PEER REVIEWED

Denials Management
IN A HOSPITAL-BASED RADIOLOGY PRACTICE

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Abstract

The objective of the study was to identify opportunities for increased profitability by utilizing formal process-improvement techniques to decrease insurance denials. The study was conducted using data from a radiology practice in Dallas, Texas, with 17 hospital-based radiologists and an in-house billing department with 13.5 billing/collections employees. The analysis utilized the practice-management system's denial reports from July 2004 (when the system was installed) to the present date. Critical denial categories were analyzed utilizing Six Sigma methodology to prioritize categories of denials for correction.

Introduction

Insurance denials are a necessary evil related to submitting claims to insurance companies for payment. Both in-house, physician-billing departments, as well as billing services, are realizing there is money to be made or lost in denials. Over the past decade, "denials management" has continued to be an area of interest for physician practices, although frequently the phrase is used to describe the submission of appeal letters in response to a denied claim. The study outlined in this article sought to decrease denials by correcting the root cause in addition to efficiently following up after the denial occurred.

While there are literally hundreds of insurance denial categories, for ease of understanding and tracking, denials essentially fall into one of two classes: compliance denials or administrative denials. Once denials are generally categorized into one of the two classes, it is easier to prioritize a particular problem and develop a corrective approach.

Compliance denials are those that potentially put the practice at risk, since they may involve not only a denied claim, but possible violation of regulatory requirements. Administrative denials, on the other hand, usually occur as an error or omission that is theoretically preventable once the source of the denial is identified. Administrative denials are costly to a physician practice. It is estimated that for a 10-physician (non-radiology) practice, "$9,248 was spent per year resubmitting denied claims – 73 percent of which are eventually paid." (MGMA, 2004) The sheer volume of claims processed by radiology practices means the staffing costs are most likely in excess of that amount. In addition, there is a greater risk when dealing with this large number of claims that a higher percentage may not receive any follow-up at all.

If resubmission of a claim can be avoided, there are obviously savings in terms of staffing levels.

Background Information

Radiology Consultants of North Dallas is a sub-specialized radiology practice located in Dallas, Texas, with 17 primarily hospital-based radiologists and 13.5 billing/collections staff members. It should be noted the billing department also coordinates distribution of outside films for several offices and manages a large number of "group accounts" that would not be included in this study.

RCND installed an advanced practice-management system in mid-2004 and has emphasized the use of technology to improve the billing/collections process. A formal denials-management program was implemented with the goal of improving clean-claims submission as well as the denials follow-up process.

System maintenance allowed for the consolidation of denial codes into several general categories, including the following:

- Coding (which includes bundling/unbundling as well as CPT/ICD-9 problems)
- Medical necessity
- Duplicate claims
- Missing/incorrect information
- Eligibility (which also includes "wrong insurance/other insurance primary" categories)
- Prior authorization
- Denied (no denial reason given)
- Non-covered service
- Timely filing

While insurance companies had a broad range of denial codes descriptors, they were grouped into one of the categories and were identified and assigned during the payment posting process. This enabled the practice-management system to group categories for analysis.

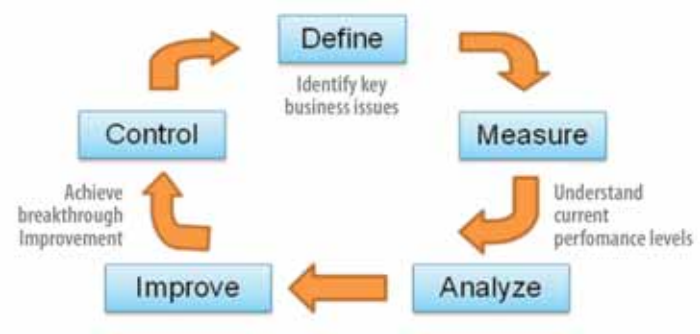
The system allowed for detailed reporting at the CPT code level and data could be sorted by site of service, date range, insurance carrier, and denial reason. Information was then moved to an Excel spreadsheet where it could be sorted and analyzed based on various criteria.

Since the practice-management system also incorporated document scanning, the explanation of benefits forms, radiology reports, and insurance correspondence were easily accessed at the workstation level for follow-up. This overcame the initial staff objection that the simplified denials category would not allow them to see the insurance company explanation for the denial during the claims follow-up process.

Denials Management and Process Improvement

Formal process-improvement programs were implemented in the United States manufacturing industry beginning in the 1970s when the country faced a global competitive marketplace and was losing ground on cost, price, and quality issues. For some time, Japan led the world in the area of process improvement and quickly gained market share in the electronics and automotive industries. Nimble US companies such as Southwest Airlines and General Electric recognized the benefits of refining and standardizing processes to improve profitability and over the years numerous process-improvement theories evolved.

Motorola developed the Six Sigma program, which measured the error rates per million for critical manufacturing processes and established a framework for breakthrough process improvement. (Harry and Schroeder, 2000) Six Sigma utilizes a series of defined steps, representing a circular series of actions that can be continuously repeated until a given process has been maximized:



The radiology billing process for a hospital-based practice occurs in a "manufacturing" environment, involving a high volume of transactions. Errors in the billing process result in an increased level of "handling" as denied claims are reprocessed, with several consequences:

- Delays in cash flow
- Increased staffing and overhead
- Decreased profitability
- Loss of revenue when denials are not worked due to overworked staff or inefficient processes

In terms of denied claims and Six Sigma methodologies, the following steps occurred:

- Define (at the beginning of project)
  1. Denied claims represent an opportunity to improve profitability for the practice
  2. Processes surrounding claims submission and follow-up appear to be inefficient
- Measure
  1. Categories of denied claims
- Analyze
  1. Processes in place for claims preparation, submission, and follow-up
  2. Potential risk and/or gains from addressing certain denial categories

3. Root causes of why denials are occurring

• Improve
1. Implement technology to eliminate manual processes and standardize
2. Train those involved regarding standardized processes
3. Change workflow and transition to paperless environment

• Control
1. Verify standardization of denials-management processes
2. Continue to measure to ensure replication of results

The initial assumptions for the program were that formal process-improvement processes utilized in manufacturing could successfully be applied in the context of radiology billing and collections.

Research Design and Methodology

Denial percentages are not currently measured on a standardized, industry-wide basis and in fact, articles in industry journals are largely based on opinions by industry experts rather than strict measurement documentation. However, the experts have consistently reported an industry denial percentage somewhere between 15 percent and 30 percent. (Masson, 2009) This gave RCND a baseline against which to compare their denial rate of 10 percent in 2004, demonstrating denials were not excessive even at the beginning of the project.

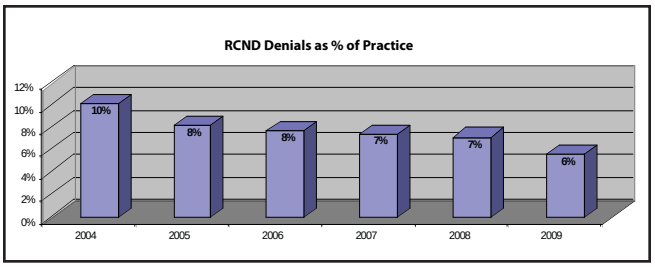
Since each organization may define denials differently, for the purpose of this analysis a denial was defined as a claim not paid on the initial submission. Denials were counted by procedure code so multiple denials could occur on one claim.

The study was performed utilizing reports from the practice-management system. Again, denials are identified and classified during the payment posting process and then routed to a designated denial queue to be worked by assigned staff members. Denied claims stay on the accounts receivable (A/R) until they are resolved – either by receiving payment, finalizing the denial by adjusting it off the Accounts Receivable, or writing off the account to collections as bad debt.

Population and Sample

Efforts were made in the beginning of 2004 to begin reducing the practice's denials, with a focused analysis launched when the new practice-management system was deployed in mid-2004. Since that time and as process-improvement steps were implemented, the practice has seen a marked decline in overall denials.

The entire population of denials from the practice was analyzed from 2004-2009 (2009 is annualized for this table) and showed a decline in overall denials from 10 percent to 6 percent. In some instances certain types of denials would increase for periods of time as new Medicare Local Coverage Determinations were implemented, insurance edits changed, or as a particular payor experienced claims-processing problems. However, the overall trend demonstrated improvement even as the volume of procedures increased.



Total denials were measured, including all categories. The 2004 percentage was annualized based on approximately six months of activity and the 2009 percentage reflects activity for the first six months of the year. In some cases, improvement in a targeted category could be offset by increases in another area, although the overall percentage continued to improve.

During the program, certain categories were selected for attention based on their perceived impact if corrected. Not all categories were addressed simultaneously, although the practice-management system's robust pre-submission editing program reduced the occurrence of certain administrative denials even before they were isolated for further attention. Again, the total improvement graphs may not accurately reflect improvements in individual categories, since gains in one area could potentially be offset by increases in another due to factors such as a new claims edit.

Critical Denial Categories

COMPLIANCE DENIALS

There were two categories of denials prioritized to receive special attention. Coding and medical necessity denials each represent potential compliance risks to the practice so both areas received focused attention early in the program.

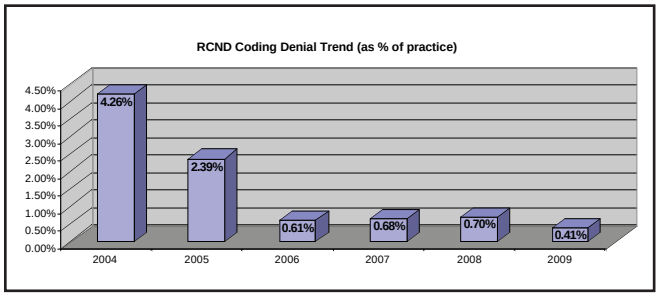
Coding and medical necessity denials can result from omissions in physician dictation, with medical necessity denials often resulting when insufficient information was provided regarding the indication for the study. The radiologists' dictation patterns were compared to the *ACR Practice Guideline for Communication: Diagnostic Radiology,* which provided an objective template of elements that should be included in each dictated report. Each physician in the group received a workbook that included an analysis of how their reports compared to the elements identified in the communication guidelines, more specifically highlighting the following areas:

- Indication/reason for the study
- Description of the exam (number of views, complete versus limited study, contrast usage, etc.)
- Impression

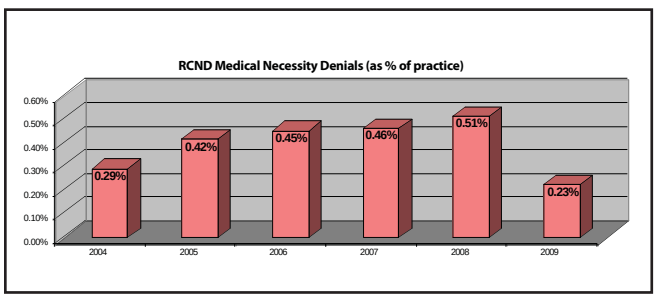
In addition, the workbooks included a sample of reports that were problematic for the coders and/or could not be appealed when denied. There were also samples of "good" reports with all necessary elements included in the dictation.

Physician leadership in the group reinforced the importance of complete and accurate dictation. Incomplete reports were returned for re-dictation during the early months of the program.

Initially coding denials represented approximately 4.26 percent of total procedures submitted (and therefore, 42.6 percent of total denied claims). Efforts to improve dictation patterns have continued to help reduce coding denials, with fewer than 1 percent of procedures denied for coding reasons from 2006-present. In 2009, the coding denial rate is approximately .41 percent (or approximately 7 percent of total denials).



It is interesting to note medical necessity denials have maintained a relatively consistent level since 2005 in terms of the total number of denials, although the procedures involved changed from one year to the next based on payor edits. For example, denials for PET procedures and vascular studies increased during this time period even if sufficient patient histories were included on the dictated reports. Medical necessity denials account for well below 1 percent of total procedures for the practice. (2004 medical necessity denials were annualized since the computer conversion occurred mid-year and 2009 represents a partial year).



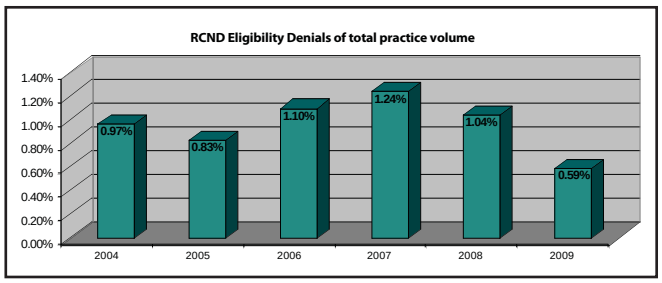
ADMINISTRATIVE DENIALS

Administrative denials were classified as human errors that can theoretically be corrected to improve revenue. Examples of administrative denials are site of service denials such as "prior authorization," "missing/incorrect information," and eligibility denials. These denials occur as the result of gathering and/or transferring inaccurate patient data, something a hospital-based group cannot control but must correct after the fact. As practice-management systems have improved pre-submission claims editing, these areas have been improved – and in an imaging-center scenario, as opposed to a hospital setting, where the group can better control front-end processes, administrative errors should be virtually eliminated.

It is estimated "eligibility drives 45% of most denials" (Waymack, 2006). The value-added clearinghouse used by the practice reported the overall eligibility denial category for all of their clients at 29 percent, although neither of the numbers cited represent radiology-specific figures. However with either estimate, the percentage is large enough to warrant attention and the ability to reduce these denials through improving clean-claims quality is an important goal.

Eligibility denials improved somewhat with the practice-management system's claims editing program in that it corrected certain data fields. Unfortunately limitations of the previous system did not allow for a before-and-after comparison and eligibility remained fairly consistent as a denial category for most of the years in the study. Again, the accuracy of this category rests with hospital employees who collect details of insurance information from patients during the registration/admissions process.

However, RCND changed to a "value added clearinghouse" in the fourth quarter of 2008, primarily to address eligibility denials since the software conducts a pre-submission eligibility check with more than 200 insurance plans. Eligibility denials dropped from 1.04 percent in 2008 to 0.59 percent in 2009 following this change, a nearly 50-percent decrease.



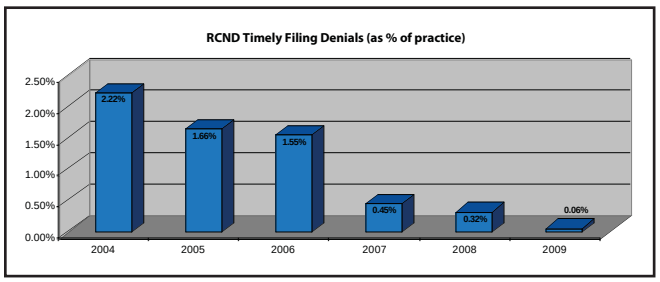
Another denial category that has benefited from the implementation of technology is timely filing. The reduction in timely filing denials resulted from a coordinated attack, including:

- Use of technology to shorten the time period from date of service to claims transmission as manual

processes were reduced

- Document scanning and workstation access to materials needed for follow-up (paperless environment)
- Sophisticated worklists in tickler files, allowing for sorts by various criteria, including claim age
- Prioritized follow-up of insurance correspondence, including posting of "zero pay" status
- Recent implementation of improved eligibility verification processes

Again, the practice is subject to quality issues related to hospital billing information, so the secret to reducing timely filing deadlines lies in the ability to identify an eligibility denial and react quickly. Since it is not unusual to face 90-day filing deadlines, speed and efficiency is of the essence.



RCND timely filing rejections represented 2.22 percent of total claims in 2004 (annualized based on the new software installation) and were therefore responsible for an estimated 22 percent of total denials for that year. Process-improvement activities were able to consistently reduce the number of timely filing denials over the years, with the addition of the eligibility checks dropping timely filing to .06 percent of total claims (.01 percent of total denials) in 2009.

Discussion and Conclusions

Processing insurance claim denials adds to the overhead of a physician practice and causes delays in cash flow if all denials are worked on a retrospective basis. Ideally, the emphasis of a denials-management program should be upon correcting the root cause of denials before claims are submitted, increasing the likelihood of payment on the first submission. The fact that payors will continue to implement new payment criteria and "edits" means it is unlikely that denials will be eliminated, but in many categories, they can be reduced.

Radiology practices will inherently experience a higher number of denials than non-hospital-based physician groups because they do not have control over the quality of information received from the hospital for billing. Problems are amplified by the high volume of claims processed by a hospital-based group, making it extremely difficult to address denials-management issues without the use of technology. On the other hand, an imaging center should theoretically be able to achieve a higher level of success in terms of correcting several denial categories since they control processes beginning at the point of patient scheduling.

Practice-management technology has continued to improve, making it possible to organize, measure, and analyze large volumes of data. In addition, it enables management to observe, standardize, and measure employee production. One of the problems faced in the industry is inconsistent measurement and largely anecdotal estimates. As performance benchmarks and standardized applications are established and refined, radiology practices will better be able to learn from one another to improve performance.

The ability to measure performance is critical to the adoption of formal process-improvement theories. The benefit of a formal process-improvement program lies in applying a structured, consistent methodology that can be replicated and measured. There are numerous theories applicable to radiology billing and collections, which can be broken down into a series of defined process steps and analyzed.

However, one of the observed weaknesses of the billing/collections process from one practice to the next lies in the lack of standardization and, frequently, inefficient replication of effort.

The denials-management program for Radiology Consultants of North Dallas utilized formal process-improvement steps to reduce the variability of key billing/collections process and to continually validate the effectiveness of those efforts. The use of leading-edge technology and value-added clearinghouse services were critical to the improvement achieved and emphasize the importance of continually observing vendor activity and advances. At the present time, the denials-management program continues to evolve within a structure focused on further refining all areas of the billing/collections process. As key denials-management processes are determined to be stable (or in control), the focus shifts to another area of the billing and collections operation.

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