

Frequently Asked Questions

What percentage of graduating CT surgery fellows (integrated vs traditional) are getting jobs within the first 12 months after graduation?

Overall, the job market is doing very well. Anecdotal evidence from the University of Michigan, MD Anderson, and Emory shows that in the past 2 years, CT surgery residents applying for cardiac surgery (private practice) and general thoracic surgery (academic and private practice) positions have had a large increase in the number of job interviews. Current trainees are going on five to seven interviews each.

The exact number of fellows being hired within 12 months is difficult to provide. The [Thoracic Surgery Residents Association](#) (TSRA) conducts a survey of all trainees during the In-Training Examination every spring. The survey asks those trainees who are actively looking for a job to identify how many job interviews they have had at the time of the survey. The question is broken up by the type of job that is being pursued (private practice, academic cardiac, academic general thoracic, etc.); data on the frequency of job interviews overall are not available.

Among the respondents who were completing residency in 2016 who reported they were seeking employment, the percentage of trainees who had at least one job interview by spring 2016 by job type is:

- 71% mixed adult cardiac/general thoracic private practice
- 41% general thoracic private practice
- 49% adult cardiac private practice
- 29% mixed adult cardiac/general thoracic academic practice
- 51% general thoracic academic practice
- 58% adult cardiac academic practice
- 7% congenital heart surgery academic practice

Some respondents may have been looking within multiple types of jobs (i.e., both a thoracic private practice and a thoracic academic practice), so the true percentage of job interviews for each trainee may be higher.

Among the respondents who were completing residency and seeking employment in 2016, the percentage of trainees who had at least one job offer by job type is:

- 61% mixed adult cardiac/general thoracic private practice
- 32% general thoracic private practice
- 46% adult cardiac private practice
- 32% mixed adult cardiac/general thoracic academic practice
- 38% general thoracic academic practice
- 46% adult cardiac academic practice
- 7% congenital cardiac surgery academic practice

The integrated 6-year programs (I6) are very young and, as such, only a few have graduated any trainees. While there is no repository of these data, correspondence with the few graduates reveals that all who applied for a job are currently employed.

How many unfilled positions for CT surgery attendings are there across the US?

This number varies by location but is undoubtedly increasing. A large number of senior surgeons are still practicing, limiting the number of open positions. Due to retirement of this population AND overall aging of the U.S. population, there are more CT surgeons needed than in the past. There may be more programs looking for CT surgeons as 1) surgeons retire, 2) younger surgeons are interested in flexible positions with better work-life balance, and 3) the aging population increases the number of people with heart and lung disease. This is not a number that is readily available, and it varies from month to month. One barometer, although limited, would be the number of job offerings posted on [CTSNet](#) or in professional journals. However, these usually reflect only a fraction of the jobs available at any one time.

What is the projected need for CT surgeons over the next 10 years?

Overall, we anticipate a significant growing need over the next 10 years. It is difficult to estimate the exact need as we must factor in a growing population of elderly, changes in procedure volume secondary to other technologies, and changes in patient demographics and standards of patient care.

What we can estimate is how many CT surgeons will be practicing. STS conducts workforce surveys periodically. Previously, these have shown that the total workforce would decline if only 100 surgeons per year are trained, which is roughly the current number of graduates each year. Therefore, even with an increase in the number of trainees completing training, with the influx of I6 programs, the workforce appears to be stable at best.

While some might worry that certain procedures will become less frequent due to new technology, we must also factor in the development of new procedures. Also, even if a procedure is performed in a smaller fraction of patients, the predicted increases in the population of patients being served (i.e., aging baby boomers) may still mean that the actual volume of procedures being performed remains the same or even increases.

According to a presentation at the American Association for Thoracic Surgery 96th Annual Meeting in 2016, there will be a shortfall of cardiothoracic surgeons by 2035, and the demand for cardiothoracic surgeons could increase by as much as 46% by 2025.

According to TSRA's 2016 Pre In-Training Exam Survey results, 47% of respondents were planning on additional training after their cardiothoracic surgery residency in aortic surgery, endovascular/TAVR surgery, mitral valve surgery, minimally invasive cardiac or thoracic surgery, cardiac or lung transplant/assist devices, congenital cardiac surgery or critical care.

What are the prospects for the field?

The prospects for the field are bright. Cardiac surgery is one of the most innovative fields with increasing work being done to address heart failure (such as ventricular assist devices), which affects millions of Americans. Endovascular valve repair and aortic aneurysm repair are growing rapidly, and cardiac surgeons will remain an integral part of this technology. Minimally invasive techniques, including robotic surgery, continue to grow, and the demand for surgeons facile in these techniques will grow as senior

