

# THE BACKSIDE OF EMR

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## ABSTRACT

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In any industry, there is a paradox surrounding the introduction of new technologies to solve old problems; they invariably results in the creation of new ones, particularly during early and untested phases of implementation. The Electronic Medical Records (EMR) system is no different in that, through its implementation, we have entered an undefined environment that associates itself with the adequacy of chart documentation and the relationship to the conjecture of ‘medical necessity’. There is a definitive disconnect between the documentation => coding => medical necessity chain of events, which needs to be remedied before EMR can provide the types of benefits hoped for. Early studies point to a pendulum shift from not enough documentation to support the level of care to more documentation than is necessary to support the level of diagnoses. In this, the medical necessity issue has become the fulcrum that will be used to support a financial metric within the practice. In order to move EMR to a high level of benefit, our industry needs to find a more standardized approach to defining medical necessity and EMR systems need to encourage the technology needed to accommodate efficiency without sacrificing the strategic compliance initiative.

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## INTRODUCTION

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Historically, the physician work product has been represented by the information contained within the patients’ medical record and in order to standardize the nomenclature, is referred to as ‘documentation’. In its basic definition, documentation is both the instigator and the product of the medical procedure and/or service. In essence, it provides a logical proof of the work done, including complaint, historical findings, physical exam, diagnosis and recommendations for treatment (or treatment at the time of visit). Extending beyond the quality issues to those of econometrics, documentation represents the basis behind payment to the medical practice. This component is driven by the process of procedural coding; in that the HCPCS code selected is, at least in theory, a result of interpretation of the documentation. In reality, payers can not (and do not) require proof of documentation in all claims submissions, however, using applied mathematics (in the form of extrapolation), audits are used to measure the quality of documentation and link that that to the reimbursement model. In the final analysis, there are, then, three components of the coding experience;

1. The documentation in the chart accurately describes the details of the visit, encounter, service and/or procedure
2. The code selected is based upon proper and complete documentation

3. The code selected based upon the documentation is the minimum resource consumption necessary to satisfy the diagnoses.

The latter (number 3) specifically addresses the issue of medical necessity, which defines the purpose of this paper. The medical necessity test is met by determining whether the services provided to the patient were inadequate, met or exceeded the relationship to the diagnoses. For example, a 99201 for a new patient in generally good health complaining of simple rhinitis may be inadequate while a 99205 would most certainly exceed that test. If the HCPCS code selected exceeds the test for medical necessity, the result may be that the claim is 'down coded' or denied by the payer. Down coding is a process whereby the payer will decline the level of the submitted code to one that more adequately meets the medical necessity test.

It is, then, a requirement to understand the process of defining 'medical necessity'. Unfortunately, there is no industry-wide standard for this process. There are, however, several databases that are used by both payer and provider alike. These databases, through a one-to-many relationship, use a process of linking 'adequate' HCPCS codes to a single or set of diagnostic (ICD-9) codes. Practically, there are several thousand ICD-9 codes and several thousand HCPCS codes. Therefore, all of these databases are defined as conjectures since it would be virtually impossible to prove a quantifiable relationship between all diagnoses and all procedure codes (and no such proof currently exists). Nonetheless, the payer will use this database to determine whether the relationship meets or exceeds the test. In our example above, a 99205 submitted for a diagnosis of rhinitis may be either denied outright or down coded (for payment purposes) to a 99202 or 99203, depending on payer criteria. The question that begs answering here is this; if the procedure is, in fact, down coded based upon the relationship between the diagnosis and procedure code, does that mean that the criteria for the 99205 was not met? The answer is, in absence of a chart review; no. In some circumstances, the payer may request a copy of the chart in order to validate the selected code using strict adherence to the E&M guidelines. Even in cases where the documentation does support the code, it still may not pass the test for medical necessity. Why? Because medical necessity is independent of documentation in that it is a process of linking the code itself (resource consumption) to the diagnosis. Therefore, even if the E&M process included all of the documentation necessary to validate the selected E&M code, it may be determined that the level of work to achieve that level of code was unnecessary. This is the heart of the medical necessity determination.

Historically, documentation has been a problem plaguing medical practices. While anecdotal here, it is widely accepted that physicians have a tendency to under document their findings in the medical chart making coding decisions difficult. The result, in a conservative effort, is to code at or below the actual level of the code as it is related to the resources consumed for the service and/or procedure. For example, a physician may see a patient for a relatively complex problem (diabetes) yet not document all of his or her findings in the chart. In this case, it may result in an E&M code that is inadequate as it relates to the diagnosis. Based on studies performed by both private payers and Medicare (through the CERT program), under documentation is a pervasive problem in medical practices, potentially resulting in the loss of millions if not billions of dollars in payments to the practice.

Since documentation drives the first part of the coding equation and since the physical act of writing in a chart or remembering everything in the dictation process seems overwhelming to many providers, a new and more robust solution needed to be found, which is introduced as the Electronic Medical Record (EMR). The primary function of an EMR program is to give the provider an easier, more detailed and more efficient method for documentation. EMR is a computer software program that, as its name states, allows documentation for the visit to be digitally translated into the medical

record. In many EMR systems, templates are developed that contain commonly represented factors of the visit process of the visit process, allowing a provider to simply check a series of boxes (or click on a series of buttons) in order to complete the documentation for a series of events. Popularity of EMR is expanding exponentially and some predict that greater than 50% of all medical practices will be using EMR by the end of 2007.

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## CONJECTURE

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It would seem, then, that EMR is a revolutionary solution to an age old problem; adequate documentation of a patient encounter. And it fact, is looks like this is the case. There is, however, a consequential rebound effect, which has its roots in the issue of medical necessity. Remember that the process of documentation to coding is one step in the process and coding to medical necessity is the other. Mathematically, however, there is no equation that holds true from documentation to medical necessity. In essence, unless there is a link that can show inadequate coding related to adequate documentation, documentation and medical necessity are independent variables. What is true, however, is that greater (and more detailed) documentation will lead to higher levels of coding, which, if not supported through diagnoses, will lead to higher levels of denials and greater occurrences of down coding due to the failed medical necessity test.

In one study, we compared the rate of medical necessity-related issues (including rejections, denials and down coding) in seven medical practices for a period of one year prior to the introduction of EMR to one year after implantation of EMR. Our results indicated a statistically significant increase in the volume of medical necessity related issues, as defined above. Individual chart reviews supported our suspicions that this was due to over documentation; a unique phenomenon brought about by this improvement in documentation technology. In the face of the results of this small study, we were not certain if the increase in documentation details represented work actually done by the provider or documentation of work that was not performed, but inferred through the use of templates. The latter would present a new category of compliance violations that would require both a modification of the EMR applications and a more stringent process of chart review; perhaps including additional documentation requirements through provider validation instruments. Another concern was that the assignment of ICD-9 codes were inappropriate or even that the guidelines themselves were inherently flawed. We did look at the diagnoses codes assigned and while we did not conduct a significant review of the medical record, they did appear to accurately represent the presenting chief complaint and were linked to the appropriate procedure code. With respect to E/M guidelines, this continues to be a concern that is beyond the scope of this paper. Remember, the purpose of the methodology used in the E/M guidelines was to quantify the value of the service so that an RVU could be assigned for each code level. Considering the high degree of elasticity in interpretation of grids used to determine the key components required for E/M coding, many questions remain as to the efficacy of the initial design.

Another test is to look at the mean of E&M visit levels reported by the practice both prior to and after implementation of EMR. In our study, we did this by developing a distributed mean measurement using geographically unadjusted RVU levels. To accomplish this, we multiply the RVU value for a particular E&M code by the frequency of use as a percentage of all frequencies for that category. Then, we take the sum of those products in order to obtain the utilization mean. As an example, in one case, we calculated the mean RVU for new office visits as 3.23 for the period one year prior to implementation of EMR and as 3.81 for the year after implementation. Using other statistical calculations, this 18% represented a statistically significant increase and was not unlike our findings for the other practices we studied. Using another relative calculation (acuity factors), we

controlled for the change in overall complexity of procedures, which further supported an increase in the level of E&M codes based solely on documentation.

The next test would be to determine if there is a correlation between this increase in the level of E&M coding and the level of denials and/or down coded events. We found that, in fact, there was a relationship which was significant for five of the seven practices. This would indicate that, in our small sample, EMR has created a new set of both compliance and financial problems for the practice. One area of study should focus on whether a practice was experiencing compliance issues related to code levels not supported by adequate levels of documentation. This affects the non-financial (except as it relates to potential audit recoveries) area of the practice. The other is to study the relationship of coding to medical necessity as this affects the financial area of the practice. The results of these two reviews would assist the practice in defining their specific needs and possible make the decision of which EMR to purchase a more efficient task.

There are other benefits to EMR beyond compliance and finance. These relate to issues that have already been dealt with in other industries, such as storage space, retrieval efficiencies, access and the like. Unfortunately, these also bring with them additional challenges, such as protecting data from loss and theft, tracking access to information and obsolescence as a result of software that may end up unsupported by their developers. The latter has been problematic with both practice management and medical billing software programs over the years as start-ups went out of business within a short time.

While this was a small study, anecdotal evidence from some payers do support our initial findings and have served to put the medical community on alert. Certainly this is not a difficult conjecture to test; all the payer (or practice) needs to do to identify potential aberrancies is to develop the differential calculations for mean RVU values by E&M category and compare the resultant values by period. Significant increases without demographic explanations would point towards a change in the coding structure and if associated to an EMR system, raise concern of over documentation.

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## CONCLUSION

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As stated in the introduction, new technologies, in any industry, introduce risks as well as benefits. This may be particularly true in healthcare as implementation of true business models into the medical practice has been slow at worst and incomplete at best. Lack of standardization for testing of medical necessity is a recognized problem as is the administrative complexity and arguably, the medically unnecessary E&M guidelines. EMR attempts to combine the world of quantification (coding by guideline) with qualification (interpretation of documentation related to medical necessity) without the benefit of any true methodological studies. Those that are available for review focus primarily on software applications issues, such as compatibility, resource consumption, networkability, transportability and to a lesser extent, the polymorphic capabilities of the template models (with respect to specialty needs). To my knowledge, no reported studies have dealt with the issue of linking documentation to medical necessity.

Specifically, in order for EMR to experience both a useful and efficient transition to the medical practice, our industry should tackle two primary issues:

1. standardization of medical necessity methodology and
2. understand the difference between increasing documentation as opposed to improving documentation.

Until these have been addressed, I believe that the risk of EMR cannot be adequately assessed. In the absence of this approach, practices should be judicious about educating physicians to the concept of medical necessity and its relationship to documentation. And while much of this may be solved by including medical necessity edit engines within the EMR program, this does not address the issue of standardization.

Finally, it is important to remember that not everything technological is of benefit to everyone. When human intelligence and interpretation dominates a field such as ours, total technological automation will not provide a total solution. Therefore, we should carefully weigh the benefits of integrating human interaction with the process of automating documentation within the medical practice.