

Casting an Ethics Lens on Quality An Information Paper

Introduction

Quality measures are tools to improve health care delivery. Centers for Medicare & Medicaid Services (CMS) aims to quantify and improve "healthcare processes, outcomes, patient perceptions, and organizational structure and/or systems" by holding hospitals accountable for specific quality measures. The goal is to ensure delivery of "quality care" - eg, care that is "effective, safe, efficient, patient-centered, equitable, and [timely]." The Institute of Medicine defines healthcare quality as "[t]he degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge."

While quality measures are valuable, they sometimes lead to unintended consequences. The challenge for policy-makers is to identify measures that reliably correlate with improved health outcomes; the challenge for clinicians and hospitals is to implement processes that reliably correlate with quality measures and desired positive health outcomes. In other words, it is not always enough to "meet the metric." The method by which the metric is met must be ethical and in keeping with the spirit of the quality measure. The high-stakes nature of publicly reported measures tied to ranking and payment of providers and hospitals can create an incentive to focus more on the metric than on patient care and safety.

Clinicians and administrators should recognize this risk and use an ethics framework to evaluate proposed approaches to improving quality measures. The following cases illustrate the spectrum of value that may result from implementation of quality measures.

Cases

The following is a case where the care meets both the metric and improves quality care:

Case 1: Left Without Being Seen (LWOBS)

A 23-year-old man presents to the emergency department (ED) with a sore throat. He is triaged as a level 4 (low acuity) by the triage nurses and then immediately evaluated by the physician "provider in triage." He is febrile and tachycardic. He has odynophagia but no difficulty handling secretions. His oropharynx is erythematous without exudate. The physician orders ibuprofen and a rapid throat swab, with a plan for the advanced practice provider (APP), who is also out front as part of a triage team, to re-evaluate and disposition the patient once the swab is resulted. After waiting 30 minutes in the "results pending area," the patient leaves to go home to sleep.

Initiatives to reduce the number of patients who leave the ED prior to evaluation and treatment should result in improved patient care and improved outcomes.³ Initiatives to reduce LWOBS have included additional triage nurses to reduce time to triage; providers in triage to initiate evaluation and treatment and, in the case of low acuity patients, to re-evaluate and disposition them without using department bed space; direct-to-bed processes, with bedside registration and triage; and improved throughput processes to increase

available treatment beds. 4-8

LWOBS is an example of a metric which should lead to improved systems that in turn improve patient care. It satisfies the ethical principles of beneficence and justice, by providing timely access to medical screening and treatment for patients who might otherwise leave. In the case above, the triage team meaningfully advanced the patient's care from the initial point of contact. This patient would not have counted as LWOBS, because he was seen almost immediately by the physician in triage; however, he unfortunately would have counted as "left before treatment completed (LBTC)." Assuming a process to call him back with swab results, the team would likely consider this encounter meaningful care that met the LWOBS metric, though not the LBTC.

The team triage process in this case is desirable for patients because it allows them to see the doctor immediately. It is good from an ethical perspective, because it is an effort to provide care out front that both meaningfully advances the patient's care by providing rapid evaluation and treatment and meets the LWOBS metric. Potential problems include 1) inability for under-resourced departments to staff a physician or APP in triage, 2) increased patient hand-offs, diminished yield for departments with too few low-acuity patients, and 3) increased strain on the main ED if there are insufficient resources to follow up on care orders initiated in triage.⁹

The following are cases where the care meets the metric but fails to improve quality care:

Case 2: Door-to-Doc Time

An emergency physician (EP) works in an ED for a large contract management group. The group has a goal of minutes for "door-to-doc" time. The physician is in the midst of a discussion with an 89-year-old patient with metastatic lung cancer regarding end-of-life decision making. A nurse interrupts to say, "There's a new patient in Room 5 with chronic abdominal pain."

All metrics are intended to improve patient care, but some may lead to unintended consequences. Ideally, reduced waiting times for patients to be assessed by a physician result in improved patient care and patient satisfaction. ^{10–12} However, as in this case, pressure to reduce door-to-physician time may result in interruption of critical or important tasks in order to meet a metric which may not always be clinically indicated. Interruptions of physician tasks may result in numerous deleterious effects, such as disrupted work flow, inefficiencies, medical errors, and decreased patient satisfaction. ^{8,13–15} Metrics that interfere with physician judgment about treatment priorities may actually interrupt or interfere with quality care and respect for patients.

Case 3: Public Reporting of Procedure Outcomes

A 50-year-old man is brought to the ED after cardiac arrest. Paramedics found the patient in ventricular fibrillation (VF), initiated advanced cardiac life support (ACLS) interventions, and achieved return of spontaneous circulation (ROSC). The post-ROSC EKG does not show an ST-elevation myocardial infarction (STEMI). However, the emergency physician calls the interventional cardiologist because she believes that based on age, history, and initial rhythm, the patient is likely to benefit from percutaneous coronary intervention (PCI). The cardiologist is reluctant to perform PCI on this resuscitated comatose patient because the patient's overall mortality risk is high, and she fears the potential negative impact on publicly reported PCI outcome data.

The primary goal of public reporting of procedure outcomes is to measure and improve the quality of care. These metrics are used to evaluate, rank, and determine payment for providers and hospitals. The current approach used for measuring quality of PCI care of patients who suffer an out-of-hospital cardiac arrest, which centers on mortality, may misrepresent the quality of care provided and lead to increased mortality

by disincentivizing interventionalists from offering early PCI to high-risk patients. New York State saw a 36% decrease in PCI mortality from 1997 to 2003. At first glance, these data suggest better care. However, during the same period, there was a 30% decrease in the proportion of patients in cardiogenic shock who underwent PCI, despite evidence that STEMI patients in cardiogenic shock benefit from early PCI. A survey of interventional cardiologists included in the 1998-2000 PCI in New York State report found that 79% "agreed or strongly agreed that the publication of mortality statistics has influenced their decision regarding whether or not to perform angioplasty on individual patients." Eighty-five percent agreed or strongly agreed that "patients who might benefit from angioplasty may not receive the procedure as a result of public reporting of physician-specific patients' mortality rates." "18

The decision not to offer PCI to a high-risk patient who would be expected to benefit, due to concern about the impact on publicly reported physician-specific metrics, is unethical. It fails to put the "patient first," violating the virtue of honesty and the principles of beneficence and justice. Though the physician bears moral responsibility for "gaming the system" at the expense of the patient, flaws in the reporting system are in part to blame. A similar proportion of physicians who believed public reporting disincentivized PCI for high-risk patients (85%) believed that the risk stratification model failed to adequately adjust for the true risk of PCI in this population. It is essential that metrics mirror the clinicians' sense of quality care for patients along the entire spectrum of risk, so as not to discourage physicians from doing all they can for the sickest.

The following is an example of a flawed metric that resulted in significant push-back from clinicians and professional societies:

Case 4: Pain Scores

A 37-year-old woman is seen in the ED for a flare of her chronic back pain. She has no signs or symptoms to suggest non-mechanical back pain. She initially reports her pain is "11/10." The EP administers an NSAID and muscle relaxant. On re-evaluation, the patient reports her pain is better, but still there ("4/10"). The EP decides to administer an opioid to further reduce the patient's pain level in the ED and then discharges the patient with a short course of opioids and a follow-up appointment with her primary care provider (PCP).

The American Pain Society campaign, "Pain, The Fifth Vital Sign," adopted in 2001 by The Joint Commission, likely contributed to the dramatic increase in the subsequent nearly two decades in the use of opioids by physicians from many specialties for non-chronic pain, and the proportional increase in mortality from opioid overdose. ^{19–23} The intent was to improve pain management and quality of life for patients, but the increase in prescription opioid use did not achieve this. ²⁴ Instead it worsened a different public health problem: substance use disorders and related death from overdose. ²¹

Prior to July 2018, the Pain Management Composite from the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey asked patients, for example, "During this hospital stay, how often did the hospital staff do everything they could to help you with your pain?"²⁵ Pain is a subjective symptom, not an objective vital sign, like heart rate or blood pressure. Implicit in The Joint Commission Pain Standards and the HCAHPS Pain Management Composite was the flawed idea that physicians could reduce pain, even chronic pain, to near zero on a subjective pain score by "doing everything" in the same way that they could normalize objective vital sign abnormalities with aggressive resuscitation.

It would have been unethical for physicians to knowingly put patients at risk for opioid addiction, in order to meet a pain management metric. However, at roughly the same time of the "Pain, The Fifth Vital Sign" campaign, the opioid OxyContin was aggressively marketed with an FDA-approved label indicating that addiction was "very rare," which made it harder for physicians (and patients and policy-makers) to understand the true nature of the risk. More than 5,000 physicians and other health care professionals

attended Purdue-sponsored conferences in order to become national speakers for the company.²⁶ The consequence of these conflicts of interest was an obscured truth about the actual risk of using opioids to meet the fifth vital sign metric in patients with non-malignant chronic pain.

In 2018, Centers for Medicare & Medicaid Services (CMS) removed the Pain Management Composite from the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey, and the pain management measure is no longer used in the Hospital Compare overall rating.²⁵ This iteration of the pain management metric was an example of a metric that was appropriately lobbied against, as it did not accurately measure care quality but rather contributed to a national public health crisis.

The following is an example of balancing metrics to promote improved care:

Case 5: Patient Experience

A 70-year-old female is seen in the ED for abdominal pain. She is very anxious and uncomfortable. Her evaluation requires an oral contrast CT scan, which drives the length of stay for the patient well beyond the 150-minute benchmark. The patient was initially unable to tolerate the contrast. The team was able to administer antiemetics and support her slowly drinking the contrast without pressuring her.

A number of the metrics used to incentivize quality for EDs are about efficiency, eg, length of stay, door-to-provider. While it makes sense to drive immediacy of care in an emergency setting where there have been issues of crowding and delays of care causing poor patient outcomes, focusing on these efficiency measures can have unintended consequences. For example, driving providers to decrease length of stay can cause patients to be rushed through the process and feel dissatisfied with care in terms of provider contact time, attentiveness, and empathy. Using patient experience measures as a metric at the individual provider and department level can serve as a balancing measure for the consequences of pushing efficiency. Adding a focus on patient experience reflects attention to treating the whole patient. Patient experience metrics can also balance out the use of procedures/revenue as quality metric drivers to ensure that patients are not treated as a means to a financial end.

General Ethical Considerations

The following is a set of ethical considerations that clinicians and administrators can use to evaluate proposed approaches to improving quality scores:

1. Patient Safety

A first consideration is one of the oldest maxims in clinical ethics. Does the proposed strategy put the patient first or does it serve the metric rather than the patient? A provider-in-triage model that initiates rapid contact between patient and provider, in order to reduce the LWOBS number, but does not meaningfully contribute to the patient's care does not pass the "Patient First" test. On the other hand, a model that effectively uses a provider-in-triage (or more likely team-in-triage) to initiate, as in the case of low-acuity patients, complete appropriate care out front would meet the standard, especially if this care could be provided in a way that did not interrupt more critical patient care interactions.

In the latter case, patients receive care that is timely and effective, and the LWOBS is truly met as a consequence of improved care. The "Patient First" test is a commonsense way to engage institutional decision-makers around the *intent* behind the proposed strategy. A strategy that passes this test would stand *even if the quality measure were eliminated*.

2. Beneficence

A second consideration is the principle of beneficence, which is closely related to "Patient First." The aim of medicine is to promote the good of the patient. Each decision should be evaluated in terms of its benefits and burdens to the patient, understood in the context of the patient's values.²⁷ In the case of a post-cardiac arrest patient, the decision about whether to offer PCI should be based on the health risks/benefits to the patient, not on the reporting risks/benefits to the physician or institution. Post-arrest patients without identified STEMI, for whom PCI guidelines are less clear, require physicians and institutions to carefully consider the principle of beneficence as they develop their local practice. It should be understood by all in the organization that the approach to this high-risk population is principally intended to promote the welfare of patients in line with their values.

3. Efficiency

A third consideration is, on its face, an "operational" rather than an "ethical" one, but efficiency has an important ethical dimension. Inefficient interventions are unethical, as they waste valuable healthcare resources and deprive patients of the good they could otherwise achieve. In general, inefficient EDs have longer than necessary wait times for everyone, including those with life-threatening conditions. Efficiency is not simply about average throughput, but about making the best use of available time and resources. Delaying the administration of antibiotics for hours in an inefficient ED can delay recovery and further a patient's suffering. Interrupting an end-of-life conversation, in order to meet a door-to-doc time on a low-acuity patient not only jeopardizes trust, but it represents inefficient use of available resources. If a metric-driven process leads to constant or inappropriate interruptions, inappropriate delays in care or other inefficiencies, it should be re-considered. A counterargument to treating efficiency as an ethical concept is that it creates an overly broad, non-specific, and therefore, meaningless ethics lens. In the last four decades, ED operations and ethics as fields have developed considerably and independently, with different language, methods, and overall perspective. The important insight from efficiency as an ethical principle is that operations and ethics need to be combined into a single perspective with coordinated ways of approaching problems and opportunities.

4. Effectiveness

A fourth consideration is also both ethical and operational in nature. Every intervention carries some risk. It is, therefore, unethical to implement an ineffective intervention as it poses risk to the patient unnecessarily. The fundamental question echoes the core idea of quality measures: will the proposed strategy produce the desired result? "Pain, The Fifth Vital Sign" and the HCAHPS Pain Management Composite did not produce the desired result. While they led to increased attention on pain management, this attention came in the form of increased opioid use and, ultimately, overdose deaths. The desired result was greater consideration for, and communication about, patients' pain and suffering, which was not achieved by viewing pain as an objective measure and then "doing everything" to minimize it. If a strategy does not meet the metric, it should be re-evaluated. Likewise, as in the case of the Pain Management Composite, if the metric does not correlate with the true desired result, it should be lobbied against.

5. Justice

A fifth consideration is the principle of justice.²⁷ Justice requires that the benefits and burdens of healthcare success and failure be fairly distributed. Care should be provided according to need. And the most vulnerable patients should not suffer disproportionate harm when resources are too few. Justice is not just about the distribution of benefits and burdens, but also about participation in decisions about distribution of care resources ("procedural justice").²⁸ Like PCI outcomes, cardiac valve replacement

outcomes are publicly reported. A surgeon may be reluctant to replace a valve of a patient with a history of infective endocarditis from intravenous drug because of the potentially negative impact on outcome data. The "Patient First" and beneficence considerations should influence institutional policy on this issue. But so too should consideration of justice for the vulnerable patient population. "High-risk" patients who are most likely to be harmed by a quality measure that discourages from providing potentially beneficial treatment should have a say in the measure, and physicians have a role in advocating for them and thus ensuring a fair distribution of valuable healthcare resources.

Conclusions

Quality measures have the potential to promote timely, efficient, and high-quality patient care. Quality measures should be closely studied to ensure positive impact and avoid negative unintended consequences. Emergency physicians should be actively involved in the daily application of quality measures that improve patient care and should advocate for quality measures that improve patient care and against measures that jeopardize patient care.

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