

The Home Health Groupings Model (HHGM)

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PRESENTED BY: Al Dobson, Ph.D.

PREPARED BY: Al Dobson, Ph.D., Alex Hartzman, M.P.A, M.P.H., Kimberly Rhodes, M.A.,
Sarmistha Pal, Ph.D., Sung Kim, Steve Heath, M.P.A, Joan DaVanzo, Ph.D., M.S.W.

Dobson | DaVanzo

Dobson DaVanzo & Associates, LLC Vienna, VA 703.260.1760 www.dobsondavano.com

Introduction and Presentation Overview

- **Introduction**
 - Dobson DaVanzo & Associates was commissioned in early 2017 to replicate the HHGM patient grouper and model payment impacts
- **Presentation Overview**
 - HHGM's Core Elements
 - Historical Context
 - Dobson | DaVanzo's HHGM Replication Project
 - Results and Key Findings
 - Dobson | DaVanzo's Analysis of the HHGM as Outlined in the Proposed Rule
 - Points to Consider

HHGM's Core Elements

- **The Home Health Groupings Model (HHGM) is a proposed replacement to the Home Health Prospective Payment System (HH PPS) case-mix system**
- **Some of the key motivations for the HHGM were to align payments more closely to patient needs and to protect access to care for vulnerable populations**
- **The HHGM would fundamentally change how home health care providers are paid and, in turn, how they deliver care. If implemented, HHGM would:**
 - No longer directly reimburse for the number of therapy visits
 - Base reimbursement directly on patient and case characteristics
 - These characteristics (admission source and episode timing, clinical grouping, functional level, and the presence of comorbidities) comprise the episode's case-mix weight, which is incorporated into the payment model
 - $\text{Base Rate} \times \text{Case-Mix Weight} \times \text{Other Adjustments} = \text{Episode Payment}$
 - Include Nonroutine Supply (NRS) costs in the base rate
 - Shorten home health episodes from 60 days to 30 days
 - This affects both high-cost outlier payments and low-utilization payment adjustments

Historically, when Changes of this Magnitude were Implemented, the Field Experienced Extreme Financial Distress

- **In the past, changes of a similar scale have created unintended effects among agencies and beneficiaries**
- **System changes in the late 1990s resulted in large-scale impacts on the industry:**
 - **Agency impacts:**
 - There was a net 15% reduction in the number of Medicare Home Health Agencies¹
 - **Beneficiary impacts:**
 - Home health utilization dropped by 29%, from 104 home health users per 1,000 in 1996 to 72 users per 1,000 in 1999²
 - **System impacts:**
 - Program payments were reduced from \$16.8 billion in 1996 to \$7.9 billion in 1999, and the industry had not fully recovered as of 2007³

¹Note: The actual closure rate was 26%; the entry of new agencies provided a level of offset. Source: "Agency Closings and Changes in Medicare Home Health Use, 1996-1999." Page 7. U.S. Department of Health and Human Services Assistant Secretary for Planning and Evaluation Office of Disability, Aging and Long-Term Care Policy. July 2003. <https://aspe.hhs.gov/system/files/pdf/74761/closings.pdf>.

²Note: Average county-level rate of decline in HHA utilization. Source: Ibid. Page 6.

³Note: Program payments were \$15.6 billion in 2007. Source: Health Care Financing Review 2008 Statistical Supplement. Table 7.1, Trends in Persons Served, Visits, Total Charges, Visit Charges, and Program Payments for Medicare Home Health Agency Services, by Year of Service: Selected Calendar Years 1974-2007. Centers for Medicare and Medicaid Services. https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareMedicaidStatSupp/Downloads/2008_Section7.pdf#Table%207.1.

Dobson | DaVanzo's HHGM Replication Project

- **To replicate the HHGM patient grouper and model payment impacts, we closely followed the Abt Associates Technical Report¹ and used 2013 data² to:**
 - Construct a claims-level database, linking home health claims to OASIS assessments
 - Build the HHGM patient grouper to place individuals into HHGM case-mix groups
 - Assign payments for simulated HHGM 30-day episodes and simulated current law payments under 30-day episodes
 - Build impact (predictive) ratios by dividing 30-day simulated HHGM payments by 30-day simulated current law payments at the episode level
 - *Note that impact ratios in the Abt technical report, and in Dobson | DaVanzo's replication of the model describe the effects of a presumed budget neutral system*
 - Compare our impact ratios to Abt's on 80+ variables
 - Produce impact analyses for agency-level revenues (assuming overall budget neutrality) for Fee-for-Service and ACO-attributed beneficiaries
 - Assess HHGM's effects on agency margins

¹Overview of the Home Health Groupings Model. November 18, 2016. Abt Associates. <https://downloads.cms.gov/files/hhgm%20technical%20report%20120516%20sxf.pdf>.

²CMS Data Use Agreement Number 28682.

Dobson | DaVanzo's HHGM Replication Results

- We were able to accurately replicate Abt Associates' 2013 HHGM model

	Dobson DaVanzo Replication ¹	Abt Associates Technical Report
Mean Impact Ratio (across the 84 analytic variables)	1.029	1.028
Average current law 30-day episode payment ²	\$1549	\$1519
Average HHGM 30-day episode payment ²	\$1549	\$1519

Dobson DaVanzo's mean impact ratio was .001 from Abt's

Dobson DaVanzo's average episode payment calculation is \$30 from Abt's; 79% of our modeled impact ratios were within +2.5% of Abt's

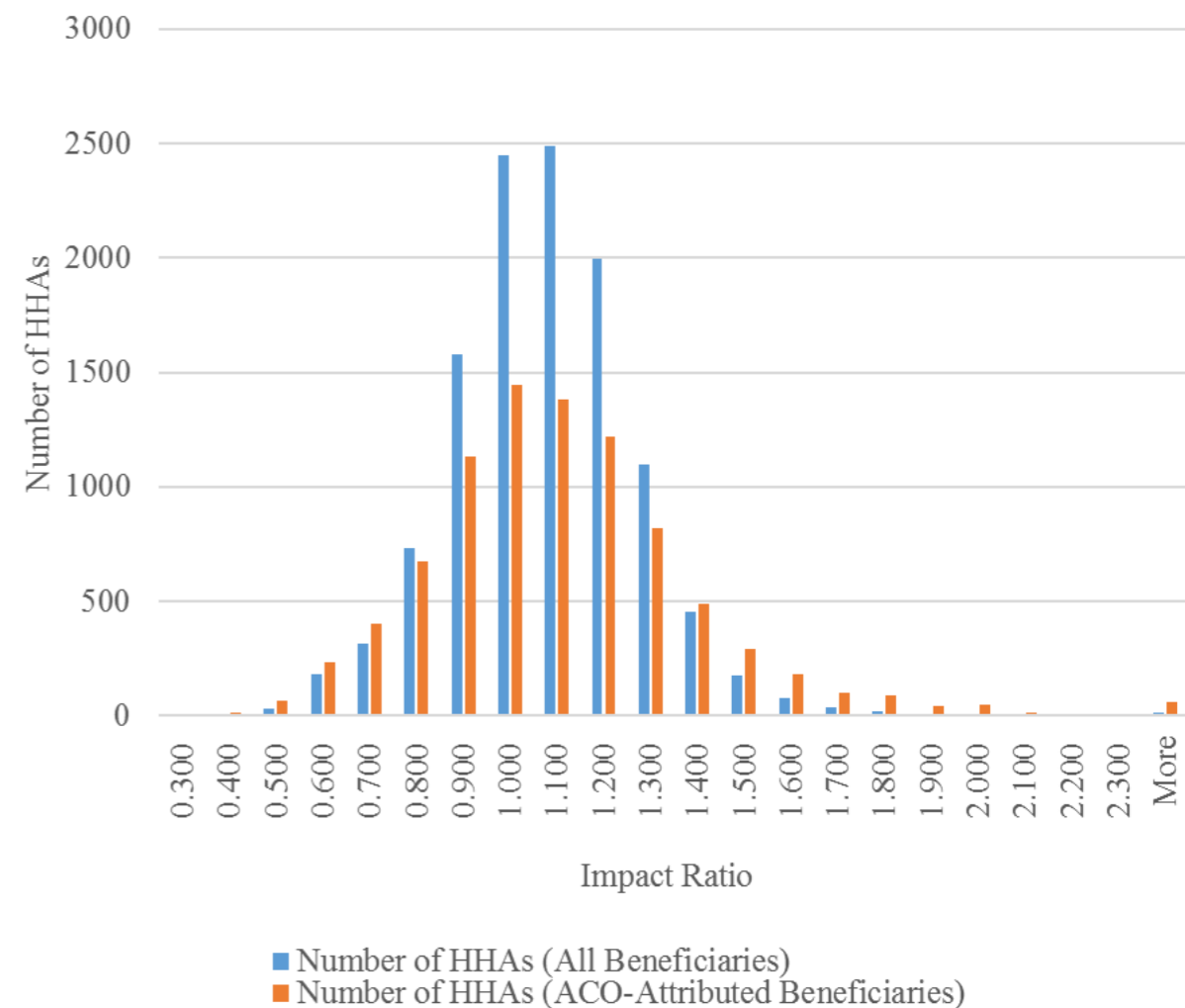
¹ CMS Data Use Agreement Number 28682.

²Revenue neutrality to included cases implied; the system as modeled does not account for lost revenues allocated within removed or missing 30-day cases.

Dobson | DaVanzo's HHGM Replication

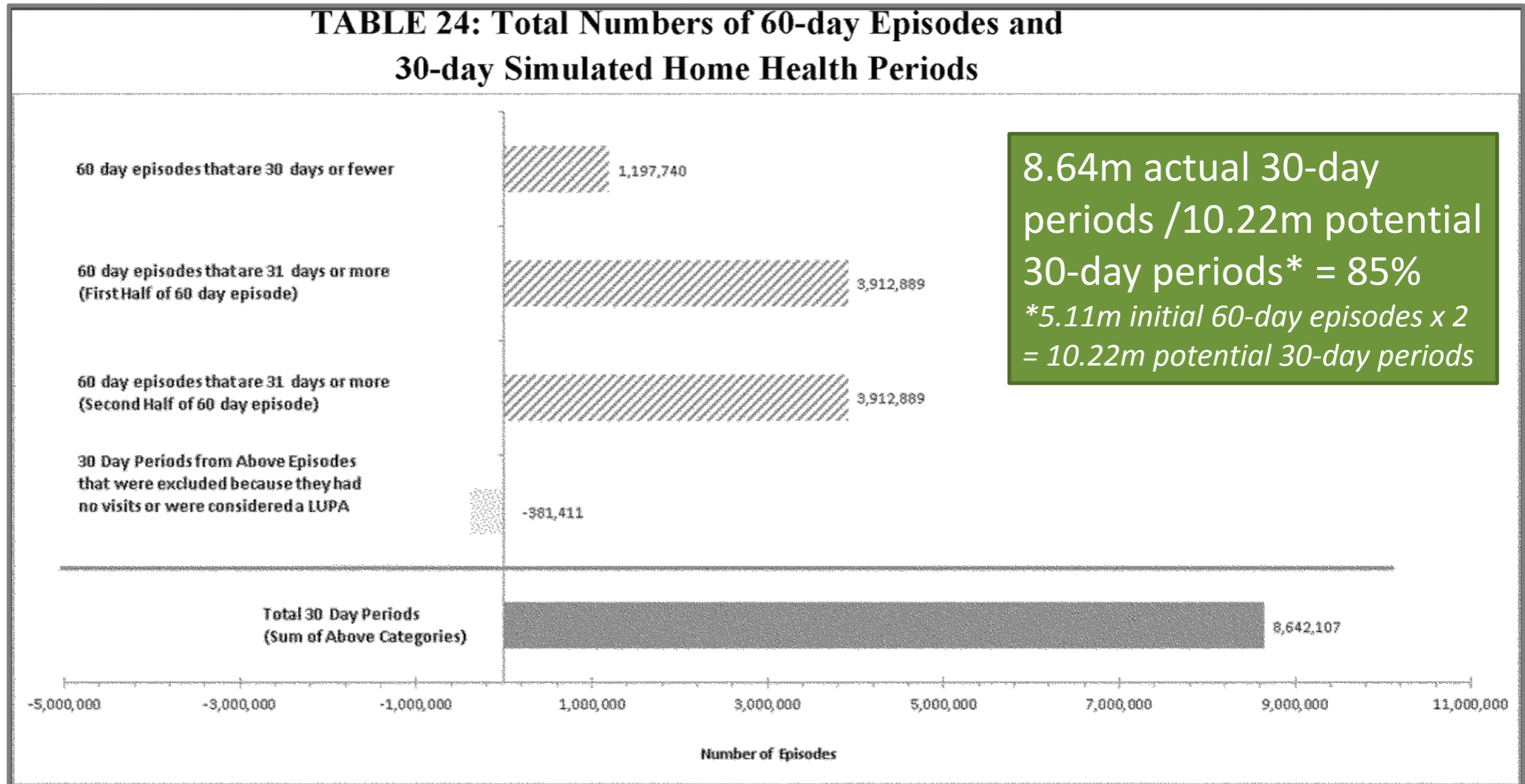
Results: Key Findings

- **The HHGM is highly redistributive of Medicare payments for home health services***
 - 27% of HHAs would experience a revenue shift of at least +/- 20% for the same cases under HHGM
 - 41% of HHAs serving *ACO-attributed beneficiaries* would experience a revenue shift of at least +/- 20% for the ACO-attributed case load under HHGM
 - Note that the inclusion of overhead dollars derived from cost reports in the analysis may reassign payments to case types that facility-based providers specialize in, further exacerbating redistributive effects of the system
- **Major drivers of the impact ratio are therapy provided, admission source (institutional vs. community), timing (early vs. late), and presence of comorbidities**



**Note this distribution assumes a budget neutral system; As outlined in the proposed rule and our analyses, HHGM is not budget neutral*

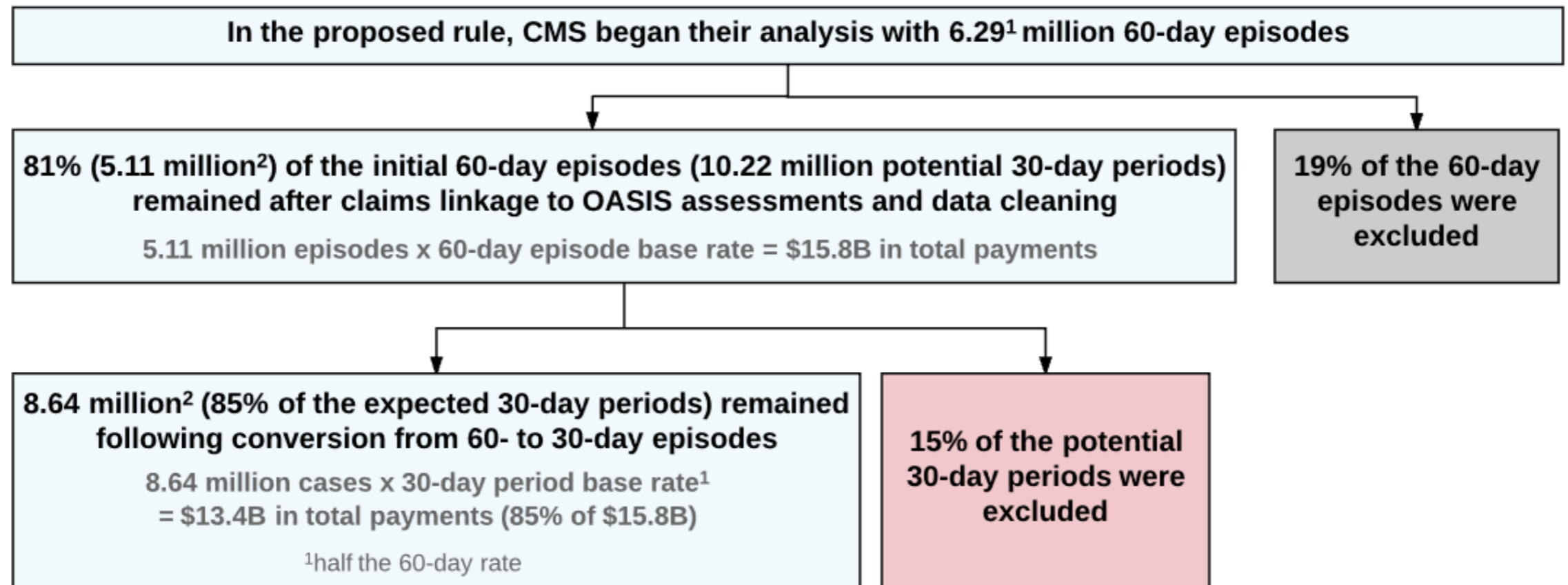
The Proposed Rule's Illustration of 60-day Episodes and 30-day Simulated Periods



Source: Proposed Rule: Medicare and Medicaid Programs; CY 2018 Home Health Prospective Payment System Rate Update and Proposed CY 2019 Case-Mix Adjustment Methodology Refinements; Home Health Value-Based Purchasing Model; and Home Health Quality Reporting Requirements. 82 Federal Register 144, page 35302. Centers for Medicare and Medicaid Services. July 28, 2017. <https://www.gpo.gov/fdsys/pkg/FR-2017-07-28/pdf/2017-15825.pdf>.

Dobson | DaVanzo's Analysis of the HHGM Impact as Outlined in the Proposed Rule

- HHGM as outlined in the CY2018 proposed rule is an estimated 15% below budget neutral on revenues due to the exclusion of certain 30-day episodes which are currently paid under the 60-day system



¹ Proposed Rule: Medicare and Medicaid Programs; CY 2018 Home Health Prospective Payment System Rate Update and Proposed CY 2019 Case-Mix Adjustment Methodology Refinements; Home Health Value-Based Purchasing Model; and Home Health Quality Reporting Requirements. 82 Federal Register 144. Page 35298. Centers for Medicare and Medicaid Services. July 28, 2017. <https://www.gpo.gov/fdsys/pkg/FR-2017-07-28/pdf/2017-15825.pdf>.

² Ibid. Page 35302.

Dobson | DaVanzo's Analysis of the HHGM as Outlined in the Proposed Rule

- **Subsequent to our replication of the 2013 HHGM, a revised version of the model was included in the CY2018 HH PPS proposed rule. Despite this revised version, Dobson | DaVanzo's overall conclusion that the system is highly redistributive is unchanged**
- **However, despite our efforts to recreate and analyze the HHGM, we are unable to fully understand its impacts due to unclear or missing information**
 - Fundamental to understanding the impact table is to know the baseline system revenue from which impacts are assessed
 - The 4.3% reduction to home health payments described in the proposed rule appears to rest on “assumptions on [agency] behavioral responses”.¹ What are the assumed behavioral responses that would decrease the apparent 15% reduction in revenue to a lesser 4.3%?
 - The implications of the changes to LUPA and high-cost outlier episodes and ‘questionable encounters’ may reflect changes to the home health benefit
 - The distribution of resource use for dually (Medicare and Medicaid) eligible beneficiaries found in the Abt Technical report contradicts previous literature
 - The HHGM as outlined in the proposed rule was modeled using 2016 data, which is not publicly available

¹ Proposed Rule: Medicare and Medicaid Programs; CY 2018 Home Health Prospective Payment System Rate Update and Proposed CY 2019 Case-Mix Adjustment Methodology Refinements; Home Health Value-Based Purchasing Model; and Home Health Quality Reporting Requirements. 82 Federal Register 144, page 35298. Centers for Medicare and Medicaid Services. July 28, 2017. <https://www.gpo.gov/fdsys/pkg/FR-2017-07-28/pdf/2017-15825.pdf>.

² Ibid. Page 35385.

Points to Consider

- **The HHGM represents a major shift from the current payment system**
- **The HHGM has the potential to significantly redistribute payments and revenues**
- **By setting costs equal to payments, the HHGM essentially rebases the system to a lower level**
- **Paired with the lack of budget neutrality, the HHGM would stress the system in compounding ways and potentially create unintended consequences**
- **Historically, changes of this magnitude have placed agencies in jeopardy, with negative impacts on beneficiaries, providers, and the post-acute care landscape**