

Balancing Community and Institutional Care Among Elderly and Disabled Medicaid Recipients

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Study Background and Goals

- **Background**
 - Increased use of and expenditures for home and community-based services (HCBS) in recent decades.
 - Recent policies and programs encourage increased focus on HCBS for Medicaid enrollees who need long-term services and supports (LTSS)
- **Goals: Update previous study on patterns of LTSS use among Medicaid enrollees who are aged or have disabilities using 2009 data**
 - Assess different perspectives on HCBS from different measures of balance
 - Compare patterns of HCBS use among subpopulations of Medicaid enrollees
 - Identify changes in HCBS use across states from previous study
 - Identify relationships between HCBS use and state population and program characteristics
- **Study Subpopulations**
 - Aged Medicaid enrollees (age 65 and older)
 - Medicaid enrollees with disabilities, including:
 - Individuals under 65 with ID/DD
 - Individuals under 65 with other disabilities (excluding individuals with ID/DD)

Today's Talk

- **Data and data exclusions**
- **National performance on HCBS measures**
- **Differences in performance for subpopulations of Medicaid LTSS users**
- **Differences in performance across states**
- **Progress on HCBS use and expenditures from 2006 to 2009**
- **State and program factors related to HCBS use in 2009**

Data

- **Medicaid Analytic eXtract (MAX) 2009 Person Summary File**
 - Enrollment and summary claims information for all Medicaid enrollees
 - Demographic and eligibility characteristics
 - Annual HCBS and institutional care service use and expenditures
- **HCBS data in MAX include**
 - Section 1915(c) waiver services
 - State Plan personal care, home health, private duty nursing, adult day care, and residential care (includes residential habilitation and assisted living)
- **Institutional care in MAX includes**
 - Nursing home
 - ICF/IID
 - Inpatient psychiatric care for people under age 21
 - Mental hospital for people age 65 and older

Data Exclusions

- **13 States excluded from analysis: Arizona, Hawaii, Maine, Massachusetts, Michigan, Minnesota, Montana, New Mexico, Oregon, Pennsylvania, Rhode Island, Tennessee, and Wisconsin.**
- **Reasons for exclusion include:**
 - **Unavailable 2009 data**
 - **Known LTSS data quality issues**
 - **High rates of Medicaid managed care enrollment among LTSS users**
- **Additional exclusions:**
 - **Children and non-disabled adults using LTSS**
 - **Services provided under capitated managed care arrangements**

National LTSS Use in 2009

Medicaid enrollees who were aged or eligible on the basis of disability using Medicaid fee-for-service LTSS compared to all full-benefit enrollees in 2009 in 38 included states

	All full-benefit Medicaid enrollees	Full-benefit aged or disabled	Aged or disabled with any FFS LTSS (All LTSS Users)	Aged or disabled with any FFS HCBS	Aged or disabled with any FFS ILTC
Number, in millions	45.1	10.5	3.1	2.1	1.2
Percentage of all full-benefit Medicaid enrollees	100.0	23.3	6.9	4.6	2.7
Percentage of full-benefit aged or enrollees with disabilities	-	100.0	29.8	19.8	11.5

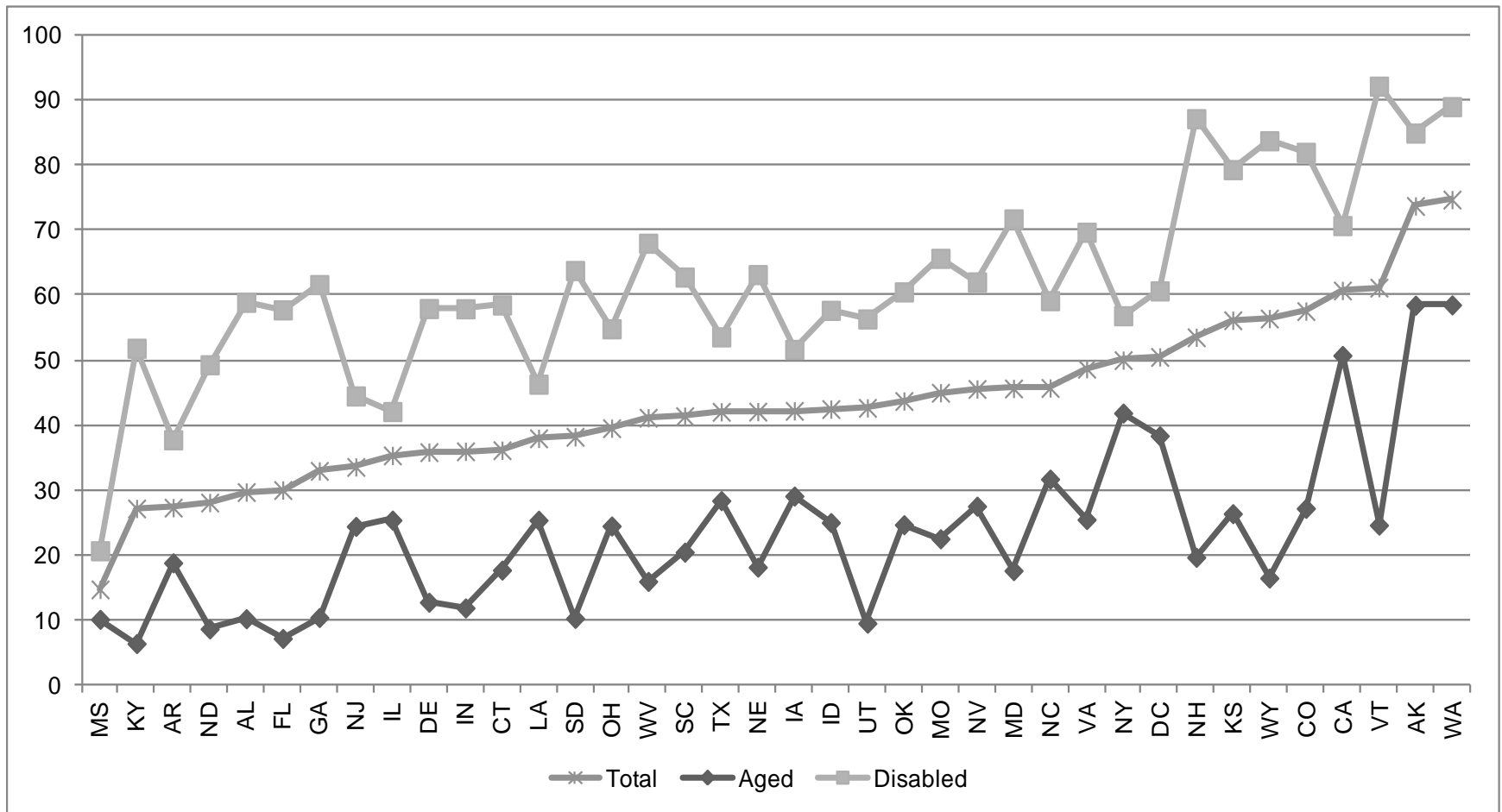
Source: Mathematica analysis of state constraints and 2009 MAX data for 37 states and the District of Columbia with representative LTSS data. Analysis of enrollees with disabilities under 65 with ID/DD and those with other disabilities include 35 states (individuals with ID/DD could not be identified in the District of Columbia, Vermont, or Washington and these states were excluded from analyses of this population).

National Balance Estimates

	All LTSS users 2006	All LTSS users 2009	Aged (65+)	Enrollees Under 65 with Disabilities, excluding ID/DD (<65)	Enrollees Under 65 with ID/DD
Percentage of Medicaid LTSS expenditures allocated to HCBS	40.8	45.3	30.2	49.0	64.5
Percentage of LTSS users receiving HCBS	63.8	66.6	54.5	78.0	86.1
Ratio of per-recipient spending on HCBS to spending on institutional care	0.458	0.478	0.493	0.326	0.363

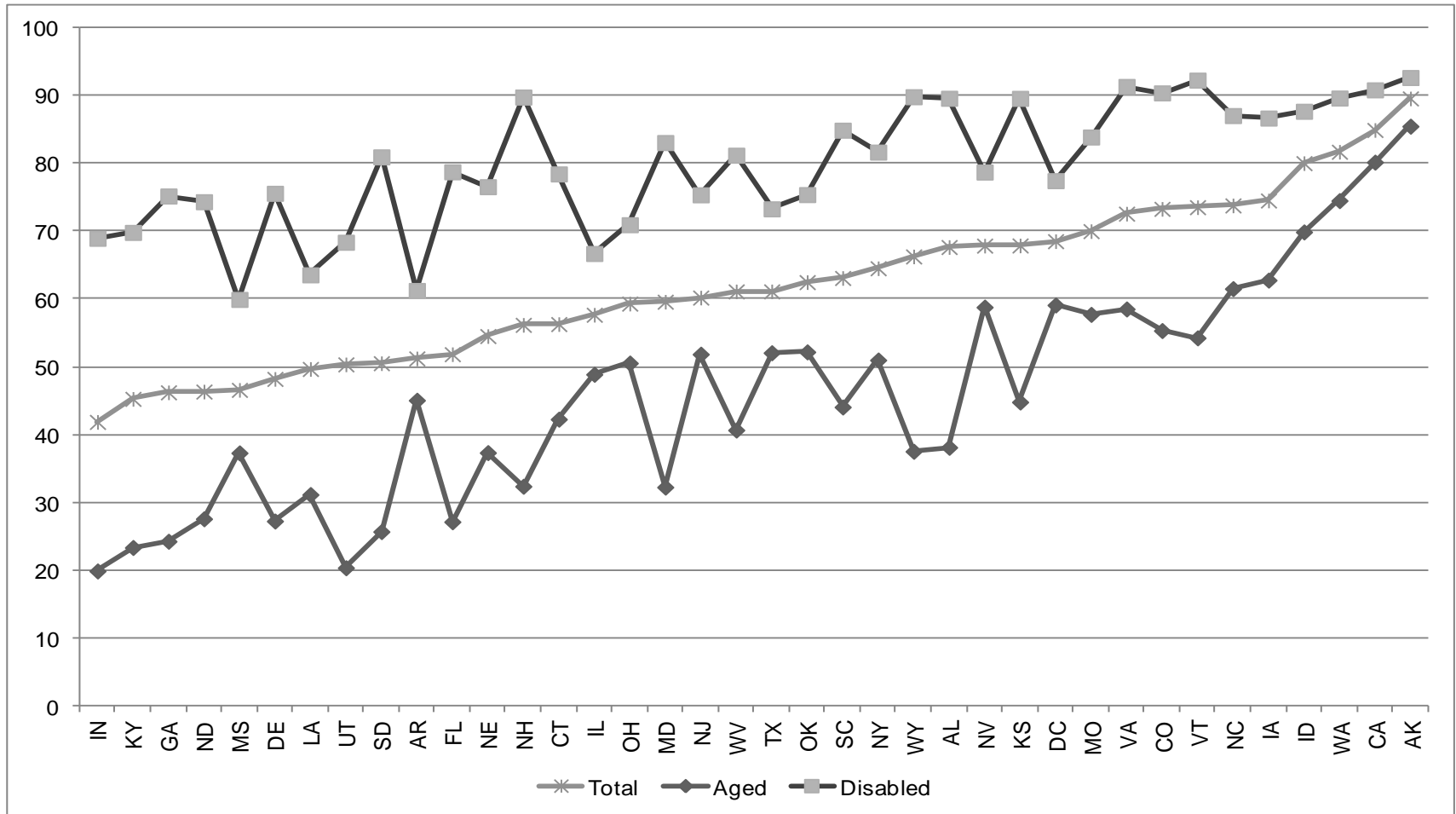
Source: Mathematica analysis of state constraints and 2009 MAX data for 37 states and the District of Columbia with representative LTSS data. Analysis of enrollees with disabilities under 65 with ID/DD and those with other disabilities include 35 states (individuals with ID/DD could not be identified in the District of Columbia, Vermont, or Washington and these states were excluded from analyses of this population). MAX 2006 results from Wenzlow et al. 2011 and include slightly different set of states.

Percentage of Medicaid LTSS Expenditures for HCBS in 2009



Source: Mathematica analysis of state constraints and 2009 MAX data for 37 states and the District of Columbia with representative LTSS data.

Percentage of LTSS Users Receiving HCBS in 2009



Source: Mathematica analysis of state constraints and 2009 MAX data for 37 states and the District of Columbia with representative LTSS data.

Interstate Variation in HCBS Balance Rankings

Balance Measure	Alaska	California	Indiana	New Hampshire	Washington
Percentage of Medicaid LTSS expenditures allocated to HCBS	2	4	28	8	1
Percentage of LTSS users receiving HCBS	1	2	38	26	3
Ratio of per-recipient spending on HCBS to spending on institutional care	28	35	3	1	2

Source: Mathematica analysis of 2009 MAX data for 37 states and the District of Columbia with representative LTSS data.

Top Five States in Balance Rankings in 2009

Percentage of LTSS expenditures allocated to HCBS

Rank	All LTSS users	Aged (65+)	Disabled (<65)
1	Washington (74.8%)	Washington (58.5%)	Vermont (92.2%)
2	Alaska (73.8%)	Alaska (58.5%)	Washington (89.1%)
3	Vermont (61.2%)	California (50.8%)	New Hampshire (87.2%)
4	California (60.8%)	New York (41.9%)	Alaska (85.0%)
5	Colorado (57.6%)	District of Columbia (38.4%)	Wyoming (83.8%)

Source: Mathematica analysis of state constraints and 2009 MAX data for 37 states and the District of Columbia with representative LTSS data.

Top Five States in Balance Rankings in 2009

Percentage of LTSS users receiving HCBS

Rank	All LTSS users	Aged (65+)	Disabled (<65)
1	Alaska (89.6%)	Alaska (85.5%)	Alaska (92.7%)
2	California (84.9%)	California (80.2%)	Vermont (92.3%)
3	Washington (81.7%)	Washington (74.5%)	Virginia (91.4%)
4	Idaho (80.0%)	Idaho (69.9%)	California (90.9%)
5	Iowa (74.5%)	Iowa (62.8%)	Colorado (90.4%)

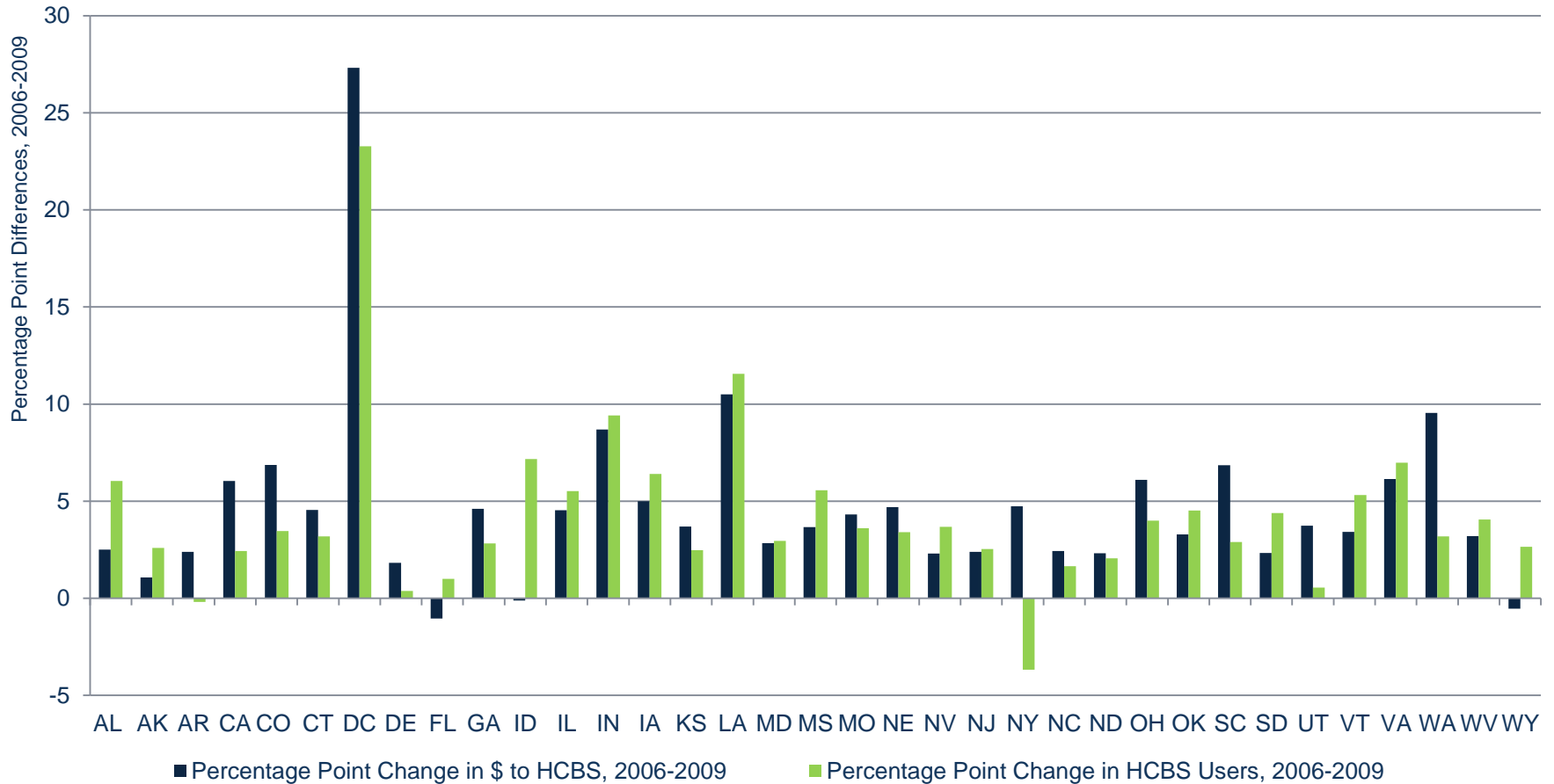
Source: Mathematica analysis of state constraints and 2009 MAX data for 37 states and the District of Columbia with representative LTSS data.

High-Ranking States

Five states ranked highly on both share of expenditures for HCBS and on LTSS users receiving HCBS for most or all subpopulations of LTSS users:

- Alaska
- California
- Colorado
- Vermont
- Washington

Progress on HCBS Use and Expenditures, 2006 to 2009



Source: Mathematica analysis of state constraints and 2009 MAX data for 37 states and the District of Columbia with representative LTSS data. Analysis of 2006 MAX data from Wenzlow et al. 2013. Figure includes all states with reliable LTSS data in both years.

Factors Potentially Related to Interstate Variation

- **State Constraints: factors over which states have limited control**
 - Cost of living
 - State financial resources
 - Fiscal constraints
 - Environmental factors
 - Demand for services
 - Workforce availability
- **State Policies or Supply-Side factors: factors related to state policy or program options**
 - Consumer direction
 - Personal care and residential care coverage
 - SSI supplements
 - Waiver waiting lists
 - Nursing home bed supply
 - Small ICF/IID availability
 - Assisted-living availability
 - LTSS system accessibility
 - Payment rates that encourage HCBS supply
 - Support for informal caretakers

State Constraints Significantly Associated with Higher Levels of HCBS Expenditures

State Constraint	All LTSS Users	Aged (65+)	Enrollees <65 with Other Disabilities	Enrollees <65 with ID/DD
Single-family housing price index	0.35	.	.	.
Per-capita personal income	.	0.35	.	.
Taxable resources per capita	0.36	0.36	.	0.35
Percentage of potential Medicaid eligibles age 75 or older	-0.57	.	.	-0.56
Home health aides per 1,000 elderly or persons with a disability	.	0.42	0.38	.
Personal and home care aides per 1,000 elderly or persons with a disability	0.50	.	0.46	.

Source: Mathematica analysis of state constraints and 2009 MAX data for 37 states and the District of Columbia with representative LTSS data. Analysis of enrollees with disabilities under 65 with ID/DD and those with other disabilities include 35 states (individuals with ID/DD could not be identified in the District of Columbia, Vermont, or Washington and these states were excluded from analyses of this population).

NA = not applicable. Values in table represent the correlation coefficient between the factor and HCBS share of LTSS expenditures. All values shown are significant at the .05 level.

Policy or Supply-Side Factors Significantly Associated with Higher Levels of HCBS Expenditures

Policy or Supply-side Factor	All LTSS Users	Aged (65+)	Enrollees <65 with Other Disabilities	Enrollees <65 with ID/DD
Number of people consumer-directing services per 1,000 adults age 18+	0.53	0.52	0.34	.
Medicaid state plan personal care	.	0.34	.	.
Persons on ID/DD waiver waiting list, per ID/DD HCBS users	.	NA	NA	-0.35
Percentage of total out-of-home placements in settings for 6 or fewer persons	0.67	NA	NA	0.72
Assisted-living and residential care units per 1,000 people age 65	0.40	0.34	0.35	.
Adult day service rate	0.33	.	.	.

Source: Mathematica analysis of state constraints and 2009 MAX data for 37 states and the District of Columbia with representative LTSS data. Analysis of enrollees with disabilities under 65 with ID/DD and those with other disabilities include 35 states (individuals with ID/DD could not be identified in the District of Columbia, Vermont, or Washington and these states were excluded from analyses of this population).

NA = not applicable. Values in table represent the correlation coefficient between the factor and HCBS share of LTSS expenditures. All values shown are significant at the .05 level.

Conclusions and Next Steps

- **Different measures of HCBS balance provide different insights into level and nature of HCBS in state Medicaid programs.**
- **Differences in rates of HCBS use among Medicaid enrollees who are aged or have disabilities were widespread across states**
- **Further investigation into the nature and causes of these differences may help to guide state LTSS policy. Areas for additional exploration include assessment and documentation of:**
 - Ongoing patterns in LTSS systems as the ACA is fully implemented and other initiatives to encourage HCBS use mature
 - Balance at the community level
 - Constraints as mediators of LTSS policy
 - Level of need and the distribution of care received

For More Information

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Understanding nursing home entry and Medicaid transition among the Medicare elderly

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Context of study

- Nursing home use is costly for Medicaid and can be financially devastating for individuals and their families
- Most states are trying to shift the Medicaid LTSS for the older population to community settings
- Policy-relevant study questions include:
 - Among those using home care, how do those who enter nursing homes differ from those who do not, and what state Medicaid program characteristics are associated with nursing home use?
 - What individual and program characteristics are associated with transitions to Medicaid?
 - Can home care defer or prevent the need for costly nursing home care?



Presentation aims

- To provide national estimates from ongoing ASPE-supported studies of nursing home entry and transitions to Medicaid among the Medicare elderly
- Focus on characteristics, formal and informal care, and state program characteristics for nursing home users and nonusers
- Explore the importance of nursing home entry in Medicaid transition
- Discuss implications for public policies and next steps



Data

- National Long Term Care Survey 2004
 - Nationally representative cohort of Medicare enrollees age or older provides data on baseline characteristics at interview
 - n~6,000; ~2,000 with chronic disability using home care at baseline, ~400 using nursing homes within 2 years
- Linked administrative data
 - Medicaid at and after baseline from beneficiary data for Medicare (2004-2009) and Medicaid (2004-2007)
 - Minimum data set (MDS) for 2004-2009 captures all nursing home admissions after baseline
- State Medicaid program characteristics compiled from various published sources



Key disability and service use measures

- Disability hierarchy for sample getting help
 - Gets help, but not with disabilities identified as chronic (mostly those managing disabilities with assistive devices)
 - Gets help with chronic disabilities: IADL help only; help with 1-2 ADLs; help with 3+ ADLs
- Home care use in the previous week
 - Formal, paid help in traditional housing or supportive settings
 - Informal help from family or unpaid nonrelatives
- Self-reported unmet need
 - for help with IADLS
 - for help or more help with ADLs



Medicaid enrollment and state program characteristics

- Enrollment at baseline, within 1 year, 2 years
- Program characteristics in state of residence
 - % of aged/disabled LTSS spending in community > median across states
 - High spousal protection: income protection at maximum, resource limit at or above 75th percentile
 - Spousal income and resource protections for HCBS waivers
 - Special income rule for nursing home residents
 - Medically needy program
 - 209B state



Methods

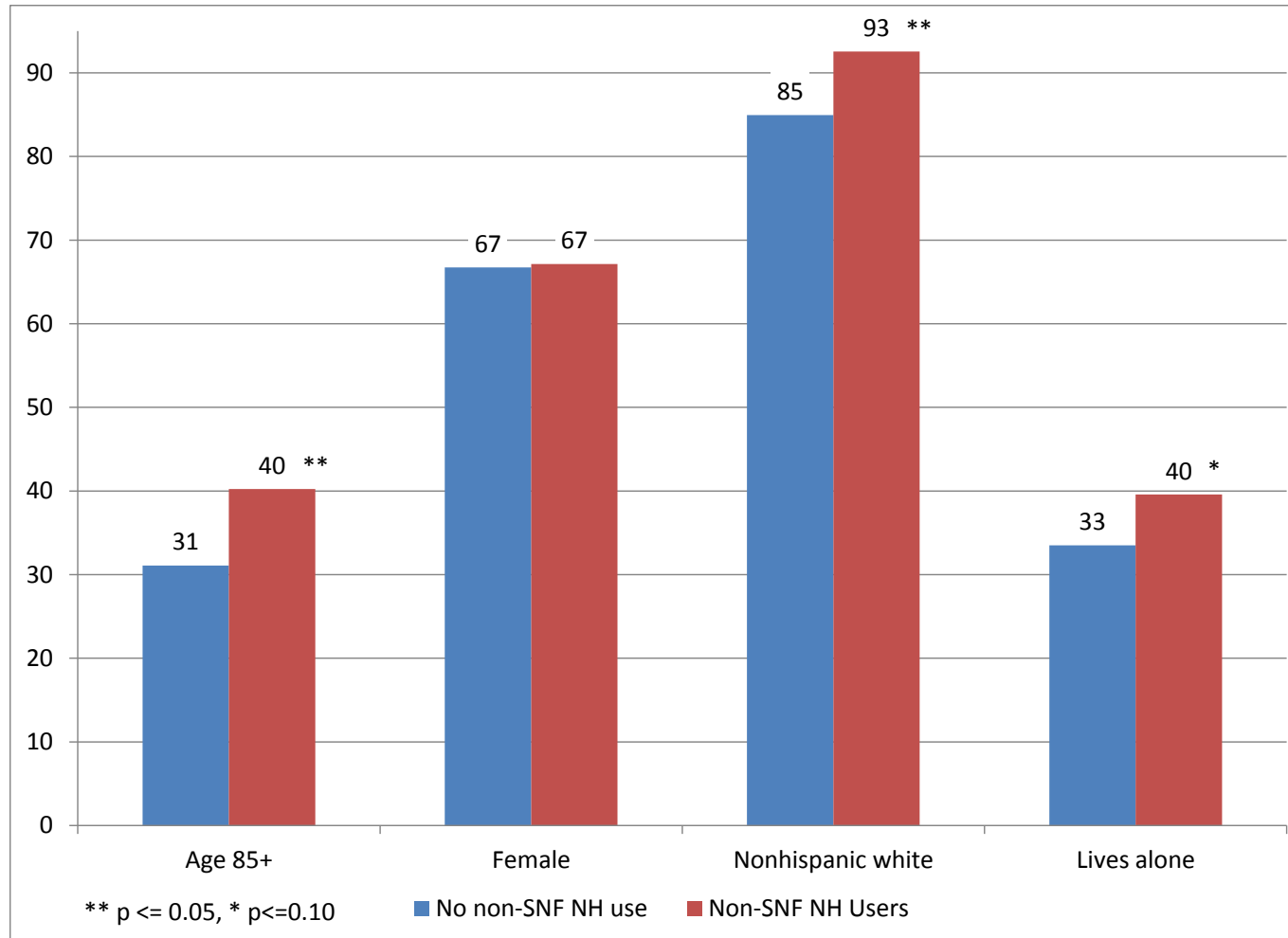
- Descriptive univariate estimates for the baseline profile of home care users by whether they use nursing home care over a two-year follow-up period
- Multivariate longitudinal model to explore the association of nursing home entry over 2- to 4-year follow-up periods relate to Medicaid transitions



Community residents receiving home care

Baseline characteristics by nursing home use within 2 years

Nursing home users were more likely to be very old, non-Hispanic white, living alone



Except for cognition, few differences in disability level for nonusers and users

- 35% of nursing home users versus 29% of nonusers had cognitive impairment at baseline ($p \leq 0.05$)
- Both nonusers & users had an average 3 (of 6) ADL disabilities (with/without help)
- Rates of help with only IADLs or with 1-2 ADL disabilities were similar (27%-29%)
- **However**, relative to nonusers, users
 - were more likely to report getting help, but not with disabilities they identified as chronic (11% vs. 9%, $p < 0.10$)
 - were less likely to receive help with 3+ ADLs (33% vs 38%, $p \leq 0.10$)

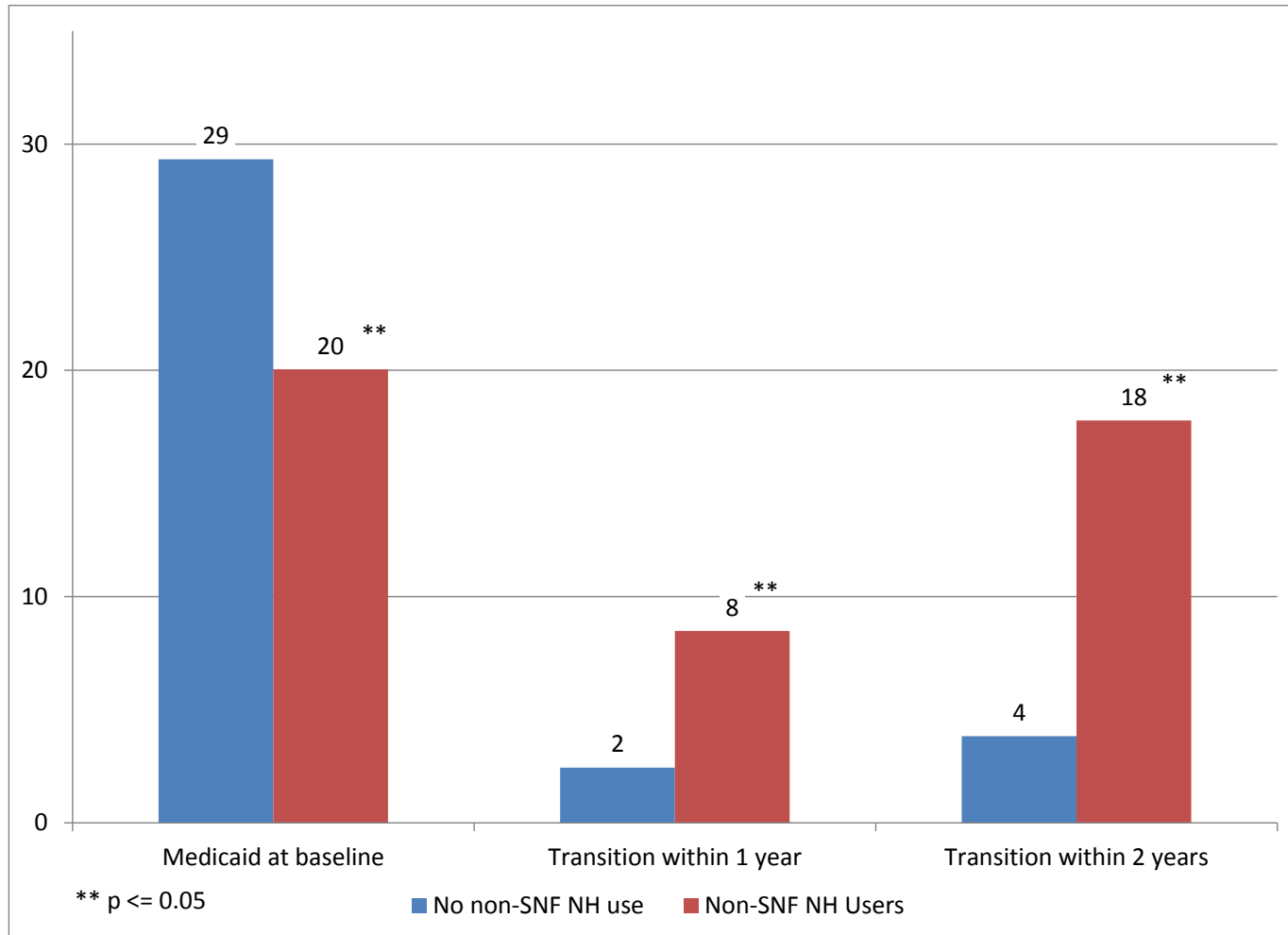


Formal, informal care patterns, unmet need were similar for nursing home users and nonusers

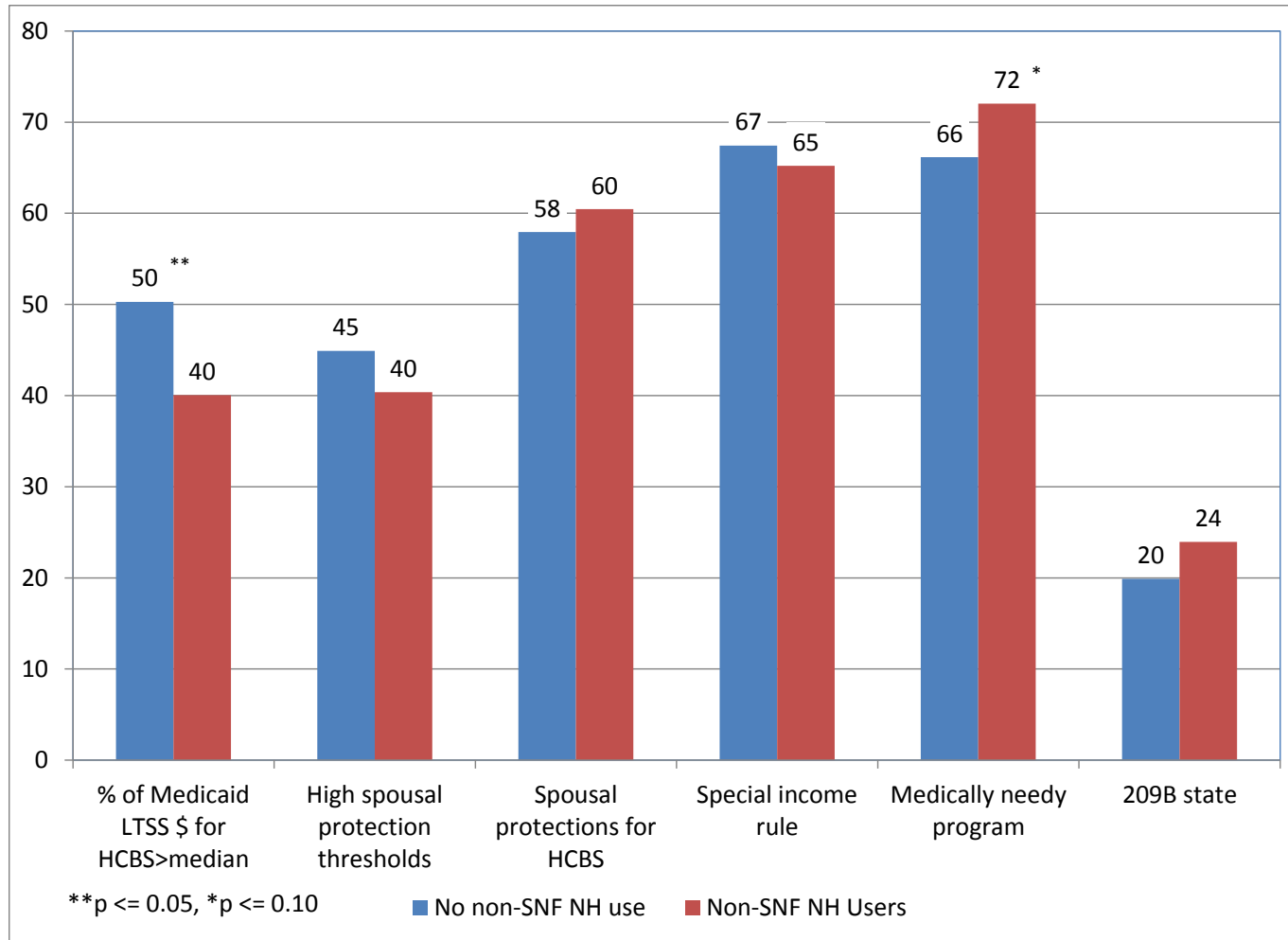
- 35% of nonusers and 39% of users received formal care at baseline; 85% received informal care
- Average formal care hours per week were similar for nonusers (9) and users (7)
- Average informal care hours were about 26 for both users and nonusers
- Similar proportions of users and nonusers reported unmet need for help with IADLs (~50%) and ADLs (~25%)



Nursing home users less likely to be Medicaid at baseline, more likely to transition in 1-2 years



Greater rebalancing less common, medically needy program more common for users than nonusers



Nursing home use and Medicaid transition

Results for community residents not enrolled at baseline

Overview of Medicaid transitions

Community residents not enrolled at baseline

Baseline characteristics	Medicaid Transition after baseline			
	Within 1 year	Within 2 years	Within 3 years	Within 4 years
All Medicare aged	1.6	3.0	4.5	5.2
Men	1.1	2.4	3.6	4.1
Women	2.0	3.5	5.2	6.1
Age 65-74	1.3	1.9	2.8	3.4
Age 75-84	1.5	3.3	5.0	5.7
Age 85+	3.5	7.0	10.9	12.1
No disability	1.1	2.1	3.3	3.8
Disability but no help or IADL only ^a	2.7	5.9	8.4	10.4
Help with ADLs	6.3	10.6	14.3	16.4



Strongest predictors of Medicaid transition

In order of effect size over 4 years

	Within 1 year	Within 2 years	Within 3 years	Within 4 years
Nursing home entry	+	+	+	+
Income < \$10,000	+	+	+	+
Income \$10,000 -<\$20,000	+	+	+	+
Home value less than \$75,000		+	+	+
Not a homeowner	+	+	+	+
Cognitively impaired		+	+	+
High spousal protection			+	+
Medically needy program	+	+	+	+
Medicaid community LTSS \$ >median			+	+

+ = $p \leq 0.05$, + = $p \leq 0.10$

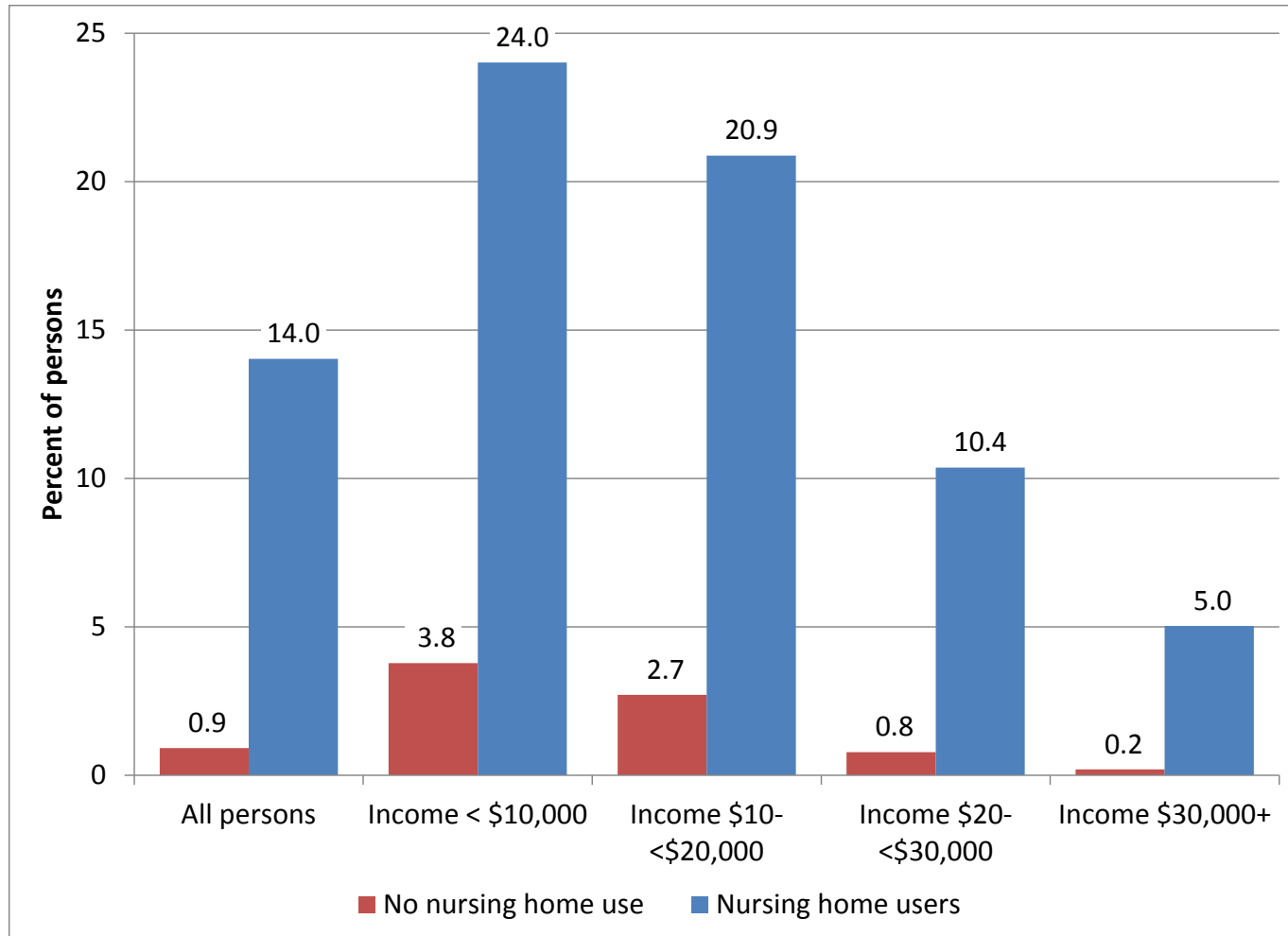


Summary of findings for factors most strongly associated with Medicaid transition

- Nursing home use is by far the strongest predictor of transition over all periods—increasing likelihood by a factor of 4 in 1 year
- Low income—roughly below 2X FPL—is the next most important predictor, followed by little or no housing wealth (highly related to other asset value)
- Controlling for other factors, cognitive impairment is next and is the sole significant functional factor
- Medically needy program is a significant predictor in all periods, while spousal protection and high community LTSS spending are predictive over 3-4 years



Predicted transition over 2 years, nursing home nonusers and users, by income



Key findings and policy implications

- Nursing home users are
 - More likely to be very old, living alone, cognitively impaired
 - No more likely than nonusers to be Medicaid enrolled at baseline but far more likely to transition over 1-2 years
 - Using similar levels of formal and informal supports
 - Less likely to live where “rebalancing” is greatest, more likely to live where there is a medically needy program
- Nursing home use is by far the greatest predictor of Medicaid transition followed by low income & assets
- Findings imply the need to understand
 - Whether increased/improved formal supports could prevent or defer nursing home use
 - How increased access could be accomplished and paid for



Next steps

- Two modeling efforts are in progress
 - Model the relationship between HCBS, both formal and informal, and nursing home entry
 - Replicate and expand on previous model findings indicating
 - modest reductions in nursing home entry associated with increased informal care hours
 - increases in entry when caregivers experienced high levels of stress
- Results may be able to
 - Inform policies aimed at increasing access to HCBS and support for informal caregivers
 - Underpin greater state interest in “rebalancing” Medicaid services for the aged/disabled



Use of Institutional Care by Elderly and Disabled Medicaid Enrollees

**Presentation at the HCBS Conference
Crystal City, VA**

September 17, 2014

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and Evaluation

Overview

- **Background**
- **Study**
 - **Purpose**
 - **Methods and data sources**
 - **Findings**
 - Nursing home enrollees
 - ICF-IID
- **Conclusions and future research**
- **Acknowledgements**

Background

- **Many states are actively working to “rebalance” their long-term care systems**
 - **Increased emphasis on independent living for the elderly began with the establishment of Section 1915(c) waivers in the early 1980s**
 - **For people with developmental disabilities, the movement away from larger state-run ICFs-IID toward smaller group homes with a closer connection to the surrounding community began earlier**
- **Today many Medicaid enrollees continue to reside in nursing homes or intermediate care facilities for individuals with intellectual disabilities (ICFs-IID)**
- **A better understanding of who uses institutional long-term care and how they use it is critical to the continued development of effective policy.**

Purpose

To better understand the population of Medicaid enrollees qualifying for benefits on the basis of age or disability and living in nursing homes or ICFs-IID, we analyzed data from the Medicaid Analytic eXtract (MAX) from 2008 and 2009 to understand:

1. What are the characteristics of enrollees remaining in nursing homes and ICFs-IID and their stays?
2. How does the length of institutional spells vary at the state level with changes in state constraints and policies?

Data and Methods

- **Medicaid Analytic eXtract (MAX) from 2008 and 2009**
 - **The sample includes 12.5 million enrollees who were elderly or entitled on the basis of disability to full Medicaid benefits in 2008 or in 2009**
 - Of those enrollees receiving nursing home care during this period, about 46 percent started new nursing home spells
 - **States where fee-for-service claims data were both complete and believed to be reliable**
 - Eight states were excluded: Arizona, Hawaii, Maine, Minnesota, New Mexico, Oregon, Tennessee, and Wisconsin
 - Four other states were excluded in our analyses of state policy variables: Massachusetts, Michigan, Montana, and Rhode Island.
- **Medicaid spells refer to the span of time during which claims were submitted to and paid by Medicaid.**

Enrollees in Nursing Homes

Who used nursing home care?

Characteristics of aged or disabled enrollees with new Medicaid-financed nursing home spells between July 2008 and December 2009

Characteristic	Number or percentage
Number of enrollees with new spells in all states	677,253
Percentage female	64.3
Percentage non-Hispanic white	73.2
Age (Percentage of Subgroup)	
Under age 21	0.3
21–44 years	4.2
45–64 years	20.7
65–74 years	17.2
75–84 years	29.7
85 years and older	27.9
Percentage with multiple new spells	6.6
Percentage with spells in both nursing homes and ICFs-IID	0.2

Source: Mathematica analysis of 2008-2009 MAX data

Note: New spells are spells beginning on or after July 1, 2008.

How did nursing home entrants become eligible for Medicaid?

Maintenance Assistance Status (MAS) in the two months preceding the first new Medicaid-financed nursing home spells of aged or disabled enrollees between July 2008 and December 2009

Percentage in MAS group two months before first new nursing home spell

	Total number of enrollees with new nursing home spells	Not enrolled	“Other”	Cash assistance-related	Medically needy	Poverty-related	Section 1115 demonstration waiver
All 43 states	677,253	30.4	23.4	23.5	9.5	9.6	0.3

Source: Medicaid Analytic eXtract, 2008–2009

How did enrollees qualify for Medicaid during the first month of their spell?

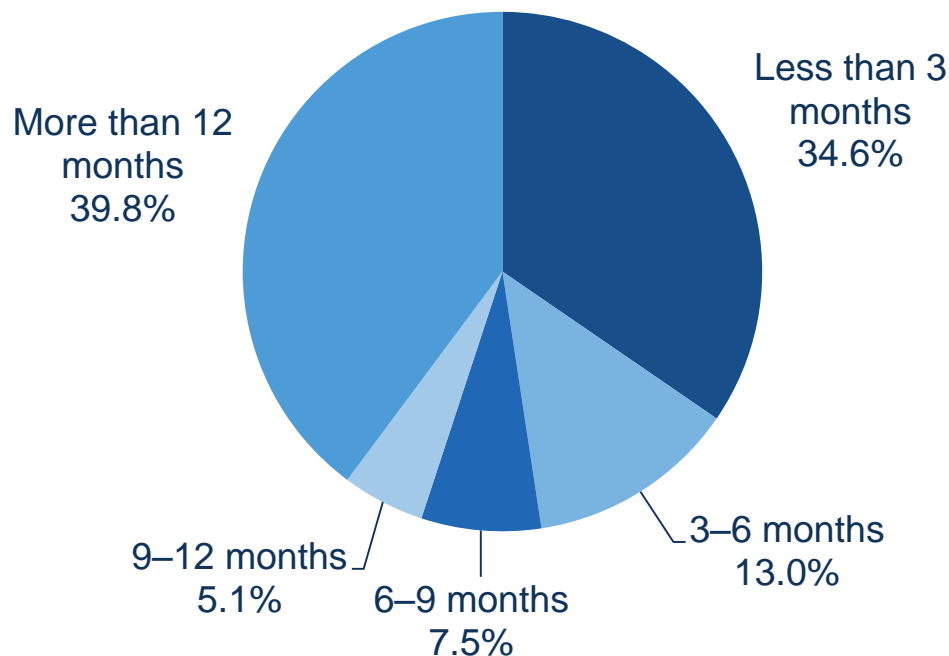
Maintenance Assistance Status (MAS) in first month of new Medicaid-financed nursing home spell among aged or disabled enrollees eligible for full Medicaid benefits began, July 2008 to December 2009

	Total number of enrollees with new nursing home spells	Percentage in MAS group at start of first new nursing home spell				
		“Other”	Cash assistance-related	Medically needy	Poverty-related	Section 1115 demonstration waiver
All 43 states	677,253	49.1	22.0	21.6	7.0	0.3

Source: Medicaid Analytic eXtract, 2008–2009.

How long did entrants stay in nursing homes?

Length of first new nursing home spells among Medicaid enrollees who were aged or had disabilities, July 2008 and December 2008



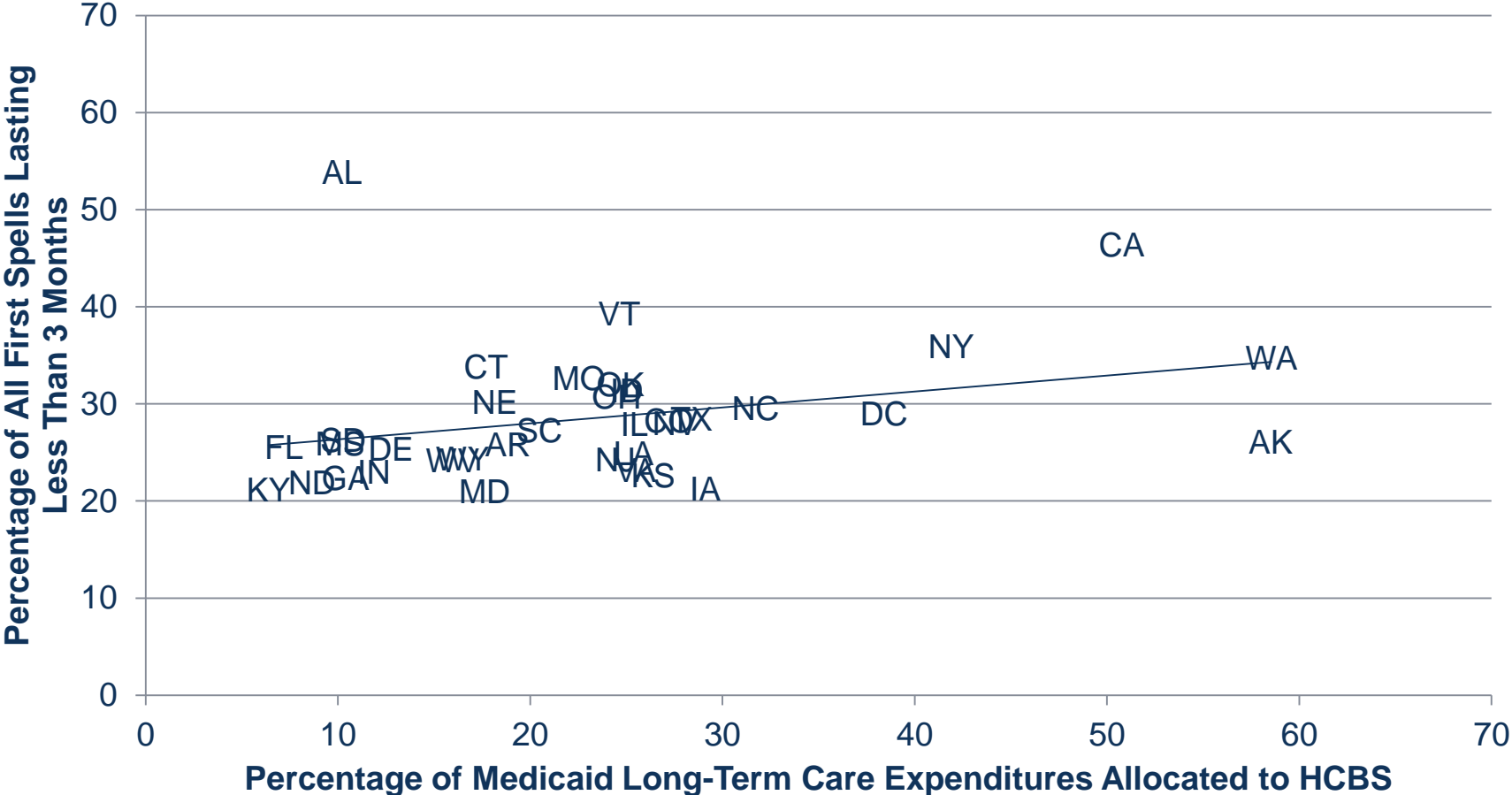
Source: Medicaid Analytic eXtract, 2008–2009.

Did enrollees who entered nursing home care also use HCBS?

Timing of HCBS use	Percentage
First new spells beginning in 2009 preceded by HCBS use in 2008	22.6
First new spells beginning in 2009 and ending on or before June 30, 2009 preceded by HCBS Use in 2008	31.2
First new spells ending in 2008 followed by HCBS Use in 2009	32.4

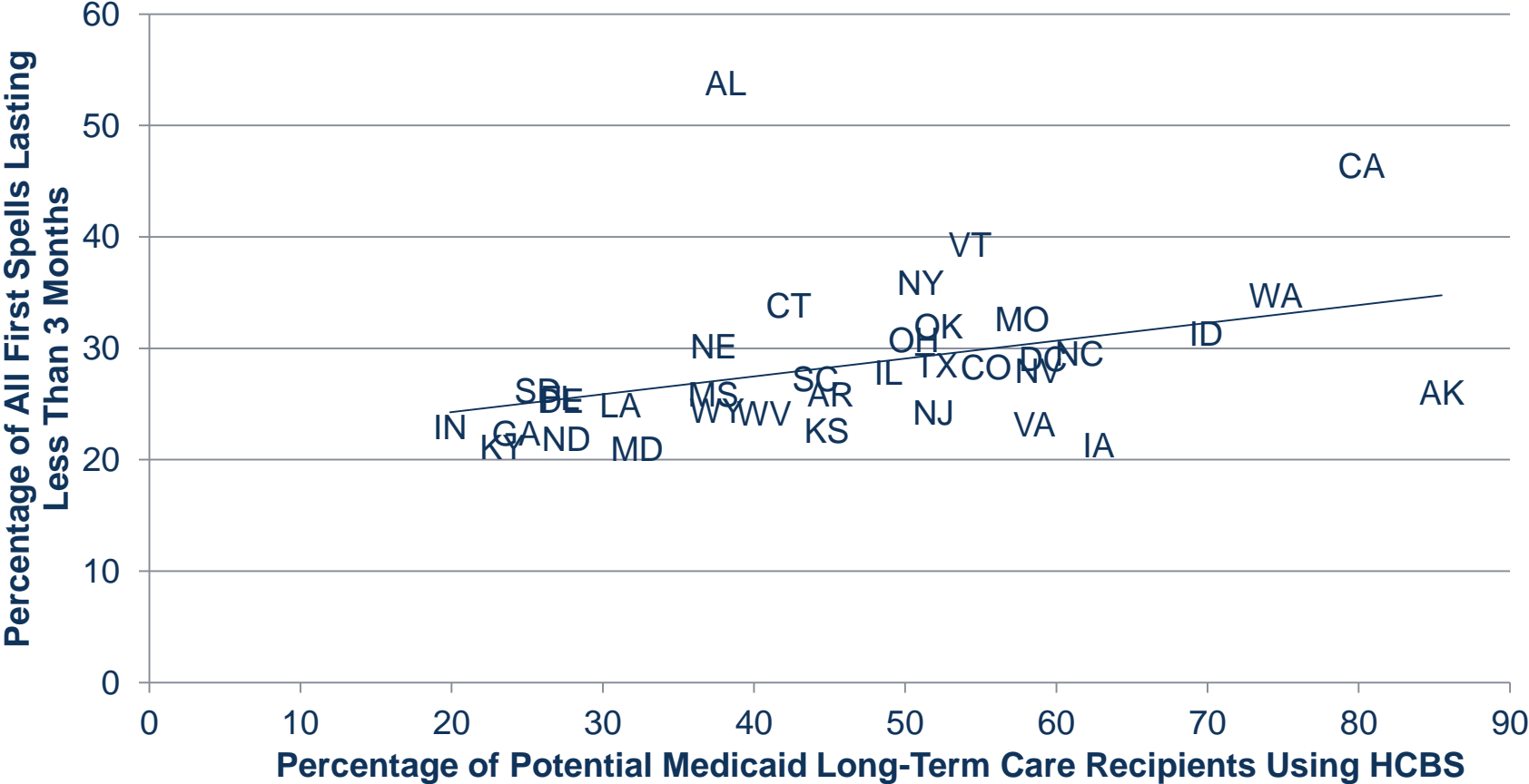
Source: Medicaid Analytic eXtract, 2008–2009.

Associations between lengths of stay in nursing homes and HCBS use



Source: Medicaid Analytic eXtract, 2008-2009.

Associations between lengths of stay in nursing homes and HCBS use



Source: Medicaid Analytic eXtract, 2008–2009.

ICF-IID Findings

Who Used ICF-IID care?

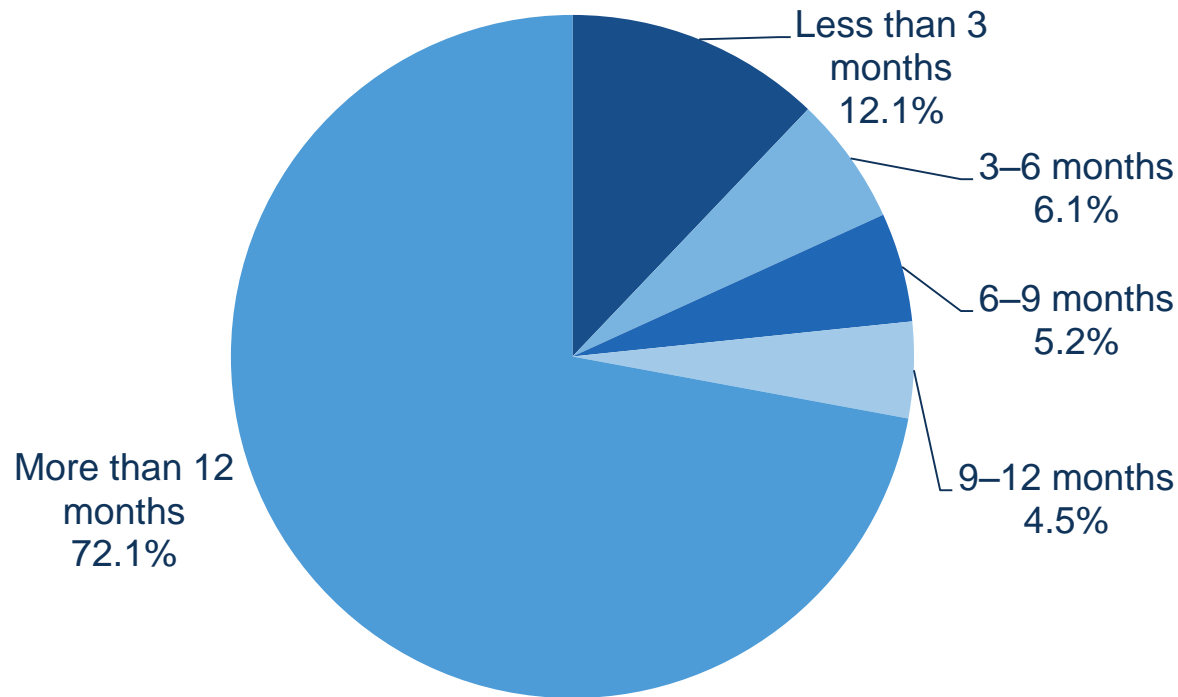
Characteristics of enrollees who were aged or disabled with new ICF-IID spells, or both new ICF-IID and nursing home spells, July 2008 to December 2009

Characteristics of people with new spells of ICF-IID care	Enrollees with one or more new ICF-IID Spells	Enrollees with both new nursing home and new ICF-IID spells
Number of enrollees with new spells in all states	8,577	1,020
Percentage female	38.1	44.7
Percentage non-Hispanic white	71.1	77.9
Age (percentage of subgroup)	-	-
Under age 21	27.6	4.2
21–44 years	37.7	30.9
45–64 years	29.0	49.5
65–74 years	3.8	11.3
75–84 years	1.3	3.5
85 years and older	0.3	0.5
Percentage with multiple new spells	14.2	100.0
Percentage with spells in both nursing homes and ICFs-IID	11.9	100.0

Source: Mathematica analysis of 2008-2009 MAX data

How long did enrollees stay in ICFs-IID?

Length of first new ICF-IID spells among enrollees who were aged or disabled with new Medicaid-financed ICF-IID spells, July 2008 to December 2008



Source: Mathematica analysis of 2008-2009 MAX data

Did enrollees receiving ICF-IID care also use HCBS?

HCBS use relative to first new spell of institutional care	Percentage
First new spells beginning in 2009 preceded by HCBS use in 2008	38.8
First new spells beginning in 2009 and ending on or before June 30, 2009 preceded by HCBS Use in 2008	43.2
First new spells ending in 2008 followed by HCBS Use in 2009	40.5

Source: Mathematica analysis of 2008-2009 MAX data

Conclusions and Future Research

- **Characteristics differed between nursing home residents and enrollees in ICFs-IID**
 - The majority of enrollees with new ICF-IID spells were male and under 65 years old, and more likely to have multiple new spells
 - Roughly 30 percent of those beginning new Medicaid spells of nursing home care were not enrolled in Medicaid prior to the beginning of their Medicaid-financed spell, compared to 90 percent of ICF – IID residents
- **Although the percentage of nursing home spells lasting 3 months or less was typically higher in states with larger investments in HCBS relative to nursing homes and with higher HCBS utilization rates, these associations were not particularly large.**
 - These relationships were not statistically significant for ICF-IID enrollees
- **Future research could examine**
 - Outcomes of residents at large versus small ICFs-IID
 - Variation across states and over time in the relationship of individual functional and cognitive limitations to the nature of LTSS provided
 - Person-level analyses of LTSS use and transition over several years

Acknowledgements

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