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# reducing lost revenue from inpatient medical-necessity denials

A data-driven approach can help hospitals limit payment denials that are based on questions of whether an admission was medically necessary.

The vast majority of hospitals in the United States are all too familiar with denials of payment. Payers may issue denials for any number of reasons, chief among them perceived errors in submitted claims, failure to follow the rules and processes of a particular insurer, and questions about medical necessity.

## AT A GLANCE

- > Payment denials based on questions of medical necessity have increased significantly for many hospitals, while the odds of mounting a successful appeal have diminished.
- > Instead of focusing primarily on making appeals more effective, hospitals should construct a strategy for reducing the incidence of medical-necessity denials through the collection and analysis of denials data.
- > Hospitals can break down the data to produce optimal approaches at both the case management and service levels to minimizing lost revenue from medical-necessity denials.

Of those reasons, denials based on medical necessity present the biggest challenge because:

- > The justification for the denial may not be clear.
- > Different medical-necessity guidelines may be used depending on the insurer's preference.
- > Interpretation of guidelines may vary from one insurer to the next or among different reviewers within the same insurer—and sometimes even from one review to the next by the same person.
- > Insurers may not follow their own guidelines.
- > Hospitals may need to depend on physicians who lack the same level of financial incentive to reduce denials.

Internal data and information we have gleaned from discussions with our hospital partners point to a significant increase in medical-necessity denials for many hospitals over the past 10 years, corresponding with a general increase in various Medicare denials and fee-for-service Medicaid denials.

(For the purpose of this article, our focus is exclusively on inpatient medical-necessity denials, with the term *medical necessity* pertaining to the inpatient setting.) A worrisome implication of this trend is that many regulatory entities—alarmed at the continued rise of medical costs—see medical-necessity denials as a legitimate means of controlling healthcare costs.

Successfully appealing these denials has become more difficult, according to our data: Overturn rates have dropped in many hospitals, and more level-2 and level-3 appeals are taking place along with hearings before Medicare administrative law judges and state Medicaid administrators. These trends are resulting in significantly higher costs and fewer recovered dollars associated with the appeals process, making for a dramatic reduction in ROI. In some facilities, in fact, we have seen a negative ROI.

It is worth noting that with the recently implemented Medicare two-midnight rule, the expectation is that we will see a reduction in Medicare inpatient medical-necessity denials because recovery audit contractors have been instructed not to review cases for medical-necessity issues if those cases meet the two-midnight criteria. The result should be reductions in Medicare inpatient admissions and in medical-necessity denials. However, the overall impact on denials is uncertain given that other payers are constantly adjusting their denials strategy.

There certainly are strategies to improve the ROI on appeals.<sup>a</sup> However, the primary strategy for every hospital should be to reduce the incidence of denials in the first place. With new bundled payment methodologies that make physicians more financially accountable for denials, and with the availability of powerful clinical data, hospitals can develop actionable strategies that will have a significant impact on denials activity.

## Data Collection and Analysis

There are different sources of data in the hospital setting, including claims data, Medicare payment data, and denials data. We suggest using denials data because such data:

- > Are timely and address the issue at hand
- > Are immediately available and easy to collect
- > Provide a steady stream of information that allows for re-measurement and assessment of interventions over time
- > Allow for calculation of denial rates using admissions volumes—which are readily available and can be categorized by physician or insurer—as the denominator

It is best to gather both clinical and administrative data. The number of medical-necessity denials for a hospital in a given month typically is in the tens to low hundreds, so collecting data on these denials should not require significant resources. By deploying a tool that aggregates data directly from the medical record, a hospital can most easily control data integrity, run multiple reports, and perform analysis. However, any data collection tool should do the job.

The goal of the analysis is to identify the drivers of denials at a level that is specific enough to be actionable, but broad enough that any intervention would make a significant impact. Analysis should be sufficiently robust to allow for the development of interventions at the service and case management levels.

Data collection should focus on two main goals. At the case management level, the goal should be to obtain insight into denials trends to gauge where the hospital or health system has the greatest potential to reduce denials by allocating resources more efficiently and making strategic adjustments. And at the service level, the goal should be to understand the physician-controlled drivers of denials to help physician leaders work with case management in implementing sustainable changes to reduce denials.

a. Olaniyan O., Brown, I.L., Williams, K., "Managing Medical Necessity and Notification Denials," *hfm*, August 2009.

## Case Management Analysis

This analysis first should seek to identify patterns that help define the denials environment of a given hospital. Data points and trends to consider include:

- > Days denied per denied admission (DDPDA) and how that measure is changing over time
- > The portion of the admissions that tends to be denied
- > Obvious diagnostic trends

*DDPDA* refers to the average of all denied days within a number of denied admissions. For example, if a hospital has 10 admissions with an average length of stay (ALOS) of four days, and on average only two of those four days were approved, the DDPDA for those admissions is 2. This number offers valuable insight into denials-related trends at a hospital. A number higher than 2 associated with a particular diagnosis indicates that efforts to reduce denials through medical management would be worthwhile.

The exhibit below illustrates the significance of calculating the DDPDA. Using actual data at a sample hospital, we see that total dollars denied went up by a staggering 42 percent in 2012 compared with 2011. Upon further analysis, this

increase was driven by two factors: a 19 percent increase in number of days denied and another 19 percent increase in expected payments per day that were lost on denial. (The latter increase in part reflected increases in charges for this hospital.) Although the number of admissions denied remained relatively stable, the DDPDA increased by 23 percent.

The increase in the DDPDA is an important observation because it is a number over which hospitals have some control. Affecting the number of admissions denied is possible but much more difficult, and hospitals can make little or no impact on expected payments per day.

The DDPDA can be influenced by an effective use of concurrent-review policies, although given the scarce availability of resources, any case management intervention should be targeted as precisely as possible. Concurrent review is required by the National Committee for Quality Assurance and most other utilization-review accreditation entities, but it is contingent, of course, on the submission of clinical information to the managed care company in a timely manner. Access to real-time information on denied days is critical because the hospital often has the

### PAYMENTS LOST THROUGH DENIALS OF ADMISSIONS AT A SAMPLE HOSPITAL

Quarter	Expected Payments Denied	Days Denied	Admissions Denied	Average Days Denied per Denied Admission (DDPDA)	Average Dollars per Day Denied
Jan-Mar 2011	\$716,580	515	267	1.9	\$1,391
Apr-Jun 2011	\$705,049	483	223	2.2	\$1,460
Jul-Sep 2011	\$811,180	527	253	2.1	\$1,539
Oct-Dec 2011	\$722,161	488	254	1.9	\$1,480
Jan-Mar 2012	\$1,239,381	782	264	3.0	\$1,585
Apr-Jun 2012	\$1,155,123	621	250	2.5	\$1,860
Jul-Sep 2012	\$1,025,693	604	243	2.5	\$1,698
Oct-Dec 2012	\$766,751	389	211	1.8	\$1,971
<b>Total 2011</b>	<b>\$2,954,970</b>	<b>2,013</b>	<b>997</b>	<b>2.0</b>	<b>\$1,468</b>
<b>Total 2012</b>	<b>\$4,186,949</b>	<b>2,396</b>	<b>968</b>	<b>2.5</b>	<b>\$1,747</b>
<b>Percentage Change</b>	42%	19%	-3%	23%	19%

SAMPLE HOSPITAL'S MOST-DENIED DIAGNOSES AND THEIR ASSOCIATED DDPDA*	
Diagnosis	DDPDA
Syncope and collapse	2.3
Fracture (not otherwise specified—closed)	2.4
Episodic mood disorder	2.9
Depressive disorder	3.4
Heart failure (not otherwise specified)	4.6
Failure to thrive—child	4.3
Abscess (not otherwise specified)	3.7
Mood disorder/other disorder	3.3
Dizziness and giddiness	3.0

\*Days denied per denied admission

opportunity to act immediately and possibly prevent a second or third day from being denied.<sup>b</sup>

To put the data to practical use, the top diagnoses being denied should be identified. Then, a review of DDPDA for these diagnoses can identify which are driving the overall increase in DDPDA. An example of such findings, which are necessarily hospital-specific, is shown in the exhibit above.

Enhanced concurrent review would not be as beneficial for diagnoses with a DDPDA of less than 2, such as chest pain and abdominal pain. Diagnoses with a DDPDA of greater than 2 would call for increased case management emphasis.

b. Olaniyan, O., Brown I.L., Williams, K., "Concurrent Utilization Review: Getting It Right," *Physician Executive Journal*, May-June 2011.

SAMPLE HOSPITAL'S DIAGNOSES FOR WHICH THE ALOS IS CLOSE TO THE DDPDA*	
Diagnosis	DDPDA
Chest pain—not otherwise specified	1.5
Headache	1.9
Abdominal pain—generalized	1.8
Pain in limb	1.5
Fever	1.8

\*ALOS: Average length of stay; DDPDA: Days denied per denied admission.

The goal would be to prevent more than two days from being denied and bring down the DDPDA of these diagnoses and the overall hospital DDPDA.

Timely concurrent review with immediate follow-up on denials—by providing additional clinical information to support continued inpatient stay, for example—is critical to achieving the goal of a reduced DDPDA. Because the DDPDA can be tracked over time, it is possible to evaluate the effectiveness of any case management interventions.

Another valuable endeavor is to look at diagnoses with frequent denials but a low DDPDA and ALOS. Such consideration may help a hospital decide what types of resources to allocate for sentinel preadmission case management in the emergency department (ED). Denials for diagnoses with an ALOS of fewer than two days lend themselves to prevention through the use of ED case managers, who review potential admissions for these diagnoses before the admission order is written and who may recommend observation if established criteria for admission are not met. These types of cases typically have an ALOS that is the same or very close to the DDPDA because the entire admission is typically denied. Examples of such diagnoses are shown in the exhibit below left.

This approach helps the hospital's case management department allocate scarce concurrent-review and ED case management resources to reduce the impact of denials. The data allow the case management department to effectively target resources based on diagnosis and the DDPDA rather than taking a blanket approach. It is important to note that this method would be used in conjunction with other considerations, such as physician denial activity or charges associated with specific denials, to determine case management resource allocation.

### Service-Level Analysis

Looking at denials by service allows a hospital to identify physician drivers of denials and develop interventions to mitigate the impact of those drivers.

For example, in a university hospital, a large proportion of denials may be driven by specialty services such as neonatal intensive care, neurosurgery, neurology, and pediatric gastroenterology. In a community hospital, internal medicine and general surgery may drive most denials.

A hospital with a data application that does not capture denials by service may need to aggregate data from all physicians in a given service to approximate these totals. Once the services driving most of the denials have been identified, it is possible to drill down into each service to look for trends and patterns.

Focusing on services rather than individual physicians has two primary benefits.

First, working with groups of physicians to reduce denials tends to be more effective because physicians may be less prone to take offense if they view the approach as being collaborative. The approach also taps into physicians' competitive nature, which tends to kick in when they work alongside each other to address a problem.

Second, it is rare to find one physician driving a high enough number of denials to have a major impact on the total. Most physicians who do drive a significant number of denials are high-volume admitters, and hospital management may be reluctant to aggressively address denials with those physicians for fear of upsetting them—especially if they have choices about where to admit their patients.

### Case Study: Payment Denials Analysis by Service Area

Service-level data from an analysis of an actual hospital, shown in the exhibit above right, indicate that denials for this hospital are being driven in large part by trauma, cardiology, virology, hospitalist services, neurosurgery, and pediatric gastroenterology. For each service, the analysis looked at diagnostic trends, number of denied days, and LOS. If any patterns were observed, a sample

SAMPLE SERVICE-LEVEL DATA OF PAYMENT DENIALS

Service	Admits	Total Days Denied	Amount Denied*
Trauma	220	423	\$1,905,876
Cardiology	97	217	\$1,144,357
Virology	72	210	\$616,233
Hospitalist Service	62	195	\$477,869
Neurosurgery	55	184	\$981,359
Pediatric Gastroenterology	25	151	\$293,489
Family Medicine	72	148	\$416,023
Adult Psychiatry	33	129	\$228,267
General Medicine	41	115	\$365,950
Child Psychiatry	30	100	\$234,717
Pediatrics	40	88	\$248,035
Cardiac Surgery	19	76	\$280,436
Neurology	36	71	\$240,940
Orthopedics	30	63	\$392,162
General Surgery	21	56	\$195,126
Obstetrics	36	45	\$110,914
Surgical Oncology	13	38	\$137,673
Ear, Nose, and Throat	14	21	\$112,731

\* Amount denied refers to expected payments.

of records was taken to examine the actual drivers of denials.

**Trauma.** The analysis first focused on the denials data for trauma by diagnosis and LOS. No obvious themes were noted based on diagnosis, and LOS ranged from same-day discharge to 53 days.

The analysis did find that same-day discharges accounted for 4.8 percent of all denials in trauma. That number stood out because in most other services in the same hospital, only 5 to 10 percent of denials were same-day discharges.

Based on this finding, sample cases were selected from same-day discharges to examine specific drivers of denials. The analysis found that many of the cases were admissions followed by a thorough evaluation to determine whether further care was necessary. In most cases, the initial evaluation

was negative and was followed by a quick discharge, sometimes in four hours or less. Observation or a simple ED encounter would have sufficed for many of the cases, especially given that placing patients in observation rarely changes the quality or type of care provided and is purely an administrative designation. The resulting recommendation was that trauma patients requiring evaluation be placed in observation until the evaluation was complete, with the results determining the need for admission.

**Cardiology.** Predictably, a third of all cardiology denials were for chest pain, generally in cases of patients who presented without evidence of acute coronary syndrome (ACS). In reviewing individual records, the analysis found that patients with chest pain in the cardiology unit were more likely to meet admissions criteria than were patients in general medicine.

The recommendation in this case was more diagnosis-based than service-based. In the absence of myocardial infarction (MI), ACS, or any other obvious findings warranting immediate admission, all patients with chest pain should be evaluated in the observation setting with serial cardiac enzymes, electrocardiogram, and cardiac imaging. If signs of ACS or MI develop at any time during the evaluation, admission would take place immediately.

It was recommended that cardiology take the lead in building these protocols, which then would be implemented for all services that manage patients with chest pain.

**Virology.** The most common denials in this service line were for patients with respiratory diseases, including cellulitis and pneumonia. A chart review indicated that admissions for cellulitis often were denied in the absence of constitutional symptoms or evidence of systemic infection warranting admission, and that cases of pneumonia typically were denied if they did not meet admission criteria based on the pneumonia severity index.

The recommendation here was to have the hospital's physician adviser work with virology to develop cellulitis and pneumonia admission and treatment guidelines using evidence-based medicine. These guidelines would be implemented across all services that manage cellulitis and pneumonia cases. Guidelines developed by physicians typically end up approximating popular insurance guidelines such as Milliman, and generate more buy-in from medical staff.

**Neurosurgery.** A chart review showed that most of the denials were driven by inefficient progression of care. In some cases, patients were admitted unnecessarily for a preoperative day; in others, there were delays either in the time to surgery after admission or in discharge. Neurosurgery had a higher DDPDA than did the other services, and findings of the analysis showed that these costly denials were driven mostly by delayed procedures and by admissions occurring several days before a procedure to allow for preoperative testing.

The recommendation was to have case management follow neurosurgery cases closely and look for ways to proactively prevent delays or reduce the number of days denied. This approach highlights the importance of data in helping case managers do their jobs effectively. A strong physician adviser is helpful in getting physicians to buy in to the involvement of case management.

**Pediatric gastroenterology.** A review of the data showed that almost half the denials were for constipation or obstipation admissions. Review of medical records showed that these patients were admitted without any initial attempts at outpatient treatment with enemas—an approach that often works in conjunction with home healthcare support as needed. The recommendation was to ensure that patients had documented outpatient treatment with enemas prior to admission.

These sorts of findings clearly are hospital-specific. Such an analysis allows us to drill down far enough to ensure the findings are sufficiently clear-cut and precise for broad-based, actionable interventions to be developed.

### Being Solutions-Oriented

Given the increasingly aggressive approaches to payment denials, every hospital should have a robust denials-prevention program that includes the ability to collect denials data and use it to meaningfully evaluate trends.

The data analysis described in this article should be followed by specific recommendations on how to develop processes to reduce denials. Once a solution is identified, these processes should be developed with the full buy-in and involvement of physician leaders and case management, and be followed by frequent reevaluations to assess whether the action is effective. If evidence

suggests a certain strategy is working, steps should be taken to institutionalize the processes to ensure any gains are long-lasting. Physician buy-in is critical for success and can be promoted by ensuring the data are presented by another physician and are statistically sound. ■

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