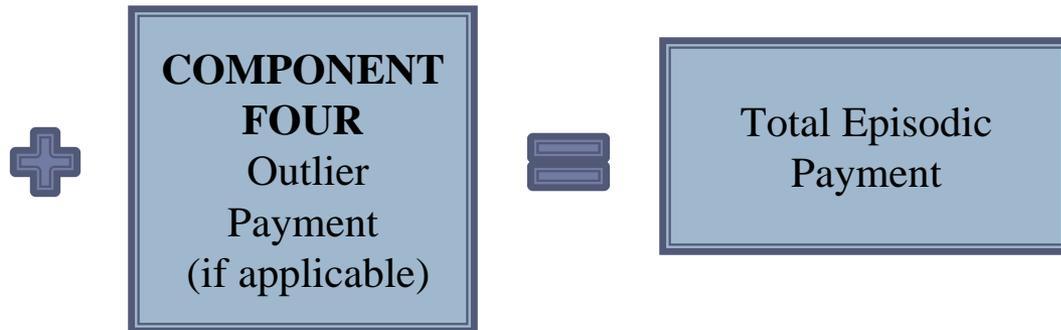
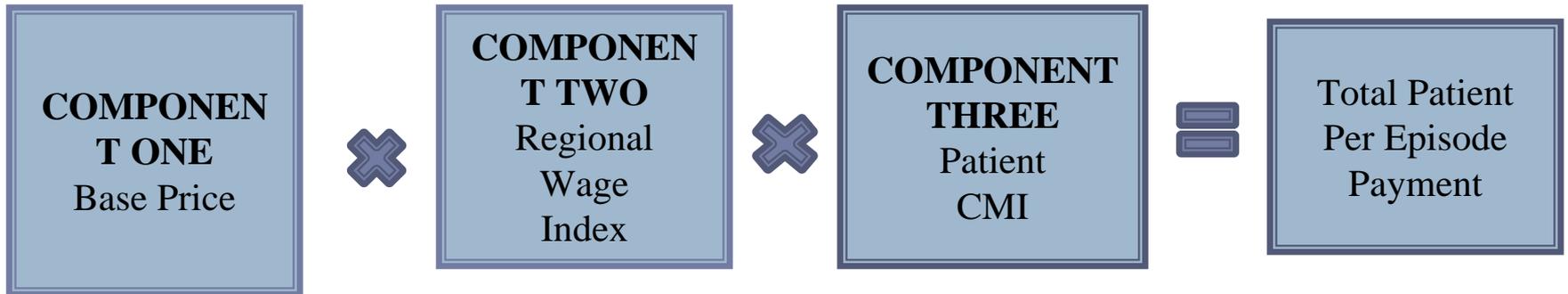


Home Care Work Group Revisions to the Episodic Pricing Methodology

February 23, 2010



2009 -10 Episodic Pricing Model



Overview of Refinements to Episodic Pricing Model

	2009-10 Model	Refined Model
Base Price	6 Base Prices, Adjusted For WIF and CMI	One Base Price, Adjusted for WIF and CMI
Case Mix Data	2008 OASIS Data 2008 Medicaid Claims Exclude Patients Under 18 Exclude Payments Under \$500 (Low Utilization)	Same
Case Mix Grouper	Medicare Grouper	New York State Medicaid Grouper
Outlier Thresholds	80 th Percentile of Each Group	Percentile Thresholds Increases with Case Mix/Patient Need
Wage Index Factor	3 Regions (NYC, Downstate, Upstate)	10 NYS DOL Regions

Base Episodic Price

➤ 2008 Data Set

- Analysis based on 60-day episodes that began and/or ended during 2008
 - Includes some claims dollars from late 2007 and early 2009
- Patients under age 18 excluded
- Total Medicaid Claims: \$1.242 billion
- Total # Episodic Claims: 220,806 episodic claims

➤ To Calculate Base Episodic Price:

➤ SUBTRACT:

- Low utilization claims of \$500 or less (\$7.8M)
- Amounts above outlier thresholds (\$203.8M)
- Other claims without matching OASIS information (\$16.2M)

➤ DIVIDE remaining amount (\$1.014 billion) by remaining claims (178,009)

- Base price before adjustments: \$5,695.90
- Base price after adjustment for unpaid RTR & AQE funding: \$5,903.20

Summary Results of New Statistical Model

	Medicaid Model : Assessment Reason, Clinical, Functional, Age	Medicaid Model: Assessment Reason, Clinical, Functional, Age + Outlier Percentile Thresholds	2009-10 Medicare Model Using 2008 OASIS and Claims Data
R-Square	.22	.36	.26

Refinements to Case Mix

- ▶ The 2009-10 model used the CMS HIPPS Codes for *Medicare* home health care patients (e.g., acute rehab care)
- ▶ Work Group concluded that the Medicare HIPPS did not capture all of the data elements needed to predict costs for *Medicaid* home health patients (e.g., predominantly custodial care)
- ▶ A new approach, which examined all of the OASIS data was used to identify data elements that best predict costs for Medicaid home health patients

Overview of New York State Medicaid Grouper

	2009-10 Model – Medicare Grouper	NYS Medicaid Grouper
Clinical	Medicare Clinical Measures – 3 Groups	Medicaid Clinical Measures – 3 Groups
Functional	Medicare Functional Measures – 3 Groups	Medicaid Functional Measures – 3 Groups
Assessment Reason	Not Applicable	2 Groups – Start of Care or Recertification
Age	Not Applicable	6 Age Groups
Dual Status	2 Groups - Dual and Non-Dual - for each Clinical/Functional combination	Not Applicable
Total # Case Mix Groups/Weights	Total: 20 Case Mix Groups (3*3*2) + 2 for claims with no OASIS	Total: 108 Case Mix Groups (3*3*2*6)

Medicaid Grouper for New York State

- ▶ Uses 2008 Medicaid claims/episodes and 2008 OASIS Data
- ▶ Model includes Assessment Reason as a proxy for Episode Timing
 - Assessment Reason (M0100-Assessment):
 - Start of Care – initial assessment
 - Recertification – follow up assessment
- ▶ Analysis included most of the variables that are collected in both the initial and follow-up assessment
- ▶ Model was further refined by excluding:
 - Variables/measures that were non-significant (did not explain differences in costs of patients)
 - Variables that resulted in negative parameter coefficients, i.e., “over fitting the model”
 - Variables that did not increase the ability of the model to explain differences in cost, i.e., did not significantly improve the model’s fit (r-square)

OASIS Variables that Explain Variation in Costs

Assessment Reason

- Start of Care
- Recertification of Care

Clinical Factors

- 1) Diabetes
- 2) Orthopedic diagnoses
- 3) Dementia diagnoses
- 4) HIV diagnoses
- 5) Bowel Incontinence
- 6) Urinary Incontinence
- 7) Shortness of Breath

Functional Factors

- 1) ADL Dressing upper body
- 2) ADL Dressing lower body
- 3) ADL Toileting
- 4) ADL Transferring

Age

- Less than 60
- 60-69
- 70-74
- 75-79
- 80-84
- 85+

OASIS Variables that Did Not Explain Variation In Costs (not included in Model)

- ▶ Variables that were not statistically significant, resulted in a negative parameter coefficient (over fitting) or didn't contribute significantly to the model fit (r^2) were excluded:
 - Episode number
 - Dual status
 - Mental health diagnosis
 - Paralysis diagnosis
 - ADL Bathing
 - ADL Ambulation

New Medicaid Clinical Classification

- ▶ Similar to the CMS HIPPS coding methodology, a clinical index based on the 7 statistically significant conditions was created
- ▶ Used the parameters of the statistical model to create weights (i.e., parameter estimates of 7 conditions: diabetes, orthopedic, dementia, HIV, bowel incontinence, urinary incontinence and shortness of breath)
- ▶ Three Clinical levels created:
 - A = 0-4
 - B = 5-14
 - C = 15+

New Medicaid Functional Classification

- ▶ Similar to the CMS HIPPS coding methodology, a functional index based on the 4 statistically significant ADLs was created
- ▶ Used the parameters of the statistical model to create weights (i.e., parameter estimates of 4 functions: dressing upper body, dressing lower body, toileting and transferring)
- ▶ Three levels created:
 - E=0-18
 - F=19-51
 - G=52+

Point Scale

		Response Level					
OASIS Number		0	1	2	3	4	5
Diagnosis of Diabetes	M0230/M0240	0	4				
Diagnosis of Orthopedic	M0230/M0240	0	2				
Diagnosis of Dementia	M0230/M0240	0	24				
Diagnosis of HIV	M0230/M0240	0	10				
Bowel Incontinence	M0540	0	0	0	0	0	5
Urinary Incontinence	M0520	0	6	0			
Shortness of Breath	M0490	0	4	4	4	4	
Dress Upper	M0650	0	8	18	18		
Dress Lower	M0660	0	0	12	21		
Toilet	M0680	0	13	20	20	20	
Transfer	M0690	0	0	9	9	15	15

Statistical Model Updated With New Classifications

- ▶ Model includes 108 Groups:
 - Clinical Status: A, B, C
 - Functional Status: E, F, G
 - Assessment Reason for calculating weights
 - Start of Care = 0
 - Reassessment = 1
 - Age Groups for Calculating Weights
 - 1=<60 years
 - 2=60-69 years
 - 3=70-74 years
 - 4=75-79 years
 - 5=80-84 years
 - 6=85+ years
- ▶ Model $r^2 = 0.22$
- ▶ No outlier thresholds established at this point

Establishing Outlier Thresholds

- ▶ A separate and unique percentile threshold is established for each of the 108 case mix groups
- ▶ The outlier percentile threshold increases with patient need/severity of condition
 - Higher clinical – higher percentile threshold
 - Higher functional – higher percentile threshold
 - Older age – higher percentile threshold

Examples of Outlier Threshold Percentiles

Assessment Reason	Clinical Group	Functional Group	Age Group	Threshold Percentile	Threshold
Start of Care = 0	A	E	70-74 = 3	70	\$3,589
Start of Care = 0	A	G	85+ = 6	78	\$18,762
Start of Care = 0	B	F	Under 60 = 1	78	\$6,357
Start of Care = 0	C	E	75-79 = 4	82	\$8,041
Start of Care = 0	C	G	80-84 = 5	90	\$25,283
Recertification = 1	A	F	60-69 = 2	73	\$7,928
Recertification = 1	B	E	80-84 = 5	77	\$6,486
Recertification = 1	B	G	75-79 = 4	83	\$24,680
Recertification = 1	C	F	70-74 = 3	83	\$21,291
Recertification = 1	C	G	85+ = 6	90	\$27,769

Outliers by OASIS Assessment Reason

Reason	# Claims	\$M Above Threshold
Start of Care	9,966	\$45.7
Recertification	29,896	\$149.4
No OASIS	1,228	\$8.7
TOTAL:	41,090	\$203.8

Outliers by Age Group

Group	# Claims	\$M Above Threshold
1. Under 60	12,921	\$62.7
2. 60-69	7,104	\$32.1
3. 70-74	4,663	\$20.7
4. 75-79	4,470	\$21.5
5. 80-84	4,683	\$25.0
6. 85 and up	6,021	\$33.1
No OASIS	1,228	\$8.7
TOTAL:	41,090	\$203.8

Outliers by Clinical Grouping

Group	# Claims	\$M Above Threshold
A	16,848	\$76.4
B	18,878	\$98.9
C	4,136	\$19.8
No OASIS	1,228	\$8.7
TOTAL:	41,090	\$203.8

Outliers by Functional Grouping

Group	# Claims	\$M Above Threshold
E	18,593	\$74.7
F	15,431	\$89.2
G	5,838	\$31.2
No OASIS	1,228	\$8.7
TOTAL:	41,090	\$203.8

Example Case Mix ~ Mrs. Smith

Mrs. Smith - Assessment Reason: Recertification =1 Age Group 70-74 (Age = 3)	Points
Diabetes	4
Orthopedic Condition (Arthritis)	2
Bowel Incontinence less than Once Weekly Response 1	0
Urinary Incontinence Response 1	6
No Shortness of Breath	0
Clinical Score (A= 0-4, B=5-14, C=15+)	12 = B
Dress Upper Body Response 1 (needs clothes laid out)	8
Dress Lower Body Response 1 (needs clothes laid out)	0
Toileting Response 1 (needs to be reminded, supervised, assisted)	13
Functional Score (E=0-18, F= 19-51, G=52+)	21=F
Mrs. Smith : Case Mix Group = 1 B F 3	

Example of Case Mix Index ~ Mrs. Smith

Example of calculation of Case Mix Index:

Assessment Reason: 1 (Recertification)
Clinical Group: B
Functional Group: F
Age Group: 3 (age 70-74)

- Number of episodic claims in this group: 4,193
 - Low utilization claims (\$500 or less) excluded
- Total claims dollars: \$29,682,011
- Outlier threshold: \$9,556
- Dollars above threshold: \$4,760,973
- Dollars below threshold: \$24,921,039
- Average per claim: \$5,943 (\$24,921,039 divided by 4,193)
- \$5,943 divided by \$5,696 (average for all claims) = 1.0435 = Case Mix Index for this group

Refinements to Wage Index Factor

- ▶ Medicare labor cost percentage of 77%
- ▶ New York State Department of Labor ~ 10 Labor Market Regions
- ▶ Occupational Employment Statistics compiled by the Federal Bureau of Labor Statistics for five occupational categories:
 - Home Health Aides, Registered Nurses, Occupational Therapists, Physical Therapists, Speech Therapists
- ▶ Occupational categories are weighted according to each Region's Medicaid utilization as reported in the CHHA certified cost reports for 2008.
- ▶ No adjustment for fringe benefits due to lack of reliable data
 - Cost reports/statistical reports will be amended to collect necessary data
- ▶ Wage Index Factors are adjusted to achieve revenue neutrality

Example Wage Index Factor Calculation: Capital Region

	Registered Nurses	Physical Therapy	Speech Therapy	Occupational Therapy	Home Health Aides
Regional Average Wage	\$28.93	\$30.99	\$27.43	\$29.99	\$12.28
Statewide Average Wage	\$35.91	\$35.78	\$34.92	\$32.59	\$11.16
Ratio (Region/Statewide)	.8055	.8659	.7855	.9202	1.1008
Weighting *	.6511	.1293	.0175	.0402	.1619
Total weighted ratio** .8654					
Adjusted for revenue neutrality .8874					

** $(.8055 \times .6511) + (.8659 \times .1293) + (.7855 \times .0175) + (.9202 \times .0402) + (1.1008 \times .1619) = .8654$

Weighting is based on Medicaid visits reported by 9 CHHAs in Capital Region (2008 cost reports):

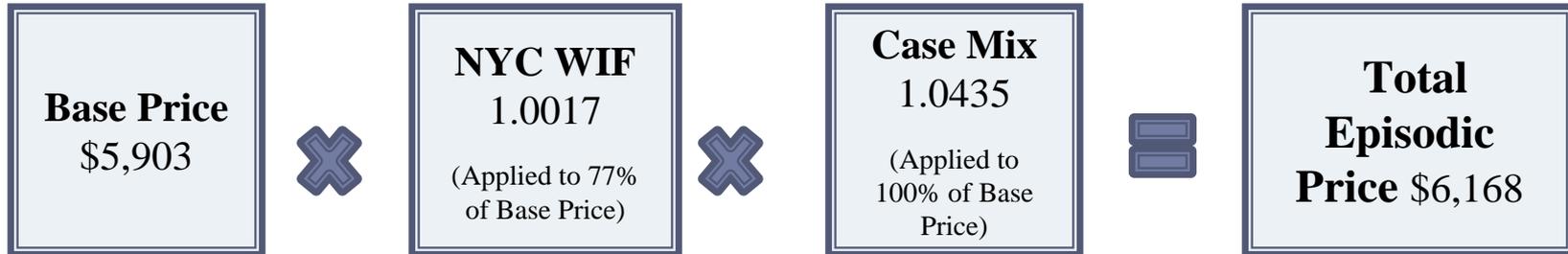
Nursing: 37,562
 PT: 7,459
 Speech: 1,010
 OT: 2,318
 HHA: 9,342

Wage Index Factors

Region	Wage Index	Counties
Capital	0.8874	Albany, Columbia, Greene, Rensselaer, Saratoga, Schenectady, Warren, Washington
Central New York	0.9325	Cayuga, Cortland, Madison, Onondaga, Oswego
Finger Lakes	1.0420	Genesee, Livingston, Monroe, Ontario, Orleans, Seneca, Wayne, Wyoming, Yates
Hudson Valley	1.0724	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester
Long Island	1.0769	Nassau, Suffolk
Mohawk Valley	0.9594	Fulton, Herkimer, Montgomery, Oneida, Otsego, Schoharie
New York City	1.0017	Bronx, Kings, Queens, New York, Richmond
North Country	0.8986	Clinton, Essex, Franklin, Hamilton, Jefferson, Lewis, St. Lawrence
Southern Tier	0.8624	Broome, Chemung, Chenango, Delaware, Schuyler, Steuben, Tioga, Tompkins
Western New York	0.8563	Allegany, Cattaraugus, Chautauqua, Erie, Niagara

Example: Mrs. Smith

Recertification Assessment, New York City CHHA, Clinical B, Functional F,
Age Group 70-74



Calculation of Total Reimbursement to CHHA under 3 cost scenarios

Total cost of visits/hours	Outlier Threshold	Episodic Payment	Outlier Payment	Total Payment (add quality payment if applicable)
\$3,000	\$9,556	\$6,168	\$0	\$6,168
\$6,000	\$9,556	\$6,168	\$0	\$6,168
\$12,000	\$9,556	\$6,168	\$2,151*	\$8,319

* Assumes \$20 million quality pool

Next Steps

- ▶ Continue discussions of methodology
- ▶ Refine quality measures
- ▶ List and discuss implementation issues