Study identifies racial and ethnic disparities in surgical care

February 15 2010

Minority patients in New York City appear less likely than white patients to have surgeries performed by surgeons or at facilities that have handled large numbers of similar procedures in the past, according to a report in the February issue of *Archives of Surgery*.

Racial and ethnic differences in medical care and health outcomes have been widely documented, according to background information in the article. "One specific concern is whether minorities disproportionately receive treatment from lower-quality providers," the authors write. "While measuring quality accurately is difficult, research has shown mortality [death] to be inversely related to hospital and surgeon volume for many surgical procedures."

Andrew J. Epstein, Ph.D., of the School of Public Health, Yale University, New Haven, Conn., and colleagues selected 10 procedures for which published evidence indicates hospital and surgeon volume influences patients' short-term risk of death (including cancer, cardiovascular and orthopedic surgeries). They then studied 133,821 patients in the New York City area who underwent one of these procedures between 2001 and 2004. Annual procedure volumes were calculated for each hospital and surgeon using a statewide database, and thresholds for high-volume vs. low-volume providers and facilities were determined based on previously published research.

Of the patients, 100,798 (75.3 percent) were white, 17,499 (13.1 percent) were black, 4,249 (3.2 percent) were Asian and 11,275 (8.4

percent) were Hispanic. For all ten procedures, white patients were more frequently treated by high-volume surgeons and at high-volume facilities than were black, Asian or Hispanic patients.

"Even after adjusting for a broad range of relevant factors, compared with white patients, treatment at high-volume hospitals by high-volume surgeons was lower by 11.8 percentage points for black patients, 8 percentage points for Asian patients and 7 percentage points for Hispanic patients on average across the 10 study procedures," the authors write.

Two possible explanations for disparities in provider selection have been discussed in previous research, the authors note. One—that systematic barriers including geography and financial incentives keep minority patients from higher-quality providers—was mitigated by the researchers' decisions to focus on the New York City metropolitan area and to control for a range of variables that could affect which providers are used.

"Another hypothesis posits racial/ethnic differences in access to or use of information about provider quality," the authors conclude. "In addition to efforts to improve the quality of care among providers serving minority patients, policymakers and clinicians may be able to improve outcomes by encouraging minority patients and their surrogates to consider comparative performance information when choosing hospitals and surgeons."

More information: Arch Surg. 2010;145[2]:179-186.

Provided by JAMA and Archives Journals