

Cost and Utilization Methodology

Data Sources:

The data for all dashboards are from the MCDB (2012 to 2014) Files:

- (1) Professional Services
- (2) Institutional Services
- (3) Pharmacy
- (4) Eligibility

Data Filters:

The following data filters were used for MIA data:

- (1) Risk business (Plan Liability)
- (2) Maryland Contracts only
- (3) Markets (Coverage Type):
 - (i) Individual (including Grandfathered (GF) and Non-GF for 2014)
 - (ii) Small Group (including Grandfathered (GF) and Non-GF for 2014)
 - (iii) Large Group
 - (iv) Student Health Plan
- (4) All data include MD and Non-MD residents

MCDB Data Notes:

Some payors have submitted data to the MCDB for the Small Group market that incorrectly did not follow Maryland Law for Small Group Reform. This error affects both the Small Group and Large Group markets for 2012 and prior. As a result, data in the MCDB (Claims and membership) is not consistent with data reported to the MIA via Actuarial Memoranda for 2012.

Definitions & Assumptions:

Claims Data (Dollars and Counts):

(1) Allowed Claim Dollars: The maximum reimbursement a patient's health insurance policy allows for a specific service. It is usually the total patient's liability and payor liability.

(2) Facility Inpatient

(i) If multiple claims had the same patient identification, facility categorization (inpatient or SNF), and provider with overlapping or contiguous admission (Service From) or discharge (Service Thru) dates, they are grouped into one admission. Note: the current format of the MCDB institutional file is in a rollup format

(ii) Length of stay is determine as the discharge (Service Thru) date less the admission (Service From) date. If multiple claims were combined into one admission, the discharge date used should be the latest discharge date among all claims; the admission date used should be the earliest admission date among all the claims. Note: the current format of the MCDB institutional file is in a rollup format

(iii) Sort data by unique combination of (Payor ID Number, Patient IdentifierP, Patient Year and Month of Birth, Patient Sex), NPI, Service From Date, and Service Thru Date.

(iv) If "Service Thru Date" is greater than "Service From Date" and the type of facility is hospital inpatient, then do the following:

- (a) If the length of stay is greater than 1, then set bed-days as equal to length of stay. Otherwise set bed-days at 0
- (b) If bed-days are greater than 0, then set admits at 1. Otherwise set admits at 0

(3) Facility Outpatient

(i) A visit is define as all claims for the same patient, same provider, and same start service date (Start Thru Date); If a claim had multiple start service dates among its various detail claim lines, the earliest date should be used as the start service date for the entire claim. Note: the current format of the MCDB institutional file is in a rollup format

(ii) Sort data by unique combination of (Payor ID Number, Patient IdentifierP, Patient Year and Month of Birth, Patient Sex), NPI, Service From Date, and Service Thru Date.

(iii) If "Service Thru Date" is greater than or equal to "Service From Date" and the type of facility is hospital outpatient, then do the following:

(a) On the first instance of a given "Service From Date", If the length of stay is greater than or equal to 1, then define visits as equal to 1. Otherwise set visits at 0

(4) Professional Services

(i) A given patient, for the same provider on the same day is counted as one visit regardless the number of services provided to the patient by the same provider on the same day. In other words, count a unique select of Patient ID, Provider ID and Start Service Date as one claim or visit. If a claim had multiple start service dates among its various detail claim lines, the earliest date was used as the start service date for the entire claim.

(ii) Sort data by unique combination of (Payor ID Number, Patient IdentifierP, Patient Year and Month of Birth, Patient Sex), Servicing Practitioner ID, Service From Date, and Service Thru Date.

(iii) On the first instance of a given "Service From Date", do the following:

(a) If (the "Service From Date" is equal to 0 or the "Service Thru Date" equal "Service From Date") AND "Units of Service" less than 0 THEN the Visit Count is set at minus 1

Negative units of service occur from claim reversals, making it important to reverse the visit count as well.

(b) If (the "Service From Date" is equal to 0 or the "Service Thru Date" equal "Service From Date") AND "Units of Service" greater than 0 THEN the Visit Count is set at 1

(c) If (the "Service From Date" is equal to 0 or the "Service Thru Date" equal "Service From Date") AND "Units of Service" equal to 0 THEN the Visit Count is set at 0

(5) Prescriptions:

For a given Patient, Pharmacy and "Date Filled", do the following:

(a) If "Drug Supply" is less than 0 THEN the Script Count is set at minus 1

Negative units of medication dispensed occur from claim reversals, making it important to reverse the script count as well.

(b) If "Drug Supply" is equal to 0 THEN the Script Count is set at 0

(c) If "Drug Supply" is between (including) 1 and 30, THEN the Script Count is set at 1

(d) If "Drug Supply" is between (including) 31 and 60, THEN the Script Count is set at 2

(e) If "Drug Supply" is greater than 60 THEN the Script Count is set at 3

(6) Claims Run-off:

(a) For 2014, claims are incurred in calendar year 2014 and paid through 201504 (i.e. 4 months claims run-off)

(b) For 2013, claims are incurred in calendar year 2013 and paid through 201404 (i.e. 4 months claims run-off)

(c) For 2012, claims are incurred in calendar year 2012 and paid through 201304 (i.e. 4 months claims run-off)

Other Definitions:

(7) Inpatient Hospital: Includes non-capitated facility services for medical, surgical, maternity, mental health and substance abuse, skilled nursing, and any other services provided in an inpatient facility setting and billed by the facility.

(8) Outpatient Hospital: Includes non-capitated facility services for surgical, emergency room, lab, radiology, therapy, observation and other services provided in an outpatient facility setting and billed by the facility.

(9) Professional: Includes non-capitated primary care, specialist, therapy, the professional component of laboratory and radiology, and other professional services, other than hospital based professionals whose payments are included in facility fees. Also includes Other Medical which includes non-capitated ambulance, home health care, DME, prosthetics, supplies, and other services (excluding vision exams and dental services not collected in MCDB).

(10) Prescription Drug: Includes drugs dispensed by a pharmacy. This amount should be net of rebates received from drug manufacturers.

(11) Utilization Description: Admits (for Inpatient service only), Visits

(12) Utilization per 1,000: Total utilization per 1,000 covered members per year for claims incurred during the experience period. Utilization must be on an annualized basis

(13) Average Cost/Service: Average allowed costs per unit of service for claims incurred during the experience period. Average allowed cost per admit for inpatient, cost per visit for outpatient and professional and cost per script for pharmacy.

(14) 12-Month Rolling PMPMs:

(a) Allowed: 12-months Allowed Claims divided 12 months of members

(b) [12 Months Admits or Visits per 1,000 divided by 12 months of members] times 12,000 members

(c) (Utilization per 1,000 times Average Cost per Service) ÷ 12,000 Members

(15) Trend: Year over year change in claims on a PMPM basis. 12-month trend is a period of 12 consecutive months over the same 12 months of the prior year.

(a) Utilization Trends is the change in utilization per 1,000 of 12 consecutive months over the same 12 months of the prior year. Admits per 1,000 for inpatient, visits per 1,000 for outpatient, and scripts per 1,000 for pharmacy.

(b) Cost Trends is the change in cost per unit (admit, visit, or script) of 12 consecutive months over the same 12 months of the prior year. Cost per admit for inpatient, per visit for outpatient, and per script for pharmacy.

(c) Allowed PMPM trend is also equal to $(1 + \text{utilization trend}) \times (1 + \text{cost trend}) - 1$

(16) No adjustments (e.g. IBNR, age/gender, etc.) were made to the allowed claims dollars or utilization counts data.

(17) Rate Area:

(a) Baltimore Metro: Baltimore City, Baltimore, Harford, Howard and Anne Arundel counties.

(b) DC Metro: Montgomery and Prince George's.

(c) Eastern/Southern MD: St. Mary's, Charles, Calvert, Cecil, Kent, Queen Anne's, Talbot, Caroline, Dorchester, Wicomico, v Somerset, and Worcester.

(d) Western MD: Garrett, Allegany, Washington, Carroll, and Frederick.

(e) Out-of-Area: Out of State

(18) What the MIA Reviews:

(a) Only reviews Individual and Small Group Markets

(b) Does not review metrics by product, rating area or age range.