Data for Healthcare Improvement – Developing and Applying Avoidable Delay Tracking

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Data for Healthcare Improvement — Developing and Applying Avoidable Delay Tracking

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During the past decade, case management has become an outcome-driven practice. This is in response to various needs: metrics to track and benchmark performance, identification of performance improvement opportunities, reporting requirements of regulatory standards, and evidence to justify the impact of case management resources. Concurrently, advancements in data capture systems and practice innovations give health care providers rich and detailed information regarding opportunities to improve patient care, throughput and discharge processes.

One of the measures at the forefront of these changes is the tracking of avoidable delays. According to the American Case Management Association's (ACMA) National Hospital Case Management Survey, conducted in 2005, 25% of case management departments tracked avoidable days/delays. By the 2007 survey, 88% of hospital case management departments reported tracking avoidable days or delays. Avoidable delays had become the second most tracked metric, second only to Length of Stay (LOS).

Rush University Medical Center (Rush) began tracking avoidable delays 15 years ago. This article examines Rush’s process for tracking avoidable delays, key considerations in the development of an avoidable delay tracking process, successful methods to utilize avoidable delay information for organizational improvement, and examples of the outcomes produced. Rush is a 613-bed nonprofit, academic medical center in Chicago, IL.

In 1993, Rush merged the Social Work, Utilization Review and Discharge Planning divisions into a single case management department consisting of both nurse and social work case managers. Tracking the causes of delays in patient care was an early priority. Initially, Rush approached this tracking with the financial goal of preventing denied days. However, as the metric was put to use, case managers realized that delays often impact patient flow and the quality of care, and in fact represent a broader opportunity for performance improvement. The thinking shifted – case management leaders began looking beyond what the payer would pay, and beyond traditional boundaries. Avoidable delay data is now utilized at Rush for performance improvement throughout the organization; it is routinely reported to physician section chairpersons, nursing leaders, department administrators, and medical staff and utilization management (UM) committees.

DEVELOPING AN EFFECTIVE DELAY DICTIONARY

The foundation of a system for tracking avoidable delays is a dictionary to help categorize delay reasons or causes. The dictionary should include reasons for avoidable delays for which tracking can produce actionable performance improvement information. It is useful to divide the dictionary into broad categories, such as financial delays, clinical delays, physician issues, system issues, etc. Input by medical staff, the UM committee and/or UM plan can provide valuable insight into how these categories may be best structured.

Two pitfalls commonly hamper the effectiveness of an avoidable delay dictionary: attempting to be too broad and attempting to be too narrow. A dictionary that is too large, with too many delay categories is a result of categories that are overly specific. This is not only confusing to staff using the dictionary, but will preclude the tool from producing useful comparative data. Many categories will have very small numbers of occurrences during any month or quarter. Analyzing these very small numbers is difficult as variances and trends are difficult or impossible to discern. Thus, overly specific dictionaries fail to produce actionable performance improvement information.

Avoidable delay: Any barrier to facilitating effective, efficient, timely and safe care.¹

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Similarly, a dictionary with too few broadly defined causes of delays will also be problematic. Such broad categories do not allow the intended audience to drill down into the primary and fundamental reason for the delay. An effective delay dictionary must develop a balance between under- and over-specificity. If categories are too small, trends may not be apparent and will be difficult to detect. However, if categories are too broad, it becomes difficult to differentiate.

Analysis of the accountability for each occurrence is important and an effective dictionary helps define accountability for each delay reason. This is far more credible and actionable than data with undocumented accountability, and therefore contributes to more expedient solutions. For example, a case that is delayed because the patient is not taken to the OR when ready may be classified as an “OR delay.” This defines the department where the delay took place, but not the underlying cause. Is this the result of a scheduling delay, reflecting perhaps the need for more collaborative, proactive scheduling communications or a change in the scheduling process? Or, is the delay due to reduced staffing in the OR (which is a system issue)? Is the delay caused by the surgeon’s unavailability to perform the procedure (a physician issue)?

Additionally, unclear accountability hampers the ability to share and use data in collaboration with other services and departments. To solve a problem efficiently, the group, person, or department accountable must provide the expertise to most effectively review and resolve the issue. Without clear accountability, it is more difficult to engage other departments, leaders, and staff in the improvement process.

The dictionary should also attempt to draw correlations and share clear language, when possible, between avoidable delay and denial categories. Case management at Rush worked with the Denial Management Department to ensure that the information produced from avoidable delay tracking is useful to both departments. While this does not always yield a clear crosswalk between avoidable delay reasons and reasons cited by payors for denial, this collaboration does help fine tune processes and establish a common language. This collaboration and common language also allows both departments to provide a consistent message for physicians, chairpersons, and administrators regarding the causes for both delays and denials.

When developed and implemented properly, a data dictionary can be a beneficial resource to clearly identify issues and focus case management staff on discerning the root causes of delays.

DEVELOPING ACTIONABLE INFORMATION

Once the data is collected, analysis will produce information for performance improvement. This is often the most difficult aspect of avoidable delay tracking as each of the analyses can contribute useful information, but may not provide the full story alone.

Frequency Analysis is the first means of analyzing avoidable delay data, and simply asks: What are the most frequently occurring delays? Which causes are responsible for the largest percentages of delays? Analyzing delay frequency helps narrow the focus and identify areas to prioritize for case management attention. However, it is important to note that direct comparisons cannot be made across different delay categories. An occurrence frequency for one delay may reflect outstanding performance and proactive management of a particularly difficult area, while the same number of occurrences for a different delay could indicate substantial problems. For example, medical service related level of care issues generally comprise the greatest number of delays and denied days in acute care. Financial/payer delays or discharge/planning delays may not be highest in volume, but provide opportunities for improvement that should not be ignored.

Trending delays relative to past occurrence rates can also be a strong indicator of areas in need of improvement. Retrospectively evaluating performance also helps develop a timeline to determine when an issue originated. However, trending analysis is limited by the dynamic nature of the hospital environment. For example, medical staff turnover, regulatory changes, or the development of internal programs could each impact trends in delay occurrence.

Extremes in delay occurrence can indicate valuable information. If the occurrence rate changes during a certain period, what is the cause? At Rush, case managers examine and discuss extremes as well as baselines to determine whether they are isolated occurrences or representative of valid or emerging trends.

Benchmarking is one of the most accepted methodologies in health care for interpreting data. While denial benchmarks can serve as an initial point of reference when beginning to judge performance, benchmarks for avoidable delays have been unavailable. This is a result of a lack of standardization in delay dictionaries between various organizations – most dictionaries are developed internally. Direct benchmarking for avoidable delays, however, is emerging. Rush was one of the initial sites involved in developing and testing a benchmarking system in conjunction with ACMA. This system has produced valuable benchmarks, and is now available to all hospitals (see facing page).

KEY CONSIDERATIONS

Retaining objectivity is critical when developing an avoidable delay tracking system and interpreting data. This can be very challenging. Many case managers act upon prior experience and biases, and have a level of intuition regarding delay causes. Objectivity may also be compromised by interpersonal factors, such as personality conflict with a particular physician or department, and certain causes can become the focus whether or not they are substantiated. To gain the optimal benefit from avoidable delay tracking, data must be approached as research and studied objectively. This approach will yield unbiased, quantifiable information that often will unveil unidentified problem areas and clearly identify those areas that receive undue focus.

Education and monitoring are also key considerations in avoidable delay tracking. Education often proves to be one of the most challenging aspects of developing a tracking system due to the fact that many case managers do not apply criteria in the same way. Proper training and education of staff is necessary to ensure that delays are identified, recorded and categorized consistently. Ongoing monitoring of the system is necessary to ensure data integrity. At Rush, the recording and categorization of data is audited periodically by supervisory staff. The most effective monitoring, however, is the use of...
the data. Incorporating the data into regular reports means that the quality of the information is constantly scrutinized.

**APPLYING THE DATA IN THE ORGANIZATION**

Avoidable delays are initially discussed and analyzed amongst case managers and with physician advisors to ensure validity and discern trends in daily practice that can be improved. However, delay tracking provides a powerful platform for improvement not only in case management but throughout the organization. Collaboration and flexibility are key factors to successfully using delay data for performance improvement. At Rush, this data is shared with departments, committees, administrators, and chairpersons in a format and at scheduled times that best suits their needs. Detailed reports, graphs, and email messages are provided to meet the preferences and needs of the specific audience, and as a result, the entire organization has come to recognize this data as valuable for practice improvement.

In one example, data began to show trends in operating room (OR) scheduling delays. The director of case management shared this information with the manager in charge of OR scheduling, who was immediately interested and asked to be included in Medical Staff UM Committee meetings and to receive concurrent reports detailing delays. Over the next several months, this manager continued to concentrate on the scheduling delays as brought to his attention by case management tracking. He soon began to manage the most common potential delays proactively, taking action to prevent them from occurring. OR scheduling improved, and delays in this area decreased. This collaborative practice has developed into clear communication between the OR, surgeons, and case management.

The manner in which avoidable delay information is communicated determines how effectively it is used throughout the organization. Specifically, it is important to present this data collaboratively rather than punitively – accountability differs from blame. At Rush, information may be communicated by the medical director, the director of case management, chief medical officer, medical staff UM committee chair, and/or department chairperson in collaborative meetings with leaders in departments. Delay tracking and denial data are seen as valuable information shared for practice improvement, and discussion about the data is always welcomed. Sharing data provides a starting point. At times, the data are challenged, which is positive because it presents an opportunity for greater understanding by all sides. The discussion and questioning foster the development of solutions and consequently desired outcomes.

How data are applied within the case management department sets the stage for working collaboratively with other departments.

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**CompareAD, ACMA’s system to track and benchmark avoidable delays, is now available nationally and accepting new subscribers. This system will improve your tracking and capture of delays, provide delay-specific national benchmarks for identifying performance improvement needs, and provide clear, valid data to use in your organization.**

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Ultimately, the promise of EMR is in the ability to improve not only hospital processes and fiscal outcomes, but more important, patient care. Properly implemented, EMR will provide a better, as well as safer, patient care experience. The patients who will benefit from this most acutely are those like the previously mentioned child with multiple chronic conditions and her parents, for whom obtaining needed care is highly fragmented and confusing. Information that can span the continuum of care can help bind healthcare into a more streamlined and beneficial service.

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It is important to visibly use avoidable delay data to monitor case management, discharge planning and social work related opportunities, to address internal issues, and to implement improvement in case management processes. At Rush, for example, a trend was noted with denials-questions cases related to “lack of information,” despite having systems in place within case management to provide concurrent review and certification services. Drilling into the delay data illuminated various improvement opportunities. With some cases, case manager reviews were delayed or there was incomplete case management review information. Root causes included case manager workload, the quick turn-around required with one day LOS, case manager educational needs, and physician documentation and planning deficiencies related to rounding late in the day and/or lack of understanding the documentation needed to justify level of care and services. The level of detail provided by effective avoidable delay tracking supplied the framework to formulate solutions.

OUTCOMES

At Rush, reportable outcomes resulting from tracking avoidable delays include a decrease in delays, denials, and LOS. A key example of how tracking has led to improved outcomes can be found in Rush’s internal medicine department.

The chairman of the internal medicine department has embraced delay information and works collaboratively with Rush’s case managers. He established weekly meetings with the director of case management, medical director, and medical senior case managers to review concurrent cases and delay trends, and to actively intervene when physician related opportunities for improvement occur. As a result, the average length of stay decreased to 4.7 days, with only .11% of total Medical upheld denied days and .16% Medical delayed days. This collaboration has also brought resolution to physician documentation issues that previously existed within the department. Both outcomes have allowed Rush’s internal medicine department to consistently be recognized as a top performing clinical service.

Avoidable delay information also provides quantifiable data for resource allocation. For example, when evaluating weekend staffing needs, the cardiology and physical therapy departments consulted case management regarding weekend delays as part of their assessment process.

Historically, Rush viewed avoidable delay data as a case management metric; today it is a valued organizational metric. Using this data as an engine for organizational improvement and applying a collaborative approach has increased case management’s credibility and influence within the organization. Avoidable delay tracking has become an agent for change and improvement within a culture where data is collected in order to improve established procedures, and ultimately improve upon the quality, safety, and efficiency of care.

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ENDNOTES

1 Adapted from the Institute of Medicine’s 2001 publication “Across the Chasm: Six Aims for Changing the Health Care System.” http://www.ihi.org/IHI/Topics/Improvement/ImprovementMethods/ImprovementStories/Across-the-Chasm-Six-Aims-for-Changing-the-Health-Care-System.htm