

AAMI's Employment Survey...

How Does Your Compensation Stack Up?

Darcy Lewis

Being a biomedical equipment technician is one of the best jobs that you get today, according to a new listing of best careers published by *U.S. News & World Report*. As the national magazine reports, the job market for technicians is strong and the work is interesting and rewarding. But just how do the salary and fringe benefits stack up? The answer: Good and continuing to improve.

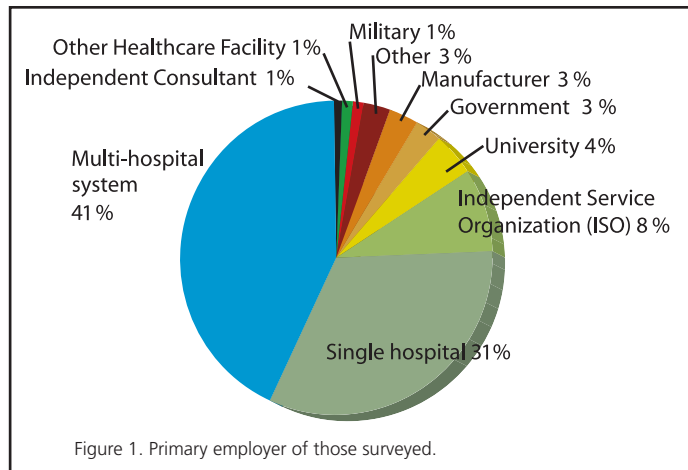
A new AAMI survey shows that average salaries for biomedical equipment technicians (BMETs), clinical engineers (CEs), and other medical technology professionals continue to rise, in most cases faster than inflation. In particular, the survey shows significant growth in salaries for entry-level technician positions.

The survey—which was conducted by Westat, a nationally recognized research firm—is designed to provide up-to-date salary information to help benchmark salary, benefits, and other career-related information. The survey provides insights on issues ranging from income by education level, job title, employer, and specialty; to fringe benefits; and to job satisfaction in different workplaces.

While the survey was not designed to establish or recommend salary levels or job responsibilities, it can help employers and employees gauge how their salaries measure against others in the field. Among the findings:

- For the nine specific job title categories surveyed, the median total salary ranged from \$43,000 for an entry level BMET to \$89,000 for a department director or manager.

- Manufacturers and independent service organizations (ISOs) generally pay more than hospitals, but hospital-based salaries have made up ground in the last two years and are increasing at a faster rate.
- It pays to be certified. On average, respondents who are certified reported earning 8% more than those who are not certified.
- In general, respondents said they were satisfied with their training and other educational opportunities to advance in their careers, but said they felt somewhat constrained by limited advancement opportunities within their departments.



Survey Background

The 2008 Employment Survey was sent by mail to a random sample of AAMI members, and 361 responded. Participants were asked questions about their background, employer, work experience, compensation, and other employment-related issues. The survey was sent only to those living in the United States.

Respondents were promised confidentiality.

Individuals were also asked to select a job title that most closely described their own, and were given descriptions of each position (see sidebar titled “Job Titles Defined.”)

Of those who responded, 92% were male and the median age was 48. About 41% worked for multi-hospital systems, 31% worked in a single hospital, 8% worked for ISOs, and 3% for a manufacturer (See Figure 1). The remainder worked for the government, universities, and military, among others. On average, respondents have worked in the medical technology field for 22 years and for their current employers for 11 years.

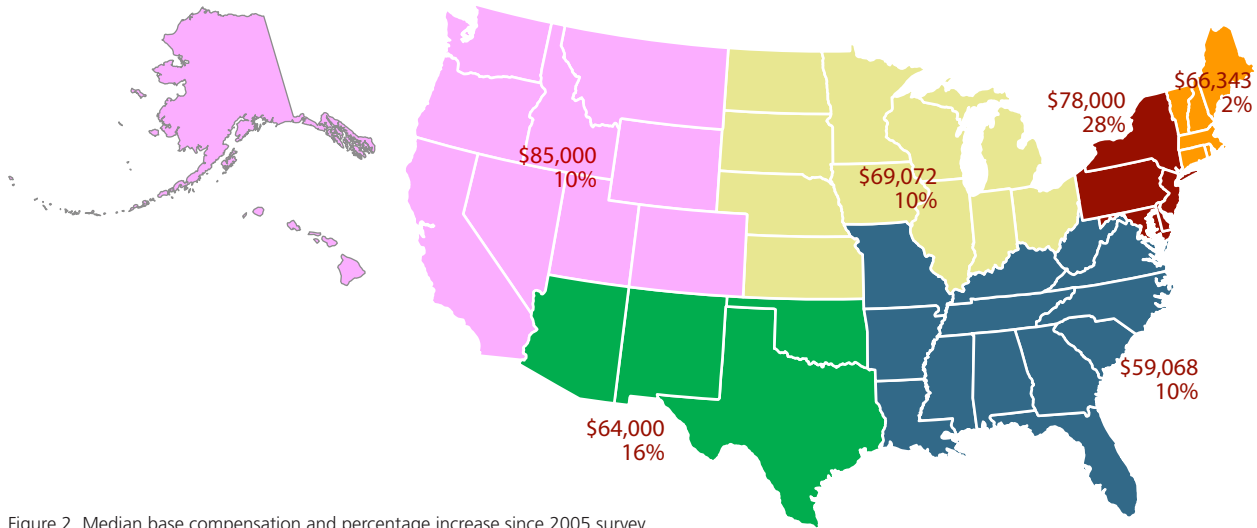


Figure 2. Median base compensation and percentage increase since 2005 survey.

Job Titles Defined

Although job titles vary widely in the industry, the following job titles and descriptions were provided to survey respondents for the purposes of this survey.

BMET I—An entry-level or junior biomedical equipment technician (BMET). Works under close supervision. Performs skilled work on preventive maintenance, repair, safety testing, and recording functional test data. Not certified. Usually has less than four years of experience.

BMET II—A BMET who usually has a two-year degree or higher. Has good knowledge of schematics and works independently on repairs, safety testing, and preventive maintenance (PM). Maintains records, writes reports, and coordinates outside repairs. Average experience is eight years.

BMET III—A highly experienced or specialized BMET usually having an AS (two-year) degree or higher. Has substantial experience and may be certified (CBET). Does highly skilled work of considerable difficulty. Has comprehensive knowledge of practices, procedures, and types of equipment. Average experience is 12 years.

Equipment Specialist—A highly specialized BMET having special training or equivalent experience in lab equipment (LES) or radiology equipment (RES). Usually has an AS (two-year) degree or higher. Performs highly skilled work of considerable difficulty and may hold certification as CLES or CRES.

BMET Supervisor—A BMET who supervises oth-

ers. Has a significant amount of training, education, or equivalent experience. Most have a BS (four-year) degree or higher. Schedules and assigns work to subordinates, but also continues to do highly skilled repairs. Has comprehensive knowledge of practices, procedures, and types of equipment. Average experience is 13 years.

Clinical Engineer—A graduate engineer holding a BS, MS, or PhD. Performs engineering-level work of considerable difficulty. Has the ability to modify devices and do analysis of devices and systems.

Clinical Engineering Supervisor—A clinical engineer who supervises BMET/peer/subordinate clinical engineers; may also supervise equipment specialists. Usually degreed engineer at BA, MS, or PhD level. Average experience is 21 years.

Director/Department Manager—Most are educated or experienced as clinical engineers or BMETs, but others may be trained in administration or business or have extensive healthcare supervisory experience. Most have a significant amount of technical or management experience, and have the skills to select high-tech equipment, and acquire, maintain, and repair equipment. Supervises BMETS, clinical engineers, and support personnel. May also be the chief technology officer or vice president for healthcare technology.

IT Technologist/Technician—An IT technologist/technician manages projects in the areas of system administration, software development, and network security, and provides direct technical support in at least one of these areas.

	2007 Base Salary	2007 Total Salary
BMET (I)	\$38,000	\$43,128
BMET (II)	\$43,180	\$50,000
BMET (III)	\$54,000	\$60,000
Equipment Specialist (CRES or CLES)	\$66,200	\$75,808
BMET Supervisor	\$62,150	\$65,000
Clinical Engineer	\$72,464	\$73,500
Clinical Engineer Supervisor	\$75,414	\$75,811
Director/Manager	\$85,000	\$89,000
Educator	\$83,000	\$94,000
Other	\$84,500	\$93,000

Table 1. Base and total compensation. Total compensation equals base compensation plus any additional compensation such as overtime, on-call pay, bonuses, etc.

Region, Job Title Affect Pay

As with past surveys, income varied by region of the country. As shown in Figure 2, base salaries in New England were relatively stagnant since AAMI's 2005 Employment Survey, rising by just 2%. By contrast, base salaries in the Southwest grew by 16% since 2005. But the biggest salary differential was in the Mid-Atlantic region, where median base salaries jumped 28%—from just under \$61,000 up to \$78,000. These figures take into account all job categories included in the survey.

For Alan Lipschultz, CCE, director of clinical engineering at Christiana Care Health Services in Newark, DE, the Mid-Atlantic finding is surprising. “We’ve had steady 3% increases year by year, and I know my organization tries to stay competitive with the marketplace,” he says. “But we might be an anomaly within the region in that most organizations are centered in Philadelphia or New York, where there are many employment opportu-

nities. I’m a little more insulated from market pressures by being geographically removed.”

Down in Texas, Michael G. Staley, administrative director of the Harris County Hospital District in Houston, is very sensitive to biomed supply and demand. “Within a five-mile radius, we’ve got 34 medical centers and we compete with all of them for biomed techs,” he says. “We found our rates were \$2 to \$5 lower per hour than our competitors’, so we worked with our human resources department and did a market rate adjustment. We’re pretty much equal now with the rest of the Houston medical community.”

The survey also showed that some job titles experienced more salary growth than others (see Table 1). For instance, the base salary for respondents with the job title of BMET I increased from \$29,750 in 2005 to \$38,000 in 2007, a 28% increase. But BMET IIs rose from \$37,750 to just over \$43,000 (14%), while BMET IIIs increased from \$52,000 to \$54,000, an increase of only 4%. The salary figures cited in Table 1 also include “total income,” which is the base salary as well as any additional compensation received such as overtime, on-call pay, call-back pay, and bonuses.

Paul W. Kelley, CBET, biomedical engineering manager at Washington Hospital in Fremont, CA, says the rise in entry-level salaries can be partially explained by the closing of many trade schools, implying that the supply of entry-level candidates has dropped. “I also think there

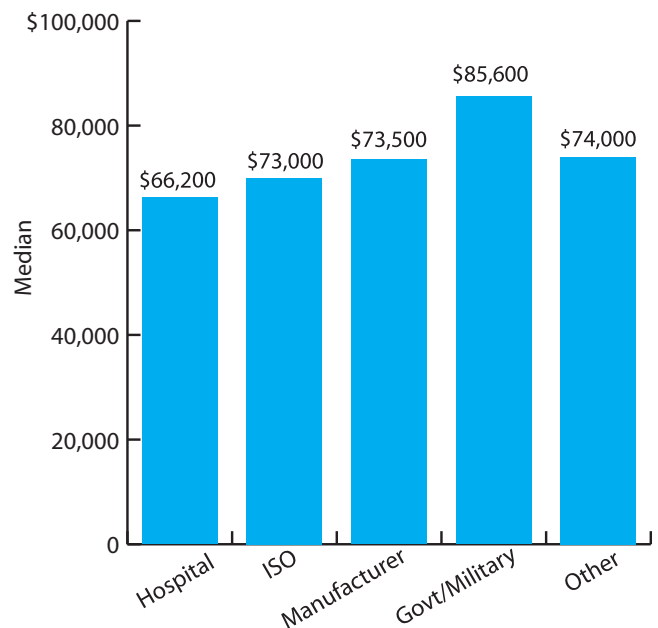


Figure 3. Median base salary by employer type.

is a lure for people to go toward the information technology (IT) fields due to the money,” he says. “Trying to find qualified people to do this job is not as easy as it once was, and the field is more sophisticated than it used to be. For a time, people with little or no medical equipment training could still get hired, but the ‘yesterday, copiers; today, anesthesia’ is much less likely nowadays.”

This increasing level of sophistication is why Robert Stiefel, director of clinical engineering for the University of Maryland Medical System, would have expected greater pay increases to occur at the BMET III level. “In my estimation, there’s a shortage at the entry level but an even greater shortage at the experienced levels,” he says. “At the entry level, you can hire someone with a good technical background who is willing to take additional training and anatomy and physiology courses at a local college as a reasonable substitute for an entry-level BMET. But you cannot find a reasonable substitute for an experienced BMET.”

How Do Hospitals Compare?

As far as work settings go, the survey results found that employees who work for government or military institutions had the highest compensation (see Figure 3). Their median base salary was \$85,600—about \$12,000 higher than their counterparts working for manufacturers or ISOs and \$19,000 above their counterparts at hospitals.

Nonetheless, since AAMI's 2005 Employment Survey, hospital salaries have increased at a faster pace than either manufacturer or ISO salaries. Roger Bowles, EdD, CBET, a professor at Texas State Technical College in Waco, TX, has witnessed this spike in salaries at hospitals. “For years, at least according to our graduate data, in-house BMETs were paid less than manufacturer reps or ISO BMETs. Hospitals have had to raise salaries in order to attract new BMETs,” he says. “I know of one hospital that used to start their entry-level BMETs at about the same rate as the local Wal-Mart paid their stockers. They realized they had to make drastic changes in order to attract and keep BMETs and did so.”

Despite paying less than employers in other sectors, hospitals have a better record of retaining employees. The survey showed that, on average, hospital employees have worked for their employers for 12 years, while those who work for manufacturers have been in their jobs for four years. Kelley believes there are several reasons for this. “One is the travel: the manufacturing employees

	2007 Base Salary
No speciality	\$71,600
Radiology	\$72,000
Laboratory	\$62,400
Information systems/ technology	\$68,200

Figure 4. Median base salary by specialization.

often spend a lot of time traveling to different sites. Second, they tend to work on a limited number of devices, whereas many people prefer working on a broader array of equipment,” he says. “But many people also enjoy the stability of going to work at the same place every day, and knowing the people. Working in a hospital is sort of like joining a family.”

Working at a hospital can also be more manageable in raising a family, says Bowles. “Because I had young kids when I first entered the field, I didn’t much care for the idea of traveling or being on call all of the time,” he says. “At least for me, I preferred a more 8-to-5 environment with an occasional call.”

Lipschultz has found that putting extra effort into filling his BMET I jobs means less turnover later. Christiana Care Health Services has an in-house equipment inspector program that gives candidates a leg up on earning their BMET I qualifications after they obtain additional education. “That way, when they are ready to be considered for BMET I job, they are now internal candidates and so have an advantage over outside candidates,” he says. “In 18 years, I’ve only had one person leave to go to another institution, and that person came back two years later, wanting his job back.”

Does It Pay to Specialize?

In this new survey, nearly 60% of respondents said that they didn’t have a specialty. As shown in Figure 4, the median base salary for this group was \$71,600. By contrast, other respondents chose one of four specialties: Radiology, Laboratory, Information Systems/Technology, or Other. Of these, only those respondents indicating a specialty of Radiology made more than those respondents who did not declare a specialty, and that difference was minor (\$72,000 versus \$71,600). The other three

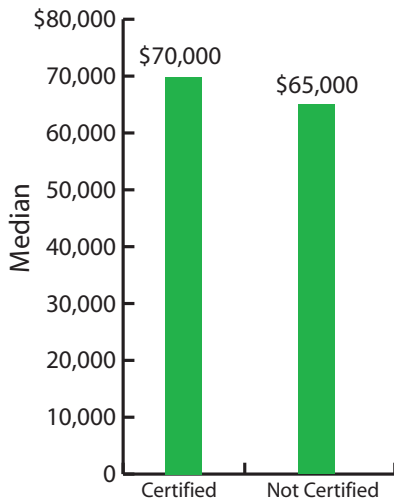


Figure 5. Median base salary by certification.

specialties actually made slightly less than generalist respondents (Laboratory specialists made the least, with \$62,400; the category of “Other” earned nearly \$65,000, while those in IT earned \$68,000).

Manuel Roman, CRES, who is the president of DITEC, Inc., an Ohio-based consultancy devoted to providing special-

ized training in radiology technology, notes that AAMI membership is heavily weighted toward hospital-based biomed, where specialization may be discouraged for managerial reasons. “Most in-house departments do not want to have people who are considered specialists on staff because that presents managerial challenges and issues of pay and performance equity,” he says. “What if

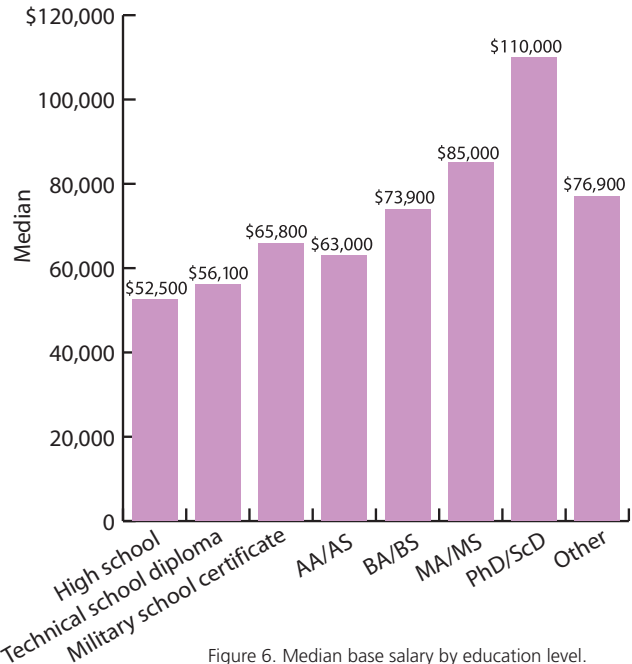


Figure 6. Median base salary by education level.

I have 10 biomed and each one will only work on one kind of equipment? That’s not good for the hospital.”

Make an impact.

ARAMARK Healthcare is core to the clinical care process. And with more than 1,300 hospital partners, we offer our people the opportunity to make the optimal healthcare experience possible for patients, families and the physicians, nurses and staff caring for them.

Make an impact with ARAMARK Healthcare’s Clinical Technology Services, the industry leader in comprehensive multivendor medical equipment service. The successful outcomes we deliver to our clients are a tribute to the greatness of our people:

Biomedical Technicians Clinical Engineering Managers

Imaging Engineers Imaging Supervisors

To discover how our diverse team is redefining healthcare excellence, check out www.aramarkhealthcare.com. To apply online, visit www.aramark.com/careers For more information, call 877-454-4585. EOE

- Technical Training**
- Advancement Opportunities**
- Extensive Operations Support**
- Relocation Assistance**
- Competitive Salaries**
- Comprehensive Benefits**

Best Care, Best Environments®

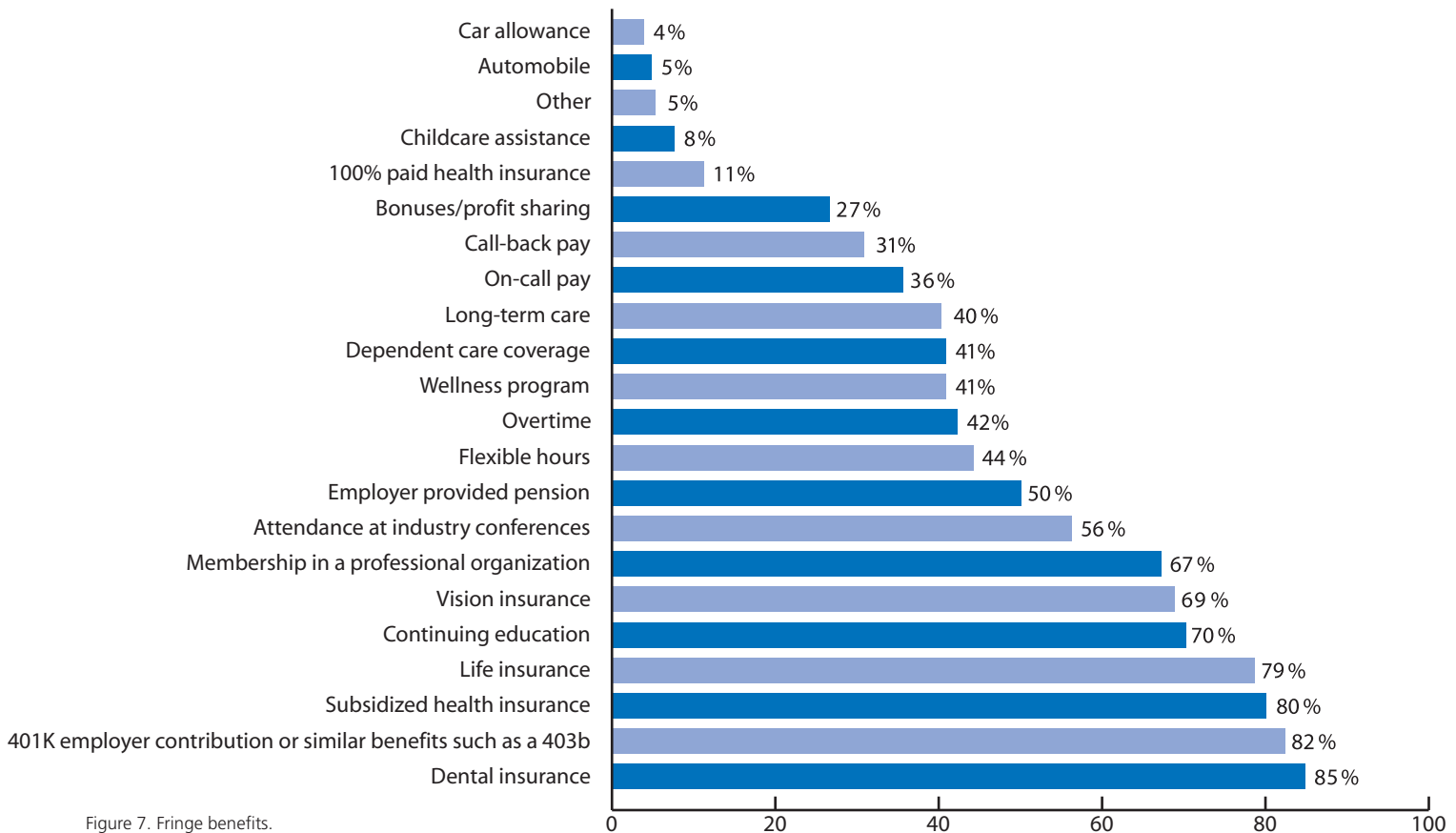


Figure 7. Fringe benefits.

This issue aside, however, Roman points to what he calls the conventional wisdom of pay scales: “The feeling has always been that if you work on expensive equipment, you must know more than someone who works on less expensive equipment,” he says. “And the equipment in radiology is extremely expensive—in the millions of dollars per machine. Therefore, the person who knows enough to work on this equipment should earn more than someone who doesn’t.”

John M. Noblitt, CBET, director of the biomedical technician program at Caldwell Community College and Technical Institute in Hudson, NC, has found that radiology tech jobs tend to pay slightly better than their general counterparts. “That comes down to economics and the volume of money the hospital can bring in with these imaging techniques,” he says. “Each magnetic resonance imaging (MRI) scan brings in about \$1,500, so if your MRI machine goes down on a day you’ve got 20 scheduled, your hospital has lost a chunk of change.”

But Noblitt says, generalists are in strong demand too and as a result their salaries have increased as well. “The biomedical who is a jack-of-all-trades is even more valuable

because they’ve got a harder job in that they need to know so much more to move from department to department,” he says.

Noblitt is not necessarily convinced by what he sees as a trend for hospitals to hire specialists. “Especially at the large hospitals, biomed are being hired in and assigned to specific departments. If you ask an operating room (OR) specialist to cover labor and delivery (L&D), they won’t speak the language or know all the parts. Larger hospitals are more apt to have biomed specialize, but then, many hospitals also cross-train their biomed—it really depends on size,” he says. “If you’ve got four ORs, you can’t afford to have people who only work on OR equipment. If you’ve got 40 ORs, that’s an entirely different situation. But I do believe that the best tech is the guy who can go to L&D, then turn around and go to the lab, OR, or wherever else he’s needed.”

Does Certification Pay Off?

About half of the respondents identified themselves as certified biomedical equipment technicians (CBET), while 37% said they were not certified (see Figure 5).

The remainder held other certifications. Similar to past surveys, the results showed that the median base compensation for certified respondents is nearly 8% higher than those who are not certified—\$70,000 versus \$65,000.

At the University of Maryland, for example, technicians get paid more if they are certified. “My opinion is that certified technicians are better on average [than those who are not certified], though there are many variables,” says Stiefel. “We don’t yet require certification for promotion, but we’re moving in that direction. In my previous job we had that requirement and I think it was successful.”

Education Can Pave the Way

As the survey results indicate, education remains important to success in any technical field. Just over 35% of those surveyed had associate’s degrees and 27% had bachelor’s degrees. As Figure 6 shows, there was a correlation between education level and income level, too.

Those with a technical school diploma earned a median salary of \$56,000, while those with a master’s degree brought home \$85,000 in 2007.

When seeking a promotion, especially into management, formal education clearly pays dividends. “Our chief executive officer (CEO) places a lot of emphasis at the manager level and above on traditional education—that’s where you learn to manage budgets and people,” says Staley from the Harris County Hospital District. “As you move up the ladder, if you have experience without education, you’re not going to be able to compete. The candidate with more specific training, all other points being equal, will get the nod.”

Tim Hopkins, executive recruiter at Stephens International, Inc. in Lakeview, AR, points out that a majority of biomedes know that continuing education can help advance their career. “Many of our client organizations help pay for continuing education and that’s a big perk for a lot of people, especially in a specific modality in im-

AAMI CAREER CENTER
FOR MEDICAL TECHNOLOGY PROFESSIONALS
www.aami.org/career

Find **qualified**
candidates at AAMI’s Online Career
Center

www.aami.org

*The job bank for the
medical technology field.*



To place your ad here contact
Vicki Cummins at
vcummins@aami.org
or call 888-777-6956



HEALTH CARE RECRUITMENT AND PLACEMENT SERVICES

*“Connecting Quality People,
Quality Service”*

- We are dedicated to fulfilling your health care staffing needs.
- Specialized health care recruiting for permanent & temp positions;
- Alternative staffing services such as temporary or contract staffing.

Contact: Tim Hopkins or Cindy Stephens

Toll-free: (888) 785-2638 (BMET)

E-mail: info@BMETS-USA.com

www.BMETS-USA.com

aging like computed tomography (CT)," he says. "Savvy biomed know this training will add to their value in the marketplace."

But Hopkins points out that continuing education can be a double-edged sword for the employer who pays for it: "That same training that the organization has just paid for also adds value to the next guy who's willing to hire those biomed," he says. "Many hospitals that provide extra training now require employees to stick around for a certain amount of time after the training, or they may owe a percentage back. From the employer's perspective, providing training is a good way to save some money in the long run in developing and retaining your employees."

Marcia Wylie, director of biomedical engineering at Scripps Health, a five-hospital system in La Jolla, CA, agrees. "We do a lot of training, but I haven't had people running away with it, because they tend to stay with us," she says. "When people get more training and can do more things for us, we've been able to recognize their increased skills with increased pay. For promotion decisions, we go on performance, not outside experience or education."

At the entry level, Wylie does emphasize education, however. "We put quite a bit of stock in education with our new hires," she says. "In San Diego, we are fortunate to get a lot of military people, with their very good training and education. There are no local biomed schools here, so it's harder to find people who come out of a two-year program."

Emphasis on Benefits

Of course, continuing education is not the only benefit employers offer. Survey participants were asked to identify which fringe benefits they receive from their current employer. Just under 85% of the respondents said they receive dental insurance, which ranked as the most common benefit. Other common benefits include subsidized health insurance, 401(k) employer contribution, and life insurance. The benefits least often provided by employers included automobile loaners, car allowance and 100% employer-paid health insurance (see Figure 7).

The survey also showed the benefits vary by employment sector. As in 2005, a larger percentage of hospital-based employees received overtime and call-back pay. Nearly half of hospital-employed biomed report receiving access to a wellness program. Manufacturers lead the way in subsidized health insurance, long-term care,

bonuses or profit sharing, and 401(k) contributions. ISOs have the highest participation in providing a car or car allowance, life insurance, and membership in a professional organization. Government or military employers are the most likely to offer employer-funded pensions and attendance at industry conferences.

Another perk that is drawing attention is flextime. "I allow a fair amount of flexing, as long as it is pre-approved, and we have coverage. The work is going to be here, and if I can make my employees happier by allowing them to flex around the Bay Area commute, then I do what makes sense," says Kelley. "Later or earlier hours actually help out with gaining access to some equipment, such as in surgery. I think it is important to the employees, because they have some say in their situation, and because they know that we value them as people."

From Hopkins' perspective, he sees biomed as being interested in flextime—up to a point. "Some organizations want to give paid time off versus receiving the money for overtime and on-call. That's not very popular," he says. "People are definitely enticed by flextime if it doesn't take away from their overtime income. People want the money these days, hands-down." ■

.....
Darcy Lewis is a Chicago-based freelance writer who specializes in healthcare.

More Information is Available!

The full results of the 2008 Survey are available on CD or as a downloadable PDF. See detailed answers to each question, demographic information, and much more.

Visit <http://marketplace.aami.org> to purchase your copy.

- Order code, CD version: SALCD
- Order code, PDF version: SAL-PDF
- List price: \$119
- AAMI Member discount price: \$59

Source code: HI