At first glance, the article by Rathore et al., which appeared in a recent issue of the journal and is on demographic and socioeconomic differences in the treatment of acute myocardial infarction, seems to be one more study showing that being a middle-to-upper class white male has its advantages in this world—even during an acute myocardial infarction. Other investigations have shown that such patients are more likely to receive invasive procedures during the treatment of acute myocardial infarction. The new contribution shows that women, blacks, and the poor are less likely to receive medical therapies known to improve outcomes, including reperfusion, aspirin, and β-blockers.

Before filing this article under the category of “Health Policy,” readers should look carefully at Table 3. This table shows the actual rates for the utilization of various interventions among “ideal patients.” The remarkable database used in this study was collected from detailed chart reviews for 169,079 Medicare patients who had confirmed acute myocardial infarctions from January 1994 to February 1996. These clinical data were used to exclude patients with relative contraindications to reperfusion, aspirin, or β-blocker therapy. The investigators were able to adjust for issues such as severity of illness, physician specialty, and hospital and geographic characteristics.

As shown in that table, a 5% difference exists in the rates of use of β-blockers at discharge between white and black patients who are ideal for this therapy. Multivariate analysis confirms that this difference is statistically significant. However, note the rates of use of β-blockers in the groups supposedly getting “better” treatment—56% for whites, men, and non-poor patients. Which gap is more impressive: the 5% difference in rates between blacks and whites or the 44% chasm between real and ideal therapy for ideal patients?

For the other medical interventions included in this study, the percentage of patients in each racial, sex, and socioeconomic group who received the recommended therapy was discouragingly low. The multivariate analyses were consistent in suggesting that black, female, and poor patients were less likely to receive these interventions and, for once, we are not left wondering whether the difference is due to underutilization in one group versus overutilization in the other. However, the crude rates shown in Table 3 suggest that racial, sex, or other prejudices are not the problem.

Rather, the crisis seems to affect everyone. Despite well-publicized randomized trials and guidelines, gaps in quality continue to compromise care for patients with cardiovascular and other diseases. These gaps are not the fault of unformed or incompetent physicians. Even in delivery systems with strong reputations for quality, there are disappointing rates for the utilization of interventions that are effective in the secondary prevention of coronary events.

The problem seems instead to be a breakdown in systems—systems that should ensure that patients reliably receive the right care. These systems may be even more dysfunctional for the poor and minorities, which may help explain some of the findings of the article by Rathore et al. The good news is that systems can be improved—and much more rapidly than racism or sexism can be eradicated.

**Health Plan Employer and Data Information Set Data**

Just how quickly improvement can occur can be demonstrated by a review of data from health maintenance organizations (HMOs) collected by the National Committee for Quality Assurance (NCQA), the nonprofit organization that evaluates the quality of care delivered by managed care organizations. Among the tools used to evaluate these plans are Health Plan Employer and Data Information Set (HEDIS) measures. The performance of HMOs on HEDIS measures is often published in lay publications; hence, older HEDIS measures, including the use of β-blockers after a myocardial infarction, have become key foci for HMO quality improvement initiatives.

Since 1996, HEDIS data has shown an increase in the rate of use of β-blockers after acute myocardial infarction, from 62.5% in 1996 to 74% in 1997 and to 80% in 1998. These rates varied throughout the country in 1998, ranging from 69% in Dallas, Texas, to 90% in Boston. Furthermore, the best 10% of HMOs by this measure had a 94% compliance rate, compared with a 64% compliance rate for the worst 10th percentile. These rates are based on younger patients who are mostly in commercial insurance plans, and fewer data exist on Medicare HMO patients. However, available data indicate that HEDIS data on the use of β-blockers in Medicare HMO patients are in the same range.
There is every reason to believe that the trends suggesting an improvement in the use of β-blockers in managed care organizations are real. Data collection is audited by NCQA, and there has been little or no improvement on other HEDIS measures, such as cervical cancer screening, which actually declined slightly from 70.4% in 1996 to 69.9% in 1998. An unscrupulous HMO trying to “game” the system would be unlikely to inflate their performance for patients with acute myocardial infarction while downplaying the quality of their care for healthy young women.

Furthermore, the 62.5% rate in 1996 is in the same ballpark as the 1994 to 1996 data reported by Rathore et al. Whether the cohorts described by NCQA and by Rathore et al are truly comparable, however, is not the issue. More important are the questions of whether marked improvement in use of β-blockers and other preventive measures since 1996 has occurred outside of managed care organizations and whether managed care organizations have improved in areas not directly assessed via HEDIS measures. In the absence of data, it is impossible to know. There is every reason for skepticism or, at least, an expectation that the rates of improvement have been slow.

How have managed care organizations been able to improve their use of β-blockers? First, data on their performance were being collected and published, which created a sense of accountability for correcting gaps in care. Second, they invested in systems to improve performance, such as critical pathways that automatically pose the question of whether aspirin and β-blockers should be used at key junctures in hospitalization. Some HMOs and integrated delivery systems have implemented disease management programs that use case managers to ensure that patients who have coronary events receive appropriate secondary prevention measures.

Such systems are, of course, blind to race, sex, and socioeconomic status. An issue worth exploring is whether the differences in patterns of care demonstrated by Rathore et al are present in managed care organizations for β-blockers and other issues measured in HEDIS. Quite possibly, racial and other differences may have widened: the rich-get-richer, poor-get-poorer care scenario. My hypothesis, which should be tested, is that the differences have been reduced or eliminated.

Such systems to improve care are more readily developed in managed care organizations, which usually have the data to identify deviations from recommended therapeutic strategies and the financial resources to invest in systems such as case management. However, individual physicians’ offices and other provider organizations also have the ability to make their care more systematic by integrating the collection of data into their routine processes.

In summary, Rathore et al provide important findings from a valuable database, and readers may differ on which gaps in quality they find most disturbing—those between the subsets of the population or between the overall care and the ideal. One hopes that all of the gaps have narrowed since 1996. However, hope is not as likely to promote improvement in quality as much as collection of data and the development of systems to support physicians in their efforts to care for their patients.

References
Gaps In Quality of Cardiovascular Care Transcend Social Bias
Thomas H. Lee

Circulation. 2000;102:943-944
doi: 10.1161/01.CIR.102.9.943

Circulation is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2000 American Heart Association, Inc. All rights reserved.
Print ISSN: 0009-7322. Online ISSN: 1524-4539

The online version of this article, along with updated information and services, is located on the
World Wide Web at:
http://circ.ahajournals.org/content/102/9/943

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in Circulation can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the Permissions and Rights Question and Answer document.

Reprints: Information about reprints can be found online at:
http://www.lww.com/reprints

Subscriptions: Information about subscribing to Circulation is online at:
http://circ.ahajournals.org//subscriptions/