



**The Hilltop Institute**

*analysis to advance the health of vulnerable populations*

# **Medicaid and Medicare Resource Use For Dual Eligibles in Maryland**

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December 10, 2010

Charles Milligan

Medicaid and CHIP Payment Advisory Committee

# Hilltop conducted research, funded by the State of Maryland and RWJF, on Medicare-Medicaid cross-payer effects.

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- Constructed and utilized a database that linked, at the individual level, Medicaid claims, Medicare claims, and MDS records
- One area of analysis: the cross-payer effects for dual eligibles who meet nursing facility level of care (NF LOC), regardless of setting (community or institution)
- One subgroup analysis: Maryland's 1915(c) Older Adults Waiver (OAW), the largest NF LOC waiver in Maryland
- OAW beneficiaries were compared to two "control" groups using propensity score methods: (a) individuals in the community and not in the OAW and (b) individuals in institutions (CY 2006 used)

**In the following slides, the "HCBS Waiver Group" means the OAW in Maryland in 2006.**

# Covariates used in the propensity score methodology

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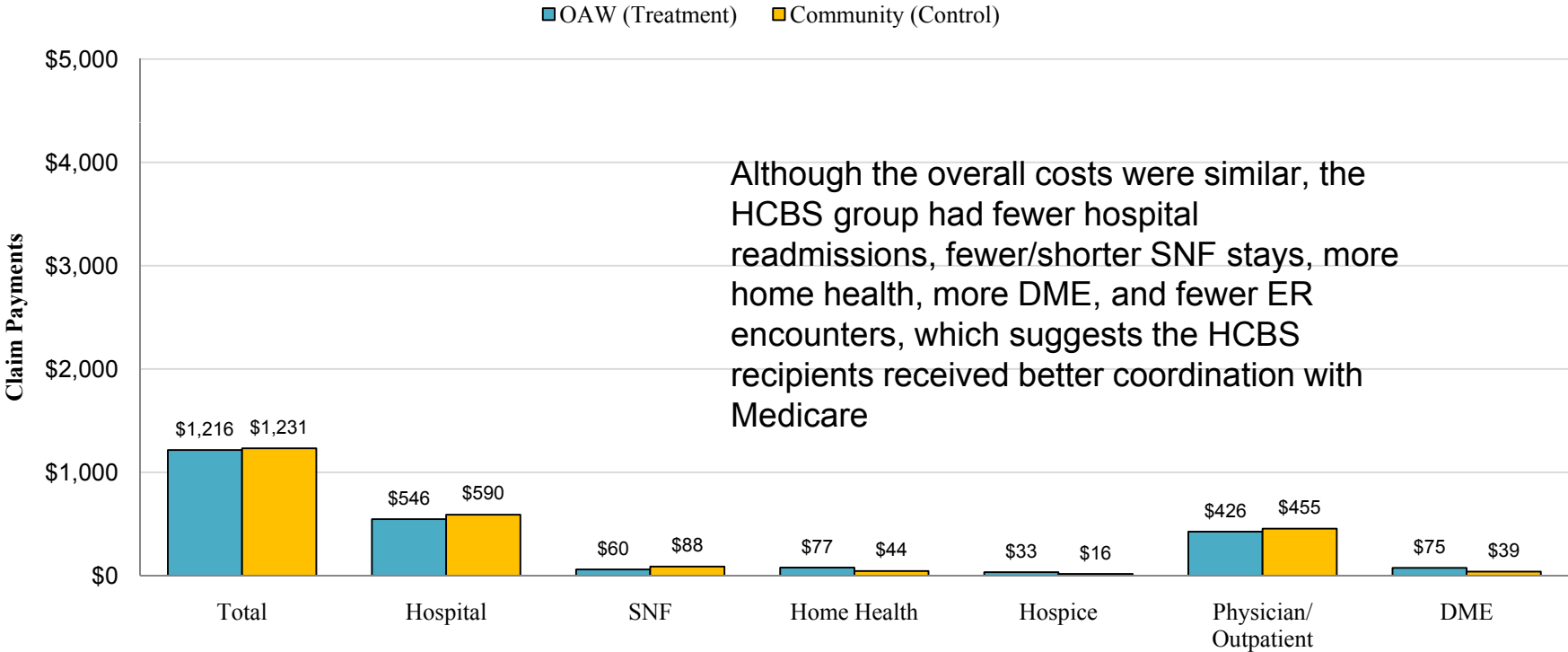
- Demographics (age, gender, race)
- CMS-HCC relative value
- 20 Chronic Condition Warehouse condition indicators (AMI, AD/dementia, COPD, diabetes, depression, hip fracture, stroke, etc.)
- Disability as reason for original Medicare enrollment
- Frailty indicator (diagnosis-based, Hopkins ACG system)
- ESRD indicator
- Months of full Medicaid coverage

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# **HCBS Waiver Group Compared to Community Non-Waiver Group**

# Medicare payments were nearly identical for HCBS beneficiaries and the matched group in the community . . .

MEDICARE Benefit Payments, PMPM, by Service

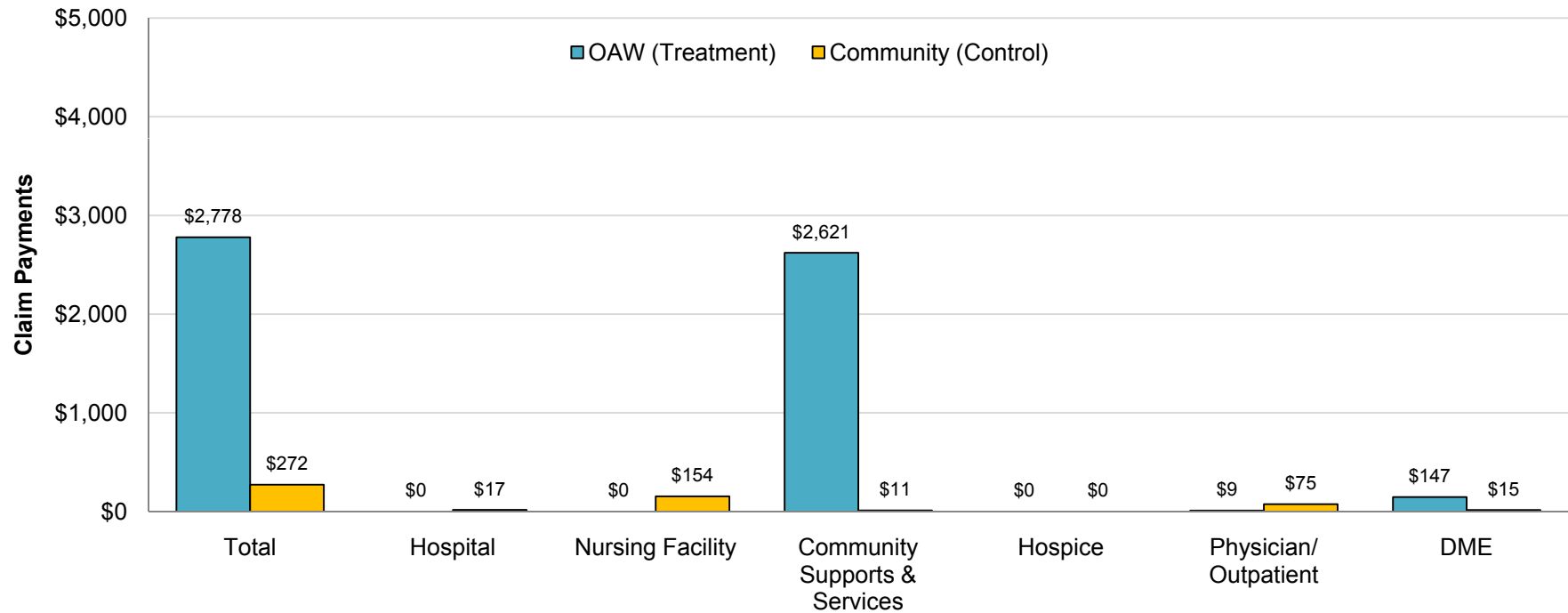


Source: Tucker, A., & Johnson, K. (2010). *Cross-Payer Effects on Medicare Resource Use: Lessons for Medicaid Administrators*. Baltimore, MD: The Hilltop Institute.

Notes: Maryland OAW (treatment) and community (control) samples of 1,410 full-benefit duals aged 50 and older, enrolled for 12 months (with no group health coverage) in 2006.

# ... while Medicaid payments were far higher for the HCBS group than the community group ...

**MEDICAID Benefit Payments, PMPM, by Service**

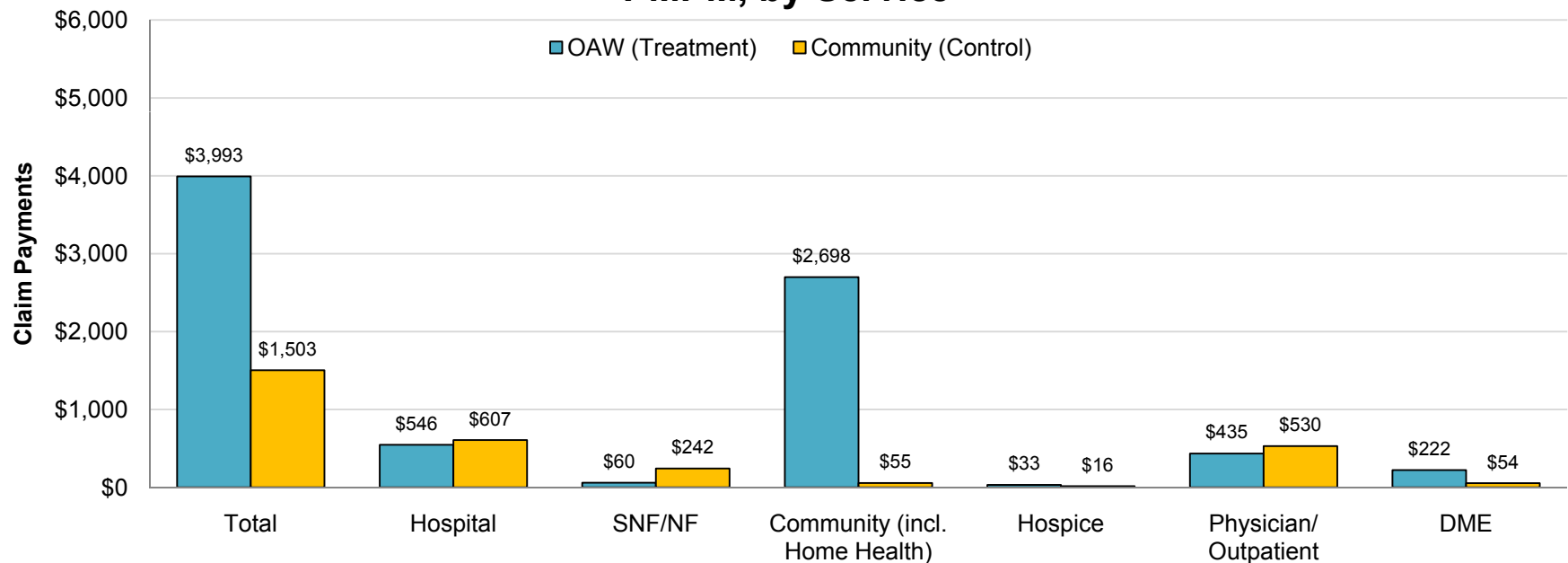


Source: Tucker, A., & Johnson, K. (2010). *Cross-payer effects on Medicare resource use: Lessons for Medicaid administrators*. Baltimore, MD: The Hilltop Institute.

Notes: Maryland OAW (treatment) and community (control) samples of 1,410 full-benefit duals aged 50 and older, enrolled for 12 months (with no group health coverage) in 2006. Medicare crossover payments paid by Medicaid not included.

**... and as a result, the HCBS group were far more expensive than the community group, in total dollars.**

**MEDICARE and MEDICAID Benefit Payments, PMPM, by Service**



Source: Tucker, A., & Johnson, K. (2010). *Cross-payer effects on Medicare resource use: Lessons for Medicaid administrators*. Baltimore, MD: The Hilltop Institute.

Notes: Maryland OAW (treatment) and community (control) samples of 1,410 full-benefit duals aged 50 and older, enrolled for 12 months (with no group health coverage) in 2006. Medicare crossover payments paid by Medicaid not included.

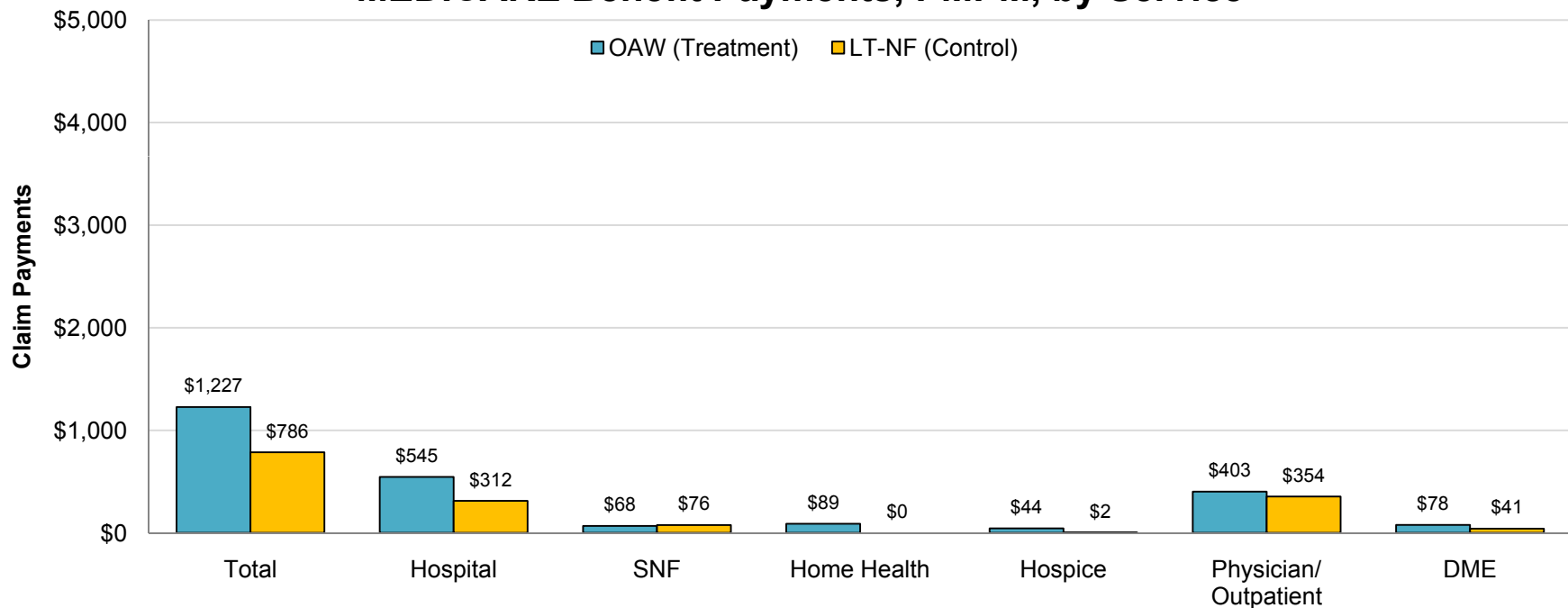
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# **HCBS Waiver Group Compared to Long-Term Nursing Facility (LT-NF) Group**



# Medicare payments were \$441 higher PMPM for the HCBS group than the matched LT-NF group . . .

MEDICARE Benefit Payments, PMPM, by Service

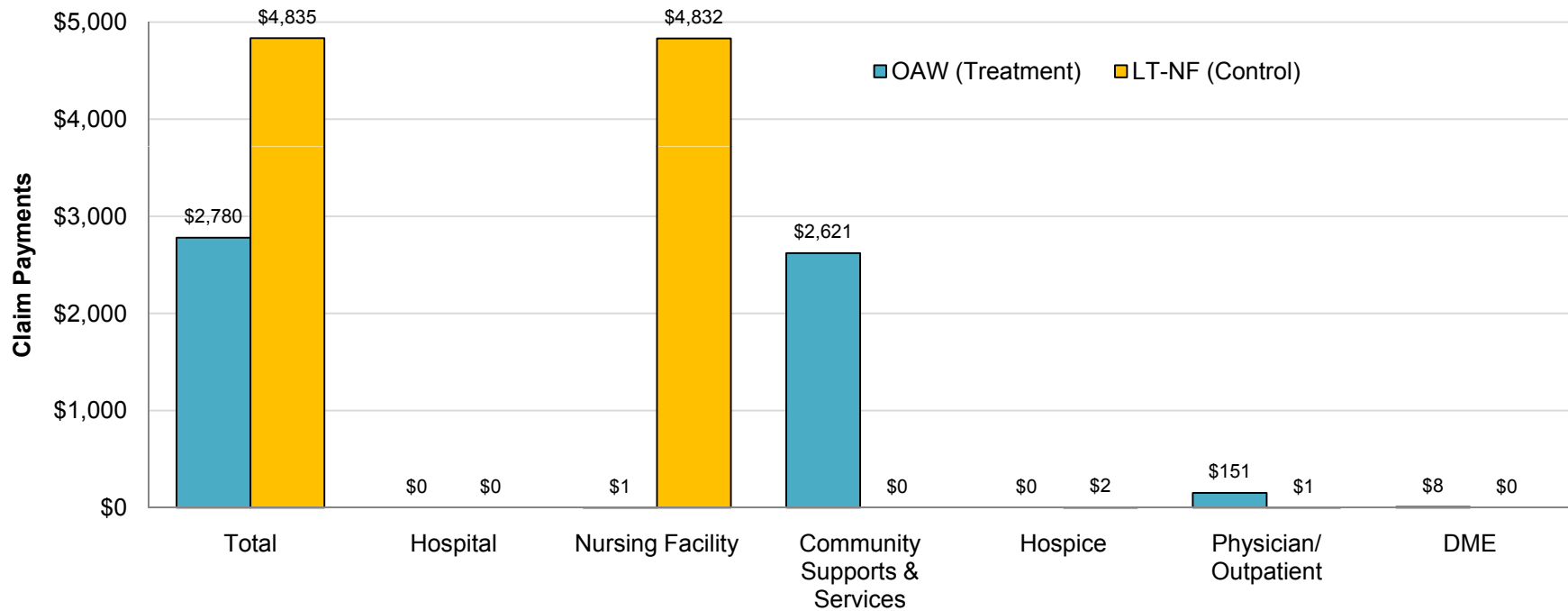


Source: Tucker, A., & Johnson, K. (2010). *Cross-payer effects on Medicare resource use: Lessons for Medicaid administrators*. Baltimore, MD: The Hilltop Institute.

Notes: Maryland OAW (treatment) and community (control) samples of 1,731 full-benefit duals aged 50 and older, enrolled for 12 months (with no group health coverage) in 2006.

**... while Medicaid payments were \$2,055 PMPM higher for the LT-NF group, compared to the HCBS group ...**

**MEDICAID Benefit Payments, PMPM, by Service**

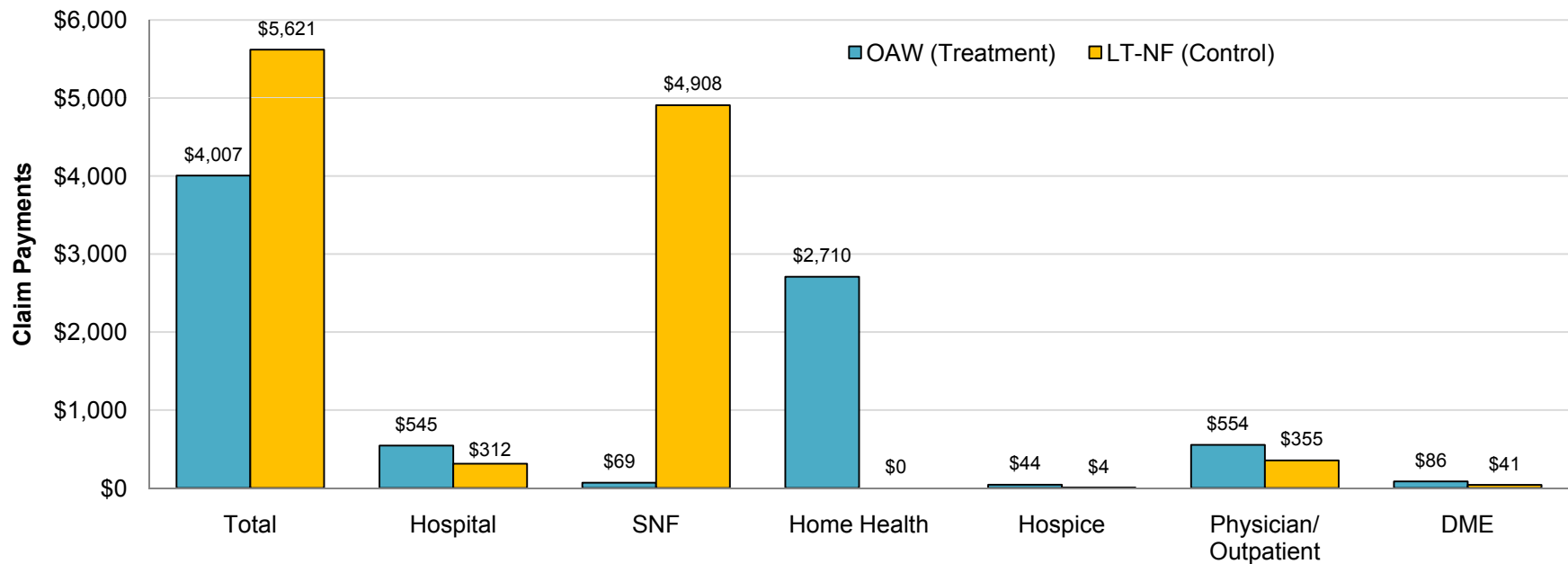


Source: Tucker, A., & Johnson, K. (2010). *Cross-payer effects on Medicare resource use: Lessons for Medicaid administrators*. Baltimore, MD: The Hilltop Institute.

Notes: Maryland OAW (treatment) and community (control) samples of 1,731 full-benefit duals aged 50 and older, enrolled for 12 months (with no group health coverage) in 2006. Medicare crossover payments paid by Medicaid not included.

# ... and in total dollars, the HCBS group was far less expensive than an LT-NF group.

**MEDICARE and MEDICAID Benefit Payments, PMPM, by Service**



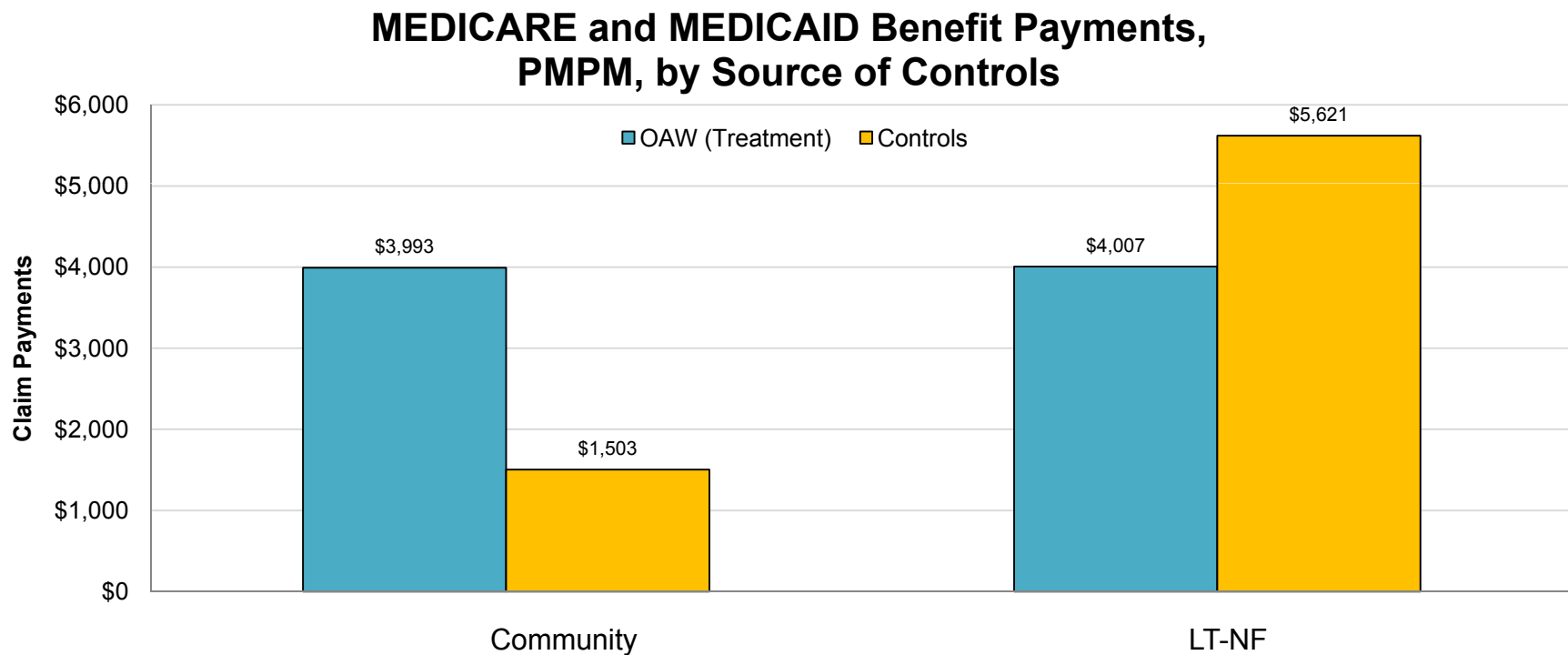
Source: Tucker, A., & Johnson, K. (2010). *Cross-payer effects on Medicare resource use: Lessons for Medicaid administrators*. Baltimore, MD: The Hilltop Institute.

Notes: Maryland OAW (treatment) and community (control) samples of 1,731 full-benefit duals aged 50 and older, enrolled for 12 months (with no group health coverage) in 2006. Medicare crossover payments paid by Medicaid not included.

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# Conclusions

# In total dollars, the HCBS group is far more expensive than the community group and far less expensive than the LT-NF group.

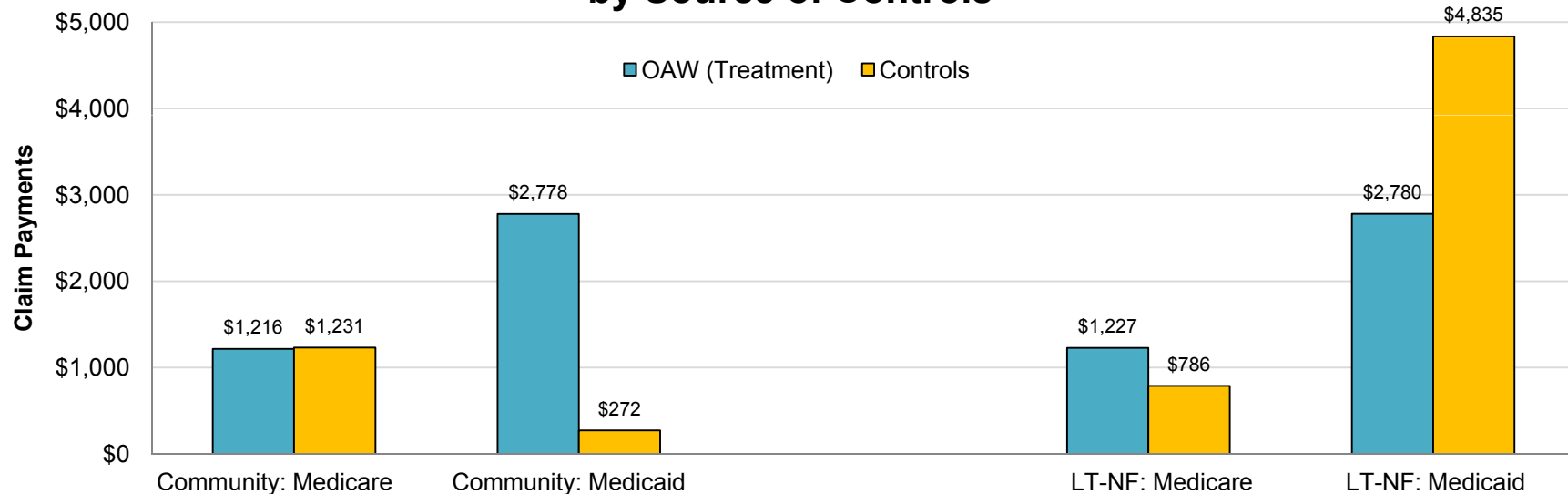


Source: Tucker, A., & Johnson, K. (2010). *Cross-payer effects on Medicare resource use: Lessons for Medicaid administrators*. Baltimore, MD: The Hilltop Institute.

Notes: Both sets of samples: full-benefit duals aged 50 and older, enrolled for 12 months (with no group health coverage) in 2006. Maryland OAW and Community samples: n=1,410; Maryland OAW LT-NF samples: 1,731. Medicare crossover payments paid by Medicaid not included.

# While Medicare \$\$ was similar between HCBS and the community, the Medicare program saved \$\$ when people were in NFs.

**MEDICARE and MEDICAID Benefit Payments, PMPM, by Source of Controls**



Source: Tucker, A., & Johnson, K. (2010). *Cross-payer effects on Medicare resource use: Lessons for Medicaid administrators*. Baltimore, MD: The Hilltop Institute.

Notes: Both sets of samples: full-benefit duals aged 50 and older, enrolled for 12 months (with no group health coverage) in 2006. Maryland OAW and Community samples: n=1,410; Maryland OAW LT-NF samples: 1,731. Medicare crossover payments paid by Medicaid not included.

# Key observations from the analysis

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- Medicare and Medicaid financing do not align to promote home and community-based services; this is a barrier to HCBS. Medicare saves \$\$ when a dual eligible is in a stable custodial LT-NF stay, when compared to the community
- Medicaid's HCBS program helped to promote better care and service utilization *in the Medicare program*, but receives no incentives \$\$ from Medicare; this is a barrier.
- Because most extended NF admissions begin with a Medicare admission, community integration for dual eligibles must engage Medicare; engaging Medicare providers is a barrier.
- The HCBS waiver is only cost-effective (at the individual level) for Medicaid when it truly avoids a NF placement

# About The Hilltop Institute

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The Hilltop Institute at the University of Maryland, Baltimore County (UMBC) is a nationally recognized research center dedicated to improving the health and wellbeing of vulnerable populations. Hilltop conducts research, analysis, and evaluations on behalf of government agencies, foundations, and nonprofit organizations at the national, state, and local levels.

[www.hilltopinstitute.org](http://www.hilltopinstitute.org)



# Contact Information

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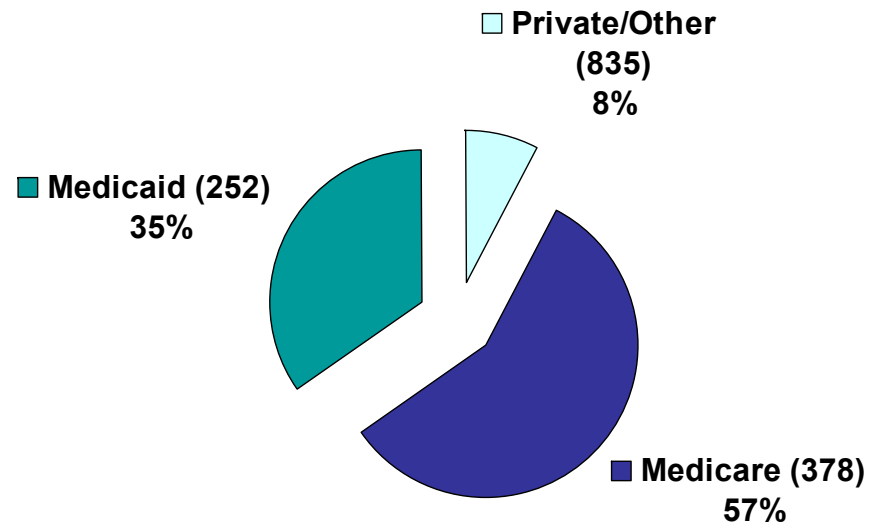
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# Data Appendix

# Nearly 60 percent of extended SNF/NF stays that involve Medicaid eligibility during the stay began as a post-acute Medicare SNF stay . . .

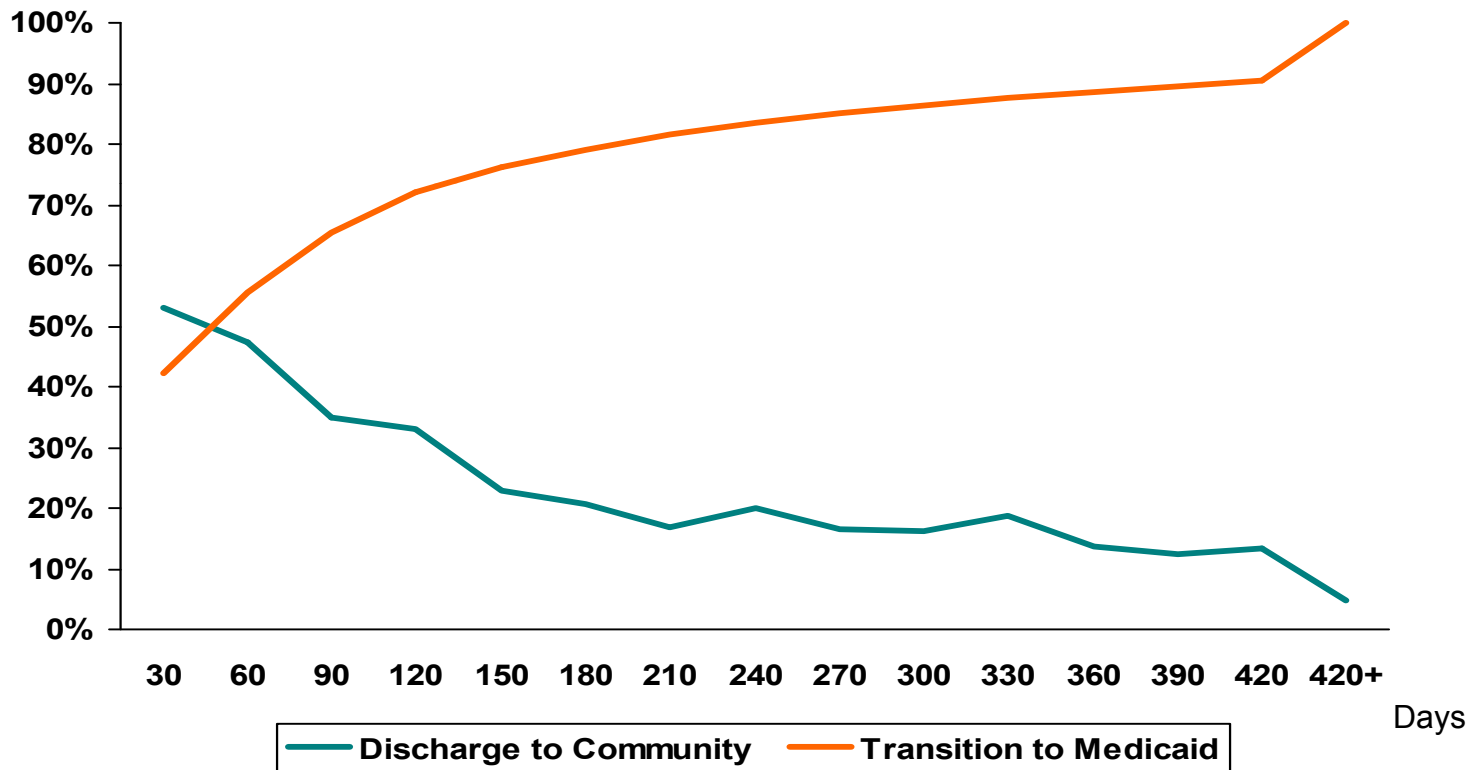
Source of Payment at Initial Admission  
(with average length of stay), Extended Stays



An "extended" stay links multiple stays, across institutions and time, with no home or community-based placement longer than 30 days between stays. An "extended" stay could involve a single stay, or multiple linked stays.

Hilltop refined MDS data for Maryland, 2000-2009 (95,911 stays).  
Limited to stays for those with Medicaid eligibility at some time during the stay (regardless of payer).

# ... and a key predictor of a conversion to the community is a nursing facility resident's length of stay.



Hilltop Refined MDS data for Maryland, Extended Stays w/Discharge 1999-2008, limited to the stays that involve Medicaid eligibility at some point during the stay

# But let's look underneath the total Medicare \$\$ and service use for the HCBS versus community group

Resource Use Measure	With HCBS (treatment)	Without HCBS (control)
Beneficiaries	1,410	1,410
PMPM	\$1,216	\$1,231
User of any Medicare service	1,405	1,360

- The community control group had a slightly higher PMPM
- Yet there were more users of a Medicare service among the HCBS group

# HCBS versus Community: Medicare Hospital

Resource Use Measure	With HCBS (treatment)	Without HCBS (control)
Hospital PMPM	\$546	\$590
Users	539	507
Hospital Stays	1,081	1,158
<i>Stays Per User</i>	<i>2.0</i>	<i>2.3</i>

- Lower PMPM in the HCBS group
- More users in the HCBS group
- Fewer total stays in the HCBS group
- More multiple stays for the community control group users

# HCBS versus Community: Medicare SNF

Resource Use Measure	With HCBS (treatment)	Without HCBS (control)
SNF PMPM	\$60	\$88
Users	108	134
SNF Stays	142	194
<i>Stays Per User</i>	<i>1.3</i>	<i>1.4</i>
Medicare-Paid Days	2,827	4,734
<i>Days Per User</i>	<i>26.2</i>	<i>35.3</i>
<i>Days Per Stay</i>	<i>19.9</i>	<i>24.4</i>

- Lower PMPM in the HCBS group
- Fewer users in the HCBS group
- Fewer SNF stays and far fewer days in the HCBS group
- Shorter lengths of stay in the HCBS group

# HCBS versus Community: Medicare Home Health

Resource Use Measure	With HCBS (treatment)	Without HCBS (control)
Home Health PMPM	\$77	\$44
Users	299	211
HH Episodes	367	268
<i>Episodes Per User</i>	<i>1.2</i>	<i>1.3</i>
HH Visits	6,531	4,467
<i>Visits Per User</i>	<i>21.8</i>	<i>21.2</i>
<i>Visits Per Episode</i>	<i>17.8</i>	<i>16.7</i>

- Higher PMPM in the HCBS group
- More users in the HCBS group
- More episodes in the HCBS group
- More visits per episode in the HCBS group



# HCBS versus Community: Medicare Hospice

Resource Use Measure	With HCBS (treatment)	Without HCBS (control)
Hospice PMPM	\$33	\$16
Users	22	9
Hospice Episodes	25	11
<i>Episodes Per User</i>	<i>1.1</i>	<i>1.2</i>
Medicare-Paid Days	4,065	1,930
<i>Days Per User</i>	<i>184.8</i>	<i>214.4</i>
<i>Days Per Episode</i>	<i>162.6</i>	<i>175.5</i>

- Higher PMPM in the HCBS group
- More users and total episodes in the HCBS group
- More days per user and per episode for the community group

# HCBS versus Community: Medicare Part B (Physician, O/P, DME)

Resource Use Measure	With HCBS (treatment)	Without HCBS (control)
Part B PMPM	\$501	\$494
Users	1,403	1,360
<i>Physician Users</i>	1,399	1,352
<i>DME Users</i>	965	615
<i>Other outpatient Users</i>	952	1,007

- Higher PMPM and more users in the HCBS group
- Those differences driven by physician services and DME
- Higher use of “other outpatient” by community control group, which was driven by ER visits