



Revenue Cycle Management: *A Life Cycle Approach*

**2008-2009 HIMSS Financial Systems
Revenue Cycle Task Force**

September 2009

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Introduction

One of the biggest challenges facing providers is justifying the use of information technology systems. Competition is stiff for securing capital dollars for information technology systems. Today, approved technology spending is expected to support a provider's targeted service offering and/or is related to the 2009 American Recovery and Reinvestment Act (ARRA) stimulus funds.

Justification for revenue cycle management information systems can be easier than clinical systems due to the resulting impact these systems have on the provider's revenue stream and the organization's financial health. These systems can more clearly demonstrate a 'one-to-one' relationship of dollars spent to dollars impacting the organization's financial bottom line. However, today's best practices in revenue cycle management systems extend beyond just billing. These systems may cover pre-service through post-service functions, including registration, bill estimations, case management, discharge billing and post-service billing reconciliation.

This paper provides an overview of the revenue cycle life cycle and begins exploration of best practice metrics. Practice metrics can be leveraged for both benchmarking and system purchase justifications. This paper addresses best practices and metrics to optimize the revenue cycle and leverage technology.

Purpose

This white paper is a result of the work effort of the HIMSS 2009 Revenue Cycle Management Task Force. The work effort is in response to a HIMSS strategic goal for fiscal year 2009 to develop a white paper related to the life cycle of the patient encounter.

This white paper provides an overview of identified stages in the revenue cycle management (RCM) life cycle encompassing the entire patient encounter process. The targeted audience for this includes hospital providers and integrated delivery systems. The life cycle is divided by category of activities with each category described in detail in this paper. The next white paper in this HIMSS RCM series will build upon this paper's overview of the RCM life cycle and include more in-depth analysis of each category with inclusion of benchmarking or best practice metrics. The additional, in-depth paper is projected for publication in the fall of 2009.

Revenue Cycle Overview

Organizational performance is achieved through a delicate balance of people, processes, the technology used to support the processes, and the environment in which the processes are done. Changes in any one of these four variables may result in less than desirable organizational performance.

Performance improvement is assessed and sustained with objective performance measurement. Revenue cycle management in healthcare is complex. To identify

performance issues, a simple measure of overall outcomes is interesting, but may not be *actionable* information. For actionable information on revenue cycle performance, the measure of performance must be made at the level of specific action reflective of specific daily operational accountabilities.

RCM is an overall complex process that requires a variety of personnel to be involved in the improvement effort. To facilitate understanding, the RCM measures around the RCM life cycle are divided into major categories (Front-end, Middle, and Back-end, as described in the next section), with further sub-categorization outlined as needed.

Strategic metrics (those included in executive dashboards) encompass financial, operational, and customer service or quality measures at a high level. Their purpose is to give the executive an overview of each measurement. These metrics can change based on an organization's priorities and objectives. Many of these actionable measures may be included in dashboards.

Revenue Cycle Management Categories

The Task Force identified three major categories within the overall RCM process to frame discussions of the information in this paper. They are:

- Front-end: Scheduling, patient access, pre-authorization, insurance verification and financial counseling
- Middle: Charge capture and clinical documentation
- Back-end: Claims processing and payment posting, follow up, customer service and collections.

Front End: Scheduling Patient Access, Insurance Verification and Financial Counseling

The front end of the healthcare revenue cycle begins at the point of scheduling, or the time the patient presents for clinical service, if the service is not scheduled. The key objectives are to ascertain the source of payment for the service, accurately collect patient demographic information and ensure an excellent patient experience with the process. The most important criteria for a metric are that it can be consistently measured, and that the results provide information to drive operational improvement.

Patient Scheduling

- Sample metrics were researched focused on measuring physician and patient demand for services around patient scheduling. Ideally, some goals for these metrics would be to improve accuracy and capacity for outpatient scheduling, and to reduce non-productive time in the clinical department.

Patient Access

- Selected metrics in patient access should help organizations improve billing accuracy, reduce days in accounts receivable and payer denials, and enhance the patient experience with the revenue cycle in patient access.

Insurance Verification

- Tracking these measures identifies continuous improvement opportunities in the front end process at an organization. Insurance verification metrics should provide a strong correlation to the security of the collectability of an account and the grade of the accounts receivable.

Financial Counseling

- Using these metrics will help to ensure that the patient is engaged in creating a financial plan no later than the time of service. Expectations are set, and improved self-pay collections are the result.

System Tools

- System tools supporting the front end category include the following:
 - Enterprise-wide scheduling system
 - Order tracking and management system
 - Telephony system in order to measure call activity
 - Registration quality assurance tools
 - Online third party eligibility and coverage limitations
 - Workflow drivers to ensure all financial clearance functions are completed
 - Estimation tools for patient out-of-pocket
 - Electronic financial assistance applications.

Middle: Charge Capture and Clinical Documentation

The middle section of the healthcare revenue cycle represents the intersection of clinical practice and billing. The key objectives are to manage the clinical practice within accepted guidelines to ensure reimbursement, to document services completely and accurately, and to ensure the codification of documented services is complete and accurate.

Performance issues may arise in the middle section during or after technology projects since a multidisciplinary perspective is needed when balancing information systems and technology, clinical operations, administrative operations, and billing regulation. An integrated team approach will aid in providing a multidisciplinary perspective when planning changes in this area.

Operational controls and performance measures lacking in this middle section will cause overall poor performance results. The underlying cause will be difficult to identify and may take valuable time and resources to discover. Thus, the establishment of objective performance measures and reporting tools at a granular level of detail is essential to mitigate risk and promote optimal revenue cycle performance.

The middle section can be sub-categorized into the following:

- Case management
- Charge capture and clinical documentation
- Charge description master (CDM) maintenance
- Health information management (HIM).

Accountability for each of these functions may be assigned to a unique job class, and may require a unique skill set to perform well. The performance metrics, processes to support optimal performance, and general discussion are presented by sub-category in the sections that follow.

Case Management

Revenue cycle objectives supported by case management include:

- Admissions: To ensure that the admission is appropriate, within the parameters of clinical practice and that which may be reimbursed.
- Care planning/coordination and discharges: To ensure that the discharge is not delayed due to preventable causes. Resources consumed during an inappropriate or avoidable extension of stay may not be reimbursed.

Systems tools supporting case managers:

- Case managers are dependent on information to support their decision making and activities. Admission and clinical data are required on each admission, including real time information on elapsed time from admission and expected duration of admission. Systems tools may include a mix of HIS applications or a case manager-specific application that is integrated with other HIS applications.

Other Considerations

- The case manager role is one that will benefit immensely from consolidation of data, whether through systems integration and consolidated real-time reporting, or a wholly integrated hospital information system (HIS) with an electronic health record (EHR). This role should be included when planning new transaction or reporting systems that would facilitate their information gathering.
- The case manager role carries inherent conflict. There is accountability to the patient to coordinate optimal care. There is accountability to the chief financial officer and the clinical senior management to ensure that the care is rendered efficiently and not in excess of what is required. When conflict arises, it is essential that the case manager have a means of escalation within the hierarchy of both clinical practice and administration.

Charge Capture and Clinical Documentation

Revenue cycle objectives include the following in this section:

- Complete, accurate, and timely identification of charges associated with supplies and services rendered, and input of the charges into the billing system (or a system that is integrated with the billing system).

- Complete, accurate and timely documentation of patient history, assessment, procedure notes, and clinical plan. Documentation should be readily available for use by coders and/or entered into a system that is integrated with billing.

As stated previously, the middle section of the healthcare revenue cycle represents the intersection of clinical practice and billing. This is most true in the specific transactions to capture and integrate clinical and charge data into the claim record. The processes to support this integration of data may be automated and thus controlled by system and record configurations. In many cases, many of these processes may remain manual or a hybrid mix of forms and systems.

Systems tools supporting charge capture and clinical documentation:

- A diversity of tools for charge capture and clinical documentation can add complexity to the revenue cycle process. Charge capture may be completed with a mix of forms, on-line entry (keyed or scanned) and automatic triggering.
- A diversity of tools for clinical documentation may also add complexity to the revenue cycle process. Clinical documentation may first originate as written text, dictation, or text keyed directly to the system. Ultimately, clinical documentation must result in codified procedures and diagnoses to support billing.

For charges and clinical documentation, the path from origination to the billing system may create opportunities for delays, errors, or omissions, and thus adversely affect revenue cycle performance. Where possible, direct entry at the time of service supports optimum revenue cycle performance. Direct entry enables real-time edit checking and circumvents possible delays or errors in processing. To guard against omissions, operational controls and checks and balances should be established for each mechanism and site where used, regardless of the type of mechanism used. Each completed clinical encounter should result in charges and clinical documentation. The accountable party should be alerted in real time when these items are not completed within an expected timeframe.

- Correct Coding Initiative (CCI) & Local Medical Review Policy (LMRP)/National Coverage Determination (NCD) edits should be applied at the time of the original transaction. These edits require coded diagnosis and procedures (charges). In an EHR, the clinician or other user should be alerted to any edit issue when posting the transaction. If information is keyed later from documentation, the edits should be applied at the earliest point in the process where the data is available and there is a party accountable for intervention when appropriate. Thus, the transaction is identified and addressed prior to entry into the claim cycle.

Charge Description Master (CDM) Maintenance / Charge Capture Tools

- The CDM is one of the most complex master files within an HIS and is subject to continuous updates. Proper maintenance is essential to ensure proper charging for services and supplies within financial and regulatory parameters. Given the critical nature of the data within this file, there is merit in monitoring performance in file maintenance. Poor performance in maintenance of this file will put the organization

in financial risk and may introduce risk of regulatory non-compliance. Thus, monitoring the performance in file maintenance will aid in risk mitigation.

System tools supporting CDM maintenance:

- The CDM is the critical piece of effective revenue management and more and more organizations are using tools to support the process on a daily basis. The days of the annual review of the CDM are long gone. Organizations are turning to e-tools to help with maintenance. Optimal software packages include online reference tools that compile the latest coding and regulatory information, have a complete and active code book feature, and include a browser-based, cross-reference toolkit, enabling users to research coding, regulations and pricing information.

Health Information Management (HIM)

Revenue cycle objectives include the following:

- Complete, accurate and timely codification of documented clinical care and patient conditions as necessary to support billing claims.
- Complete, accurate and timely verification of provider or clerk entered codification of clinical care and patient conditions against actual documentation to ensure compliance with financial and regulatory guidelines.

Systems tools supporting health information management:

- HIM processes are dependent on access to all clinical documentation and any pre-coded data. Reference materials may be required to support the coding process, and once determined, coded values must be input into systems for inclusion in claims processing. Automated edits may be imbedded in transactions systems to identify discrepancies at the time of entry (prior to submission into the claim cycle). Final coded records must be submitted through diagnosis-related grouping (DRG) tools to calculate and assign DRGs. Systems tools may include a mix of HIS applications or an HIM-specific application that is integrated with other HIS applications.

Back-End: Claims Processing, Payment Processing, Follow up, Customer Service and Collections

The back end can be described as those functions typically considered by many as business office or back office functions. These include the following:

- Billing and claim submission
- Cashiering, refunds, and receipt/adjustment posting
- Third party and guarantor follow up
- Customer service
- Collections and outsourcing.

Billing and Claim Submission

The beginning of the “back-end” revenue cycle functions start with billing and claim submission. Billing and claim submission is expected to be a smooth process, assuming strong processes and information technology solutions are in place that provide real time

rules-based editing of accounts throughout the front and middle section of the revenue cycle. The utilization of information technology to automate and manage the billing process is key to expediting the billing of clean claims, as well as organizing the manual interactions required by the inevitable percentage of claims that need review and interaction.

Understanding the current best practices in automation and workflow management used for claim submission can make information technology extremely effective. Utilizing information technology that provides bi-directional communication between payers, strong bill editing functionality, and flexible workflow management can compliment well designed billing processes that ultimately improve collection rates and reduce accounts receivables (AR).

Cashiering, Refunds and Receipt/Adjustment Posting

Effectively managing the high volume of incoming claim responses from payers has long been a labor intensive, thankless function performed by the business office. While technology has come a long way in the last decade, automating large portions of past manual entry in these departments, high performing organizations are scrutinizing workflows and further enhancing the effectiveness of these departments.

Pushing to maximize automated posting and increasing the level of detailed information added to accounts has improved organization's ability to route work, automate secondary billing, and quickly respond to denial and underpaid claims. The speed and accuracy has improved with the implementation of technology. Ultimately, "cash is king" to these departments; therefore it is necessary to have proper processes, cross checks, and incentives help to ensure that an organization has the money in the bank to support their mission.

Third Party and Guarantor Follow Up

The business office follow up function has long been the work horse of the revenue cycle process and used to clean up poor processes and mishandled claims. While the front end and middle portions of the revenue cycle are gaining effectiveness, claim follow up teams remain an effective method for protecting revenue.

Routing unpaid or underpaid claims to the most effective teams at the appropriate time is imperative to keep AR collection time to a minimum. Whether accounts are managed in-house or outsourced, the timeliness of follow up has a direct relationship to collection rates. Utilizing technology to identify incorrectly paid or unpaid claims, then route these claims and provide applicable information needed for resolution, are becoming routine for effectively managed business offices. Implementing standard processes and quality monitoring to compliment technology can take cash collections to a new level for organizations.

Customer Service

The fourth and final section on performance measurements for revenue cycle systems justification is customer service. Many of the metrics included in best practices for the

pre-service and post-service systems are the same for customer service. Particularly, customer service can be most closely related to patient registration in terms of performance metrics—call wait times, numbers of calls dropped, calls resolved in the first contact—but the subject matter here is less standardized and more complex. It is important to have software that can support the most frequently asked questions and allow the customer service representatives to help add to the database. In addition, connection to the billing system information is also important.

One of the major challenges for the future in post-service technology will be developing applications for other forms of communication, such as wireless communications devices. Healthcare providers will need to complement existing interactive voice response (IVR) systems with new technologies that facilitate multiple means of customer communication.

Collections and Outsourcing

As an industry, healthcare has struggled with acknowledging the existence of unpaid bills and determination of the level of aggressiveness that should be taken in collection of this debt. Today, healthcare is experiencing new reporting pressures from the changes to the Internal Revenue Tax Form 990. Implementation of Sarbanes-Oxley has affected healthcare with changes required for not only bad debt and charitable care reporting, but also the timing of when this is reported. Technology is essential to coordinate the identification of the patient's payment ability and associated identification of charitable care. Best practice includes implementation of systems that connect pre-service insurance and bill estimates with end of service insurance coverage, actual bills, and the amounts collected. These systems must include quality modules that report on the accuracy of the bill estimators for improvement opportunities.

Ideally, from the provider perspective, all information systems should be interfaced with insurance companies, internal billing and posting systems, as well as secondary billing companies and collection agencies for expedient transfer of information, in order to minimize the total billing cycle and maximize collections.

System tools supporting the back end category include:

- Workflow claims management system for follow up
- Denial management system
- Contract management system
- Claims editing system
- Integration to payers for automated claims status and cash posting
- Telephony system in order to measure call activity
- Electronic financial assistance applications

Conclusion

Revenue cycle management (RCM) is a key tool in addressing the shifting industry practices toward real-time processing, consumer-driven healthcare, as well as changes in regulations and reimbursement structures. Health information technology is critical to the

discussion of how RCM can be leveraged by organizations. There are many areas as well as industry trends that impact this discussion.

This white paper provides an overview of the life cycle of revenue cycle management and processes. Future white papers from this HIMSS Task Force will address each category of this life cycle in more depth, along with best practices and approaches to measuring performance. The HIMSS Task Force will also begin investigating and addressing the emerging trends and issues impacting RCM.



Acknowledgments

Special acknowledgment is given to the primary authors of this white paper:

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