

Best Practices: What Works

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by Danielle Carrier

Medical record accuracy, record completion time, physician satisfaction—all of these are indicators of how well an HIM department is performing. The findings of a UHC benchmarking study may point the way to best practices that can be shared and adapted.

What makes a high-performing HIM department? What practices and strategies do departments use to become outstanding performers? And how can they share these "enabling practices" within their own institutions and with others as well?

The University HealthSystem Consortium (UHC) sought to answer these questions with its Medical Records Benchmarking project. The study, completed in early 1999, provides insight into practices that help HIM departments function more efficiently.

UHC targeted HIM departments for a number of reasons, including:

- access to complete information affects the efficiency and effectiveness of care delivery
- the patient record is the driver of the billing and reimbursement process
- introduction of the electronic medical record changes and challenges existing processes
- traditionally, medical records is an area with high levels of backlogs and rework

How to Use the Findings

This article describes the ways best practices were measured and how they were put into action by high-performing departments at some facilities. As you read this article, you may recognize problems that your department needs to solve or ideas that might be applicable to your facility. Remember, however, that everyone's needs and priorities are different. Therefore, performing an internal operational assessment and identifying opportunities are critical first steps. Once these are accomplished, practices outlined in this article can be evaluated for adaptability in your organization.

Keep in mind that the UHC benchmarking project focused on the medical records processes at academic health centers. Participating medical record departments supported an average of 25,600 inpatient discharges, 42,900 emergency department, 9900 ambulatory surgeries, and 330,000 clinic visits. The medical staffs for these organizations are large—approximately 200 to 400 attending physicians plus house staff. Therefore, certain practices that make sense for UHC participants may not work in your operating environment.

Following the steps outlined in "Steps for Implementation" (below) can help you start implementing the strategies described in this report.

Steps for Implementation

- Identify opportunities for improvement
- Assess adaptability of best practices and enablers
- Contact peers exhibiting high performance in your area(s) of interest
- Contact peers committed to implementing similar changes

Project Findings

"[In Search of Best Practices](#)," below, describes how UHC identified key performance measures that were used to select better-performing institutions for further study. Through site visits and interviews, these institutions identified and described practices that contributed to their outstanding performance. "[Measures Used to Identify Better Performers](#)," and "[Better Performers](#)," specify what these measures and areas of outstanding performance are and who the best performers were.

The study revealed improvement strategies that reflect practices and enablers considered to be key contributors to better performance. The strategies fell into the following categories:

- global enablers
- cost of operations
- use of technology
- record completion process
- record availability
- release of information
- physician satisfaction

Global Enablers

Global enablers are factors that contribute to the overall performance of the medical records department and have been observed at better performers in other UHC benchmarking projects. They include:

Use of data to manage operations—All better performers have efficiency and quality performance standards for the medical records department as a whole, as well as for individual staff members. These are monitored regularly. The University of Texas Medical Branch has even developed performance goals, shared across various medical records functions, to create interdependencies that ensure that all work gets done. Better performers use daily operational data to prioritize work and adjust staffing and work flow to manage the current work load. Constant communication via e-mail, reports, and graphs enhances the staff's ability to meet performance expectations.

Leadership and support—Strong leadership at the organizational and departmental level is a cornerstone of outstanding performance. Leadership support from hospital senior management and the medical director is a key enabler of the record completion process at Utah. Lean, committed department teams are associated with short cycle times, minimal backlogs, and low-cost operations at Kansas and Vanderbilt.

Staff development and participation—Staff commitment is an essential component for continued high-level performance, as demonstrated by the comments better performers have made as to the dedication of their staffs. All better performers have individual performance standards to reinforce expectations, create accountability, and recognize outstanding employees. Other forms of staff development include:

- cross-training employees to provide flexibility to adjust assignments based on work load
- empowering staff, via the team concept, to make changes that improve performance
- having a dedicated coordinator responsible for staff orientation, training, and quality review

Cost of Operations

The UHC project studied costs associated with labor and outsourcing as well as costs associated with delayed billing.

Coding process—Based on results from the benchmarking survey, the average time to complete coding was less than five days post discharge for UHC better performers. Practices and enablers that contribute to timely coding processes for these better performers include:

- prioritization of records for coding, based on dollar amount
- use of documents available online when paper copy is missing from the medical record
- identification of location and retrieval of uncoded records by a dedicated person

- concurrent analysis of records so they are ready for coding as soon as they arrive in the department
- examination of records by utilization review or equivalent staff while records are on the nursing units
- setting of productivity standards for coding staff

The four better performers in the area of coding accuracy and completeness, based on the results of the independent coding review, have incorporated their quality programs into day-to-day operations. Coding quality is regularly evaluated using both internal and external reviewers. The quality programs include regular feedback on performance with targeted educational sessions. Better performers also have high accuracy standards that are regularly monitored by coder. Longevity and consistency of coding staff was another key enabler for coding accuracy and completeness.

Labor and outsourcing cost—Better performers, in terms of their labor and outsourcing cost per record, achieved their low-cost position incrementally. Specific practices to reduce costs at these organizations include:

- use of performance monitoring tools
- discontinuation of record delivery to physician offices
- use of volunteers for many clerical functions
- use of universal chart order to eliminate record reassembly in the medical records department
- elimination of backlogs
- matching staff skill and educational level to the activities being performed

Vanderbilt realized cost savings by outsourcing high-turnover, difficult-to-recruit clerical functions such as release of information, off-site record storage, and weekend coverage. Outsourcing avoids costs related to recruiting and hiring. Long-term outsourcing contracts can also stabilize costs. However, outsourcing takes considerable time to manage in order to ensure that productivity, service, and quality standards are met.

Use of Technology

Several organizations have successfully used technology, such as optical imaging and clinical information systems, to improve performance. The Medical College of Georgia found that emphasizing technology's "value added" to clinical service promoted physician buy-in. Performance improvements cited by the three organizations interviewed include:

- efficient monitoring of incomplete record status
- increased access to complete records for patient care, as well as record completion
- decreased need for the paper record
- better management of loose documents (timely filing)
- access to information for timely coding
- improved release of information turnaround time

The UHC benchmarking survey results show that the use of technology enhances record completion time without an increase in medical record labor and outsourcing cost. Technology is also linked to higher physician satisfaction, especially related to clinic records, based on results from the physician satisfaction survey. However, an increase in loose documents appears to be a byproduct of technology, because most online documents are printed in the medical records department for filing (see [Figures 1-4](#), below).

Record Completion Process

On average, it takes UHC benchmarking survey respondents 2.6 days to receive the patient record in the medical records department and another 22.2 days before the record is complete (based on UHC's definition of a complete record: signed history/physical, operative report, and discharge summary). The practices and enablers of record completion better performers fall into two categories: those related to functions performed by the medical records staff and those that address techniques to facilitate physician record completion activities.

Medical Record Staff Functions

Practices observed at better performers related to record completion activities that do not involve physicians include:

- concurrent analysis of records to clear deficiencies while record remains on the unit
- retrieval of records from the unit 24 hours post discharge
- minimal analysis performed by medical records staff. For example, the benchmarking survey results indicate that including countersignatures for verbal orders in the analysis process is associated with longer record completion times (see [Figure 6](#), below)
- centralization of incomplete record activities
- access to online documents for coding
- month-end closing of all incomplete records
- use of credentialed staff for record completion functions
- issuance of daily reports that monitor individual record status
- formation of relationships with other departments involved in the revenue cycle, such as patient accounting

The survey results show that using a standardized format for hospital records is associated with faster record completion times (see [Figure 5](#), below). Implementing a universal chart order used by both the hospital inpatient units and the medical records department eliminates reassembly time by medical records staff. Kansas and Utah were able to reduce record completion time by one day and reduce staffing by instituting a universal chart order.

Techniques to Facilitate Physician Record Completion

Better performers use a number of techniques to facilitate record completion by physicians.

One technique that does not work, according to the UHC benchmarking survey results, is the delivery of records to physician offices. The survey results show that the delivery of paper charts to physician offices is associated with longer record completion times and higher costs ([Figures 7 and 8](#), below). Instead, better performers have developed conveniently located centralized record completion areas. Utah and Vanderbilt centralized physician record completion to reduce costs associated with record delivery and retrieval to hundreds of physician offices, improve record completion times for records requiring multiple physician signatures, and enhance the availability of medical records for follow-up clinic visits.

Both organizations were able to achieve their objectives and still maintain high levels of physician satisfaction. The physician completion area is staffed by credentialed medical records staff who maintain all incomplete medical records and assist physicians. Hours of operation vary among the better performers; however, all completion areas are open during evening hours and on weekends.

Other practices observed during the better performer interviews include:

- turning transcription around within 24 hours
- making documents available online for physician review and edit
- delivering dictated reports to physician offices for signature
- involving chairmen in the chart completion process
- assigning delinquent status to records 7 to 15 days post discharge
- assigning responsibility for resident delinquencies to attending physicians
- making records available in completion area for physicians to review

The effective methods used by better performers to motivate physicians vary. Utah offers house staff \$5 bookstore credits for all dictation completed within 24 hours of surgery or discharge. In contrast, UVA fines its attending physicians \$100 for every delinquent record. Kansas has taken a different approach to monitoring physician record completion. Rather than evaluating physicians based on delinquent charts, Kansas expects attending physicians to visit the incomplete record area once a week. Regardless of the method used, valid reports of medical record status distributed to physicians on a timely basis are critical.

Record Availability

A critical factor in the success of the medical records function is timely access to complete patient records. On average, UHC benchmarking survey respondents deliver records in 17 minutes to the emergency department, 23 minutes to the clinics, and 21 minutes to the hospital unit for stat requests. Components of record availability include record retrieval rate and time and timely filing of loose documents.

Record Retrieval Rate and Time

Medical records department perceptions (from the benchmarking survey) and physician perceptions (from the physician satisfaction survey) of outpatient record timeliness and completeness differ (see [Figure 9](#), below). Practices at the University of Texas Medical Branch and Kansas that contributed to high performance in medical records retrieval include:

- enforcing the same-day return of records
- locating and retrieving missing records by dedicated personnel
- using first volume of record only, containing most recent inpatient and outpatient information, to fulfill record requests
- maintaining record location—and knowing where record is
- allocating adequate file space on site or means of retrieving records from off-site location quickly
- establishing standards for retrieval time and rate
- automating record delivery mechanisms for stat record requests

Loose Document Filing

Most loose documents for better performers relate to outpatient activity. Helpful practices include:

- establishing standards, e.g., zero inches at the end of the day
- using "flex" staffing to cover fluctuations in work load
- delivering lab reports in terminal digit order
- with optical imaging, automatically filing loose documents at time of scanning
- considering filing to be a 24-hour-a-day process

Release of Information

UHC benchmarking survey results show that average turnaround time for release of information ranged from 5.7 days for requests from physicians and other healthcare providers to 8.7 days for attorneys. Better performers in the area of release of information (ROI) include organizations that perform the function in-house and those that outsource it. Critical success factors for timely release of information include:

- continuous electronic tracking of the status of ROI requests
- establishment of turnaround standards
- use of online documents when available (supported by the survey results, as [Figure 10](#) shows)
- record availability
- provision of whatever information is available (e.g., unsigned reports)
- use of electronic requestor database and invoice/cash system

Physician Satisfaction

Personal interaction is a key enabler in achieving high levels of physician satisfaction. Based on the physician satisfaction survey, the items most associated with high levels of satisfaction were availability of records in a reasonable time, currency and completeness of record information, and knowledge level of medical records staff. Contributing factors for better performers include:

- a customer-focused staff
- attention to detail to meet physician expectations (e.g., accurate, timely reports; availability of medical records and transcribed reports)
- open communication between medical records and the medical staff
- prompt follow-up on all physician comments and concerns
- convenient location for record completion, with convenient hours of operation
- availability of documentation online
- conscious effort to identify referring physicians and send them appropriate information promptly

figure 1—average inpatient record completion time (days) and number of documents online

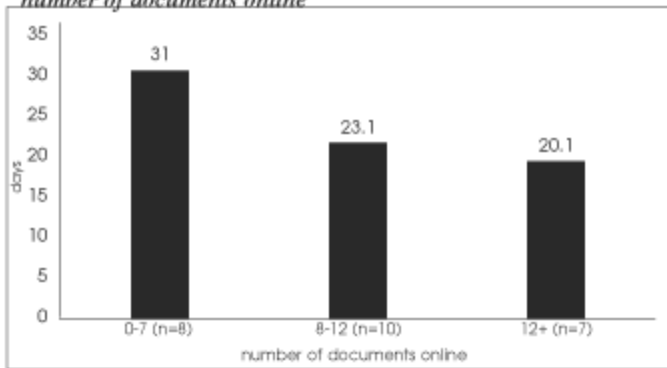


figure 2—labor and outsourcing cost per record and number of documents online

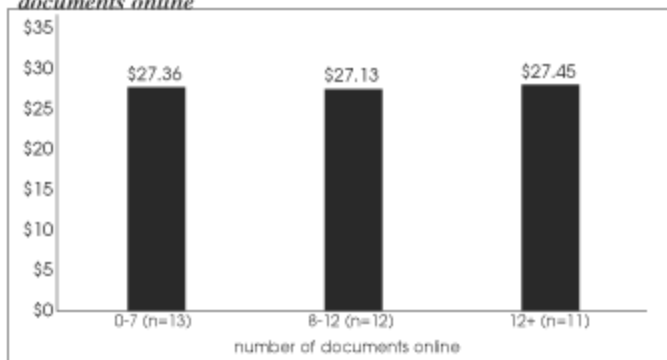


figure 3—physician satisfaction and number of documents online

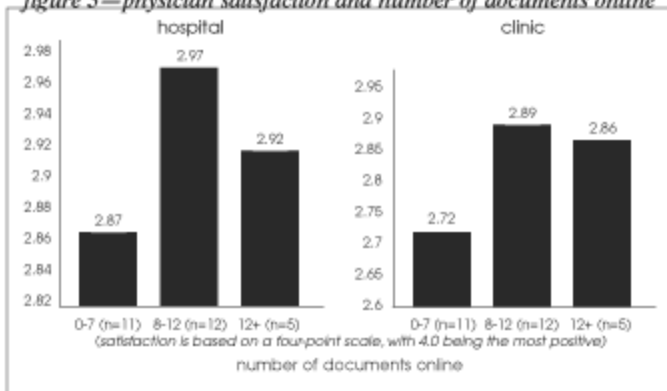


figure 4—inches of loose documents received daily and number of documents online

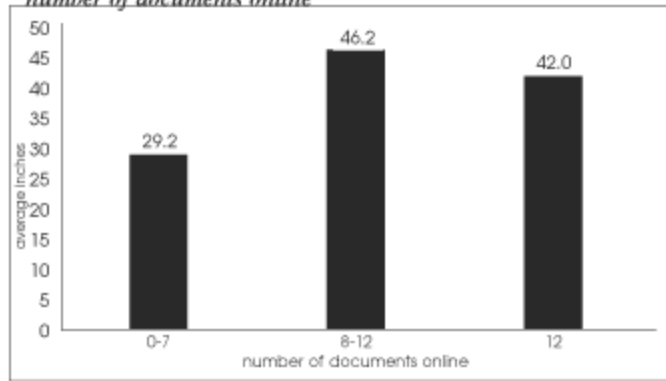


figure 5—standardized record format and average inpatient record completion time (days)

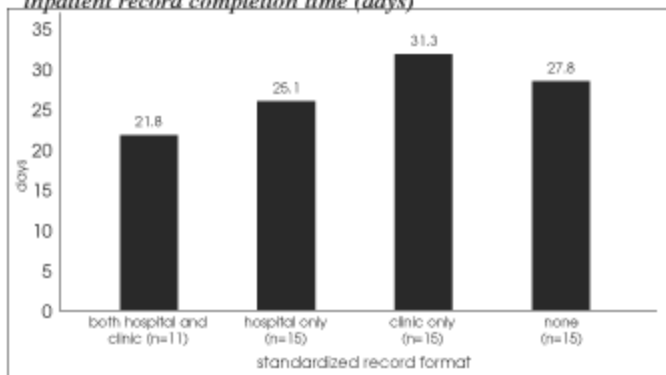


figure 6—percentage of incomplete records (greater than 30 days) and countersignature of verbal orders

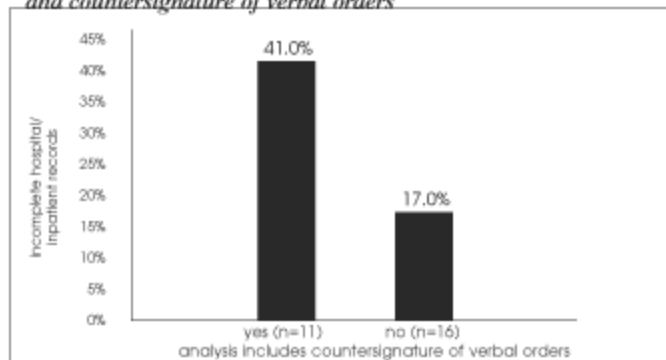


figure 7—delivery of patient records to physician offices and average inpatient record completion time (days)

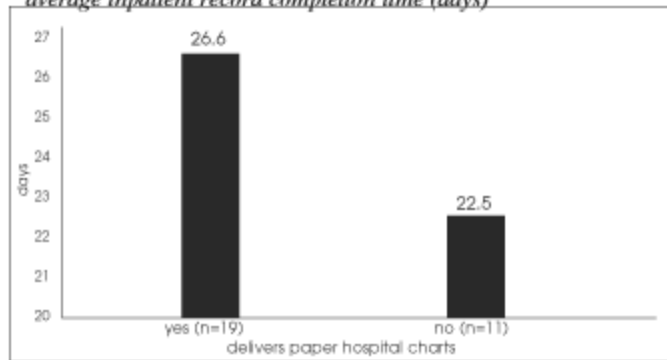


figure 8—delivery of patient records to physician offices and labor and outsourcing cost per record

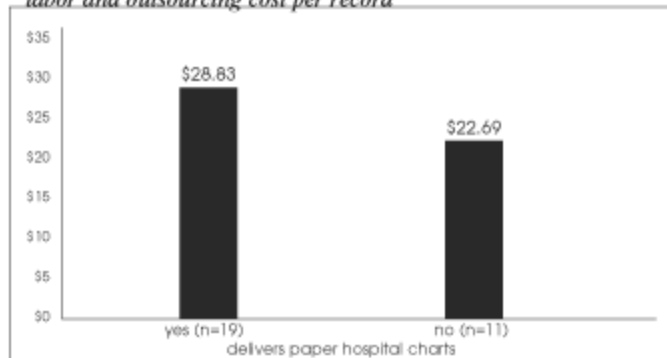


figure 9—record retrieval rate

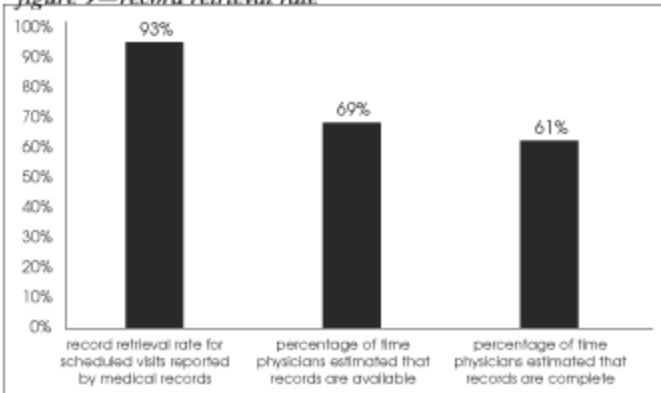
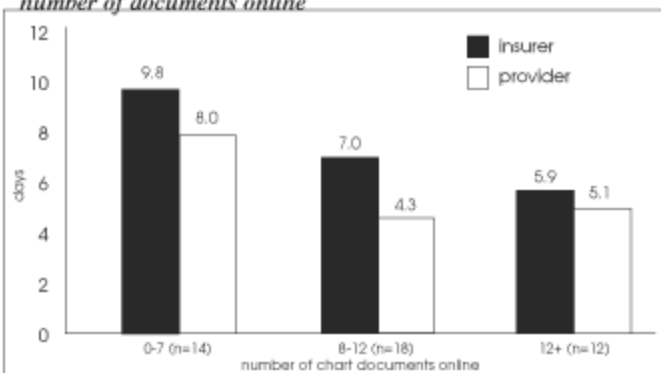


figure 10—release of information turnaround time (days) and number of documents online



In Search of Best Practices

The mission of the University HealthSystem Consortium (UHC), an alliance of 80 academic health centers (AHCs) based in Oak Brook, IL, is to "advance knowledge, foster collaboration, and promote change to help members compete in their respective health care markets." One way the UHC accomplishes its mission is helping members improve clinical and operating efficiencies. Since 1993, the UHC operations improvement program has been assisting AHCs in successfully managing the process of care.

Key components of this initiative are its operational benchmarking projects, which identify best practices in a variety of clinical and operational areas that support organizational improvement. To date, the operations improvement program has completed 11 such projects. The latest in the series is its Medical Records Benchmarking Project.

In this project, each of the 49 UHC member participants identified a project liaison for the institution. Participants also were given the opportunity to nominate an administrator or medical records director to serve on the 10-member project steering committee.

The steering committee was responsible for the project's direction and oversight. Specific responsibilities included establishing the project scope, defining indicators to identify better performers, and assisting UHC staff in developing the project findings. Performance indicators (shown in "Measures Used to Identify Better Performers" below) focused on cost, cycle time, and quality.

Data Sources

The tools used to gather information for the project included a benchmarking survey, physician satisfaction survey, independent coding review, site visits, and telephone interviews.

Benchmarking Survey

Created and pilot tested by the steering committee, the benchmarking survey included profile data (such as number of inpatient admissions), process information (such as the individual primarily responsible for record assembly), and outcome measures (such as labor cost per medical record and record completion time). The survey was conducted in March-April 1998 and completed by 45 participants.

Project liaisons met in June 1998 to review the first draft of the survey responses and to clarify any survey questions that were interpreted differently by respondents. Liaisons were also provided with an "audit report." Revised data were submitted in July 1998.

Key observations from the benchmarking survey data:

- the individual ultimately responsible for the medical records function was equally likely to be the CFO, CIO, or COO
- more than 70 percent of respondents code and file inpatient, emergency department, and ambulatory surgery records. Although 89 percent of respondents file clinic records, only 29 percent have coding responsibilities
- the most common functions outsourced include transcription (91 percent of respondents), release of information (69 percent), off-site storage (38 percent), and coding (27 percent)
- most medical records functions are performed by clerical staff. Functions with the highest level of technical staff involvement (never more than 25 percent of the activity) include analysis/assembly, release of information, chart completion/physician workroom, and medical record reviews

Physician Satisfaction Survey and Independent Coding Review

Each participant was given the option of participating in a physician satisfaction survey and an independent coding review. Thirty-one organizations participated in the physician satisfaction survey, and 25 organizations participated in the independent coding review. Participants in both the satisfaction survey and coding review received customized reports that included summary results and detailed institution-specific results.

The satisfaction survey targeted up to 200 physicians at each participating institution, using a written questionnaire developed by UHC. Satisfaction components measured for both inpatient records and clinic records included overall satisfaction, communication, record availability, transcription, and medical records staff. To promote candid responses, UHC mailed the survey and received responses. Individual responses were not shared with hospital personnel, with the exception of open-ended comments regarding operational strengths and areas for improvement.

The independent coding review focused on coding accuracy and completeness in relation to severity of illness assessment and risk adjustment. The review, performed by LexiCode from May-July 1998, examined a random sample of 50 medical records for each site, comparing coding assignment to medical record documentation. The results of the review were used as a screening measure for the benchmarking project. Participant-specific results were not publicly shared. Findings included:

- the most common causes of recommended DRG changes were a change in principal diagnosis and an addition of a complication or comorbidity (77 percent of all changes)
- the most common reasons for DRG coding recommendations were coding guideline noncompliance and incomplete record review (69 percent of all changes)

Site Visits and Telephone Interviews

Based on input from the project steering committee and liaisons, key performance measures were established as the means for selecting better performers for site visits and telephone interviews. Eleven institutions (see "Better Performers" below) were selected for site visits and phone interviews to review the area(s) of performance in which they excelled.

In addition to the better performers, UHC interviewed three organizations for their accomplishments in the use of technology. The purpose of the site visits and phone interviews was to identify and describe practices and enablers that contribute to outstanding performance. Several UHC members and staff participated in each site visit and phone interview.

Measures Used to Identify Better Performers

Outcome	Indicator
Cost	Average number of days of unbilled records
	Unbilled dollars as a percentage of total A/R
	Average number of days of unfilled loose documents
	Labor and outsourcing cost per adjusted medical record
Cycle time	Inpatient record completion time (days)
	Stat record retrieval time (minutes)-ED
	Transcription turnaround time (hours)-discharge summaries
	Release of information turnaround time (days)-health provider
Quality	Physician satisfaction-inpatient records (4.0 scale)
	Coding completeness and accuracy-percentage with DRG change
	Record retrieval rate for scheduled clinic visits

Better Performers

Institution	Areas of Outstanding Performance
University of Kansas Hospital	Unbilled dollars, cost, retrieval time and rate, loose filing, release of information, coding
Vanderbilt University Medical Center	Unbilled days and dollars, cost, release of information, physician satisfaction
University of Utah Hospitals and Clinics	Inpatient record completion time, unbilled days and dollars, cost, loose filing, physician satisfaction
University of Texas Medical Branch, Galveston	Reengineered HIM department, use of team concept, retrieval rate, loose filing
University of Virginia Health System	Inpatient record completion time, unbilled dollars, loose filing, release of information
Loyola University Medical Center	Inpatient record completion time, unbilled days and dollars
NYU Medical Center and Georgetown University Hospital and Clinics	Physician satisfaction
UCLA Medical Center, UCSD Medical Center, Shands HealthCare	Coding
Medical College of Georgia Hospitals and Clinics, Brigham & Women's Hospital, Harborview Medical Center	Use of technology

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Article Citation:

Carrier, Danielle. "Best Practices: What Works?" *Journal of AHIMA* 70, no. 7 (1999): 61-68.

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