-Term Services and Supports (LTSS) users across the State (moving from 68.64% to 71.87%). Details are illustrated in Appendix A of the Long-Term Care Demand Projections Databook (Databook).

The July 2021 report contained statewide HCBS ratio targets for 2040, which were separately determined by demographic category (e.g., age, sex, and Labor Market Area), and based on levels demonstrated to be achievable by the experience in other states. The July 2021 statewide HCBS ratio target for 2040 was 81.5%, which was calculated using the 2018 aged, blind, and disabled (ABD) Medicaid population prevalence by demographic category. New targets were established for 2040 in response to a review of more recent population data following the Coronavirus Disease 2019 (COVID-19) public health emergency and an updated source of population projections. The revised target for 2040 is 78.4%. Details are illustrated in Appendix C in the Databook.

Limitations

The projections in this Report have been prepared for the Connecticut Department of Social Services (DSS). Mercer understands DSS will be making this Report publicly available. To the extent that information in this Report is made available to third parties, the entire Report should be made available. Other users of this Report and the accompanying data should have knowledge of the State's Medicaid program including, but not limited to, the State's ongoing rebalancing efforts of LTC services. This Report and accompanying data should be considered in its entirety and users of the data and projections in this Report must, in order to

avoid misinterpretation of the information, have a sufficient level of understanding and expertise in LTC services and health care modeling.

Labor Market- and town-level projections necessarily involve projections with low numbers of persons in certain projection age/sex cells. Any projection involving such low numbers is subject to significant statistical fluctuation.

The information presented in this Report includes projections of future contingent events. Not all possible contingencies are considered. For example, changes to Medicaid eligibility due to legislation or economic circumstance could have a significant effect on the number of persons who use NF or HCBS. In addition, changes in types of medical services available could alter the portion of recipients who would be eligible for NF or HCBS. Improvements in mortality beyond that anticipated in the census projections could lead to different proportions of recipients of advanced ages.

Mercer relies upon, but does not assume responsibility for, the following items that are material to this communication including, but not limited to, eligibility data from the Medicaid Management Information System (MMIS) data extract, claims from the MMIS data extract, labor market, NF, population projections data, and information supplied by the State and its vendors.

To the best of Mercer's knowledge, there are no conflicts of interest in performing this work. The suppliers of data are solely responsible for its validity and completeness. Mercer has reviewed the data and information for internal consistency and reasonableness, but Mercer did not audit it. All estimates are based upon the information available at a point in time and are subject to unforeseen and random events. Therefore, any projection must be interpreted as having a likely range of variability from the estimate. The estimates in this Report were created using data prior to, during, and following the COVID-19 pandemic. Any estimate or projection may not be used or relied upon by any other party or for any other purpose than for which it was issued by Mercer. Mercer expressly disclaims responsibility, liability, or both for any reliance on this communication by third parties or the consequences of any unauthorized use.

Section 3
Data

Mercer relied on several data sources in the development of these projections. Mercer reviewed the data for reasonability and consistency, but Mercer did not audit it. Data elements include the following listed in the table below:

Data	Source	Use
Population projections	Weldon Cooper Center for Public Service at the University of Virginia	State-level population projections by age group and sex. Starting from the 2020 Census, projections are shown for 2030, 2040, and 2050. For purposes of this analysis, 2050 projections are not used, and 2035 population projections were made assuming a constant rate of change between 2030 and 2040.
Annual Town and County Population for Connecticut	CT Department of Public Health	2023 population estimates are used to develop population projections at a Labor Market-level.
Historical Population Projections	Connecticut State Data Center at the Map and Geographic Information Center (August 2023)	Regional demographic mix variation.
Labor Market Areas	CT Department of Labor	Aggregation of towns for projections. Mercer observed no changes in this data from the prior iteration of the report.
NF Cost Reports	DSS	Information from the NFs on utilization and staffing.
NF 15-Mile Town Radius	DSS	For each town, Microsoft Structured Query Language's (MSSQL's) Geography functions were used to determine all towns within a 15-mile radius. In addition to the NFs located in that town, the count of NFs and available

Data	Source	Use
		beds for up to 10 “nearby towns” are listed in descending order by number of available beds.
CT Claims and Eligibility Data	CT Medicaid data	Classification of Medicaid recipients in the ABD aid category, NFLOC, waiver eligibility, and claims.
ZIP Code to Town Crosswalk	CT Economic Resource Center	Translate eligibility and claimant information, which did not have town of the recipient (but did have ZIP code) to town. Mercer observed no changes in this data from the prior iteration of the report.

NF cost report data is as reported for cost year 2023 (October 1, 2022 through September 30, 2023). If a NF was open in 2023 but a cost report for 2023 was not available for that NF, then the 2022 cost year report was used instead. If neither a 2022 nor a 2023 cost year report was available, or if a NF did not report any certified beds, that NF was excluded from the Appendices.

The available beds in the NF 15-mile town radius data are based on the most recent available census for each provider.

The ZIP code to town crosswalk could not distinguish all 169 towns from one another. Accordingly, the following towns are paired in Mercer’s analysis: Cornwall and Warren, Griswold and Lisbon, and Stafford and Union.

Additionally, the following towns in the NF 15-mile town radius data are mapped to larger geographic areas in the population projections. To ensure consistency throughout this Report, towns as defined in population projections are used in the Appendices.

15-Mile Radius Town	Report Town Mapping
Cobalt	East Hampton
Danielson	Killingly
Dayville	Killingly
Forestville	Bristol
Kensington	Berlin
Moodus	East Haddam
Mystic	Stonington
Niantic	East Lyme
Norwichtown	Norwich

15-Mile Radius Town	Report Town Mapping
Plantsville	Southington
Rockville	Vernon
Southport	Fairfield
Stafford Springs	Stafford-Union
Storrs	Mansfield
Uncasville	Montville
Willimantic	Windham

Section 4

NF and HCBS Definitions

Another common point of necessary clarification when examining statistics nationally or between states is how NF and HCBS are defined. The Medicaid designation of NFLOC for a Medicaid recipient means that the recipient has, according to the specific State assessments, met the conditions necessary to receive NF services. Recipients who meet NFLOC and eligibility criteria can choose to receive LTC services either in an institution or HCBS setting.

Setting of Care (either NF or HCBS) is defined in the analysis for each recipient on a month-by-month basis according to the following definitions:

Setting of Care	Definition
NF	If the *WRK_INST_TYPE_CD* field in the State's eligibility file is populated with "NH" and the enrollee used some form of NF or waiver services during the month, the person was counted as being NF for that particular month.
HCBS	For all remaining enrollees, Mercer has included unique monthly participant counts of all individuals with utilization of HCBS home health services, including adult day care, personal care assistant, or targeted case management (TCM) regardless of their level of utilization. Traditionally, the State has included TCM recipients with their HCBS participant counts, even though TCM is a State Plan service, not a waiver service.

Section 5

Labor Market Areas

There are 169 towns in Connecticut, many with relatively small populations and no NFs. Accordingly, the analysis of NFs by town needs to be augmented by analysis on aggregations of towns. Based on previous discussions with the Connecticut Department of Labor, Mercer decided to include analyses of each of the nine Connecticut Labor Market Areas. The towns that comprise the Connecticut Labor Market Areas are shown in the table in this section.

The Connecticut Labor Market Areas are based on towns that share a high degree of social and economic integration, as based on employment and related commuting. The Labor Market Area shares many characteristics with the New England City and Town Area (NECTA), which is a geographic and statistical entity defined by the United States Office of Management and Budget. The NECTA is used only for the states in the New England area of the United States; areas based on aggregations of counties are used in the other states. Each NECTA has a core urban area with at least 10,000 persons, as well as adjacent towns that have a high degree of social and economic integration with the core urban area as measured by commuting and employment. NECTAs are classified as either metropolitan NECTAs (urban core of at least 50,000 persons) or micropolitan NECTAs (urban core of at least 10,000 but less than 50,000 persons). Individual NECTAs may be comprised of towns from more than one state, but the Connecticut Labor Market Areas consist only of towns in CT.

Labor Market Area	Town	
Bridgeport-Stamford-Norwalk Area	• Ansonia • Bridgeport • Darien • Derby • Easton • Fairfield • Greenwich • Milford • Monroe • New Canaan • Newtown • Norwalk • Oxford	• Redding • Ridgefield • Seymour • Shelton • Southbury • Stamford • Stratford • Trumbull • Weston • Westport • Wilton • Woodbridge
Danbury Area	• Bethel • Bridgewater • Brookfield • Danbury	• New Fairfield • New Milford • Sherman

Labor Market Area	Town	
Enfield Area	• East Windsor • Enfield • Somers	• Suffield • Windsor Locks
Hartford-West Hartford-East Hartford Area	• Andover • Ashford • Avon • Barkhamsted • Berlin • Bloomfield • Bolton • Bristol • Burlington • Canton • Colchester • Columbia • Coventry • Cromwell • East Granby • East Haddam • East Hampton • East Hartford • Ellington • Farmington • Glastonbury • Granby • Haddam • Hartford • Hartland • Harwinton	• Hebron • Lebanon • Manchester • Mansfield • Marlborough • Middlefield • Middletown • New Britain • New Hartford • Newington • Plainville • Plymouth • Portland • Rocky Hill • Simsbury • South Windsor • Southington • Stafford-Union • Thomaston • Tolland • Vernon • West Hartford • Wethersfield • Willington • Windsor
New Haven Area	• Bethany • Branford • Cheshire • Chester • Clinton • Deep River • Durham • East Haven • Essex • Guilford • Hamden	• Killingworth • Madison • Meriden • New Haven • North Branford • North Haven • Old Saybrook • Orange • Wallingford • West Haven • Westbrook

Labor Market Area	Town	
Norwich-New London Area	• Bozrah • Canterbury • East Lyme • Franklin • Griswold-Lisbon • Groton • Ledyard • Lyme • Montville • New London	• North Stonington • Norwich • Old Lyme • Preston • Salem • Sprague • Stonington • Voluntown • Waterford
Torrington Area	• Bethlehem • Canaan • Colebrook • Cornwall-Warren • Goshen • Kent • Litchfield • Morris • Norfolk	• North Canaan • Roxbury • Salisbury • Sharon • Torrington • Washington • Winchester • Woodbury
Waterbury Area	• Beacon Falls • Middlebury • Naugatuck • Prospect	• Waterbury • Watertown • Wolcott
Willimantic-Danielson Area	• Brooklyn • Chaplin • Eastford • Hampton • Killingly • Plainfield • Pomfret	• Putnam • Scotland • Sterling • Thompson • Windham • Woodstock

Section 6

State Population Projections

Population projections used in the analysis were developed by the Weldon Cooper Center for Public Service at the University of Virginia.[2] The projections were developed at a statewide total population with age group and sex breakouts. The projections are benchmarked on the 2020 Decennial Census data with projections for 2030, 2040, and 2050. The projections and additional information, including a Methodology document, are available at: https://www.coopercenter.org/national-population-projections.

The statewide population projections are converted to estimates by Labor Market Area using the State's Annual Town and County Population report (2023 Vintage).[3] The 2023 Vintage was selected because the 2022 Vintage included known overestimations for select towns that contained large group quarter facilities.[4]

Mercer relied on the demographic case mix of the historical population projections to model Labor Market-level age demography for each projection year. Mercer developed population projection estimates for 2035 by assuming a constant annual rate of change between 2030 and 2040. These estimates are developed for comparability with prior iterations of this analysis.

[2] University of Virginia, Weldon Cooper Center for Public Service. (2024). National and 50-State Population Projections. Retrieved from https://coopercenter.org/national-population-projections.

[3] Backus, K (2024) Town-level Population Estimates for Connecticut, July 1, 2023. Connecticut Department of Public Health, Health Statistics and Surveillance, Surveillance Analysis & Reporting, Hartford, CT.

[4] Group quarter facilities include college dormitories, prisons, and nursing homes. Retrieved from https://www.ctdata.org/blog/known-errors-in-the-census-bureaus-vintage-2022-population-estimates.

Section 7
Analysis

The overarching process for developing this projection is as follows:

1. Project the population of the State by age and sex.
2. Project the proportion of the State population that is Medicaid eligible ABD.
3. Project the proportion of the Medicaid ABD population that is NFLOC.
4. Project the proportion of the NFLOC population using HCBS services.

This process was conducted at the Labor Market Area level and aggregated at the statewide level. Projection counts are represented as average annual Medicaid recipient counts. NF projections across all payers were estimated using historical market share of Medicaid NF utilization relative to the statewide NF utilization.

As previously stated, Mercer was able to utilize population projections through 2040 developed by the Weldon Cooper Center for Public Service by age and sex. Mercer assumed, by Labor Market Area, a constant ABD and NFLOC incidence rate by age and sex. As the projection goes toward 2040, the natural aging of the population leads to a higher proportion of the town population expected to be NFLOC.

As stated in the November 2012 report, the historical NF/HCBS mix in the State had been moving toward HCBS at approximately 0.50% to 0.75% per year, absent the impact of State led initiatives. Following the impact of the State led initiatives, the State has been moving toward HCBS at rates exceeding 1.5% per year. This rate has been revised downwards in this iteration of the Report to acknowledge the recent impact of the COVID-19 pandemic and diminishing impacts over time.

In Mercer's examination of the historical data, Mercer found that beginning in early 2011, there was a significant acceleration in the HCBS/NF mix as a result of the following State led initiatives:

- Money Follows the Person (MFP) Grant
- Community First Choice
- Hospital Discharge Planning
- NF Closure Model
- Value-Based Payments
- Long-Term NF Diversion

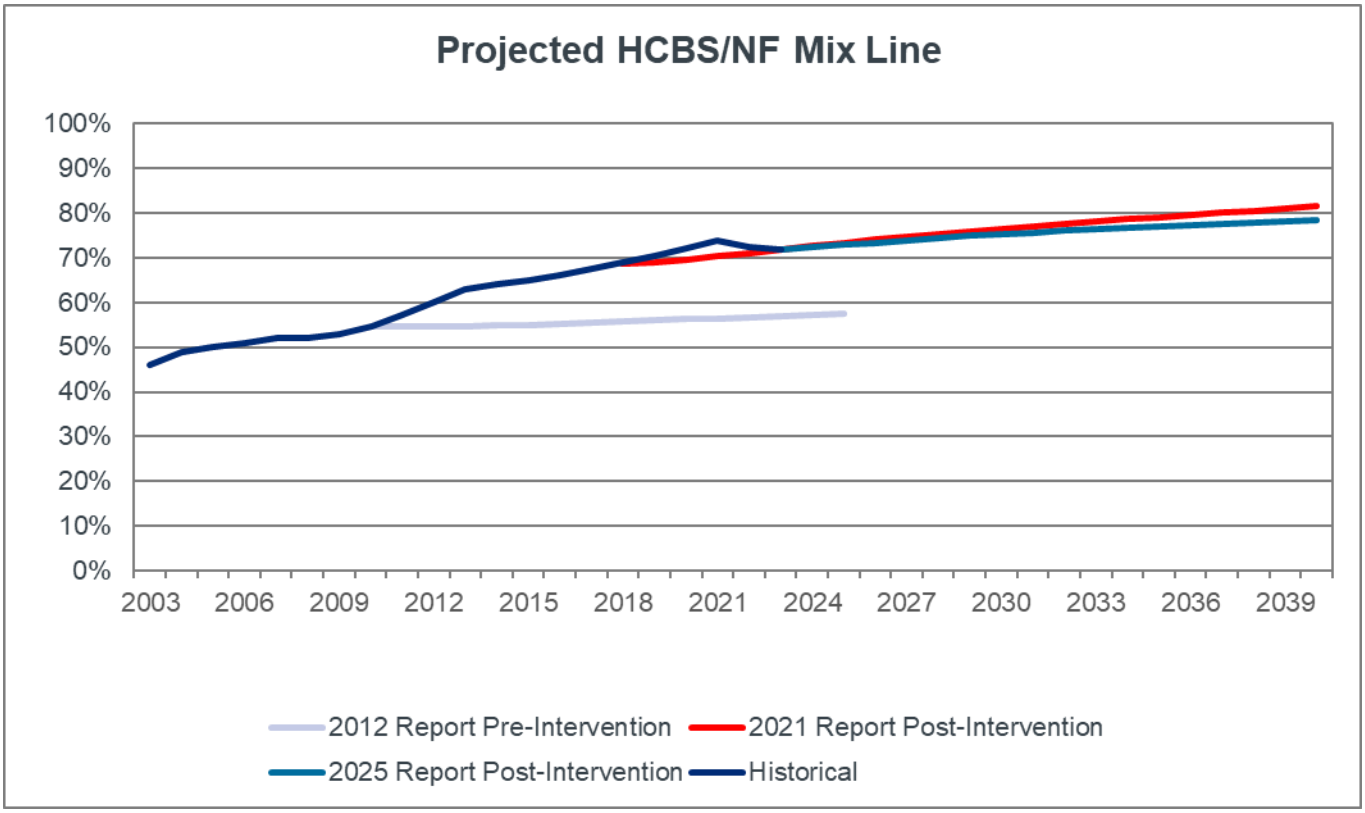
By incorporating the impact of these initiatives into modeling the projected HCBS/NF mix at the statewide level, it is expected to increase proportionately to 78.4% by the year 2040. The

final HCBS/NF mix is consistent with HCBS levels currently being achieved in other states[5]. The proportionate increases were developed at the age, sex, and Labor Market Area level.

Note: these projections of future HCBS/NF levels presume the State will continue to use current initiatives and will utilize additional initiatives in future years in order to achieve the projected 2040 HCBS levels.

Some Labor Markets, as illustrated in the Labor Market templates, were either far behind or far ahead of the statewide average. The HCBS ratios in those markets grew faster or slower than the statewide average depending on how much movement was possible, considering the starting points.

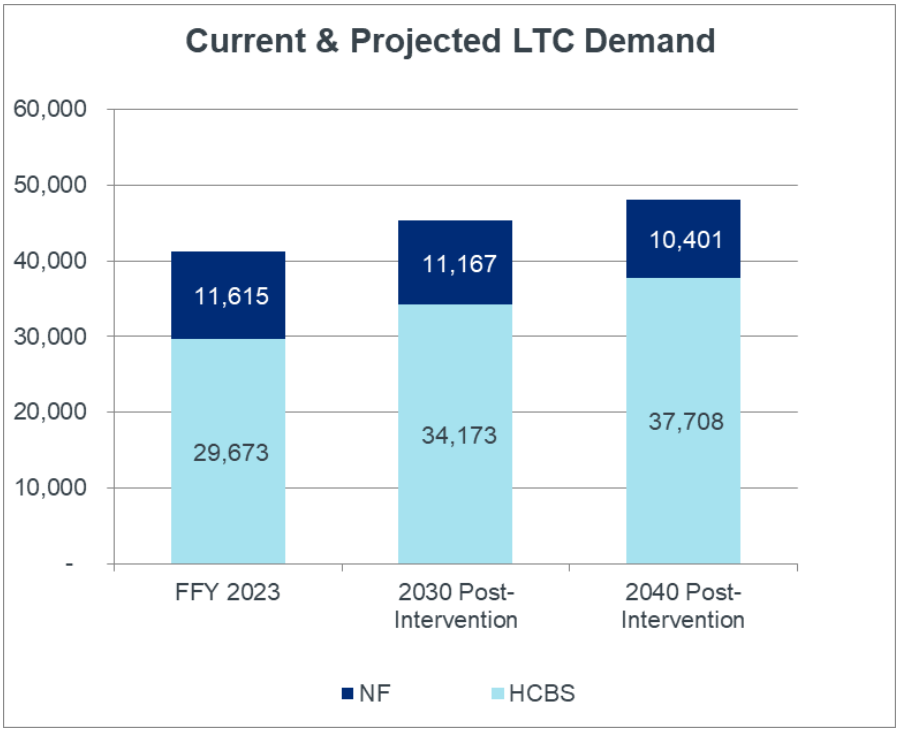
Another element of the modeling includes projecting the demand for NF and HCBS workers as this shift in HCBS/NF mix occurs. The worker supply and demand reported assume a constant proportion by Labor Market Area of HCBS/NF highlighted work groups throughout the projection. As the population ages and the number of users shifts from NF to HCBS, the worker supply and demand shifts accordingly by Labor Market Area based on the number of people expected to need care under the specific settings.

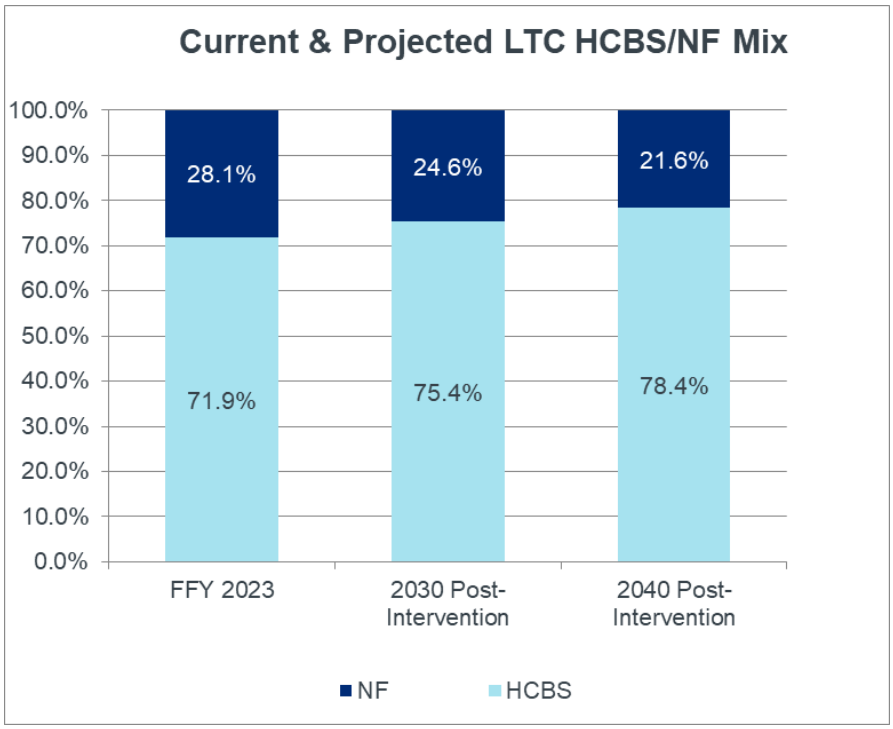


The chart above demonstrates the initial projections from the November 2012 LTC report, the actual observed mix of HCBS and NF, and the updated projections in the 2025 Report compared to the previous iteration of this analysis.

[5] Murray, Caitlin, Cara Stepanczuk, Alexandra Carpenter, and Andrea Wysocki. "Trends in Users and Expenditures for Home and Community-Based Services as a Share of Total Medicaid LTSS Users and Expenditures, 2022." Mathematica, August 29, 2024. Retrieved from https://www.medicaid.gov/medicaid/long-term-services-supports/downloads/ltss-rebalancing-brief-2022.pdf.

The charts below highlight the number of LTC users and the corresponding HCBS/NF mix post State led initiatives projected for 2030 and 2040.





Section 8

Feedback and Comments

Should you have any questions regarding the content of this Report or have suggestions on how to improve the Report during future updates, please contact the Department of Social Services, Division of Health Services, Reimbursement & Certificate of Need Unit. Feedback can be sent via email or USPS to:

con-ratesetting.dss@ct.gov

Reimbursement & Certificate of Need
Department of Social Services
55 Farmington Avenue
Hartford, CT 06105

Mercer Health & Benefits LLC
2325 East Camelback Road, Suite 600
Phoenix, AZ 85016
www.mercer-government.mercer.com