Effective Care

There is unwarranted variation in the practice of medicine and the use of medical resources in the United States. There is underuse of effective care, misuse of preference-sensitive care, and overuse of supply-sensitive care.

Effective care refers to services that are of proven value and have no significant tradeoffs – that is, the benefits of the services far outweigh the risks that all patients with specific medical needs should receive them. These services, such as beta-blockers for heart attack patients, are backed by well-articulated medical theory and strong evidence of efficacy, determined by clinical trials or valid cohort studies.

Diabetes is a common and growing problem for American adults, and the underuse of effective care services for diabetics illustrates the problem. Practice guidelines call for an eye examination at least once every two years for people with diabetes. The Dartmouth Atlas Project found that in many hospital referral regions in 2001, fewer than half of Medicare enrollees with diabetes had eye examinations; in the “best” regions about 75% of enrollees had them. Meanwhile, depending on the region, from 30% to 90% percent of Medicare enrollees who were diabetic did not receive annual blood screening tests of their blood sugar and lipid levels, both of which are important predictors of catastrophic outcomes such as blindness and limb amputations.

Unwarranted Variation: The Overuse, Underuse, and Misuse of Care

There is unwarranted variation in the practice of medicine and the use of medical resources in the United States. There is underuse of effective care, misuse of preference-sensitive care, and overuse of supply-sensitive care.

- Underuse of most kinds of effective care (such as the use of beta-blockers for people who have had heart attacks and screening of diabetics for early signs of retinal disease) is very common even in hospitals considered among the “best” in the country – including some academic medical centers. The causes of underuse include discontinuity of care (which tends to grow worse when more physicians are involved in the patient’s care) and the lack of systems that would facilitate the appropriate use of these services.

- Misuse of preference-sensitive care refers to situations in which there are significant tradeoffs among the available options. Treatment choices should be based on the patient’s own values (such as the choice between mastectomy and lumpectomy for early-stage breast cancer); but often they are not. Misuse results from the failure to accurately communicate the risks and benefits of the alternative treatments, and the failure to base the choice of treatment on the patient’s values and preferences.

- Overuse of supply-sensitive care is particularly apparent in the management of chronic illness (such as admitting patients with chronic conditions such as diabetes to the hospital, rather than treating them as outpatients). The cause is an overdependence on the acute care sector and a lack of the infrastructure necessary to support the management of chronically ill patients in other settings.

The Atlas finding is not an isolated event. Most effective care is underused. In a recent article in the New England Journal of Medicine, Elizabeth A. McGlynn, Ph.D., and her colleagues used a sample of medical records to examine compliance with practice guidelines, most of which targeted the underuse of effective care. The study obtained data on 439 quality measures. The researchers found that patients received recommended care only 54.9% of the time. McGlynn’s research for the RAND Corporation listed these four examples of how lives could be saved if the underuse problem were eliminated:

- Fewer than half of all Medicare enrollees with diabetes nationwide received annual eye exams, in spite of the fact that annual screening is recommended to screen for changes that can cause blindness, a known and devastating complication of diabetes. There were no hospital referral regions where 80% or more of the diabetic enrollees received eye exams, and only three where the percentage was higher than 60%.

The Dartmouth Atlas Project
Patients with hypertension received less than 65% of recommended care. Poor blood pressure control is associated with increased risk of heart disease, stroke, and death. In fact, poor blood pressure control contributes to more than 68,000 preventable deaths annually.

People with coronary artery disease received 68% of recommended care, but just 45% of heart attack patients received beta-blockers, and only 61% got aspirin – medications that could reduce their risk of death by more than 20%.

Patients with pneumonia received just 39% of recommended care. In fact, less than two-thirds of elderly Americans were vaccinated against pneumonia. Nearly 10,000 deaths from pneumonia could be prevented annually through proper vaccinations.

Patients with colorectal cancer received 54% of recommended care, but just 38% of adults were screened for colorectal cancer. Routine tests and appropriate follow-up could prevent 9,600 deaths a year.

“Although the … size of the quality problem may continue to be debated, the gap between what we know works and what is actually done is substantial enough to warrant attention,” McGlynn et al. wrote. “These deficits, which pose serious threats to the health and well-being of the U.S. public, persist despite initiatives by both the federal government and private health care delivery systems to improve care.”

Atlas research shows that spending is inversely correlated with the likelihood of receiving recommended care.

The underutilization of effective care represents a wasted opportunity to prevent serious illness. Care that demonstrably reduces morbidity and mortality and improves the quality of life should always be provided when warranted. The irony is that the level of spending on health care in a community is uncorrelated with the incidence of effective care. The Dartmouth Atlas Project’s studies of Medicare enrollees show that even in regions where Medicare spends the most money per capita on enrollees, there is no guarantee that these simple, cost-effective, proven care measures will be included in the roster of medical interventions. In fact, Atlas research shows that spending is inversely correlated with the likelihood of receiving recommended care, meaning that people who live in high-spending regions (who see many more different physicians and make many more physician visits) are less likely to receive these services than those who live in areas where per capita spending is lower, and continuity of care might be higher.

Indeed, enrollees in traditional Medicare in regions with fewer specialists and more family practice physicians (and less Medicare per capita spending) are more likely to receive effective care. Why? One explanation is that patients with chronic illnesses who live in high-spending regions (where there are also many more medical specialists per capita) tend to have many more physicians involved in their care. That can complicate the care processes to such an extent that no one physician is clearly in charge and responsible for assuring that needed care is provided.

Delivering More Effective Care

Effective care is underused largely because our health care system lacks the means of supporting systematic compliance with treatment guidelines. Organized group practices such as Kaiser Permanente, which have worked hard to improve the management of chronic illness, have demonstrated far better compliance than has fee-for-service medicine in any market. They have succeeded by developing processes that identify patients in need and ensure that they receive proper treatment. These successes indicate that we can raise the quality of care substantially by improving the processes by which preventive and therapeutic services are delivered.

Identifying patients in need will become easier as electronic medical records become more widely used. But to truly expand effective care, we must change the economic incentives that influence the behavior of both patients and providers. For example, why should our health care system underpay for such services as annual eye exams and then overpay for services to those who end up blind as a result? We need a system that rewards physicians for providing effective and wanted care and encourages the provision of such services to every eligible patient for whom they were indicated.

Sources: