

The Mojo of the Medical Home: Beyond NCQA Recognition

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Often lost in the technical complexities of the Patient Centered Medical Home is its richness and power as it fulfills to the promise of family medicine. This article is the first of several that will share the medical home experience from the perspective of family medicine practice teams that began the journey four years ago. We will begin by exploring the concept of data competency, the first of four pillars of advanced primary care that also include meta-teamwork, the learning organization and population health literacy.

After caring for patients, making good use of clinical data – “clinical data competency” – should be a top priority for family physicians. Knowing what measures matter, figuring out how to input and analyze data and sharing performance and outcomes data is what makes the medical home a discipline. Data competency empowers family physicians to do something extraordinary and evolve through continuous improvement.

I have two confessions to reveal. Data competence cannot happen in the absence of an electronic health record (EHR) and even then, an EHR is not enough. You also need additional information systems that can mine and report on performance and outcomes.

Step 1:

The true north of clinical data competency is determining what to measure. This is the easy part and begins with the national quality agenda that lays out a map: diabetes, chronic obstructive pulmonary disease, hypertension, immunizations, cancer screenings, access and care coordination. These are some of the "high impact" areas for primary care where patients can receive better value for their health care dollar. The National Quality Forum (NQF) and other standard bearers of evidenced-based medicine specified the relevant measures – including HbA1c, smoking status and counseling, and time to the third next available appointment – within the past year. Some measures focus on process (e.g., the use of a depression screening tool for your patients with diabetes) and others on outcomes, (e.g., the percent of people with ischemic vascular disease with blood pressure <140/90).

Step 2:

Now the fun starts: measures are different from metrics. A measure is a statement of the dimension of care (i.e., the process or outcome) to be evaluated. A metric is a specific definition of a measure, with a numerator and a denominator, exclusion and inclusion criteria, and often a time parameter. An example of a process measure is “breast cancer screening performance.” The corresponding metric is:

Numerator = all women between ages of 50 and 69 who have had a mammogram in the past 730 days

Denominator = all women between ages of 50 and 69 who don't meet exclusion criteria

Exclusion Criteria: double mastectomy

Because of the technical nature of metrics, they are hard work and tricky to create. For instance, is the metric for up-to-date A1c the same for United Healthcare as it is for the National Quality Forum or for your local accountable care organization or independent practice association? Metrics are essential for translating measures into technical terms that drive the work of performance improvement. The moral here is that your performance as a medical home is only as good—and relevant—as the metrics you create and use.

Since we are in the digital era with the mantra "gold in, gold out," getting meaningful process and outcomes metrics are highly dependent on reliable data capture: are all data points that feed the metrics being captured by your practice (e.g., are there corresponding, discrete data fields – so called “structured data” -- located in the EHR, has your care team been trained to do -- and be accountable for – correct data entry, does your EHR have validated, reliable interfaces with outside lab vendors?). Arguably, the

most important step in data capture has to do with patient attribution: which patients consider you their family physician? How and where is this caught in the record? What process is in place to ensure that patients that have “moved or gone elsewhere” have their attribution changed? Without reliable attribution, performance reports lose their reliability, accountability wanes and there is less gold and more garbage.

Step 3:

When the measures and metrics are defined and the important data are reliably captured in the clinical workflow process, then comes the reckoning. It is time for a reality check regarding the state of the art in health information technology: EHRs are good transactional tools, documenting and retrieving patient-specific, therapeutic information for the purposes of the encounter, but they generally are lousy analytic engines. What this means is that getting good, primary source data into an EHR database is far easier than getting aggregate, analyzed and meaningful data out.

But help is on the way! Health care clinical analytics will be the buzzwords for the next several years. Clinical analytics are facile, reliable, valid, real-time reporting on clinical performance and outcomes. Clinical analytics are common in the non-health care business world and require mapping of EHR data to separate servers with analytic databases and the specialized software for number crunching. The challenges and benefits of data mining are becoming just as important to the small primary care practice as they are to larger health care organizations. It is, after all, this kind of meaningful clinical data that powers the improvement work of a medical home.

The good news about data competency is that doctors love data but they love it only when they own it. Remember that getting buy in from all staff and involving them in metric definitions and the validation process can foster trust that makes the data valid and meaningful. That, I believe, is the key to ownership.

Examples to try with your practice team:

1) In order to improve efficient data capture, change the medical assistant rooming workflow to include "smoking status" as a vital sign and training them to do brief supportive counseling for every smoker every time. This will result in dramatic improvements with process measures and in the critical outcome measure of smoking cessation.

2) In order to improve data validation and provider engagement, develop performance reports. Our performance reports for pneumococcal vaccination rates in patients over 65 were approximately 60 percent. The numbers stayed that way for a year because physicians believed the data was incorrect. The physician who was least likely to change was invited to drill down each of his 110 outliers, he discovered the following: although 10 percent of his patients were in fact up to date with their vaccinations, 90 percent were not immunized. We used his insights to improve on the performance reports and he is now our biggest data champion.

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