afhto | D2D: DATA TO DECISIONS ▶ 2.0

Frequently Asked Questions

Quality "roll-up" indicator: Measuring comprehensive, patient-centered primary care

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What is the composite indicator?

The Quality roll-up indicator reflects the comprehensive nature of primary care according to what matters to both patients and providers through a single measure. It is a composite indicator based on many component indicators, which are combined using a weighting scheme to reflect each component's importance in the Patient-Doctor Partnership. The weights are assigned by patients in a formal assessment process.

D2D 2.0 was the first deployment of this indicator beyond the team where it was developed over 10 years ago. With the data from 100 teams contributing to D2D 2.0, there is now a data-set to explore how best to structure and interpret this indicator.

What's next for the Quality roll-up indicator?

AFHTO is engaging clinicians and other health team members to better understand the clinical usefulness of the composite indicator in time for the next iteration of D2D. The questions to be addressed include:

1. How many (and which) indicators need to be included in the calculation of the composite indicator to generate a robust measure of quality?
2. How many (and which) domains exist in the Patient-Doctor Partnership?

3. How (and when) could AFHTO determine differences in quality roll-up indicator scores based on relationships with providers other than physicians and/or expectations of different groups of patients (e.g. seniors, patients with chronic disease, rural or northern patients etc.)?

Volunteers participating in this consultation will receive a summary of the relative contribution of each component to the stability of the roll-up indicator as well as the nature and number of domains in the Patient-Doctor Partnership on which the roll-up indicator is based. Contact Carol Mulder if you would like to join this discussion or provide input to be considered.

Why use a composite indicator?

The concept of the Quality roll-up indicator is based on the work of Barbara Starfield, a pre-eminent primary care researcher in the USA (see The Starfield model: Measuring comprehensive primary care for system benefit for a summary). Her research established that patient-centred, comprehensive primary care produces better outcomes for patients, improves the Patient-Doctor Partnership, and is cost-effective and therefore more sustainable for the healthcare system.

Measuring performance in a way consistent with these principles is a challenge due to the many different indicators involved in measuring each aspect.

A composite indicator makes it easier by combining all of the relevant indicators into a single measure that can be tracked and compared over time and between providers as a more useful and meaningful reflection of comprehensive primary care. Assembling the Quality roll-up indicator in a way that reflects patients' views of what is important in the Patient-Doctor Partnership adds to the patient-centeredness of the composite indicator.

Where does the Quality roll-up indicator come from?

The Quality roll-up indicator is based on the **"Starfield Index"** which has been in use in the Dorval Medical Family Health Team for more than 10 years. In that setting, the Quality roll-up indicator is combined with 2 other indicators (cost and capacity) as the "Starfield Model" of measurement.

How does the Quality roll-up indicator fit with AFHTO's work?

Developing and implementing the Quality roll-up indicator is part of AFHTO's efforts to advance manageable meaningful measurement of primary care. The first step in that journey was Data to Decisions 1.0 (D2D 1.0). D2D 1.0 was a membership-wide report summarizing performance on a small number of indicators that were both possible to measure and meaningful to members.

D2D 2.0 is the second iteration of this report and will help AFHTO members continue along the path to manageable meaningful measurement. D2D 2.0 built the capacity of AFHTO members to measure primary care according to Barbara Starfield's principles. It represents the first attempt at generating and reporting performance on the Quality roll-up indicator for a large number of primary care teams.

What's in the Quality roll-up indicator?

One of the inputs to the Quality roll-up indicator is the **weights that are applied to each of the components of the composite**. The weights are based on patient input about the relative importance of each of the component measures to the Patient Doctor Partnership (see below for more information about measuring this partnership). The initial weights were generated from a small patient population

at the Dorval Medical Family Health Team. AFHTO has worked with Patients Canada to refresh these weights based on a larger, more diverse sample of patients.

Another input is the **targets for each of the component indicators**. Because each of the components is measured in different units (i.e. grams per litre, % of patients, blood pressure level etc.), the performance on each components is converted to a unit-less scale to allow all the components to be combined into a single composite indicator. For example, instead of reporting HbA1C levels in grams per litre, they are reported in terms of how close the level is to the "target" or desired level for the indicator. This means that targets need to be set for all indicators. The initial targets were defined by a small group of physicians at the Dorval Medical Family Health Team. Based on D2D 2.0 data, AFHTO will be seeking input from a broader physician population to refresh these targets for further use in membership-wide reporting.

The final input into the Quality roll-up indicator is the **performance on the component indicators**. This is based on data from EMRs, patient surveys, provider information and administrative data sources, among others. The indicators included in D2D 2.0 represent a subset of the component indicators of the Quality roll-up indicator. Ideally, the Quality roll-up indicator would be calculated based on data for all the component indicators. However, through mathematical manipulations to estimate values for missing data, it is still possible to calculate the Quality roll-up indicator even for any teams contributing data only for the core D2D 2.0 indicators. This may be sufficient to guide teams with respect to the quality of their Patient-Doctor Partnerships.

How is the Quality roll-up indicator score calculated?

The Quality roll-up indicator score is generated by combining the performance on each of the component indicators (e.g. core D2D indicators plus any data submitted by expanded data collection) with the weight assigned to each indicator by the patient survey. Separate scores are calculated for each of the "domains" of the Patient-Doctor Partnership (see below). There is no direct map back from the domain-specific score to any individual indicator. This is because the roll-up indicator is a composite score, intentionally considering performance on a variety of indicators simultaneously. For example, there is no indicator called "trust" or "sensitivity" or "commitment".

Thanks to the data contributed for the quality roll-up indicator via D2D 2.0, it is now possible to fully explore the theoretical basis for the "domains" of the partnership and further determine exactly how many indicators (and which ones) need to be included in the roll-up indicator. Therefore, as noted in background documents for D2D 2.0, the Quality roll-up indicator is meaningful not so much in terms of the scores (which might not be particularly instructive at all, at this stage) but as an opportunity to determine the feasibility, reliability and minimum data required to generate a reliable composite measure of comprehensive, patient-centered primary care.

What is the Patient-Doctor Partnership (aka DPR)?

The literature suggests that the Patient-Doctor Partnership can be thought of in 6 domains. These are listed and then described in more detail below.

- Access: you get care when you want it
- Sensitivity: your doctor respected your feelings, concerns and circumstances
- Trust: your doctor has your best interests as top priority

- Knowledge: your doctor uses the most accurate/up to date information
- Commitment: your doctor helps you get through your issues
- Collaboration: you and your doctor make decisions together

Six domains of the Patient-Doctor Partnership:

NOTE: *Excerpts below are from a literature review by Jay Shaw, Carol Mulder, George Southey and Frank Sullivan, with help from Rick Glazier, Danielle Martin, Joshua Tepper, Lee Fairclough, Tia Pham, Noah Ivers, Tara Kiran, Geordie Fallis, Phil Ellison, Onil Bhattacharyya, and Sacha Bhatia.*

The literature review refers to the ***Doctor Patient Relationship (DPR)****, a term that was replaced by Patient-Doctor Partnership in D2D, following consultation with Patients Canada. The original term persists here since the literature review pre-dated discussions with Patients Canada and is a common term in the literature.*

Access

The theme "access" is itself multi-dimensional, and is understood differently in reference to the DPR than the more commonly referred to discussion of "access to health services" in general. Our findings suggest that in relation to the DPR, access refers to the actual receipt of services from a primary care practitioner (in this case, the physician): (a) in a time frame that meets the patient's expectations, and (b) in a way that actually addresses the patient's central concerns. As such, access as a theme in the DPR extends beyond the simple availability of primary care services to include the actual content of the consultation and services delivered.

Across studies in our review, findings suggest that patients considered timely availability of primary care services to be an important element of a strong DPR. In addition to timeliness, our findings suggest that "access" includes the patient's ability to have their personally defined needs met by their primary care physician. This thematic element of access includes patients' beliefs that the doctor spends enough time with them (DiMatteo et al, 1979) and that patients feel encouraged to address the concerns that are important to them (Fredriksen et al, 2009). The increasing resource/time constraints on primary care (and throughout health systems) make these elements of access particularly challenging to achieve, adding potential strain to the development of a strong DPR.

Regard/Sensitivity

The theme "regard" captures the affective or emotional element of the relationship between patients and their physicians. Regard incorporates concepts such as "sensitivity", "empathy", "liking", and "bond". These elements reflect the overall opinion the patient and physician hold of one another, which is largely emotional in nature. Lings et al (2003) described this element of the DPR as "having an easy and comfortable relationship with the doctor", and suggested that it may actually contribute to healing among patients who are ill. Regard as the emotional element of the DPR has been used in a variety of sub-scales to measure the quality of the DPR (Eveleigh et al, 2012), and was found across a wide range of studies to be a key element of a strong DPR.

Trust

In agreement with the wide body of literature on trust in clinician-patient encounters, the findings of our review suggest that trust is also multi-dimensional. Trust refers to patients' beliefs that the physician

(a) has the patient's best interests as their top priority, and (b) is competent as a medical practitioner. Trust refers to both *good intentions* and *competence*. In their literature review of the DPR, Ridd et al (2009) found that patients valued such traits as "competence" in their physicians, and sought "security", "faith", and "confidence" in their relationships with their primary care practitioners. The analysis of these authors further supports the importance of both competence and good intentions for trust in the DPR. Furthermore, Ratanawongsa et al (2011) found that erosions of trust led to challenges in the DPR in primary care, further supporting the importance of a multi-dimensional understanding of trust to the quality of the DPR.

Knowledge

Knowledge was also found to be a multi-dimensional theme in the literature reviewed, referring to (a) having an accurate history and comprehensive knowledge of a particular patient's medical concerns, and (b) having accumulated an understanding of the patient's particular context and social circumstances. A literature review by Ridd et al (2009) addressed how these two sub-themes of knowledge were inter-related. As patients spend time with their physician, they expect the physician to build upon their foundational knowledge of the patient to recognize how social and contextual circumstances fit into their medical concerns. In this way, the "knowledge" aspect of the DPR refers to both a comprehensive medical knowledge of the patient (also reflected by an accurate and updated medical record) and personal knowledge of the patient's life situation.

Commitment

Commitment as a distinct theme reflects the patients' perceptions of the mutual commitment of the patient and physician to maintaining interpersonal continuity over time. This theme incorporates the concept of "loyalty", and enables the continued contact required for a strong DPR to be built through sustained interactions between practitioners and patients. Commitment to building the relationship, and recognition that both the physician and patient express such commitment, has been found to enhance the strength and impact of the DPR (Pandhi). Thematically different from the theme of "regard", commitment refers to the patients' propensity to act on their regard and maintain continuity for the sake of improved relationships with their primary care physician.

Collaboration

Collaboration refers to the practical element of the DPR, capturing the reality in primary care that the relationship between physicians and patients is oriented toward the practical goal of improving and maintaining the health of the patient. Collaboration as a theme captures concepts such as "sharing power", "shared decision-making", "shared goals", and "communication" (among many others). Saba et al (2006) suggested that the performance of many tasks considered fundamental to successful patient-centered care, including shared decision-making, influence the quality of the relationship between the physician and the patient. In this way, the practical activities in which the patient and physician engage *together* help to constitute the quality of their relationship. Collaboration thus refers to the *practical* aspect of the DPR, reflecting the fact that the DPR is a practical accomplishment that occurs over time through the joint performance of relational tasks by both physician and patient.