



Applying Analytics and Technology to the Search for High-Quality Physicians

By **Randy K. Hawkins, MD, FACHE, Chief Medical Officer, ConsumerMedical**

The word “quality” is often used in healthcare, but it is rarely defined. However, when quality is a component of comparative analysis, it needs a working definition to be meaningful.

Consider the term “physician quality.” What does it mean, and how is it defined? Is it simply a qualitative assessment, or are data elements and metrics available for quantitative analysis and scoring? If data is used, which elements are selected? How is each metric weighted? What might a scoring system suggest? Whose scoring system or quality tool is the best?

These are just a few of the many questions surrounding physician quality, and there is no consensus on any of the answers. That makes it extremely difficult to compare one physician to another and nearly impossible to compare physicians using different tools or methodologies.

If quality is only loosely defined, and there is no agreement on data sets or the weighting and scoring of variables, can physician quality be that important? A growing body of research, and the experience of employers, patients and payers, support the premise that physician quality matters.

The Role of Quality Physicians

Studies related to outcomes, patient satisfaction and the quest to manage costs are some of the factors helping to fuel the interest in defining quality. A [study published in December of 2020](#) in the [Journal of Medical Internet Research](#) highlights findings from researchers in Chicago who looked at surgical results from more than 4,100 Medicare patients undergoing elective hip replacements in 2018.

Results from the study showed that those patients who used surgeons who were more highly ranked by consumer ratings, quality stars, and machine learning had results that “were associated with better outcomes and lower total costs of care.”

Numerous [studies continue to highlight](#) the impact of low-quality and low-value care. The research consistently shows patients of higher-performing physicians have shorter lengths of stay, lower total cost and better health at discharge than lower-quality providers.

The Search for a New Way to Measure Quality

Indeed, of the five drivers of quality care: diagnosis, doctor, treatment, facility, and coping, the doctor driver may be the most important, as the physician is at the center of healthcare delivery. For example, if a diagnosis is unclear, a high-quality physician is more likely to arrive at an accurate diagnosis in an efficient manner. Similarly, if a diagnosis is confirmed, a high-quality physician will recommend the best evidence-based treatment plan for a condition.

While it varies somewhat by organization or specialty, a common method of measuring physician quality is to look at six items, including:

1. Board certification
2. Sanctions
3. Education and training
4. Licensure
5. Hospital affiliations
6. Procedure level expertise

continued on page 2

Applying Analytics and Technology to the Search for High-Quality Physicians Continued

While this data can be a starting point, today's healthcare consumers need additional insights into the quality of the physicians they see, *and they need help interpreting such information*. Unfortunately, there are no structured guidelines or tools available to the average healthcare consumer searching for a high-quality provider.

Today most patients turn to family, friends and the internet for anecdotal evidence of good surgical results or a positive office visit experience. In addition, an increasing percentage of patients now turn to social media for their initial information on physician quality. [Research shows that 77% of consumers use online reviews as the first step in finding a new physician](#). Rarely, however, does finding a "good" physician go beyond location, availability, and the advice of contacts.

A Data-driven Approach to Quality

There needs to be a better way. Technology, sophisticated algorithms, and even artificial intelligence are needed to arrive at a data-driven approach to physician quality scoring. The data should include:

- Massive data sets covering all physicians and specialties.
- Condition-specific and procedure-specific search capabilities (e.g., orthopedic surgeon specializing in shoulders, knees, etc.).
- A detailed analysis of a physician's relevant experience, including volume of conditions treated and procedures performed, as well as complication rates, and efficiency of care.
- A risk-adjustment methodology that considers the complexity of the provider's patient panel.

What can Health Plans and Employer Groups Do?

Health plans and employers can either build or partner to develop analytics, technology and programs to help consumers navigate to high-performing providers, but what should these solutions be able to do?

- **Include commercial claims.** Many physician quality tools only ingest data from government claims, but it is important that physician quality tools incorporate commercial claims into their analysis.
- **Provide scoring for physicians nationwide.** Resist limiting the analysis to a single, predefined, network of providers. Look for a resource that provides data on all physicians.
- **Offer customized searches.** These analytic tools should consider patients' preferences when returning results. Does the patient only want to see a female OB/GYN? A male urologist? Do they need an appointment right away? Perhaps the provider needs to speak a language other than English. If so, preference-sensitive searching can be very helpful.
- **Ensure data is understandable.** Physician quality reports must be easy to understand and quickly communicated. Patients don't want to spend hours reviewing information that is foreign to them. They often want comparisons that are tailored to their specific interests and will allow them to make an informed choice from vetted options.
- **Share social information.** People will go to the internet to get information about virtually anything, even physician quality. Incorporating relevant social data into analysis helps today's consumers feel they are getting input from patients like them.

Additionally, treatment decision support and expert medical opinion services are valuable resources that are key elements of any successful program to help patients find and access care from quality providers. This type of support is especially important for patients who need help advocating for themselves or who have historically been disenfranchised.

Helping Patients Get off the Sidelines

Healthcare consumers are becoming more informed and engaged in their search for high-quality care. They are getting up off the sidelines to become active participants along their entire healthcare journey.

We need to facilitate this transition. Health plans and employers that provide ongoing education about the importance of quality providers and offer the tools and support are helping to ensure that as many of their members as possible get the quality care needed.

As healthcare continues to evolve, we need to commit to the further development of technologies and tools to expand the knowledge base, toolsets, and experiences of healthcare consumers. When we do, we will enable a new level of healthcare consumerism, one to rival our successes as consumers in other areas of our lives, but with much deeper personal impact.

continued on page 3

Applying Analytics and Technology to the Search for High-Quality Physicians Continued

About the Author: [Randy Hawkins, MD, FACHE](#), is the Chief Medical Officer for ConsumerMedical. He received his BA in Biochemistry from Dartmouth, and his Doctor of Medicine from Georgetown University School of Medicine. He was a Commissioned Officer in the U.S. Navy Reserves Medical Corps. For more information visit www.consumermedical.com.