THE ECONOMIC IMPACT OF THE MEDICAL TECHNOLOGY INDUSTRY

A 2021 statistical update on the contributions of the industry to national and state economic conditions

AdvaMed
Advanced Medical Technology Association

The Economic Impact of the Medical Technology Industry: A 2021 statistical update on the contributions of the industry to national and state economic conditions

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PROJECT OVERVIEW

The purpose of this report is to provide a comprehensive update to medical technology industry statistics in order to quantify its impact on the U.S. economy. By leveraging data from the U.S. Bureau of Labor Statistics, the U.S. Census Bureau, and the U.S. Bureau of Economic Analysis, the following tables and figures yield a complete overview of the medical technology industry. These data quantify the substantial economic contributions of the industry at the national and state level.

KEY INDUSTRY STATISTICS

REVENUES AND COSTS

In 2019, the medical technology industry was responsible for:

- $148.7 billion in total sales, shipments, and revenues
- $28.8 billion in total payroll
- $52.7 billion in total cost of materials
- An economic value-added of $97.1 billion

In 2017, the top five states in terms of total medical technology revenue were California, Minnesota, Massachusetts, Pennsylvania, and Indiana.

LABOR

In 2020, the medical technology industry:

- Employed 438,060 people
- Included 14,885 establishments
- Paid employees $88,096 per year on average, 44% higher than the average across all industries, and higher than a corresponding premium of 14% for all manufacturing jobs

The top five states in terms of total medical technology employment were California, Minnesota, Florida, Indiana, and New York.

GROWTH RATES

- Between 2015 and 2020, total medical technology employment grew by 6.4%, compared to a decrease in overall manufacturing employment of -1.8%
- Between 2014 and 2019, total medical technology sales, shipments, and revenues grew by 2.6%, compared to a decrease in overall manufacturing sales, shipments, and revenues of -2.7%
- When adjusted for inflation, both annual revenues and annual payroll have remained steady over the past decade.

INDIRECT EFFECTS

Revenues, employment, and earnings in the medical technology provide outsize impacts in their states. On average, in a given state:

- Each $1.00 in MTI revenues led to an additional $0.74 in total state revenues
- Each MTI job resulted in an additional 1.42 jobs
- Each $1.00 in MTI payroll led to an additional $0.94 in total state payroll

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339112	Surgical and medical instrument manufacturing
339113	Surgical appliance and supplies manufacturing
339114	Dental equipment and supplies manufacturing
339115	Ophthalmic goods manufacturing
339116	Dental laboratories

NOTES

The annual 2020 labor statistics presented were computed from Quarterly Census of Employment and Wages (QCEW) data for the first three quarters of 2020.

The establishment size statistics presented were computed from Quarterly Census of Employment and Wages (QCEW) data for the first quarter of 2020.

Indirect revenue, payroll, and employment effects were computed using RIMS II multipliers provided by the Bureau of Economic Analysis. The corresponding state revenues, payrolls, and employment figures used in those calculations were sourced from the 2017 Economic Census, the latest data available providing by-subsector revenues. The multipliers from the BEA use a combination of 2019 and 2012 data and were released in March of 2021.

Where identified, adjusted dollar amounts were calculated using the Consumer Price Index for All Urban Consumers (CPI-U) provided by the U.S. Bureau of Labor Statistics.

SOURCES

- 2020 Quarterly Census of Employment and Wages – Quarterly Data, U.S. Bureau of Labor Statistics
- 2008-2019 Quarterly Census of Employment and Wages – Annual Averages, U.S. Bureau of Labor Statistics
- 2008-2011, 2013-2016, & 2018-2019 Annual Survey of Manufacturers, U.S. Census Bureau
- 2012 & 2017 Economic Census, U.S. Census Bureau
- RIMS II Multipliers, U.S. Bureau of Economic Analysis

MTI REVENUES AND EXPENSES

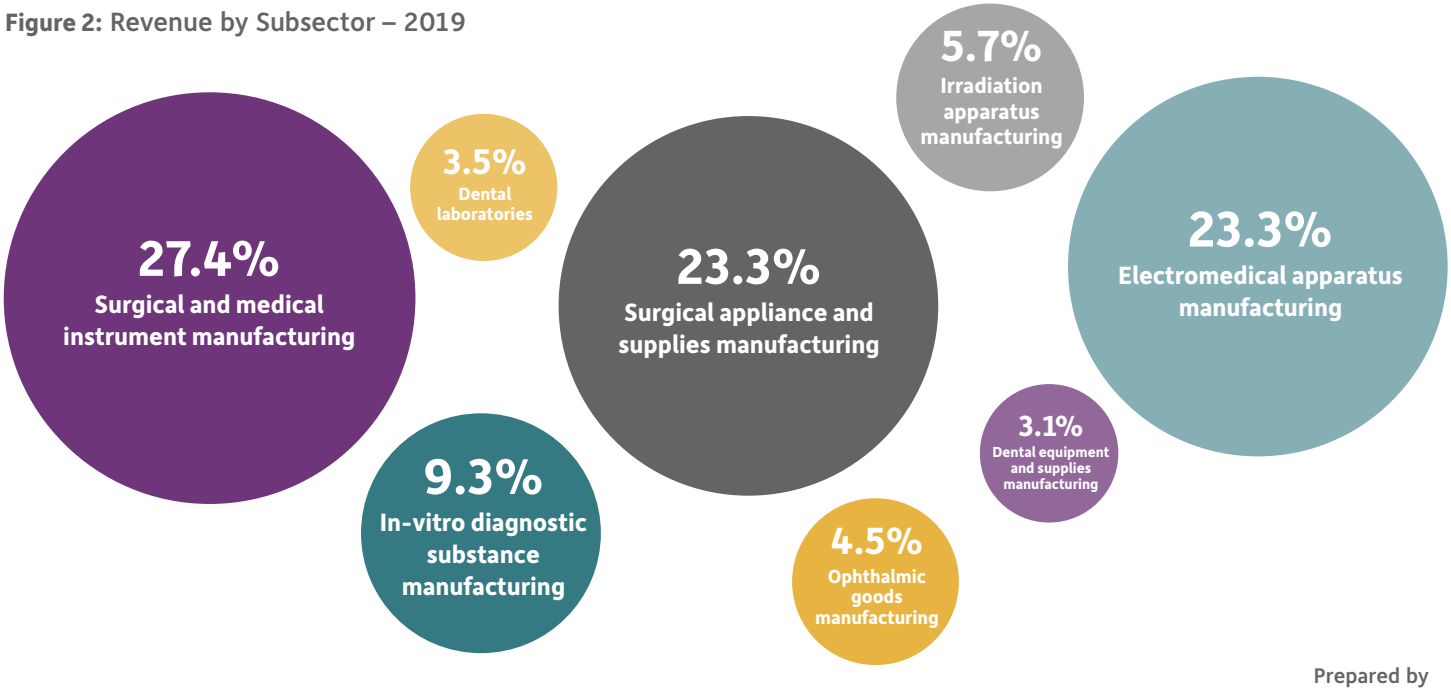
The following figures utilize data from the Annual Survey of Manufacturers & the Economic Census.

CURRENT DATA

Figure 1: Revenue, Payroll, Costs, and Value Added by Subsector – 2019

Subsector	Share of Total Revenues	Sales, value of shipments, or revenue *($1,000s)*	Annual payroll *($1,000s)*	Total cost of materials *($1,000s)*	Value added *($1,000s)*
Medical technology	---	148,704,806	28,804,609	52,682,254	97,133,592
In-vitro diagnostic substance manufacturing	9.3%	13,823,668	2,666,817	4,999,693	8,973,798
Electromedical apparatus manufacturing	23.3%	34,590,108	6,840,444	13,321,063	21,464,390
Irradiation apparatus manufacturing	5.7%	8,403,052	1,178,801	3,323,882	5,110,397
Surgical and medical instrument manufacturing	27.4%	40,736,615	8,184,035	13,390,538	27,411,242
Surgical appliance and supplies manufacturing	23.3%	34,698,542	5,855,843	12,546,722	22,667,911
Dental equipment and supplies manufacturing	3.1%	4,604,575	913,504	1,353,649	3,252,553
Ophthalmic goods manufacturing	4.5%	6,691,088	1,296,929	2,544,317	4,263,738
Dental laboratories	3.5%	5,157,158	1,868,236	1,202,390	3,989,563

Figure 2: Revenue by Subsector – 2019



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