

Medicaid Long-Term Care in New York: Variation by Region and County

About the Medicaid Institute at United Hospital Fund

Established in 2005, the Medicaid Institute at United Hospital Fund provides information and analysis explaining the Medicaid program of New York State. The Medicaid Institute also develops and tests innovative ideas for improving Medicaid's program administration and service delivery. While contributing to the national discussion, the Medicaid Institute aims primarily to help New York's legislators, policymakers, health care providers, researchers, and other stakeholders make informed decisions to redesign, restructure, and rebuild the program.

About United Hospital Fund

United Hospital Fund is a health services research and philanthropic organization whose mission is to shape positive change in health care for the people of New York. We advance policies and support programs that promote high-quality, patient-centered health care services that are accessible to all. We undertake research and policy analysis to improve the financing and delivery of care in hospitals, clinics, nursing homes, and other care settings. We raise funds and give grants to examine emerging issues and stimulate innovative programs. And we work collaboratively with civic, professional, and volunteer leaders to identify and realize opportunities for change.

Medicaid Institute at United Hospital Fund

James R. Tallon, Jr. President

David A. Gould Senior Vice President for Program

Michael Birnbaum Director of Policy, Medicaid Institute

Copyright 2010 by the United Hospital Fund ISBN 1-933881-07-0



Medicaid Long-Term Care in New York: Variation by Region and County

Michael Birnbaum

DIRECTOR OF POLICY MEDICAID INSTITUTE AT UNITED HOSPITAL FUND

Elizabeth M. Patchias

HEALTH POLICY ANALYST UNITED HOSPITAL FUND

Jennifer Heffernan

HEALTH POLICY ANALYST UNITED HOSPITAL FUND

Contents

EXECUTIVE SUMMARY	iii
INTRODUCTION	1
I: DEFINING THE ANALYSIS	2
Medicaid Long-Term Care Services	2
Medicaid Beneficiaries	3
Regions of New York State	4
II: RATES OF LTC SERVICE USE BY REGION	6
III: LTC SPENDING PER RECIPIENT BY REGION	7
IV: VARIATION IN LTC SERVICE USE AND SPENDING PER RECIPIENT BY COUNTY	7
Skilled Nursing Facilities	12
Home Health Services	12
Personal Care	12
V: POTENTIAL EXPLANATIONS FOR VARIATION	13
Demographics	13
Price of LTC Services	14
LTC Delivery Systems	15
Local Administration	16
VI: IMPLICATIONS OF VARIATION FOR MEDICAID POLICY AND ADMINISTRATION	17
APPENDIX: COUNTY-LEVEL ANALYSIS	18

Executive Summary

Long-term care (LTC) services and supports for frail elderly and physically disabled low-income New Yorkers accounted for \$13.6 billion in Medicaid spending in 2009—more than total annual Medicaid spending in all but four other states. New York's Medicaid program faces substantial and intersecting challenges related to long-term care. For decades the state has prioritized ensuring access to essential long-term care services for its most vulnerable elderly and disabled beneficiaries. Recently, against the backdrop of substantial state budget deficits, the state has advanced an agenda to become a more discerning purchaser of Medicaid LTC services.

This report analyzes rates of service use and levels of spending per recipient across New York; documents variation among five regions (New York City, Long Island, Westchester/ Rockland, Upstate Urban, and Upstate Rural) and by county; and considers several factors that may affect these rates and variations. Its goal is to advance discussions on Medicaid LTC policy, service delivery, and administration in New York State, and to inform policymakers now wrestling with questions of how to provide vital Medicaid services most effectively and efficiently.

Rates of Service Use by Region

Across New York State, the shares of Medicaid beneficiaries within each enrollment category who received an LTC service during a one-year period were remarkably consistent, with one notable exception: among elderly dual Medicare-Medicaid enrollees (elderly duals), a smaller share of beneficiaries in New York City (41 percent) used an LTC service compared to those in the other four regions (47 to 50 percent). However, for elderly duals—the enrollment category that contains the highest rates of LTC service use and costs—small variation in overall LTC service use masks dramatic variation in rates of service use for different LTC services. For example:

- One-sixth (16 percent) of elderly duals in New York City used nursing home services at some point in the year; in all other regions of the state, twice as many—one-third or more—relied on nursing homes.
- One-quarter (25 percent) of elderly duals in New York City used home health services, compared to a range of 16 to 21 percent in other regions.
- Eighteen percent of elderly duals in New York City used personal care, compared to a range of 7 percent (Upstate Urban) to 13 percent (Westchester/Rockland) in other regions.

Levels of Spending per Recipient by Region

Overall, Medicaid spending per recipient of LTC services was consistently higher in the three downstate regions—New York City, Long Island, and Westchester/Rockland—than in the two upstate regions. Among elderly duals, Medicaid spending per LTC recipient was highest in the Long Island region (\$43,002), followed by Westchester/Rockland (\$40,586) and then New York City (\$35,594). Compared to New York City, spending on Long Island was 21 percent higher and spending in Westchester/Rockland was 14 percent higher. The variation in spending between Long Island and the low-spending Upstate Rural region (\$26,124) was 64 percent.

Spending per recipient for the different services varied much more than overall spending on LTC. For example:

- Medicaid spending per recipient of nursing home services was highest on Long Island, followed by the other two downstate regions, within each enrollment category. For elderly duals, spending per recipient was 51 percent higher on Long Island (\$53,282) than in the Upstate Rural region (\$35,230).
- Medicaid spending per recipient of home health services was highest in New York City within each enrollment category. Elderly duals in New York City receiving home health services (\$7,612) accounted for, on average, nearly four times the spending (292 percent more) of their counterparts in the Upstate Rural region (\$1,944).
- Medicaid spending per recipient of personal care was highest in New York City and lowest in the Upstate Rural region within each enrollment category. Elderly duals in New York City who received personal care (\$26,804) accounted for, on average, three-and-a-half times as much (256 percent more) Medicaid spending as their counterparts in the Upstate Rural region (\$7,537). Elderly duals on Long Island (\$20,253) accounted for more than two-and-a-half times as much (157 percent more) spending as their counterparts in the upstate Urban Region (\$7,878).

Service Use and Spending per Recipient by County

The greatest variation in the share of elderly duals using any LTC service during the year, between any two counties statewide, was 38 percent: beneficiaries in Orange (56 percent) were most likely and beneficiaries in Rockland (41 percent) were least likely to use LTC services. This finding is notable for two reasons: first, a maximum variation of 38 percent among 58 local districts is surprisingly low; second, Rockland and Orange are neighboring counties. The greatest variation in spending per LTC recipient was 127 percent, with those in Nassau (\$43,243) accounting for more than twice the spending of their counterparts in Cayuga (\$19,055). However, compared to variation in overall LTC service use and spending per recipient, variation for individual LTC services was considerably greater.

For example:

- Beneficiaries in Livingston (44 percent) were 170 percent more likely than those in New York City (16 percent) to use nursing home services.
- Recipients of nursing home services in Nassau (\$54,400) accounted for 92 percent more spending than their counterparts in Allegany (\$28,406).
- Beneficiaries in Franklin (34 percent) were nearly three times more likely to receive home health services in a given year than their counterparts in Tioga (12 percent).
- Recipients of home health services in Monroe (\$8,157) accounted for more than 21 times as much spending as their counterparts in Chenango (\$384).
- Beneficiaries in Franklin (19 percent) were more than 11 times as likely to receive personal care services as their counterparts in Madison (1.7 percent).
- Recipients of personal care in New York City (\$26,804) accounted for more than 15 times as much spending as their counterparts in Herkimer (\$1,713).

Collectively, this report's findings indicate that, on a regional level, there is a reciprocal relationship between residential care provided in nursing homes and community-based services provided through home health and personal care. As a result, relatively consistent overall rates of LTC service use co-exist with significant variation in the rates of utilization for each individual service, both by region and by county. The report's findings also indicate that, on a county level, there is little consistency in the application of LTC policy across the state.

Potential Causes of Variation and Implications for Medicaid

There is no evidence to suggest that regional differences in the demographic characteristics of elderly and disabled beneficiaries are driving the dramatic levels of variation in rates of service use and spending per recipient for Medicaid LTC services. Nor do regional differences in the price Medicaid pays for long-term care services play a major role in explaining dramatic levels of variation in home health and personal care spending per recipient. Factors likely to explain more of the dramatic variation in LTC service use and spending within New York's Medicaid program include regional differences in the characteristics of LTC service delivery systems and differences in Medicaid administration at the local district level.

New York's Medicaid program faces the considerable challenge of balancing two competing policy priorities: maintaining access to long-term care services for vulnerable beneficiaries despite ongoing budgetary constraints, and containing spending and cost growth. Addressing this major Medicaid LTC challenge will require informed decisions about policy, service delivery, and administration. To address this challenge, New York's policymakers must reach a clearer and more consistent understanding of what it means for Medicaid to purchase the right combinations and amounts of long-term care services, and to deliver them to the right beneficiaries in the right settings.

Introduction

Mainstream long-term care (LTC) services and supports for frail elderly and physically disabled low-income New Yorkers accounted for \$13.6 billion in Medicaid spending in 2009.\(^1\) This figure, which does not include specialized services for individuals with developmental disabilities and mental illness, represents 28 percent of overall program costs in New York. It exceeds total annual Medicaid spending in all but four other states.\(^2\)

New York's Medicaid program faces substantial and intersecting challenges related to long-term care. For decades the state has prioritized ensuring access to essential long-term care services for its most vulnerable elderly and disabled beneficiaries. New York has long been regarded as a national leader in providing services in the home as an alternative to residential care, a policy consistent with the requirements set forth in the Supreme Court's Olmstead decision under the Americans with Disabilities Act of 1990.³

The state has recently advanced an agenda to become a more discerning purchaser of Medicaid services—an agenda that began with acute care services and is now focusing on long-term care settings as well. This policy imperative is framed by the ethos of "doing more with less" in Medicaid. It will require pursuing increased Medicaid enrollment and better integration of acute care and long-term care services under federal health reform, against the backdrop of substantial state budget deficits.

While in some ways the state's challenges in long-term care are similar to those Medicaid and other purchasers face in acute care—balancing access, quality, and cost containment, as well as achieving higher performance from the delivery system—in some ways they are greater. There are no generally accepted frameworks and standards (defined by the federal government or by independent leadership organizations) that the state can rely on to help define the types and amounts of long-term care services required by individuals in need. Moreover, because many of its most complex and costly Medicaid long-term care recipients also have Medicare coverage, the state faces additional constraints in pursuing the integration of service delivery for these individuals. Through Medicare, the federal government retains control over duals' use of acute care services; it therefore influences beneficiaries' pathways into LTC as well.

¹ United Hospital Fund (UHF) analysis of Centers for Medicare and Medicaid Services (CMS) Financial Management Reports (Form 64), and New York State Department of Health (NYSDOH) MARS 72 data. Unless otherwise stated, years refer to federal fiscal years.

² UHF analysis of CMS Form 64.

³ See Olmstead v. L.C., 527 U.S. 581 (1999).

Medicaid spending on long-term care varies widely between New York City and the rest of the state. Spending in New York City accounts for 66 percent of mainstream long-term care spending statewide, a level somewhat higher than the city's share of all elderly and disabled Medicaid beneficiaries in the state (58 percent). The component parts of this spending vary even more widely: compared to its overall share of costs, New York City is home to a significantly lower share of nursing home spending (52 percent), and significantly higher shares of spending on home health services (80 percent) and personal care (84 percent).

These aggregate statistics—which appear frequently in ongoing discussions of Medicaid LTC—have significant limitations. They consist of several component parts and they reflect multiple overlapping patterns. They lead to oversimplified conclusions about LTC service use and spending in New York City, and they reveal nothing about differences among the remaining regions and 57 counties of the state.

To reach a more complete and detailed understanding of Medicaid LTC in New York, this report analyzes rates of service use and levels of spending per recipient across the state; documents variation by region and by county; and considers several factors that may affect these rates and variations. Its goal is to advance discussions on Medicaid LTC policy, service delivery, and administration in New York State, and to inform policymakers now wrestling with questions of how to provide vital Medicaid services most effectively and efficiently.

I. Defining the Analysis

This analysis of regional and county variation in mainstream long-term care service use and spending under Medicaid relies on person-level Medicaid Statistical Information System (MSIS) data from federal fiscal year (FFY) 2005, made available under a data exchange agreement with the Centers for Medicare and Medicaid Services (CMS), with the Urban Institute providing programming and analytic support. Below are definitions and descriptions of the long-term care services, beneficiaries, and regions that underpin this analysis.

Medicaid Long-Term Care Services

Mainstream long-term care encompasses many services and supports.⁴ We focused on the three services that together accounted for \$12.1 billion in 2009, or about 90 percent of mainstream long-term care spending: services provided by skilled nursing facilities (\$7.6 billion), home health services (\$1.8 billion), and personal care (\$2.7 billion).⁵

⁴ Hokenstad A, M Shineman, and R Auerbach. April 2009. *An Overview of Medicaid Long-Term Care Programs in New York*. New York: United Hospital Fund.

⁵ In 2005, the year on which our analysis focuses, skilled nursing facilities (\$6.9 billion), home health services (\$1.3 billion), and personal care (\$2.4 billion) accounted for a combined \$10.7 billion in Medicaid spending in New York. (These components do not sum to the total due to rounding.)

- Skilled nursing facilities (SNFs or nursing homes) provide skilled nursing care, rehabilitation services, and related care and support for persons with disabilities and major injuries. A small minority of the services SNFs provide are non-resident services, such as adult day care. In 2005—the most recent year for which detailed person-level data are available for this analysis— 146,000 of New York's Medicaid beneficiaries received care in nursing homes.
- Home health services encompass post-acute and long-term care provided by a certified home health agency (CHHA)—including visits by a registered nurse or a home health aide; medical supplies and equipment; physical, speech, and occupational therapy; and medical social work services. They also encompass additional services provided under New York's Long-Term Home Health Care Program (LTHHCP)—including respiratory therapy, nutrition and dietary services, and social day care. In 2005, 245,000 of New York's Medicaid beneficiaries received home health services, although many of these beneficiaries had only a single home health visit provided as an assessment for personal care services.
- Personal care services include hands-on assistance with activities of daily living (ADLs), such as feeding, bathing, and dressing; and instrumental activities of daily living (IADLs), such as shopping, housekeeping, and paying bills. In 2005, 102,000 of New York's Medicaid beneficiaries received personal care—including both traditional personal care services, which are provided by a licensed agency paid directly by Medicaid; and consumer-directed personal care services, which are provided by a direct-care worker who is hired and supervised directly by the Medicaid beneficiary or a surrogate.

In our analysis, the overall shares of beneficiaries using any of the three LTC services was adjusted so as not to double-count beneficiaries relying on more than one service over the course of the year. For this reason, the utilization rates for each LTC service do not sum to the overall share of beneficiaries using any of the LTC services. Similarly, average spending per user of any LTC service was calculated independently of average spending per user for each of the three services.

Medicaid Beneficiaries

This analysis focused on elderly and disabled Medicaid beneficiaries—groups that account for nearly all long-term care service use and spending. To ensure consistent comparisons, we divided elderly and disabled beneficiaries into two cohorts: those with dual Medicare-Medicaid eligibility (duals) and those without Medicare coverage (non-duals). We then excluded elderly non-duals from the analysis because their numbers were low overall, and very low outside New York City. Because both Medicaid eligibility categories and Medicare enrollment status can change over the course of the year, we used the following hierarchy to define enrollment categories: beneficiaries who were 65 or older for any part of the year were counted as elderly; beneficiaries with any form of Medicare coverage for any part of the

year were counted as duals. The three groups of Medicaid beneficiaries that were the subjects of this analysis are:

- Elderly duals (seniors with some Medicare coverage)
- Disabled duals (nonelderly, disabled beneficiaries with some Medicare coverage)
- Disabled non-duals (nonelderly, disabled beneficiaries with no Medicare coverage)

Regions of New York State

In addition to comparing individual counties, we defined five regions within New York State for the purposes of comparison. Reflecting the available data, all regions are aggregations of counties. Two regions, New York City and Long Island, defined themselves by their component counties (or boroughs). A third region, covering the northern suburbs of New York City, included Westchester and Rockland Counties. The fourth and fifth regions covered upstate urban counties and upstate rural counties, respectively.

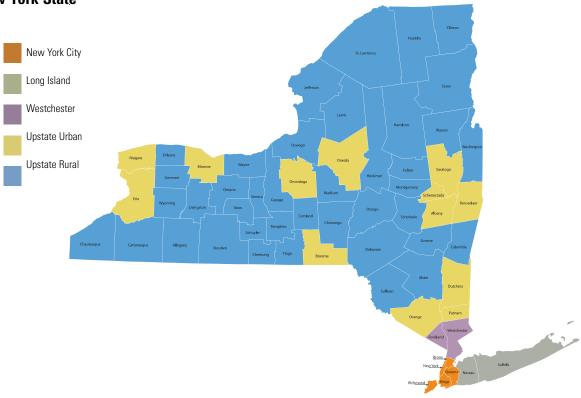
In order to separate the upstate population centers from the upstate rural areas, we used as our starting point New York State law, which defines "rural areas" as counties with a population of 200,000 or less and towns with a population density no greater than 150 persons per square mile. First, we assigned all upstate counties with a population greater than 200,000—Albany, Saratoga, Erie, Niagara, Monroe, Onondaga, Broome, Dutchess, Oneida, and Orange—to the "Upstate Urban" region, which by design included suburban as well as urban areas. Second, we analyzed population densities in the remaining counties (those with populations below 200,000) and assigned the three with the highest population densities—Schenectady, Rensselaer, and Putnam—to the "Upstate Urban" region. These three counties have population densities above 225 persons per square mile, which we adopted as a revised threshold because the 150-person threshold left too many counties in this region with far lower population densities than the upstate urban centers.

For the purpose of this analysis, we defined the regions of New York State as follows:

- New York City: the five boroughs of Manhattan (New York County), Brooklyn (Kings County), Queens, the Bronx, and Staten Island (Richmond County).
- Long Island: Nassau and Suffolk.
- Westchester/Rockland: Westchester and Rockland.
- Upstate Urban: Albany, Broome, Dutchess, Erie, Monroe, Niagara, Oneida, Onondaga, Orange, Putnam, Rensselaer, Saratoga, and Schenectady.
- Upstate Rural: Allegany, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Montgomery, Ontario, Orleans, Oswego, Otsego, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Wyoming, and Yates.

⁶ New York State Executive Law 481.7.

Figure 1. **Regions of New York State**



Medicaid beneficiaries were assigned to regions based on their county of residence upon enrollment in Medicaid.

Table 1. **Medicaid Beneficiaries by Category and Region (in thousands)**

	New York State	New York City	Long Island	Westchester/ Rockland	Upstate Urban	Upstate Rural
Elderly Duals	495	310	38	21	72	53
Disabled Duals	208	89	21	9	52	37
Disabled Non-Duals	400	243	24	13	74	46

Note: Enrollment by regions may not sum to statewide total due to rounding.

Focusing on these services and beneficiaries, and using these regions, we analyzed the shares of Medicaid beneficiaries that used each service, by region; the cost to Medicaid of serving each recipient, by region; Medicaid service use and spending at the county level, including within regions; potential reasons for regional and county variation; and implications for Medicaid policy and administration.7

⁷ Rates of service use for different services cannot be added together, because they are not unduplicated counts.

II. Rates of LTC Service Use by Region

Across New York State, the shares of Medicaid beneficiaries in each enrollment category who received an LTC service during a one-year period were remarkably consistent—with one notable exception. Among elderly duals—the enrollment category with the highest rates of LTC service use and costs—a smaller share of beneficiaries in New York City (41 percent) used an LTC service than those in the other four regions (47 to 50 percent). Elderly duals in the Upstate Urban region were 22 percent more likely to use an LTC service over the course of a year than their counterparts in New York City. Among nonelderly disabled beneficiaries, the share using LTC was remarkably uniform: it ranged from 21 to 22 percent for disabled duals and from 15 to 17 percent for disabled non-duals.

However, for elderly duals, small variation in overall LTC service use masked dramatic variation in rates of use for individual LTC services. One-sixth (16 percent) of elderly duals in New York City used nursing home services at some point in the year; in all other regions of the state, twice as many—one-third or more—relied on nursing homes. One-quarter (25 percent) of elderly duals in New York City used home health services, compared to a range of 16 to 21 percent in other regions. Eighteen percent of elderly duals in New York City used personal care, compared to a range of 7 percent (Upstate Urban) to 13 percent (Westchester/Rockland) in other regions.

	New York City	Long Island	Westchester/ Rockland	Upstate Urban	Upstate Rural
Elderly Duals					
Any LTC	41%	47%	48%	50%	49%
Nursing Facility	16%	33%	33%	37%	33%
Home Health	25%	16%	21%	16%	19%
Personal Care	18%	11%	13%	7%	10%
Disabled Duals					
Any LTC	22%	22%	22%	21%	22%
Nursing Facility	6%	7%	8%	5%	4%
Home Health	16%	15%	17%	17%	18%
Personal Care	7%	4%	6%	4%	5%
Disabled Non-Duals					
Any LTC	17%	16%	16%	15%	16%
Nursing Facility	4%	3%	4%	2%	2%
Home Health	12%	12%	13%	13%	14%
Personal Care	4%	3%	5%	3%	4%

The shares of disabled Medicaid beneficiaries relying on each LTC service was generally much more consistent across regions, and rates of service use were significantly lower than for elderly duals. For disabled duals, rates of nursing home use ranged from 4 percent in the Upstate Rural region to 8 percent in Westchester/Rockland. Use of home health services was relatively consistent from region to region, varying between 15 and 18 percent. Use of personal care was higher in New York City (7 percent) than in the other regions (4 to 6 percent). For disabled non-duals, the five regions looked even more similar.

III. LTC Spending per Recipient by Region

Overall, Medicaid spending per recipient of LTC services was consistently higher in the three downstate regions-New York City, Long Island, and Westchester/Rockland-than in the two upstate regions. Among elderly duals, Medicaid spending per LTC recipient was highest on Long Island (\$43,002), followed by Westchester/Rockland (\$40,586) and New York City (\$35,594). Compared to New York City, spending on Long Island was 21 percent higher and spending in Westchester/Rockland was 14 percent higher. The variation in spending between Long Island and the low-spending Upstate Rural region (\$26,124) was 64 percent.

For nonelderly disabled beneficiaries, both duals and non-duals, spending was highest in New York City, followed by Long Island and Westchester/Rockland. The differences in spending for nonelderly disabled beneficiaries among the three downstate regions were smaller than differences in spending for elderly duals in the same part of the state. However, differences in spending between the downstate and the upstate regions were greater. Relative to the low-spending Upstate Rural region, spending per recipient in New York City was 158 percent higher among disabled duals and 209 percent higher among disabled non-duals.

As was the case for rates of LTC service use, spending per recipient for the individual LTC services varied much more than overall spending on LTC. Because the available data did not allow us to disaggregate the volume and the price of the services delivered, this analysis does not divide variation in Medicaid spending per recipient of each long-term care service into differences in the price per unit of service and differences in the volume of services delivered; however, we consider this issue later in the report.

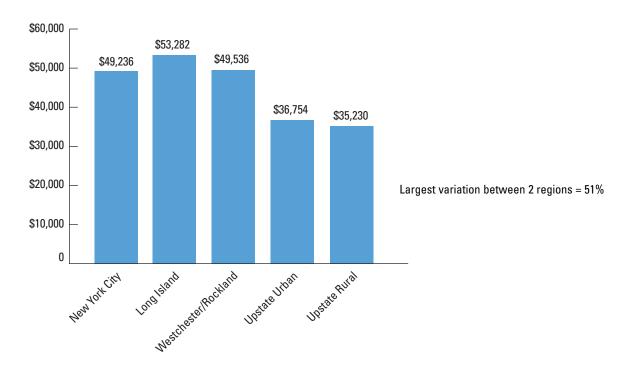
	New York City	Long Island	Westchester/ Rockland	Upstate Urban	Upstate Rural
Elderly Duals					
Any LTC	\$35,594	\$43,002	\$40,586	\$29,531	\$26,124
Nursing Facility	\$49,236	\$53,282	\$49,536	\$36,754	\$35,230
Home Health	\$7,612	\$2,705	\$4,474	\$3,238	\$1,944
Personal Care	\$26,804	\$20,253	\$18,717	\$7,878	\$7,537
Disabled Duals					
Any LTC	\$25,942	\$24.067	\$23,787	\$12,697	\$10,045
Nursing Facility	\$47,592	\$53,331	\$44,687	\$33,942	\$32,862
Home Health	\$6,926	\$2,978	\$3,557	\$2.819	\$1,929
Personal Care	\$27,074	\$23,852	\$19,712	\$11,418	\$9,349
Disabled Non-Dual	 S				
Any LTC	\$23,920	\$20,934	\$19,298	\$10,445	\$7,742
Nursing Facility	\$54,337	\$58,380	\$46,115	\$36,275	\$32,574
Home Health	\$5,909	\$4,347	\$3,282	\$2,875	\$2,224
Personal Care	\$23,892	\$22,323	\$17,988	\$12,597	\$3,028

Skilled Nursing Facilities

Medicaid spending per recipient of nursing home services was highest on Long Island, followed closely by the other two downstate regions, with the spending levels varying within 8 percent for elderly duals and by no more than 27 percent for nonelderly disabled beneficiaries. Spending per recipient was lowest in the Upstate Rural region, and no more than 11 percent higher in the Upstate Urban region. For nursing home spending per recipient, the greatest variation was between downstate and upstate. For elderly duals, spending per recipient was 51 percent higher on Long Island (\$53,282) than in the Upstate Rural region (\$35,230). For nonelderly disabled beneficiaries, the level of variation was marginally greater.

Figure 2.

Medicaid Spending per Recipient (Elderly Duals), by Region: Nursing Homes

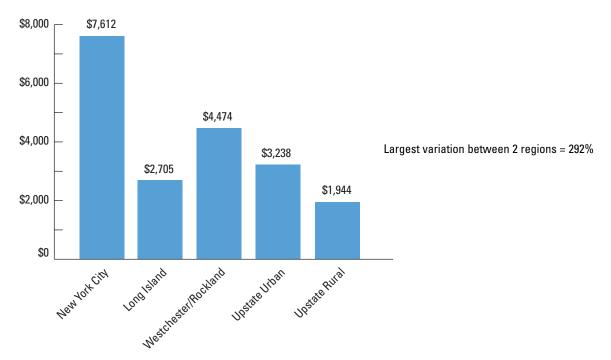


Home Health Services

In all three enrollment categories, Medicaid spending per recipient of home health services was highest in New York City and lowest in the Upstate Rural region; the level of variation was dramatic. Elderly duals in New York City receiving home health services (\$7,612) on average accounted for nearly four times the spending (292 percent more) of their counterparts in the Upstate Rural region (\$1,944).

Home health service spending per recipient did not follow a two-tier pattern between upstate and downstate regions the way nursing home spending did. Elderly duals in Westchester/Rockland who received home health services (\$4,474) accounted for 65 percent more Medicaid spending than their counterparts on Long Island (\$2,705), though neither was the highest- or lowest-spending region. Spending per elderly dual on Long Island was higher than in the Upstate Rural region, but lower than in the Upstate Urban region.

Figure 3. Medicaid Spending per Recipient (Elderly Duals), by Region: Home Health



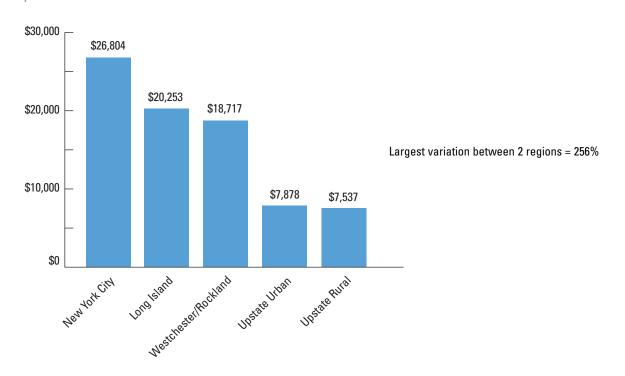
Personal Care

In all three enrollment categories, Medicaid spending per recipient of personal care was highest in New York City and lowest in the Upstate Rural region. As was the case with home health spending, variation between the highest- and lowest-spending regions was dramatic. Elderly duals in New York City who received personal care accounted for, on average, three-and-a-half times as much Medicaid spending as their counterparts in the Upstate Rural region (256 percent more).

Like nursing home spending, personal care spending followed a clear regional progression, with downstate regions accounting for higher levels of spending. New York City was followed, in order, by Long Island, Westchester/Rockland, and the Upstate Urban region. But there were substantial differences within the distribution. For example, elderly duals in New York City receiving personal care accounted for 43 percent more Medicaid spending than their counterparts in Westchester/Rockland, while those in Westchester/Rockland accounted for 138 percent more than their Upstate Urban counterparts.

Figure 4.

Medicaid Spending per Recipient (Elderly Duals), by Region: Personal Care



IV. Variation in LTC Service Use and Spending per Recipient by County

To illustrate variation at the local level, we focused on elderly duals in this component of our analysis. We chose elderly duals (instead of disabled duals or disabled non-duals) for three reasons: this cohort was the largest, it had the highest rates of LTC service use, and it showed significantly more variation in service use and spending than the other two enrollment categories.

The greatest variation in the share of elderly duals using any LTC service during the year, between any two counties statewide, was 38 percent: beneficiaries in Orange (56 percent) were most likely and beneficiaries in Rockland (41 percent) were least likely to use LTC services. This finding is notable for two reasons: first, a maximum variation of 38 percent among 58 local districts is surprisingly low; second, Rockland and Orange are neighboring counties. The greatest variation in spending per LTC recipient was 127 percent, with those in Nassau (\$43,243) accounting for more than twice as much spending as their counterparts in Cayuga (\$19,055). However, compared to variation in overall LTC service use and spending per recipient, variation for the individual LTC services was considerably greater.

Table 4. Rates of Long-Term Care Service Use and Spending per Recipient (Elderly Duals)

Rates of Service Use				Spending per Recipient				
	Any LTC	Nursing Facility	Home Health	Personal Care	Any LTC	Nursing Facility	Home Health	Personal Care
New York City	41%	16%	25%	18%	\$35,594	\$49,236	\$7,612	\$26,804
Long Island								
Nassau	46%	30%	17%	14%	\$43,243	\$54,400	\$2,175	\$23,305
Suffolk	48%	36%	15%	8%	\$42,775	\$52,373	\$3,281	\$14,857
Westchester/Roc								
Rockland	41%	28%	22%	9%	\$38,618	\$50,603	\$5,030	\$15,084
Westchester	50%	34%	18%	14%	\$41,068	\$49,275	\$2,216	\$19,440
Upstate Urban								
Albany	52%	40%	20%	11%	\$24,345	\$35,935	\$3,128	\$7,625
Broome	51%	38%	15%	12%	\$31,100	\$31,594	\$1,333	\$4,238
Dutchess	47%	39%	15%	10%	\$31,172	\$43,106	\$1,839	\$9,266
Erie	54%	33%	15%	6%	\$29,231	\$35,223	\$2,320	\$7,909
Monroe Niagara	49% 49%	37% 43%	19% 15%	3% 6%	\$30,574 \$30,346	\$38,247 \$33,763	\$8,157 \$1,794	\$7,739 \$5,955
Oneida	49% 52%	45% 39%		6%			\$1,794 \$939	
Onendaga	52% 52%	38%	13% 16%	6%	\$35,087 \$30,608	\$32,991 \$38,508	\$2,041	\$5,219 \$5,502
Orange	56%	34%	20%	11%	\$38,417	\$39,060	\$1,597	\$12,849
Putnam	51%	41%	20%	9%	\$31,250	\$45,581	\$6,603	\$21,229
Rensselaer	49%	40%	14%	8%	\$26,611	\$37,775	\$2,637	\$6,557
Saratoga	45%	37%	18%	5%	\$27,772	\$37,144	\$2,531	\$11,294
Schenectady	53%	39%	14%	7%	\$28,433	\$38,712	\$2,586	\$7,005
					, ,, ,,		. , ,	. , , , , , , , , , , , , , , , , , , ,
Upstate Rural Allegany	46%	30%	21%	11%	\$24,129	\$28,406	\$1,524	\$4,390
• ,	52%	35%	18%	9%			\$1,024 \$1,069	
Cattaraugus Cayuga	52% 53%	39%	17%	6%	\$24,297 \$19,055	\$31,757 \$31,227	\$1,069 \$1,154	\$4,672 \$5,477
Chautauqua	53%	30%	15%	10%	\$19,033	\$34,504	\$2,029	\$4,549
Chemung	48%	34%	13%	10%	\$24,327	\$37,867	\$2,023 \$1,111	\$4,456
Chenango	50%	33%	15%	8%	\$24,538	\$38,014	\$384	\$3,462
Clinton	44%	27%	23%	11%	\$24,697	\$31,365	\$3,103	\$7,051
Columbia	52%	35%	15%	6%	\$24,824	\$40,482	\$2,847	\$7,900
Cortland	44%	33%	24%	11%	\$24,975	\$34,811	\$3,995	\$4,441
Delaware	45%	28%	20%	11%	\$25,208	\$36,406	\$1,383	\$3,632
Essex	49%	31%	21%	10%	\$25,551	\$39,943	\$1,217	\$3,822
Franklin	49%	25%	34%	19%	\$25,624	\$30,885	\$2,131	\$8,604
Fulton	51%	29%	19%	12%	\$26,068	\$32,592	\$2,466	\$9,041
Genesee	48%	43%	13%	8%	\$19,427	\$37,590	\$1,847	\$5,472
Greene	45%	32%	16%	9%	\$26,069	\$34,822	\$1,541	\$5,417
Hamilton	50%	29%	22%	16%	\$26,264	\$38,740	\$1,611	\$4,493
Herkimer	47%	38%	14%	9%	\$26,485	\$32,768	\$503	\$1,713
Jefferson	48%	30%	21%	10%	\$27,438	\$34,290	\$3,209	\$5,829
Lewis	51%	27%	24%	13%	\$27,445	\$35,408	\$1,170	\$4,533
Livingston	53%	44%	14%	4%	\$21,154	\$35,042	\$1,279	\$3,829
Madison	46%	38%	18%	2%	\$21,250	\$35,219	\$2,186	\$6,735
Montgomery	46%	30%	21%	14%	\$22,148	\$40,804	\$3,243	\$5,922
Ontario	44%	41%	17%	6%	\$23,091	\$39,592	\$4,087	\$7,110
Orleans	50%	32%	15%	4%	\$23,240	\$29,673	\$3,157	\$2,282
Oswego	45%	39%	18%	10%	\$23,825	\$31,667	\$1,698	\$3,960
Otsego	45%	35%	14%	6%	\$28,148	\$36,372	\$819	\$6,211
Schoharie	45%	28% 30%	19%	10% 8%	\$23,945	\$34,345	\$1,137	\$9,143
Schuyler Seneca	49% 47%	30% 40%	20%	4%	\$28,326	\$41,708	\$1,011 \$3,079	\$18,023
St. Lawrence	47% 51%	40% 31%	15% 25%	4% 18%	\$28,417 \$28,518	\$35,096 \$29,202	\$3,079 \$1,926	\$7,108 \$10,383
Steuben	49%	32%	16%	4%	\$28,887	\$35,119	\$997	\$3,744
Sullivan	48%	32%	21%	10%	\$29,304	\$45,202	\$1,547	\$11,965
Tioga	53%	35%	12%	5%	\$29,466	\$30,662	\$1,547 \$850	\$2,574
Tompkins	49%	34%	21%	15%	\$30,364	\$35,002	\$1,010	\$5,727
Ulster	54%	34%	24%	15%	\$30,737	\$40,939	\$1,835	\$19,233
Warren	48%	33%	22%	12%	\$30,737	\$32,461	\$1,864	\$10,322
Washington	55%	37%	18%	7%	\$31,986	\$32,085	\$2,664	\$5,485
Wayne	54%	36%	13%	7%	\$24,071	\$36,697	\$2,599	\$4,837
Wyoming	54%	39%	15%	7%	\$32,468	\$37,624	\$941	\$2,497
Yates	48%	34%	24%	5%	\$33,608	\$36,404	\$1,954	\$6,930

Skilled Nursing Facilities

County-level variation in nursing home service use and levels of spending per recipient was mostly incremental. The greatest variation in the share of elderly duals using nursing home services during the year, between any two counties statewide, was 170 percent—with beneficiaries in Livingston (44 percent) most likely and those in New York City (16 percent) least likely to use these services. Excluding New York City, the maximum variation among 57 counties was 73 percent, between Livingston and Franklin (25 percent).

The greatest variation in Medicaid spending per elderly dual receiving nursing home services was 92 percent, with Nassau (\$54,400) accounting for the highest level and Allegany (\$28,406) accounting for the lowest.

Home Health Services

For home health services, variation in service use was slightly greater. The largest variation in the share of beneficiaries using home health services, between any two counties, was 179 percent, with those in Franklin (34 percent) nearly three times as likely to receive services in a given year as their counterparts in Tioga (12 percent).

Variation in spending per recipient of home health services was dramatic. The greatest variation in home health spending was 2,025 percent, with home health recipients in Monroe (\$8,157) accounting for more than 21 times as much Medicaid spending as their counterparts in Chenango (\$384). There were also numerous examples of dramatic variation between counties in the same region. Within the Upstate Urban region, which also includes some suburban counties, recipients of home health services in Monroe (\$8,157) accounted for more than eight times as much Medicaid spending as recipients in Oneida (\$939) and four times as much spending than those in Onondaga (\$2,041). Within the Upstate Rural region, recipients of home health services in Ontario (\$4,087) accounted for more than ten times as much Medicaid spending as recipients in Chenango (\$384).

Personal Care

Local variation was also dramatic in rates of both personal care service use and spending per recipient. Within the Upstate Urban region, beneficiaries in Broome (12 percent) and Albany (11 percent) were nearly four times as likely to receive personal care services as their counterparts in Monroe (3 percent). Within the Upstate Rural region, beneficiaries in Franklin (19 percent) were more than eleven times as likely to receive personal care services as their counterparts in Madison (1.7 percent).

The greatest variation in spending per recipient of personal care was 1,465 percent, with those in New York City (\$26,804) accounting for the highest, and those in Herkimer (\$1,713) accounting for the lowest. Excluding New York City, long regarded as the state's outlier on personal care spending, the maximum variation was 1,261 percent, with those in Nassau (\$23,305) accounting for the highest spending per recipient. Within the Upstate Urban region, personal care recipients in Putnam (\$21,229) accounted for five times the Medicaid spending as their counterparts in Broome (\$4,238). Within the Upstate Rural region, recipients in Ulster (\$19,233) accounted for more than eleven times the Medicaid spending of their counterparts in Herkimer (\$1,713).

V. Potential Explanations for Variation

Many factors may have contributed to the variation we observed in Medicaid long-term care service use and spending among regions and counties. We considered four interrelated dynamics: the characteristics of the Medicaid populations (demographics), Medicaid reimbursement policies (price of LTC services), the supply of LTC services available through local delivery systems (LTC delivery systems), and local roles in Medicaid administration (local administration).

Demographics

Within New York State, the share of elderly residents with Medicaid coverage varied dramatically. In New York City, 34 percent of elderly residents had Medicaid coverage at some point during the year; while in the state's remaining four regions, only 11 to 13 percent of elderly residents had Medicaid coverage. New York City's higher Medicaid participation rate reflects the fact that seniors in the city have a far higher poverty rate than their counterparts elsewhere in the state.8 The higher participation rate may also be affected by New York City's local district Medicaid office—the Human Resources Administration—which plays a relatively active role in helping individuals complete applications and eligibility determinations.

Table 5. Poverty Rates and Medicaid Enrollment among Elderly Residents, by Region							
	New York	Long	Westchester/	Upstate	Upstate		
	City	Island	Rockland	Urban	Rural		
Poverty Rate	18%	5%	8%	11%	12%		
Share with Medicaid	34%	11%	13%	13%	11%		

⁸ UHF analysis of U.S. Census Bureau 2005 Population Estimates.

The extent to which demographic differences can drive regional or county variation in service use or spending depends on whether there are material differences among the cohorts of Medicaid beneficiaries that we compare in this analysis. This is a different question altogether from how characteristics of the broader population—such as rates of poverty, chronic illness, disability, and functional limitation—vary throughout the state. Our analysis compared Medicaid beneficiaries—all of whom were very low-income, and all of whom were elderly, disabled, or both—to comparable cohorts of Medicaid beneficiaries. While this analysis could not rule out differences in disabling conditions, functional limitations, or levels of family support, there was no evidence that regional differences in these characteristics—within the narrowly defined Medicaid cohorts we examined—played a significant role in explaining the dramatic regional and county-level variation we observed.

Price of LTC Services

By definition, Medicaid spending per recipient is explained by a combination of its two component parts: price per unit of service, and the volume of services delivered per recipient. Differences in the prices Medicaid pays for services may help explain some of the incremental variation we observed in spending per recipient of nursing home services. Medicaid's average daily payment rates for nursing homes downstate are incrementally higher than rates upstate;⁹ and this pattern is consistent with incrementally higher spending per recipient across the three downstate regions.

On the other hand, price differences do not appear to explain the more dramatic variation in spending per recipient of home health services or personal care. Hourly rates provided to personal care providers averaged less in New York City (\$16) than in the rest of the state (\$21), where they varied little (\$20 to \$22). This wage pattern indicates that higher levels of personal care spending in New York City, as well as significant variations in personal care spending across the rest of the state, are exclusively driven by differences in the volume of services provided.

Generalizing patterns for home health payment rates is more complex than it is for personal care, because payment rates can vary for home health services; however, the payment rate variation we observed did not follow a clear geographic pattern, and it did track with variation in spending by recipient. It is therefore more likely that the dramatic variations in Medicaid spending per recipient of home health services—both among and within regions—were driven principally by differences in the volume of services delivered.

⁹ Hokenstad A, M Shineman, and R Auerbach. April 2009. *An Overview of Medicaid Long-Term Care Programs in New York*. New York: United Hospital Fund.

Hokenstad A, M Shineman, and R Auerbach. April 2009. An Overview of Medicaid Long-Term Care Programs in New York. New York: United Hospital Fund. Wage levels are for 2007.

LTC Delivery Systems

Differences in the supply and availability of LTC services are likely a significant factor in regional and county differences in service use and spending. Providers of home health services and personal care in New York City can draw on a large workforce, making these services more available in the city than elsewhere in the state. The availability of these services outside New York City is not uniform. Some regions with few home health and personal care aides—and a lack of available labor willing to work for industry wages—face a real supply-side constraint that could play a major role in explaining very low levels of service use and spending under Medicaid.

Delivery system constraints affect not only community-based long-term care services. New York City's low number of nursing home beds relative to population likely contributes to its lower levels of service use in nursing homes. For example, only 38 percent of all nursing home beds statewide (45,000 out of 119,000) are in New York City," though the city is home to 63 percent of all New York State seniors covered by Medicaid. Differences in the availability of beds throughout the rest of the state may also be a potential factor.

Providers' ability to pay regionally competitive wages is another important factor in the robustness of a delivery system for providing home health and personal care services, but ensuring that providers can pay competitive wages is not the sole challenge in making these community-based services available. Providers of home health services must find or train, and then retain, qualified individuals from within local job markets. They must also absorb the costs associated with transportation including paying employees for time between visits. These are often thought of as rural issues, but they are significant in suburban areas as well.

In addition, provider practice patterns are a core dynamic of regional and local delivery systems. While the absence of supply clearly can lead to an unmet need for long-term care services, it is less clear whether or how greater supply might create, or enhance, demand. Perhaps the availability of home health and personal care services induces more relatively needy low-income seniors to apply for coverage or services, resulting in higher rates of LTC service use. Perhaps—just as nursing homes have incentives to fill their beds in order to maximize their revenue—home health agencies have incentives to deliver more services, and personal care providers have incentives to seek approval for greater numbers of hours.

¹¹ Hokenstad A, M Shineman, and R Auerbach. April 2009. An Overview of Medicaid Long-Term Care Programs in New York. New York: United Hospital Fund. Adjusting for the number of nursing facility beds dedicated to rehabilitation, which the available data did not permit, would likely lower New York City's share of the beds available for long-term stays.

These forces could contribute to higher spending per recipient. There is also the question of whether and how Medicare maximization—providers' attempts to maximize Medicare reimbursement by increasing the levels of home health services provided under Medicare's prospective payment system—may affect home health service use and spending under Medicaid.

Despite some uncertainty about the specific roles of economic forces and incentives, the characteristics of local LTC delivery systems and the supply of available services exert significant influence on LTC service use and on spending per recipient, particularly in the absence of a unified statewide Medicaid LTC policy.

Local Administration

New York gives its 58 local departments of social services substantial roles in administering key components of its Medicaid program. While the local districts hold many administrative responsibilities related to LTC, these are greatest for personal care. They include authorizing the use of personal care services under Medicaid as part of a plan of care, holding contracts with personal care providers, and setting reimbursement rates within state limits.¹² Local administration of personal care, therefore, can be an important determinant of whether elderly and disabled beneficiaries receive personal care under Medicaid, and how many hours of personal care they can receive each week—and it can also influence whether Medicaid beneficiaries seek and use other LTC services.

There is evidence that local administrative practices related to personal care vary significantly among local districts across New York State, and that the same Medicaid beneficiaries would receive very different personal care authorizations in different counties.¹³ This variation reflects both different interpretations of state rules and different approaches to implementing them.

While the state fully controls the administration of Medicaid acute care—and, thus, has policy-making and administrative jurisdiction across the continuum of acute care services—it does not have complete administrative responsibility for all long-term care services. New York's model of shared state-local administration is a major contributor to regional and county variation in personal care service use and spending.

¹² Dutton M, W Bernstein, K Bhandarkar, and S. Ingargiola. August 2009. *The Role of Local Government in Administering Medicaid in New York*. New York: United Hospital Fund.

¹³ Dutton M, W Bernstein, K Bhandarkar, and S. Ingargiola. August 2009. The Role of Local Government in Administering Medicaid in New York. New York: United Hospital Fund.

VI. Implications of Variation for Medicaid Policy and Administration

In our study, we identified and documented dramatic variation at the regional and county levels in rates of service use for personal care, as well as in levels of spending per recipient of both home health services and personal care, within New York's Medicaid program. We found smaller but still notable variation by region and by county in rates of service use for nursing home and home health services, and in levels of spending per recipient of nursing home care.

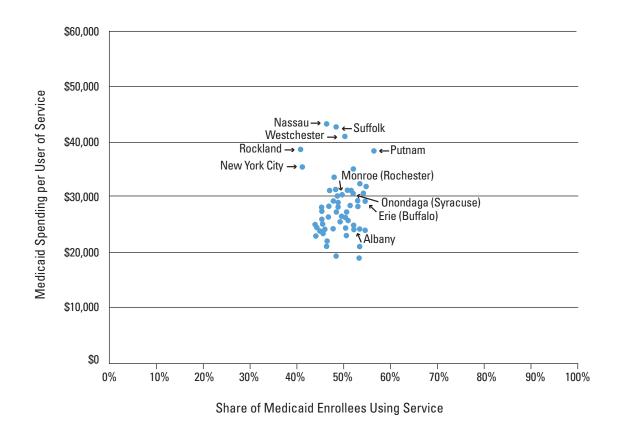
There was no evidence to suggest that regional differences in the demographic characteristics of elderly and disabled beneficiaries were driving the dramatic levels of variation in rates of service use and spending per recipient for Medicaid LTC services. Nor could regional differences in how much Medicaid pays for long-term care services play a major role in explaining the dramatic levels of variation in spending per recipient for home health services and personal care. Factors that could explain more of the dramatic variation in LTC service use and spending within New York's Medicaid program include regional differences in the characteristics of LTC service delivery systems and differences in Medicaid administration at the local district level.

New York's Medicaid program faces the considerable challenge of balancing two competing policy priorities: maintaining access to long-term care services for vulnerable beneficiaries despite ongoing budgetary constraints, and containing spending and cost growth. Addressing this major Medicaid LTC challenge will require informed decisions about policy, service delivery, and administration. To address this challenge, New York's policymakers must reach a clearer and more consistent understanding of what it means for Medicaid to purchase the right combinations and amounts of long-term care services, and to deliver them to the right beneficiaries in the right settings.

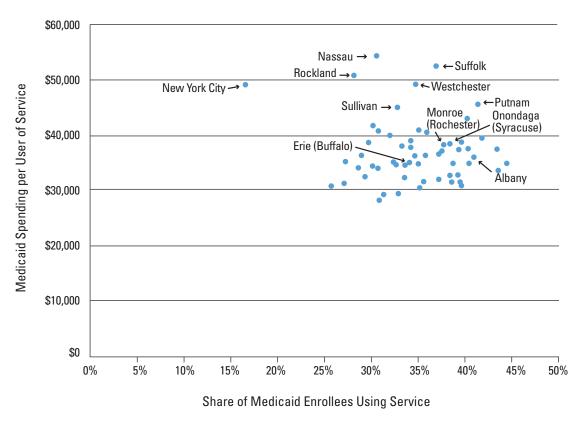
Appendix: County-Level Analysis

Note: The charts in this appendix illustrate Medicaid utilization and spending at a county level. All of the analyses in these charts are based on data for New Yorkers 65 and older with both Medicaid and Medicare coverage ("elderly duals").

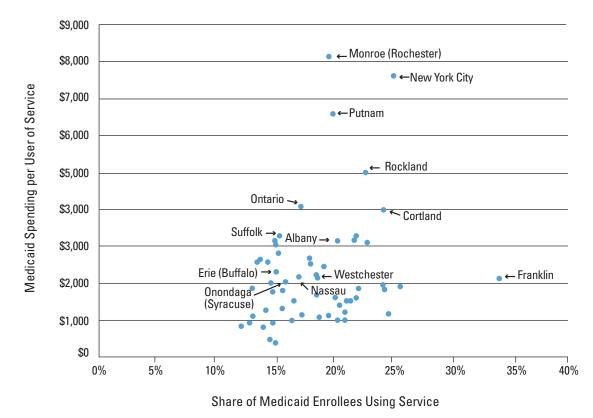
Appendix Figure 1: Medicaid Utilization and Spending per Recipient, by County: Unduplicated Long-Term Care



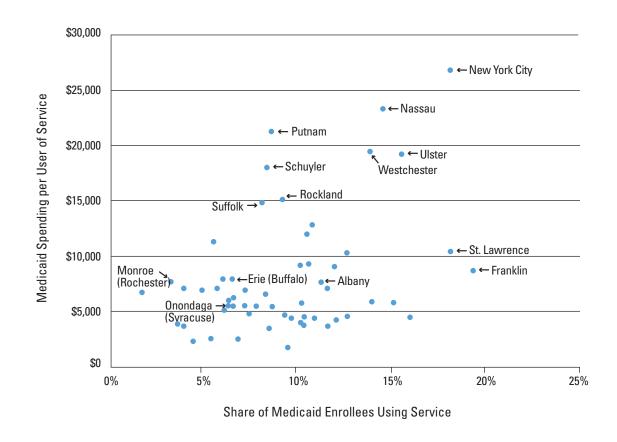
Appendix Figure 2: Medicaid Utilization and Spending per Recipient, by County: Nursing Facilities



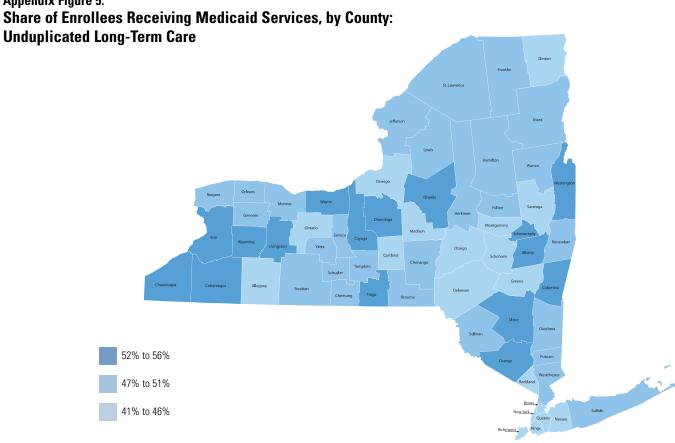
Appendix Figure 3: Medicaid Utilization and Spending per Recipient, by County: Home Health



Appendix Figure 4: Medicaid Utilization and Spending per Recipient, by County: Personal Care

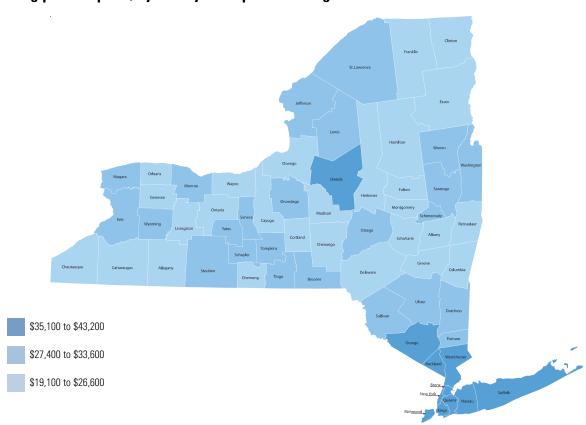


Appendix Figure 5:

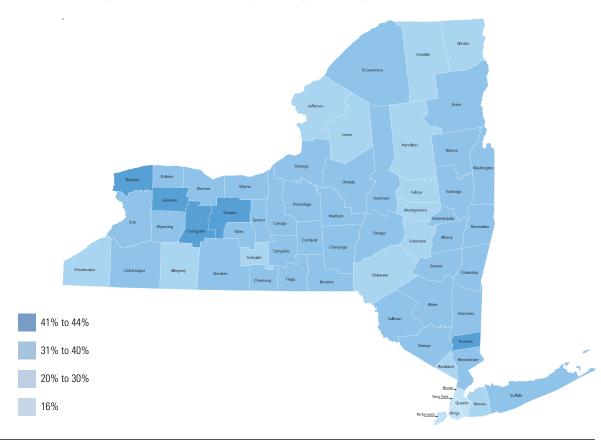


Appendix Figure 6:

Medicaid Spending per Recipient, by County: Unduplicated Long-Term Care

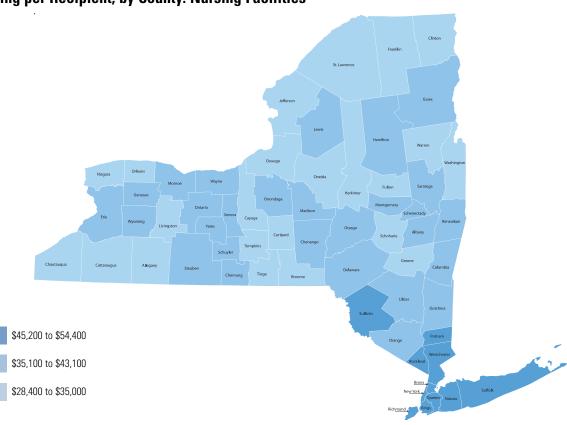


Appendix Figure 7: Share of Enrollees Receiving Medicaid Services, by County: Nursing Facilities



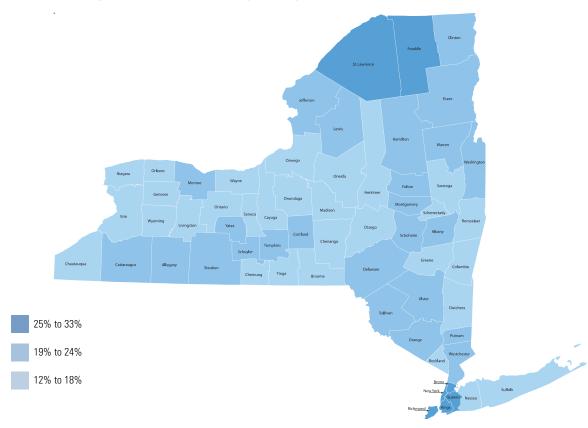
Appendix Figure 8:

Medicaid Spending per Recipient, by County: Nursing Facilities



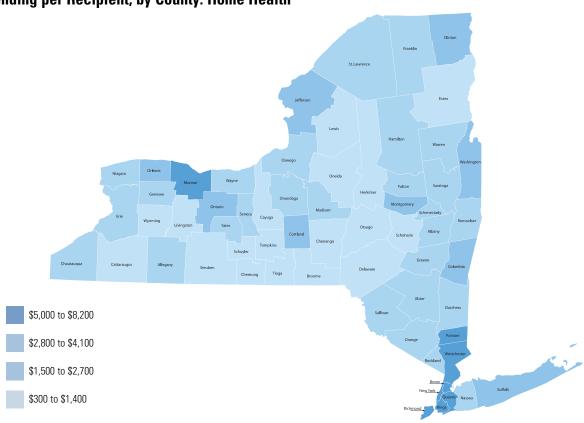
Appendix Figure 9:

Share of Enrollees Receiving Medicaid Services, by County: Home Health

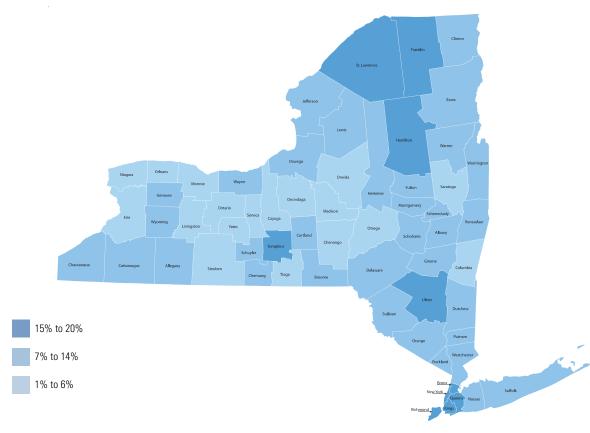


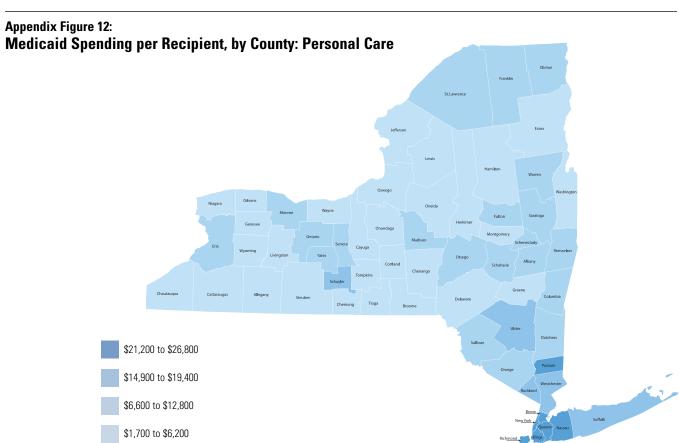
Appendix Figure 10:





Appendix Figure 11: Share of Enrollees Receiving Medicaid Services, by County: Personal Care





Medicaid Institute at United Hospital Fund

Empire State Building
350 Fifth Avenue, 23rd Floor
New York, NY 10118-2300
(212) 494-0700
www.medicaidinstitute.org
www.uhfnyc.org

