

Opinion

Heart Doctors: Why Do They Embrace Their Database?

Big Brother is watching you! This has long been a rallying cry for those worried about government intrusiveness and loss of civil liberties. It was inspired by George Orwell's novel *1984* (published in 1949), and it had a major influence on my generation of physicians. Requests by governments (or their copycats, private insurance) for documentation, reporting on outcomes of care, financial penalties for noncompliance are all viewed with a jaundiced, Orwellian eye.

In the late 1980s, the New York State Health Commissioner generated data showing an alarming variation among hospitals in the state in short-term mortality and complications for cardiac surgery. Hospitals claimed the data weren't properly risk adjusted, but the thoracic surgeons reacted in a way that nobody had predicted. They decided that only if *they* were in charge of a database could they have reasonable assurance that the data were reliable and conclusions from analysis were valid. And they decided that their database should be national in scope. In 1989, the database project of The Society of Thoracic Surgeons was born and today includes more than 1,300 hospitals and their affiliated surgeons. This database has defused public criticism and has allowed for improvements in mortality and morbidity. Initially skeptical, most heart surgeons are supporters.

By 1998, public scrutiny began to spread to medical and percutane-

ous management of heart disease. Coincident with that development, the American College of Cardiology (ACC) embarked on a project to improve compliance among its member physicians and their teams with Appropriate Use Criteria (AUC) that had been shown in high-quality studies to decrease mortality. Notably, the ACC had expanded its membership to include nurses, physician assistants, pharmacologists, administrators, and cardiovascular technologists, so most stakeholders were represented. It was a College-wide effort, involving development of guidelines, input from member and patient focus groups, construction and implementation of a nationwide database, analysis, and immediate feedback to the providers. It took a lot of time and money and met resistance from naysayers within the College.

The ACC database program is now called "Pinnacle," and it has achieved some spectacular results. In 2010 there were 700,000 patient encounters for hypertension, 523,000 for coronary artery disease, 468,000 for heart failure, and 222,000 for atrial fibrillation. Baseline data had revealed shortcomings in care: Only 79 percent of heart failure patients were prescribed beta-blockers, and only 82 percent of coronary disease patients were prescribed antiplatelet therapy. Yet with feedback, participant compliance improved markedly. For beta-blockers in heart

failure patients, the improvement from baseline was 25 percent, and for antiplatelet therapy in coronary artery disease patients, it was 70 percent.

With this degree of patient care improvement nationwide, it is no wonder that the database has wide acceptance with the ACC and external agencies. Also, the database is robust enough to fulfill the data reporting requirements for the P4P program PQRI (now called PQRS). You may ask whether ophthalmology might benefit from such a database. To get there, much work is needed. And, along the way, worries about "Big Brother" may be raised; such is expected when opening a new frontier.



RICHARD P. MILLS, MD, MPH
CHIEF MEDICAL EDITOR, EYENET