
General surgery residency programs lack capacity to address shortage

Current residency programs do not have the capacity to address the growing shortage of general surgeons, according to survey research presented in May at the sixth annual Association of American Medical Colleges (AAMC) Physician Workforce Research Conference in Alexandria, VA.

In addition to expanding the existing 246 accredited general surgeon residency programs in the U.S., new training programs and an increase in funding will be required to meet the growing need for general surgeons, according to Anthony G. Charles MD, MPH, FACS, the study's lead researcher. Dr. Charles is an assistant professor of surgery in the department of surgery at the University of North Carolina, and a researcher at the American College of Surgeons Health Policy Research Institute, both located in Chapel Hill, NC. His presentation at AAMC was entitled *The Surgeon Shortage: Can We Solve the Surge in Residents Trained by Existing Residency Programs?*

"This shortage already poses a threat to hospitals in poor urban areas and rural hospitals that are generally dependant on surgical services for their survival," said George Sheldon, MD, FACS, a professor of surgery and social medicine in the department of surgery at the University of North Carolina and Director of the

ACS Health Policy Research Institute. "Among the ways to solve this problem are to develop new educational sites and new educational models. Above all, we need federal action to 'unfreeze' the funding for residency positions."

General surgeons perform a wide variety of procedures including appendectomies, cutting out cancerous tumors, and repairing the organs of trauma victims. Approximately 1,000 residents complete general surgery training annually in the U.S.—a number that has changed very little since 1980. In 2009, 909 residents became board certified general surgeons, according to the American Board of Surgery.

The overall number of general surgeons per 100,000 population has declined by 26 percent over the past 25 years. In addition, there is an increasing trend among general surgery residents to pursue surgical subspecialties rather than focus on general surgery. Given the present production level and retirement rate of general surgeons, the per capita supply of the general surgery workforce is expected to decline further over the next 15 years.

In November 2009, Dr. Charles conducted a Web-based survey to 246 residency programs accredited by the Accreditation Council for Graduate Medical Education to determine if these programs could expand enough

to address the shortage problem. Of the 123 program directors who responded, 80 percent reported having sufficient clinical and operative volume to accommodate an average increase of 1.9 residents per year.

Based on this response, Dr. Charles estimated that general surgery residency slots could potentially be increased to train up to 1,515 general surgery residents per year—a 33 percent expansion over the existing 1,137 approved chief resident slots. Given the five-year training intervals, it would take at least five years for this increase to have an impact on the shortage problem.

The research also found, however, that over the last five years, 71 percent of general surgery residents entered surgical clinical fellowships after completing their residencies.

"Even if we expand our current residency programs to full capacity, new programs and new models for surgical training will be needed, as will increased Medicare graduate medical education funding, if we are to produce enough new general surgeons to address the shortage," Dr. Charles said. He believes there has to be a commitment by the federal government to provide the resources that will help resolve this problem.