VIEWPOINT

Who Determines Physician Effectiveness?

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It is a paradox. Although physicians do not control patient behavior, physician effectiveness is increasingly determined by patient behavior. There is a trend toward physician ratings being based on specific metrics related to the management of chronic illness. Such markers include glycosylated hemoglobin levels, blood pressure, body mass index, and smoking rates, along with other factors known to affect risk of morbidity and mortality. However, the physician contribution to changing the actual outcomes is limited.

Population analyses of health outcomes suggest that medical care accounts for only 10% of the variance in outcomes, whereas approximately 50% can be attributed to behavioral and social factors.[1] With respect to the chronic conditions that receive the largest proportion of health care attention, such as cardiovascular disease and diabetes, physicians identify risk factors, diagnose disease, prescribe treatments, and educate patients regarding relevant lifestyle factors. The result of these efforts, however, is ultimately determined by patient adherence to prescribed treatment regimens and recommended health behaviors (eg, diet, exercise, smoking cessation).

> Because so many variables beyond physician control affect patient outcomes, relying solely on outcome data (or proxies for outcomes) to determine physician effectiveness may be both inaccurate and unjustified.

Extensive physician time and effort is devoted to determining what medications and dosages patients need to take for their chronic conditions, but nonadherence to medication regimens for the treatment of chronic illness has been estimated to be 50%.[2] Primary nonadherence (not ever filling or picking up the prescription) is estimated to be approximately 30%.[3] Outcomes of surgical interventions (eg, bariatric surgery) also largely depend on patient behavior over the long term (ie, changes in eating patterns must be maintained by patients for sustained weight management).

Other variables associated with health outcomes are not directly affected by physicians. Educational attainment affects life expectancy, such that individuals with an advanced degree can expect to live approximately a decade longer than individuals with less than a high school education, although childhood adversity can attenuate the advantage of education.[4] There is a similar gradient for other socioeconomic indicators. Positive affectivity, that is, a trait-like tendency to experience positive emotions and to be actively engaged with other people, is associated with a life expectancy of approximately 4 to 10 more years compared with more negative affectivity.[5] Although physicians are not held accountable for life expectancy, these traits influence overall health and well-being.

Because so many variables beyond physician control affect patient outcomes, relying solely on outcome data (or proxies for outcomes) to determine physician effectiveness may be both inaccurate and unjustified. There is a parallel with public school teachers who are increasingly evaluated using student outcomes, even though student achievement is affected by many variables other than the teacher's qualifications and skills, such as socioeconomic factors. However, until better measures of overall physician effectiveness are identified, physicians, like teachers, must do their best to affect outcomes in the face of performance measures that are influenced by circumstances outside their control.

The prevailing approach to this dilemma is to treat and to teach—the physician-centered intervention models that have been traditionally emphasized in medical education. However, prescribing, recommending, and educating do not necessarily change patient behavior. Much of the management of chronic illness is ultimately the behavioral responsibility of the patient. Overemphasis on patient education often leaves both the patient and physician mutually frustrated. Notably, a leading concern of patients is that physicians are unresponsive to their primary concern,[6] whereas physicians recognize that patients often do not follow their recommendations.

An alternative approach to patient behavior is for physicians to become more patient-centered and to emphasize asking, listening, and understanding, not just the patient's symptoms but also the patient's circumstances, environment, perspectives, barriers, stressors, and goals. Patient behavior is more affected by the pervasive conditions and influences in their lives than by what is learned in the hospital or physician's office (and patients remember only a small proportion of what is discussed in a given appointment).

Physicians can address patient behavior in a manner that both supports patients' autonomy and responsibility for their behavior and that increases the likelihood that patients will make healthier choices. An example of such an approach is motivational interviewing, a form of interaction with patients that highlights the ambivalence patients have about health behavior. Motivational interviewing requires setting aside the tendency to educate patients and rather emphasizes eliciting from patients what they know and what most

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concerns them. This is done through the use of reflective listening and open-ended questions. For example, instead of discussing with the nonadherent patient with diabetes who has a glycosylated hemoglobin level of 9.2% that she needs to take her medications regularly, lose weight, and again receive diabetes education, the patient might be asked what concerns her most about not having her diabetes under control. The physician may learn about the patient's ambivalence; although she is worried about possibly needing dialysis in the future, she presently tends to make adherence to her medication regimen a low priority because she is "just trying to get through the day with a stressful job and family problems." Given such circumstances, the patient might then be asked how she wants to proceed regarding her health. This is to acknowledge reality, which is that she is the decision-maker about what she will or will not do, regardless of what the physician prescribes or recommends. Such a collaborative approach gives necessary consideration to factors that ultimately drive patient decision making. Systematic reviews and meta-analyses of randomized controlled trials of motivational interviewing indicate some efficacy of this approach with medical populations.[7] If the patient's HbA_{1c} level is not in the acceptable range, it is important to explore what health behavior change the patient is willing to pursue.

Physicians are also evaluated using patient satisfaction scores. Patients who take greater responsibility for their health tend to report more positive experiences with their physicians.[8] A patient-centered approach such as motivational interviewing fosters greater patient ownership for health-related behaviors and choices. The notion that patients will not make healthy choices if physicians do not discuss with them what they need to do ignores that fact that simply telling patients what to do has limited influence.

In addition to the potential benefit of improved patient outcomes, a patient-centered approach also may be beneficial for the physician. A cause of physician frustration and burnout is patient nonadherence to treatment or recommended lifestyle change. Goals established collaboratively with the patient are more likely to be realistic and attainable, potentially leading to reduced physician frustration. Furthermore, better-quality physician-patient relationships are known to reduce the likelihood of malpractice suits.

Certainly there are some real and perceived barriers to implementing patient-centered approaches such as motivational interviewing. Time pressures, insufficient skills, and physicians' perceptions about their role are among these. Yet it behooves physicians to recognize that their direct effect on patient outcomes is usually limited and adjust their interactions with patients accordingly. The more effective approach is to adopt a patient-centered and collaborative style that can meaningfully help patients determine how they can best manage the myriad influences on their health.

Although the physician's direct effect on patient health may be decreasing, patient health outcomes are increasingly used to evaluate physicians. Physicians cannot control what patients do, but to ignore or ineffectively address influences on patient behavior is to disregard what ultimately will determine patient outcomes and, accordingly, ratings of physician effectiveness.

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