EDITORIAL

Patient Archetypes, Physician Archetypes, and Tailored Diabetes Care

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Evidence-based diabetes care guidelines[1,2] specify several important clinical goals. Reducing glycated hemoglobin (A_{1c}) levels to less than 7%, blood pressure to less than 130/80 mm Hg, and low-density cholesterol levels to less than 100 mg/dL; using aspirin; and stopping smoking have each been shown to reduce microvascular or macrovascular complication of diabetes. About 70% of adults with diabetes die of a heart attack or stroke,[3] and aggressive control of these risk factors reduces rates of major cardiovascular event or mortality by at least 30% to 50%.[4]

The most common error primary care physicians make in diabetes care is failure to move toward reducing the levels of hemoglobin A_{1c}, low-density cholesterol, and blood pressure, or prescribing aspirin for a patient who has not yet reached one or more of these important evidence-based goals. Studies have shown that primary care physicians are knowledgeable about important evidence-based goals and believe that most patients, with the exception of the terminally ill or seriously functionally impaired, should be managed aggressively. Yet, when we encounter a patient who could benefit from better control of hemoglobin A_{1c} levels, blood pressure, or low-density cholesterol levels, we make a move only about 12% of the time.[5]

Most of us believe that the main problem in diabetes care is not the physician, but the patient. We often claim that we do not initiate or intensify therapy because our patients will not let us.[6] Many medical groups, however, have improved mean hemoglobin A_{1c} levels, low-density cholesterol levels, or blood pressure substantially in recent years simply by setting specific improvement goals and organizing office systems with diabetes registries to enable monitoring, prioritization, visit planning, and active outreach to patients.[7–13]

Office systems that include registries often reduce mean hemoglobin A_{1c} levels about an absolute 1%, but it is clear that we need to do more to get most patients to reduce hemoglobin A_{1c} levels to less than 7%, systolic blood pressure to less than 130 mm Hg, and low-density cholesterol levels to less than 100 mg/dL. Once our offices are organized, the critical next step is to find effective ways to change the behavior of our patients. The work of Peterson and Hughes in this issue of the *Journal*[14] implies that tailoring diabetes care to specific patient characteristics, such as readiness to change, could lead to improvements in both effectiveness and efficiency of diabetes care. Tailored care might be more effective because we can select interventions that match the needs and expectations of specific patients. Tailored care can be more efficient because we can match the intensity of care and the responsiveness of the patient to our efforts.

An extensive body of literature supports the effectiveness of tailored messages,[15] and tailoring care to patients has been an important hallmark of primary care for generations.[16–18] The success of any tailoring strategy is likely to increase if we can develop a simple way to classify patients and apply this method systematically to all diabetes patients. Informal assessment of patient motivation to improve diabetes care is known to be inaccurate. The introduction of simple tools, such as those described by Peterson and Hughes, that can be used systematically in routine office practice to assess readiness to change allows us to tailor our management to the particulars of the patient.

Tailoring care to our patients' readiness to change is a key concept, but there are other patient characteristics that require additional clinical and research attention.[19] What determines a patient's

Submitted 15 March 2002.

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readiness to change? One important factor is whether a patient believes that diabetes is a serious threat to his or her health. If the patient who has not achieved clinical goals has low readiness to change, exploration of the patient's views of diabetes might be important. "Does my patient really believe he or she has diabetes? Does my patient understand that diabetes is a serious disease?"

Changing beliefs about a disease is difficult. There is intriguing evidence that for many patients stories work better than information or threats in inspiring a change in attitude toward diabetes.[20] One way of understanding where that patient is coming from and developing an appropriate approach is to ask a patient to describe friends or acquaintances who have diabetes. How did they take care of their diabetes? How did things turn out for them? Careful listening to these stories, which takes some time, can give us the clues we need to stimulate change in our patient's views of diabetes and to instigate and support the patient's efforts to take better care of this potentially devastating disease.

We know that at the time diabetes is diagnosed, many patients view the disease as an outside threat to their normal life. In response to this perceived threat, many patients might deny that they have diabetes or take refuge in the belief that it is not a serious disease.[20,21] After a period that could extend from months to years, many such patients might integrate their diabetes care into a new, normal life with diabetes. At the time patients make transitions in their beliefs and attitudes about diabetes, they might have high readiness to change and make considerable improvements in their care by working collaboratively with physicians and educators.[19]

Some patients, however, never get past their denial of the seriousness of diabetes. These patients often fare poorly with time because they generally do not achieve desirable levels of hemoglobin A_{1c}, blood pressure, or low-density cholesterol. These patients typically have low readiness to change.[22] Peterson and Hughes' tool might provide a simple way to distinguish these two groups of patients systematically rather than intuitively. Distinguishing these two groups is important because the clinical approach to these two groups of patients is necessarily different. It is appropriate and advisable to initiate, titrate, or otherwise intensify the treatment of diabetes for motivated patients. In fact, previous studies have shown that diabetes patients who are ready to change often leave physicians who fail to treat them aggressively.[20]

Patients who are less ready to change are less likely to respond to treatment intensification, as Peterson and Hughes' data suggest. We do not yet have a proven, effective clinical approach to such patients. Assisting patients with the hard psychological work of coming to grips with their diagnosis—which might take them through denial, anger, and bargaining before they reach acceptance—is a major challenge.[19] We might work with patients toward this important attitude shift; we might also choose to involve psychologists or diabetes educators to help with this difficult and time-consuming process.

One way to bring order to tailored care is to classify patients into groups, which can be referred to as *archetypes*, based on particular combinations of key characteristics. Preliminary data suggest there are at least a half-dozen common diabetes patient archetypes. Patients progress from one archetype to another along several pathways as the key characteristics, such as readiness to change or views of diabetes, evolve with time. One desirable pathway starts with denial but progresses to a realistic view of diabetes, adjustment to disease, and potential for good control of diabetes-related problems. On the other hand, patients who persist in their denial of the seriousness of diabetes are likely to remain in poor control and ultimately sustain serious complications before they will change their views of diabetes.

As physicians, one responsibility is to provide guidance, encouragement, and advice to patients who must necessarily choose their own path through the unpredictable maze of diabetes. We can guide more effectively if we have a good sense of patient archetypes and tailor our care to be archetype-specific. As a particular patient's life with diabetes unfolds, we can anticipate changes in archetype and tailor our clinical approach accordingly. We can anticipate and support archetype transitions, which move patients from denial toward that elusive, new normal life with diabetes that makes care easier for both patients and their physicians.

Beyond patient archetypes lies the largely unexplored world of physician archetypes. Even among primary care physicians in the same clinic, there are remarkable variations in process and outcomes of diabetes care,[23] in ways of dealing with family is-

sues,[24] in time management,[25] and in relational styles with patients.[26] Surprisingly little attention has been devoted to understanding factors that are related to variation in care provided by similarly trained physicians.[27] It is apparent that the interaction of physician archetype and patient archetype can profoundly influence clinical interactions, satisfaction of both patient and physician, resource use, and clinical outcomes. More work is needed, however, to determine effective archetype-specific change strategies for both patients and for physicians.

Scriptures written by our forefathers and contemporaries provide important information that can increase our understanding of both patient archetypes and physician archetypes.[16,17,28] As we face the urgent challenge of improving chronic disease care—a challenge on which the survival of primary care may depend—it is ironic to find an important key to our future buried in the traditions and texts of our past. I wonder whether William Carlos Williams knew, when he died in 1963, that we would be visiting his stories 40 years later to learn how we might adapt to the challenges of a century, a century that was not, perhaps, entirely beyond his imagination.

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