The choice of employment setting for surgeons affects their financial risk and reward, work hours, practice autonomy, institutional relationships, and administrative responsibilities. The most common setting for surgeons continues to be group practice, and that applies to both rural and urban areas. In the past decade, there has been an overall decline in the number of surgeons in solo practice. This has occurred in rural places as well, where solo practice has been more common partly due to the lower number of surgeons who could form group practices.

**Group Practice Growing**

Between 2001 and 2009, the number and proportion of surgeons employed in the three main types of practice settings—hospitals, solo practice and group practice—shifted considerably. The number of surgeons employed in group practice increased by more than 50% between 2001 and 2009 to the point where 54% of all practicing surgeons were employed in group practice by 2009. The more prevalent choice of group practice has come primarily at the expense of employment settings outside the two other main types; “other” settings dropped from 15% to 10% of practice types. Concurrent with expansion in group practice employment, there was a sharp decline in both the number and proportion of surgeons employed in solo practice between 2001 and 2009; in 2001 there were 35,364 surgeons (27% of total) in solo practice compared with 29,310 (21%) in 2009. The number of surgeons employed by HMOs, non-hospital government, and other entities (defined in Figure 1 and Figure 2 as “other setting”) also declined substantially (by 35%) between 2001 and 2009.

**Rural Surgeons**

Since there are typically fewer providers and smaller hospitals in rural areas, the employment options for rural surgeons tend to be more limited. Our analysis shows some differences in the employment setting for rural surgeons. For example, the proportion of surgeons employed in solo practices was higher in rural areas for all years. However, that proportion declined by 17% between 2001 and 2009. Additionally, there was a greater increase in the number of hospital-employed surgeons in rural places than urban places. Between 2001 and 2009, the number of surgeons employed by a hospital increased by more than 50% in rural places versus 20% for all surgeons. In 2001, a total of 591 (4.5%) rural surgeons reported working as hospital employees, compared with 901 (6.9%) in 2009.
Implications
Anticipating the effects of health care reform on the surgical profession is difficult, however, language in the Affordable Care Act (ACA) suggests that future payment changes may favor organizational structures resembling accountable care organizations (ACOs). As such, surgeons may need to align with ACO-type organizations. These are, by definition, large entities that will favor group practices, and the transition process may be easiest for providers accustomed to employment in a groups or hospitals. Additionally, group practice settings may offer greater professional flexibility, protection and fewer practice-entry barriers for surgeons, thus making this type of practice more attractive to future cohorts of medical students who choose surgery as a career. This is particularly important given the recent decline in the number of surgeons relative to population in the U.S.

Data and Methodology
American Medical Association (AMA) Physicians Masterfile data were analyzed for 2001, 2003, 2004, 2005, 2006, and 2009. Providers with a self-reported primary specialty in one of 53 surgical specialties* were included in the analysis. Only providers who identified their practice type as “direct patient care,” were 69 years old or younger, and who reported a practice location within a U.S. county or county-equivalent [e.g., Federal Information Processing Standard (FIPS) codes] were included in the analysis. Physicians were excluded from the analysis in a given year if they reported being in residency training, semi-retired, or if they reported their primary present employer was the U.S. government, locum tenens, medical school, or other non-patient care employment. For the purpose of this analysis, counties were defined by FIPS codes, regions by the U.S. Census Bureau, and rural – urban was defined using the U.S. Office of Management and Budget’s core-based statistical area (CBSA) definitions for metropolitan and micropolitan areas. Rural areas were a composite of micropolitan and unclassified areas.

Limitations
Analysis with AMA Physician Masterfile data have inherent limitations because of the methodology used to construct the dataset. First, the file reflects self-reported data and respondents are prone to various interpretations of questions or response categories. In particular, specialty codes may not accurately reflect the true breadth of a provider’s practice content. Additionally, the response categories for the question about present employment setting, on which this analysis is based, may not be exhaustive or appropriately descriptive of the range of employment settings.

* For a list of specialties included in this analysis, please see: http://www.acshpri.org/documents/surgicalspecialties2010.pdf.