
4 Managing and Improving the Hospital Revenue Cycle Process

Carol S. Miller and David Edward Marcinko

CONTENTS

Introduction	66
Issues Impacting the Revenue Cycle	67
Impact of Regulations, Laws, and Healthcare Reform	68
Organizational Structure	69
Benchmarking	69
Technology	70
Patient Access.....	71
Health Information Management	71
Patient Financial Services	71
Revenue Cycle Operations	72
Front End Processes	72
Pre-registration	72
Scheduling.....	73
Patient Access and Registration	73
Pre-authorization, Pre-certification, and Insurance Verification	73
Point-of-Service Collections and Financial Counseling	74
Middle Processes	74
Clinical Documentation/Medical Records	74
Charge Capture and Coding	75
Charge Master and Master Patient Index	75
Late Charge Reductions	76
Case Management	76
Back End Processes	77
Billing: Primary and Secondary Insurance	77
Reimbursement, Posting, Refunds, and Adjustments	77
Follow-Up/Tracking	78
Denial Management	78
Bad Debt and Collections.....	79
Customer Service: Front, Middle, and End Processes	79
Management Expectations	79
Performance Measurements.....	80
Revenue Cycle Improvement Processes and Quality Measures	80
Conclusion	80
Acknowledgements	81
Appendix 1	81

Appendix 2.....	89
Director of Revenue Cycle Management Job Description.....	89
Experience Required	90
References.....	93

INTRODUCTION

Collectively the healthcare industry spends over \$350 billion to submit and process claims while still working with cumbersome workflows, inefficient processes, and a changing landscape marked by increasing out-of-pocket cost for patients as well as increasing operating costs.¹

For many years, hospitals and healthcare organizations have struggled to maintain and improve their operating margins. They continue to face a widening gap between their operating costs and the revenues required to cover current costs as well as the costs to finance strategic growth initiatives and investments. Faced with increased operational costs and associated declines in rates of reimbursement, many healthcare hospital executives and leaders are concerned that they will not achieve margin targets. To stabilize the internal financial issue, some hospital have focused on lowering expenses to save costs—an area they control and an area that will show an immediate impact—that is not, however, the best solution. Executives are concerned with the effect that these reductions may have on patient quality and service. Finding ways to maximize workflow to lower operating costs is vital. Every dollar not collected negatively impacts short- and long-term capital projects, lowers patient satisfaction scores, and possibly affects quality of patient care.

Small community or rural hospitals, large hospital systems, university-based hospitals, free standing clinics, small or large provider practices, long-term care facilities, and others are faced with the steps and processes involved in the management of the revenue cycle, but each to a different degree. As an example, many large, hospital-based systems have integrated clinical management systems with electronic health records whereby information entered at the point of care immediately transmits to those individuals in the billing department, whereas private practice physicians may rely on a remote billing service that supports multiple providers. Rural or smaller facilities may only have part-time staff to support their needs. In addition, some facilities or providers still rely on paper transmission, providing another cumbersome step in the process of claims submission and collection as well as the risk of missing supportive documentation and charges.

Revenue cycle operations appear to be straightforward: render a service, bill for the service, and collect reimbursement; upon deeper examination, however, there are many components that have to be included to establish a high-performing, integrated, coordinated, seamless revenue cycle operation. The effectiveness of a hospital's revenue cycle drives the entire hospital operation because the cycle is the source of the resources needed to maintain a successful facility. Success rests in how well the cycle is integrated. A successful revenue cycle is a complex process involving many inter-related components. This process not only relies on the technology and software that support the collection of data related to a billable event, but also on the processes established, the capabilities and motivation of staff, and the culture of the organization. Trained staff is crucial to each part of the revenue cycle to ensure that all processes and systems are working efficiently. Regardless of what is in place, every hospital, to maintain viability, needs to either improve or create a detailed process for improving revenue cycle performance. Poorly managed revenue can lead to a significantly lower profit margin, clerical errors, problems with insurance providers, and shortage of staff to fulfill requirements.

Hospitals and providers need to be prepared and need to ensure that their revenue cycle process is performing effectively and efficiently to handle these changes. Every hospital and provider has the fiduciary responsibility to ensure that the revenue cycle is capturing the appropriate reimbursement for all clinical services rendered.

A basic role of hospital revenue cycle management is to measure how well a hospital maximizes the amount of patient revenue billed and how quickly it collects that revenue. An effective way to analyze patient revenue billed is to consider trends in the percentage of gross revenue written off versus collectible or net revenue. The speed at which the hospital collects net revenue can be analyzed by looking at trends in the percentage of accounts receivable (A/R) reserved for write-off versus collectible as well as the ratio of net A/R days outstanding. As an example, the Healthcare Financial Management Association noted that the percentage of gross revenue written off by hospitals rose steadily from 63.2 percent in fiscal year 2006 (FY06) to an astounding level of 66.9 percent in FY10. These trends suggest that hospitals spend considerable effort to capture revenues that they will never be able to collect. The percentage of A/R reserved for write-off also rose steadily during this five-year period, from 46.1 percent in FY06 to 62.3 percent in FY10. Conversely, the percentage of collectible A/R declined from 53.9 percent in FY06 to 47.7 percent in FY10.² These trends suggest that the net revenues billed by hospitals are getting harder to collect.

The objectives related to successful revenue cycle management are as follows:

- Improve cash flow
- Increase revenue
- Lower bad debt expense
- Improved patient/customer satisfaction with financial services
- Reduced operating cost
- Increased productivity
- Reduce the possibility of extended patient stays
- Understand problem areas and implement improvements

This chapter will review the issues affecting revenue cycle, the impact of regulations and healthcare reform, positioning the right organizational structure, information technology needs, a summary of the operational elements in the revenue cycle, quality and process improvement, and a summary of recommended performance metrics and measurements.

ISSUES IMPACTING THE REVENUE CYCLE

As stated, hospitals and providers are under increasing pressure to collect revenue to remain solvent. The significant issues facing the revenue cycle staff include the following:

- **Impact of consumer-driven health:** This process has emerged as a new approach to the traditional managed care system, shifting payment flows and introducing new “non-traditional” parties into the claims processing workflow. As market adoption enters the mainstream, consumer-driven health stands to alter the healthcare landscape more dramatically than anything we have seen since the advent of managed care. This process places more financial responsibility on the consumer to encourage value-driven healthcare spending decisions.
- **Competing high-priority projects:** Hospitals are feeling pressured to maximize collections primarily because of impending changes due to healthcare reform, and they know they will need to juggle these major initiatives along with the day-to-day revenue cycle operations.
- **Lack of skilled resources in several areas:** Hospital have struggled to find the right personnel with sufficient knowledge of project management, clinical documentation improvement, coding, and other revenue cycle functions, resulting in inefficient operations.
- **Narrowing margins:** Declines in reimbursement are forcing hospitals to look at their organization to determine if they can increase efficiencies and automate to save money.

Hospitals are faced with the potential of increased cost to upgrade and adapt clinical software while not meeting budget projections. There are a number of factors contributing to the financial pressure, including inefficient administrative processes such as redundant data collection, manual processes, and repetitive rework of claims submissions. Also included are organizations using outdated processes and legacy technologies.

- **Significant market changes:** Regardless of what happens with the Patient Protection and Affordable Care Act, hospitals will have to deal with fluctuating amounts of insured and uninsured patients and variable payments.
- **Limited access to capital:** With the trend towards more complex and expensive systems, industry may not have the internal resources and funding to build and manage these systems that keep pace with the trends.
- **Need to optimize revenue:** There are five core areas that hospitals must examine carefully:
 - **International Classification of Diseases–Tenth Edition (ICD-10):** This is an entirely new coding and health information technology issue, but it also represents a revenue issue.
 - **System integration:** Hospitals need to look at integrating software and hardware systems that can combine patient account billing, collections, and electronic health records.
 - **Clinical documentation:** Meaningful use will require detailed documentation for payment to be made; this is another revenue issue.
 - **Billing and claims management:** Reducing denials and reject claims, training staff, improving point-of-service collections, and decreasing delays in patient billing can improve the revenue cycle productivity.
 - **Contract analysis:** Hospitals need to focus more on negotiating rates with insurers to increase revenue.

IMPACT OF REGULATIONS, LAWS, AND HEALTHCARE REFORM

There is a fair amount of activity that will take place in response to the transition to ICD-10, health-care reform, the Affordable Care Act (ACA), meaningful use compliance and its financial incentives, and other regulatory issues that will require system or software upgrades to support the new efforts. As an example, the ACA is expected to significantly alter reimbursement structures and delivery of care. Below are several areas that will be affected.³

- With the projected increase in patient volumes, an associated cost of about 62 percent will emanate from Medicare cuts: \$162 billion through reducing fee-for-service Medicare payments; \$136 billion from setting Medicare Advantage rates based on fee-for-service payments; and \$36 billion from cutting hospital Medicare/Medicaid disproportionate share.
- Compliance reviews will be increased through recovery audit contractors, where Centers for Medicare and Medicaid Services (CMS) expect to obtain \$2.9 billion in additional savings. With recovery audit contractors in place, hospitals and providers need to increase their focus and attention in improving documentation quality and validating medical necessity to substantiate their reviews.
- Reduced payments for readmissions and Medicare penalties for poor outcomes can and will affect the bottom line for both hospitals and providers in the future.
- By 2015, more than 19 million uninsured will receive coverage, and in 2016, another 11 million uninsured will be insured. This will create more patients per hospital/provider and will require more full-time equivalents to support the revenue cycle process of registration, documentation, billing, and collection.

- The ICD-10 conversion will create more complex requirements for documenting diagnoses and will require software modifications for hospitals and providers as well as significant training.

ORGANIZATIONAL STRUCTURE

Organizational structures in the past have been very fragmented islands of expertise that were and continue to be managed by different individuals with different goals and objectives. From a design and operations viewpoint, this approach has become antiquated and lends itself to issues regarding revenue collection. In addition, this approach does not provide a clear picture to those individuals who are responsible for overseeing the financial viability of a hospital or provider practice, in that they can not fully see all the issues or problems that relate to lost revenue. In today's structure, the trend is to place individuals working on front-end functions, middle functions (e.g., documentation and coding), and back-end functions under a senior financial executive to ensure that all sides are integrated and well-coordinated.

First and foremost, since the organizational structure is designed to help an organization achieve its purpose, the purpose itself must first be clearly defined. The purpose overall is very simple: to convert patient, payer, and service information into cash—more simply, to convert net revenue to cash.

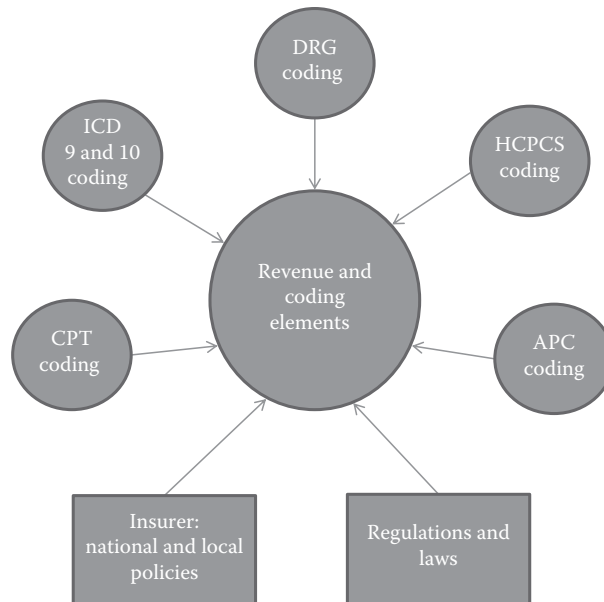
If a traditional organization structure is used, the structure needs to have leaders in such areas as patient access/registration, health information management (HIM), and billing and collection, with oversight and management by a chief revenue cycle officer or chief financial officer. This governance model assures the applicable information is documented, billed, and reimbursed; resolves process or people issues that may be negatively impacting the flow of information; and enables cross-functional learning and information exchange.

An even more innovative approach is to design specific high-performance work teams on the back end in which several fully self-contained mini business offices are responsible for a given set of patient accounts. Within these teams, all skill areas are represented, including coding, billing, validation, collections, denial management, follow up, etc. These teams are physically co-located such that intra-team communication is fast and easy, allowing team members to resolve issues, even cross-functional ones, immediately. Each team is held accountable to a set of revenue cycle metrics, and the metrics between teams are identical to allow for direct comparisons. With this design, most problems associated with traditional organizational structures are eliminated, and a platform for cross-training and team competition, along with performance-based pay, is built into the structure. In this model, the managerial responsibilities shift to performance management and process improvement while the team focuses on their own operations. The intent is to streamline patient services, minimize rejected claims, and accelerate reimbursement while improving patient satisfaction and overall revenue cycle performance.

BENCHMARKING

From the standpoint of patient accounting, coding allows for a common language between providers and payers during the reimbursement process. Accurate coding procedures limit the number of denied claims due to inaccuracies, thereby optimizing cash flow and managing A/R. Examples of what coders utilize in the coding process are referenced in Figure 4.1.

The expanded levels of specificity created in ICD-10 are expected to have a significant impact in terms of more accurate reimbursements and fewer rejected claims, but they will require more work and time. As would be expected, this new system is several orders of magnitude more complex than its predecessor, ICD-9. Successful transition will require significant modifications to existing healthcare information technology systems, new tools for analytics, and a tremendous amount of training for these new requirements.



AQ1 **FIGURE 4.1**

An industry-acknowledged professional recommends the following targets for different levels of coding expertise:⁴

Type	Coding Specialist I	Coding Specialist II	Coder I	Coder II
Inpatient	>45 records daily	>32 records daily	>15 records daily	>23 records daily
Outpatients and emergency room records	2 min/chart or 250/day	2 min/chart or 250/day	4 min/chart or 120/day	3 min/chart or 160/day
Ambulatory surgery	3.5 min/chart or 130/day	4 min/chart or 120/day	8 min/chart or 60/day	8 min/chart or 60/day

The above table is for coding and light abstracting. The study assumes an 8-hour day and a 40-hour week.

Coding averages referenced in the table above represent averages based on existing coding methodology, which have been in place for a period of time. Converting to ICD-10 will surely decrease the above averages per coder until they learn the nuances and structure of the new coding system.

Coding is one of the core HIM functions; due to the complex regulatory requirements affecting the health information coding process, coding professionals are frequently faced with ethical challenges, e.g., does the level of care support a higher or lower coding structure, or which is the most appropriate diagnosis code to address multiple problems. Even trained providers have difficulty selecting the most appropriate code. Therefore, the use of a common language or vocabulary is a fundamental component of performance measure and workflow. Re-engineering the work process and evaluation measures seeks to facilitate use of informatics tools to make the coding process more reliable and efficient.

TECHNOLOGY

Automation can lead to decreased paperwork, standardized processes, increased productivity, and cleaner claims. Automation also leads to a better control of expenses, higher productivity, and efficient utilization management.

Because the revenue cycle involves many different people and departments, one challenge to using technology is ensuring the systems are integrated. As stated in the Hospital Review articles, “Hospitals use 10–12 different technological systems throughout the entire revenue cycle. Sophisticated software may not benefit a hospital if there are different systems that are not integrated. Hospitals should assess their technology to identify deficiencies and areas of overlap. One of the biggest mistakes many providers make is purchasing too many pieces of software instead of looking for one robust solution.”⁵

In addition, as stated in another article, “Only one in five hospitals expect to change their core revenue cycle management software within two years, but much of the change will be at large hospitals versus smaller facilities and/or provider hospitals,” according to a recent survey by a health information technology research firm. “Only 18 percent of hospitals with less than 200 beds are looking to replace core systems; 21 percent of hospitals with 200–400 beds are considering; and 36 percent of hospitals above 400 beds are looking for a change.”⁶

Technology plays an important role across the entire revenue cycle operation. Multiple systems in hospitals are not only inefficient for the staff but are cumbersome and repetitive for the patient. A more patient-friendly, integrated billing and registration system is needed. The large number of firms servicing the provider and hospital market is compounded by the complex diversity of business models that have emerged, even further fractionalizing the landscape.

The following list provides a few critical areas that technology has improved revenue management operations.

PATIENT ACCESS

- Call center capabilities with auto dialing, faxing, and Internet connectivity to quickly ensure and verify all insurance information.
- Master Patient Index software to eliminate duplicate medical record numbers and assist with assigning a unique identifier for all patients
- Registration and admission software that scripts the admission process to assist staff in obtaining required elements and check that insurer-required referrals are documented

HEALTH INFORMATION MANAGEMENT

- Chart-tracking software to eliminate manual medical record out-guides and decrease the number of lost charts
- Encoding and grouper software to improve coding accuracy and speed and to improve reimbursement
- Auto printing and faxing capabilities
- Internet connectivity for release of information and related document management tasks
- Electronic management of documents

PATIENT FINANCIAL SERVICES

- Automated biller queues to improve and track the productivity of each biller
- Claims scrubbing software to ensure that necessary data is included on the claim prior to submission
- Electronic claims and reimbursement processing to expedite the payment cycle

Each of these technologies, tools, software programs, and systems, has the ability to connect to outside systems for bi-directional transmittals, reduces the gap time between a service being rendered and billed, a generates a bill with correct coding, releases a clean bill to the appropriate insurer(s) and can achieve the ultimate desired result of reimbursement.

REVENUE CYCLE OPERATIONS

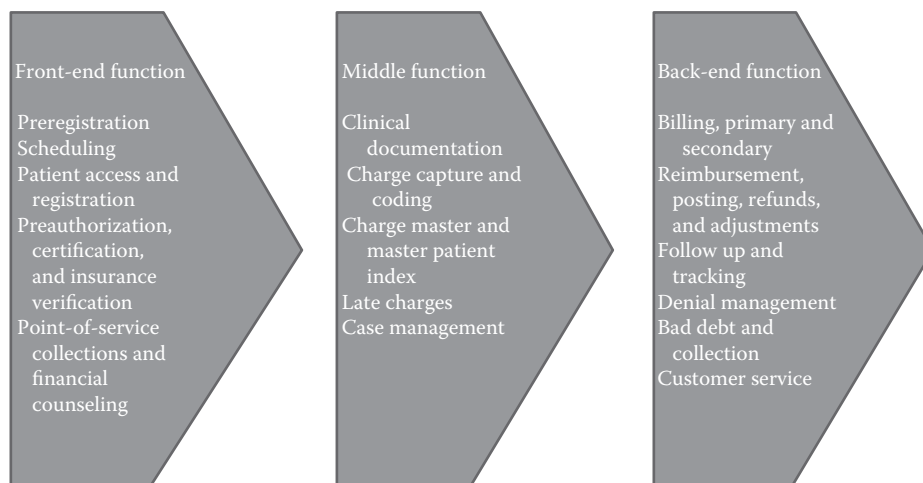
There are three functional areas in the revenue cycle: front end, middle, and back end, as depicted by Figure 4.2. The front end represents all the required functions and information associated with the patient's entry into the hospital system or provider's practice. The middle function represents the intersection between a patient entering the system, having clinical services, and the back end function of billing. The back end functions, more commonly referred to as the "back office," require information technology systems and processes to generate a timely bill and manage all the associated collections on accounts. Automated workflow management tools coupled with effective process governance can lead to meaningful streamlining of back-end processes.

Optimal performance in the revenue cycle is dependent on efficiency, speed, and accuracy. Elimination of manual tasks, automation edits and controls, and shared access are best achieved with a well implemented and managed system from front to back end. The ideal of course is for a more comprehensive system that integrates the front end functions, specific clinical documentation through an application process and the hospital and professional billing systems—one that can be used to generate accurate reports, identify duplication, and determine which accounts are outstanding. The traditional process of separate silo processes and systems does not enable efficiencies for operational management, control, and monitoring.

FRONT END PROCESSES

PRE-REGISTRATION

The initial area identified to improve revenue cycle management rests with the pre-registration process and includes timely information capture and the quality of that data. All hospitals, clinics, and provider offices should pre-register and pre-schedule patients to better manage the entire intake process. If there is a rush during registration, there is the possibility of capturing inaccurate information, which may result in a denied claim. There is a significant opportunity during the pre-registration process to improve patient satisfaction and to either remind patients of deductibles, co-payments, or back payments owed, or to use this initial meeting as a means of collecting dollars prior to a hospitalization, visit, or procedure.



AQ2 FIGURE 4.2

SCHEDULING

Many individuals feel the revenue cycle begins at pre-registration, but scheduling and pre-registration could be combined to represent the starting point of the revenue cycle. Scheduling includes verifying a patient's demographic information and source of payment, either from insurance or as self-pay; validating the medical necessity requirements; accurately and efficiently scheduling the requested service; and assuring patient satisfaction throughout the process.

Most scheduling processes are automated to ensure efficient intake of information, incorporation of clinical rules or tests requiring pre-certification or pre-authorization, and the ability to schedule multiple services within a hospital setting at one given time. Performance metrics include multiple aspects of this process to include rescheduled, cancelled, or no-show appointments that can occur either at the patient level or the provider level due to scheduling conflicts. Each of these measures needs to be evaluated on a monthly basis to determine how processes, procedures, and communications can be improved.

PATIENT ACCESS AND REGISTRATION

Most low performance rates for patient access teams are due to a lack of proper resources, inadequate training, and insufficient staffing levels. Fortunately, these can be resolved quickly and without huge expenses. Crucial to the revenue cycle is identifying the financial status prior to or directly upon admission. Patient access includes confirming the patient's identify, re-validating medical necessity, and ensuring all payer requirements are in place or being met prior to service, including notifications, pre-certifications, authorizations, and/or referrals.

Patient access is crucial to improving billing and collections efforts and increasing revenue cycle performance. Patient access can be improved significantly with several of the following information technology assets:

- Registration software that links with the hospital's or providers electronic health record
- Master Patient Index software that assigns a unique patient identifier and eliminates duplicate medical record numbers
- Internet capability to quickly verify that all pertinent information, such as insurance, is correct
- Scheduling software that links with the electronic health record
- Technology upgrades to all hospital and provider systems as well as extensive training for staff

An important review includes monitoring the number of registration errors on a daily basis. Determining what caused the error can help the hospital or provider practice improve quality through retraining efforts, developing more detailed checklists during registration, or changing procedures. This process ensures that the team learns from their mistakes and reduces the number of mistakes in the future.

PRE-AUTHORIZATION, PRE-CERTIFICATION, AND INSURANCE VERIFICATION

Pre-authorization is a statement by a third-party payer indicating that proposed treatment will be covered under the terms of the benefits in the contract, whereas pre-certification authorization is obtaining the approval for a specific medical procedure before it is performed or for admission to an institution for care. The latter is required for payment by most managed care organizations in the United States.

Hospitals and providers need access to online/integrated insurance verification systems with real-time responses to verify, prior to admission or a service, that the patient-to-be has the stated

coverage and insurance. This includes verifying coverage, approved length of stay, coverage terms, patient out-of-pocket obligations, requirements for pre-authorization or pre-certification, and any coverage limitations and maximum benefits.

As part of a routine process, all denials related to pre-authorization, pre-certification, and insurance verification should be tracked to determine if any continuous improvements could be included to eliminate future denials.

POINT-OF-SERVICE COLLECTIONS AND FINANCIAL COUNSELING

Today there are many patients who are struggling to pay for healthcare. Uninsured patients frequently utilize the emergency department or walk-in clinics for their “office visit” with no ability to pay. Likewise, charity cases based on federal, state, and local regulations are on the rise. Within the next three to four years, this problem is projected to decrease with the adoption and implementation of the ACA provisions, where all individuals will have insurance coverage. However, in today’s marketplace, hospitals and providers still need to focus on identifying eligibility for third-party sponsorship and/or eligibility for charity care under state, local, or hospital programs. In addition, states and individuals can opt out of this new coverage, leaving uninsured or uncovered patients to be admitted to the hospital, emergency room, and office practices.

The discussion of patient access and registration includes the topic of financial obligations:

- Financial conversations with uninsured and underinsured patients
- Referrals to financial counseling
- Identifying any potential non-covered or patient residual amounts that will be due after services are rendered and payment is provided by insurers
- Identifying any patient prior balances past due for payment
- Screening patients for workmen’s compensation, grants or other third-party payments
- Requesting patient deposits for copayments, deductibles, and co-insurance

Hospitals and providers need to perform real-time editing to identify any missing or inaccurate information required by billing and to utilize tools for estimating patient out-of-pocket responsibility. Financial counseling is not only a pre-registration and registration function, but also one used prior to discharge.

MIDDLE PROCESSES

CLINICAL DOCUMENTATION/MEDICAL RECORDS

The hospital needs to must evaluate the quality of the clinical documentation and justification of services rendered. At the same time, hospitals need to evaluate complications and/or co-morbidities that can extend a patient’s stay and increase the cost of the admission.

Documentation requirements may vary depending on the whether the process is manual or automated, with the latter requiring providers to specifically document information in electronic health record fields. In addition, documentation may vary based on the different documentation requirements for specialty physicians or type of care. Increased standardization in documentation will help facilitate more accurate and timely information from the hospital staff and provider offices. Any element that is ambiguous in its interpretation will create a level of risk in completing the process correctly and in a reasonable timeframe. Establishing standardized processes and procedures that providers understand will streamline the process, create efficiencies in the back-end process, and improve revenue flow. Accurate and detailed clinical documentation, including patient history, assessment, procedure notes, clinical plan, and progress notes, provides the basis for billing, reduces denials, and improves the revenue stream.

CHARGE CAPTURE AND CODING

Tracking the services a patient receives to ensure they are documented, accurate, and posted is crucial to assuring correct reimbursement. Coding is essential to the revenue cycle because it impacts the potential payment from payers.

There are two important questions regarding charge capture. Does the clinical staff document all aspects of the care accurately into the medical record not only in a timely manner? Are their services inadequately or not at all documented whereby the hospital or provider misses billing for these services? Accurate and complete documentation requires trained and skilled staff knowledgeable of insurance benefits and exclusions, who can identify charges associated with supplies and services rendered and input these charges and codes accurately into the billing system.

Charge capture can be as simple and streamlined as the clinician entering the charge code for a service directly into the electronic medical record as part of his documentation, which in turn is integrated into the HIM system and billing application. However, many providers are still not documenting their care until the end of the day, are using manual records with handwritten notes, or are using the older concept of charge tickets that are then transferred to another department to decipher and code. This manual process creates significant delays in the revenue cycle due to such menial tasks as having a coder review a chart to interpret the provider's level of care from handwritten notes.

A diversity of processes and tools for charge capture and clinical documentation can add complexity to the revenue cycle process. Direct entry at the time of the service supports optimum revenue cycle performance, enables real-time edit checking, and eliminates delays or errors in processing. Regardless of the tools in place, standardization of clinical documentation and charge capture/coding should be utilized. In addition, continued education regarding missing or inadequate documentation needs to be reviewed with the providers within a short timeframe to expedite the data being forwarded to billing as well as prevent reoccurrence.

Certified coders must be able to identify and access all clinical documentation for a given episode of care. Without proper education on tools and systems, there is always a risk that essential clinical information necessary to ensure coding accuracy is missing. There is a trend due to space, and supporting the concept of outsourcing, where coding functions are moving off-site to other complexes or to contracted firms. These processes require added security measures given the protected nature of patient data, and require that these outside professionals have access to appropriate systems and tools to assure clinical information is coding correctly. In addition, each insurer imposes specific coding regulations based on their coverage guidelines as well as local and national guidelines, which must be understood and readily accessible to each coder. In most hospitals and clinics, systems include built-in automated edits that are in place to identify discrepancies before submission.

As with all processes in the revenue cycle, operational controls that include checks and balances should be used for each task and each person.

CHARGE MASTER AND MASTER PATIENT INDEX

The Charge Description Master is an extremely complex file that is subject to continuous updates and requires continual maintenance. This file contains every single line item for which a charge may be made, including hospital services, all diagnostic and therapeutic procedures, equipment, supplies, drugs, and professional services. Each of these charges is correlated to a standard clinical code, such as ICD-9 or ICD-10, Current Physician Terminology (CPT-4), Healthcare Common Procedure Coding System (HCPCS), and, others along with the appropriate modifiers that support these codes. Maintenance includes adding or deactivating charge codes, and pricing is related to the contracts and operating costs. The most important ingredients to the Charge Description Master are accuracy of information entered and the mapping of these line items to service codes.

To ensure proficiency in this process, a formal management process and annual review process should be developed and scheduled with clinical departments. A standardized pricing methodology should also be defined. Issues should be identified, discussed, communicated and resolved by all accountable parties as they occur.

Consistent with the notion of consolidating functionality across the claims processing workflow is a broader class of opportunity: an electronic communications infrastructure that enables the sharing of information across disparate systems, databases, and stakeholders. This includes the creation and maintenance of common informational databases such as master patient indexes.

LATE CHARGE REDUCTIONS

Late charge services occur after discharge or are charges that were not charged or credited to a patient account from admission to discharge dates or through the last interim bill. This creates a re-submission of the claim with only the late charges. Each health facility has a preset minimum number of days that the information system will hold or suspend the account while awaiting additional charges that are necessary for proper billing. The most typical delay is around three days for outpatient accounts and five days for inpatient accounts. The rule of thumb to follow is to avoid late charges. Late charges should be a rare occurrence—an exception. Often the cost of rework in billing, information systems, accounting, and other areas far exceeds the value of the charges. If there late charges are routine in a hospital system, then the system is likely experiencing other inaccurate charging as well, such as lost charges, misappropriated charges, overcharges, and undercharges. In addition, rebills to insurance firms can trigger audits, cause denials and delays, and require manual intervention and time. Hospitals need to review the causes of late charges and rectify the problems to prevent future occurrences.

CASE MANAGEMENT

Case management in healthcare is “a collaborative process of assessment, planning, facilitation, care coordination, evaluation, and advocacy for options and services to meet an individual’s and family’s comprehensive health needs through communication and available resources to promote quality cost-effective outcomes.”⁷ Case management is also a process to plan, seek, and monitor services from different social agencies and staff on behalf of a client. Usually one agency takes primary responsibility for the client and assigns a case manager, who coordinates services, advocates for the client, and sometimes controls resources and purchases services for the client. The case file must be accessible in a suitably controlled way to all who are involved in the case.

Case management focuses on delivering personalized services to patients to improve their care and to assist with discharges; the elements of case management include:

- Referral of new patients
- Planning and delivery of care
- Evaluation of results for each patient and adjustment of the care plan
- Evaluation of overall program effectiveness and adjustment of the program

In the context of a health insurer or health plan, case management is a method of managing the provision of healthcare to patients with high-cost medical conditions. The goal is to coordinate the care so as to improve continuity and quality of care and to lower costs. Case management requires an information system to manage the documentation and messages from multiple care givers and to substantiate the level of effort in transitioning to an appropriate level of extended care.

Case management is assigned to providers and nurses who monitor admission progress with established clinical guidelines and provide the care planning and coordination for discharges. With the cost at hospitals on the rise, this professional team is integral to the process of controlling cost of

care, assessing appropriate admissions based on admission and clinical parameters, and determining the validity of inpatient stay extensions beyond that which is medically necessary. This team sits at the crossroad representing the patients, providers, and quality of care, and the chief financial officer and senior management to ensure that the care rendered is efficient without unnecessary costs, which sometimes is at cross purposes.

This area is very important during the registration and admission process to determine the medical necessity of their stay, i.e., will the insurer pay for the stay. Secondly, on the back end, the case management review assists the providers and hospitals in reviewing the length of stay and appropriate time for discharge, i.e., eliminating a lengthy stay that is not medically necessary.

Case management includes workload and performance measures such as:

- Number of admissions/case manager (with outcome measure of percent of appropriate)
- Number of discharges/case manager (with outcome measure of percent delayed)
- Number of patient days managed and percent of total patient days

A consolidation of data either through systems integration or an integrated HIM system with an electronic medical record is crucial to the success of a case management process. Case managers heavily rely on admissions data as well as alerts such as observations cases with a length of stay approaching 24 hours, limit of days prescribed under pre-certification approval, and cases where discharges will require continued care under another service such as extended care or home health. Tracking and documentation by the case manager and team are extremely important to the hospital's fiscal outcomes.

BACK END PROCESSES

BILLING: PRIMARY AND SECONDARY INSURANCE

Hospital or provider billing services, dependent on their internal operations and the quality and motivation of their staff, represent opportunities to increase efficiencies in the timeframe between discharge and submission of the bill to the insurer. Many hospitals have been known to hold onto the bill longer than needed before submission, which in turn delays reimbursement.

Billing and claim submission can operate smoothly if strong processes and information technology solutions are in place that provide real-time, rules-based editing of accounts. The key to a successful billing process rests with a "clean claim" submission, where all patient insurance information, diagnosis and procedure coding, and pre-approvals are obtained. A "clean claim" should result in accurate payment. The entire billing process relies on biller-specific workloads, payer edits, automatic error identification, defined coordination of benefits denoting who is the primary, secondary, and/or tertiary insurer, and direct interface into the online insurer billing systems. Functions within the billing cycle need to be continually audited to determine the level of quality or the need for process improvement or training. Trained and cross-trained staff, sufficient staffing levels to minimize backlogs, access to clinical documentation, and guarantor backup is crucial to the success of billing.

REIMBURSEMENT, POSTING, REFUNDS, AND ADJUSTMENTS

Automation of billing, posting reimbursements and adjustments, and billing of secondary insurers will lead to the staff's ability to improve the back-office revenue cycle processes. Providers and hospitals need American National Standards Institute (ANSI) transaction capabilities that are integrated seamlessly with legacy systems to support full electronic data interchange claims, claim attachments, and payment processing, which will expedite the reimbursement/adjustment posting process.

The entire process of posting payments needs to be handled with a totally separate dedicated staff primarily for checks and balances. This includes cash payments, insurer manual or electronic fund transfers, refunds by check or money order, credit card payments and adjustments, third-party payments on behalf of a patient, guarantor payments, pre- and post-contractual adjustments, and all other write-offs.

FOLLOW-UP/TRACKING

Important in the revenue cycle is not only the documentation of services that a patient receives but also the back-end tracking that a submitted claim has been reimbursed. Tracking is crucial throughout the entire life cycle until final resolution of the claim. Many times the follow-up process in the back end is more cumbersome than it needs to be, because the staff must spend additional time cleaning up errors from registration or documentation that have occurred in the front-end and middle processes. This process is very time consuming. The staff not only has to generate and review extensive reports, but also has to contact insurers, patients, patient families, and providers, address and further substantiate payment discrepancies, and many times follow up with a rebilling process. These follow-up teams are key to obtaining the correct revenue for the hospital or provider. Without this team, revenue would be unclaimed or unpaid.

AQ3

Follow-up functions can either occur with an in-house team dedicated to this process or be outsourced to a firm that specializes in follow up. The important element is to make sure that staffing levels are sufficient to minimize A/R backlog volumes and that staff is cross-trained on more than one payer type. In addition, system “tickler” reminders for each stage of follow up and summary documentation for nonpayment and underpayment are needed in this stage of the revenue cycle. Risk, age of claim, value, and other key elements need to be prioritized for pursuit. Wasting time on a \$10 co-payment does not offset the benefit of receiving a large balance payment. Accounts that are of significant value and have aged past expected timeframes need to be tracked, monitored, and documented on a weekly basis through resolution. Management needs to be informed of the working results of these follow-up teams, with tools such as core dashboard reports, trend reports, and drill-down reports.

DENIAL MANAGEMENT

Claims for services rendered can be submitted and denied for a number of reasons, such as failure to meet a deadline for submission; services not covered by the patient’s insurer, such as cosmetic surgery; insufficient documentation to substantiate the service rendered; insurance billed is not the primary insurance; insurance was cancelled; and a multitude of other reasons. The hospital or provider needs to assess each denial and determine how they can resubmit information for reconsideration and/or what could be done on a future billing to prevent a similar denial from occurring.

AQ4

Denials for non-covered services, inappropriate or non-justified coding, fragmented billing, coordination of benefits rejections, and deferrals of payments that request further substantiated documentation must be handled and managed until resolution. According to the Medical Group Management Association (MGMA), the cost to resubmit claims averages \$25–\$30. In addition, a United States Government Accountability Office report issued March 16 found that a significant percentage of denied claims went unpaid because of billing mistakes. Many denied claims are paid on appeal, but resubmissions add to the expense of the process.⁸ To improve revenue, the easiest established goal is to improve denied claims and submit cleaner claims from the start.

A claims denial management program is any system set up by a hospital or provider practice to determine why insurers are turning down claims. It allows the hospital or provider to address denials, whether they are caused by the insurer or the billing staff.

The process begins with a list of denied claims along with the reasons the claim was denied, the name of the insurer, the type of plan and other relevant information. The next step is to identify the

most common problems and devise ways to address them. These problems could be as simple as a transposed numbers, duplicate submission (original already paid but not posted), missing information, coverage ineligibility of patients, or just an error in payment by the insurer.

BAD DEBT AND COLLECTIONS

Collections include not only primary and secondary insurer payments, but also patient payments and third-party payments such as from Workmen's Compensation. It is even conceivable that a patient may have more than two insurance providers. Collection of these payments may rest with multiple individuals and different systems depending on the complexity and size of the medical or hospital. To improve the efficiency of collection operations and to increase the revenue, an efficient tracking and follow-up system is needed, one that will remind staff that payments are still owed.

Providers and hospitals are being affected by new reporting pressures from the Internal Revenue Service and the Sarbanes-Oxley Act on how bad debt and charitable care are reported. Each entity needs to determine when a collection process must be implemented in the revenue cycle or when accounts are determined to be bad debt accounts and must be forwarded to collection agencies. This is a delicate and sensitive process, but one that needs attention.

The use of integrated information technology and automated processes can significantly support high-performing collections and outsourcing for healthcare providers. Collections and outsourcing firms should possess direct experience in the healthcare industry due to the complex nature of patient accounting, as well as a track record demonstrating quantifiable results. These firms should be selected not only based on the level of fees proposed or charged but also on historical results, the capability to connect electronically with the hospital or provider's information systems, and the ability to produce meaningful reporting results and to demonstrate a strong customer-service orientation.

CUSTOMER SERVICE: FRONT, MIDDLE, AND END PROCESSES

To achieve best practices for revenue cycle management, one final element needs to be added. Hospitals or providers need to incorporate customer service and satisfaction into the pre- and post-service processes. Customer service includes addressing patient inquiries and issues regarding accounts and claims, as well as close coordination with other revenue cycle functions to resolve problems in a timely manner. Aside from experience, knowledge, and skills, efficient and effective customer service heavily depends on the information system infrastructure. Today's customer service information systems capabilities include integration with the main information systems to track and report key quantitative and qualitative aspects to measure their responsiveness and effectiveness. These individuals touch many facets of the revenue cycle and must be experienced in addressing a variety of patient inquiries. Their role is integral in the overall revenue cycle process.

MANAGEMENT EXPECTATIONS

Throughout the entire revenue management process, communications between all three functional areas must be improved and must occur on a regular basis. This will help ensure timely responses and compliance across all department boundaries. Along with communications, a weekly revenue cycle meeting should take place that includes key representatives from each area of the revenue cycle, such as patient access, registration, financial counseling, verification, case management, health information systems, billing, posting, follow up, and others depending on the organizational structure. These individuals should be the ones accountable for status updates, identifying key issues and problems, recognizing accomplishments, and forecasting.

Finally, as each process and procedure is defined, the expectations from management should be determined, and quantifiable performance improvement goals should be established for each department. Managers need to focus on productivity, quality, operational efficiency, and excellence.

PERFORMANCE MEASUREMENTS

AQ5 If you do not measure it, you cannot manage it.—Deming

The revenue cycle for hospitals and provider offices is being impacted by changing dynamics and trends in the industry: real-time processing, consumer-driven healthcare, and changes in regulations and reimbursement structures. To achieve successful outcomes, a balanced combination of people, process, technologies used to support the processes, and the environment in which processes are carried out must be used. For the performance to be measured and used effectively, the level of metrics needs to be made at the specific operational levels that involve areas that can be quantified. Metrics for each of the categories—front end, middle, and back end—are referenced in Addendum A and are based on existing best practice standards, executive reference, and organizational priorities.

REVENUE CYCLE IMPROVEMENT PROCESSES AND QUALITY MEASURES

An integrated approach is essential to the review of the revenue cycle to determine its inherent weaknesses and strengths. First of all, a detailed assessment of the current state of your revenue cycle must be performed. Once that is documented, a more tailored definition of the future state must be derived, taking into account resources and capabilities that are or will be available. The third step is a gap analysis, comparing the baseline revenue cycle processes, procedures, policies, and forms, to the “to be” state envisioned. This assessment will enable the development of a transition plan and approach that will bridge the current practice to the future state and begin the development of process improvements and quality performance metrics that can evaluate the changes to the revenue cycle process and revenue income. Regardless of the tools and systems in place, a period of intensive follow up is required to support the permanent improvement changes.

Quality measurements and metrics are important elements in the evaluation cycle, especially related to process improvement, for several reasons:

- Metrics support the analysis, recommendations, and conclusions—you cannot argue with quantifiable data.
- Metrics establish the tone where both negative and positive outcomes are measured.
- Metrics provide a mechanism for understanding outcomes and a way to obtain employee buy-in to change.
- Metrics establish accountability, especially for those employees not performing to par.
- Metrics provide data to leadership enabling them to focus on issues, problems, and resolutions.
- Metrics are also used as a means to celebrate improvement once attained.

AQ6 Examples of various assessment forms are included in Appendix 1.

CONCLUSION

Revenue cycle management is a means to improve hospital revenue and reimbursement by streamlining workflow, processes, and education. The overall objectives are to provide financial stability and sustainability, increase cash flow, and improve operating margins. This process takes the traditional revenue cycle approach, which is more oriented toward labor, technology, and more silo organizations, and does not address root-cause process breakdowns across the entire revenue cycle, to a different model. The new model looks at a whole new integrated approach that improves processes, capabilities, and technology across the life cycle. In challenging economic times, there is a unique opportunity to increase cash flow, reduce underpayments, improve quality, decrease denials,

and evaluate staff performance. The goal is not to overwhelm a current system but to segmentally restructure the revenue cycle to achieve desired outcomes by way of the assessment of current processes (as is) and the identification of needed processes (to be).

Future reimbursement may change, operating costs are sure to increase, and rules and regulations impacting reimbursement will continue to evolve. Hospitals and providers need to pay attention to improving revenue cycle processes and systems to maintain viability for the future.

ACKNOWLEDGEMENTS

To Karen White, PhD, of ACS-Xerox Healthcare Services, and Hope Rachel Hetico, RN, MHA, CMP™, of the Institute of Medical Business Advisors Inc., Atlanta, GA.

APPENDIX 1

The following tables provide the Key Performance Indicators and Best Practices Standards for select areas during the registration process, documentation/coding area and billing/collection areas in the revenue cycle.⁹

Scheduling	
Pre-registration rate for schedule patients	>98 percent
Percent tests scheduled in system	100 percent
Medical necessity checking at time of scheduling	100 percent
Legible order with all required elements at time of scheduling	>95 percent
Reminder calls for schedule services	100 percent
Number of calls per test scheduled	Individual
Average speed of answer	<30 seconds
Percent inbound call abandonment rate	<2 percent
Percent of patients rescheduled, cancelled, no show	Individual
Percent of patients postpone for lack of precertification	Individual
Next available appoint for diagnostic tests	<24 hours
Call abandonment rate	<2 percent

Patient Access	
Percentage of claims on hold for registration errors	<1/16 day of revenue
Number of statements in returned mail weekly	<5 percent
Percentage of patients waiting greater than 10 minutes for a registrar	<10 minutes
Average face-to-face registration duration	10 minutes
Average registration throughput	35 inpatients (IP); 40 outpatients (OP)
ABNs/MSPQs obtained	100 percent
Data entry quality compared to established department standards	98 percent
Master Patient Index (MPI) duplication rate as percent of total registrations	<1 percent

AQ7

AQ8

Insurance Verification	
Eligibility is verified with the payer for scheduled services	98 percent
Denial rate of lack of precertification	Individual
Number of appeals, including those overturned and lost	Individual
Data quality as compared to pre-established standards	98 percent
Verification rate of IP within one business day	98 percent
Verification rate of high-dollar OP in one business day	98 percent

Financial Counseling

Medicaid eligibility screening for all uninsured patients	100 percent
Medicaid eligibility screening for all Medicare-only patients	100 percent
Percent uninsured IPs screened for financial assistance	95 percent
Percent uninsured OPs screened for financial assistance	individual
Percent uninsured emergency department patients screened for financial assistance	80 percent
Collects deposits for elective services prior to service	100 percent
Collects IP patient-pay balances prior to discharge	65 percent
Discusses options for account resolution with IPs	100 percent
Financial assistance approved within 10 days	100 percent
Medicaid approvals obtained within 30 days	100 percent

Case Management

AQ9	Observation cases: two per length of stay (LOS) >24 hours (or other limit depending on case type)	0 percent
	Cases denied reimbursement due to “inappropriate admission”	0 percent
	Cases: two per discharge delays (by reason for delay)	0 percent
	Ratio of the length of stay actual average over expected average	1:1
	Current admission population on skilled nursing facility (SNF) wait list	0 percent

Charge Capture and Clinical Documentation

AQ10	Professional/ambulatory charges entered <1 business day (2 days with exception for diagnostics charged on results posting; if expected results turnaround >1 day)	100 percent
	Late charge hold period (“suspense days”) (2–4 days)	2 days
	Charges entered for admission encounters > 7 days (with exception for diagnostics charge on results posting; if expected results turnaround >7 day)	0 percent
	Late charges as a percent of total charges	2 percent
	Lost charges as a percent of total charges	1 percent
	Clinical procedure/visit documentation entered <1 business day	100 percent
	Final clinical procedure/visit documentation signed <3 business days	100 percent
	Accounts/claims w/charge coding errors (per subscriber)	1 percent
	Accounts/claims w/missing charges (per scrubber, coder review)	1 percent

Charge Description Master (CDM) from a Statistical Assessment of Records in the CDM

AQ11	CDM duplicate items	0
	CDM item price is \$0 (other than ‘no-charge’ provider visit)	0
	CDM item price less than HOPPS APC rate	0
	CDM item description is “miscellaneous”	0
	CDM item has missing modifier, if applicable	0
	CDM item is missing the standard code (HCPCS, CPT-4, NDC, etc.) (type of code is dependent on type of charge the CDM item represents)	0

CDM—Includes Assessment and Analysis and Periodic Review (at least annually)

	Item is assigned an incorrect/invalid code (HCPCS, CPT-4, ICD-9/10)	0
	CDM item is assigned an incorrect/invalid revenue codes	0
	CDM item has invalid/incorrect modifier	0
	Surgery, lab, and radiology charges properly unbundled?	Yes
	CDM items have consumer interpretable descriptions?	Yes

CDM—Track Activities of CDM Maintenance

Number of CDM items updated in reporting period	100 percent
Aging report on update requests (timing from update request to update implemented)	Yes
Annual HCPCS, CPT-4 changes in place by January of each year?	Yes
Receive/review CPT-4 manual/addendum B annually?	Yes

Health Information Management (HIM)

Discharged not final billed (DNFB) HIM work in process <X% of revenue or days A/R	5 percent
Average days age in pending queue < X days from entry into queue	3 days
Average days age in pending queue <X days from date of service or discharge	3 days
Coding status incomplete > 5 days (DNFB) <X% of total cases	5 percent
Coding denials <X% of (number of accounts) (\$ total charges)	1 percent
Coding write-offs <X% of (number of accounts) (\$ total charges)	1 percent

HIM: Workload and Productivity

IP charts codes per coder/per day (20–23)	23
Observation (OBSV) charts coded per coder/per day (30–34)	34
Ambulatory surgery (AMB SURG) charts coded per coder/per day (30–34)	34
OP charts coded per coder/per day (150–210)	210
ED charts coded per coder/per day (150–210)	210

AQ12

HIM: Manual Charts

MPI duplicates as a percentage of total MPI entries (<0.05 percent)	0.5 percent
Chart delinquencies	5 percent
Missing charts	0 percent

Billing and Claim Submission

HIPAA-compliant electronic claim submission rate	100 percent
Final-billed/claim not submitted backlog (one A/R)	1
Medicare supplemental insurance billing following adjudication (2 business days)	2
Non-Medicare COB-2 insurance billing following COB-1 payment (2 business days)	2
Medicare RTP (return to provider) denials rate	3 percent
Outsourced guarantor statement cost to produce/mail (20–25 cents)	\$0.20
Clean claim submission rate	>85 percent

Cashiering, Refunds and Adjustment Posting

HIPAA-compliant electronic payment posting percent	100 percent
Transaction posting backlog (during the month) (1 business day)	1
Transaction posting backlog (end of the month) (0 business day)	0
Credit-balance A/R days (gross) (1 A/R days)	1
Medicare credit-balance report submission timeliness (due date)	0

Third Party and Guarantor Follow-Up

Insurance A/R aged >90 days from service/discharge (15%–20%)	15 percent
Insurance A/R aged >180 days from service/discharge	5 percent
Insurance A/R aged >365 days from service/discharge	2 percent
Bad debt write-offs as a percent of gross revenue	3 percent
Charity write-offs as a percent of gross revenue	2 percent
Cost-to-collect ((PA+PFS+agency expenses)/cash)	3 percent
Patient cash as a percent of net revenue	100 percent
In-house inpatient A/R days (average LOS)	5
DNFB A/R days (4–6 A/R days)	4
Net A/R days (55 A/R days)	55
Cash as a percent of cash goal	100 percent
Total point-of-service cash as a percent of net revenue (2%–3%)	3 percent

Customer Service

AQ13

Correspondence backlog (internal and external) (one business day from receipt)	1 day or less
Walk-in patient wait time (minutes)	5 or less
Automated call distribution (ACD) system average hold time (minutes)	0.5 or less
ACD system abandoned call percentage (percent of calls on hold more than 30 seconds)	2 percent or less
ACD system percentage of calls resolved in less than five minutes	85 percent or more
Calls resolved in customer service without complaint or referral to Administration/customer recovery office/related staff function	99 percent or more

Bad debt net-back collection percentage (defined as: [collections minus fees] divided by placements)	11 percent or more (minimum of 7 percent)
Third-party extended business office (EBO) fee as a percentage of collections	15 percent (maximum of 18 percent)
Self-pay EBO fee as a percentage of collections	6 percent to 12 percent
Legal collections fee as a percentage of collections	25 percent or less (maximum of 30percent)
Medicaid eligibility assistance fee as a percentage of collections	15 percent (maximum of 18 percent)
Routine auditing of collection agency minimum work standards	Every 60 days

Registration

Template Name of Facility: Date:

Account Number	User Name	Patient Information	Guarantor	Emergency Contact	Primary Insurance	Secondary Insurance	Tertiary Insurance	Monthly Error Rate
XXX	Reg 1							
XXX	Reg 2							
XXX	Reg 3							
XXX	Reg 4							
								Total By Category

Monthly Registration Number by Area and User				Error % by User	Accuracy % per User
User Name	Total	Total		Percent	Percent
	Accounts	Errors			
XXX					
XXX					
XXX					

Accuracy Requirement per Policy

Percent
Percent

Efficient/Deficient Accuracy

Registration Error by Category

Patient Demo	Primary Insurance	Secondary Insurance	Tertiary Insurance	Other Insurance	Address	DOB	Etc.
XXX	XXX	XXX	XXX	XXX	XXX	XXX	

Sample Dashboard

Facility Name: _____ Year: _____

Monthly	Location	POS	Overall	Registration	Initial	Net Pt. Revenue	Net Pt. Revenue %	Cash Collected as %	Bad Debt expense	Gross A/R	% A/R
Target											
	Admitting										
January	ER										
	Etc.										
February	Admitting										
	ER										
	Etc.										
March											

Note: For Registration Accuracy, the spotlight colors need to be applied based on the percentage of accuracy established by the hospital.

Abbreviations: A/R, accounts receivable; ER, emergency room; POS, point of service; Pt., patient.

CASE MODEL 1

MEGA FEDERAL HOSPITAL CORPORATION

The MEGA Federal Hospital Corporation specializes in a certain type of high-risk heart coronary artery bypass graft (CABG) surgery, with revenue as seen below; revenues are recorded on the basis of generally accepted accounting principles (GAAP):

Description	GAAP	Taxable Income
Capitation revenue received	\$60,000,000	\$60,000,000
Administrative costs (15 percent)	\$9,000,000	\$9,000,000
Net available to pay medical costs	\$51,000,000	\$51,000,000
Paid and reported claims at year end	\$43,500,000	\$43,500,000
Incurred but not reported (IBNR) claims	\$7,500,000	\$0
Profit/Income	\$0	\$7,500,000
Tax rate		35 percent
<i>Federal income tax due on IBNR</i>	\$2,625,000	

AQ14

Key Issues

Which of the following factors should have the greatest influence for MEGA Hospital Clinic in deciding whether to accept the contract?

- GAAP analysis
- IBNR deductions
- Pro-forma estimates
- Reserve amounts
- Profit or loss
- Taxes refunded or due

Solution

For a \$60 million capitated contract, the MEGA Hospital did not profit and is responsible for a taxable income of \$7,500,000. The \$2,625,000 of taxes is payable to the IRS and is a direct reduction of the cash flow to the MEGA Hospital Corporation.

CASE MODEL 2

THE MUNICIPAL HOSPITAL CLINIC, INC.

The Municipal Hospital Clinic, Inc., uses the historical cost analysis method of similar established organizations to estimate incurred but not reported (IBNR) accounts receivable calculations. It is based on the actual number of past claims on a per member/per month basis.

If the Municipal Hospital Clinic treated 5,000 and 6,000 HMO members, respectively, in two months, the total member year-to-date months would be 11,000, or 5,500 per month.

Therefore, if submitted medical costs were \$3, and there were 11,000 members for the period, the total IBNR estimated reserve fund would be \$33,000.

Key Issues

- (1) What should be the Municipal Hospital Clinic’s preferred method of analysis?
 - Actuarial data analysis
 - Historical cost analysis
 - Open referral analysis
 - Estimated comparable reserve fund analysis
 - Pro-forma estimates
- (2) Can you explain why it might be suggested that two to three times the average historical cost analysis claims history should be retained in the IBNR reserve fund for the Municipal Hospital Clinic, Inc.?

CHECKLIST 1: Revenue Cycle Organizational Structure **Yes** **No**

Determine the advantages of a centralized system.

Is there more than one executive in charge of the areas of revenue cycle operations (defined as patient access, case management, health information management (HIM), and patient financial services (PFS)) at your hospital or healthcare facility? o o

If yes, what are their names and titles?

Have you ever considered having the chief financial officer as the executive in overall charge? o o

If yes, do you think this organizational structure would provide better results? o o

Are any other executives in overall charge, and/or do you report to them? o o

- chief information officer?
- director of revenue cycle management?
- director/manager(s) of PFS?
- director/manager(s) of patient access?
- director/manager(s) of HIM?
- director of case management?
- director of managed care?
- CDM coordinator?

CHECKLIST 2: Industry Benchmarking **Yes** **No**

Determine the benchmarks against which you will measure the performance of your hospital.

Would application of industry standards improve processes? o o

Would processes improve through setting a baseline of current status performance levels? o o

Would performance be improved by re-engineering front-end processes? o o

Would performance be improved by re-engineering middle processes? o o

Would performance be improved by re-engineering back-end processes? o o

CHECKLIST 3: Information Technology Adoption **Yes** **No**

Assess the level of technology adopted by your hospital.

Would retraining in systems improve the perception of system quality by staff? o o

Do you have a call center environment? o o

Do you use the following software:		
Master Person Index?	<input type="radio"/>	<input type="radio"/>
Admission Process Scripting?	<input type="radio"/>	<input type="radio"/>
Chart Tracking?	<input type="radio"/>	<input type="radio"/>
Encoder?	<input type="radio"/>	<input type="radio"/>
Claims Editing?	<input type="radio"/>	<input type="radio"/>
Do you have automated biller queues for follow up?	<input type="radio"/>	<input type="radio"/>
Do you utilize any imaging software in Registration/Admissions areas?	<input type="radio"/>	<input type="radio"/>
Do you issue claims to third-party payers and receive reimbursements electronically?	<input type="radio"/>	<input type="radio"/>
<hr/>		
CHECKLIST 4: Revenue Cycle Performance Evaluation	Yes	No
<i>Perform a Revenue Cycle Performance Evaluation with summaries.</i>		
Are current state themes regarding people, process, and technology included in your evaluation?	<input type="radio"/>	<input type="radio"/>
<ul style="list-style-type: none"> • a review of known opportunities and threats? • a gap analysis scorecard based on current versus optimal processes? • a benchmark analysis? • a benefits forecast? • a prioritized list of appropriate solutions to consider for improvement of the financial position of the organization? 	<input type="radio"/>	<input type="radio"/>
Are next-step recommendations for revenue cycle services implementations included?	<input type="radio"/>	<input type="radio"/>

APPENDIX 2

DIRECTOR OF REVENUE CYCLE MANAGEMENT JOB DESCRIPTION*

POSITION: Revenue Cycle Director

REPORTS TO: Chief Financial Officer

SUPERVISES: Revenue Cycle Managers

The revenue cycle is defined as all administrative and clinical functions that contribute to the capture, management, and collection of patient service revenue. The Revenue Cycle Director is responsible for enhancing and maintaining a properly functioning revenue cycle process through a cross-department organizational structure. These functional areas act interdependently during a patient visit, contributing critical information required for clinical service and procuring payment. Thus, the Revenue Cycle Director concentrates resources on improving core clinical care delivery and protecting the assets of the organization.

Critical responsibilities include achievement of annual and periodic goals for significant statistical indicators of revenue cycle performance and for the organization’s overall financial performance.

The Revenue Cycle Director is expected to demonstrate, through plans and actions, that there is a consistent standard of excellence to which all departmental work is expected to conform. Such a standard should be based on establishing and maintaining a constancy of purpose, focusing on continuous improvement within the Director’s area of influence, and delivering the highest degree of quality service possible.

The expertise of the Revenue Cycle Director should include:

* This Director of Revenue Cycle Management job description was compiled from actual job descriptions from several hospital and health systems, along with insights from the Healthcare Financial Management Association (HFMA) Patient Financial Services Task Force, HFMA’s PFS Forum, and other advisors. Posted on the GE Web site: www.GEHealthCare.com.

- Working knowledge in the areas of patient registration, billing, accounts receivable (A/R) and cash management requirements, managed care contractual terms and requirements, health insurance practices, industry regulatory requirements, business office operations, A/R and financial reporting technology, wage and hour regulations, basic accounting, and industry standards for healthcare revenue resolution management practices.
- Ability to analyze and resolve problems that affect the claim submission process, regardless of whether the problem originates in an area under direct or indirect control.
- Financial management skills, including the ability to financially analyze data for operations, budgeting, auditing, forecasting; basic accounting knowledge; AR and reserve analysis, market analysis; staffing and financial reporting skills.
- Leadership skills to motivate cross-departmental teams' performance towards excellence and develop team concepts and consensus-building management styles.
- The ability to make a significant contribution to the organization's overall effectiveness.

EXPERIENCE REQUIRED

Education

Bachelor's degree required, preferably in business, health or public administration, management, or a related field. Master's in hospital or business administration, accounting, finance, or related field and closely related clinical discipline preferred.

Work Experience

A minimum of seven years' management experience in the healthcare receivables field required, with a work record that demonstrates:

- In-depth knowledge of hospital and physician billing and reimbursement.
- Leadership in the core values of the organization.
- Clear, effective communication skills.
- A mature approach to problem solving for all types of issues.
- Skills in using mainframe and PC computers.
- Knowledge of medical terminology.
- Negotiating skills.
- Detail orientation.
- Experience with total quality management concepts and tools.
- Knowledge of healthcare industry financial statistical indicators.

*Primary Responsibilities**

- Incorporate the facility's values into all business staff development practices and all departmentally directed activities.
- Complete (or contribute to the completion of) various financial forecasts, including cost center salary and direct expenses, month-end financial reporting, receivables levels (days in AR and aging), cost center productivity, and any long-range strategic plans for the department.
- Plan, coordinate, and prepare year-end audits with public accounting firms and third-party auditors as they relate to AR operations. Mediate and resolve conflicts regarding public accounting firms, third-party auditors, and investigative parties.
- Directly manage all service programs, including external vendor programs and systems.

* The following functions are compiled from the essential duties listed for a variety of positions in this job classification. Individuals in this role may not perform all of these duties, or may perform additional, related duties not listed here.

- Monitor and support daily staff functions in all areas related to the scope of the manager's responsibility. Participate in revenue cycle, denial management, and access management work teams.
- Maintain appropriate internal control safeguards over AR records and collection of cash. Maintain compliance standards for providing accurate information on all facility or health system billings.
- Assess and respond to organizational and customers' needs with innovative programs to ensure customer satisfaction. Implement patient friendly billing guidelines.
- Ensure compliance with relevant regulations, standards, and directives from regulatory agencies and third-party payers.
- Oversee the financial interface between and performance analysis of the patient financial services functions and fiscal services functions.
- Oversee the integrity of financial and clinical interfaces, while facilitating the development of strategic system planning.
- Direct ongoing programs for staff development, which include:
 - hiring and training for leadership positions and directing the hiring and training of all staff in the department;
 - completing (or directing the completion of) all necessary human resource documentation and adhering to all human resources expectations for subordinates;
 - communicating regularly and effectively with subordinates and superiors regarding the status and condition of the business operations under control of the director; and
 - developing multi-disciplinary patient financial services teams to enhance quality and efficiency.
- Carry out other assignments or special projects as assigned.

Denials Management by Adjustment Code

Name of Facility: _____ Date: _____

Month Year	Incorrect Payment	Need Records	Wrong ID	Need EOB	Wrong Primary Insurance	Duplicate Claim	Timely Filing	Non Covered	No Authorization	Medical Necessity	Etc.
January 2014											
February 2014											
March 2014											
Etc.											
<i>Total</i>											
<i>Percent of whole</i>											

Note: Graphic bar charts can be created to assess changes in denials by month.
Abbreviations: EOB, explanation of benefits.

REFERENCES

1. *Revenue Cycle Solutions for Hospitals and Health Systems*, Healthcare Revenue Cycle Management Solutions, Dell, 2012. <http://www.content.dell.com/us/en/healthcare/hospital-providers>. AQ15
2. *Trends in Hospital Revenue Cycle Management*, Healthcare Financial Management Association. <http://www.hfma.org>. AQ16
3. *Health Reform's Impact on the Revenue Cycle*, 2012. <http://www.sites.mckesson.com/achieveHIT>. AQ17
4. *Performance Standards for Coding Professionals*, Rose T. Dunn, Advance for Health Information Professionals, 2012. AQ18
5. *Comprehensive Revenue Cycle Services for Community Hospitals*, HealthTech Solutions Group. <http://www.ht-llc.com/revenue-cycle-services.html>.
6. *Survey: Hospital Looking at Revenue Cycle Changes*, Health Data Management. <http://www.healthdatamanagement.com/news/hospital-survey>. AQ19
7. Case Management (USA health system), definition. http://www.en.wikipedia.org/wiki/case_management. AQ20
8. *Denial Management: How to Improve the Process*, Shawn McKee, 2012. <http://www.poweryourpractice.com/denial-management>.
9. *Revenue Cycle Management: A Life Cycle Approach for Performance Measurement and System Justification*, HIMSS Financial systems, Revenue Cycle Task Force, May 2010.

Author Queries

- AQ1: Please provide caption for Figure 4.1
- AQ2: Please provide caption for Figure 4.2
- AQ3: Can the sentence beginning “Wasting time on a \$10 co-pay...” be clarified? The idea of one task offsetting another is not clear here; it might be more clear if the benefit \$10 co-pay were compared with the high cost of pursuing such a small amount.
- AQ4: In the second paragraph under Denial Management, please provide the year of the U.S. Government Accountability Office report (dated March 16).
- AQ5: Please provide source for Deming quote
- AQ6: Please confirm that Appendix 1 is the correct cross reference here.
- AQ7: In the table for Patient Access, please verify the measure for the third row; it asks for a percentage but a time measure is given.
- AQ8: In the table for Patient Access, please spell out ABN and MSPQ. These are the only uses in this chapter.
- AQ9: In the table for Case Management, please confirm edits made in first and third lines, and SNF as it has been spelled out.
- AQ10: In the table for Charge Capture and Clinical Documentation, please confirm edits made in the first and third lines.
- AQ11: In the table for Charge Description Master, please spell out HOPPS APC, PHCPS, CPT-4, NDC.
- AQ12: In the table for HIM: Workload and Productivity, please spell out “ED charts” in the last line of the table.
- AQ13: In the table for Customer Service, please confirm ACD and CRO as spelled out.
- AQ14: In case model 1, please review the way GAAP has been spelled out, and the edit to the “Taxable Income” column (original text showed only “Tax” as the column head. In addition, please verify that the text “35%” and “\$2,625,000” is aligned under the appropriate column.
- AQ15: The webpage referred to could not be found. Please provide valid URL
- AQ16: Please provide the date
- AQ17: Please provide author. Also, the webpage referred to could not be found. Please provide valid URL
- AQ18: Is this a book, journal, webpage, etc.? Please clarify. Please provide publisher, volume/ pages, URL, etc. as applicable.
- AQ19: Please provide the date
- AQ20: Wikipedia cannot be used as a reference. Please provide an alternate source.