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Prescriptions for Excellence in HEALTH CARE

A COLLABORATION BETWEEN JEFFERSON MEDICAL COLLEGE AND ELI LILLY AND CO.

Overcoming Barriers to Quality Health Care: Performance Improvement Methodologies and Evidence-Based Medicine

By Emad Rizk, MD

Health care consumers – both patients and payers – are very concerned with the performance of our health care system. Escalating costs, access to care, and wide variations in practice patterns are frequently cited problems. Research confirms that these concerns are valid and that performance in these areas must improve. As an industry, we know that we can do better. The time is right for improving performance by leveraging the tools and knowledge at our disposal.

A number of powerful quality improvement tools have been developed across industries. One such tool that can be applied in the health care system is Six Sigma. Although it was developed for use in industries such as manufacturing, health service providers across the country have achieved great improvements (eg, reducing variability in practice patterns) by using Six Sigma techniques.

Physicians' lack of adherence to evidence-based medicine (EBM) is a major concern. Research has revealed that evidence-based medical care is underdelivered across all

geographies, all disease categories, and by all treatment providers in our country.¹ We have learned that proven medical treatments often go undelivered even when care is received from highly trained medical providers, and that the care we receive depends more on the zip code in which we live than what medical research has shown to be effective.² These conditions are distressing and our lack of progress is disheartening.

While difficult to reconcile given our excellent medical training facilities, these circumstances are, in part, the result of knowledge velocity. The rate at which new medical findings are introduced in our industry has outstripped the ability of our training facilities to adapt and update medical training. Established providers are expected to keep up-to-date with medical findings, but most providers find it difficult at best to do so without assistance.

Providers need tools to alert them to and inform them about new medical evidence. In addition, they need tools that show practice pattern variability, both at the individual and the aggregate level, to identify

those areas in which they should modify their practices. It is through such knowledge, processes, and tools that we will see incremental improvements in performance and that our industry will be transformed.

Opportunities and solutions are literally at our fingertips. The following are some examples from our experience at McKesson Corporation:

Access to care

1. *Accurate telephone numbers for members enrolled in disease management programs.* Disease management programs rely on contacting and counseling members individually by telephone (as well as in person, through their physicians, and via various print and electronic media), but the phone numbers on record are not always accurate. Securing a valid phone number is vital to offering the intervention. By applying Six Sigma methodology to analyze the source of the defects (bad phone numbers) and implement processes to correct the source errors, "reach" rates have improved by a significant percentage with a resulting reduced cost of delivery.

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2. *Leveraging member contacts through 24-hour nurse-lines.* Members calling a 24-hour nurse-line may have an immediate health concern to be addressed. This interaction with a nurse is a “teachable moment” during which the individual may be enrolled into a condition management program. Again using Six Sigma methodology, the reasons for not engaging the member in this transition (from nurse-line to condition management) have been analyzed, revealing several areas of opportunity from both the member and nurse sides of the intervention. The solutions implemented have increased conversion to a condition management program by 30%.

Cost and Variation

1. *Encouraging adherence to evidence-based medical care* represents a striking opportunity to improve health care in the United States. Studies have revealed that, on average, physicians deliver only about half the evidence-based medical care that is indicated for patients during office visits.¹ The greatest area of opportunity is patient counseling, but the reality is that the basics of good medical care (eg, cancer screening, chronic disease prevention) are delivered only 70% of the time.¹ Tools that supply updated EBM findings to providers in readily acceptable and adoptable form can dramatically reduce this gap. The availability of updated disease treatment guidelines (eg, pneumonia) for providers in select geographies has resulted in profound improvements in outcomes and reductions in practice variance.³

2. *Addressing variances in medical care across geographies.* Medical options and treatments for patients vary by geography. Such differences are not easy to explain, but they do exist. For example, health care costs for an average Medicare member are 2.5 times higher in Miami than in Minneapolis, even when adjustments are made for age, sex, and disease intensity⁴; a woman with breast cancer in Pennsylvania has a 3 times greater chance of having a mastectomy depending on the zip code in which she happens to live.⁵ Implementing processes and tools to address these variances through real-time knowledge availability and incentives for compliance are expected to have a positive impact on this issue.

Improving the training process for the next generation of providers

Much of the difference in the way physicians practice can be traced back to their training. The ability to keep up with advancements in medical knowledge is another key factor. With medical information doubling every 2-3 years by some estimates, it has become increasingly difficult for time-pressed physicians to keep up-to-date on multiple conditions and treatment modalities.

It will be incumbent upon the industry to work with the medical community to offer solutions that will allow physicians to have real-time access to the latest medical evidence in order to apply it to the specific circumstances facing patients in the examining room. The expansion of decision-support tools will be even more critical in helping physicians to stabilize variations in medical care

as the velocity of new diagnostic and treatment options make it impossible for even the most committed of practitioners to remain current. Providing information is necessary, but not sufficient. In order to change the health care landscape it is essential for us to understand the root cause of variations and lead with purposeful steps beyond current practice. Like quality improvement, EBM is not a product – both are guiding principles for improving access to care and reducing cost and variation. Embracing these problems provides an opportunity to transform health care delivery with new solutions that will impact performance, satisfaction, and clinical outcomes. It is through these processes that our health care industry will evolve into the seamless, accurate, effective, and efficient system that we all know it can become.

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