MASSHEALTH ACO/MCO PRICING MEETING

JUNE 21, 2017

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Boston, MA





TODAY'S AGENDA

- Overview
- Base Data Development
- Prospective Adjustments
 - Price Normalization
 - Medical and Pharmacy Trend
 - Program Changes
- Entity-Specific Adjustments
 - Clinical Efficiency Adjustments
 - Inpatient Stop-Loss
 - Network Variance Factor
- Non-Medical Loads
- Reconciliation
- RY17 Continuation Rates

RATE DEVELOPMENT PACKAGES & INFORMATION SHARING

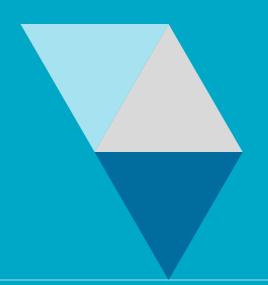
- Rate development packages (released on June 20, 2017)
 - Entity/Class-specific rate build-up
 - Entity/Class-specific NVF
 - Market rate build-up
 - CRCS Sheets
 - Supplemental Maternity Payment exhibit
 - RY18 Rate Development Package Guide
- Information Sharing (yet to be released)
 - Complete narrative on rating methodology and assumptions for capitation rate development and ACO benchmark development
 - Completion factors underlying adjusted base data
 - Base member months details
 - Additional LANE and PPA detail
 - Additional CBHI and ABA detail

The information provided in this document is subject to change and is not binding on EOHHS.

All information provided in this document, including example calculations, is for information and illustrative purposes only. Examples incorporate illustrative numbers (e.g., for administrative rates, capitation payments, etc.) that may not reflect actual values, and example calculations use simplifying assumptions that may not reflect actual calculations.

Methodologies set forth herein may be subject to federal approval, and all information provided in this document is subject to change as required to comply with any applicable laws or regulations.

RY18 TCOC BENCHMARK AND CAPITATION RATE DEVELOPMENT OVERVIEW



OVERVIEW RATE SETTING PHILOSOPHY

MassHealth Program Goals

Federal Rules and Regulations

Actuarial Standards

Assess Current Environment

- Current data
- Enrollment patterns
- Contract Requirements
- Marketplace Factors
- Risk

TCOC Benchmarks & Capitation Rates Regional and Rating Category Basis

OVERVIEW

REGULATORY AND ACTUARIAL CONSIDERATIONS

- TCOC benchmarks and capitation rates are developed in accordance with regulatory requirements and actuarial guidance
 - While TCOC Benchmarks for Primary Care ACOs and MCO-Administered ACOs do not require certification, generally accepted actuarial principles will be followed
- CMS regulation sources and guidance
 - 42 CFR 438 "Managed Care"
 - Medicaid Managed Care Final Rule (May 2016)
 - Additional clarification released (e.g., pass-through payments) subsequent to the release of the Medicaid Managed Care Final Rule
 - Medicaid Managed Care Rate Development Guide (April 2017)
 - CMS Checklist (November 2014)
- Methodologies for benchmarks and capitation rates are subject to CMS review and approval

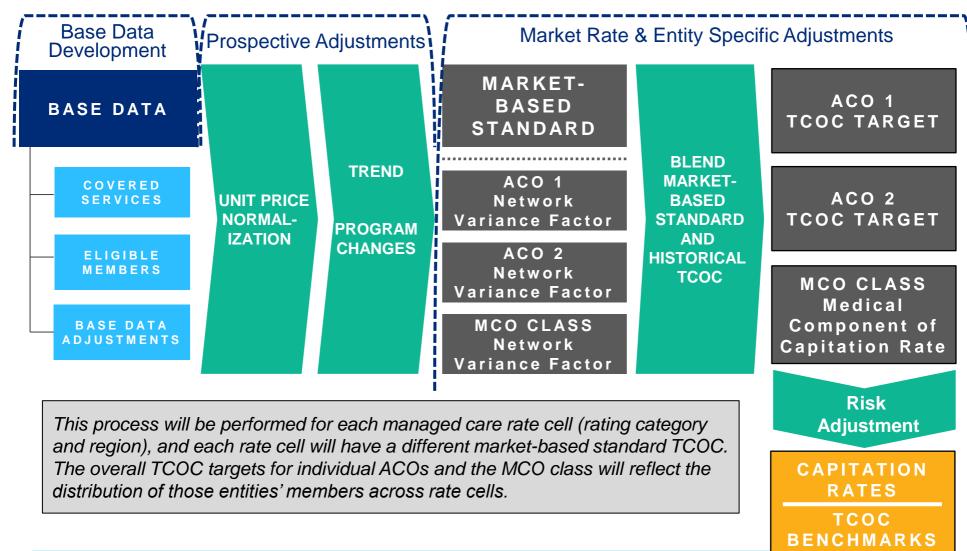
OVERVIEW

REGULATORY AND ACTUARIAL CONSIDERATIONS

- ASOP 49 defines "actuarially sound" Medicaid managed care capitation rates
 - Medicaid capitation rates are "actuarially sound" if, for business for which the
 certification is being prepared and for the period covered by the certification,
 projected capitation rates and other revenue sources provide for all reasonable,
 appropriate, and attainable costs required under the terms of the contract.
 - For purposes of this definition, other revenue sources include, but are not limited to, expected reinsurance and governmental stop-loss cash flows, governmental risk adjustment cash flows, and investment income.
 - For purposes of this definition, costs include, but are not limited to, expected health benefits, health benefit settlement expenses, administrative expenses, the cost of capital, and government-mandated assessments, fees, and taxes.
- Further guidance on actuarial soundness is provided in 42 CFR 438.4

OVERVIEW

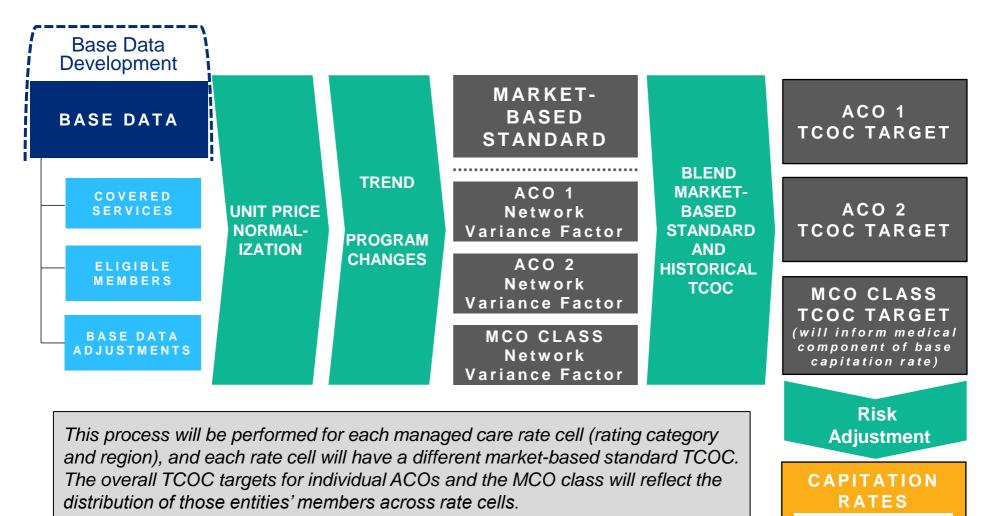
RY18 BENCHMARKS AND RATE DEVELOPMENT



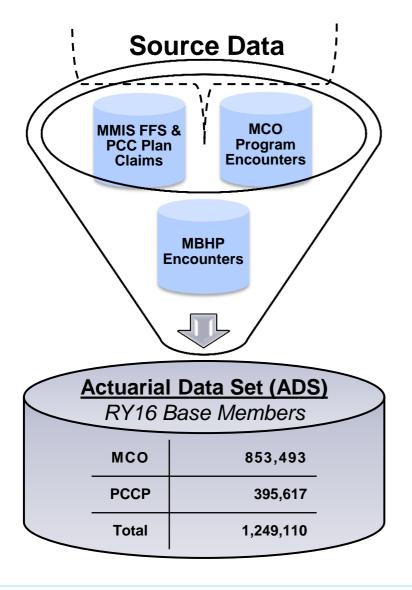
RY18 TCOC AND CAPITATION RATE DEVELOPMENT

BASE DATA
DEVELOPMENT





TCOC BENCHMARKS



- Validation
- Standardization (e.g., COS, provider types, Rating Categories)

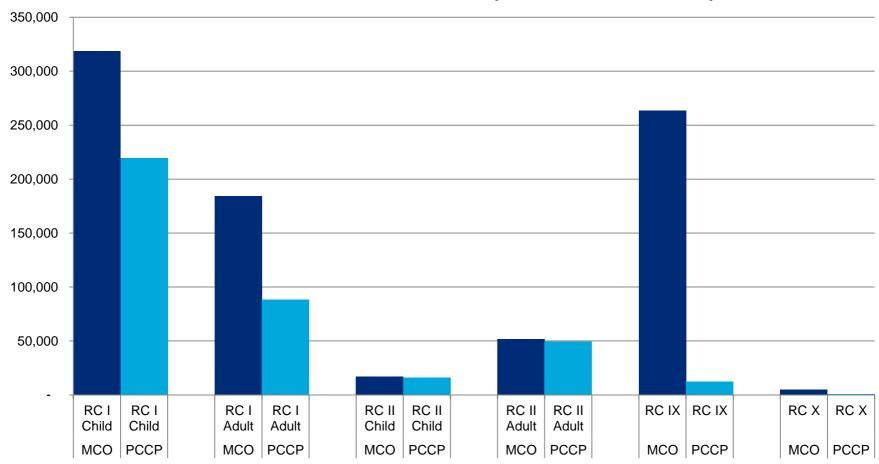


- Apply filters for covered population and benefits
- Price Normalization

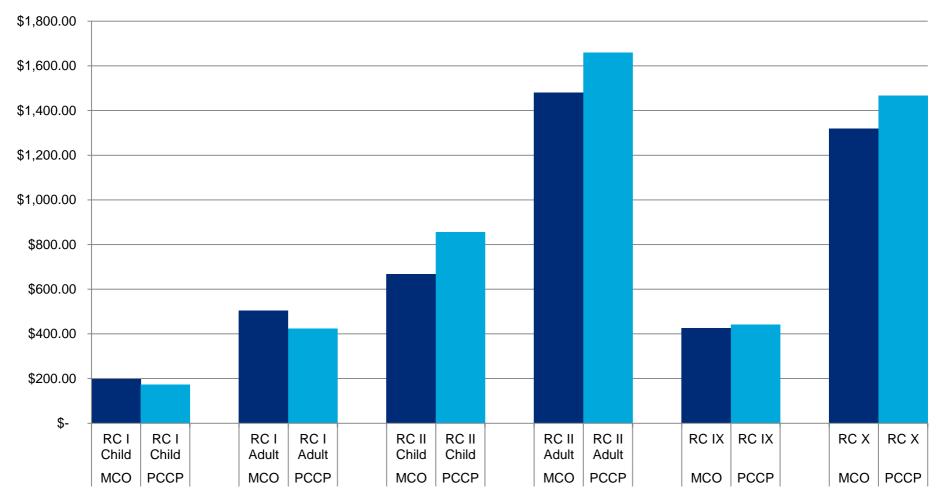


 ADS: Single source of standardized and normalized data

RY16 Base Data Enrollment (Count of Members)



RY16 Base Data PMPM¹

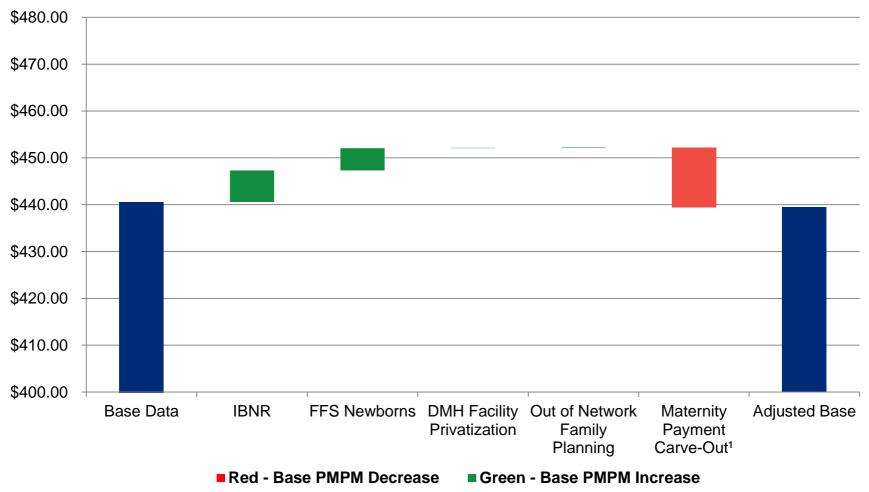


1. "Base data" summarizes the starting point base data PMPMs by RC prior to base adjustments.

BASE DATA DEVELOPMENT OTHER ADJUSTMENTS

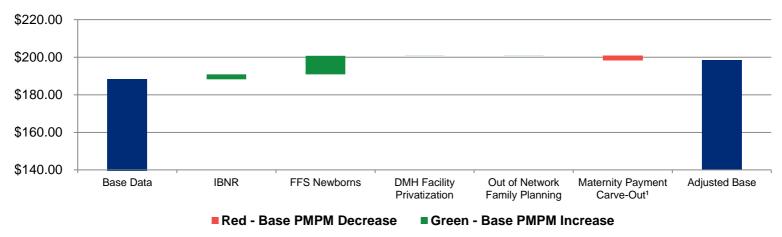
- In addition to price normalization, other adjustments are made to the ADS prior to the application of prospective adjustments
 - Managed care eligible populations
 - MCO/ACO covered services
 - IBNR: Estimate of claims incurred, but not yet reported
 - Developed by MCO (and separately for PCC Plan), service category, and rate cell
 - Addition of FFS newborn data for PCC Plan
 - Addition of data paid FFS by the Department of Mental Health (DMH privatization)
 - Inclusion of family planning services rendered out-of-network (MCO members)
 - Removal of facility claims for maternity delivery events (paid under separate payment for RY18)





1. Delivery facility costs are reimbursed separately through the Supplemental Maternity Payment



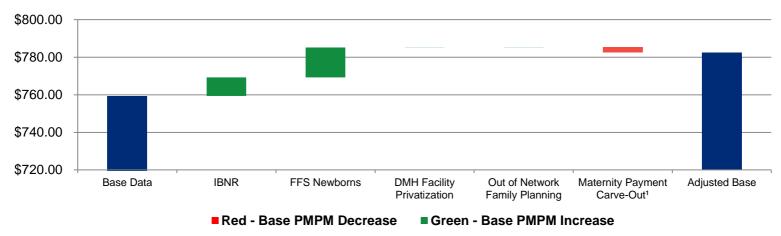


RCI-Adults



1. Delivery facility costs are reimbursed separately through the Supplemental Maternity Payment

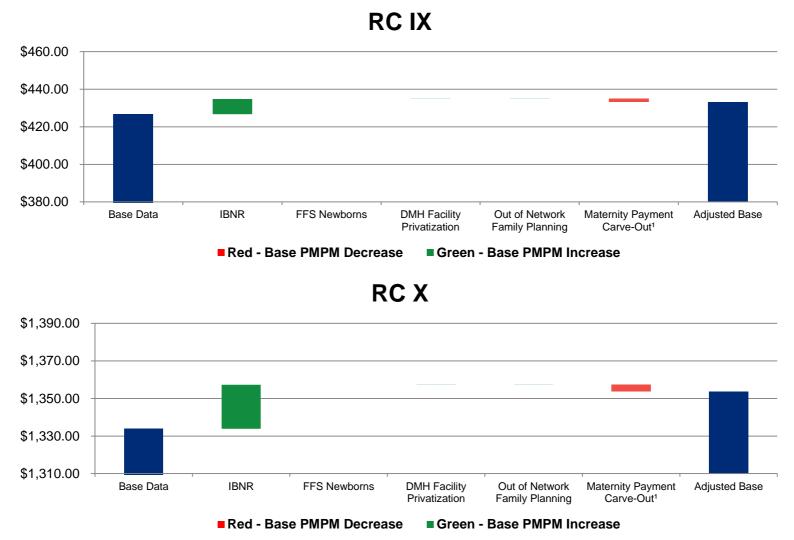




RCII - Adults



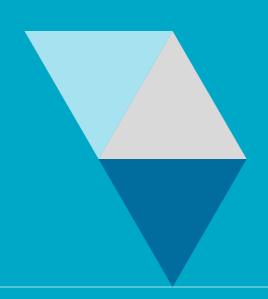
1. Maternity delivery costs reimbursed separately through the Supplemental Maternity Payment



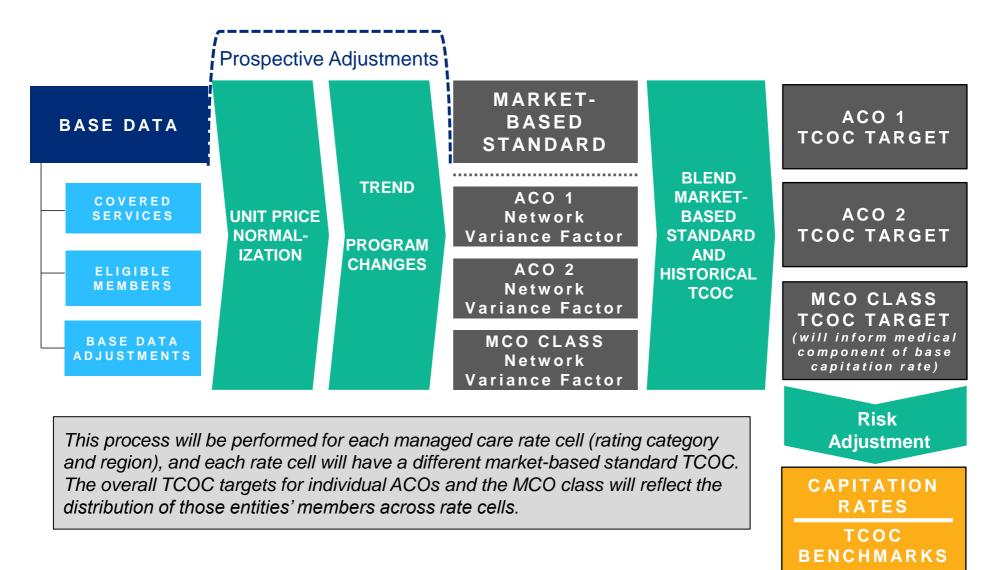
1. Delivery facility costs are reimbursed separately through the Supplemental Maternity Payment

RY18 TCOC AND CAPITATION RATE DEVELOPMENT

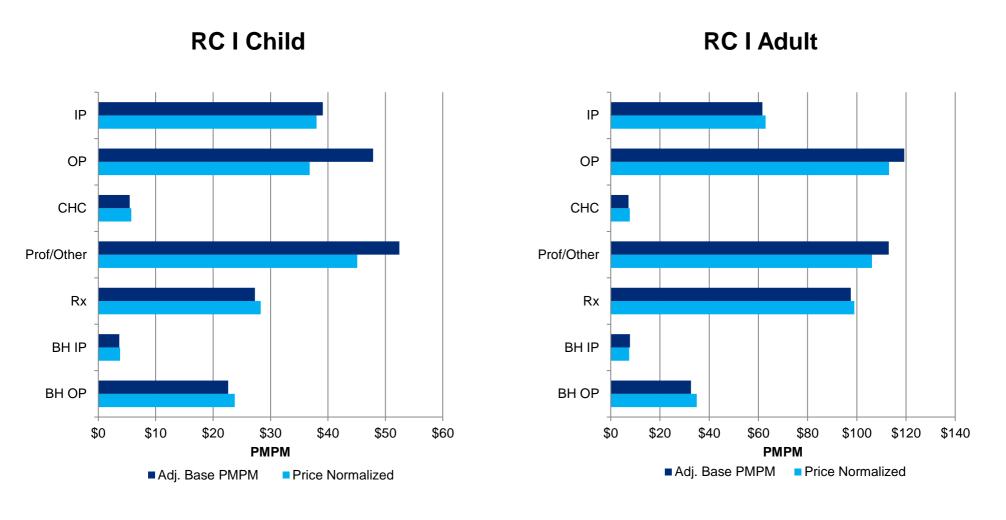
PROSPECTIVE ADJUSTMENTS

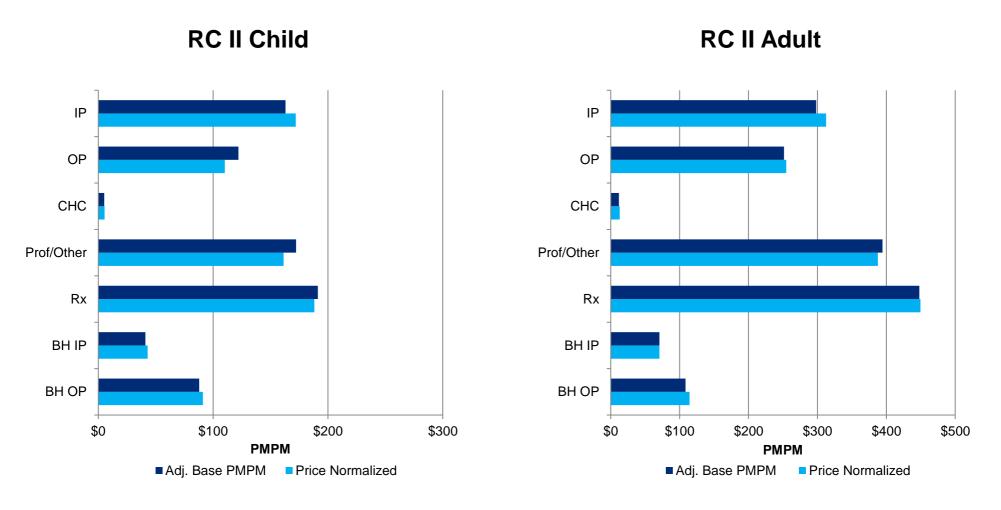


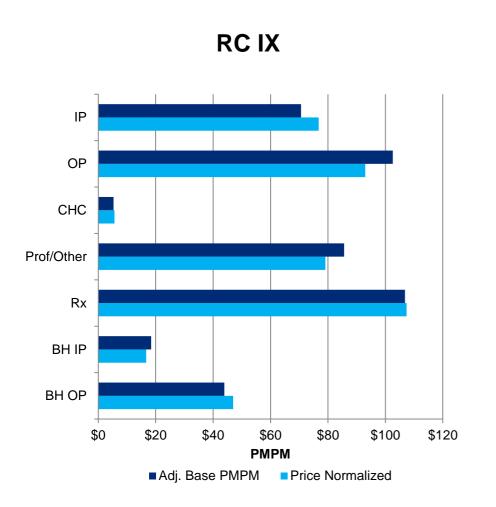
PROSPECTIVE ADJUSTMENTS

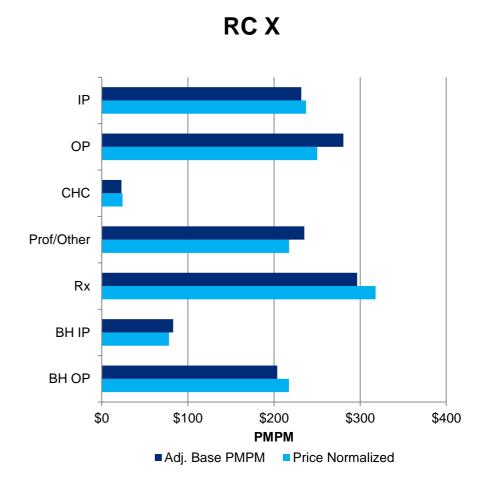


- Claims and encounters are price normalized across major COS
 - Inpatient Hospital: Normalized to MassHealth APAD fees
 - Outpatient Hospital: Normalized to MassHealth APEC fees
 - Professional services: Normalized to MassHealth fee schedules
 - Behavioral Health: Applicable BH fees for PCC Plan members
 - Inpatient services
 - Outpatient services
 - CHC: Normalized to RY18 MassHealth fee level
 - Pharmacy: Normalized to NADAC/WAC pricing









PROSPECTIVE ADJUSTMENTS FEE SCHEDULE LEVEL SETTING

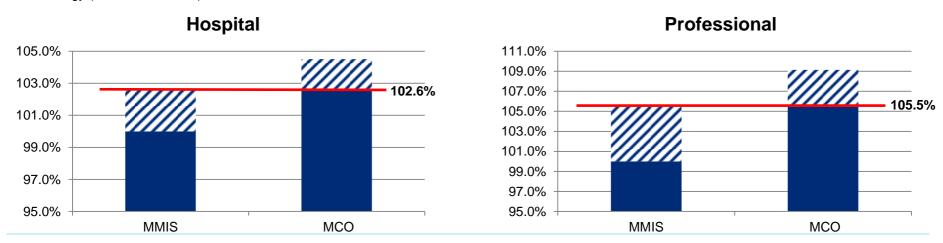
- RY17 capitation rates reflected hospital fees capped at 105% of MassHealth fees, and professional services capped at110%
- Starting in RY18 capitation rates will be priced at 100% of MassHealth fees
- MassHealth will increase fees to offset the capitation rate reductions due to this re-alignment.
 - EOHHS will raise MassHealth FFS payment rates for acute inpatient and outpatient hospital services by 2.6%, effective January 1, 2018
 - Applies to APAD and APEC payments
 - Accountable Care Partnership Plans and MCOs will be expected to pay at or below 100% of the new MassHealth benchmark for hospital services
 - EOHHS will raise MassHealth FFS payment rates for professional services by 5.5%, effective January 1, 2018
 - Applies to services covered under the Medicine (101 CMR 317), Surgery and Anesthesia (114.3 CMR 16.00), and Radiology (114.3 CMR 18.00) fee schedules

PROSPECTIVE ADJUSTMENTS FEE SCHEDULE LEVEL SETTING

	Α	В	$C = A \times B$	D		$E = A \times D$	F = E - C
Data Source	 RY16 Claims Dlume at 100% of A Fee Schedule	Effective MCO RY17 % of Fee Schedule	Claims Priced fective RY17 %	Level-Set % of Current MA	Lev	vel-Set Claims Volume	Dollar Impact
MMIS Hospital ¹	\$ 1,144,547,802	100.0%	\$ 1,144,547,802	102.6%	\$	1,174,327,520	\$ 29,779,719
MCO Hospital ¹	\$ 1,563,713,570	104.5%	\$ 1,634,179,182	102.6%	\$	1,604,399,463	\$ (29,779,719)
Total Hospital ¹	\$ 2,708,261,371	102.6%	\$ 2,778,726,983	102.6%	\$	2,778,726,983	\$ -
MMIS Professional ²	\$ 371,045,377	100.0%	\$ 371,045,377	105.5%	\$	391,340,671	\$ 20,295,294
MCO Professional ²	\$ 553,076,908	109.1%	\$ 603,624,185	105.5%	\$	583,328,891	\$ (20,295,294)
Total Professional ²	\$ 924,122,286	105.5%	\$ 974,669,562	105.5%	\$	974,669,562	\$ -

Note: Totals may not tie due to rounding

- 1. Includes applicable hospital services covered under the APAD and APEC fee schedules.
- 2. Includes applicable professional services covered under the Medicine (101 CMR 317), Surgery and Anesthesia (114.3 CMR 16.00), and radiology (114.3 CMR 18.00) fee schedules.



PROSPECTIVE ADJUSTMENTS TREND — OVERVIEW

- Trend assumptions account for changes in utilization, unit cost, intensity, and mix
 of services during the projection period
 - Some unit cost trends are already reflected in price normalization adjustments, resulting in lower unit cost trends
- Annualized trend factors are developed by rate cell and major service category
 - Annual factors are compounded based on the projection period
 - The projection period (amount of time between the midpoint of RY16 and the midpoint of RY18) is 27 months
 - Additional trend is applied for RY15 PCC Plan members under age one
- Blend of quantitative and qualitative information with professional judgement

PROSPECTIVE ADJUSTMENTS TREND — SOURCES

- Trend analysis reviews historical Massachusetts Medicaid data to project future costs
 - January 2014 through December 2016 data are reviewed
- Unit cost vs utilization trends
- Quantitative methods such as regression analyses and moving average trends are reviewed
- Interactions with price normalization are considered
- Qualitative information is also reviewed
 - MCO-reported financial statements
 - Other Medicaid program trends

PROSPECTIVE ADJUSTMENTS TREND SUMMARY - ANNUALIZED TREND RATES

RATING CATEGORY	SERVICE CA	TEGORY	UT	TL / 1000	UNIT COS	Т	PMPM				
All RCs	Medical (witho	out Home		0.91%	9%	1.31%					
All RCs	Medical (with I	Home Health)		-0.64%	0.7	9%	0.15%				
All RCs	Pharmacy - O	ther High Cost ¹		3.28%	10.5	14.17%					
All RCs	Pharmacy - Al	I Other ¹		0.86%	6.4	7.41%					
PMPM TRENDS											
SERVICE CATEGORY	RC I CHILD	RC I ADULT	RC II CHILD	RC II ADULT	RC IX	RC X	ALL RCS				
Medical (without Home Health)	1.36%	2.16%	0.92%	1.47%	0.22%	1.78%	1.31%				
Medical (with Home Health)	1.36%	1.46%	0.14%	-1.88%	0.21%	1.57%	0.15%				
Pharmacy - Other High Cost ¹	17.85%	16.29%	14.78%	12.53%	11.83%	0.48%	14.17%				
Pharmacy - All Other ¹	4.11%	8.57%	5.69%	8.20%	7.45%	5.72%	7.41%				

1. Pharmacy trends exclude the impact of high cost therapies for HCV and Spinraza.

PROSPECTIVE ADJUSTMENTS TREND — PHARMACY

CONSIDERATIONS

Impact of price normalization on unit cost trends, particularly for low cost generic prescriptions

Anticipated pharmaceutical pipeline developments including new drugs, new indications, and new generic introductions

Program, rate cell and regional differences in utilization and product mix

ANTICIPATED UTILIZATION GROWTH IN IMPORTANT CATEGORIES

- Medication assisted treatment for substance abuse disorder, including buprenorphine products and naltrexone long acting injection
- Oncology and oral oncology
- Drugs for inflammatory conditions such as rheumatoid arthritis, psoriasis, and Crohn's disease

ANTICIPATED UNIT COST GROWTH IN IMPORTANT CATEGORIES

New products and price inflation of existing products

HIV (specialty)
Inflammatory (specialty)
Spinraza (specialty – high cost)
Oncology/oral oncology (specialty)
Hemophilia (specialty – high cost)
Diabetes (traditional)

PROSPECTIVE ADJUSTMENTS TREND — SPECIALTY PHARMACY

HIV

• HIV unit costs per prescription expected due to migration to newer products

Inflammatory

- New drugs and new indications as well as continued price inflation
- Biosimilars for older products not expected to have a significant impact on trend in the near term
- Oral products for multiple sclerosis continuing to displace older less costly injectable preparations

Spinraza

- · First product for spinal muscular atrophy
- Mercer analyzed claims data to identify possible candidates for treatment and simulate utilization and cost scenarios for next two years
- Provider capacity expected to limit uptake in the first year to 10-30% of potential candidates
- At least some of the utilization of Spinraza expected to be billed through medical rather than pharmacy channels

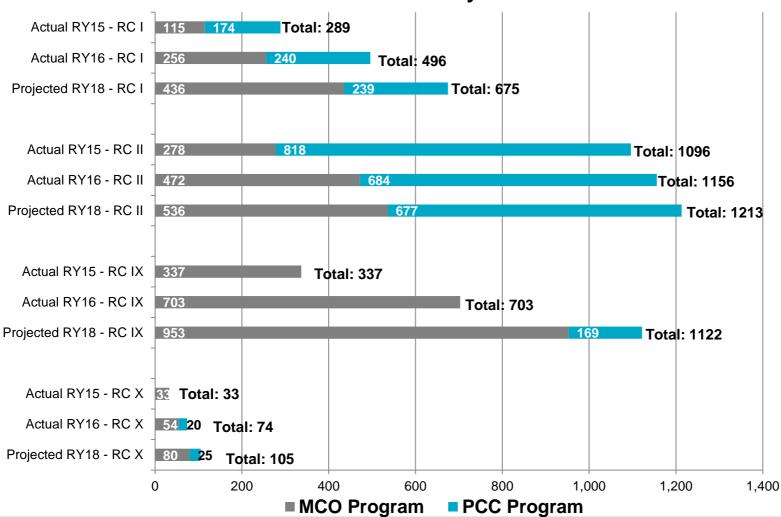
Specific high cost drugs, including Spinraza, are excluded from the total cost of care benchmarks for primary care ACOs and MCO-administered ACOs, and are subject to a high cost drug-specific risk corridor and reconciliation for the partnership ACOs and MCOs

PROSPECTIVE ADJUSTMENTS HCV PROJECTIONS

- RY18 treatment rates are expected to be higher than 2014–2016 based on the expectation that contracted entities will provide treatment to members with Hepatitis C that have a METAVIR fibrosis score of F0 and above
- HCV utilization is expected to be limited to the EOHHS preferred product list Consequently
 - The Commonwealth is expected to retain all rebates, both Federal and supplemental
 - RY18 rate development assumed pricing for these products does not reflect a reduction for supplemental rebates
 - EOHHS is providing a Hepatitis C specific risk corridor during RY18
- Average cost per treatment is projected to be \$75,598
 - Higher prevalence of genotype two and three members
 - Higher proportion of 12 week duration Harvoni treatments
 - Higher compliance rate among utilizers

PROSPECTIVE ADJUSTMENTS HCV PROJECTIONS

HCV Utilizers by Year



PROSPECTIVE ADJUSTMENTS PROGRAM CHANGES

- Contracting related
 - Specialty Hospital Enhanced APAD
 - Behavioral Health Inpatient Contracting
- Behavioral health related
 - Care Coordination
 - Perinatal Depression
 - Social Innovation/Community Support
 - Recovery Support
- Program Integrity
- Student Health Insurance Plan Program
- High Cost Drugs Adjustment
- HCV Projected Change

PROSPECTIVE ADJUSTMENTS PROGRAM CHANGES — PROGRAM INTEGRITY

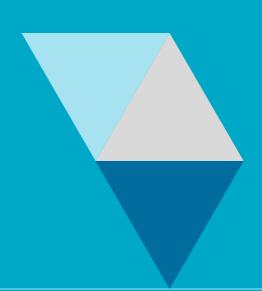
- Data adjustments to align with program integrity concepts and objectives, developed in conjunction with and at the direction of EOHHS
 - National Corrective Coding Initiative edits
 - Pre-admission, non-diagnostic or diagnostic visits within three days of an inpatient stay
 - Reduced reimbursement for procedure code modifier 25
 - Experimental, Investigative, and Unproven (EIU) Therapies or Services

PROSPECTIVE ADJUSTMENTS PROGRAM CHANGES — SHIP

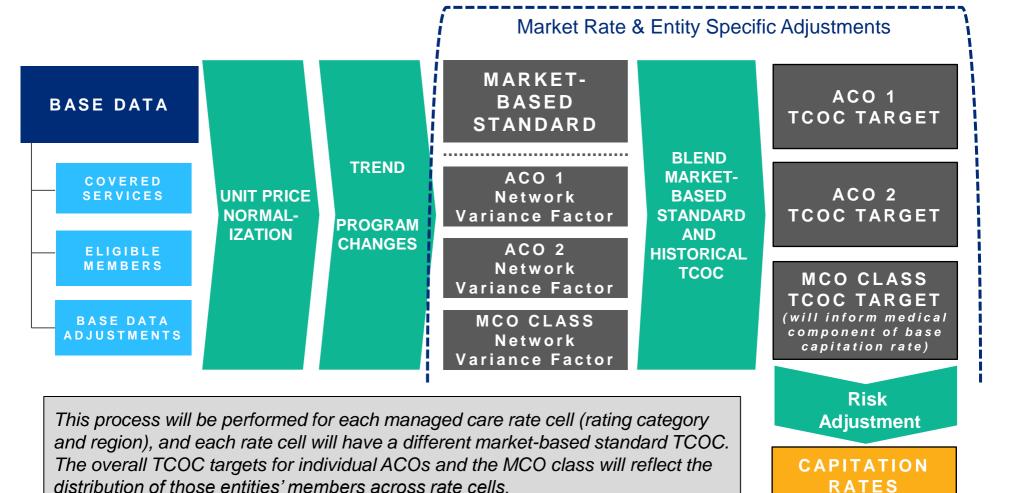
- Mandatory enrollment for MassHealth members with access to SHIP approved in November 2016 for next open enrollment period
 - Voluntary enrollment implemented in fall 2016 (4,800 members)
 - Additional members expected to migrate to SHIP after mandatory enrollment is implemented
 - Voluntary enrollment data indicated lower than average PMPMs for these members, resulting in an upward adjustment to market rates due to this program change

RY18 TCOC AND CAPITATION RATE DEVELOPMENT

MARKET RATE AND ENTITY-SPECIFIC ADJUSTMENTS



MARKET RATE & ENTITY-SPECIFIC ADJUSTMENTS



TCOC BENCHMARKS

MARKET RATE

- The Market Rate results from the application of price normalization, trend, and program changes to the adjusted base data
- Represents the average projected medical cost across all MassHealth managed care eligible members (ACO Program, MCO Program, and PCC Plan)
 - Each rate cell will have a market rate
 - Updated annually with more recent data and information
- Serves as the basis for MCO and ACO A capitation rates and ACO B and C TCOC benchmarks

ENTITY-SPECIFIC ADJUSTMENTS

- The Market Rate is adjusted for several class-specific and entity-specific adjustments to produce entity-specific rates
- Model-specific adjustments are quantified based on market-wide information, but are applied on a model-specific basis

ACO A & MCO MODEL ADJUSTMENTS	ACO B & ACO C MODEL ADJUSTMENTS
Pharmacy Rebates	Remove High Cost Drugs
Clinical Efficiencies	Inpatient Stop-Loss
	BH Inpatient Contracting

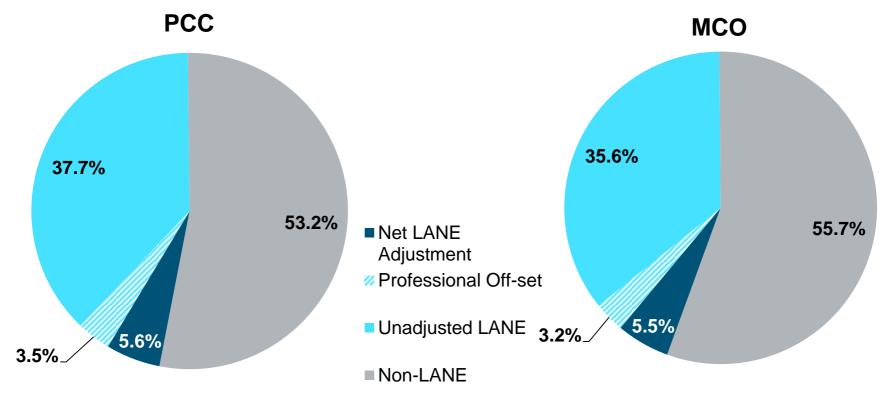
- Model-specific adjustments are followed by an entity-specific adjustment for the NVF, based on entity-specific base data and member risk scores
- The combination of model-specific adjustments and entity-specific adjustments produces the medical component of the TCOC benchmark or capitation rate

ENTITY-SPECIFIC ADJUSTMENTS CLINICAL EFFICIENCIES (MCO & ACO A ONLY)

- RY18 rate setting incorporated medical management efficiency adjustments to reflect the expectation of efficient service delivery
 - LANE ED efficiency
 - PPA inpatient efficiency
- Clinical criteria are applied to the RY16 encounter and PCC data to identify potentially avoidable events and costs
- RY16 base data is coded using the ICD-10 diagnosis code standard
 - PPA: AHRQ Prevention Quality Indicators version 6.0 is designed for ICD-10 codes
 - LANE: Mercer assigned encounter and PCC data to the existing ICD-9 diagnosis code list using a clinically appropriate conversion system
- Clinical efficiencies are measured on the market data, and applied only to the MCO class and ACO A models

ENTITY-SPECIFIC ADJUSTMENTS CLINICAL EFFICIENCIES (MCO & ACO A ONLY)

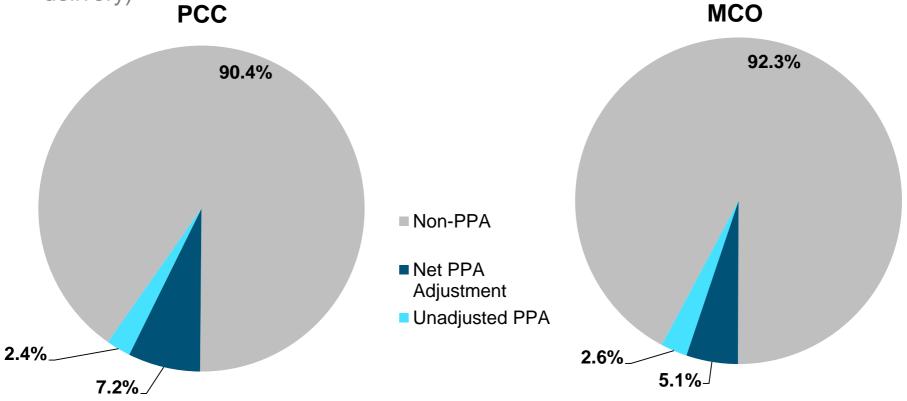
LANE adjustment as a percentage of ED expenditures by program



 Total RY16 ED spend is \$126.2 million for the PCC Plan and \$247.6 million for MCO and CarePlus

ENTITY-SPECIFIC ADJUSTMENTS CLINICAL EFFICIENCIES (MCO & ACO A ONLY)

 PPA adjustment as a percentage of total inpatient facility expenditures (excluding delivery)



 Total RY16 inpatient facility spend is \$270.3 million for the PCC Plan and \$613.5 million for MCO and CarePlus

ENTITY-SPECIFIC ADJUSTMENTS STOP-LOSS (ACO B AND C ONLY)

- Inpatient stop-loss adjustments for catastrophic claims are applied to TCOC benchmarks and reconciliation calculations
- Stop-loss threshold is set at \$150,000 per admission
- For admissions exceeding the threshold, \$150,000 plus 5% of the admission cost above the threshold is attributed to the ACO
- Stop-loss adjustment will also be applied to RY18 actuals prior to shared savings reconciliations

ENTITY-SPECIFIC ADJUSTMENTS NETWORK VARIANCE FACTOR — OVERVIEW

- Rates will be adjusted by the NVF according to the Glide Path schedule
- NVF is calculated as the ratio of historical entity-attributed member experience to market-wide experience, after unit price normalization, risk normalization, and other adjustments
- Entity-specific adjusted historical data is risk normalized and compared to market rates for each rate cell
 - Each RC reviewed at the statewide level
 - RC X combined with RC II Adult due to credibility considerations
- High dollar inpatient claims, HCV, and High Cost Drug considerations
- Credibility and bounding adjustments
 - 1200 member month minimum base experience
- Structural differences between Partnership Plan ACO and MCO Class vs Primary Care and MCO-Administered ACOs

ENTITY-SPECIFIC ADJUSTMENTS NVF — GLIDE PATH

• TCOC benchmarks and capitation rates, developed for each ACO and the MCO program as a class, will ultimately move towards the market rate (with adjustments for risk scores)

NVF

- Over 5–10 years, EOHHS intends to move to a pricing structure in which contracting entities (ACOs and MCOs) are accountable to perform to the same market-based standard for medical costs, after accounting for member risk
- The market-based standard will represent the average expected cost of MassHealth members across all managed care programs (MCO and ACO Programs, and PCC Plan)
- The market-based standard affects the medical component of capitation rates only; the administrative component is <u>not</u> affected

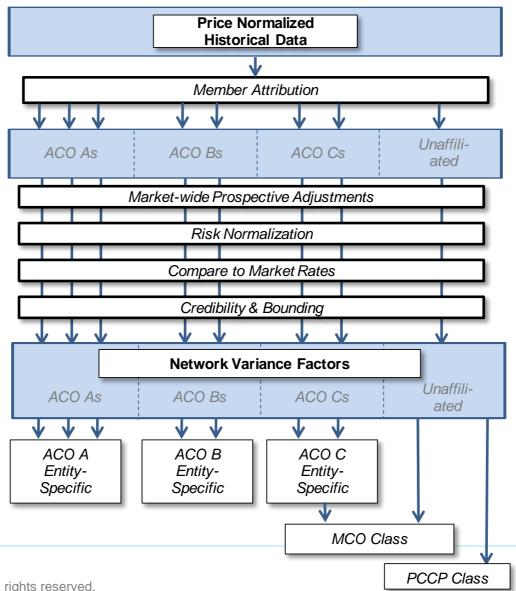
Glide Path

- Mechanism for which entity-specific rates will "glide" towards the "market average"
- Blend of market and entity-specific NVF
 - In the first year, NVF for each entity will be assigned a 90% weight; the remaining 10% will be assigned the market average of 1.0
 - The weight assigned to an entity's specific performance and the market average will move over time towards the market average
- Both the NVF and glide path blend will be updated annually

ENTITY-SPECIFIC ADJUSTMENTS MEMBER ATTRIBUTION

- Member Attribution
 - An entity-specific TCOC is based on its own historical base data limited to those members attributed to a entity's contracted PCP
 - Members are attributed to a PCP based on the member's PCP of record in the enrollment file for each enrollment span
 - Members' PCP of record is based on MMIS eligibility records for PCC Plan members and MCO PCP assignments as submitted to EOHHS by MCOs
- Examples of member attribution
 - Member #1
 - Provider A: October 2015 through September 2016
 - Member #2
 - Provider A: October 2015 through March 2016
 - Provider B: June 2016 through September 2016
- No restriction for minimum days/months of enrollment
 - No eligibility base data is excluded as part of member attribution

ENTITY-SPECIFIC ADJUSTMENTS NVF — CALCULATION SUMMARY



ENTITY-SPECIFIC ADJUSTMENTS NVF — SAMPLE CALCULATIONS

	ACO 1	ACO 2
Historical PMPM	\$ 200.00	\$ 250.00
x Price Normalization	0.950	0.980
x Market-wide Prospective Adjustments	1.040	1.050
= Adjusted Historical PMPM	\$ 197.60	\$ 257.25
÷ Historical Risk Score	0.970	1.050
= Risk normalized PMPM	\$ 203.71	\$ 245.00
÷ Market rate	\$ 235.00	\$ 235.00
= Preliminary NVF	0.867	1.043
+ Credibility & Bounding Adjustments	0.033	(0.002)
= Final NVF	0.900	1.041

ENTITY-SPECIFIC ADJUSTMENTS NVF — IMPACT OF BOUNDING

- NVFs were reviewed over a two year time period by RC and were found to be stable for most ACOs. NVFs were less stable over two years for ACOs with more significant deviations from 1.000 and for ACOs with limited enrollment in particular RCs.
- NVFs are thus adjusted for credibility and bounding as follows
 - Credibility: ACOs with less than 1200 member months for a given RC are considered non-credible and receive an NVF of 1.000 for that RC
 - Bounding: NVFs are bounded to a minimum of 0.900 and a maximum of 1.100
 - Considerations:
 - Volatility
 - Outliers
 - Reasonability
 - Long-term sustainability
 - Impacts approximately 5% of ACO enrollment
 - Reweighting: NVFs are reweighted after the credibility and bounding adjustments to produce a market average NVF of 1.000

ENTITY-SPECIFIC ADJUSTMENTS NVF — RANGE OF RESULTS

Category of Service
Inpatient PH - Non-maternity
Inpatient PH - Maternity
LTC
Emergency Room
Lab and Radiology - Facility
Other Outpatient Hospital
Professional Services
Home Health
DME & Supplies
Emergency Transportation
Pharmacy - HCV
Pharmacy - Other High Cost
Pharmacy - All Other
Other Medical Services
Inpatient Behavioral Health
Outpatient Behavioral Health
All Categories of Service

RC I Child												
Ma	rket Rate	Bottom	2nd	3rd	Тор							
	PMPM	Quartile	Quartile	Quartile	Quartile							
\$	32.35	0.804	0.850	1.074	1.272							
\$	8.48	0.645	0.669	1.298	1.355							
\$	0.56	0.823	0.798	1.169	1.248							
\$	11.22	0.975	0.934	1.023	1.071							
\$	6.39	0.912	1.061	1.015	1.012							
\$	19.92	1.041	0.939	1.061	0.959							
\$	45.74	0.963	1.004	0.971	1.062							
\$	0.77	0.822	1.330	0.816	0.981							
\$	2.77	0.952	1.241	0.943	0.857							
\$	1.49	1.038	0.917	1.009	1.033							
\$	0.09	1.000	1.000	1.000	1.000							
\$	2.26	1.000	1.000	1.000	1.000							
\$	29.41	1.001	1.096	1.001	0.902							
\$	0.74	0.884	0.994	1.015	1.112							
\$	3.75	0.997	0.985	1.017	1.002							
\$	24.70	0.967	1.112	0.982	0.937							
\$	190.66	0.936	0.986	1.026	1.052							

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			C I Adult		
Ma	arket Rate	Bottom	2nd	3rd	Тор
	PMPM	Quartile	Quartile	Quartile	Quartile
\$	58.98	0.911	0.979	1.002	1.115
\$	9.46	0.834	0.956	0.861	1.304
\$	2.42	0.831	1.131	0.956	1.083
\$	25.86	0.984	1.006	0.978	1.033
\$	36.60	0.914	0.950	1.014	1.134
\$	54.66	0.776	0.860	1.238	1.081
\$	99.63	1.039	0.993	0.894	1.079
\$	2.17	1.060	0.976	0.958	1.005
\$	4.01	0.944	0.927	1.093	1.037
\$	3.49	0.976	1.016	1.003	1.006
\$	14.98	1.000	1.000	1.000	1.000
\$	1.99	1.000	1.000	1.000	1.000
\$	104.92	0.952	0.993	1.000	1.059
\$	0.79	0.859	0.830	1.205	1.093
\$	8.87	0.910	0.982	1.015	1.097
\$	37.29	0.964	1.087	0.938	1.006
\$	466.11	0.944	0.981	1.002	1.077

- Shows unbounded NVFs
- Quartiles are defined by All Categories of Service NVFs; category-specific NVFs show average values for each quartile as defined by All Categories of Service ranking
- Market Rate PMPM corresponds to statewide average Best Estimate market rates by RC

ENTITY-SPECIFIC ADJUSTMENTS NVF — RANGE OF RESULTS

Category of Service
Inpatient PH - Non-maternity
Inpatient PH - Maternity
LTC
Emergency Room
Lab and Radiology - Facility
Other Outpatient Hospital
Professional Services
Home Health
DME & Supplies
Emergency Transportation
Pharmacy - HCV
Pharmacy - Other High Cost
Pharmacy - All Other
Other Medical Services
Inpatient Behavioral Health
Outpatient Behavioral Health
All Categories of Service

	RC II Child												
Ma	rket Rate	Bottom	2nd	3rd	Тор								
PMPM		Quartile	Quartile	Quartile	Quartile								
\$	183.20	0.854	0.979	1.000	1.166								
\$	6.76	1.354	1.397	0.879	0.326								
\$	6.92	0.809	0.874	0.834	1.464								
\$	20.69	1.043	0.997	1.047	0.914								
\$	20.27	0.859	0.961	0.913	1.244								
\$	70.73	0.828	0.917	1.097	1.152								
\$	79.11	1.076	0.988	0.955	0.988								
\$	14.29	0.886	1.081	1.210	0.809								
\$	47.40	0.729	0.934	0.949	1.382								
\$	6.64	1.003	0.927	1.027	1.038								
\$	0.69	1.000	1.000	1.000	1.000								
\$	47.03	1.000	1.000	1.000	1.000								
\$	188.22	0.897	0.985	0.995	1.112								
\$	1.69	0.849	0.843	1.369	0.853								
\$	45.03	0.893	0.923	1.091	1.084								
\$	92.40	1.034	0.982	1.013	0.977								
\$	831.07	0.915	0.975	1.007	1.097								

		RC II A	Adult & RO	X	
Ma	arket Rate	Bottom	2nd	3rd	Тор
	PMPM	Quartile	Quartile	Quartile	Quartile
\$	325.34	0.903	1.032	1.018	1.047
\$	1.22	1.184	1.235	0.940	0.606
\$	21.83	0.876	1.058	1.065	0.996
\$	60.53	0.991	0.980	0.953	1.091
\$	68.43	0.959	0.936	1.105	0.997
\$	133.29	0.831	1.074	1.048	1.038
\$	170.58	0.992	0.960	0.972	1.081
\$	71.22	0.813	0.966	0.874	1.361
\$	26.80	0.913	0.901	1.124	1.051
\$	16.98	1.019	0.970	0.942	1.071
\$	79.58	1.000	1.000	1.000	1.000
\$	11.23	1.000	1.000	1.000	1.000
\$	420.18	0.950	0.993	1.039	1.016
\$	7.22	0.881	1.057	0.932	1.131
\$	77.04	1.075	0.931	0.998	1.003
\$	124.62	1.056	0.936	0.980	1.030
\$	1,616.10	0.946	0.993	1.012	1.050

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ENTITY-SPECIFIC ADJUSTMENTS NVF— RANGE OF RESULTS

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DME & Supplies
Emergency Transportation
Pharmacy - HCV
Pharmacy - Other High Cost
Pharmacy - All Other
Other Medical Services
Inpatient Behavioral Health
Outpatient Behavioral Health
All Categories of Service

	RC IX												
Ma	rket Rate	Bottom	2nd	3rd	Тор								
	PMPM	Quartile	Quartile	Quartile	Quartile								
\$	76.55	1.001	0.983	1.031	0.984								
\$	0.38	0.771	0.877	1.134	1.156								
\$	3.29	1.005	0.932	0.969	1.089								
\$	24.77	0.961	1.077	1.046	0.919								
\$	27.76	0.850	0.940	0.967	1.236								
\$	41.52	0.984	0.825	0.989	1.179								
\$	72.77	1.007	0.976	0.966	1.051								
\$	0.91	1.374	0.835	0.951	0.871								
\$	2.88	0.968	0.813	0.961	1.248								
\$	3.80	0.999	1.138	1.050	0.814								
\$	25.62	1.000	1.000	1.000	1.000								
\$	5.23	1.000	1.000	1.000	1.000								
\$	100.64	0.940	0.967	0.969	1.119								
\$	0.43	0.950	0.981	0.562	1.428								
\$	18.82	0.963	1.075	1.001	0.963								
\$	48.62	0.936	1.084	1.041	0.942								
\$	453.98	0.967	0.982	0.996	1.052								

- Shows unbounded NVFs
- Quartiles are defined by All Categories of Service NVFs; category-specific NVFs show average values for each quartile as defined by All Categories of Service ranking
- Market Rate PMPM corresponds to statewide average Best Estimate market rates by RC

ENTITY-SPECIFIC ADJUSTMENTS ADMIN, UNDERWRITING GAIN, SURCHARGE

- Mercer used historical MCO-reported 4B financial reports in conjunction with other industry data to develop administrative expenses
- Aggregate administrative expense PMPMs are allocated by RC and region and compared to industry benchmarks
- ACO A administrative expense is adjusted to eliminate overlaps and double counting with DSRIP payments
- Health insurance providers fee is excluded from the rate development and will be accounted for retrospectively for RY18
- Payer Surcharge is developed using projected costs of acute hospital and ambulatory surgery centers, multiplied by the estimated HRY18 surcharge percentage
- Underwriting gain loads are applied as a percentage of the market rate premium after clinical efficiencies and pharmacy rebate adjustments, plus administrative expense and payer surcharge

ENTITY-SPECIFIC ADJUSTMENTS CBHI AND ABA ADD-ONS

CBHI

- Applies to recipients under age 21. Add-on applied to child rate cells only
- CBHI add-on development follows a similar process to the market rate development, with a base data period of RY16.
- Subject to risk corridor

ABA services

- Licensed applied behavior analysis services for treatment of autism spectrum disorder are available to children under age 21. Add-on applied to child rate cells only
- ABA add-on development follows a similar process to the market rate development, with a base data period of RY16.
- Subject to risk corridor

SUPPLEMENTAL MATERNITY PAYMENT

- Covers mothers' inpatient facility charges for newborn deliveries
- Excludes newborn costs, professional costs, prenatal, and post-partum care costs
- Paid on a per delivery basis for MCO and ACO A
- ACO B and C benchmarks adjusted during reconciliation based on actual delivery counts

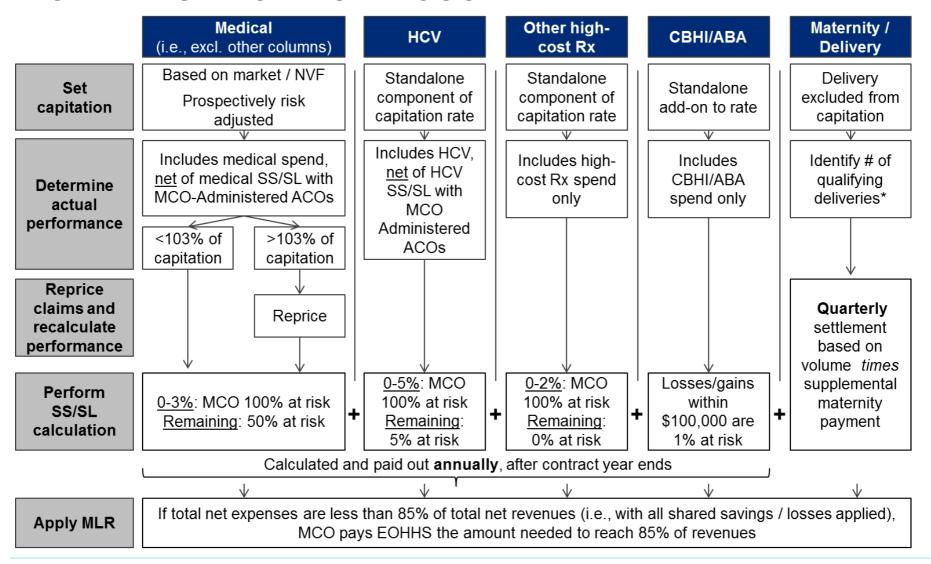
RY18 TCOC AND CAPITATION RATE DEVELOPMENT RECONCILIATION



RECONCILIATION OVERVIEW OF RISK MITIGATION AND RECONCILIATIONS

- Overall principles of risk mitigation
 - Protect plans from high cost, low frequency, difficult-to-manage risk
 - Retain claims and encounters that are manageable for plans to generate savings
- Risk mitigation techniques in existence for RY17
 - HCV risk corridor
 - CBHI/ABA risk corridors
 - Medical risk corridor
- Risk mitigation techniques that are new, effective RY18
 - Stop-loss per inpatient admission: Primary Care ACOs and MCO-Administered ACOs only
 - Other high cost drug risk corridor (for MCOs and Partnership Plans) or risk carve-out (for Primary Care ACOs and MCO-Administered ACOs)
 - Criteria for inclusion in the other high cost drug risk corridor/carve-out: used for Chronic on-going therapy <u>and</u> used by a small population <u>and</u> no/few other effective drug treatments available for the condition <u>and</u> cost >\$100K per year per person <u>and</u> not used for cancer treatment
 - Or, used for HIV Pre-Exposure Prophylaxis
 - Supplemental maternity payment/adjustment

RECONCILIATION RISK MITIGATION FOR MCOS

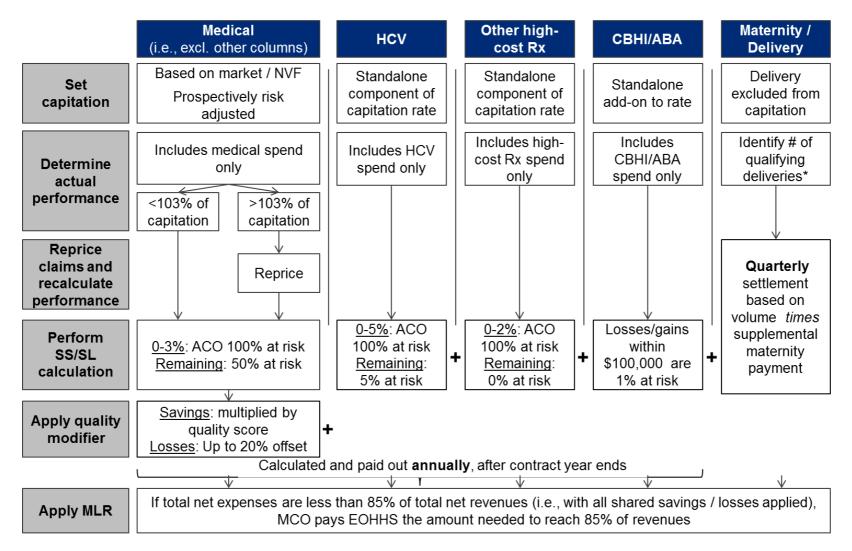


RECONCILIATION MCO EXAMPLE

	Pi	narmacy - HCV	harmacy - other High Cost		All Other /ledical ^{1,2}		ABA	СВНІ	Тс	otal Medical	
Member Months					600,	,00	0				
Capitation Rate PMPM	\$	15.00	\$ 5.00	\$	450.00	\$	25.00	\$ 75.00	\$	570.00	Α
Actual Experience PMPM	\$	17.00	\$ 5.50	\$	500.00	\$	23.00	\$ 80.00	\$	625.50	В
Medical Gains/(Losses) PMPM	\$	(2.00)	\$ (0.50)	\$	(50.00)	\$	2.00	\$ (5.00)	\$	(55.50)	C = A-B
Medical Gains/(Losses) %		-13.3%	-10.0%		-11.1%		8.0%	-6.7%		-9.7%	D = C/A
Risk Sharing Calculations									_		
MCO Full Risk	\$	(0.75)	\$ (0.10)	\$	(13.50)				\$	(14.35)	E
MCO Shared Risk	\$	(0.06)		\$	(18.25)	\$	0.00	\$ (0.00)	\$	(18.31)	F
Final MCO Shared Risk	\$	(0.81)	\$ (0.10)	\$	(31.75)	\$	0.00	\$ (0.00)	\$	(32.66)	G = E + F
MassHealth Shared Risk	\$	(1.19)	\$ (0.40)	\$	(18.25)	\$	2.00	\$ (5.00)	\$	(22.84)	H=C-G
MCO Final Gain/(Loss) PMPM	\$	(0.81)	\$ (0.10)	\$	(31.75)	\$	0.00	\$ (0.00)	\$	(32.66)	
MCO Final Gain/(Loss) Dollars	\$	(487,500)	\$ (60,000)	\$(19,050,000)	\$	1,000	\$ (1,000)	\$((19,597,500)	

- 1. Actual experience for All Other Medical is price normalized when actual costs exceed 103% of capitation.
- 2. *Excludes* Supplemental Maternity Payments and experience.

RECONCILIATION RISK MITIGATION FOR PARTNERSHIP PLAN ACOS



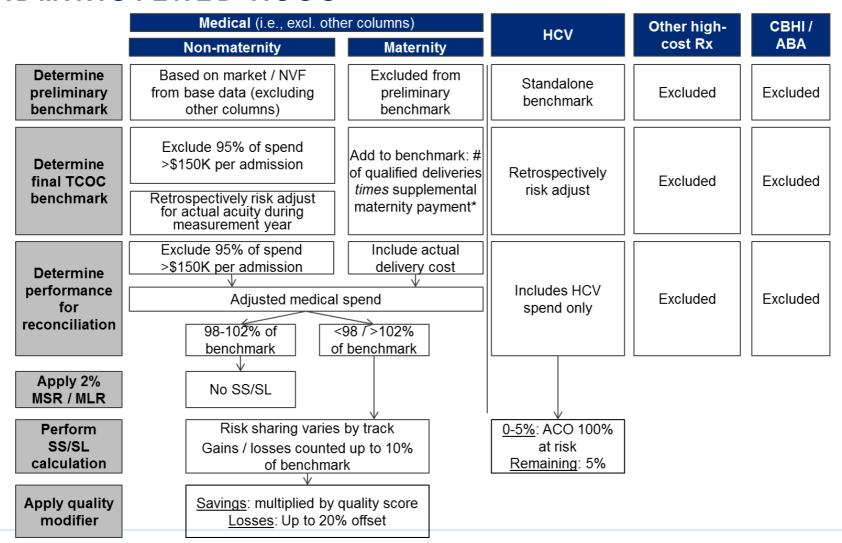
RECONCILIATION PARTNERSHIP PLAN ACOS EXAMPLE

	Pł	narmacy - HCV	harmacy - other High Cost		All Other Medical ^{1,3}		ABA	СВНІ	Tot	al Medical	
Member Months					600,	,000)				_
Capitation Rate PMPM	\$	15.00	\$ 5.00	\$	450.00	\$	25.00	\$ 75.00	\$	570.00	Α
Actual Experience PMPM	\$	17.00	\$ 5.50	\$	500.00	\$	23.00	\$ 80.00	\$	625.50	В
Medical Gains/(Losses) PMPM	\$	(2.00)	\$ (0.50)	\$	(50.00)	\$	2.00	\$ (5.00)	\$	(55.50)	C = A-B
Medical Gains/(Losses) %		-13.3%	-10.0%		-11.1%		8.0%	-6.7%		-9.7%	D = C/A
Risk Sharing Calculations									ı		
ACO Full Risk	\$	(0.75)	\$ (0.10)	\$	(13.50)				\$	(14.35)	E
ACO Shared Risk	\$	(0.06)		\$	(18.25)	\$	0.00	\$ (0.00)	\$	(18.31)	F
Quality Modifier ²					90.0%						G
Quality Modifier Adjustment ²				\$	5.72				\$	5.72	Н
Final ACO Shared Risk	\$	(0.81)	\$ (0.10)	\$	(26.04)	\$	0.00	\$ (0.00)	\$	(26.95)	I=E+F+H
Final MassHealth Shared	\$	(1.19)	\$ (0.40)	\$	(23.97)	\$	2.00	\$ (5.00)	\$	(28.55)	J=C-I
ACO Final Gain/(Loss) PMPM	\$	(0.81)	\$ (0.10)	\$	(26.04)	\$	0.00	\$ (0.00)	\$	(26.95)	-
ACO Final Gain/(Loss) Dollars	\$	(487,500)	\$ (60,000)	\$(15,621,000)	\$	1,000	\$ (1,000)	\$(1	6,168,500)	

- 1. Actual experience for All Other Medical is price normalized when actual costs exceed 103% of capitation.
- Quality multiplier applies to All Other Medical corridor only. For shared savings calculations, ACO shared savings are multiplied by the quality modifier. For shared loss calculations, shared losses are offset by up to 20% based on quality modifier.
- 3. Excludes Supplemental Maternity Payments and experience.

RECONCILIATION

RISK MITIGATION FOR PRIMARY CARE AND MCO-ADMINISTERED ACOS



RECONCILIATION EXAMPLE RISK TRACK — PRIMARY CARE TRACK 1



RECONCILIATION

PRIMARY CARE AND MCO-ADMINISTERED ACO EXAMPLE

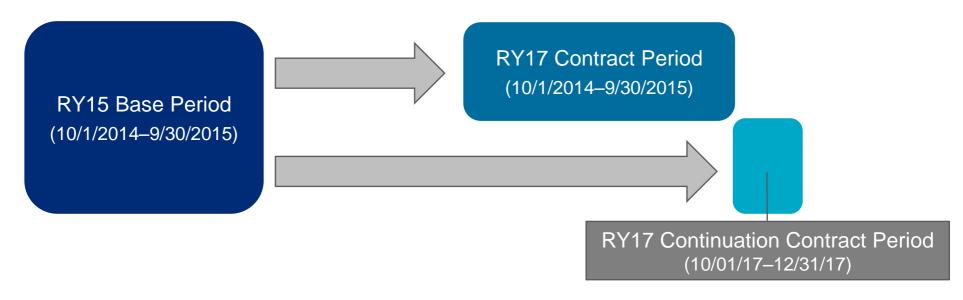
	Pł	narmacy - HCV	Pharmacy - Other High Cost		All Other Medical ³	ABA	СВНІ	T	otal Medical	
Member Months		600,000								
Benchmark PMPM	\$	15.00	Excluded	\$	450.00	Excluded	Excluded	\$	465.00	Α
Actual Experience PMPM ¹	\$	17.00		\$	500.00			\$	517.00	В
Benchmark vs. Experience	\$	(2.00)		\$	(50.00)			\$	(52.00)	C = A-B
PMPM										
Benchmark vs. Experience %		-13.3%			-11.1%				-11.2%	D = C/A
Risk Sharing Calculations										
ACO Full Risk	\$	(0.75)						\$	(0.75)	E
ACO Shared Risk Tier 1	\$	(0.06)		\$	(5.40)			\$	(5.46)	F
ACO Shared Risk Tier 2				\$	(6.30)			\$	(6.30)	G
Quality Modifier ²					90.0%					Н
Quality Modifier Adjustment ²				\$	2.11			\$	2.11	1
Final ACO Shared Risk	\$	(0.81)		\$	(9.59)			\$	(10.41)	J=E+F+G+I
Final MassHealth Shared	\$	(1.19)		\$	(40.41)			\$	(41.59)	K=C-J
ACO Final Gain/(Loss) PMPM	\$	(0.81)		\$	(9.59)			\$	(10.41)	•
ACO Final Gain/(Loss) Dollars	\$	(487,500)		\$	(5,756,400)			\$	(6,243,900)	

- 1. Actual experience is price normalized for MCO-Administered ACOs.
- Quality multiplier applies to All Other Medical corridor only. For shared savings calculations, ACO shared savings are multiplied by the quality modifier. For shared loss calculations, shared losses are offset by up to 20% based on quality modifier.
- 3. Includes Supplemental Maternity Adjustments and experience.

RY17 CONTINUATION RATES APPROACH AND METHODOLOGY



RY17 CONTINUATION RATES APPROACH



- Continuation period bridges the time to align with the ACO/MCO contract period
- Encounter data reviewed through September 2016
- HCV pharmacy data reviewed through December 2016

RY17 CONTINUATION RATES APPROACH

- Maintain consistency with RY17 rating structure and pricing methodology
- Key differences in RY17 Continuation rate development process compared to RY18
 - Populations captured in rate base
 - COS classifications
 - Price normalization
 - Child/adult rate structure
 - Delivery payment
 - Risk mitigation

RY17 CONTINUATION RATES METHODOLOGY

- "Leveraged" rate development process
 - Review original RY17 rating assumptions for reasonability
 - Based upon reviews of more recent encounter data
 - Maintain RY17 base data time period and base adjustments
 - Revise previous RY17 rating assumptions
 - Examples: HCV, ABA medical projections
 - Develop new rating assumptions
 - Examples: Qualified SHIP, additional trend months

ACRONYMS

ABA	Applied Behavior Analysis	HCV	Hepatitis C Virus
ACO	Accountable Care Organization	HIV	Human Immunodeficiency Virus
ADS	Actuarial Data Set	HRY	Hospital Rate Year
ASOP	Actuarial Standard of Practice	IBNR	Incurred But Not Reported
APAD	Adjudicated Payment Amount per Discharge	ICD	International Classification of Diseases
APEC	Adjudicated Payment Episode of Care	LANE	Low Acuity Non-Emergent
AHRQ	Agency for Healthcare Research and Quality	LTC	Long-Term Care
ВН	Behavioral Health	MBHP	Massachusetts Behavioral Health Partnership
CBHI	Children's Behavioral Health Initiative	MCO	Managed Care Organization
CHC	Community Health Center	MMIS	Medicaid Management Information System
CFR	Code of Federal Regulations	MLR	Medical Loss Ratio
CMR	Code of Massachusetts Regulations	NADAC	National Average Drug Acquisition
CMS	Centers for Medicare & Medicaid Services	NCCI	National Corrective Coding Initiative
cos	Category of Service	PPA	Potentially Preventable Admissions
CRCS	Capitated Rate Calculation System	PCC	Primary Care Clinician
DME	Durable Medical Equipment	PCP	Primary Care Provider
DMH	Department of Mental Health	PMPM	Per Member Per Month
DSRIP	Delivery System Reform Incentive Payment	RC	Rating Category
ED	Emergency Department	RY	Rate Year
EIU	Experimental, Investigative, and Unproven	SHIP	Student Health Insurance Plan
EOHHS	Executive Office of Health and Human Services	TCOC	Total Cost of Care
FFS	Fee-for-service	WAC	Wholesale Acquisition Cost
FFY	Federal Fiscal Year		

