

APR-DRG & EAPG

BCBSMN PAYMENT METHODOLOGY



APR-DRG

INPATIENT PAYMENT

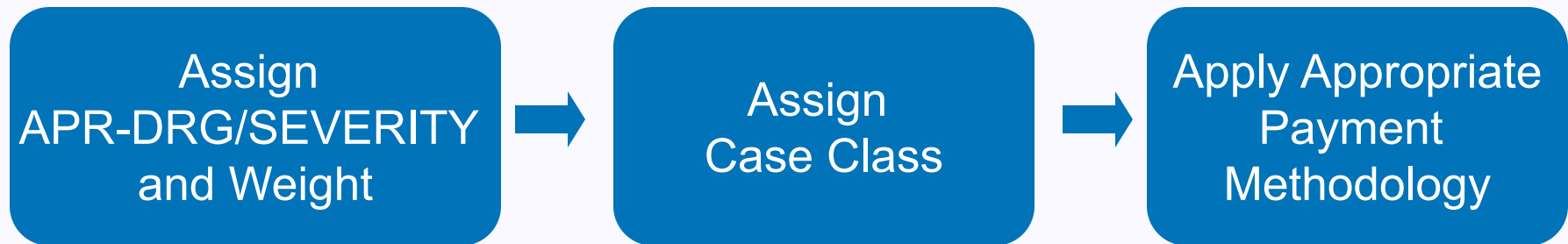


Key Features: APR-DRG Inpatient Payment

- Case based payment (payment determined by date of admit).
- Outlier add-on payments for costs incurred above pre-determined thresholds.
- Transfer Payment for transferring facility.
- Covers all inpatient cases

Payment Under the APR-DRG System

How We Calculate Reimbursement Under the APR-DRG System



Hierarchy:

- **Outlier** (1.5% cases)
- **Transfer Cases** (2.0% cases)
- **Standard Case** (96.5% cases)

Payment Methodology: Outlier Cases

- Outliers: cases with costs that exceed outlier cost threshold
- Thresholds developed using interquartile range (IQR) methodology
- To determine the IQR:
 - Organize case costs with APRDRG from least to greatest value
 - Split data into 4 quartiles
 - Determine Outlier Threshold = $(y) * (Q3-Q1) + Q3$
- Target between 1-1.5% of network cases to be tagged as outliers
- One threshold per APRDRG for all facilities in network
- Outliers are paid standard case rate plus an additional add on payment meant to cover additional cost

An Example:

Payment Methodology: Outlier Cases

APR-DRG	225 Appendectomy
Severity level	4 Extreme
APR/SEV Weight	3.0654
Network Outlier Cost Threshold	\$21,256

Facility Rate (illustrative)	\$10,000
Facility Charges	\$124,968
Applicable RCC	0.29

1. Case Cost:

- Facility Charges (\$124,968) x Applicable RCC (0.29) = \$36,241

2. Outlier Payment:

- Case Cost (\$36,241) – Outlier Cost Threshold (\$21,256) = \$14,985

3. APR-DRG Case Rate:

- Case Weight (3.0654) x Facility Rate (\$10,000) = \$30,654

4. Final Outlier Case Payment:

- APR-DRG Case Rate (\$30,654) + Outlier Payment (\$14,985) = **\$45,639**



Payment Methodology: Transfer Cases

- Transferring facility receives 50% of the calculated case payment based upon the submitted claim detail from *transferring* facility.
- Transfer cases are defined as discharge status '02'.
- Receiving facility receives 100% of the calculated case payment based upon the submitted claim detail from *receiving* facility.

An Example:

Payment Methodology: Transfer Cases

APR-DRG	225 Appendectomy
Severity level	2 Moderate

APR/SEV Weight	1.0905
Facility Rate (illustrative)	\$10,000

Regular Case Payment:

Facility Rate (\$10,000) x APR/SEV weight (1.0905) = \$10,905

Transfer Case Payment:

Regular Case Rate (\$10,905) X .5 = **\$5452.50**

An Example:

Payment Methodology: Standard Cases

APR-DRG	225 Appendectomy
Severity level	2 Moderate

APR/SEV Weight	1.0905
Facility Rate (illustrative)	\$10,000

Regular Case Payment:

Facility Rate (\$10,000) x APR/SEV weight (1.0905) = **\$10,905**

EAPG

OUTPATIENT PAYMENT



Key Features: EAPG Outpatient Payment

- Visit based payment (determined by date with the exception of emergency department, observation and treatment room).
- Discounting of multiple services:
 - Multiple significant procedures on same day
 - Repeat ancillary EAPGs
 - Bilateral with Modifier 50
 - Terminated procedures (Modifiers 52 or 73)

EAPG Key Features (continued)

- Modifiers used:

- 25 separate E&M
- 27 multiple E&M on same day
- 52 reduced services
- 73 discontinued service
- 59 distinct procedural service
- 50 bilateral procedure
- Therapy (GP, GO, GN)

- Case Rate for Direct Admit to Observation

- Per Diem Rate for full or partial hospitalization for mental health and substance abuse services (directly and indirectly determined).

EAPG Key Features (continued)

- Packaging of lower level ancillary services:

EAPG	Description
373	Level I Dental Film
374	Level II Dental Film
375	Dental Anesthesia
376	Diagnostic Dental Procedures
377	Preventive Dental Procedures
380	Anesthesia
390	Level I Pathology
394	Level I Immunology Tests
396	Level I Microbiology Tests
398	Level I Endocrinology Tests
400	Level I Chemistry Tests
402	Basic Chemistry Tests
406	Level I Clotting Tests
408	Level I Hematology Tests
410	Urinalysis

EAPG	Description
411	Blood and Urine Dipsticks Tests
412	Simple Pulmonary Function Tests
413	Cardiogram
423	Introduction of Needle and Catheter
424	Dressings and Other Minor Procedures
425	Other Miscellaneous Ancillary Procedures
426	Psychotropic Medication Management
427	Biofeedback and Other Training
428	Patient Education, Individual
429	Patient Education, Group
448	Expanded Hours Access
449	Additional Undifferentiated Medical Services
457	Venipuncture
471	Plain Film
490	Incidental Supplies and Services

NOTE: EAPG 490 includes implantable supplies



EAPG Key Features (continued)

- Fee schedule for pharmacotherapy and chemotherapy drugs.
- Packaging of medical visit with significant procedure (unless appropriate modifier is used).
- Packaging of ancillary observation with a significant procedure.

EAPG Payment Summary

Primary APG Type	Included in Base Rate	Additional Payment Available
Significant Procedure or Therapy	<ul style="list-style-type: none"> Routine Ancillaries Incidental Procedures and visits Supplies Drugs (other than Fee Schedule) Anesthesia Ancillary Observation 	<ul style="list-style-type: none"> Additional procedures where applicable and subject to discounting Non-packaged ancillaries Drug fee schedule
Medical Visit (including Emergency)	<ul style="list-style-type: none"> Routine Ancillaries Incidental Procedures Supplies Drugs (other than Fee Schedule) 	<ul style="list-style-type: none"> Non-packaged ancillaries Drug fee schedule Ancillary Observation
Direct Admit for Observation	<ul style="list-style-type: none"> Medical Visit Routine Ancillaries Incidental Procedures Supplies Drugs (other than Fee Schedule) Ancillary Observation 	<ul style="list-style-type: none"> Non-packaged ancillaries Drug fee schedule
Mental Health or Chemical Dependency Full day partial admission (defined by direct code or code count)	<ul style="list-style-type: none"> Routine Ancillaries Incidental Procedures Supplies Drugs (other than Fee Schedule) Counseling 	<ul style="list-style-type: none"> Non-packaged ancillaries Drug fee schedule
Mental Health ½ day partial admission (defined by direct codes)	<ul style="list-style-type: none"> Routine Ancillaries Incidental Procedures Supplies Drugs (other than Fee Schedule) 	<ul style="list-style-type: none"> Non-packaged ancillaries Drug fee schedule
Ancillary Only	<ul style="list-style-type: none"> Ancillary Services 	<ul style="list-style-type: none"> Second ancillary service subject to discounting

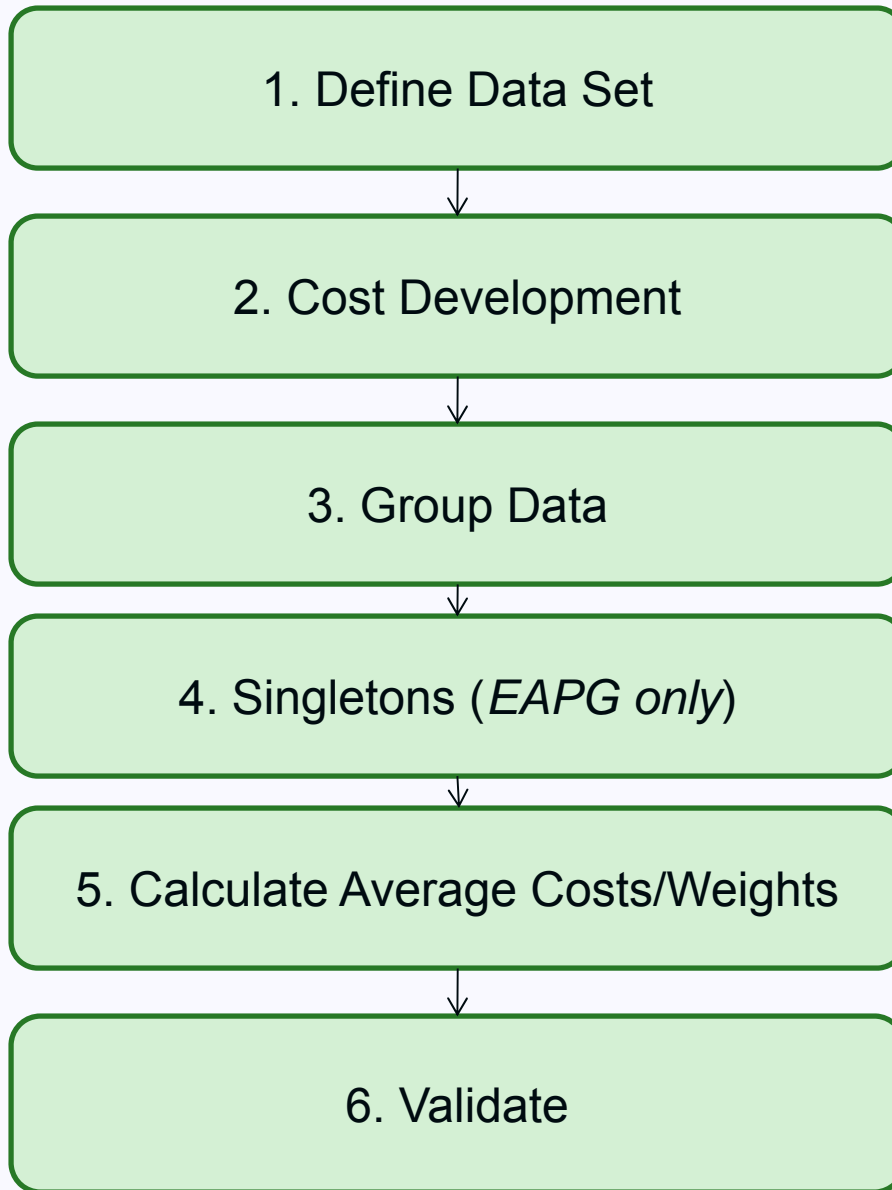


APR-DRG & EAPG

DEVELOPING RELATIVE WEIGHTS



Six Basic Steps



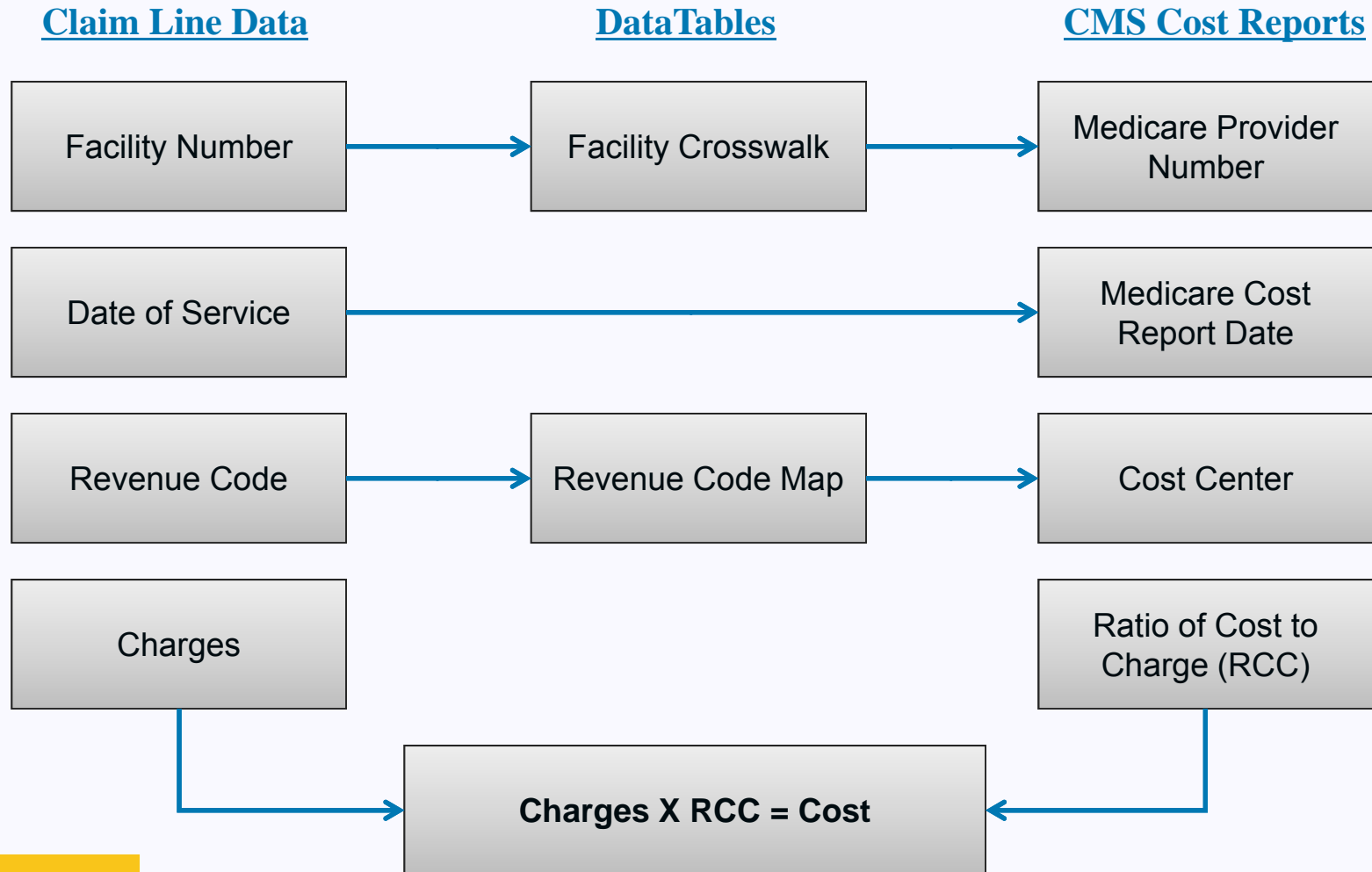
Step 1: Define Data Set

	APR-DRG	EAPG
Period	Based on claims discharged between 1/1/10 – 12/31/10, paid through June 2011	
Facilities	Any Minnesota par facility with valid Medicare Cost Report (MCR)	
Lines of Business	Commercial and Medicaid lines of business	
Exclusions	<ul style="list-style-type: none"> •Transfers •Claim allowed <\$500 except neonate •Charges <\$250 •Cost <=\$0 •Ungroupable 	<ul style="list-style-type: none"> •Drug fee schedule items: defined by HCPCS codes •80% of drug supply billed as revenue code only: 25X •100% of drug supply billed as revenue code only: 63X •Inpatient only claims •Claims > \$50,000 (single claim)

Step 2: Cost Development

- Costs are the basis for relative weights
- Costs derived from line-level charges using ratio of cost to charges (RCC) from Medicare Cost Report (MCR)
- Line-level costs are aggregated into case/visit costs

Step 2: Cost Development



Step 2: Cost Development

- Costs facility specific MCRs (most recent cost report in CMS HCRIS file March 2011)
- Followed CMS rules for inclusions and exclusions (Schedule C)
- Excluded Costs:
 - A-8 adjustments
 - Direct medical education
 - Physician costs from A-8
 - Non-reimbursable cost centers
 - Observation
 - Organ acquisition

Step 3: Group Data

	APR-DRG	EAPG
Unit of Service	Inpatient stay (case)	Visit: claims with multiple dates of service will split
Classification	Single APR-DRG/Severity assignment for entire case	Grouping assigns EAPG to each line depending on the HCPCS code and/or ICD9 code.

Step 4: Singleton Visits (EAPG only)

- Singleton = single service visit
- Provide the best estimate for average resource consumption by EAPG.
- Include cost estimates for:
 - Packaged ancillary services
 - Revenue code only (RCO) services
(except drug supply exclusions)
- Does not include cost estimates for discounted services.

Step 4: Singleton Visits: Example

Single Line: Singleton				
29888	38	Level II Arthroscopy	Significant Procedure	Full Payment

Multiple Lines: Singleton				
29888	38	Level II Arthroscopy	Significant Procedure	Full Payment
RCO (20% of 25X, non-63X)	999	Error	Error	Packaged
84999	400	Level I Chemistry	Ancillary	Packaged

BUT: the addition of the following procedure to either of the above would result in a non-singleton.

11400	9	Level I Excision	Significant Procedure	Discounted



Step 4: Singleton Visits: Pseudo Singletons

Exception to singleton logic is made for procedures with high cost implantable devices:

- Anchors, Screws
- Closures, devices
- Catheters
- Morcellator
- Corneal Tissue
- Ocular Devices
- Ntiol
- Mesh
- Others

Decision Logic:

# Proc	# Devices	# Eligible Pair	# Distinct Pairs	2 nd Device Eligible?	Pseudo- Singleton Eligible?	Reason
1	1	1	1		Y	Eligible Pair
1	1	0	0		N	Not an eligible Pair
2	1	1	1		Y	Distinct Pair eligible
1	2	1	1	Y	Y	Eligible for 2 nd device pair
1	2	1	1	N	Y	Distinct Pair eligible
1	2	2	0	N	N	Cannot determine eligible pair
2	2	2	2	N	Y	Include each pair

Step 5: Calculate Relative Weights

- **Relative Weight**

- Measure of the resource intensity of a unit* relative to other units in a specific data set.

- **Determine Average Cost for Each Unit**

$$= \sum \text{ of unit costs} / \sum \text{ of all Units} = \text{Unit Average Cost}$$

- **Determine Average Cost for Entire Data Set**

$$= \sum \text{ of all costs} / \sum \text{ of all units} = \text{Average Cost All Units}$$

- **Determine Unit Relative Weight**

$$= \text{Unit Average Cost} / \text{Average Cost All Units}$$

**Note: Inpatient Unit= APR=DRG/Severity*

Outpatient Unit = Singleton EAPGs



Step 5: Calculate Relative Weights: Examples

APR-DRG

$$\begin{aligned} & \sum \text{APR 383 Sev 3 Cellulitis} / \sum \text{of all APR-DRGs} \\ & = \$2,850 \quad / \quad \$3,400 = .8382 \end{aligned}$$

EAPG

$$\begin{aligned} & \sum \text{Singleton EAPG 14 Level III Skin Repair} / \sum \text{of all EAPGs} \\ & = \$425 \quad / \quad \$650 = .6538 \end{aligned}$$

Step 5: Calculate Relative Weights: Adjustments

- **Weight Breadth**

- Null volume cells
- Low volume cells--monotonicity
- Single provider cells

- **Benchmark Weights:**

- Weight relativity
- High volume/high cost services
- Overall reasonableness of weights

Next Steps

- Distribute Conversion Packages:
 - Inpatient APR DRG Base Rate and Impact Reports
 - APR DRG Version 27 Weight Set
 - APR DRG Version 27 Cost-Based Outlier Thresholds
 - Outpatient EAPG Base Rate and Impact Reports
 - Standard Fee Schedule
 - Ratio of Cost to Charge
 - MHSA Document
- Ongoing discussion and educational support
- Contract and Provider Manual Changes