



The Society for Cardiac Angiography & Interventions

SCA&I President's Page



Interventional Cardiology Manpower Needs: How many of us are there? How many should there be? How many will we need in the future?

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The manpower necessary to handle interventional procedures in the United States remains a subject of great uncertainty. The American College of Cardiology predicted a glut of cardiologists in a 1994 position statement [1], and Federal policy and budget decisions reduced financial support for cardiology training. As a result cardiology training programs were downsized [2]. Between 1990 and 1995 the total number of cardiology trainees increased from 2,310 to 2,633. Subsequently the number declined and by 2001 had decreased to 2,305.

How many of us (invasive/interventional cardiologists) are there? In 1997 over 6,500 operators at 1,003 hospitals billed Medicare for PCI procedures [3]. This may be one of the best estimates of the number of practicing interventional physicians in the United States today. If we “do the math” and estimate 1,000,000 PCI procedures annually, each operator should be performing about 150 procedures each year. This represents a manageable load. However, the workload is unevenly distributed. It is clear that many operators have difficulty meeting the 75 case-per-year PCI guideline benchmark number. At the same time, there are certainly operators who perform many hundreds of procedures per year.

There is clearly capacity for the current pool of interventional practitioners to do more.

What is the demand for interventionalists in the community? From the number of letters I receive each week from headhunter companies, there seems to be an endless number of possible interventional positions around the United States. Each seems to offer a higher starting base salary than the next, along with tremendous benefits. They are all in family-friendly, university towns. Fellows tell me they receive daily phone calls with job offers. A recent New England Journal had almost sixty ads for interventional positions.

We are not alone. Electrophysiology is clearly facing a shortage, accelerated by the recent trials demonstrating benefits for AICD therapy and biventricular pacing in large groups of patients, and by the growing applications

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of catheter ablation. It has been suggested that the only way to meet the need for EP procedures will be to have interventional physicians help. If the promise of drug-eluting stents, the proliferation of non-coronary interventional procedures (such as patent foramen ovale closure) and the potential for percutaneous valve intervention are all realized, the demands on our ability to provide services will increase even further.

In conjunction with the establishment of the Interventional Cardiology board examination, the ACGME instituted formal accreditation of Interventional Cardiology training programs. This has had a dramatic impact on the number of physicians we are training. Prior to the initiation of the accreditation process as many as 200-250 fellows completed interventional training each July. In addition, many were in two year programs and received either advanced clinical or research experience. In July 2003, only 135 new interventional board eligible operators will enter the U.S. work force.

What is the supply? This year there are 83 training programs that have been accredited by ACGME. The approved number of positions for these programs is 158. The number of positions from this pool of possible training slots that have been filled totals only 135 (www.acgme.org). If population predictions are correct regarding the increasing number of older patients in the United States, we may face a shortfall over the next two decades [4,5]. There are no data regarding the number of retiring interventional practitioners, so we cannot create an "I=O" equilibrium to maintain our current supply. Nevertheless, the trend is clear.

Another factor that may have an impact on our personnel needs is the growing outcry to limit work hours. While this discussion has focused primarily on house-staff, mention has been made of the similar situation with surgeons who perform off hours procedures [6]. If we are forced not to work on the days after we spend all night in the hospital with acute interventions, how will we manage post-call coverage? In addition to the complexity of managing round-the-clock coverage, the cost of such coverage would represent a large burden as well.

What has SCA&I done to begin to address our manpower uncertainties and our potential needs? A joint intersocietal task force has been formed to examine the

issue. Also, SCA&I has formed a committee for interventional training program directors, and have had well-attended meetings at the annual meeting of the Society, the American College of Cardiology meetings, and TCT. This Society-sponsored effort has been an important—and extremely well-attended—forum for training directors. At our meetings, we have had a number of direct conversations with representatives from ACGME. These conversations have already effected some changes in the ACGME accreditation process to make the process more relevant to the realities of running an interventional training program.

This represents important progress. We are no longer just observers, but have become active partners in the process. The SCA&I training program directors forum will help respond not only to future societal needs, but also to our training programs' ability to meet these needs. If you are a training program director, make sure that you participate in these important meetings.

The real future manpower needs that we need to address remain poorly defined. We may have too many interventional physicians now, and too few for the future.

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