

Analysis of Quality Rating System for QHPs: Options and Recommendations

Prepared By:

Paul Kirby
Ann Lawthers

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1. Background

This report provides Vermont with a review of quality rating systems for assessing health plans, and makes recommendations on the type of rating system that would best complement Vermont's goals in promoting quality health care. As stated in the contract between the University of Massachusetts Medical School (UMass) and the state of Vermont, the goal of this task is:

Development of a QHP rating system for the Exchange. Based on the results of the inventory, research on best practices, the analysis of federal guidance and regulations, and initial work on the implementation plan for incorporating quality programs into the Exchange referenced in Section C., the Contractor shall present a proposed system for rating the quality of and certifying QHPs. The report shall include:

- The quality components that the Exchange should use to meet federal requirements to certify and rate QHPs^a (identified in the implementation plan referenced in Section C. above),
- Recommendations on whether to include existing or proposed Vermont quality programs that go beyond federal requirements, in order to accomplish Vermont-specific objectives,
- Corresponding metrics for use in certifying and rating QHPs,
- Recommendations on best practices for collecting, auditing and certifying data for the selected metrics,
- Recommendations on methods for summarizing and benchmarking data (including information about quality improvement activities) across QHPs,
- Recommendations on how the Exchange will monitor QHP quality on an ongoing basis, including the monitoring of complaints, grievances, appeals, access and network adequacy.

As discussed in the previous UMass report, "Preliminary Analysis of Affordable Care Act Laws and Regulations Relating to Quality Measurement," federal guidance on the construction of QHP quality ratings has been limited to date. In fact, the current expectation, based on a Question and Answer document provided by CMS to the states on November 29, 2011, is that QHP-specific quality ratings will not be required until 2016. Instead, quality ratings used at the

^a Qualified Health Plans, i.e., those plans certified by the Exchange.

outset of Exchange operations (beginning on January 1, 2014) will require only “generally available and collected metrics and measures.”^b

Vermont may, however, implement a QHP rating system ahead of the federal requirements. Again, as discussed in the previous report, the ACA language simply sets a minimum floor of required state actions, but allows states considerable flexibility in moving beyond this. In fact, the initial proposed Exchange rule (implementing the ACA language on Exchanges), released in the Federal Register in July 2011, states in its Preamble that HHS “encourage(s) States to consider supplemental standards or functionality for their Exchanges that benefit consumers and businesses.”^c

Given Vermont’s well-advanced system of health care quality monitoring and improvement, the state is already well positioned to meet the minimum ACA requirements. Consequently, the focus of this report is to provide guidance to Vermont on creating a QHP rating system that moves beyond the ACA requirements. The Vermont rating system should instead point toward the more ambitious goals laid out in Act 48, which establishes the state’s single-payer system, Green Mountain Care, which is overseen by the Green Mountain Care Board.

2. Methodology and Organization of Report

This report contains two main sections. First, the report will present a brief literature review, dealing with key issues in the construction of quality rating systems. The findings from this literature review will then be used to inform the discussion in the second section. This second section will include recommendations for Vermont’s quality rating system. These recommendations will address general considerations as raised in the literature review as well as the more specific topics mentioned in the bulleted list of report components above (from the UMass-Vermont contract). This section will also look ahead to potential future directions for Vermont’s quality rating system, beyond the initial implementation.

Research databases such as PubMed were used to retrieve articles from the peer-reviewed literature. A number of different search terms were used, for example: “health plan quality rating,” “health plan performance,” “provider quality score,” and related terms. Additional articles were found in the reference lists of articles found in the initial search. In addition to peer-reviewed research literature, non-peer reviewed reports from national organizations, health consultancy businesses, and think tanks were retrieved via Google, using similar search terms to those listed above. The literature search uncovered a very large number of articles, many of a quite technical nature. In order to make the review in the next section as useful as possible, the review will not be exhaustive. Articles representing key viewpoints in the debates over quality

^b “State Exchange Implementation Questions and Answers,” CMS Question and Answer document, p. 8.

^c 56 Fed. Reg. 41875 (July 15, 2011)

measurement and ratings will be summarized briefly, with a view toward extracting only the policy-relevant conclusions.

The final section (recommendations and discussion of future directions) will build upon both the literature reviewed here, and other work by the UMass team done to this point. While the rating design recommendations will be fairly specific, we emphasize again the high degree of flexibility built into the federal statutory and regulatory framework. As discussed in all of the UMass deliverables, this flexibility gives Vermont policymakers the opportunity to pursue the ambitious goals laid out in Act 48, while easily satisfying the more limited federal requirements under the ACA.

3. Literature Review Findings

Health care performance measurement has been the subject of a vast body of peer-reviewed articles and other reports over recent years, particularly as composite rating systems (such as the CMS five-star systems for Medicare Advantage and drug plans, and for nursing facilities) have come into wide usage. Studies have looked at a variety of health care contexts, such as health plans, hospitals, and individual providers. While the health plan level is the main focus of this report, we will discuss findings relevant to all health care delivery settings below.

We focus on two critical issues in health care performance measurement: whether quality ratings accurately reflect the underlying construct of quality, and whether quality ratings can in fact drive performance improvement in the health system through impacts on consumer choice and provider behavior. The discussion will center on composite rating systems, given the widely held assumption in the health policy community that, once federal guidance on rating systems is released, that guidance will steer states toward a composite type system similar to the CMS five-star system. (The NCQA also provides Health Plan Report Cards for commercial, Medicare, and Medicaid plans, and this is another potential model for the eventual ACA guidance on QHP ratings. However, the literature search did not return materials critically evaluating this system, so we do not discuss it below.)

3.1 Do quality ratings really capture “quality”?

In general, the literature shows a good deal of skepticism about the ability of quality ratings to measure “quality” in a straightforward, reliable manner. In large part, this has to do with the nature of the composite star ratings generally in use. The broader question here can break out into two subtopics: theoretical concerns with composite scores and specific issues with the CMS star system.

3.1.1 Concerns with composite scores in general

This area has by far been most discussed. Many researchers have tested composite quality scores to assess their reliability as measures, and their sensitivity to methods of aggregation. Much of the work so far is in the hospital and physician contexts, but should still apply to health plans.

Some studies have found that composite scores are unreliable and/or overly sensitive to changes in method. For example, Jacobs et al.¹ applied a three-star rating system (where the best score is three stars) to a hospital-level data set, using simulation methods to test various specifications. The study's two major findings were, first, that random factors beyond the hospitals' control affected ratings outcomes to such a degree that the certainty of distinctions between star rating categories was placed in doubt; and, second, that differences in aggregation methods (such as weights assigned to quality domains like outcomes, access, or satisfaction) strongly impact the results. Another more recent study, by Couralet et al., of hospital data used to construct a composite care quality score for Acute Myocardial Infarction patients also found that aggregation methods caused scores (in this case, rank orderings of hospitals) to vary widely.²

In contrast, other researchers studying this issue have reached more positive conclusions about aggregated, composite quality scores. For example, Staiger et al.³ found that composite surgical performance measures performed much better than individual measures at both explaining hospital variation in patient mortality and in predicting future hospital performance. This finding was replicated in the trauma care (hospital) setting by Willis et al.⁴, who found that composite scores were strongly predictive of lower mortality. Finally, this issue was tested at the physician level in a study of diabetes care. Kaplan et al.⁵ constructed a composite measure that emphasized physician behavior over uncontrollable patient factors, and created statistically reliable physician-level quality scores.

For all their divergent findings, the studies discussed above all demonstrate one key point: the details of aggregation methods used in composite measures strongly influence their utility. All of the studies discussed in this section included extensive tests of alternative versions of the composite scores, and each study's composites were created by the study authors themselves, rather than by CMS, NCQA, or other authoritative entities. In the next section, we focus on studies and reports that address the actual rating system most likely to serve as a model for the QHP rating system – the CMS five-star system for Medicare Advantage (MA) plans.

3.1.2 Specific concerns with CMS MA star ratings

CMS implemented its five-star rating system for MA plans in 2007. Plans with excellent performance receive five stars, while plans with poor performance receive only one star. The scoring system brings together 53 separate measures, drawn from four sources: CMS administrative data, CAHPS survey data, HEDIS data, and data from the Health Outcomes Survey (HOS), conducted by CMS.⁶ The overall plan score is a weighted average of the individual measure scores. Initially, the ratings were intended for information purposes only, to assist Medicare Advantage recipients in selecting the best quality plan. But with passage of the Affordable Care Act, the ratings began to impact payment, through a system of bonus payments based on the ratings, beginning in 2012.

Not surprisingly, the application of the CMS MA ratings to payment has led provider groups, think tanks, and other analysts to take a closer look at the rating system. Aside from the measurement theory issues discussed above, a number of strong critiques of specific aspects of the rating system design have emerged. This section will briefly highlight the major arguments,

along with emerging CMS responses to these critiques, leading to design changes currently underway.

A 2010 report by the consultancy Health Dialog summarizes the main criticisms of the CMS MA star system.⁷ First, the initial rating system design gave equal weight to all measures, rather than assigning differential weights based on importance. This becomes problematic when types of measures vary as widely as they do in the CMS MA star system. For example, this means that call wait times are weighted the same as improvements in physical health.

A second critique raised in the Health Dialog report concerns the methodology for distributing stars among the plans for each measure (i.e., the thresholds for determining how many stars any particular measure score earns). The CMA MA system uses “cut points”, adjusted for various regional factors, to assign stars. While specific thresholds are greatly preferable to a strict version of relative ranking (in which a given population of health plans would be forced to fit a bell-shaped curve), the cut point values picked by CMS “seem arbitrary and offer little guidance about how a plan might improve,” according to the Health Dialog report (p. 4). Moreover, most of the cut points are in fact derived from the relative performance of all plans on the specific measure. Depending on the distribution of the data, plans with high scores in an absolute sense might not receive high star ratings.

CMS has responded to these criticisms, as transmitted through documents such as the Health Dialog report and through public comment submissions. Beginning with the 2012 MA plan rankings, CMS’s methodology changed the measure weighting system to give outcome measures the highest weight, which compensates for the fact that outcome measures account for only 20% of the total measure slate.⁸ Outcome measures are now given three times the weight of process measures. Another important response by CMS is to propose adding a measure in the 2013 ratings that would reward health plans for improving on their prior year scores (across all plan measures), though this would only be one measure out of over 50 total, so it would not contribute greatly to the overall score.⁹

The flexibility demonstrated by CMS in making adjustments to the Medicare Advantage star system is commendable, and suggests that the eventual guidance on ACA Exchange ratings will also build in flexibility. Indeed, given that the Exchanges are state level (in contrast to Medicare, which is a unitary, national program), we would expect to see even greater flexibility.

3.2 Do quality ratings really drive quality improvement?

In this section, we discuss the second high-level methodological concern with quality ratings: does public reporting of quality ratings actually result in improved health care quality? The literature identifies two potential mechanisms through which quality ratings could drive improvement: by influencing consumer choice, and by inducing health plans and providers to improve their own performance. In the discussion that follows, we refer only to the public reporting aspect of quality ratings. The impact of incorporating quality ratings in payment, through provider-side incentives (such as Pay for Performance), is discussed in a separate UMass report.

3.2.1 Influence on consumer choice of health plan

To date, there is some evidence showing that quality rating information actually steers health care consumers into higher-rated plans, but this evidence is not uniform. In the Medicaid context, two studies^{10 11} tested the effect of mailing CAHPS survey reports on Medicaid managed care plans to randomly selected samples of new Medicaid enrollees in two states, New Jersey and Iowa. The timing of the experiments allowed the researchers to give this information to members at the point where they were required to choose a managed care plan. Neither study found a statistically significant impact of the reports for the full study samples on member plan choice.

However, some studies looking at populations other than Medicaid have found statistically significant, though not large, effects. For example, Jin and Sorenson¹² found that provision of NCQA quality data to federal employees had a significant impact on plan selection, especially for individuals who for various reasons are forced to change from their current plan to a new one. A study by Dafny and Dranove,¹³ in the Medicare context, found that report cards for Medicare HMO plans (the precursor to Medicare Advantage) did influence enrollee decisions. However, this impact was limited to the consumer satisfaction domain only, rather than process or outcome measures.

3.2.2 Influence on plan/provider behavior

The evidence for public reporting as a driver of quality improvement through its impact on health plan provider behavior is also mixed. Research at the hospital level has found that public reporting induces hospitals to engage in quality improvement activity. Hibbard et al.¹⁴ used a quasi-experimental design to compare a group of Wisconsin hospitals that participated in a public reporting initiative to a second group that received non-public quality reports, and a third group receiving no reports at all. Hospitals in the public reporting group greatly increased their quality improvement activities in clinical areas in which the hospitals scored lowest. Hospitals receiving non-public reports engaged in fewer quality improvement activities, while hospitals receiving no reports at all did the least.

At the health plan level, two older studies looked at NCQA accreditation data (HEDIS and CAHPS) from the late 1990s, a period in which accredited health plans could choose not to disclose their results to the public. (NCQA no longer permits plans it accredits to opt out of public reporting.) One study¹⁵ found that health plans that voluntarily reported their HEDIS results to the public had higher scores than non-reporting plan, while a second study¹⁶ found that health plans often withdrew from voluntary public reporting after receiving low quality scores. While interesting, these findings do not indicate a causal link between public reporting and better quality.

Studies from the health economics field raise some concerns which, while more theoretical in nature, are important for policymakers to consider. First, a study by Glazer et al.¹⁷ argued that consumer satisfaction ratings (such as CAHPS scores) may inadvertently give health plans an incentive to focus on improving services received by lower-cost members, rather than those used by higher-cost members. This incentive stems from the fact that lower cost members tend

to use a smaller range of service types than do higher cost members, who have more, and more varied, healthcare needs. A health plan might attempt to game the system by identifying the services most used by their low-cost populations (which in a typical insured population will be the largest proportion of plan members), and concentrating resources on those specific service areas. The authors recommend weighting member satisfaction ratings data based on expected member medical costs in order to correct for this unintended incentive.

A second concern raised by health economists relates to network overlap, i.e., the fact that providers contract with multiple networks. Maeng et al.¹⁸ examine this issue, using simulation methods on HEDIS and CAHPS data combined with a network overlap measure, and find that plan scores decline significantly as network overlap increases. The authors attribute this to economic incentives: where a high degree of network overlap exists, the benefits of plan-level efforts at improving quality among network providers would accrue to all plans with whom the providers contract, not just the particular plan putting the resources into provider quality improvement. In Vermont, however, network overlap may be less of a concern, as the state moves to a single-payer environment, in which the Green Mountain Care Board can direct providers and plans to implement the same types of quality improvement programs. This would eliminate the potential free-rider effect of a more fragmented QI environment.

4. Recommendations and Discussion

Despite the mixed evidence for the value of plan quality ratings in driving quality improvement, it is clear that a ratings-based system must exist to hold plans accountable. This is both a legal requirement, under the ACA and Vermont's Act 48, and a health policy imperative. The best response to the current weakness of the scientific evidence is to build flexibility into the ratings system from the beginning, so that as new evidence emerges from the research, and best practices for quality rating systems emerge, these can be quickly incorporated into Vermont's QHP rating system.

With the above points in mind, this section addresses each of the specific bulleted subtopics referenced in the UMass contract as elements of this report. (Each bullet is listed again here for reference.)

- *Quality components that the Exchange should use to meet federal requirements to certify and rate QHPs;*

As discussed in the UMass report "Preliminary Analysis of Affordable Care Act Laws and Regulations Relating to Quality Measurement," explicit federal guidance in this area is still pending. But the broad outlines are reasonably clear. The ACA requires Exchanges to certify participating QHPs; though not required by the ACA, existing plan accreditation (NCQA) processes, and the data streams associated with them, can serve as a core data source for the Exchange as it makes its certification decision. Since Vermont expects that the current Vermont managed care market participants, all of whom are NCQA-accredited, will be the only participants in the Exchange market, the Exchange will have data generated by the

accreditation process at its disposal.

Federal guidance on plan ratings (as distinct from initial certification) may not be available for some time, as CMS has previously indicated that Exchanges will not be required to produce “QHP-specific ratings” until 2016.¹⁹ This delay will, among other things, allow the new QHPs sufficient lead time to enroll members and collect data on the quality of care provided to them. Since the Exchanges will first enroll members on January 1, 2014, the lead time is necessary for sufficient members to be enrolled and generate data.

Regardless of the delay in issuing specific federal guidance, CMS has already signaled its intent to put forward only minimum requirements in its guidance documents. The agency has repeatedly stated that it will allow and encourage states to impose more stringent quality reporting requirements. Vermont can therefore design a QHP rating system that implements the state’s ambitious vision for improving health care quality.

- *Recommendations on whether to include existing or proposed Vermont quality programs that go beyond federal requirements, in order to accomplish Vermont-specific objectives;*

Vermont laws and regulations already go well beyond the ACA minimum requirements. Act 48 has additional requirements for quality reporting, such as the addition of provider satisfaction with QHPs to the ACA-mandated consumer satisfaction survey. In addition, Rule 9-03 requires all health plans to report operational indicators such as access measures, member grievance, and utilization review process data. Under the ACA, Vermont has the discretion to incorporate all of these data sources into its QHP certification process.

Vermont should consider integrating some of the metrics from the Blueprint for Health initiative with the Exchange’s quality program. Specifically, the eventual quality rating system should reach down to the provider level, incorporating metrics such as the NCQA Patient Centered Medical Home (PCMH) standards. These standards are used to designate Advanced Primary Care Practices (APCPs). Vermont’s existing payment reform laws require all major commercial insurers to participate in this initiative, so the infrastructure and data streams already exist, and can be adopted by the Exchange.

As an example of how this could work in practice, QHPs could be measured on the percentage of their members enrolled in primary care practices with the APCP designation. The Blueprint, in conjunction with insurers, has already developed a system for attributing patients to specific practices, so Vermont could easily implement this metric.²⁰

- *Corresponding metrics for use in certifying and rating QHPs;*

Specific recommendations concerning measures and data sources will be included in the Quality Implementation Plan report, forthcoming from UMass. As a general comment, we would simply restate the recommendation that Vermont draw widely from the variety of quality initiatives it already has in place, and use the existing data associated with these programs.

- *Recommendations on best practices for collecting, auditing and certifying data for the selected metrics;*

As discussed above, Vermont should not have to create any new data streams, since the state's numerous quality initiatives are well developed and have data collection procedures in place and operating. Specific data sources include NCQA data, which are already available to the state as part of the annual reporting requirements for managed care plans under Rule 9-03, the VHCURES all-payer database (which helps support the Blueprint), and additional data collected in support of the Blueprint (outside of VHCURES). NCQA data are audited routinely for all accredited plans, and will therefore presumably meet ACA standards. However, Vermont should review current data validation procedures used by the state for its Blueprint and VHCURES data, to ensure these procedures satisfy the ACA requirements.

- Recommendations on methods for summarizing and benchmarking data (including information about quality improvement activities) across QHPs;

The creation of summary (composite) scores for health plans is a complex issue, as discussed in the literature review above, and in the UMass report on consumer reporting. There is an inherent tension between concise, high-level composite scores, which are easier for consumers to understand but which may convey less meaningful information about quality, and more detailed quality reports containing measure-level breakouts, which are potentially more informative but which could intimidate some consumers.

We recommend that Vermont use a two-track strategy for summarizing data on the Exchange website. The QHP rating homepage should use high-level, composite scores, but include links to detailed data displays for those consumers who wish to see them. The federal guidance on quality ratings will most likely direct states to use a star system of composite ratings. But again, in view of the ACA's emphasis on flexibility and experimentation in the states, we do not expect the future federal guidance to restrict Vermont's ability to make detailed quality reports available to consumers. In addition to reporting plan-level scores on all measures (HEDIS, CAHPS, etc.) that make up the composite rating, Vermont may wish to create "drill-down" capacities, allowing interested consumers to view quality information for primary care practices and hospitals. These provider-level reports could indicate which QHPs contract with the practice or hospital.

Benchmarking of Exchange plans could prove a challenge, especially in the early years of Exchange operation. Vermont health policymakers sometimes calculate benchmarks based on the state's 13 health service areas (HSAs), but only when looking at results across multiple payers. For example, VHCURES data are used to produce a number of reports, such as the Vermont Healthcare Utilization and Expenditure Report, and the VHCURES Statewide Report Card, which provide data at the HSA level. But these reports primarily present multi-payer totals for categories such as types of services, cost, and disease categories for each HSA. Creating statistically valid HSA benchmarks from this data source at the individual payer (QHP) level, in order to compare QHPs, may be difficult due to the small population in some HSAs. Vermont should pay careful attention to this issue as it develops these benchmarks. The benchmarks Vermont selects should utilize all available statewide, regional, and national data from

VHCURES, NCQA's Quality Compass, and other sources, rather than attempting to benchmark performance on Exchange-based only, or on health service areas that include only a portion of the statewide population.

- *Recommendations on how the Exchange will monitor QHP quality on an ongoing basis, including the monitoring of complaints, grievances, appeals, access and network adequacy.*

This topic will be addressed in the forthcoming Quality Implementation Plan deliverable.

To conclude, we re-emphasize that the flexibility afforded the state by the ACA framework presents a tremendous opportunity for Vermont to integrate its vision for quality into the Exchange. As the Exchange becomes the platform for Green Mountain Care, the quality ratings and reports provided will go well beyond the (likely minimal) requirements in the upcoming federal guidance.

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