



Attribution: Principles and Approaches

DRAFT REPORT FOR COMMENTING

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Background and Context

Value-based purchasing, including alternative payment models, is widely seen as a potential solution to the high healthcare spending in the United States that has not resulted in better health for Americans when compared to outcomes worldwide. Quality measures are the building blocks of value-based purchasing. Valid and reliable measures are essential to ensure that costs are lowered while quality improves.

Increasingly healthcare clinicians and facilities are being measured and paid based on patient outcomes. However, numerous clinicians and facilities are often involved in a patient's care making it difficult to know who is responsible for the patient's outcomes and ensuring the delivery of quality care. New payment models require a method to determine the clinicians or facilities with which patients have relationships and which providers should be accountable for the care provided. Accountable clinicians or facilities are those whom would be held financially responsible for patient outcomes. Attribution is the method by which these clinician-patient relationships are often defined and is used to assign patients, and their quality outcomes, to organizations, a clinician or groups of clinicians.

Project Purpose, Scope, Approach

There are many issues that make attribution a challenge in the current healthcare environment. The concerns frequently raised include alignment of the care delivery model or payment with the specified attribution approach, the impact of small numbers of patients in provider profiles on reliability, and alignment of the attribution approach to the accountable entity's locus of control. For performance measures that address patient outcomes and cost, the attribution of the measure result is not always clear. Lack of clarity in attribution approaches remains a major limitation in the use of outcome and cost measures. The issues regarding attribution to individual clinicians, including primary care physicians, specialist physicians, physician groups, nurse practitioners and the full healthcare team have complicated the evaluation and implementation of performance measures. Measurement approaches are needed that recognize the multiple entities involved in delivering care, and their individual and joint responsibility to improve quality across the patient episode of care. These issues have become increasingly important in an environment of public reporting, pay for performance, and penalties, where improvements in outcomes may not be directly tied directly to a single provider.

Taking into account the trend towards providing care in shared accountability structures the purpose of this project is to provide multi-stakeholder guidance on approaches to attribution. Specifically this project involves:

1. a commissioned environmental scan of current approaches to attribution;
2. an analysis of the strengths and weakness of these approaches;
3. development of guiding principles for attribution; and
4. recommendations to guide the selection and implementation of attribution models.

NQF has convened a multi-stakeholder committee ([Appendix A](#)) to provide guidance on developing and implementing attribution models. As a first step, the Committee agreed on a set of core principles to

ground its recommendations. These principles represent a baseline agreement on key issues that must be considered in making recommendations. The Committee will meet again in August to develop recommendations; these principles will serve as guidance for those recommendations.

The Committee will meet again August 30-31, 2016 to develop recommendations using these principles as guidance. The process of drafting consensus-based principles was iterative and incorporated Committee discussions from in-person meeting and a two-hour web meeting held after the in-person meeting. Following these meetings, the Committee participated in a survey to approve the draft principles and further refine them to reflect the multi-stakeholder Committee's discussions. The Committee will finalize these principles at their August meeting after considering the input provided through the public comment process.

Draft Core Principles

Attribution models are a set of rules used to systematically assign accountability to providers for a patient's health outcomes. The principles recognize the complex, multidimensional challenges to implementing attribution models, which can change depending on their purpose and the data available. The Committee noted that attribution can refer to both the attribution of patients to a clinician or facility for accountability purposes as well as the attribution of results of a performance measure such as health outcomes or resource utilization to a clinician or facility.

The Committee's discussion highlighted the absence of a gold standard for designing or selecting an attribution model at this time. Therefore, when assessing potential approaches, it is important to understand the goals of attribution in each specific case that the model is used. When selecting an attribution model, actionability, accuracy, fairness, and transparency should be assessed. This is particularly important as the application of an attribution approach for performance measures can significantly impact measure reliability, validity, and results. Moreover, attribution can significantly impact on size of the population for whom facilities and clinicians take responsibility as well as their success under payment programs.

Principle 1: A key goal of attribution is to assign accountability in order to advance and measure progress towards the goals of the National Quality Strategy: better care, healthy people/communities, and smarter spending.

The Committee recognized the importance of identifying a trusted patient/clinician relationship and enhancing patient centeredness and coordination of care in developing attribution models. However, it can be challenging to determine the patient/clinician relationship for purposes of measurement and payment, particularly for outcomes where multiple clinicians or facilities may share responsibility.

Principle 2: Attribution is an essential part of measure development, implementation, and policy and program design.

The Committee recognized that the choice of attribution model and the potential impact of the model on the measure or program results should be among the primary concerns of both measure developers and program implementers. The Committee stressed the impact that the attribution model used can

have on the results of a performance measure, payment model, or quality initiative program. The Committee recognized how attribution can affect measure results, clinician behavior, and policy and program success. The Committee noted that a performance measure can be used with more than one attribution model and that measure implementers should carefully consider the downstream effects of the selected attribution model. For example, attributing a measure to multiple clinicians or facilities rather than using exclusive attribution broadens accountability for patient care.

Principle 3: Available data and data quality are fundamental to designing an attribution model.

Data plays an essential role in the use of an attribution model. Available data sources and data quality should be considered when designing and selecting an attribution model. Attribution models should use the most accurate and timely data available. Data does not need to be limited to medical claims and data from electronic health records and the Committee recognized the importance of patient and clinician reported data for attribution purposes.

Attribution models should leverage available data that is the most reliable and valid for its intended use. For example, the Committee discussed the attraction of using prospective patient-defined relationships for the purposes of attribution yet the higher quality data may be retrospective claims data. The Committee recognized current limits the availability of accurate and timely data for some episodes of care making proper attribution of those episodes impossible at this time.

Principle 4: Attribution models may evolve over time as data availability and quality, health system goals, and the evidence-base for attribution models evolve.

The Committee recognized the impact that temporal and environmental context can have on attribution models. Committee acknowledged that best practices, care delivery systems and the data available are constantly evolving and that attribution models should evolve with these factors to ensure accuracy. The Committee also noted that attribution models may need to change to reflect the system being measured as what works in one system may not work for another. The Committee recognized that attribution models may evolve with policy and program design and measurement goals to optimize the approach.

Principle 5: Simplicity and consistency of attribution models are the ideal state

Ideally, attribution models should be designed to be easily understood by and meaningful to patients, families, and clinicians. Currently it can be challenging to understand why attribution models assign patients or outcomes to certain clinicians or facilities limiting the perceived accuracy, actionability, and fairness of the model. The Committee also recognized the importance using a consistent attribution model approach across measure concepts to increase transparency and understanding about the results of the model. However, the Committee recognized that flexibility is needed to respond to environmental context and align the attribution model with the purpose and goals of measurement.

Principle 6: Attribution requires transparency about the goals and purpose of measurement, the rationale for selecting the attribution model, and consideration of the intended and unintended consequences to all stakeholders (patients, clinicians and facilities, plans, payers) that might arise when the model is implemented.

The Committee acknowledged that performance measurement and value-based purchasing are mechanisms to drive change and improvement in the healthcare system by incentivizing behavior that leads to better outcomes for patients. The Committee stressed that transparency is essential to accurate and fair attribution in both applications. It is critical that the attribution for care and health outcomes be transparent to both clinicians and patients. The Committee noted that the attribution model used and the data available must enable clinicians to know which patients' care or which portion of any particular patient's care they are responsible for. The Committee recognized the importance of timing and that allowing clinicians to prospectively know and agree to their patient panel can improve the fairness and accuracy of an attribution model. The Committee noted that measure implementers should be cognizant that the attribution model selected will drive consequences, both intended and unintended.

Next Phase of Project Work

The Committee will meet again August 30-31, 2016. At that meeting the Committee will finalize the principles based on public comments received. The Committee will also develop a framework for evaluating attribution models as well as develop recommendations to guide the selection and implementation of attribution models.

Appendix A: Attribution Committee Roster

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