

# An Overview of the **Medical Device Industry**

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# Medical Device Industry Services

**Mercer Capital provides valuation services to start ups, larger public and private companies, and private equity and venture capital funds.**

Mercer Capital's expertise in the medical device industry spans the following segments:

- Cardiovascular
- Orthopedic & Spinal
- Biologics
- Dental
- Diagnostics Equipment

Our services include:

- Purchase price allocations
- Impairment testing
- Portfolio valuation for LP reporting
- Transaction and valuation advisory
- Equity compensation valuation for 409a compliance

## Contact Us Medical Device Professionals



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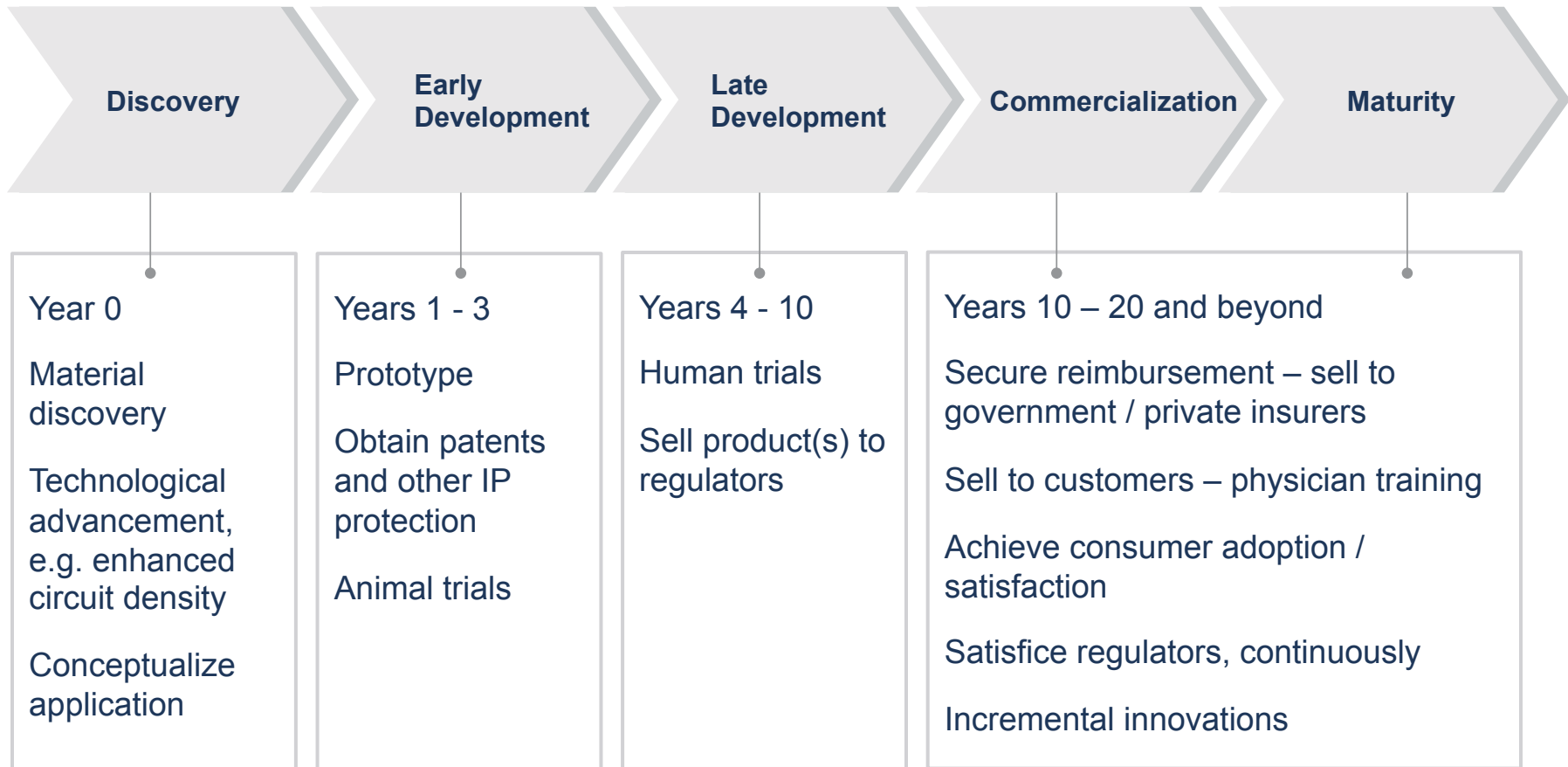
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# Lifecycle: Stages and Players

# Lifecycle

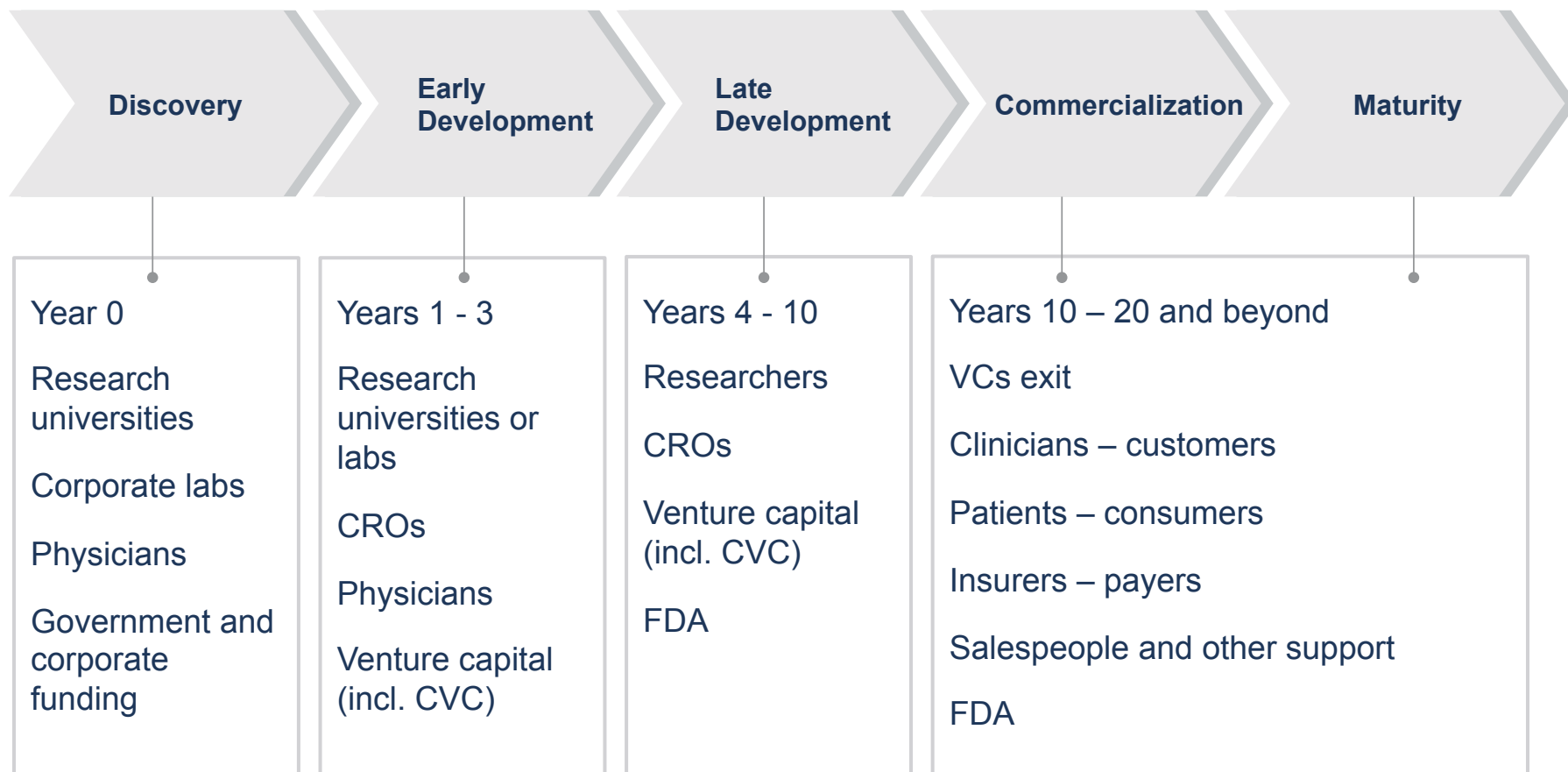
Of Technology / Product / Platform



*Timeline shown is demonstrative, not definitive*

# Lifecycle

Of Technology / Product / Platform

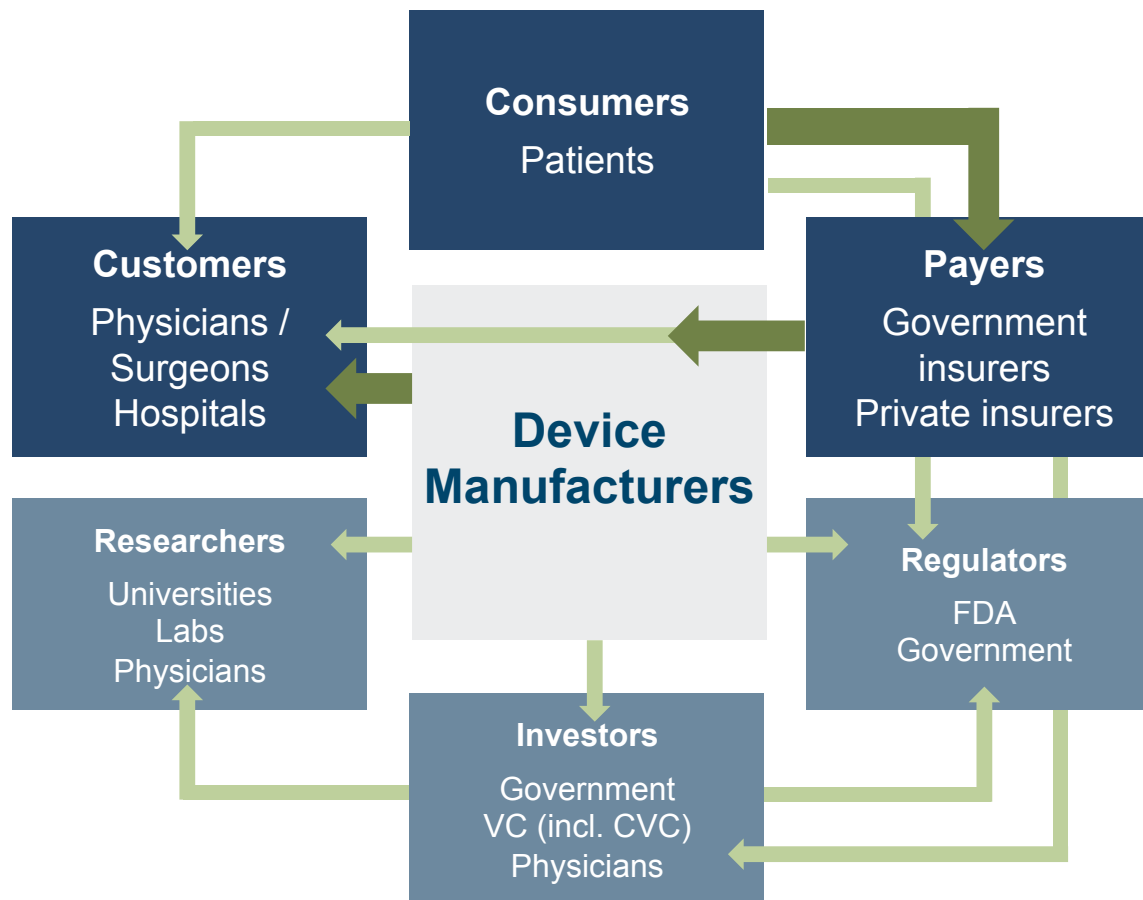


*Timeline shown is demonstrative, not definitive*

# **Follow the Money: Price Feedback Loop?**

# Follow the Money

Purchasing Decision Largely Disconnected from Price



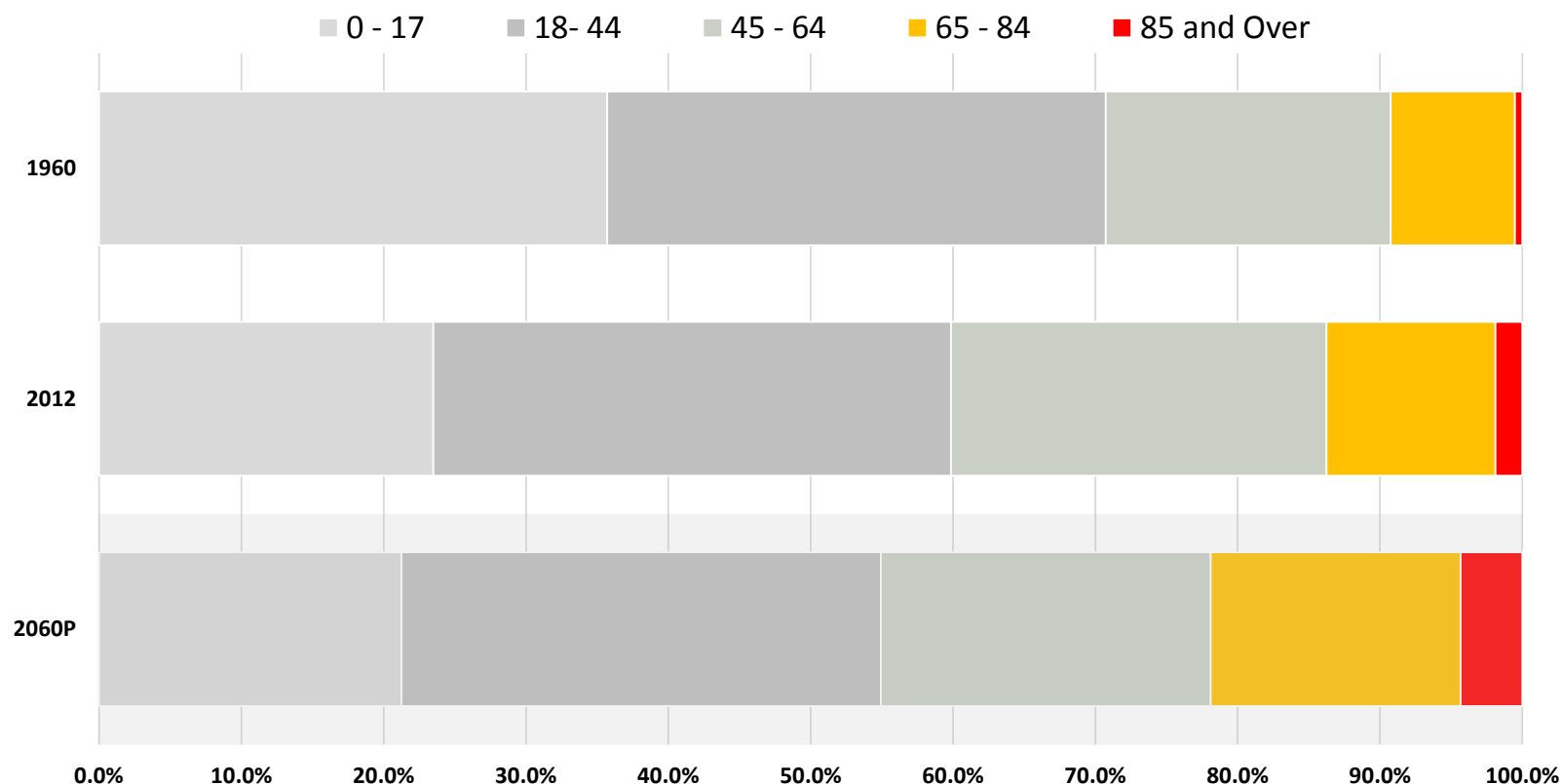
# **Valuation is a Function of: Cash Flow, Growth, and Risk**



# Cash Flow, Growth, and Risk

Demand – Demographics is Destiny

### US Population Distribution by Age Group



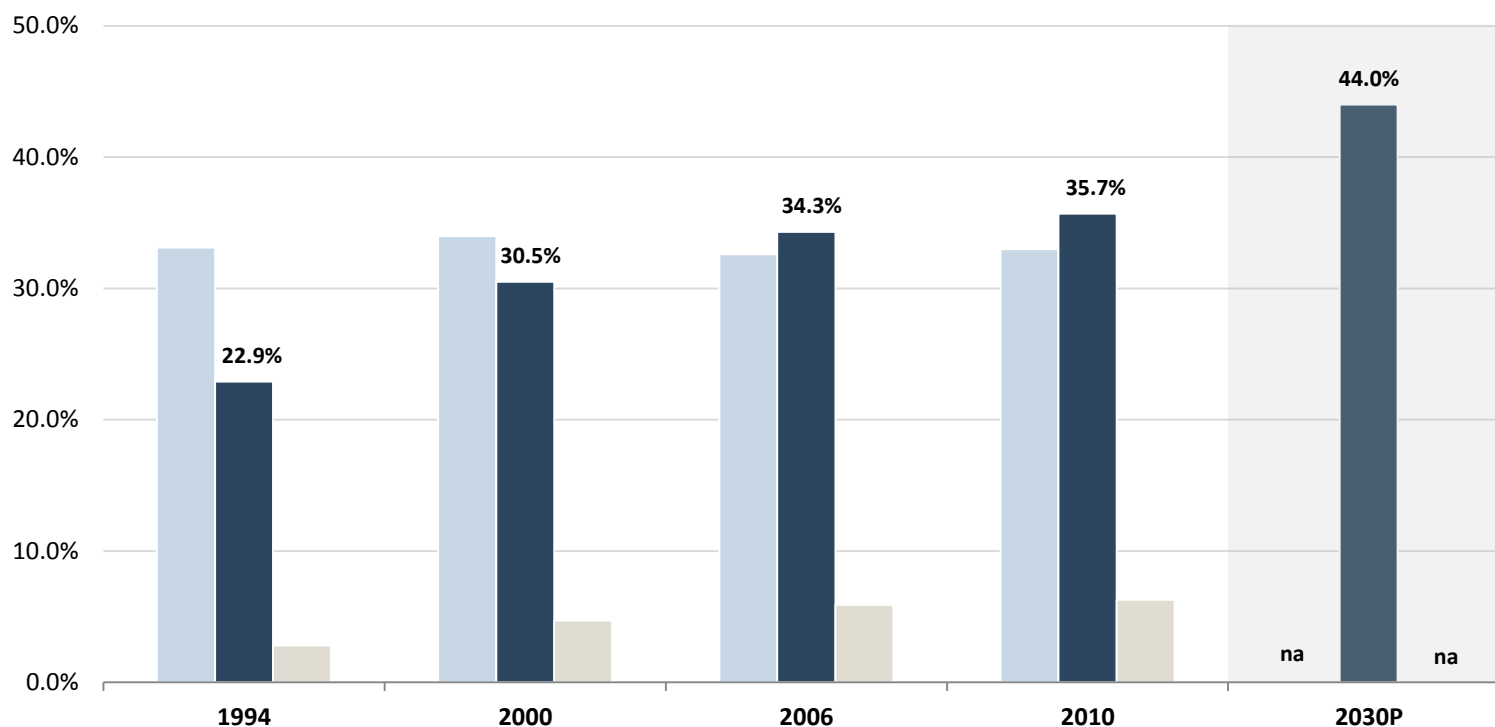
Data source: US Census Bureau

# Cash Flow, Growth, and Risk

Demand – Demographics is Destiny, Too

## US Adult Obesity Rates

Overweight Obese Extremely Obese



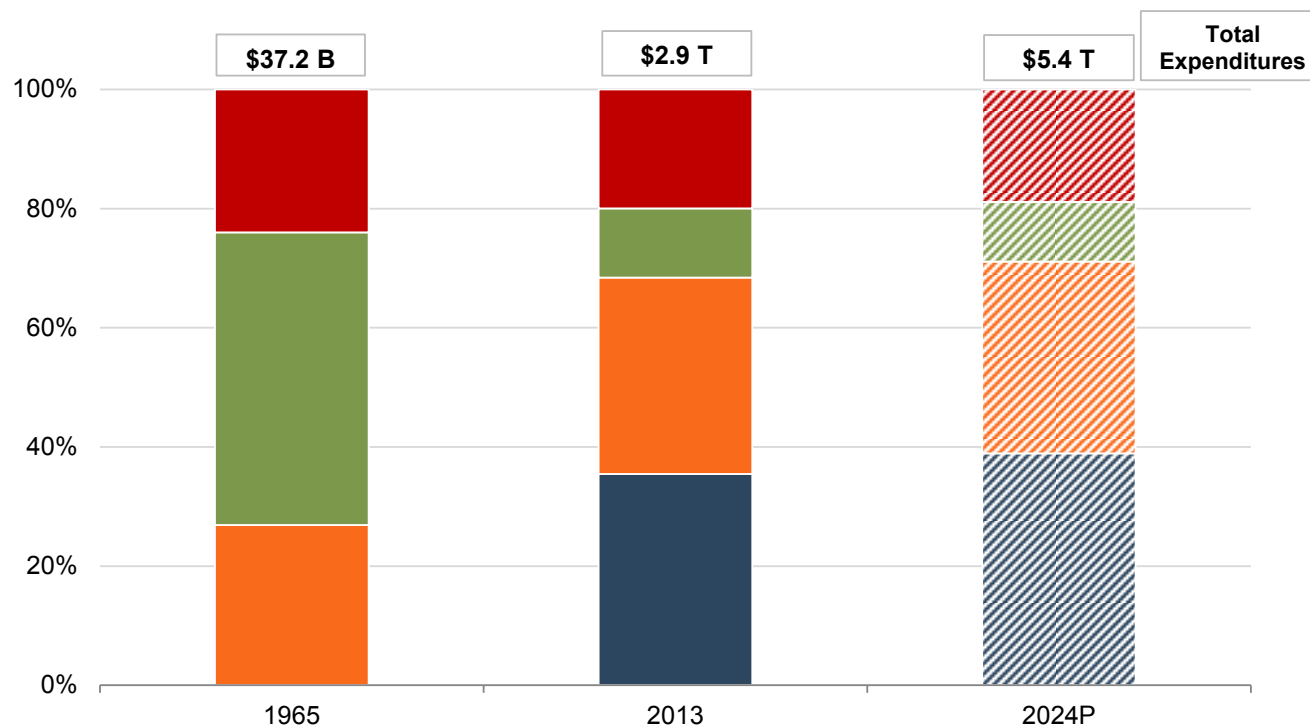
Data source: Centers for Disease Control and Prevention; Trust for America's Health, Robert Wood Johnson Foundation

# Cash Flow, Growth, and Risk

Those who Pay, (Hope to) Get a Say

## Payor Mix - Health Consumption Expenditures

■ Medicare / Medicaid   ■ Private Health Insurance   ■ Out-of-Pocket   ■ Other



Source: National Health Expenditures Accounts, Centers for Medicare & Medicaid Services [Amounts in current dollars]

# Cash Flow, Growth, and Risk

People the World Over are Getting Richer – and Spending More on Healthcare

Global Healthcare Expenditures Region*	% of GDP 2012	Per Capita 2012	Growth, Ann. 2005-12	2012 Payor Mix	
				Govt	Private
United States	18%	\$8,895	4%	46%	54%
Africa	6%	\$147	7%	52%	48%
Americas ex US	7%	\$733	10%	58%	42%
Eastern Mediterranean	5%	\$525	9%	53%	47%
Europe	8%	\$2,349	5%	67%	33%
South-East Asia	4%	\$129	11%	50%	50%
West Pacific	7%	\$982	8%	72%	28%
<b>Select Countries</b>					
Australia	9%	\$6,014	10%	66%	34%
Brazil	9%	\$1,056	15%	46%	54%
Canada	11%	\$5,741	8%	70%	30%
China	5%	\$322	22%	56%	44%
France	12%	\$4,690	3%	77%	23%
Germany	11%	\$4,683	4%	76%	24%
India	4%	\$61	10%	33%	67%
Israel	8%	\$2,289	6%	62%	38%
Japan	10%	\$4,752	7%	82%	18%
Mexico	6%	\$618	4%	52%	48%
Norway	9%	\$9,055	5%	85%	15%
Republic of Korea	8%	\$1,703	8%	54%	46%
Russian Federation	6%	\$887	18%	61%	39%
Singapore	5%	\$2,426	13%	38%	62%
United Kingdom	9%	\$3,647	2%	83%	17%

\*Expenditures (US Dollars) and share statistics shown are averages for the regions. Growth rates are medians for the regions

Source: Global Health Expenditures Database, World Health Organization

# Cash Flow, Growth, and Risk

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Regulation Cuts Both Ways

On the one hand

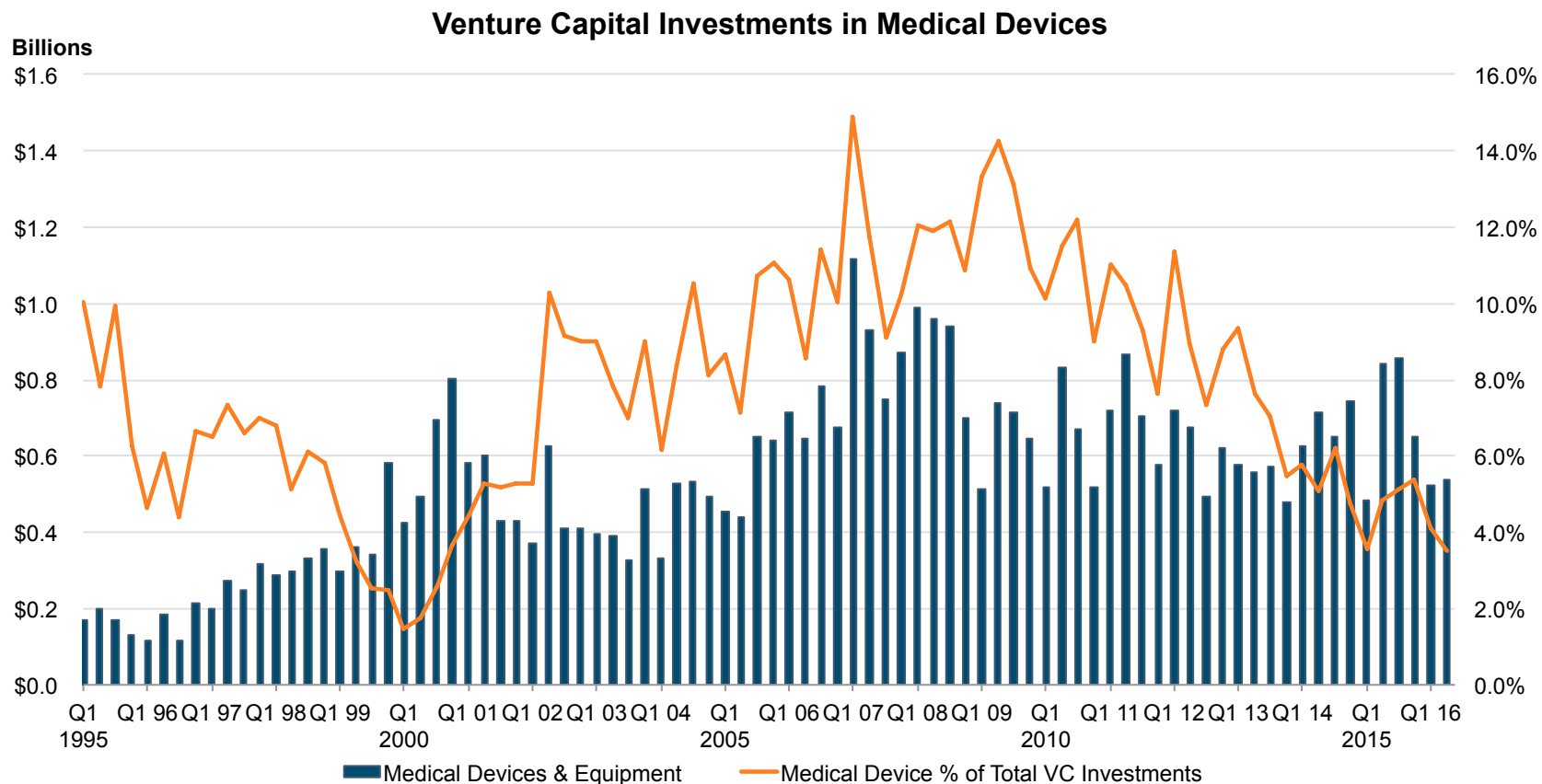
**The process of selling  
new products to  
regulators and insurers  
is long and arduous**

On the other hand

**These difficulties  
create substantial  
barriers to entry**

# Cash Flow, Growth, and Risk

Is Risk/Reward Getting Less Favorable for Early Investors?



# **Industry Summary: Features, Snapshot, and M&A Trends**

# Industry Features

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## High profitability

Purchasing decisions disconnected from prices

Substantial barriers to entry

## Sustained growth

Demographic tailwind

Income, wealth growth outstripping more basic needs

## Continual technological advancement

Virtuous cycle re: growth and profitability



# Industry Snapshot

## Public Medical Device Companies // Select Operating Metrics

Segment	Gross Margin		EBITDA Margin		Operating Margin		R&D / Revenue	
	Q2 2016	Q1 2016	Q2 2016	Q1 2016	Q2 2016	Q1 2016	Q2 2016	Q1 2016
Large, Diversified	66.7%	66.0%	26.7%	26.3%	14.0%	13.6%	7.2%	7.2%
IVD & Life Sciences	55.0%	55.3%	15.0%	14.6%	10.3%	10.0%	9.1%	9.2%
Cardiovascular	66.1%	66.3%	18.8%	17.6%	8.4%	7.4%	12.4%	12.3%
Ortho, Implants & Prosthetics	69.5%	69.3%	17.3%	17.2%	8.2%	8.0%	7.0%	7.0%
Other	53.3%	53.6%	5.8%	4.4%	-1.0%	-0.9%	8.1%	8.2%
<b>All Companies</b>	<b>58.1%</b>	<b>57.8%</b>	<b>16.3%</b>	<b>15.7%</b>	<b>8.2%</b>	<b>8.0%</b>	<b>7.9%</b>	<b>7.9%</b>

Segment	Historical Rev Growth		LT Fwd Op Earn Grwth		Debt / EV		Debt / EBITDA	
	Quarterly	Annual	Q2 2016	Q1 2016	Q2 2016	Q1 2016	Q2 2016	Q1 2016
Large, Diversified	1.0%	2.5%	11.2%	11.4%	14.8%	18.4%	2.6	2.7
IVD & Life Sciences	2.1%	2.7%	12.5%	14.0%	5.5%	4.9%	1.5	1.4
Cardiovascular	2.7%	5.0%	17.5%	16.5%	9.1%	10.6%	1.0	0.8
Ortho, Implants & Prosthetics	1.9%	5.6%	14.1%	14.3%	20.3%	23.2%	2.7	2.7
Other	2.5%	5.3%	14.0%	13.1%	8.0%	6.2%	0.5	0.4
<b>All Companies</b>	<b>2.4%</b>	<b>4.5%</b>	<b>13.6%</b>	<b>13.4%</b>	<b>10.4%</b>	<b>10.5%</b>	<b>1.3</b>	<b>1.4</b>

Median measures for each group. | Data Source: Bloomberg; Mercer Capital Analysis

# Industry Trends

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## M&A Motivations

### Consolidation

- Efficient sales channels – relatively small number of physicians responsible for much/all buying decisions
- Concentration of product families tends to give rise to complementary portfolios
- Potential for operating leverage – specialized selling process, low capital intensity, thin layer of administrative support

### Acquisition of new technology

### Direct selling vs. using stocking distributors

# About Mercer Capital

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## **Mercer Capital is a national business valuation and financial advisory firm.**

We offer a broad range of services, including corporate valuation, financial institution valuation, financial reporting valuation, gift and estate tax valuation, M&A advisory, fairness opinions, ESOP and ERISA valuation services, and litigation and expert testimony consulting.

We have provided thousands of valuation opinions for corporations of all sizes in a wide variety of industries. Our valuation opinions are well-reasoned and thoroughly documented, providing critical support for any potential engagement.

Our work has been reviewed and accepted by the major agencies of the federal government charged with regulating business transactions, as well as the largest accounting and law firms in the nation in connection with engagements involving their clients.

For over thirty years, Mercer Capital has been bringing uncommon professionalism, intellectual rigor, technical expertise, and superior client service to a broad range of public and private companies and financial institutions located throughout the world. Feel confident in our experience and expertise.

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- Succession & Shareholder Planning
- Valuations for Corporate Tax Planning
- Valuations for Gift & Estate Tax Planning
- Fairness Opinions
- ESOP & ERISA Advisory Services
- Bankruptcy Related Valuation Services
- Valuations for Buy-Sell Agreements

## Transaction Advisory Services

- M&A and investment banking services
- Fairness Opinions
- Buy-sell Agreements & Private Company Transactions
- Strategic Assessments

## Litigation Support Services

- Statutory Fair Value
- Business Damages & Lost Profits
- Valuation, Labor & Contract Disputes
- Family Law & Divorce
- Tax Related Controversies
- Corporate Restructuring & Dissolution
- Initial Consultation & Analysis
- Testimony & Trial Support

## Financial Reporting Valuation Services

- Purchase Price Allocation Services
- Impairment Testing Services
- Portfolio Valuation Services
- Equity-Based Compensation Valuation Services