Strengthening States by Supporting a Vibrant Medical Technology Cluster: A Win-Win Strategy

Today, America is recognized as the world leader in the production of life-saving and life-enhancing medical technology. Yet the industry’s leadership is threatened by unprecedented challenges, including a nearly $30 billion federal excise tax set to go into effect in 2013, which is forcing some companies to produce and introduce new technologies outside of the United States. The industry employs people in nearly every state, but the majority of its jobs are concentrated in twenty states (see Appendix). Those states, which account for nearly 85% of all medical technology jobs in the United States, have a unique responsibility, and a narrow window in which to act, to preserve jobs or risk losing them.

The U.S. medical technology industry is a dynamic part of the U.S. economy and a source of economic growth and good jobs. The future presents significant opportunities for growth. The industry employs more than 420,000 people in the U.S. Between 2005 and 2007, medical technology employment grew 20.4% adding 73,000 jobs. The average medical technology worker enjoys wages almost 40% higher than average and even 22% higher than the average for manufacturing jobs. It generates an additional four jobs in suppliers, component manufacturers, and other companies servicing the industry--for a total more than two million jobs nationwide.

As a major contributor to medical progress and improvements in health, medical technology contributes to enhanced productivity. Between 1980 and 2000, medical progress added more than three years to life expectancy. The death rate from heart disease was cut in half, the death rate from stroke was cut by one-third, and the death rate from breast cancer was reduced by 20%.

The medical technology industry is also a strong source of exports and is almost alone among manufacturing industries in consistently maintaining a favorable balance of trade. Worldwide demand for medical technology will expand dramatically as populations age in countries around the world. In the U.S. alone, the elderly population will increase 32 million over the next two decades—a jump of 80%. Worldwide, by 2025, the elderly population will grow by 3.5 times as fast as the population as a whole. Also, rapidly growing middle class
populations in countries like Brazil, India, and China will fuel demand for advanced medical technologies. China’s middle class alone is expected to exceed the entire U.S. population by 2015, and India’s middle class could reach 600 million by 2025.

The medical technology industry offers a special opportunity for states seeking to bolster their economic development and grow stable high-paying jobs. Growth of the industry tends to revolve around clusters of excellence, in which small start-up companies generate the technologies of the future, larger companies interact with the start-ups and transform new products into large scale sales and employment, and medical centers and universities produce ideas and trained personnel.

Below are policy options states should consider implementing to sustain and grow their medical device cluster. The options, which focus on supporting promising early-stage companies as well as established firms through a favorable tax policy and business assistance programs, seek to create a more favorable business climate and increase predictability for medical technology providers.

**Tax Policy**

- **Research and Development Tax Credit**
  While most states have some type of a research and development tax credit, there is not one in four (New York, Florida, Tennessee, and Texas) of the top twenty medical technology states. The adoption of an R&D credit in those states could provide a significant boost for the medical technology and life sciences industries, which would be particularly important for start-up companies.

- **Net Operating Loss (NOL) Deduction**
  Most states allow a tax deduction for businesses with a net operating loss, allowing them to carry the NOL forward to gain some benefit from excess deductions. However, states vary in the length of time they allow the loss to be carried forward. A longer carry-forward period is appropriate for states with a concentration of industries, like the lifesciences, with long research and development and start-up periods. In states, with device clusters, NOL carry-forward periods should match the 20 year federal carry-forward period.
• **Biotechnology Investor Tax Credit**
States should consider adopting a tax credit of up to 50% of the eligible investment in early-stage life science companies, while allowing a five-year carry-forward.

• **Tax Credit for a Portion of Federal User Fees Paid by Companies**
States should consider a tax credit for a percentage of user fees that device manufacturers pay to the federal Food and Drug Administration. In 1996, as part of an economic stimulus package, Massachusetts adopted a 100% tax credit for revenues from user fees. Massachusetts also provides that the credit may be carried forward for up to five years and that early-stage companies, without revenues, may sell their credits.

• **Tax Credit for a Portion of the Medical Device Excise Tax**
The medical device excise tax, which took effect on January 1, 2013, will have a negative impact on industry employment as well as research and development. States should consider adopting policy options to mitigate the tax’s impact, including a refundable tax credit for a portion of the amount paid at the federal level.

• **Domestic Manufacturing Credit**
To provide greater support for domestic manufacturing, states should adopt the IRS Section 199 deduction for domestic manufacturing. This provision allows manufacturers a deduction of nine percent of qualifying income.

**Business Development**

• **SBIR Grant Match**
To help attract, retain, and grow small, technology-based companies, states should provide matching grants for Small Business Innovative Research (SBIR) grants, both in Phase I and Phase II. A handful of states have adopted match programs with very positive results.

• **State Venture Capital Fund**
Nearly forty states have state-run venture capital funds. It is important that the twenty states with the greatest device industry concentration have a venture capital fund, which dedicates a portion of its investments to medical technology.
• **Work Force Training Grants**
  Many states, including Minnesota and Ohio, have established programs dedicated to providing individuals with the unique skills and training needed for medical device manufacturing positions. These programs have a dual purpose of meeting one of manufacturers’ biggest needs; the demand for employees with specific skills, and knowledge, while enabling employees to obtain well-paying and rewarding jobs. Other states interested in attracting and retaining medical technology jobs should establish similar programs.

**Patient Access to Technology**

• **Coverage and Reimbursement**
  States promote or discourage patient access to medical technologies through the coverage and payment policies of their state health care programs that cover an estimated 57 million people. For example, states are responsible for setting reimbursement policies for services under their Medicaid plans, as well as state employee insurance and workers’ compensation programs.

  Payment and coverage policies under these programs should provide patients with timely and predictable access to medical technologies; be sensitive to individual needs; encourage, not impede, innovation; and be developed through a transparent process, with participation of stakeholders, including patients, technology manufacturers, and clinicians.

  These same objectives, of ensuring patients have access to appropriate existing and innovative therapies, should shape state payment reforms designed to encourage efficiency, increase quality, and improve care coordination. Further, it is critical that state technology assessment program decisions are based on clinical efficacy and that beneficiaries are not denied access to treatments based on costs.

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2 Ibid.