The Missing Dimension of Residencies That Will Affect Your Program's Future

written by Thomas Dent, M.D. | October 28, 2014

Residency programs need to change. I write this as a former family medicine residency program director who spent much of my professional life teaching residents and medical students. Specifically, residency programs need to get on track in the value-based health care world. To fail to do so is to become obsolete.

Here's the problem: Like most residency programs, our teaching focused on individual patients, in both the office or in the hospital. While we treated specific conditions and used protocols, however, we never evaluated performance of a patient population, particularly over an extended time frame.

Quality Measurement is Now Central to Good Medical Practice

As value-based health care becomes the industry standard, residency programs need to integrate quality measurement as a central premise of good medical practice. While the requirements for enfolding quality metrics into residency programs are not yet defined, Graduate Medical Education must participate in this new environment and, indeed, take a leading role.

Rapid changes in healthcare financing will ultimately be driven by measurement of patient outcomes, both in terms of quality and utilization. It is essential that we train residents and fellows how to deliver high quality, low cost care and contribute to best medical practices in this new reality.

Residents and Fellows Must Contribute to Better Care and Resource Utilization

Here are five basic steps to ensuring that residents and fellows are contributing to better care and use of resources at our institutions and practices:

1. Use Population Health tools that will include resident- and fellow-provided care. As a first step, residents and fellows must learn to evaluate results for patient populations, in addition to their individual patients. Residents should understand how they are performing on standard quality performance measures applied to this population.

Faculty are subject to these measurements already, and residents and fellows affect their measurements. We should expect residents to enhance quality and utilization performance under PQRS, the Value-Based Payment Modifier and/or the Shared Savings Program (ACO).

2. Build resident-based measures and registries of patients. Each resident (particularly in primary care) should have quality and population health registries for the patients they have managed that display performance and show comparison to other residents and national standards. This helps residents keep patients "top-of-mind" long after hospital discharge or office visits.

Measurement registries allow residents and fellows to see measurement process details and identify individual patients who need improvement. Registries should be specific to the residents' and fellows' specialties (a registry may be based on a number of different factors, including procedures, demographics or conditions).

3. Institute testing of interventions through applied research protocols. A good Population Health tool enables us to identify patients who have quality results or outcomes that are not favorable. This is key. There are interventions for every group of patients that may improve quality, utilization or patient outcomes. But we often do not know which interventions will prove effective for the particular population.

Residents and fellows must be trained to develop and conduct this applied research using Population Health tools. However, not all Population Health tools incorporate the functionality to make such research possible. To be useful for our purposes, they must enable the following research steps:

> Measure the effects of all interventions in order to see what works to improve results. This includes clinical interventions as well as administrative interventions. We need to measure interventions (within appropriate clinical standards) to determine what will

improve the average population's results, as well as those of individual patients. Implement and assess interventions across the entire population of applicable patients. This is essential for the intervention study to have any value. "Registry science" is a study that determines which patient care inputs improve patient outcomes. Residents within a given specialty should initiate the same intervention and investigate its impact. Tracking and trending the results of the intervention on quality measures and patient outcomes is vital to this process.

It's important to remember that quality measures are not static. Each December, CMS changes its PQRS measures for the upcoming year. Residents and fellows need not learn the individual measures; rather, they need to learn the measures' elements and master the measurement process. They need to be able to determine the relative efficacy of interventions to improve quality and utilization outcomes. Discovering what doesn't work and for whom is a meaningful contribution.

4. Share results internally and, potentially, with other residency programs. By sharing interventions across different residency programs, we have the potential to create a large population database that will be difficult to duplicate any other way. This presents an excellent opportunity for residents and fellows to gain understanding of quality improvement and hands-on experience conducting practice-based research—two important goals of Graduate Medical Education.

5. Stimulate curiosity and commitment to scholarly activities for improving patient care. Residencies provide natural teaching laboratories for practice-based investigations of actions that may improve patient care and efficiency. Using registry science and Population Health tools, we have an opportunity to train physicians early in their careers to question and then test poorly proven assumptions about the supposed benefits of many tests and interventions. Residents and fellows who receive such training will be well-positioned to take a leadership role in the new, highly competitive value-based health care environment.

Founded in 2002, ICLOPS has pioneered data registry solutions for improving population health. Our ICLOPS GME (Graduate Medical Education) Solution helps you to lead a new generation of physicians to become experts in the use of powerful data analytics that improve patient outcomes. ICLOPS is a CMS Qualified Clinical Data Registry.

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