Beyond the Basics:
Accelerating the Revenue Cycle Through Advanced KPI’s
Table of Contents

Overview 1
  The Importance of Metrics 1
  Taking the Next Step 1

Baseline KPI's 2

Why Advanced KPI's 2

Advanced KPI's In Action 3
  Patient Data Collection 3
    Patient Wait Times 4
    Real Time Patient Vitals 4
    Patient Satisfaction Survey 4

Billing 5
  Readmission Rates 5
  Cost/Revenue/Disbursement 5
  Productivity 6
  Leakage: Referrals & Authorizations 6
  Underpayment Review 7

Denials 7
  Denial Appeal Rate 7
  Denial Appeal Success Rate 7
  Initial Denial Rate and Terminal Denial Rate 8

Collections 8
  Self Pay Collections 8
  First Pass Resolution Rate 8
  Clean Claim Rate 9

Coding 9
  ICD-10 Readiness 9
  Incomplete or Missing Charges 9
  Charge Capture Lag Time 10
  Coding Turnaround Time 10
  E & M Coding Comparison 10

Summary 11
Overview

The Importance of Metrics
Try to imagine a car dashboard without indicators or a football game without a scoreboard. Without these important tools we wouldn’t know when we were running out of gas or how much time was left in the quarter. Driving a car or watching a game without them would be meaningless or dangerous.

The same can be said for business. Establishing and monitoring appropriate metrics helps businesses track their performance when it comes to profitability, quality, or customer satisfaction. Metrics can drive improvements, focus employees on the right goals, and ensure best use of resources. They reveal where a company has been, where it is today, and how effectively it’s heading toward targeted goals.

Businesses rely on Key Performance Indicators (KPI’s) to help guide them in its daily activities. As margin pressure mounts and healthcare organizations place more focus on revenue cycle optimization, the importance of KPI’s grows as well. Setting up and diligently monitoring KPI’s to improve performance thus becomes a critical task for healthcare organizations who hope to succeed in an increasingly competitive environment.

Taking the Next Step
Using measurements to predict and drive outcomes permeates every aspect of our business and private lives. Forward thinking organizations are moving to ever more advanced metrics to help gain greater detail in the information and insight that drives behavior.

A recent article in the New York Times discussed the advanced metrics of attraction and how using sampling, statistics, and concepts like Bayes Theorem can help us differentiate a crush from a lasting relationship. The sabermetrics of Bill James has convinced us that “wins over replacement” and “runs created” have replaced batting average and RBI’s as primary indicators of a baseball player’s performance.

A similar trend towards advanced metrics is taking place in the healthcare industry. A recent report from the Healthcare Financial Management Association noted that organizations with high performing revenue cycles focus on frequent monitoring of metrics – particularly those beyond traditional measurements.
Most organizations track revenue cycle performance through a variety of basic billing and collection metrics. That’s a solid baseline, but in a time of shrinking margins, it’s not enough. Institutions that want to accelerate their revenue cycle need to go to a higher level of measurement to fully understand and optimize performance. Institutions can achieve significant improvements by managing the revenue cycle through more advanced, detailed KPI’s.

This white paper will examine various steps in the revenue cycle and outline some advanced KPI’s and how they can be used to drive enhanced revenue cycle performance.

Baseline KPI’s
Tracking KPI’s form the basis of the assessment of revenue cycle performance against internal, historical performance and/or industry benchmarks for critical business functions. By now, most organizations collect and analyze baseline revenue cycle KPI’s - high-level metrics that measure recent past performance, likely trended month-to-month and year-to-year.

The most common measurements include gross and net receivables over 90 or 120 days by payer, days receivables outstanding, net collection rates, charge lag, as well as claim rejection and denial data. Baseline KPI’s are often included in monthly financial reports and reported to organizational stakeholders. Baseline KPI’s enable an organization to review a snapshot of their revenue cycle, so should be implemented, documented, and explained to staff throughout all areas of revenue cycle operations to measure and track performance.

Why Advanced KPI’s
Healthcare organizations that rely too heavily on traditional, baseline KPI’s often neglect to measure performance and outcomes of the critical workflows that drive revenue performance such as:

• Patient access/registration
• Financial clearance/eligibility
• Coding
• Denials
• Underpayment

Data related to traditional KPIs has proven to be insufficient in providing insight into the root causes of revenue challenges and opportunities. Measuring both traditional and nontraditional revenue cycle KPIs helps
Beyond the Basics: Accelerating the Revenue Cycle Through Advanced KPI's

leaders focus efforts in areas where the potential to improve revenue cycle performance is greatest. This is critical in a time when we have too much data and not enough information to transform our operations.

Baseline KPI's are retrospective data which lead to reactive decisions. Using historical information to manage an organization is analogous to driving a car by using the rear view mirror. Advanced KPI's, on the other hand, help move an organization forward using data to identify root cause of poor performance and engage process improvements to positively impact outcomes. The greatest advantage to advanced KPI's is using them to create a foundation to “look forward” instead of retaining a “backward looking” and reactive management culture. Lessons learned from advanced KPI's can help organizations stop asking “what happened” and start focusing on “what’s next and how can we eliminate poor outcomes?”

Advanced KPI's In Action
You can leverage advanced KPI's throughout the revenue cycle to improve performance. Here are specific examples from each step in the process.

Patient Data Collection
The process of accurate billing and efficient collections starts during the first interaction with the patient. There are several advanced KPI's that can help track the effectiveness of patient data collection.
Patient Wait Times
Understanding throughput times for patient visits is the first step in improving the front-end process. The metric is calculated by monitoring wait times from patient enter to exit – including labs, physician, or ER visit. Tracking this process will help improve operations and resource allocation as well patient satisfaction.

It also allows organizations to differentiate themselves from other institutions. Once you’ve established your current benchmark, you can put an improvement plan in place by setting expectations on wait times. The next step is to review the processes, staff, and technology whenever actual times extend beyond the norm to find root causes of delays and create corrective action plans for improvement.

Real Time Patient Vitals
Healthcare reformer Dr. Patrick Soon-Shiong identifies collecting patient vital signs as a key advanced KPI. He advocates that clinicians should collect, monitor, and report on vitals such as heart rate, blood pressure, blood sugar, and white blood counts as close to real time as possible.

The concept of value-based healthcare is growing, so it is critical to monitor the impact of treatments and results in real-time. Instituting programs that collect this data for both in-patients and those at home - through technology or visiting nurses – can help dramatically improve outcomes and reduce cost of care.

Patient Satisfaction Survey
One patient satisfaction survey, conducted by Press Ganey, helps organizations understand and improve the entire patient experience. The survey process uses advanced techniques like segmentation, text analysis, multidimensional modeling, and cluster analysis to reveal trends and target areas for improvement.

With an increased focus on patient responsibility and consumer directed healthcare, patient satisfaction data can help organizations differentiate themselves. Once results are received, you can target improvement plans for areas where you score lower than peers. You can also highlight those areas
where you are outperforming other organizations to uncover and redeploy best practices.

Billing
Proper billing is the key to reduced denials and accelerated cash flow. Following are some key advanced metrics to help manage the invoicing process.

Readmission Rates
New programs are in place for hospitals that are reducing their readmission rates calculated by using billing data, patient medical record numbers, and dates of service. In order to take advantage of new incentives for reducing readmission rates, you must first establish your baseline. The focus on reducing these rates aligns with new payment methodologies and is a key component of value-based healthcare. Combined with clinical data, readmission rates can be tracked, trended, and analyzed to see what treatments are more effective than others.

Cost/Revenue/Disbursement
This metric uses cost and payment data to determine disbursement methodology. Each organization calculates this differently depending on their affiliations, partnerships, and contracts with physicians as well as the different departments within the organization. Some hospitals may disburse payments based on specific percentage of the full reimbursement amount while another may disburse based on cost/revenue, based on whether the physician is on staff or contracted.

Bundled payment and new payment methodologies will require organizations to track and calculate cost/revenue/disbursement of payments. With more data and experience, organizations will be better equipped to disburse bundled payments internally.

One specific metric is calculating margins based on the cost/revenue compared to the disbursement to see if bundled payment really does reduce the cost of care and still provide a healthy margin to the provider.
Productivity
This is a key metric for determining the effective use of staff resources - e.g. billing, payment posting, follow-up, etc. This can be calculated differently for each process area:
• Billing = number of accounts/clean claims generated over period of time
• Payment posting = number of accounts manually posted over a period of time or a number of edits corrected from electronic posting over a period of time

This advanced metric helps to allocate resources appropriately, offers potential training opportunities, and triggers areas for assessment/reassessment of technology, staff, or processes.

Analyzing the data can uncover areas for improvement such as are the right staff assigned to the right job and how workload is distributed. For example, if you have billers work your claim edits by payer and you see it takes much longer to work a Medicare claim versus a BCBS claim in your claim scrubber, you may determine that the requirements for Medicare are more complicated and you may want to shift the workload in some way. Another option would be to move some claim edits further upstream – from your claim scrubber into your patient accounting (or practice management) system.

Leakage: Referrals & Authorizations
This metric measures how often patients may be leaving the network for services. It highlights referrals and authorizations made to providers outside of network. It can be calculated differently depending on the organization since the data may be in different types of systems (e.g. patient accounting, practice management, referral/authorization system, etc.).

It’s important to find out where there is leakage since you want to keep patients within network wherever possible, especially with new payment methodologies. Leakage makes disbursing funds to providers outside the network more challenging. Using leakage reports/data can help target providers that are referring outside of network and start the process of better educating them. This can also help identify gaps in services provided by the network which presents an opportunity for the network to acquire those services and bring them into network.
Underpayment Review
In many cases, organizations don’t invoice the exact amount allowed by contract. There should be a regular review that compares actual paid claims vs. contracted rates. This has not been well developed in most institution, but plugging this underpayment hole can result in a significant boost to cash flow.

Denials
According to some estimates, denials cost health care organizations nearly 3% of their net revenue annually. In recent years, denials have grown to encompass 15-20% of the billing value of total claims. These advanced KPI’s can help you get a handle on soaring denials costs.

Denial Appeal Rate
This metric tracks the volume of denials that get appealed. It’s calculated by taking the total number of denials appealed divided by the total volume of denials. You can use either the claim or line item level for the calculation. If the percentage of appeals is not high then there is most likely an opportunity for automation to handle write-offs or adjustments. Another alternative is that staff is not focusing enough on denials.

This measurement can help prioritize work efforts and identify areas that can aid in reducing denials. One way to dig deeper is to analyze by payer, type of denial, track and trend for patterns and fine tune the system to automate where it makes sense, provide training or retraining, and share best practices.

Denial Appeal Success Rate
This is the next logical metric following Denial Appeal Rate. It measures the volume of appealed denials that get ultimately get paid. It is calculated by taking the total volume of denials that are paid divided by the total volume of denials that get appealed.

This metric provides a view into trends of your denials and appeals process. Again it’s important to analyze by payer, denial type, and even claim adjustment reason code - in combination with remittance advice remark code if possible. Tracking this measure will show if efforts to appeal are worthwhile and whether the solution to denials lie further upstream in your process.
For example, a payer may issue a denial because of missing documentation. A staff member then sends a section of the patient’s medical record that results in the denial being overturned and paid. The good news is you’re getting paid, but there probably should be a better process put in place to ensure the information is sent with the original claim to avoid the denial and the resource-draining appeals process that followed. Once again, this metric can identify trends, reveal automation opportunities, and training/retraining focus areas.

**Initial Denial Rate and Terminal Denial Rate**
This is an extension of the above KPI’s. The Initial Denial Rate is the percentage of claims denied initially by the payer – then appealed and paid. The Terminal Denial Rate is the percentage of denied claims never paid and written off. Many groups don’t track initial and terminal rates and many don’t even know the categories of denied claims. Simply tracking denials without accounting for those denials that are eventually overturned can give you a false picture of your overall denial situation.

**Collections**
U.S. hospitals provided $45.9 billion in uncompensated care in 2012, representing 6.1 percent of annual hospital expenses. They also reported that nearly five and a half percent of their total first quarter gross revenue was written off as charity care or bad debt. Here are some metrics that you can use to improve your collections performance.

**Self Pay Collections**
This metric tracks the successful front end collections of patient self pay charges and is calculated by taking the amount of patient responsibility collected divided by the total amount of patient responsibility collectibles.

As the shift to patient payment responsibility increases, the self-pay portion of the A/R is increasing and is becoming a more critical component of an organization’s cash flow. The measurement monitors the cash collection shortfall for self pay patients and helps focus corrective action efforts on policies and training to improve the collection rate.

**First Pass Resolution Rate**
This metric tracks the percentage of claims that get paid on
first submission. First Pass Resolution rate provides a look at the effectiveness of your revenue cycle management program.

To record a high percentage with this measurement, all processes need to be aligned, from pre-visit tasks like insurance verification and patient eligibility to post visit processes like proper coding and billing. A low percentage on this metric can highlight potential areas that might need corrective action.

**Clean Claim Rate**
This is the percentage of claims that pass internal claim scrubber edits and EDI (claims clearinghouse edits) and go directly to payer. Ensuring a high clean claim rates accelerates cash collection.

**Coding**
Implementing ICD-10 should spur the creation of new coding standards, management, and processes to improve productivity and quality. Any challenges experienced now, such as medical record hiccups, slow coding practices, and high error rates will become exacerbated as ICD-10 and other mandates go live.

**ICD-10 Readiness**
Specifically regarding ICD-10, groups should be cross-walking current coding to required ICD-10 coding to determine where weaknesses in documentation exist now. For example, if the documentation is not detailed enough to cross walk to the new ICD-10 codes now – it won’t be when ICD-10 is implemented. An advanced KPI should be set up to measure this now as opposed to waiting to “fix” it after the ICD-10 mandate is in place. It’s difficult to change and improve documentation habits and conducting this “risk avoidance” testing now will greatly improve outcomes when ICD-to is implemented.

**Incomplete or Missing Charges**
Missing charges are often overlooked as a key performance indicator. Track the number of incomplete or missing charges weekly or monthly to establish a trend line. Once missing charges are quantified and reported, you can begin to fix problems, introduce automation, and develop a set of published standards.
**Beyond the Basics:**
**Accelerating the Revenue Cycle Through Advanced KPI’s**

**Charge Capture Lag Time**
This metric tracks and reports on charge capture lag time. It’s calculated by measuring the time of service to the point where the service has been coded. This KPI identifies weaknesses in documentation completion or the process of getting patient information to the coding staff. Start by identifying broken charge capture workflows by tracking the medical record from initiation of visit to coder. This can highlight chart/documentation delays which result in increased charge lags.

**Coding Turnaround Time**
Once documentation is ready for coding, track coding turnaround time and improve coding rates without sacrificing quality. Measure quality based on denied claim data. Set standards around the number of coded charts per hour that match industry standards. Measuring will improve outcomes while maintaining accuracy.

**E & M Coding Comparison**
Compare E & M coding practices, by specialty, to industry coding bell curves for like specialties. This advance measurement will detect undercoding and overcoding and provide valuable information to implement improvements. It is imperative for physicians to understand how their coding practices compare to their peers in the industry to ensure they are in alignment with best practices.

Utilize E&M utilization data from CMS to create bell curve analyses. The primary reason behind performing a bell curve analysis and sharing the information with the providers is to help them understand when their billing practices and E&M code selection are not in alignment with their peers. Misalignment can either indicate an area that may be at risk for an audit or an area that is billing and documenting less than their peers.
Summary
The benefit of metrics is that they allow you to effectively report and communicate results to staff members best able to use them to affect performance. Collecting metrics without taking advantage of the information is a golden opportunity lost.

Using traditional measurements when it comes to your revenue cycle can form a solid basis for analysis. However, if you want to get to the next level and initiate fundamental change and improvement, you need to begin thinking about more in-depth ways to measure performance.

The examples provided here are just a start. Advances in IT continue to provide increasingly granular information that can reveal greater insight into your organization. Implementing an Advanced KPI plan that will help you develop meaningful advanced metrics for your organization is a solid place to begin.

Developing such a plan while trying to manage day-to-day responsibilities can be a challenge. That’s why some organizations have chosen to seek outside resources like those offered by Hayes Management Consulting. Engaging a third party with the tools and experience to help you get your program up and running may just be the best way to help accelerate your revenue cycle.
Sources


5. *The Hospital Accounts Report Analysis on First Quarter 2014*