Simple Strategies, Complex Issues

Improving the delivery of medical care can be difficult. Ever since the development of HEDIS (Health Plan Employer Data and Information Set), health plans have been challenged to improve care systemwide—across a group of heterogeneous providers caring for a group of even more heterogeneous patients. Not surprisingly, improvement efforts have tended to focus on changes that meet three criteria: 1) those that are simple, 2) those for which it is generally agreed that the change makes sense (a consensus that is, we hope, supported by evidence), and 3) those that have easily measured effects (at least in terms of the intermediate outcomes). Obvious examples include increasing vaccination rates or the proportion of heart attack patients who are given aspirin.

In this issue of Effective Clinical Practice (ECP), Wasson and colleagues report on their efforts to improve care in private practices in New Hampshire. The practices are not part of a single health plan—they are part of the Dartmouth Primary Care COOP Project. As such, they are a group of providers who have worked together for more than a decade to try to improve the care they deliver. Let’s consider the improvement reported on by Wasson and colleagues in terms of the criteria listed above.

Was the change implemented in the 11 intervention practices simple? Relatively so. Patients in the intervention practices completed surveys in which they assessed their own health problems. Two things happened with these data: 1) They were summarized and sent to the provider, and 2) they were used to construct a customized letter that directed the patient to a specific section in a self-help manual. Thus, from the providers’ perspective at least, the intervention was not only simple, it was also automatic—it did not demand any specific action on their part.

Would most providers agree that the change made sense? Probably. The effort was directed toward a laudable goal: facilitating communication of health information to elderly patients. We have no doubt that there would be broad agreement among providers that the time constraints of outpatient practice impair communication. It is likely that most providers would also believe that systematic attempts to improve communication is a desirable change. Providing evidence for that belief was, in fact, what was being tested in the randomized trial.

Was the effect of change easily measured? Although the attempt to measure change was mechanically simple (administering a survey), measuring the

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outcomes was not. Wasson and colleagues were not trying simply to determine whether a patient was immunized, received mammography, or was prescribed a β-blocker. Instead they made many measurements, perhaps reflecting that improved communication might affect many outcomes.

We would hope that facilitating communication to elderly patients would affect clinical outcomes. However, these researchers found no significant changes in the outcomes that most immediately come to mind: self-reported health status, functional health status, health care costs, and mortality. This has two possible explanations. First, it’s possible that the hypothesis is wrong and that improved communication (or at least this kind of communication) actually has no effect on clinical outcomes. Second, it is possible that the hypothesis is right but that the study failed to support it—an example of a type II error (see Primer). Some readers might find corroborating evidence in the fact that functional status, health care costs, and mortality differences all favored the intervention. They may also note that data were missing on many patients (some died, some moved, some did not respond) and that many patients did not recall that their physician discussed the data. A diminished sample and underuse of the intervention conspired to impair the study’s ability to demonstrate an effect on clinical outcomes. Readers are left to choose among these competing explanations.

Ironically, the problems of diminished sample and underuse reflect a strength of this study—the setting. The study did not take place in a single academic medical center staffed with scores of research assistants. Instead, it took place in 22 distinct private practices across 16 communities in New Hampshire. It did not involve a close-knit group of patients with a single disease entity but instead involved elderly patients with several medical problems. In short, the setting included all the vagaries of clinical practice in the real world.

The outcome measure that was changed significantly by the intervention was the patients’ perception of their health care. In 8 of 11 intervention practices, patients felt that their care had improved over the 2-year study period, whereas an improvement occurred in only 1 of 11 usual care practices. Furthermore, patients in intervention practices reported significantly more help with physical function, fall prevention, and assistance for memory problems.

Is patient perception of health care quality an important outcome? It is hard to know exactly what influences this perception, but it is likely to reflect underlying satisfaction with care. Some might wonder if perception of health care quality and overall satisfaction
are really that important. They thus might conclude that changes in this outcome alone do not warrant the intervention. We, however, come to a different conclusion. In this population of elderly patients (mean age 78), this outcome is arguably as important as any.

Finally, regardless of how one feels about the importance of the findings, it is worth thinking about the model provided by the intervention. Although the providers were active participants in the design, no action was required on their part to implement the intervention for the individual—that is, patients completed their own data forms and the system (in this case, the researchers) summarized the data and initiated actions (summary for provider, customized letter). The model was to develop a structure that worked in parallel with the providers instead of requiring them to assume additional tasks.

Is this direct-system patient contact a model for health care delivery? In certain areas, absolutely. Health plans may directly contact enrollees to encourage specific actions. Elsewhere in this issue, Pearson and coworkers provide a simple example: postcards encouraging influenza vaccination for enrollees identified by a computer algorithm as being at high risk. Many other examples can be conceived. If plans want to make sure heart attack patients are given aspirin or that diabetic patients have annual eye examinations, these patients should be identified and contacted for appointments. If physicians participate actively in the design phase, we are confident that these processes can be made to be more automatic and will be warmly received by providers.

Although researchers have long been interested in the physician–patient relationship, direct contact will create a new relationship to be considered: the health plan–patient relationship. The intervention of Wasson and colleagues proves that this relationship may increase in complexity as the patient becomes engaged in reporting information. Well-designed surveys may capture many domains: satisfaction, current medication use, functional health status, and screens for psychiatric disorders. Algorithms triggering self-help, appointments, or further testing may be developed for specific responses in the survey. These efforts may alleviate provider workload.

But it is also possible for the reverse to occur. The survey instruments may unduly scare patients or dredge up pseudo-disease. The algorithms may cause physicians to overreact (and overtreat) functional or self-limited problems. Providers may be overwhelmed with concerned patients.

All of this is why evaluations of these efforts are important. We look forward to seeing more.