Facility UCR Determination: Quantitative Methodologies

April 12, 2005

Presented to:
California Department of Managed Care
Financial Solvency Standards Board

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Section 1300.71(8) “…the payment of the reasonable and customary value for the health care services rendered based upon…”

- Statistically Credible Information Database
- Updated at Least Annually
- Recognizes Provider Specific Characteristics
- Recognizes the Nature of the Services Provided
- Considers the Fees Usually Charged by the Provider
- Geographic Segmentation
Historical Industry Objections:

1. All Inpatients are not the same, even those with the same Primary Diagnosis and Procedure (SIIS)
   - Severity of Illness
   - Intensity of Services

2. Facility Characteristics
   - Urban vs. Rural
   - Teaching Hospital
   - Trauma Center
   - Children’s Hospital

3. Geographic Segmentation
   - The value of goods and services throughout the country is not uniform
Hospital Inpatient Usual, Customary and Reasonable Amounts

Regulatory/Legal Issues:

ERISA/State Departments of Insurance, Managed Care, WC Commissions, etc
1. Payment data is not acceptable
2. Timeliness of Data
3. Source of Data
4. Location of Comparison Providers

Policy/Benefit Plan/Contractual Issues

**Definitions Section:** specifies that the policy/plan will pay for medically necessary goods and services *consumed* by their insureds at the lesser of Usual, Customary or Reasonable Amounts. (DRGs represent averages, not individual consumption. They may be used in contracts and statutory reimbursement formulas, but cannot be supported as UCR values.)
Cost Basis for Inpatient UCR

Focus
- Patient Claim-Specific
- *Allow Reasonable Margin that is proportional within each geographic peer group*
- UCR Value that is objective, quantitative

Basis Hospital-Specific Fully Allocated Costs at the Revenue Center Level
- Direct
- Indirect

Yields the Actual Cost of Providing Services by Department. Used with Hospital Department Revenue to create the first of two databases used in the two-step Re-Pricing Process.

Allowance Mark-Up Over Cost
- Revenue Center-Specific (only hospital data are used)
- Geographically Segmented

This is the second database used in the Re-pricing Process.
The Cost-to-Charge (C2C) Methodology

The Mathematical Function:

\[ f(x)_{C2C} = \sum_{n=1}^{\infty} \left( (C_n \times R_n \times M_n) \leq C_n \right) \]

- **Cn** = Revenue Center Charge
- **Rn** = Hospital-Specific Cost to Charge Ratio for that Revenue Center
- **Mn** = Area Mark-Up Rate for Hospital Revenue Center goods and services

Basis:

- Hospital-specific costs
- Geographic Norms
- Objective Data
- Quantitative Analysis
- Updated Twice Annually
- Individual Patient Bills
- Provider charges
- Patient services consumed
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The Cost to Charge Ratio (C2C):

Total Revenue Center Costs (Full Allocation)…
…divided by Gross Revenue Center Charges (Total List Price)
C2C Ratio x Charge per RCC on the UB-92

**Example:** Laboratory Charge is $1,000
Laboratory C2C (Hospital-Specific) = 0.25
Cost/Charge x Charge(/1) = COST
0.25 x $1,000 = $250.00 = COST

GeoZip Area Median Mark-Up Rate = 3.00
3.00 x $250.00 = $750.00
UCR for this Charge from this Hospital.

GeoZip Area Median Mark-Up Rate = 5.00
5.00 x $250.00 = $1,250.00
UCR for this Charge from this Hospital.

*Hospital specific costs and geographic mark up rate for hospital provided goods and services by revenue center generated the different UCR values above.*
Severity of Illness / Intensity of Service Issues

C2C Allowance Adjusts for:

- **Severity of Illness**

- **Intensity of Service**
  Increased Intensity of Service Implies Increased Quantity of Goods and Services provided.

- **A Higher Charge**, as a result of either of the above, is recognized by the mathematics. The higher the Revenue Center charge, whether driven by volume or unit price, **will directly increase** the allowance.

Hospitals will receive an allowance that is calculated based on: their costs, the goods, and services consumed by the patient and, their geographic peer group revenue center mark up rate.
Charge-Based Facility Outpatient UCR

- Uniform Level of Care/Acuity
- All Low Risk Patients
- All Good Candidates for Surgery/Procedure
- No Major Complications
- Uniform Consumption of Goods and Services
- UCR Value is Based on ICD-9 Procedure Code
- Data analysis is based on procedure - charge comparison, with geographic segmentation, is valid and yields a true UCR value for the procedure(s) performed.
Actual Charge-Based Database

- Actual Charges
- Charges are inflationary trended
- Geographically Specific Based on 3-digit ZIP Code
- Based on ICD-9-CM Surgical Procedure Codes (Volume 3)
- Compiled on a Percentile Basis (payor determined)
Actual Charges: Available Data

- 16 Million Outpatient Surgical Facility Procedure Charges Annually
- 40% are Multiple Procedures - Cannot use them
- 10 Million Episodes Available for Data Purposes
- CPS has 4.4 Million Episodes or 44% of the Nationally Available Charge Data
- Data Acquired via purchase from commercial source(s), purchase from CMS, CPS claim processing
- Database is updated every six months
Data Files:

- **Local**: Geozip (146 local areas)
- **State**: (all 50 states as well as the District of Columbia and Puerto Rico)
  - California same 12 geozip areas as used for inpatient
- **National**: Used for claims containing esoteric procedure codes when there is insufficient data at the local or state level for a statistically significant sample.

(Central Limit Theorem = Random Sample)
OPR Re-pricing is based on the same mathematical formula that traditional physician UCRs are based.
Geographic segmentation facilitates calculations reflecting community charges;
The data base used:
• is proprietary
• is updated regularly
• is composed of a statistically large sample
• is considered to be valid
Concentra Preferred Systems Facility UCR Methodologies are:

- Quantitative
- Objective
- Timely
  - (EDI input and output is preferred, yielding a very rapid turn around time)
- Updated regularly, more frequently than required by law
- Are based on data that is obtained from reliable sources
- Recognize the nature of the services provided by either ICD-9 code or by the actual departments providing services
- Incorporate geographic segmentation
- Recognize the providers charge
Thank you

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