

Best Practices in Revenue Cycle Management

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The American Health Information Management Association (AHIMA) is the premier association of health information management (HIM) professionals. AHIMA's 50,000 members are dedicated to the effective management of personal health information needed to deliver quality healthcare to the public. Founded in 1928 to improve the quality of medical records, AHIMA is committed to advancing the HIM profession in an increasingly electronic and global environment through leadership in advocacy, education, certification, and lifelong learning. For information about AHIMA, visit www.ahima.org.

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Executive Summary

Health information management (HIM) departments play a vital role in assuring that clinical care is documented and coded, and that codes are submitted for billing to assure that payment for services is received on a timely basis. The accuracy and efficiency of these processes are “mission critical” and can strongly influence the financial wellbeing of a healthcare organization. This research is intended to build upon AHIMA’s existing body of knowledge by studying key processes and contributing factors under the control of HIM/coding departments which may distinguish best performing hospitals from others with respect to revenue cycle management outcomes.

In order to conduct a well defined and meaningful study, the scope of this project was limited to the hospital inpatient coding process and with a focus on organizational practice, not individual productivity. AHIMA’s practice council and professional practices staff were invaluable in providing input, pilot testing, and recommendations for conducting the study.

A total of 162 AHIMA members, or 3.7% of those invited to participate, responded to the survey conducted via the web in May 2005. Survey responses were divided by those with “best” outcomes versus “other” outcomes in small (less than 100 beds), medium (100 to 299 beds), and large (300 or more beds) sized hospitals. The factor used to describe outcomes was the combined total number of days to drop a bill plus days in A/R as reported by the respondents.

Findings suggest that while there are a few variables that were reported more commonly by best performing hospitals in all bed size categories, there does not seem to be a clear profile of contributing processes or outcomes over which HIM departments have control that distinguishes best from other performing hospitals in influencing revenue cycle management outcomes. It is, however, believed that the research is important and can be used to stimulate further study, education, and continual improvement. It is clear that AHIMA coding credentials and departmental processes have been widely adopted in support of revenue cycle management, and that these will continue to serve the hospital community well.

Purpose

In December 2004, AHIMA engaged Margret\A Consulting, LLC and The Work Group, Inc. to conduct a formal research study for defining best practices in certain defined areas of health information management (HIM) practice. It was believed that such research would complement and supplement the best practice material already in existence within AHIMA’s Body of Knowledge. Existing best practice material that had been compiled by experts in the field was used as the basis for this next level of formal study – documenting that best practices espoused by the field actually produce better outcomes.

The project has three primary goals:

1. Relate processes and contributing factors to best outcomes in key functional areas to which HIM professionals contribute.
2. Promote adoption of best practices throughout the field to improve outcomes across all organizations.
3. Initiate benchmarking practices that would permit continuation and enhancement of best practices research over time and in other types of settings and practices.

Scope

In order to achieve a controlled study that produces solid evidence of best practices, the research study must be conducted within a well-defined and limited scope. It is hoped that once the study methodology has been established, that further studies for more narrowly focused domains or sub-domains could be conducted. The scope of this best practices research project is limited in two critical ways:

- To specific, well-defined domains of HIM practice and, within those domains, to a majority of practice or most significantly impacted portion of practice. The first domain is revenue cycle management, and the area of practice studied is that related to hospital inpatient coding. Subsequent domains to be addressed are electronic health records and privacy and security.
- To organizational practice, not individual productivity. This research is conducted to determine what processes and contributing factors help achieve best outcomes for the institution. It is not a study of individual productivity in any of the domains to be studied.

The first domain studied focuses on the impact of HIM on revenue cycle management. It is recognized that revenue cycle outcomes for inpatient hospitalizations are dependent upon many factors, including patient financial services/patient accounts management, clinicians documenting patient information completely and accurately, case management, and many other practices of a healthcare organization. The coding process, typically performed by the HIM department, plays an important role, but is not the only department which impacts revenue cycle outcomes. This research focuses only on areas where HIM influences revenue cycle management outcomes.

Definition of Best Practices

AHIMA's Best Practices Awards Handbook and Application, 2003, defines best practices as "implemented programs that meet or set new standards or introduce innovations in the management of health information. These practices have been benchmarked and tested, and outcomes have been measured, evaluated and documented."

The best practices research reflected in these results explicitly studied outcomes in relationship to processes and contributing factors in the management of health information.

Literature Review

In order to identify HIM best practices metrics for revenue cycle management, a review of the literature was conducted.

In 2003, Campbell¹ noted that while health information managers were focused on HIPAA implementation and installing some form of electronic health record, the financial pressures on the healthcare industry are "placing another hot topic on the plates of HIM professionals – the revenue cycle." Campbell identified several functions in the revenue cycle beyond coding in which HIM professionals should be involved, including analysis and management of unbilled accounts, case mix management, and denial management.

A definition for revenue cycle was offered by Huber, et al,² at the 2004 IFHRO Congress and AHIMA Convention. They defined revenue cycle as the "regularly repeating set of events that produces regular [income]." They identified the major functions of revenue cycle management (RCM) as: admitting/access management, case management, charge capture, HIM, patient financial services/business office, finance, compliance, and information technology; and noted that the "occasional misperception that HIM professionals 'just code' can lead to the exclusion of HIM participation from the RCM team." Huber, et al, also noted that while HIM professionals have been owners of functions such as reconciliation of accounts versus documentation received, order and timeliness of the process cycle, coding, physician query processes, internal and external coding accuracy audits, and requests for records/documentation; it was suggested that HIM directors should join the RCM team in actively addressing the following issues: denials management, response to patient financial services/business office requests, edit correction, policy development, data

¹ Campbell, Thea. "Opportunities for HIM in Revenue Cycle Management." *Journal of AHIMA* 74, no. 10 (November 2003): 62-63.

² Huber, Nancy, Maria Stolze, Karen Youmans, and Trish Wharton. "Improve Your Organization's Financial Health: Tools and Strategies to Manage Your Revenue Cycle. 2004 IFHRO Congress & AHIMA Convention Proceedings, October 2004.

presentation, data analysis, write-off preparation, and additional documentation requests.

Bauman's³ address at the 2004 IFHRO Congress and AHIMA Convention further challenged attendees to be aware of the entire revenue cycle – from document creation, availability, and charge capture all the way through to remittance posting; and to recognize common areas of opportunity, such as frequent reasons why charges are not captured, ways to streamline bill drop, and issues causing claims to be rejected, pending, or aggregated for focused review.

The importance of HIM involvement in revenue cycle has clearly been made. To further support such involvement, Huber, et al,⁴ also pointed to the launching of a documentation improvement initiative at The Cleveland Clinic in 2001 to ensure that medical record documentation accurately indicated patient acuity and that the documentation was in a "codeable" format. The program sought to confirm that DRG assignment was reflective of the care that was delivered and the acuity of the patient. The Cleveland Clinic strengthened not only its documentation of the care provided, but severity of illness, risk of mortality, and physician profiling were more accurately reflected through better capture of secondary diagnoses. Huber, et al,⁵ also identified several case studies in which information technology, such as document image management (DIM) and workflow applications improved the revenue cycle, including reducing days in accounts receivables, decreasing coding backlogs, improving coder productivity, reducing outsourced coding costs, and improving recruitment and retention of qualified coders.

Revenue cycle management has not only been on the minds of HIM professionals and chief financial officers, but clearly of concern to chief executive officers (CEOs) and chief information officers (CIOs) as well. Rauber⁶ describes the fact that many hospitals are "scrambling to enhance revenues . . . fixing the broken pieces of the revenue cycle process . . . as a way to bolster the bottom line." This article from *HealthLeaders* notes that it is a complex process that can require extensive retraining of employee and rethinking the way the entire facility moves patients through the system. Barnes⁷ describes the fact that "health care is being forced to push revenue cycle management to the top of senior management's priority list" in highlighting ways CIOs can help.

To further define best practice metrics for hospital inpatient coding and revenue cycle management, AHIMA practice briefs, coding notes, work group products, and other resources, much of which are available in AHIMA's Body of Knowledge (www.ahima.org) were reviewed. AHIMA provides Standards of Ethical Coding.⁸ Coding competencies and skills have been researched by Garvin and Watzlaf (2004) and coder work force researched by MacKenzie (2003). Several articles have also been written highlighting the ever-widening skills of coders (Scitar 2002), career progression (Scichilone 2002), employer requirements for coders (Bronnert 2005), and advice for coders from CFOs (Hagland 2004). AHIMA's Body of Knowledge provides information on constructing a coding compliance plan (Hanna 2002), Internet resources for accurate coding and reimbursement (AHIMA Coding Practice Team 2004), the care and maintenance of charge masters (Rhodes 1999), computer-assisted coding (AHIMA e-HIM™ Work Group on Computer-Assisted Coding 2004), and many other resources highlighting practices associated with revenue cycle management.

³ Bauman, Carrie M. "Chutes and Ladder's" of the Revenue Cycle: Strategies for Understanding Data and Coding Quality Issues that Impact Your Ability to Successfully Play the Revenue Cycle Game." 2004 IFHRO Congress & AHIMA Convention Proceedings, October 2004.

⁴ Huber, et al, Ibid.

⁵ Huber, et al. Ibid.

⁶ Rauber, Chris. "Chain Reactions." *HealthLeaders*, August 2003: 40-47.

⁷ Barnes, Gary L. "Focusing on the Numbers." *ADVANCE for Health Information Executives* 8, no. 6 (June 2004): 57-62.

⁸ American Health Information Management Association. "Standards of Ethical Coding." *Journal of AHIMA* 71, no.3 (2000): insert after p.8.

The Healthcare Financial Management Association (HFMA) also has an extensive Resource Center with a focus area on revenue cycle. It includes several self-assessment tools to evaluate each step in the revenue cycle process, as well as Roundtable and Principles and Practices Board statements on general revenue cycle topics, patient financial services, denials management, billing and coding, and pricing – many of which are free to nonmembers.

An informal research study conducted of HFMA members by Walters⁹ is especially interesting with respect to the findings of this AHIMA Best Practices research study. In late 2001, Walters conducted a survey of revenue cycle managers. Some of the key findings included that information systems do not appear to be the answer to why some organizations do better than others. It was also found that, although geography and payers may pose challenges, they do not account for wide swings in results either. Reporting relationships also do not appear to have an impact. In fact, it was noted that many healthcare organizations in which the registration or HIM functions report to patient accounting do not deliver the targeted accounts-receivable gains.

The one key factor that all of Walters' survey participants agreed upon, however, was that good revenue cycle management depends on effective leadership. There were five key leadership factors that cited:

1. Revenue cycle leaders who consistently achieve outstanding results define their role broadly. They do not focus only on collecting or billing, but understand that accounts receivable management starts at the front end and continues until all the cash they are owed is collected. Revenue cycle management, then, is a set of interrelated processes. Equally important, it was noted, was the need to build alliances and have effective working relationships with every manager who affects accounts receivable performance.
2. Continuous benchmarking was found to be a key step. Successful revenue cycle managers aim to be in the top 10 percent of all categories. They publish performance data weekly or monthly, regardless of the results, and they use these metrics as an integral part of a continuous improvement process.
3. Monitoring and managing to key metrics helps achieve exemplary performance. Metrics and goals are communicated to everyone involved in the revenue cycle process, and as a result, there are no week-end or month-end surprises or problems.
4. Hiring and retaining the best workers was believed to be a key factor to success. Once on board, employees continually receive training and education, both external and internal. It was noted that "external training budgets are fought for and never cut." Top performing organizations also had competitive salary structures or pay ranges, with celebration being an important element of the compensation package. The bottom line was that people feel valued and, therefore, deliver exception results.
5. Appropriate use of information systems was found to be very important, even though information technology itself was not a key differentiator. Leaders not only knew the technical aspects of their information systems, but also understood thoroughly how bills are processed by intermediaries and third-party payers. They are aware of the glitches that are inherent in software used by third parties and have devised strategies to work around these challenges.

So, while the literature is replete with best practice advice and informal findings with respect to revenue cycle in general, it appears that no research has focused exclusively on the role of HIM professionals in revenue cycle. In light of the fact that HIM professionals play a pivotal role in the revenue cycle, this research was undertaken to determine what processes and contributing factors contributed the most to positive outcomes.

Methodology

The methodology used to conduct the best practices research was a series of steps including:

1. Literature review to identify potential outcome factors, processes, and contributing factors.

⁹ Walters, Roy. "Five Steps to Great Revenue-Cycle Management." *HFM Magazine*, available from www.hfma.org/publications/HFM_Magazine/management_issues.htm.

2. Development of best practice research overview, outlining the outcome factors, processes, and contributing factors, and a proposed methodology to distinguish best practices from other practices.
3. Input from the AHIMA practice council and professional practice staff on the best practice research overview was received and a survey constructed to ensure completeness and relevancy.
4. Pilot testing of survey was performed with practice council members. Clarifications were made in a few questions.
5. Distribution of online survey to applicable members.
6. Data reduction and analysis of results, yielding first draft of this report.
7. Practice council and AHIMA professional practice staff review and input into findings and recommendations.
8. Finalization of conclusions and recommendations; and development of executive summary.

The original plan for this research also included case studies wherein findings would be validated and further refinement of best practices identified. This case study part of the research is still planned, as outlined in recommendations below.

Best Practice Metrics

To determine the processes and contributing factors that contributed primarily to best outcomes, metrics were identified and defined. Outcomes factors are described first, as they were used to separate “best” performing organizations from others.

Outcomes factors – Various outcome factors were identified, defined, and favorable indicators described. Table 1 lists the outcomes metrics, their definition, and what would constitute a favorable indicator for healthcare revenue cycle. These outcomes factors were believed to have the most direct bearing over which HIM has control. Survey questions were constructed to capture the relevant data on these outcomes factors.

Table 1 Outcomes Factors

Outcomes Factor	Definition	Favorable Indicators
Average days to drop a bill	Average number of days from discharge until HIM/coding transmits codes to billing.	Lower
Average days in accounts receivable (A/R)	Total patient accounts receivable divided by average daily patient service revenue	Lower
Percent of claims denied	Total number of claims denied in the most recent 12-month period divided by the total number of claims filed in the most recent 12-month period	Lower
Labor costs for coders	Total cost of coding (salary + benefits of staff) exclusive of training costs per chart coded	Lower
Percent of outsourcing utilized	Total amount spent on outsourcing as a percentage of total expenditure on coding (labor and outsourcing) exclusive of training costs	Lower
Training and resource costs for coders	Total cost of coding training and resources (including subscriptions, software licensure) per chart coded	Higher
Productivity for coders	Number of charts coded per hour	Higher
Coding staff turnover	Percent of staff changes per year	Lower
Coding staff recruitment costs	Cost assigned by HR to recruit a new coder	Lower

Other outcomes over which HIM has less control include clean claim submission rate, bad debt write-offs as a percent of gross revenue, and bad debt recovery percent. Still other outcomes, such as net operating income, revenue optimization, and total value of accounts receivable vary by type and size of hospital. These outcomes were not measured as part of the revenue cycle best practices project because they are significantly less impacted by HIM processes.

Practice area processes – Processes associated with the healthcare revenue cycle were identified next. It was recognized that many processes were not significantly under the control of HIM, and may represent confounding variables that may influence whether best outcomes based on HIM process and contributing factors can be identified. In order to separate general processes not under HIM control from those for which HIM does have significant control, all processes were identified, then the level of HIM control was described as high, medium, or low. Processes where HIM involvement was perceived to be medium or low were identified as “general processes” and were not included in the survey. These are shown in Table 2.a. Survey questions were constructed for all HIM coding processes, shown in Table 2.b.

Table 2.a General Processes

General Processes	Definition	HIM Control
Scheduling	Establishing member eligibility	L
Pre-authorization	Elective procedure approval prior to performance	L
Pre-registration	Data collection quality	M
Registration/admission	Data verification quality	M
Eligibility verification	Establishing member benefits	L
Collection of co-payment	Collecting co-pays prior to performance	L
Case management	Coordination and facilitation of health care services	L
Charge capture	Accuracy of capturing all charges	M
Utilization management	Ongoing monitoring for necessity of care	M
Coding	<i>See below</i>	H
Billing	Accurate and complete compilation of claim elements to produce clean claim	M
Patient financial services	Availability of services, such as call center, referral center	L
Analysis and management of unbilled accounts	Detailed edit analysis, including review of revenue codes and charge master	M
Appeals	Policy on performing appeals on denied claims	M
Denial management	Multidisciplinary process of looking at denials to determine target areas for improvement, such as physician education, charge capture review, charge master analysis	M
Payment/remittance posting	Potential errors in posting payments, resulting in perceived denials	L
Coordination of benefits	Delays in getting claim to secondary payer resulting in denial	L
Collections	Policy on aggressiveness of collection process	L
General Processes	Definition	HIM Control
Managed care contracting	Skills and tools available to negotiate favorable contracts	M
Case mix management	Information about changes in coding or practice patterns	M

Table 2.b Coding Processes

Coding Processes	Definition	HIM Control
Concurrent coding	Coding during hospitalization	M
Retrospective coding	Coding following discharge	M
Document imaging	Document imaging in support of inpatient coding	H
Automated workflow management	Systems that allow patient and financial information to be shared across all key patient access areas, route cases to specific coders, automatically import codes to the hospital's abstracting system, and support coding education and auditing	
Automated coding tools	For example, encoders	H

Coding Processes	Definition	HIM Control
Coding resources	Online access to current references	H
Physician accessibility	Average amount of time taken for physicians to respond to coder questions	M
Coding policies and procedures	Physician inclusion in development and regular updating	M
Current charge master	HIM participates in keeping charge master up-to-date with coding changes	M
Claims editing	Automated tools to support review of claims requirements	L
Coding compliance program	Evidence of regular auditing and monitoring	H
Relationship with PFS	Regularity of meetings	H
Process by which HIM/coding relates to the medical staff	Presentations at meetings, orientation to house staff, information in in-house newsletters, and other	

Practice area contributing factors – Table 3 identifies variables which may influence practice processes and outcomes. These contributing factors were analyzed to identify the extent to which they may be controlled by HIM/coding departments. Irrespective of the level of HIM control, all contributing factors were included in the survey.

Table 3 Contributing Factors

Contributing Factors	Characteristics	HIM Influencers
Coder education	# FTEs' years in school/degrees (i.e., high school, 1 year community college, 2 years community college, 4 year undergraduate, master's, PhD, and other)	Y
Coder certification	# FTEs' credentials as related to inpatient coding (RHIA, RHIT, CCA, CCS, RN, CPC-H, other, and none)	Y
Coder experience in HIM coding	# FTE's years experience in HIM coding	Y
Coder tenure on job	# FTE's years at this employer, years HIM coding experience (i.e., 1-3 years, 2-5 years, 5-10 years, 10-15 years, and over 15 years)	Y
HIM reporting relationship	To whom does HIM report (e.g., finance, information systems, patient care services, and other)	?
Functions reporting to HIM	What related functions report to HIM (i.e., coding, utilization, quality, risk, other)	?
Coding relationship to HIM	Part of HIM department or separate department	?
Documentation improvement program	Formal process that assesses the quality of documentation in relationship to coding for reimbursement	?
Hospital ownership status	Not-for-profit, for profit, government	N
Hospital size	Number of licensed beds in categories (i.e., 6-24, 25-49, 49-99, 100-199, 200-299, 300-399, 400-499, and 500 or more)	N

Findings

Response Rate and Demographics

A total of 162 respondents participated in the survey which was administered during May 2005. An email invitation was sent to 4,356 AHIMA members for whom their membership profile indicated they worked in

non-federal inpatient settings and who have the title and/or job responsibility of Director of HIM. While a total of 162 responses represents a response rate of 3.7% which is not inconsistent with other AHIMA e-mail surveys (including those with similar incentives, i.e., drawing for several iPods), the results were somewhat disappointing. This is especially true as there were only 140 surveys that could be considered valid after those where there were no responses to key differentiating questions were eliminated. As shown in Table 4, the majority of total respondents were at the HIM director level.

Table 4 Title of Survey Respondents

Title	No.	Percent
Director	85	52%
Manager	36	22%
Supervisor	11	7%
Coordinator	5	3%
Other	24	15%
No Response	1	1%
Total	162	100%

The hospitals represented by the respondents were a broad mix of community hospitals, medical centers, university teaching hospitals, children's hospitals, charity-care hospitals, and VA hospitals located throughout the US. Although a standard bed-size breakdown was used in the survey,¹⁰ when clustered by small, medium, and large, there were almost equal numbers in each category, as shown in Table 5. This clustered breakdown was used to perform the primary statistical analysis.

Table 5 Respondents' Hospital Bed Size

Bed Size	No.	Percent
99 or less	55	34%
100-299	58	36%
Over 300	49	30%
Total	162	100%

The number of not-for-profit hospitals significantly outweighed for-profit and government hospitals as illustrated in Table 6. Although there was concern that revenue cycle management practices may be quite different in for profit and government types of hospitals, it was believed that there were insufficient numbers of these to run the primary statistical analysis on such categories.

Table 6 Respondents' Hospital Ownership Status

Ownership Status	No.	Percent
Not-for-profit	136	84%
For profit	14	9%
Government	10	6%
No response	2	1%
Total	162	100%

Distinguishing Best Performers from Other Performers

In order to determine the processes and contributing factors that yield best outcomes, it was necessary to split results by outcomes factors. Initially, it was hoped that splitting respondents at the 25th percentile by most favorable indicators on all of the outcomes factors as identified in Table 1 would yield a sufficient number of hospitals to then compare processes and contributing factors with all others. Figure 1 illustrates this split.

¹⁰ Solucient, THE SOURCEBOOK. 2003 (Based on 2001 data, the most recent available)

Figure 1 Distinguishing Best Performers from Other Performers

Factors	Small Hospitals 1-99 Beds		Medium Hospitals 100-299 Beds		Large Hospitals 300 + Beds	
	Favorable Indicators 25 th %-ile	Favorable Indicators All others	Favorable Indicators 25 th %-ile	Favorable Indicators All others	Favorable Indicators 25 th %-ile	Favorable Indicators All others
Outcomes Factors (Table 1)						
Coding Processes (Table 2.b)						
Contributing Factors (Table 3)						

Unfortunately, there were insufficient response rates in many of the outcomes factors categories to permit this granular of an analysis.

The next split considered was to identify respondents at the 25th percentile by most favorable indicators on only days to drop a bill and days in accounts receivable (A/R). This yielded from 4 to 7 hospitals in each of the 3 bed-size categories that could be considered best performers. Upon analyzing the data further, however, it was determined that a split at the 25th percentile for both days to drop a bill and days in A/R was arbitrary, included hospitals that either had 0 in both days to drop a bill and days in A/R (suggesting charity care hospitals) or no response in one of the two factors (which were subsequently eliminated from the analysis), and did not include hospitals that were actually performing better when a combination of days to drop a bill and days in A/R were added together. For example, in the small hospitals category, the 25th percentile for days to drop a bill was 3 days and for days in A/R was 8 days. Combined, this was 11 days for claims to be paid. However, this left some respondent hospitals in the other performing category with fewer total days for claims to be paid. For example, one hospital had 5 days to drop a bill, which eliminated them from the first cut, but only 3 days in A/R, for a combined total of 8 days to be paid – clearly a “better” performer than the hospital with a combined 11 days for claims to be paid.

As a result of finding that hospitals may have different goals with respect to focusing on days to drop a bill vs. days in A/R, the final split was made based on a combination of these two outcomes and a determination of where the greatest spread resulted. Table 7 illustrates the split, the number of resultant hospitals, and the spread between the best performers and other performers.

Table 7 Best Performer vs. Other Performer Statistics

Determinants	Small Hospitals 1-99 Beds		Medium Hospitals 100-299 Beds		Large Hospitals 300 + Beds	
	Best	Other	Best	Other	Best	Other
Total number respondents	55		58		49	
Number of valid respondents	52		49		39	
Outcomes						
Days to drop bill + days in A/R - Ave	10.0	66.2	7.0	27.5	8.9	53.1
Days to drop bill + days in A/R - Range	6 - 15	30 - 127	3 - 12	20 - 103	4 - 16	20 – 86
Spread of days between best performers and other performers	15 days		8 days		4 days	
Number of hospitals	15	37	15	34	11	28

Appendix A provides the results on all outcomes metrics, categorized in accordance with the split described in Table 7. Although there were no outcomes metrics that consistently distinguished best from other performing hospitals, there are some interesting trends:

Days to Drop a Bill. Total days to drop a bill ranged from 0 to 57 across all respondent hospitals. This was a surprisingly large range, suggesting that some respondents may not calculate days to drop a bill in the same manner as defined on the survey. The survey defined this as the “average number of days from the date the patient is discharged to the date codes are transmitted to billing; which may be the same as number of days discharged, no final bill [DNFB] or something less than this if there is a delay in producing bills after

transmission of codes.” The average days to drop a bill across all hospitals, however, were in the range of 3.7 to 8.8 days. These results were somewhat low in comparison to national averages provided by the HARA Report on Fourth Quarter 2004, which was the most recent data available at the time the survey was constructed. The HARA Report indicated that the average discharge-to-bill days was 9.04 days, with a range of from 4.53 days for Medicare claims in the largest hospitals to 11.53 days for all other claims in large hospitals.¹¹

Days in A/R. Total days in A/R ranged from 0 to 113 across all respondent hospitals. The number of hospitals reporting 0 days in A/R was surprising, and, as with days to drop a bill, could suggest that respondents may not calculate days in A/R in the same manner as defined on the survey. The survey defined average number of days in Accounts Receivable (A/R) as “total patient accounts receivable divided by average daily patient service revenue.” The average days in A/R across all hospital respondents were in the range of 3.3 to 57.3 days.

Total of Days to Drop Bill Plus Days in A/R. As noted above, this metric proved to be the factor that would be least arbitrary in separating best performing hospitals from others. Table 7 highlights the results from the survey. These results are also shown in Appendix A.

Claims Denied. The components identified in the survey that were used to calculate claims denial rates had a high non-response rate (68% of respondents did not respond to either number of claims denied or total number of claims filed). Averages calculated from the available data in the small (0.5%) and large (0.8% in best performing large hospitals and 0.9% in other performing hospitals) hospitals were consistent with one another, but not with the averages of 2.1% and 5.5% in the medium sized hospitals. Because of the vast differences in how hospitals define claims denials, further definition probably should have been supplied in the survey.

Cost of Coding per Chart. It should be noted that because of high non-response rates and FTE rounding, labor costs and productivity as outcomes metrics originally targeted as potential outcomes differentiators were not calculated. While the non-response rates were high, it is noted that the primary purpose of this research was the focus on revenue cycle, not coder performance. Readers are referred to other AHIMA studies listed in the references for additional information on factors relating to coder performance. Cost of coding per chart, however, was calculated. Although there was a clear trend with lower costs per chart in the best of both the small sized and large sized hospitals, this trend was reversed in the medium sized hospitals, with cost of coding per chart being significantly higher in the best performing hospitals than in other performing hospitals.

Outsourcing. The literature (Huber, et al) suggests that decreasing outsourcing costs should be a goal for improved revenue cycle management. The results of this best practices research indicate exactly the reverse; where a higher percentage of best performing hospitals utilized outsourcing (even though the average amount per facility was lower in small best performing hospitals than in small other performing hospitals).

Training Costs. Training costs were looked at in a variety of ways, although none of the metrics revealed significant differences in best vs. other performing hospitals. Except in small hospitals, it did appear that training costs were higher in best performing hospitals than in other performing hospitals. Also, the percentage of hospitals that include coder training in their budgets was also somewhat higher in best performing medium and large hospitals than other performing medium and large hospitals, although the reverse was true for small hospitals. Although it is possible to suggest that there is little difference in training costs between best and other performing hospitals because of annual code changes necessitating training, the number hospitals without any budget for coder training was somewhat of a surprise, especially in light of literature stressing the importance of coder training (Walters). Overall, only 43% of hospitals responding to this survey indicated they had a training budget for coders.

Turnover Rates. Percent of coders resigning or being terminated was overall low, with rates of from 3% in best performing small sized hospitals to 11% in best performing medium sized hospitals. Best performing hospitals had lower turnover rates in the small and large size hospitals, but not in the medium size hospital

¹¹ HARA Report on Fourth Quarter 2004, pages 9 and 28.

category. The human resources cost to replace a coder was also asked in the survey, but, again, the non-response rate was so high as to make the results meaningless and were not reported.

Contributing Factors and Processes that Yielded Best Outcomes

Once it was determined how best performers could be identified, the contributing factors and processes that yielded the best outcomes were also analyzed. A comparative profile was developed and is provided in Appendix A. A summary of findings from the comparative profile and their implications are provided here.

Number of FTEs per Facility. In both the small and medium sized hospitals best performers reported fewer FTE coders on average than did those in the other performers categories. In the large hospital respondents there was only a slightly larger number of FTEs reported by best performers than other performers (12.9 FTEs vs. 11.9 FTEs). Given that the range of coders for large hospitals was significantly larger than the range for small and medium sized hospitals meaning higher variability in being able to predict results, at least in the best performer categories for the small and medium sized hospitals, these results could suggest that smaller inpatient coding staffs may produce more efficient outcomes than hospitals with a larger number of coders. The principle of being able to produce “more with less” is actually prevalent in other industries among those performing highly technical work.

Education. Overall there was no significant difference between the number of years of formal education among coders in the best and other performing hospitals. The average educational level of coders overall was between 1 and 2 years of college. What was somewhat notable was that as the size of the hospitals increased, the percent of coders with only high school graduation decreased.

Credentials. Among all hospitals, the rate of AHIMA certification among coders was very high, with the range of those responding having RHIA, RHIT, and/or any AHIMA coding credential being between 70% and 87%. There was no significant difference, however, when comparing respondents from best performing hospitals with other performing hospitals. As with education, there was a somewhat notable trend that as the size of the hospitals increased, the percent of coders with an AHIMA coding credential increased.

Coding Experience. The amount of experience in coding was another important variable that could influence best practices outcomes. In general, higher experience levels should result in more efficient coding functions. Results of this best practices research, however, revealed very little difference. Only in the best performing small hospitals was coder experience the highest (with an average between 5-10 and 10-15 years). In best performing medium hospitals, coder experience on average actually was the lowest reported, with slightly more than between 3 and 5 years of experience. These results could suggest that the smallest hospitals retain their staff longer, and that new coders may be employed in medium sized hospitals before seeking jobs in large hospitals.

However, one consistent trend was observed – for coders with less than 1 year of HIM coding experience “best” performers” reported a smaller percentage than the “other” performers. Further, for coders with an average of between 1 and 3 years experience, “best” performers in the small and medium hospitals reported a smaller per cent than “other” performers. For larger hospitals this percentage was about the same for both groups.

Tenure of the Job. The amount of time a coder has worked in the same hospital could also have an impact on demonstrating best practices. Longer tenure implies that a coder’s learning curve on a new job has been completed, the coder has had more time for team-building and assimilation within the hospital organization and the coder has greater familiarity with the job and the specific coding approaches used in a given hospital. No such trends, however, were evident within the responding groups. The average tenure on the job ranged from between 3-10 years (best performers in small hospitals) to slightly more than between 5-10 years (best performers in medium hospitals).

Coding Department Separate from HIM. There were only 7 hospitals overall that responded that the coding department was separate from HIM. The coding department in these hospitals reported to finance (3 hospitals), compliance (1), HIM (1), and information systems (1); and there was 1 non-respondent.

Reporting Relationship of HIM/Coding Department. Although there has been a trend toward having HIM/coding departments reporting to finance, and the results of this survey bore out this trend with 60% to 73% of respondents (except for best performing small hospitals) indicating this reporting relationship, it has been suggested in the literature (Walters) that this is not as significant a factor for best performance as might have been thought. As noted, in the small sized hospitals, best performers actually reported more frequently to other departments or directly to the hospital administrator, reporting to finance only 33% of the time.

Documentation Improvement Program. Literature (Huber, et al) indicates that a documentation improvement program contributes to good revenue cycle management. While this was borne out in the small and large hospitals where they more frequently reported such a program (60% of best performing small hospitals compared with 27% other performing small hospitals and 100% of best performing large hospitals compared with 68% of other performing large hospitals), the reverse was true in medium sized hospitals, where 60% of the best performers reported such a program and 71% of other performers reported such a program. Overall, however, 59% of valid participants reported having a documentation improvement program.

Concurrent Coding. Concurrent coding appeared to be a distinguishing factor and much more widely used in best small hospitals (67% use in best performing small hospitals vs. 24% in other performing small hospitals). The amount of concurrent coding went down as hospital size increased. One could speculate that this is due to potentially greater number of coders, and hence cost, required for concurrent coding. Since the difference in utilization of concurrent coding between best performing and other performing medium and large sized hospitals was not great, it appears that the additional cost may be believed not to be warranted.

Retrospective Coding. Between 91% and 100% of hospital respondents reported using retrospective coding. Some hospitals use both concurrent and retrospective coding, and others use only retrospective coding. There was no discernable trend in use of retrospective coding between best performing and other performing hospitals.

Document Imaging Support. Best performing hospitals in all bed size ranges reported at least a slightly higher percent usage of document imaging support than in other performing hospitals. This difference was most pronounced in the small hospitals (where 40% of best performing hospitals used document imaging vs. 8% of other performing hospitals). Medium sized hospitals reported almost the same percentage use of document imaging support (33% for best performers vs. 32% for other performers).

Automated Workflow Management. Automated workflow management assists hospitals in routing charts to be coded and exchanging information between HIM and patient financial services/patient accounts departments. Best performers in the medium and large hospitals reported a higher percentage usage of automated workflow management to support inpatient coding than did the other performers in these bed size categories. Further, this difference was quite substantial for both groups – medium sized hospitals reported 73% for best performers vs. 35% for other performers, while larger hospitals reported 100% of best performers vs. 68% for other performers. Small hospitals also used automated workflow management, but only 40% of best performing small hospitals reported such use in comparison to 59% of other performing small hospitals.

Automated Coding Support. Automated coding support includes the use of automated tools such as encoders to assist in the coding process. These tools are widely being used, by 80% or more of all hospitals that participated in the study. There was no discernable difference, however, between usage by best and other performing hospitals in any category.

Online access to Inpatient Coding References. These references include medical dictionaries, drug knowledge bases, and/or coding notes. With the exception of best performing small hospitals reporting only 47% usage, a very large percentage of use was found in general. Nearly 100% of medium and large hospitals reported using online references.

MDs Involvement in Coding Policy. Responses reveal a consistent trend between all bed size ranges with best performers responding “yes” somewhat more frequently to this question than their other performing counterparts. This suggests that best performers are more apt to communicate more frequently with medical staff members. It is also noted that small hospitals in general reported having such communication more

frequently (53% and 41% in best and other performing small hospitals respectively in comparison to 33% and 26% in medium sized hospitals and 36% and 32% in large hospitals).

HIM Participation in Updating the Chargemaster. No clear trend emerged in this area with a "yes" response range from a low of 67% for best performers in medium sized hospitals to a high of 93% reported by both best performers in the small hospitals and the other performers in large hospitals.

Automated Claims Editing. This process was performed more frequently as the size of the hospital increased (from 73% in best performing small hospitals to 100% in both best and other performing large hospitals), but did not distinguish best from other performance.

Coding Compliance Program. Coding compliance programs which include regular auditing and monitoring represent a sound practice that should presumably contribute to best practices. This best practice research, however, revealed no clear trends among the groups in response to this question; however a significant majority (73% - 100%) of all respondent groups indicated that they have a coding compliance program in place, and 100% of best performing hospitals in both the medium and large categories reported having a coding compliance program in comparison to 82% and 96% of other performing hospitals in the medium and large categories.

Communications with Patient Accounts. The frequency of interaction between HIM/coding and patient accounts is an important process in assuring that charts get coded and bills dropped. It presents opportunities to improve communication and clarify policies between these two departments, who together significantly influence best practices in the revenue cycle management process. In response to the question, How often does HIM/coding communicate with Patient Accounts? the most frequent response among all but one reporting group was "informally only, or as needed." This was the most frequent response (46%-60%) by all but other performers in large hospitals who reported 18% (more frequently utilizing regular weekly or monthly meetings and informally as needed). There was, however, a noticeable drop in use of informal only meetings as hospitals grew in size, with small hospitals using this 60% of the time, medium sized hospitals using this 54%/53% of the time, and large hospitals using this 46%/18% of the time. Such a trend makes sense as smaller hospitals are generally characterized by greater informality.

Communications with Medical Staff. Interaction between HIM/coding and the medical staff is another important avenue of communication, and is related to documentation improvement. In response to the question, Identify the ways in which HIM/coding relates to the medical staff, frequency of the following approaches was measured:

- **Presentation at meetings.** This was the most frequently reported method of communicating with the medical staff of all the response options. It was reported by all respondent groups regardless of bed size. Between 65% and 89% of best and other performers reported giving presentations at meetings. However, there were no major differences between the best and other performers regardless of bed size.
- **Orientation to house staff.** No clear differences were observed. In fact in the best performers in small and large hospitals, orientation to house staff was reported less often than in the other performing hospitals. Unfortunately, this choice was not accompanied by a question on the number of hospitals utilizing house staff, so that the frequencies may have been different as a result.
- **Information in in-house newsletters.** This communication approach was reported less frequently by best performers than their other performer counterparts for all three bed sizes. Best performers used this communication vehicle the least and used presentations at meetings the most among the options surveyed.
- **Other responses.** This was generally the least frequently reported option for both best and other performers. Most frequent descriptions of other forms of communications included: in-person communications, memos, and communications with the case manager.

Average Time for Physicians to Respond to Coding Questions. This question asked respondents to identify from within a range of hours the average time for physicians to respond to coding questions. The time ranged from less than 1 hour to between more than 96 hours. In both best and other performing small hospitals, survey participants reported that physicians responded to coding questions from staff within 24 to 48 hours; and in best and other performing large hospitals, survey participants reported that physicians responded to coding questions from staff within 48 to 72 hours. Consistent with several other metrics, medium sized hospitals reflected a reverse result, with best performers indicating a 72 to 96 hour response time and other performers indicating a 48 to 72 hour response time. Overall, there was wide variability in response times, with over 96 hours being the most frequent response time (30%), followed by 24 to 48 hours (18%).

Conclusions

The findings from this research into HIM best practices for revenue cycle management suggest that while there are a few variables that were reported by all best performing hospitals in all bed size categories, there does not seem to be a clear profile of contributing processes or outcomes that distinguishes the best from the other performers in influencing the revenue cycle management process.

Those variables in which best performers for all three bed sizes recorded a consistently higher response than their other counterparts were:

- Coding experience. Best performers reported fewer inpatient coders with less than 1 year of experience; although overall, there was little difference in coding experience among all categories.
- Concurrent coding, document imaging support, and physician involvement in coding policy were processes where best performers reported somewhat higher usage than other performing hospitals. With the exception of best performing small hospitals that reported 67% concurrent coding and 53% physician involvement in coding policy, none of the other categories reported more than 50% usage of these processes. More frequently reported processes that HIM/coding departments were involved in included retrospective coding, use of automated coding support, online access to resources, automated claims editing, and coding compliance program. HIM involvement in chargemaster varied from between 55% in best performing large hospitals to 93% in both best performing small hospitals and other performing large hospitals.

Those variables in which best performers recorded a higher response rate in two of the three bed size categories included:

- HIM credentials. Small and medium sized best performers reported a higher percent of AHIMA credentialed coders than did other performers in their respective size categories.
- Documentation improvement program. Small and large sized best performers reported a higher percent of such a program than did their other performing counterparts.
- Automated workflow management. Medium and large best performers reported a higher usage of automated workflow tools than their other performing counterparts.

Another finding of note was that the most frequent way in which HIM/coding relates to the medical staff was through presentations in meetings that was reported by two-thirds or more of all best performers.

It was also observed, in general, that where small and large hospitals tended to be fairly consistent in patterns between best performers and other performers, medium sized hospitals tended to have reverse characteristics.

While these findings are valuable and should be of interest to HIM professionals, they do not establish a clear or definitive profile of what makes best performing organizations different from other performers. This could be explained in part by the diversity of hospitals even within a specific bed size group, the fact that there are influences beyond the control of HIM that impact both days to drop a bill and A/R days, and that there are presumably other, more subtle, factors not measured in this survey that may help to better explain these differences. As suggested by Walters,¹² such differences might focus on leadership style of the organization,

¹² Walters. Ibid.

influences of corporate culture, informal communication flows, and the perception of the inpatient coding processes and staff by the clinical and administrative departments in the hospital. While these factors are outside of the scope of this project, the case studies of specific best performers, conducted as the final part of this study, will afford an opportunity to explore some of these other factors in greater detail and to attempt to better understand best performers and how they are unique in contributing to the revenue cycle management process.

Recommendations

While it may not be possible to fully validate through further investigation the conclusion that there are more subtle differences, especially in leadership, that contribute to different revenue cycle management outcomes, the final step planned in this research project – case study analysis – will be conducted following the release of this report. These case studies will attempt to validate findings and determine if it is feasible to identify what other factors may more strongly contribute to outcomes. In order to select hospitals for the case study analysis, two best performing and two other performing hospitals from each of the bed size categories will be selected and telephone interviews conducted with the survey respondent to discuss key responses and attempt to learn some additional information about the factors which may potentially contribute to their respective outcomes. One hospital in each best and other category in the medium size hospital category will then be selected for visitation. The medium size hospital category is identified for this purpose as it is believed to reflect the most mainstream type of hospital which can provide lessons learned for all bed size categories of hospitals. The visits will include interviews with the director of the HIM/coding department, coders, director of patient financial services, chief financial officer (CFO), the individual to whom the director of the HIM/coding department reports if other than the CFO, and one or more members of the medical staff who participate in coding policy development and/or documentation improvement projects. The goal will be to both further validate the responses as well as to attempt to find any other and/or more subtle factors that contribute to successful revenue cycle management. These case studies will be documented as additional appendices to this research report.

In addition to the validation of this research through case study and the completion of the best practices research for the electronic health record and privacy and security domains, it is also recommended that AHIMA consider conducting this revenue cycle management survey again, possibly in a variety of ways. The survey was fairly long and required a significant amount of data collection for participants. Potentially abbreviating the survey and making it available to the membership either for continual benchmarking purposes or periodically to determine if there are changes in results could have a positive impact on performance. Walters¹³ points out that benchmarking and continuous process improvement serve to keep goals in mind – which in itself is a factor that contributes to better outcomes. Continuously striving to be in the top 10%, or in AHIMA's "best performers" class could be sufficient incentive for improvement. The survey could also be slightly modified to capture data for outpatient coding, specialty care coding, coder productivity, and potentially other areas of interest. Because of the variability in what hospitals have implemented electronic health records (EHRs), this survey did not seek information on the extent to which an EHR may impact revenue cycle outcomes. This survey also did not focus on individual coder performance, but rather on revenue cycle management overall. As a result, the survey did not look at the impact, for example, of telecommuting. These might be factors to add to future surveys.

An additional recommendation may be to utilize the literature review and findings of this survey to develop educational programming in revenue cycle management for HIM/coding directors. Because many respondents did not report days in A/R, claims denied, training budgets, and other key indicators, there is the possibility that not every HIM/coding department director is aware of these indicators or involved in their monitoring or reporting. The 2004 AHIMA annual convention appeared to have significant focus on the need for members to be more aware of revenue cycle management beyond coding, and such educational programming may be a way to solidify this message.

¹³ Walters. Ibid.

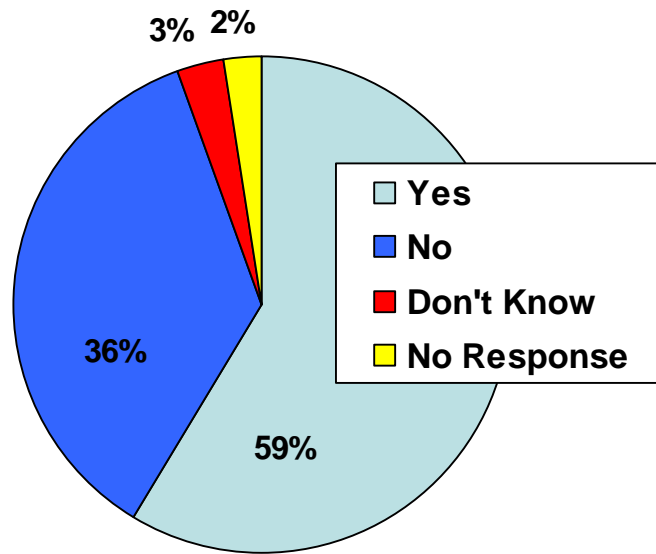
Appendix A

	Small Hospitals 1-99 Beds		Medium Hospitals 100-299 Beds		Large Hospitals 300 + Beds	
Total number of respondents	55		58		49	
Metrics	Best Days to Drop + Days in A/R	Other Days to Drop + Days in A/R	Best Days to Drop + Days in A/R	Other Days to Drop + Days in A/R	Best Days to Drop + Days in A/R	Other Days to Drop + Days in A/R
OUTCOMES						
Days to drop bill – average	4.3	8.8	3.7	8.2	4.5	5.8
Days to drop bill – range	2 – 7	0 – 30	2 – 7	2 – 57	3 – 8	2 – 35
Days in A/R – average	5.7	57.3	3.3	46.9	4.4	47.4
Days in A/R – range	0 – 10	15 – 113	0 – 7	15 – 74	0 – 9	0 – 84
Total days to drop bill plus days in A/R – average	10	66.2	7.0	27.5	8.9	53.1
Total days to drop bill plus days in A/R – range	6 – 15	30 – 127	3 – 12	20 - 103	4 – 16	20 – 86
# of valid facilities (nf)	15	37	15	34	11	28
# coders represented (nc)	44	117	56	147	142	334
Claims denied – average %	0.5% (nf=8)	0.5% (nf=28)	2.1% (nf=9)	5.5% (nf=19)	0.8% (nf=4)	0.9% (nf=16)
Cost of coding per chart	\$8.83 (nf=10)	\$17.32 (nf=32)	\$19.47 (nf= 12)	\$11.93 (nf=27)	\$9.24 (nf=9)	\$15.30 (nf=23)
Outsourcing – % of facilities	13%	14%	20%	30%	45%	48%
Outsourcing – % total expenditure	6% (nf=2)	2.6% (nf=5)	18% (nf=3)	8% (nf=10)	27% (nf=5)	19% (nf=12)
Training costs - % of facilities providing training	54% (nf=13)	68% (nf=34)	77% (nf=13)	75% (nf=32)	80% (nf=10)	73% (nf=22)
Total training costs – average per facility	\$280	\$963	\$6,416	\$2,908	\$9,218	\$6,940
Total training costs – range	\$0 - \$1,000	\$0 - \$12,000	\$0 - \$35,000	\$0 - \$25,000	\$0 - \$50,000	\$0 - \$50,000
Training costs per coder calculated as Total Cost of Training/# coders represented	\$200 (nc=21)	\$469 (nc=76)	\$2,034 (nc=41)	\$959 (nc=97)	\$716 (nc=111)	\$799 (nc=191)
Resignations/terminations – % of coders	3%	4%	11%	5%	4%	7%

Metrics	Small Hospitals 1-99 Beds		Medium Hospitals 100-299 Beds		Large Hospitals 300 + Beds	
	Best Days to Drop + Days in A/R	Other Days to Drop + Days in A/R	Best Days to Drop + Days in A/R	Other Days to Drop + Days in A/R	Best Days to Drop + Days in A/R	Other Days to Drop + Days in A/R
# of valid facilities (nf)	15	37	15	34	11	28
# coders represented (nc)	44	117	56	147	142	334
CONTRIBUTING FACTORS						
Number of FTEs per facility – average	2.9	3.2	4.0	7.4	12.9	11.9
Number of FTEs per facility – range	1 – 10	1 – 13	1 – 8	1 – 55	4 – 42	4 – 45
Education – average level	1 Yr Coll + (nc=15)	1 Yr Coll + (nc=37)	2 Yrs Coll (nc=60)	1 Yr Coll+ (nc= 148)	Btw 1-2 Yrs Coll (nc=11)	2 Yrs Coll (n =288)
12 years (high school grad)	23%	30%	21%	29%	18%	13%
13 years (1 yr community college)	7%	5%	9%	10%	7%	10%
14 years (2 yr community college)	18%	28%	45%	47%	37%	45%
16 years (4 yr undergraduate)	14%	12%	21%	12%	13%	17%
18 years (Master's) and 20 years (PhD)	0	1%	4%	1%	1%	1%
Other	0	0	0	1%	0	0
No response	38%	24%	0	0	24%	14%
Credentials – % credential from AHIMA	86% (nc=22)	77% (nc=61)	83% (nc=54)	78% (nc=120)	70% (nc=128)	87% (nc=286)
RHIA only	2%	10%	17%	7%	6%	4%
RHIT only	21%	15%	19%	24%	12%	31%
Any AHIMA coding credential	21%	15%	45%	33%	45%	41%
RN only	0	0	1%	2%	1%	1%
CPC-H	2%	0	1%	3%	0	1%
None	2%	10%	13%	12%	25%	5%
Other	2%	2%	0	1%	1%	3%
No response	50%	48%	4%	18%	10%	14%
Experience – average level	Btw 5 – 15 Yrs (nc=23)	Btw 5 – 10 Yrs (nc=73)	Btw 3-5 Yrs+ (nc=51)	Btw 5–10 Yrs (nc=124)	Btw 5 – 10 Yrs (nc=92)	Btw 5 – 10 Yrs (nc=283)
Less than 1 yr HIM coding experience	0	3%	4%	6%	0	3%
Btw 1 and 3 yrs	0	9%	11%	13%	8%	7%

Metrics	Small Hospitals 1-99 Beds		Medium Hospitals 100-299 Beds		Large Hospitals 300 + Beds	
	Best Days to Drop + Days in A/R	Other Days to Drop + Days in A/R	Best Days to Drop + Days in A/R	Other Days to Drop + Days in A/R	Best Days to Drop + Days in A/R	Other Days to Drop + Days in A/R
# of valid facilities (nf)	15	37	15	34	11	28
# coders represented (nc)	44	117	56	147	142	334
Btw 3 and 5 yrs	20%	9%	9%	11%	13%	16%
Btw 5 and 10 yrs	7%	16%	21%	19%	11%	19%
Btw 10 and 15 yrs	7%	8%	23%	14%	20%	20%
Over 15 yrs	18%	17%	25%	21%	13%	20%
No response	48%	38%	7%	16%	35%	15%
Tenure on job – average level	Btw 3 – 10 yrs (nc=23)	Btw 5 – 10 Yrs (nc=75)	Btw 5-10Yrs + (nc=55)	Btw 5-10 Yrs (nc=110)	Btw 5 – 10 Yrs – (nc=80)	Btw 5 – 10 Yrs – (nc=266)
Less than 1 yr employed in your hospital	2%	4%	7%	3%	4%	7%
Btw 1 and 3 yrs	7%	11%	11%	14%	11%	11%
Btw 3 and 5 yrs	14%	8%	11%	11%	11%	16%
Btw 5 and 10 yrs	19%	21%	20%	20%	10%	16%
Btw 10 and 15 yrs	5%	4%	19%	9%	5%	17%
Over 15 yrs	5%	16%	30%	19%	15%	13%
No response	48%	36%	2%	24%	44%	20%
Coding Department separate from HIM	0	0	0	3%	18%	7%
Reporting relationship of HIM – % of facilities						
Finance	33%	73%	60%	61%	73%	57%
Information Systems	7%	5%	13%	12%	0	7%
Patient Care Services	13%	3%	7%	9%	9%	0
Other: CEO, COO, QA, HIM*	47%	19%	20%	18%	18%	36%
Documentation improvement program	60%	27%	60%	71%	100%	68%

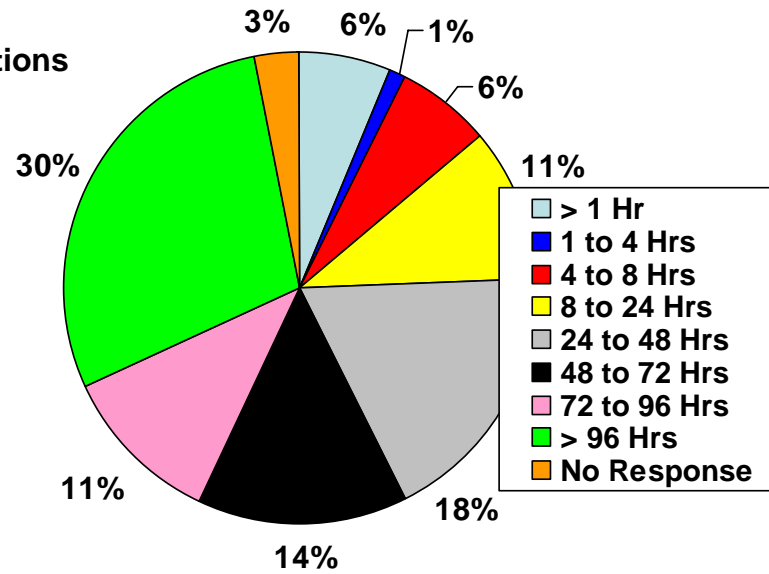
Overall Response to Presence of Documentation Improvement Program



Metrics	Small Hospitals 1-99 Beds		Medium Hospitals 100-299 Beds		Large Hospitals 300 + Beds	
	Best Days to Drop + Days in A/R	Other Days to Drop + Days in A/R	Best Days to Drop + Days in A/R	Other Days to Drop + Days in A/R	Best Days to Drop + Days in A/R	Other Days to Drop + Days in A/R
# of valid facilities (nf)	15	37	15	34	11	28
# coders represented (nc)	44	117	56	147	142	334
PROCESSES						
Concurrent coding – % of facilities	67%	24%	40%	35%	27%	29%
Retrospective coding – % of facilities	93%	97%	100%	97%	91%	96%
Document imaging support – % of facilities	40%	8%	33%	32%	55%	46%
Automated workflow – % of facilities	40%	59%	73%	35%	100%	68%
Automated coding support – % of facilities	80%	84%	100%	94%	91%	96%
Online access to resources – % of facilities	47%	86%	100%	94%	100%	100%
MDs involved in coding policy – % of facilities	53%	41%	33%	26%	36%	32%
HIM involved in chargemaster – % of facilities	93%	78%	67%	71%	55%	93%
Automated claims editing – % of facilities	73%	95%	93%	97%	100%	100%
Coding compliance program – % of facilities	73%	84%	100%	82%	100%	96%
Communications with Pt Accts – % of facilities						
Regular weekly meetings	7%	5%	7%	9%	9%	18%
Regular weekly meetings & informally PRN	20%	16%	13%	14%	18%	35%
Regular monthly meetings	0	5%	0	9%	0	0
Regular monthly meetings & informally PRN	13%	11%	13%	9%	27%	25%
Regular quarterly meetings	0	0	0	0	0	0
Regular quarterly meetings & informally PRN	0	3%	13%	6%	0	4%
Informally only, but PRN	60%	60%	54%	53%	46%	18%
Informally only, and rarely	0	0	0	0	0	0
Not at all	0	0	0	0	0	0
Communications w/Medical Staff – % of facilities						
Presentations at meetings	73%	65%	67%	53%	82%	89%
Orientation to house staff	20%	41%	53%	38%	27%	64%
Information in in-house newsletters	33%	27%	40%	59%	46%	71%
Other: <i>In person, memos, case manager</i>	33%	22%	27%	32%	9%	21%
Average time for physicians to respond to coding	24-48 hrs	24-48 hrs	72-96 hrs	48-72 hrs	48-72 hrs	48-72 hrs

Metrics	Small Hospitals 1-99 Beds		Medium Hospitals 100-299 Beds		Large Hospitals 300 + Beds	
	Best Days to Drop + Days in A/R	Other Days to Drop + Days in A/R	Best Days to Drop + Days in A/R	Other Days to Drop + Days in A/R	Best Days to Drop + Days in A/R	Other Days to Drop + Days in A/R
# of valid facilities (nf)	15	37	15	34	11	28
# coders represented (nc)	44	117	56	147	142	334
questions						

**Overall Response to Average Time for
Physicians to Respond to Coding Questions**



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