



# Innovating a new model for utilization review

Medical necessity now accounts for 29% of all denials and 53% of all denial write-offs.<sup>1</sup> At the same time, commercial payer appeal success has dropped to 50%.<sup>2</sup> This changing payer landscape has made effective utilization review (UR) more important than ever. Yet value-based reimbursement requires case managers to shift their attention toward quality improvement. Excelling in both traditional UR and quality improvement requires new processes and technologies. The old models no longer suffice.

## The problems with traditional UR

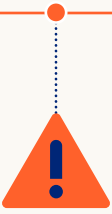
Traditional utilization review models predate value-based care, the Two Midnight Rule, and – in some cases – the development of the physician advisor role. Unsurprisingly, traditional UR is showing its age.

### About the author:

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**Lack of appropriate expertise at the right time:** Medical necessity decisions are often made without appropriate level of expertise and evidence-based medical research, and often not at the right time.



### **Error-prone medical necessity case**

**reviews:** Medical necessity requires the review of a large amount of case data. This process is tedious and prone to errors.



**Time sink:** UR is a slow process, and every minute spent on medical necessity detracts from time case managers can devote to other strategic objectives, such as length of stay and avoidable day management.

## **Evolving utilization review to meet modern challenges**

The same old thinking about utilization review cannot address these problems. Hospitals need to consider new ways of using their talent, new technologies and new processes to share insights to ensure that their UR is generating value and supporting organizational objectives. Artificial intelligence (AI) can revolutionize UR, improving efficiency and accuracy, and enabling case management/UR teams to refocus their staff to more strategic objectives.

## **Apply these 5 strategies to update your UR process to meet modern revenue cycle needs**

### **1. Reduce manual initial case stratification with AI**

Most UR processes involve a first-level review in which case managers apply a standardized criteria set (usually InterQual or Milliman) to assign an initial inpatient or outpatient status. This initial case stratification is time-consuming, taking up to 15 minutes per case.<sup>1</sup> It requires case managers to input the attributes of each case, one at a time. Each of these manual steps introduces the possibility of error. Moreover, even if the case manager enters every piece of data correctly, this first-level review still only accounts for broad, general standards – not the particular nuances and gradations of a particular patient case.

However, initial sorting of cases can be vastly improved with advanced technology. AI excels at repetitive processes, such as loading case details, and can quickly check all cases against a customizable sorting threshold. Leveraging AI for initial case stratification allows hospitals to review each case according to the same high, consistent standard quickly and efficiently. A more standardized process yields more consistent results.

Leveraging AI for initial case stratification allows hospitals to review each case using a customizable sorting threshold, improving accuracy and efficiency.

## Not all AI is equal

To contribute meaningfully, the AI you employ must have these key characteristics:



**It must be clinically intelligent.** AI must have a broad foundation in medical research and clinical knowledge.



**It must be discerning.** AI needs to identify the nuances in each case to accurately inform UR.



**It must be actionable.** Powerful AI will provide evidence, clinical indicators, and supporting research to justify patient status recommendations.



**It must be built on quality source data.** A large amount of quality source data – including claim and appeal results – trains AI how to analyze cases.

## 2. Eliminate case referral risk

While the decision to send a case for physician advisor review should be based on clinical risk factors, this isn't always the outcome. On the front end of the UR process, case managers review hundreds of cases for the same payers, and they learn payer habits as a result. This knowledge can improve the UR process, but it can also condition case managers to incorrectly anticipate payer denial decisions. If they believe a payer won't approve a case as inpatient when it fails first-level inpatient criteria, case managers may simply leave it as outpatient, denying the case a chance for further review. This is often referred to as a "self-denial."<sup>2</sup>

Sometimes, "gray cases" that aren't clearly inpatient or outpatient arise when a physician advisor isn't available, and case managers accept the results of first-level criteria instead of waiting for a physician advisor review. Though they are simply trying to operate efficiently amid heavy workloads, case managers may inadvertently miss the opportunity for appropriate inpatient reimbursement.

Machine learning, a type of AI technology, can quickly review patient records and sort cases for physician advisor review based on the medical facts, removing subjective opinion from the decision to refer a case to a physician advisor. By eliminating this case referral risk, hospitals can ensure that cases that need it can benefit from an additional review based on AI learning from a large database of past medical necessity reviews and recommendations.

**Machine learning can reduce the occurrence of unintended self-denials or gray cases, helping to capture potentially missed reimbursement.**

### 3. Refocus staff to higher value tasks

Changing payment models require case management teams, who also often have UR responsibility, to focus on tracking and ensuring the accuracy of the quality measures upon which value-based reimbursement – accounting for 40.9% of health care payments<sup>3</sup> – depends. These concerns affect not only a single case, but can influence overall reimbursement from a given payer. In addition to requiring a different set of expertise, these vital priorities require time and attention that case management teams often don't have due to heavy workloads and staff shortages. Nor does the addition of these new responsibilities replace case management's medical necessity responsibilities.

By streamlining initial case stratification, AI can save case managers time, which they can reallocate to improving the quality metrics that affect value-based contract performance and reimbursement. Refocusing staff to prioritize these quality measures is no longer optional, it's essential. AI can help unlock the bandwidth needed for this shift in responsibility.

AI-enabled case stratification allows case managers to redirect more time toward improving critical quality metrics.

### Key case manager responsibilities beyond medical necessity



Readmissions prevention



Post-discharge care coordination



Hospital-acquired conditions



Avoidable days



Denial management



Social determinants of health

### 4. Use physician advisors more effectively

Not only can AI help ensure cases are referred to physician advisors only when necessary, but it can also help make their case reviews faster and more accurate. Typically, reviewing a case requires physician advisors to search the patient record – which can be several dozen pages – for the most relevant and crucial factors indicating patient acuity. Once they've scoured the patient record, they must judge whether the acuity is more appropriate for inpatient or outpatient status. This takes careful deliberation. Without AI support, some physician advisor reviews can take between 30–60 minutes.<sup>4</sup>

And, of course, the physician advisor must document this decision, along with any supporting clinical research and industry standards that would defend it from denial and form the basis of any potential appeal argument. Most physician advisors lack a library of clinical research to support these determinations. Even if they do have such a library, it ages quickly if not continuously updated with the latest medical research and regulatory changes. And searching through that library takes even more time, slowing down the process.

AI technology can vastly accelerate the physician advisor review process by quickly highlighting the most important clinical factors affecting medical necessity from the medical record to aid physician advisors. Using AI in this way can increase physician advisor review efficiency by up to 30%.<sup>5</sup> And by reducing the time spent on each individual review, hospitals can prevent cases requiring a review from slipping through the cracks.

AI can improve physician advisor review efficiency by as much as 30%.

At the same time, clinically intelligent AI can call up the most relevant and supportive material based on a case's clinical risk factors, avoiding a lengthy search through journal articles and supportive medical research material for which no single physician advisor has time. Physician advisors need this medical research to more effectively defend against concurrent and retrospective denials. These two functions can save significant review time and improve accuracy, which can reduce denials and improve revenue integrity. Physician advisors can handle more cases in the same amount of time or devote that time savings to other responsibilities.

## 5. Access key information quicker and earlier in process

When properly applied and clinically intelligent, AI can ensure that hospitals apply expertise, knowledge and experience at the right steps along the UR process. For example, the same AI model that improves initial case stratification can jump-start physician advisor reviews. This provides clinicians and case management/UR staff with a strong foundation upon which they can make the best use of their own clinical judgement and knowledge. Transmitting this information from one stage of utilization review to another can produce significant time savings.

Likewise, much of the research and evidence-based justification produced by a physician advisor review can provide a strong foundation for a potential appeal, ensuring that appeal teams can address denials faster and more effectively. By assigning status correctly up front, UR teams save time by preventing additional rounds of review.

Clinically intelligent AI helps hospitals get medical necessity right up front, avoiding additional resource allocation later in the revenue cycle.

## Strive or thrive?

Hospital margins are constricting and value-based payment models are expanding. Competing priorities are pulling case managers in many directions at once. Case management teams work hard, but need to work smarter to ensure financial sustainability in the coming years. Evolving UR through improved processes, refocused resources and powerful artificial intelligence allows hospitals to operate more efficiently and succeed in all of their competing priorities.



1. Optum internal study, 2019.
2. Commercial self-denials in this context are unrelated to self-denial obligations under Medicare relating to Condition Code 44 use and medically unnecessary inpatient admissions.
3. Health Care Payment Learning & Action Network. APM Measurement: Progress of Alternative Payment Methods, <http://hcp-lan.org/workproducts/APM-Methodology-2020-2021.pdf> 7/6/2022
4. Internal Optum Physician Advisor Solutions data, 2019.
5. Optum internal study, 2019.

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