SCOTTSDALE INSTITUTE

information edge

Reengineering the Revenue Cycle

EXECUTIVE SUMMARY

Despite years of what many have considered an overemphasis on the financial side, most hospitals and health systems still flounder in outdated and unwieldy revenue-cycle processes that cost them as much as 2% of their gross annual revenue, year after year. For an organization operating at $400 million of gross revenue, that means as much as $8 million could be added to the bottom line each year (up to $40 million over five years) by properly reengineering those processes.

Such improvements also typically uncover a hidden one-time opportunity to reduce the investment in receivables on the balance sheet by 20% to 30%, generating $10 million to $20 million of additional cash flow. Combining all cash benefits can amount to $35 million to $65 million plus interest earnings.

There are several reasons why otherwise well-run healthcare organizations are not achieving success with A/R, according to Dale Stockamp, president of Scottsdale Institute Partner Stockamp & Associates, a national process-reengineering firm.

The first is that traditional industry indicators like A/R Days can be misleading. For example, organizations typically consider themselves fortunate if A/R Days are in the 60s and bad debt and administrative write-offs are 3% (or lower) of revenue. "What they don't realize is that their effective 'gross' A/R Days are much higher, and they also may have millions of dollars of opportunity in avoidable contractual allowances," says Stockamp.

Another reason is that many health-delivery organizations have heretofore failed to approach the revenue-cycle issue from a holistic perspective. They have failed to take into account the entire organization, starting with pre-admitting and continuing on through the business office. This approach also includes the necessary restructuring of internal and external revenue processes (following up with payers), retooling of each work step (verifying insurance coverage), installing IT-based enabling tools and the training of personnel in new ways of working.

Instead, many organizations have generated a lot of activity with only short-term results: adding more people, outsourcing the billing operation, installing new computer systems, bringing in consultants and pushing existing staff to put forth more effort.

This issue of Information Edge brings a new, more holistic approach to the revenue cycle into view, first by describing some of the factors plaguing organizations and then by describing some successful revenue-cycle reengineering efforts by University of Utah Hospitals & Clinics, Memorial Health System and Hospital of Saint Raphael. We close with a discussion of a better way to measure revenue-cycle improvement opportunity.

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WELCOME NEW MEMBER

Scottsdale Institute is proud to welcome new member **The University of Chicago Hospitals & Health System.**

The University of Chicago Hospitals is a 1,000-bed academic medical center based in Hyde Park on the campus of the University of Chicago with revenues of $800 million a year. The not-for-profit corporation annually serves more than 650,000 outpatient visits and 33,000 inpatients.

Welcome CEO Michael Riordan, Executive VP and COO Kenneth Kates, CFO and Chief of Strategic Development Lawrence Furnstahl, Vice President and CIO Eric Yablonka and the entire University of Chicago Hospitals & Health System team.

Market Challenges

Five basic problems are endemic in healthcare today:

- Diminishing payment for services, whether private, federal or state funded;
- Intensifying competition between providers for patients, specialized or skilled labor, and physicians;
- Intense cost pressures and squeezing of profit margins due to demographic changes and new—and more expensive—technology;
- The need to increase service levels for a more educated and demanding consumer;
- Costs have begun to increase again as markets adjust themselves to decreased availability of nursing, increases in drug costs, etc.

Most often the competitive environment manifests itself in the form of an increasingly complex managed care market. New products and point-of-care options proliferate, all of which generate onerous administrative demands on hospitals. Often, competition for doctors results in special global arrangements between the hospital and its physician partners that add even more to administrative complexity.

How It Happens

Over time, hospitals have created amazing internal complexity in their revenue cycle in response to these competitive pressures. The revenue cycle includes all the processes involved in managing a patient as they enter and move throughout a hospital, ultimately ensuring appropriate payment is received for the clinical services rendered.

The cycle begins with referral and scheduling functions, includes registration, insurance verification and utilization management, and ends with the traditional medical records and business-office functions of coding and chart management, billing, follow-up and collection. Revenue-cycle complexity has increased in layers, one new process at a time, similar to the way many older facilities have become physically unfriendly to patients over time with multiple additions to the original building.

Four factors are largely responsible for creating the administrative complexity that stymies proper revenue collection. First, the revenue cycle has a tendency to be departmentally (silo) focused rather than viewed as a single integrated process. While this factor leads to many problems, the single most important one is loss of focus on the patient, creating excessive delays for service and billing problems.

A second factor involves all the "work-in-process" sites at which uncompleted work accumulates in the revenue cycle. Work-in-process locations include the people, places and functions involved in the process of managing patient flow and turning services into cash. Each of these sites has the potential to choke on backed up work-in-process, resulting in delay and financial losses. A large, complex medical center can easily contain hundreds of such work-in-process sites.

The third factor is interfaces—manual and automated—between all of these work-in-process locations that add even more complexity to the revenue-cycle process. These interfaces, or "handoffs," are where patients, accounts and revenue become lost in the shuffle. To make matters worse, there are more interfaces than there are work-in-process locations. Handoffs occur between individuals in the same department, between

departments or, in an even less controlled manner, between a hospital and its payers. A hospital may be trying to push hundreds of thousands of transactions through this convoluted and often dysfunctional process each year.

Finally, each transaction follows a different processing path based on the service, payer and patient demographics involved. As a result of all these factors, a hospital's entire revenue cycle can break down—as measured by delay and waste—and the hospital ends up with dissatisfied patients and physicians, and underpayments for the services it provides.

Navigating without a compass

Such unsuccessful strategies are exacerbated by the fact that traditional revenue-cycle indicators misstate performance and therefore opportunity. The age-old adage applies: If you cannot effectively measure performance, you cannot improve it. Common metrics such as A/R Days are an inadequate measure of the performance of the revenue cycle.

The problem with A/R Days is that it is calculated in so many different ways. There are as many A/R Day calculation methods as there are hospitals and, as a result, benchmark comparisons are not generally useful. A/R Days analysis typically fails to take into account the impact of contractual allowances taken at the time of billing, credits, "off book" A/R, Inhouse/Not Discharged accounts and capitated business.

Theoretically, a net A/R Day calculation should adjust for these variables to more effectively measure performance, but it rarely does so because of many underlying assumptions involving a hospital's bad debt reserve and whether or not the hospital will be paid. When the calculation ignores the impact of these factors, an organization may inaccurately state accounts receivable from a financial-valuation perspective, and also overstate the performance of its revenue-cycle processes. Many organizations miss out on tens of millions of dollars because they mistakenly believe their effective A/R Days are in the 50s and 60s.

Many managers believe write-off levels are a good indicator of revenue-cycle performance. While they may be, write-off levels are often understated by inappropriate use of contractual allowance codes in lieu of more appropriate administrative and bad debt write-off codes.

It's not as if financial staff are purposefully misleading their organizations. They merely follow the path of least resistance in the face of literally hundreds of thousands of transactions, exceptions and rework during the course of the year. Still, many organizations are losing millions of dollars annually to contractual allowances that can be avoided.

Some hospitals look at accounts-receivable aging statistics as a measure of the effectiveness of their revenue cycle. The problem with such a metric is that those same hospitals may continue to work "off book" accounts-receivable balances, understating these processing measures. Worse yet, in an effort to show good performance, write-offs may occur before effective account follow-up efforts can resolve difficult cases.

University of Utah

With an annual budget of $525 million to support 425 inpatient beds, 90 psychiatric beds and 28 clinics, the University of Utah Hospitals & Clinics in Salt Lake City found itself in a losing battle to keep track of its billing process. It wasn't going to get easier.

Besides its fragmented billing system, Utah, like all integrated healthcare systems,

WELCOME NEW MEMBER

Scottsdale Institute is proud to welcome new member **Clarian Health.**

Based in Indianapolis, **Clarian** is the result of the 1997 merger of Methodist, Indiana University and Riley Hospitals. Clarian, which has 900,000 outpatient visits and 57,000 admissions each year, has annual gross patient revenue of $1.8 billion and assets of $2 billion.

Welcome CEO William Loveday, Senior VP and COO-Methodist, I.U. and Riley Hospitals Sam Odle, Executive VP and CFO Marvin Pember, Vice President-Information Services Cathy Cooper-Weidner and the entire Clarian Health team.

A hospital may be trying to push hundreds of thousands of transactions through this convoluted and often dysfunctional process each year.

was facing federal regulatory requirements for APCs. As a result, in November 2000 it launched an initiative to centralize everything associated with charges in order to better recoup the costs of care.

Utah's centralized charge entry project, still underway, involves centralizing registration, scheduling and prior authorization for all 28 clinics and aims to improve the accuracy and timeliness of information gathered on the front end. Part of the team's effort to centralize the charge entry involved modifying the coding on the patient encounter form used at Utah's clinics to comply with the new APC requirements.

Evaluating coding processes was also an important component of reengineering the revenue cycle, according to Keri Anderson, Utah's CFO. Too often, she says, nursing notes would document that a physician had ordered a certain procedure but there would be no post-procedure note from the physician or another clinician to corroborate it had been done. Unable to track down the documentation, the organization could not code it for reimbursement and therefore lost revenue for the procedure, no matter how expensive.

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"If we don't have the doctor's note within a certain window, say, four or five days, we lose the opportunity to bill for it," says Anderson. "It's really a process issue with us." And not a small one, she adds, given that Utah is an academic medical center with harried medical residents and medical students who may inadvertently neglect to follow-up a procedure with proper documentation.

"If we don't have the doctor's note within a certain window, say, four or five days, we lose the opportunity to bill for it."

As an academic medical center, Utah was able to motivate physician compliance by instituting penalties such as termination of medical privileges after a series of authoritative hearings. It's the case of a punitive system succeeding. "The attending physicians hate to get burdened with this. They get sick of getting dunned with emails. It's a good monitoring system for us," says Anderson.

But positive support is also part of the strategy. The administration makes every effort to help clinicians get their charts done in a timely fashion including providing handheld wireless devices for dictation, currently being tested in the ED. Although still early, it seems to be working.

"We've seen improvement and received positive feedback. I'm feeling confident," says Anderson, who says early ROI calculations suggest that such strategies will result in recovery of about $4 million in previously lost charges.

Not surprisingly, such "revenue-enhancement" efforts have replaced cost containment as the financial focus going forward at Utah. "We continue to do cost-containment, but people get tired of it and morale suffers." After focusing on cost-reduction strategies such as labor productivity, supply chain, formulary review and "barking at vendors for deeper discounts," Anderson says, there was no more to cut.

"When you only focus on cost-containment, after a while, you've cut the low-hanging fruit and it becomes an in-your-face way to manage. It's effective only for a little while." That's especially true of academic medical centers, she notes, which have very slim margins because of the extra cost of medical education.

Revenue enhancement, on the other hand, has found fertile ground at Utah. In addition to "price-file restructuring"—changing the way the organization bills—Utah also completely restructured the backend of its billing process. The project involved restructuring

workflow, redesigning processes and intense staff training. It also involved setting policies and quality standards for billing. "Basically a productivity-enhancement process," says Anderson.

A consultant broke the process down into "work buckets," which, despite the humble term, proved to be sophisticated categories that allow cash collection and cash goals to be monitored using special software. Also key: a workflow analysis that identified key steps for billing personnel to do their jobs efficiently and which supported use of the software.

Given the fact that Utah employs 100 staff—the organization bills $1.6 million each day—the strategy has had a huge impact. Among other things, the new system establishes a hierarchy of workflow that prioritizes the highest-dollar accounts. The previous approach simply divided up the staff by payers such as Blue Cross; follow-up on bills depended on the individual staff. There was no means of assessing how well they were performing.

The software also monitors individual productivity, which, says Anderson, "is, quite honestly, impossible to do without the tool. It's very difficult to monitor workflow unless you have a system. The system will tell you to 'work these accounts first,'" says Anderson. The reengineering also reviews all contracts, payers and contract terms for payment. "You're working smarter."

Smarter to the tune of $14 million added to Utah's balance sheet, plus an additional $4 million to $5 million of annual bottom-line profit. The additional revenue also solidified Utah's financial footing at A- and kept it from slipping to a BBB, according to Anderson.

Memorial Health System

In response to skyrocketing A/R days, Scottsdale Institute Member Memorial Health System in Springfield, Ill., converted to a new billing system in late 1997, but the results were disappointing. After a lot of effort, the organization, which nets about $280 million a year in revenue, failed to lower A/R days below a mid-80s floor. "We couldn't do anymore," says Paul Smith, Executive Vice President. "We were looking at a systematic problem in the revenue cycle. It had had its day."

It was after attending a Scottsdale Institute seminar on cost management that Memorial's Chief Executive Officer, Bob Clarke, realized a lot of organizations across the country were experiencing similar problems but that there were solutions. Memorial brought in Stockamp & Associates to reengineer Memorial's revenue processes. "The process started at the front door. Our objectives were to improve paper flow, decrease the number of 'rebills,' improve A/R days and reduce administrative write-offs and lost revenue due to poor information or lack of timely billing," Smith says.

The project, which was launched in August 2000 and ran until the end of May 2001, resulted in a $14-million dollar balance-sheet benefit plus an additional $7 million of annual bottom-line profit.

"One thing that's lacking in most billing processes is a good tracking system," says Smith. "Memorial did have a system that tracked the total dollars in bills that were held up due to various billing issues within our billing system. What we didn't have was a tool that could track the open claims that were pending due to information requests from our various payers. This consulting engagement provided just such a tool," he says.

"One thing that's lacking in most billing processes is a good tracking system."

Most health-delivery organizations have heretofore failed to approach the revenue-cycle issue from a holistic perspective.

"The new tracking allows us," Smith says, "to identify and track every type of outstanding claim. Starting with information not provided at the front door to rejected claims in the billing office. For every step in the revenue cycle, the tool provides the knowledge necessary to correct system breakdowns that result in unpaid claims and unnecessary write-offs."

The tracking tool identifies every type of error. It goes out to the front of the system every step in the cycle. The system produces a weekly tracking report but managers know day to day what's going on by viewing "buckets" of information categorized by payer: Medicare, Medicaid, commercial, managed care and self-pay.

The biggest obstacle was converting personnel to new processes that support the automated system.

Says Smith, "You're talking about so much data, process and intelligence. It's a situation where staff didn't want to adapt to a system. They wanted the system to adapt to them."

The new system and its accountability component were, at first, viewed with skepticism," says Smith, "but eventually we were able to win most staff over. Everyone's job became easier and less stressful. The quality of the work improved and staff have taken pride in their jobs again."

By instilling a culture of accountability with the staff, the organization was able to reduce the number of rejected claims over time because the information they contained was better. "By starting at the front end and trying to improve the paper process, we ended up getting the bills off people's desks," says Smith.

Another reason for the success of the implementation was the fact that the consultant brought in a dozen people who worked closely with Memorial staff in a very structured process—that allows for comprehensive change and avoids inappropriate tweaking of the process to meet individual manager biases as the system is changed.

The new system has resulted in clean bills in the hands of payers, getting paid for those bills that were previously denied and an improved focus on accountability for revenue personnel.

"We gave as much attention to a $50 account as a $1-million account."

Hospital of Saint Raphael

New Haven, Conn.-based Hospital of Saint Raphael, which nets $330 million a year in revenue, is a 530-bed urban hospital that serves as one of two primary teaching hospitals for the Yale University School of Medicine. Saint Raphael totally reworked its revenue cycle from beginning to end, from admitting and pre-registration to how it stratifies accounts, according to David Benfer, president and CEO.

"Our year-to-year cash improved $23 million," he says. "It's amazing what we're now able to monitor," Benfer says, adding that the organization now generates a weekly report that identifies performance benchmarks, employee productivity and where problems of improper coding and lost charts have occurred in the billing process.

Benfer, who arrived at Saint Raphael two-and-a-half years ago, says he expected a sophisticated explanation of the accounts-receivable process when he first visited the billing department. "Instead, it was more like, 'we try to work every account.' We gave as much attention to a $50 account as a $1-million account."

The software system that was installed as part of the revenue project tracks 25 A/R staff

by name, accounts being worked on and how efficient each is. "One is at 138% efficiency and another is at 50%. It's that kind of detail," says Benfer.

Saint Raphael previously would hold all bills 15 days but was able to step down that figure 12, 10, seven and finally five days. One "fix" was to assign staff to do "concurrent coding"—properly coding medical records on the care unit while patients are still in the hospital.

"For the first time in our history we don't have a problem with completion of medical records. It really expedites the coding process and also helps you find lost charts. As a teaching hospital, we find charts everywhere. We actually do sweeps of all nursing units if our last chart doesn't show up," Benfer says, adding that the hospital is doing well in following up on high-end accounts—$10,000 and above—which account for 54% of the organization's total accounts receivable.

The information also provides justification for denials. "We challenged a number of cases and got $900,000. Our cash is up $450,000 a week."

A Simple Measure, A Question and Two Tests

The best way to measure revenue-cycle improvement opportunity is to evaluate a hospital's cash factor (the percentage calculated by dividing cash payments by gross revenue) for the last three to five years. Typically, the cash factor will range from 40% to 60% depending on the particular market and payer mix.

While many other factors contribute to deterioration of the cash factor—rate increases, increased managed care penetration, government regulations—an annual deterioration of greater than one to one-and-a-half percentage points signifies considerable improvement potential. For an organization with $400 million in gross revenue a year, each percentage point improvement will yield multi-million dollar benefits to the bottom line year after year.

Management teams should ask themselves a question: Do we remove the contractual allowance portion from total patient charges at any point—discharge or time of billing, for example—for any payer, prior to the time of final payment? If the answer is yes for one or all payers, an organization's revenue-cycle performance could be misstated.

Financial teams should perform two tests to uncover this hidden opportunity. First, determine how often an account is resolved (driven to zero) with a contractual allowance when the total payments are less than 10% of gross charges. It may be surprising how long this list is and the dollar value of the accounts involved. Unless a hospital has written contracts with a planned 90% discount, this list will represent accounts that were most likely resolved through the inappropriate use of contractual allowances, representing millions of dollars of opportunity.

Next, financial teams should randomly select large balance accounts—those greater than $50,000, for example—that are 30 to 90 days from discharge. The team should determine for each of these accounts how many days from discharge the initial billing took place and how often proactive follow-up occurred. The initial billing should have been completed in 10 days or less. Proactive, well-documented follow-up should occur every 15 days. Failure to rigorously meet these standards is evidence of a significant opportunity in revenue-cycle improvement.

A/R Days analysis typically fails to take into account the impact of contractual allowances taken at the time of billing, credits, "off book" A/R, Inhouse/Not Discharged accounts and capitated business.

Watch for upcoming conference calls and Webcasts on Revenue Cycle Topics.

The Year Ahead

Welcome to our 2002 look and feel: the new format of this report allows us to provide more information in an easier to read package.

This year you will be hearing from us not only about information technology, but about the related process changes and culture changes that must accompany the IT deployment in strategic initiatives. The real objectives can only be achieved when culture change is managed along with any IT-enabled process improvement. We are all in agreement about this; now we have to learn from each other how to achieve the result in an efficient way.

In the year ahead, not only will we continue to bring you this monthly executive summary of key health industry issues and our exceptional annual conference, but we will offer several new conference-call series for interest groups, and some new opportunities to collaborate on key initiatives. We want to do more to document your successes and ideas, and provide opportunities for you to share them with each other in both virtual and real settings.

We welcome our long-standing Corporate Partner First Consulting Group as well as new Corporate Partners Stockamp & Associates, Lawson Software, Cerner Corporation, and Aventis/MyDocOnline. We look forward to the expertise and educational resources they provide relative to such strategic initiatives as Patient Safety, Clinical Excellence, Supply-Chain Management, Revenue-Cycle Management, Physician Connectivity, eHealth, Digital Imaging, Electronic Medical Records, the Leapfrog and IOM Mandates, and Benchmarking.

Please return the Program Topics survey to us via fax or email; any member may respond. Also please complete the interest-group check list so we can send you information suitable to both your interests and your function.

We are here to help you achieve your objectives through networking, tapping industry experts, and creating opportunities for multidisciplinary discussion and sharing lessons learned. We want and need your feedback on additional programs that would achieve your objectives, so please call us with your suggestions.

Have a successful, happy and healthy 2002!

Stan Nelson, Chairman
Shelli Williamson, Executive Director

REGISTRATION INFORMATION IS IN THE MAIL!

Scottsdale Institute Annual Conference
April 18* – 20, 2002
Marriott Camelback Inn ~ Scottsdale, AZ

*Special pre-conference sessions for Executive, Clinical and IT Leaders