RBMA Key Indicators

Meaningful comparison with one’s peers requires ensuring that common criteria or indicators be used in the analysis; to this end, RBMA’s Data Collection and Reporting Committee has identified eight key indicators of accounts receivable management performance and eight key indicators of imaging center performance that may be used across entities to analyze effective and efficient business performance.

A/R Management Performance

Adjusted Collection Percentage
Formula: \[(\text{Adjusted Collections} \div \text{Adjusted Charges}) \times 100\]
Definitions:
- Adjusted Collections: \((\text{Gross Collections} - \text{Collection Offsets})\)
- Adjusted Charges: \((\text{Gross Charges} - \text{Total Adjustments})\)
- Gross Collections: Revenue collected from Gross Charges.
- Collection Offsets: Refunds of dollars collected in error + returned checks.
- Gross Charges: Full dollar amount of all services rendered to patients.
- Total Adjustments: Amounts which were never expected to be collected, by virtue of laws, regulations, contracts or internal policies applicable to the services provided by the entity.

The adjusted collection percentage is a measure of the effectiveness of a business in collecting on accounts that are available for collection.

Days Charges in Accounts Receivable
Formula: \[(\text{Total A/R Balance} \div \text{Average Daily Gross Charges})\]
Definitions:
- Average Daily Gross Charges: \((\text{Average Monthly Gross Charges} \div 30)\)

The days charges in accounts receivable indicator provides a rough measure of the amounts that are outstanding in the accounts receivable. This measure provides a context for evaluating the total accounts receivable balance among practices whose operations are very different in size and scope. RBMA recommends using a 6 to 12 month average.

Total Write-offs as a Percentage of Gross Charges
Formula: \[(\text{Total Write-offs} \div \text{Gross Charges}) \times 100\]
Definitions:
- Total Write-offs: Amounts that were expected to be collected, but the organization was unsuccessful in collecting. Bad debt, bankruptcy, non-covered services, timely filing denials, small balance, return mail (unable to locate the responsible party), and patient deceased all are reasons money may not be collected as originally anticipated.
- Gross Charges: Full dollar amount of all services rendered to patients.

This key indicator represents the relationship between the total value of all services billed (gross charges) and the balances that are not collected and are removed from the A/R books as write-offs. The expectation at the time the services were billed was that they were available to the organization for collection.

Total Write-offs as a Percentage of Adjusted Charges
Formula: \[(\text{Total Write-offs} \div \text{Adjusted Charges}) \times 100\]
Definitions:
• Total Write-offs: Amounts that were expected to be collected, but the organization was unsuccessful in collecting. Bad debt, bankruptcy, non-covered services, timely filing denials, small balance, return mail (unable to locate the responsible party), and patient deceased all are reasons money may not be collected as originally anticipated.
• Adjusted Charges: (Gross Charges – Total Adjustments)
• Gross Charges: Full dollar amount of all services rendered to patients.
• Total Adjustments: Amounts which were never expected to be collected, by virtue of laws, regulations, contracts or internal policies applicable to the services provided by the entity.

Total write-offs as a percentage of adjusted charges is closely related to the previous key indicator, total write-offs as a percentage of gross charges. It adds another dimension to the overall analysis by calculating the statistic after removing from consideration the adjustments which, for the most part, are known prospectively.

**Bad Debt Recovery as a Percentage of Collection Agency Write-offs**

**Formula:** \( \frac{\text{Amount Recovered by External Collection Agency}}{\text{Collection Agency Write-offs}} \times 100 \)

**Definitions:**
- Collection Agency Write-offs: Amounts that, in an ideal world, the practice would have collected from patients, but which the patients failed to pay and were sent to an outside collection agency for additional pursuit; e.g., bad debt write-offs.

What constitutes a “good” value for this statistic is problematic because of the hidden interaction between the effectiveness of internal collection processes and the performance of the collection agency. Although the Data Committee has chosen to have a higher number represent a more desirable outcome—focusing on collection agency performance—this is not necessarily the case if accounts could have been collected more efficiently internally.

**Billing/Collection Expense Percentage**

**Formula:** \( \frac{\text{Billing/Collection Expense}}{\text{Adjusted Collections}} \times 100 \)

**Definitions:**
- Billing/Collection Expense: All costs identified as incurred in the process of collecting, recording and transmitting charge information, plus the costs of collecting, posting and depositing payments for these services. Bank lockbox fees, credit card fees, and fees paid to mailing services and to collection agencies are included here.
- Adjusted Collections: (Gross Collections – Collection Offsets)
- Gross Collections: Revenue collected from Gross Charges.
- Collection Offsets: Refunds of dollars collected in error + returned checks.

The primary reason for analyzing the relationship between the expenses that are incurred for billing/collection purposes and the adjusted collections is to evaluate the efficiency of the billing/collection process.

**Billing/Collection Cost per Procedure**

**Formula:** \( \frac{\text{Billing/Collection Expense}}{\text{Number of Procedures}} \)

**Definitions:**
- Billing/Collection Expense: All costs identified as incurred in the process of collecting, recording and transmitting charge information, plus the costs of collecting, posting and depositing payments for these services. Bank lockbox fees, credit card fees, and fees paid to mailing services and to collection agencies are included here.
- **Number of Procedures:** Total Professional Component, Technical Component or Global CPT®/HCPCS codes billed during the reporting year. Counts of the following commonly billed items are not included: a) contrast media, b) radiopharmaceuticals, c) computer evaluation of images (e.g., CAD review of mammograms), and d) other similar codes used for supplies and technical services that are tangential to providing the ordered services. This key indicator drives the organization’s expense analysis to a per-unit or per CPT®/HCPCS code level and assesses the relationship between total billing/collection expenses and a unit of service.

**Accounts Receivable Aging Percentage Over 120 Days**

**Formula:** \( \left( \frac{\text{Dollars Aged Over 120 Days}}{\text{Total A/R Balance}} \right) \times 100 \)

RBMA recommends calculating A/R aging from billing date rather than from date of service.

When managing outstanding accounts receivable, prevailing wisdom is that the older the account, the more difficult it becomes to collect. It is important to analyze this key indicator by responsible payor, if possible, to facilitate the identification of specific payor problems within the aging category.

**Imaging Center Performance**

Almost since the inception of the Imaging Center Performance Survey in 2002, RBMA envisioned the development of key indicators of imaging center performance to supplement the eight key indicators of accounts receivable management performance. In 2009, using the results from four Imaging Center Performance Surveys and a mini-Survey that collected information about what measures RBMA members use to assess the performance of their imaging centers, the RBMA Data Collection and Reporting Committee selected eight key indicators of imaging center performance. Four of the indicators are used to evaluate procedure productivity and four are used to evaluate expense management performance.

**Procedure Productivity**

These statistics are measures of throughput and are reported overall and by modality for CT, MR, PET and PET-CT, general radiology, DEXA, ultrasound, digital and analog mammography, nuclear medicine, and interventional/pain management.

**Number of CPT® Codes Billed per Imaging Machine**

**Formula:** \( \left( \frac{\text{Number of CPT Codes Billed}}{\text{Number of Imaging Machines}} \right) \)

**Definitions:**

- **Number of CPT Codes Billed:** The number of codes billed during the fiscal year. Both surgical and S&I codes are included for interventional/pain management services. Counts for codes related to contrast media, radiopharmaceuticals, computer evaluation of images, and other similar codes used for supplies and technical services that are tangential to providing the ordered service are not included.
- **Number of Imaging Machines:** The number of machines in use at this location.

**Total RVUs per Imaging Machine**

**Formula:** \( \left( \frac{\text{Total RVUs}}{\text{Number of Imaging Machines}} \right) \)

**Definitions:**

- **Total RVUs:** The total number of RVUs corresponding to the number of CPT codes billed during the fiscal year.
- **Number of Imaging Machines:** The number of machines in use at this location.
Number of CPT® Codes Billed per FTE Tech

Formula: \( \frac{\text{Number of CPT Codes Billed}}{\text{Number of FTE Technologists}} \)

Definitions:

- Number of CPT Codes Billed: The number of codes billed during the fiscal year. Both surgical and S&I codes are included for interventional/pain management services. Counts for codes related to contrast media, radiopharmaceuticals, computer evaluation of images, and other similar codes used for supplies and technical services that are tangential to providing the ordered service are not included.

- Number of FTE Technologists: The number of full-time equivalent technologists, nurses, and technologist aides who work in the imaging center on patient throughput or the acquisition of imaging studies. Hours spent performing administrative or other non-clinical functions should be excluded from the FTE Tech calculation. To calculate this number, add the FTE of part-time techs (part-time hours worked weekly divided by 40) to the number of full-time techs.

Total RVUs per FTE Tech

Formula: \( \frac{\text{Total RVUs}}{\text{Number of FTE Technologists}} \)

Definitions:

- Total RVUs: The total number of RVUs corresponding to the number of CPT codes billed during the fiscal year.

- Number of FTE Technologists: The number of full-time equivalent technologists, nurses, and technologist aides who work in the imaging center on patient throughput or the acquisition of imaging studies. Hours spent performing administrative or other non-clinical functions should be excluded from the FTE Tech calculation. To calculate this number, add the FTE of part-time techs (part-time hours worked weekly divided by 40) to the number of full-time techs.

Expense Management Performance

Imaging Center Operating Expense as a Percentage of Total Imaging Center Expense

Formula: \( \frac{\text{Imaging Center Operating Expense}}{\text{Total Imaging Center Expense}} \times 100 \)

Definitions:

- Imaging Center Operating Expense: The total of non-physician salaries expense (excluding salaries expense for marketing staff); non-physician benefits expense (excluding benefits expense for marketing staff); occupancy expense; medical imaging equipment expense; RIS/PACS expense; medical supplies expense; office furniture, fixtures and equipment expense; and office supplies expense.

- Total Imaging Center Expense: The total of imaging center operating expense, imaging center marketing expense and general, administrative and miscellaneous expense.

Imaging Center Operating Expense per CPT® Code Billed

Formula: \( \frac{\text{Imaging Center Operating Expense}}{\text{Number of CPT Codes Billed}} \)

Definitions:

- Imaging Center Operating Expense: The total of non-physician salaries expense (excluding salaries expense for marketing staff); non-physician benefits expense (excluding benefits expense for marketing staff); occupancy expense; medical imaging equipment expense; RIS/PACS expense; medical supplies expense; office furniture, fixtures and equipment expense; and office supplies expense.
- **Number of CPT Codes Billed:** The number of codes billed during the fiscal year. Both surgical and S&I codes are included for interventional/pain management services. Counts for codes related to contrast media, radiopharmaceuticals, computer evaluation of images, and other similar codes used for supplies and technical services that are tangential to providing the ordered service are not included.

**Imaging Center Operating Expense per Total RVU**  
**Formula:** \((\text{Imaging Center Operating Expense} / \text{Total RVUs})\)  
**Definitions:**  
- **Imaging Center Operating Expense:** The total of non-physician salaries expense (excluding salaries expense for marketing staff); non-physician benefits expense (excluding benefits expense for marketing staff); occupancy expense; medical imaging equipment expense; RIS/PACS expense; medical supplies expense; office furniture, fixtures and equipment expense; and office supplies expense.  
- **Total RVUs:** The total number of RVUs corresponding to the number of CPT codes billed during the fiscal year.

**Imaging Center Marketing Expense as a Percentage of Imaging Center Revenue**  
**Formula:** \((\text{Imaging Center Marketing Expense} / \text{Imaging Center Revenue}) \times 100\)  
**Definitions:**  
- **Imaging Center Marketing Expense:** Amounts spent by the imaging center to promote, brand and encourage or retain referral sources in addition to any salaries and benefits expense for those individuals in the imaging center who work on these efforts. If a portion of an FTE is dedicated to marketing efforts then the applicable percentage of salaries and benefits expense should be included in the imaging center marketing expense.  
- **Imaging Center Revenue:** Monies earned and/or received by the imaging center, whether recognized in the accounting records on a cash or accrual basis, for the provision of imaging or interventional services provided by the imaging center. If revenue is recognized on an accrual basis then the imaging center revenue should be calculated as net of adjustments and write-offs. Other income sources such as interest should be excluded.