

Accepted Manuscript



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PII: S2213-1779(16)30512-1

DOI: [10.1016/j.jchf.2016.10.004](https://doi.org/10.1016/j.jchf.2016.10.004)

Reference: JCHF 567

To appear in: *JACC: Heart Failure*

Received Date: 12 October 2016

Accepted Date: 17 October 2016

Please cite this article as: Konstam MA, Whose Metric is it, Anyway? Time for Patients to Assert Quality Control, *JACC: Heart Failure* (2016), doi: 10.1016/j.jchf.2016.10.004.

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Whose Metric is it, Anyway? Time for Patients to Assert Quality Control

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Disclosures: None

In 2012, citing the high costs of hospital readmissions, CMS, acting under the Patient Protection and Affordable Care Act, implemented penalties for excessive risk-adjusted 30-day readmissions among patients hospitalized with one of 3 diagnoses, including heart failure [1]. This year alone, with the scope expanded to 6 diagnoses, the readmission penalty is expected to exact over half a billion dollars in withheld Medicare reimbursement from more than half of the nation's hospitals [2]. While the government has saved precious health care dollars, the question has remained: have patients benefited? The most likely answer for patients with heart failure, based on the findings of Pandey et al [3], published in this issue, is no. Examining data from 171 hospitals participating in the Get With the Guidelines-Heart Failure registry, these authors compared hospitals with 2013 risk-adjusted readmission rates following heart failure hospitalization that were higher vs. lower than expected. For the time period July, 2008 through June 2011, the assessment period for determining the 2013 financial penalty, Pandey et al found no difference between these 2 hospital groups in terms of either median adherence to quality performance measures or the composite 1-year outcome of death or all-cause readmission. Above-expected 30-day readmission rates were associated with higher 1-year all-cause readmission rates. However, there was a trend toward higher 1-year mortality rates among hospitals in which 30-day readmission rates were below expected.

These authors add to a chorus of voices expressing concern regarding the appropriateness and validity of the 30-day readmission metric [4-7]. Arguably, this metric has driven our entire provider workforce to construct machinery designed to reduce short-term post-hospitalization utilization, while doing little to improve quality for the 5.7 million (and counting) Americans with heart failure. One might expect more from a major healthcare payer, not to mention the federal government. And CMS has proven less-than-facile in modifying a metric for which there

is a mounting challenge. The knowledge of our misdirection in responding to the mandate of this metric and inaction in modifying it should be a call to action toward patient enablement in selecting clinical care metrics – assuring that future metrics indeed speak to patients’ interests for improving their own care. It’s time to consider a systemic shift in our approach to driving quality.

There are multiple flaws in the design of the 30-day re-hospitalization penalty. First, as the authors note, 30 days is an arbitrary time frame that lacks both validity and relevance for patients [7]. Beyond its likely unimportance to most patients and its weakness in predicting longer-term outcomes, its brevity may incentivize adverse behavior, both in the design of systemic interventions and in individual provider practice. Hospitals have designed disease management interventions that focus all attention on the initial 30 days post-hospitalization. Although re-hospitalization rates are highest early, 77% of readmissions occurred more than 30 days post-discharge in a large acute heart failure clinical trial with median follow up of 9.9 months [8]. Moreover, providers may be incentivized to withhold certain forms of care until the 30-day time point, from hospitalization to drugs, such as beta blockers and mineralocorticoid antagonists, which prevent death and hospitalization in the long run but may also provoke an early re-admission [9].

Secondly, the focus on all-cause readmission, although ostensibly sensible from an overall short-term cost perspective, may fail to adequately reward interventions that cost-effectively reduce the more controllable cause-specific component of the problem. Specialty clinics and home-based monitoring programs are costly, yet effective at preventing heart failure readmissions [10, 11]. They may not, however, impact favorably on a less-specific, generalized re-hospitalization risk that is present in the post-discharge period [12]. More careful follow-up

may actually result in an increase in non-heart failure-related hospitalizations [13], which may be medically appropriate. Therefore, a disease-specific ambulatory management program may be cost-effective, but it may not generate a sufficient return on investment in relation to penalties linked to short-term all-cause readmission.

Third, as Pandey et al point out, the predictive accuracy of risk adjustment methodology used for the 30-day readmission metric is limited, ignoring factors, both known and unknown, that have major impact on performance [14, 15]. The result is a system that penalizes imprecisely, disproportionately harming hospitals that care for the sickest and most vulnerable populations [16] and serving to discredit the entire approach in the minds of the provider community.

And then there is the competing risk of death. Pandey et al have now added information regarding longer-term outcomes to an existing literature supporting an inverse correlation across hospitals between rates of 30-day re-admission and mortality [17,18]. This finding should come as no surprise, since the 30-day metric ignores the competing risk of death, rewarding hospitals for avoiding readmissions, even if that avoidance comes at the price of death. The observed inverse correlation is likely linked to this paradox, since patients who die cannot be hospitalized. But worse, as mentioned, the current metric may actually incentivize clinicians to withhold certain life-saving treatments until after the 30th day. It is difficult to rationalize why CMS policy makers chose to omit death from their metric.

Quality metrics must be patient-centered. The US Food and Drug administration has arrived at the simple stipulation that for a drug to be approved it should show efficacy at achieving a goal that is meaningful to the patient. Clinical outcomes, such as preventing death, are theoretically the best candidates for patient-centered quality metrics. Preventing avoidable

hospitalization is, with appropriate adjustment for the competing risk of death, a worthy patient-centered outcome metric, since it generally marks clinical worsening and since the hospital is not a great place to spend time. The challenge with outcome measures is the need for robust risk adjustment, a goal that is not always achievable. Clinical process measures, particularly those with documented process-outcome links, often serve as valid quality indicators. A measure should make sense to patients. Reporting should be transparent, and a patient should be readily able to understand why a particular measure is valuable to her. Utilization per se is never a valid quality metric. Patients will select a low-utilizing provider if reduced utilization translates into a reduced insurance premium without an undo sacrifice of quality. But they need legitimate measures of quality care – not utilization – in order to make that trade-off.

It is misguided for payers to be the designers and final arbiters of clinical quality metrics. Payers, whether the government or commercial insurers, will always primarily be motivated to drive down utilization and cost, and only secondarily to improve quality (unless improved quality translates into increased enrollment). Given the current health care trajectory, redirecting the selection of metrics into consumers' hands will be a daunting task. The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) [19,20], is an emerging complex system of provider payment being developed from the top down, with CMS' policy makers and consultants dictating a system of penalties and incentives. It is not structured to enable patients to drive the metrics to assess their own care. Furthermore, depending on the political wind, a "fix" of the Affordable Care Act will likely contain a government "option", designed to move the vast majority of the population to the government for their health plans. That will place all decision-making in the hands of CMS, rather than consumers, as the final arbiter of how providers are performing.

We need a radical new approach. Rather than further expanding Medicaid and Medicare, Obamacare 2.0 should incentivize providers and private payers to join into integrated systems of care and should enable their market-based growth, while acting to increase competition within each market. It should then bring consumers in to help select standardized quality metrics designed to be valid, transparent, actionable, and patient-centered. Within a strengthened – not weakened – market environment, consumers will then be enabled to drive both cost and quality, selecting the healthcare system that offers the most attractive value-oriented combination.

The 30-day readmission metric, with its many flaws, and clear direction to reduce utilization and cost, but without focus on patient wellbeing, should serve as an alarm that we are heading in the wrong direction of allowing government policy-makers, rather than patients to drive the design of clinical care metrics. Alternatively, the government can and should play an important role in facilitating an environment of integrated health care systems and market-based competition, within which consumers can drive the advancement of their own health.

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