Will there be enough general surgeons to meet the needs of an aging population? How will the supply affect hospital ORs? Findings from a new study suggest the nation could be facing a shortage. The number of general surgeons per 100,000 Americans has fallen by more than 25% over the past 25 years. In 2005, the national average was 5.7 per 100,000, down from 7.7 per 100,000 in 1981.

The impact will depend largely on where you live. Urban areas, large towns, and isolated rural areas will be affected differently, the study from the University of Washington, Seattle, shows.

The researchers took a close look at the demographics of general surgery for the 25-year period. Surprisingly, they found urban areas have seen a greater decline than other areas, at 27%. In rural areas, supply was off by 21%. Rural areas also had a higher proportion of general surgeons nearing retirement age. The number of women entering general surgery rose to 13% in 2005 from 1% in 1981, but they tend to be clustered in urban areas.

The decline in supply could lead to a crunch in services, especially as baby boomers’ health needs surge, the lead author, Dana Christian Lynge, MD, told OR Manager.

Rural areas could see varying effects, he notes. Some large towns, such as Bozeman, Montana, which has about 28,000 people and a university, are a health care “sweet spot.” Bozeman has a ratio of 7 general surgeons per 100,000, plus a good number of family practice physicians and specialists. But in smaller towns and parts of rural states like Montana and Wyoming, the ratio may be less than 4 in 100,000.

Impact on rural hospitals

Outlying areas are having a tough time attracting and keeping general surgeons, and that could have a serious impact on their hospitals, Dr Lynge observes. A general surgeon can bring in a couple of million dollars in charges in a year.

“There is quite a bit of evidence that a viable OR is important to keeping a hospital afloat financially,” Dr Lynge says. “It’s in hospitals’ best interests to recruit and retain general surgeons.”

If a surgeon retires or leaves, and a rural hospital has to close, the entire community is affected. Mortality from trauma could go up, he notes. Plus, the hospital is often a major employer for small communities.

But attracting general surgeons to rural practices is difficult. The 24/7 lifestyle is not attractive to many younger physicians.

Who will take call?

For urban areas, the challenge is not so much the number of general surgeons as finding ones who will take call.

One reason is the growing number of residents migrating to subspecialties. Over 70% of those entering practice took that path in 2005, up from 55% in 1992, according to George F. Sheldon, MD, and his group from the University of North Carolina, Chapel Hill. Increasingly, they are focusing on areas like minimally invasive surgery or breast surgery, and fewer are going into more traditional subspecialties like thoracic and vascular surgery.
Subspecialists may not want to take call because they don’t feel comfortable covering for emergencies or trauma or don’t find call financially viable, Dr Lynge notes, adding there are no data to document the reasons.

Some hospitals are adjusting by paying surgeons to take call. Some surgical groups have begun employing a surgeon for that purpose or designating a surgeon to be a surgical hospitalist for the day. “They don’t schedule clinic or cases for that day. They handle all of the consults, trauma, lines that need to be done, and so forth—that may be the model for the future,” he says.

**Are solutions in sight?**

There are no quick fixes because producing a general surgeon takes about 10 years. The American College of Surgeons and other groups are discussing options. One possibility is greater use of nurse practitioners and physician assistants, though they cannot replace surgeons. Solutions also need to address training, payment, and lifestyle issues that seem to have made general surgery less attractive than other options, particularly for women. Surgeons also need more exposure to rural health care during their training, the authors note.

**Supply of general surgeons**

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<tr>
<th></th>
<th>1981</th>
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<td>Overall US</td>
<td>7.7:100,000</td>
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**References**
