

The State of the Medtech Industry

Prosperity Ahead Of Long-Term Pressures

MPO Summit

San Jose, Costa Rica

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A.S. Freeman
ADVISORS, LLC

Executive Summary

- Medtech industry at \$625 billion in 2025 with 5% growth
- OEMs capitalizing on market concentration strategies developed between 2010-2020
- Current focus on execution of product launches and market outreach
- Headwinds
 - Global healthcare economic
 - Reduced healthcare spending in the US
 - OEMs responding with new product suites
- Supply chain:
 - ~\$90 billion
 - Paradox – Are large CMs ideal suppliers to OEMs or potential competitors?
 - Question - Is there too much capacity in the supply chain?

About A.S. Freeman Advisors



Tony Freeman
President



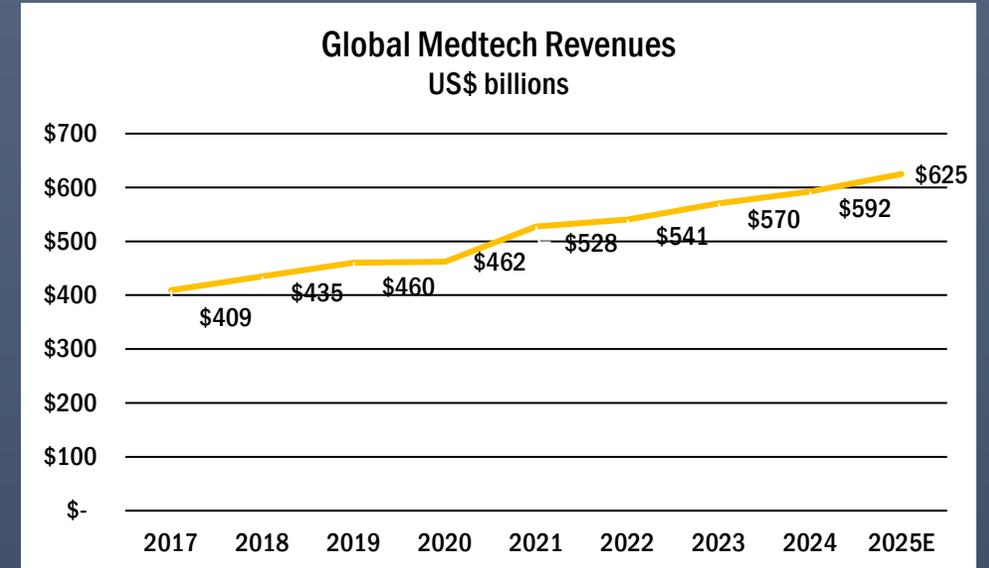
- Merger and acquisition advisory services
- Corporate strategy in support of valuation
- Focus on precision manufacturing and specialty materials markets
- www.asfreeman.com

Perspective and Methodology

- Focus on the “seismic trends” driving the industry
- Three- to five-year horizon
- Source materials:
 - OEM presentations to analysts and investors
 - Contract manufacturer public statements
 - Government health, financial, and demographic data

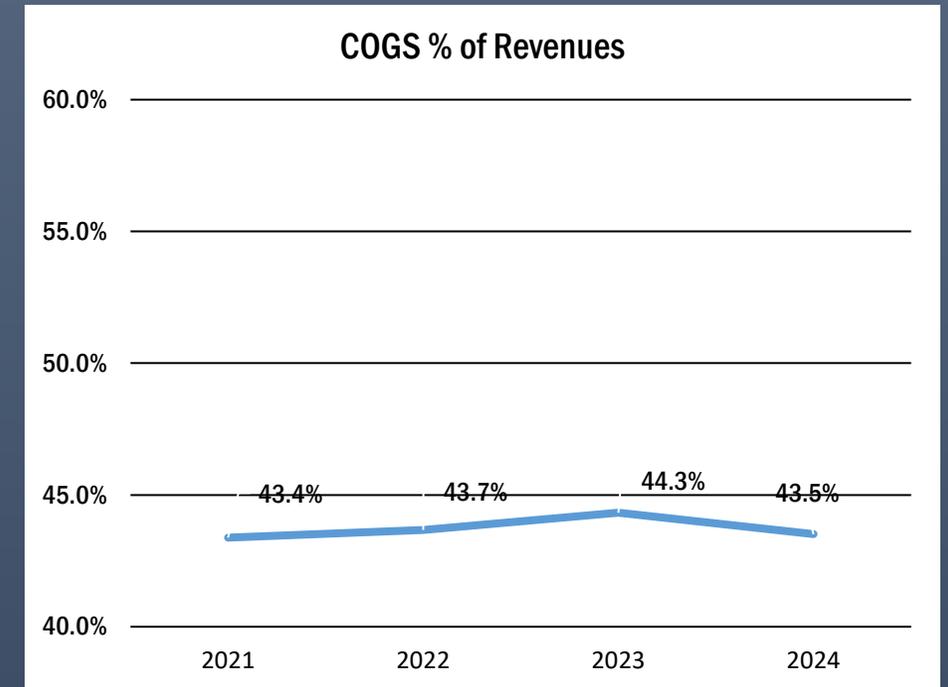
The Medtech Market - Size and Growth Rate

- \$592 billion in 2024, up 3.8%
- 5.2% CAGR over last five years
- \$625 billion in 2025 based on OEM estimates
- Projections vary by OEM from 4-8% growth for the year
- What is the message?:
 - Continued industry growth
 - Validation of the revenue stability of medtech



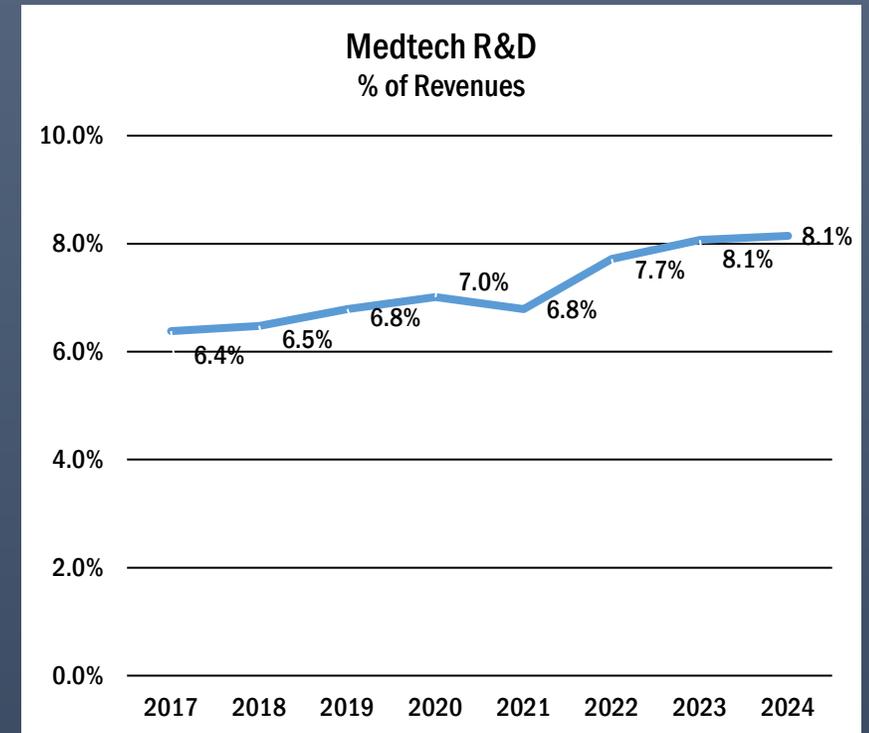
Looking Deeper – Cost of Goods Sold

- **Medtech COGS steady over last four years**
 - Around 44%
 - Little volatility
- **OEMs managing inflation**
 - Able to raise prices in inflationary period
 - Control costs while retaining suppliers
 - Stable supply chains
- **What's the message?**
 - Corporate (centralized) control on pricing and expenses
 - Medtech has moved from purchasing to supply chain management



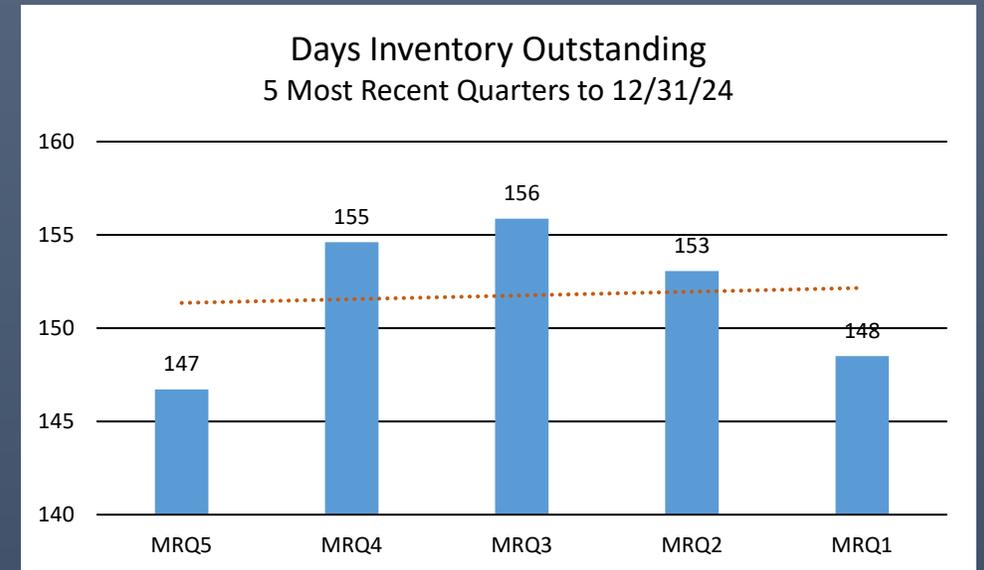
Looking Deeper – R&D Spending

- R&D holds at 8.1% in 2024
 - J&J Medtech R&D spend = 10% of revenues
 - Otherwise around 7.3%
- Strong investment in new products
- What's the message?:
 - Busy product launch schedule over next three to five years
 - Higher income as new products have higher profit margins than products older than five years



Looking Deeper– Inventory Levels

- **Sampled 12 of the top 30 OEMs**
 - Inventory levels per published financials
 - Pure-play medtech companies
 - Q42023 – Q42024, 5 quarters
 - May skew inventory heavy – imaging, ortho
- **Days Inventory Outstanding only slightly lower than historic levels, near-flat trendline**
- **What's the message?:**
 - No need of large-scale restocking in 2025



What's On Medtech CEO's Minds?

- *Optimism*
- *Executing on tactical plans*
- *Changing healthcare economics*
- *Political questions*



Corporate Optimism About Concentration Strategy

- Rationalization Era – 2010 to present
 - First big actions around 2014
 - Saw OEMs focus on most promising franchises
 - Heavy M&A as OEMs acquired/shed units
 - Largely complete, in the fields they desire
- Covid Era, 2020 to 2024
 - Delay and disruption
 - OEMs needed time to become effective, post-pandemic
- Realization Era has begun
 - The “concentration strategy” is paying off
 - Justification of the massive efforts undertaken



Rationalization Era – Strategic Swapping

Year	Acquirer	Divestor
2014	Medtronic	Covidien
2014	Zimmer	Biomet
2014	Carlyle Group	J&J Ortho-Clinical
2015	Cardinal Health	J&J Cordis
2016	Abbott	St. Jude Medical
2016	J&J	Abbot Medical Optics
2017	Becton Dickinson	CR Bard
2017	Cardinal Health	Medtronic assets (DVT, patient care, nutritional)
2017	Integra LifeSciences	J&J Codman Neurosurgery
2018	Platinum Equity	J&J Diabetes
2018	LeMaitre Vascular	Becton Dickinson Cardiac
2018	Alcon spinoff	Novartis
2019	Danaher	GE Cytiva
2019	Fortive	J&J Advanced Sterilization Products
2020	Siemens Healthineers	Varian

Medtronic



Johnson & Johnson

Alcon



SIEMENS Healthineers

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Corporate Optimism

- ***“We continue to aim to be the highest-performing differentiated large-cap MedTech company. That’s our aim through 2030.”***
-Mike Mahoney, CEO of Boston Scientific
- ***“We delivered an excellent year of results in 2024 ... Our strategy is working, and I believe Stryker’s best days are ahead of us.”***
- Kevin Lobo, CEO of Stryker
- ***“We are executing well ..., and I’m confident in our future growth trajectory.”***
- Geoff Martha, CEO of Medtronic

Confident in strong, consistent growth



Focus on Execution, Not Redefinition

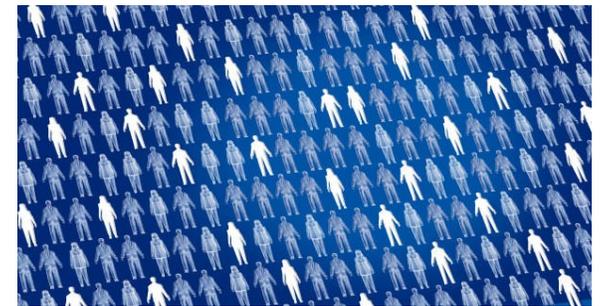
- Tactical execution
 - Expanded sales and marketing
 - Key product launches
- Few announcements of remaking of businesses, more on improving what is in place

Commitment to selected markets



New Healthcare Economics

- Larger patient loads
- Healthcare worker shortages
- Maximum reimbursement



Larger Patient Loads

- 2.X over 60 by 2050, peak population
- Middle of the baby boom curve (born 1945-1964) but coming to the peak medical spending years
- Developing nations curve right behind
- Rise of populations receiving medical care in developing countries



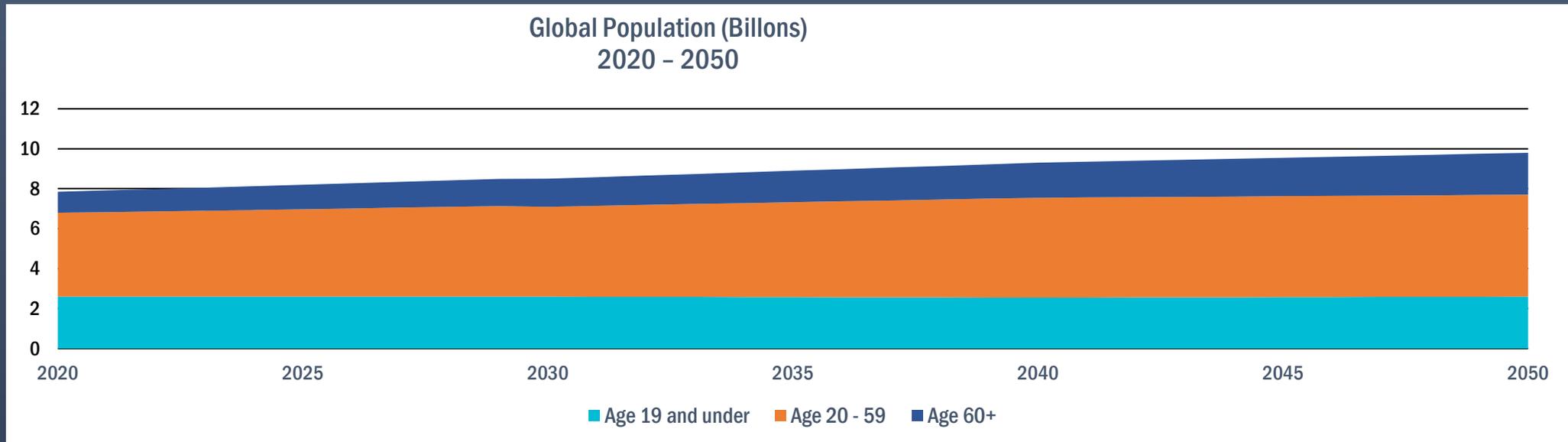
Aging Populations

- **2020 – People over 60**

- 1 billion of 7.8 billion
- 12.8% of global population
- More over 60 than under 5

- **2050 – People over 60**

- 2.1 billion of 9.7 billion
- 22% of global population



Healthcare Worker Shortage

- **Training and hiring not keeping up with demand:**
 - Shortfall of 11 million health workers by 2030 (WHO), could be as high as 13 million (WHO). 9 million are nurses or midwives
 - By 2037, the U.S. expects a shortage 187,000 doctors. Currently just over 1 million
 - Costa Rican Social Security Fund (CCSS) actively recruiting physicians, anesthesiologists to fill understaffed hospitals and rural clinics
- **Still using procedures and models for treatment developed decades ago**
- **Requires improved workflow and provider-support be built into devices**



Maximum Reimbursement

- US at 17.5% of GDP for healthcare
- Other developed nations at 11 – 17%
- Nations are borrowing to cover healthcare reimbursements. In 2024:
 - United States = ~\$850 billion
 - Costa Rica = ~\$920 million



Coupon	Duration	Yield	Change
0,50 %	3 Month	0,67 %	+ 0.05
0,75 %	6 Month	0,95 %	+ 0.07
1,25 %	1 Year	1,67 %	+ 0.12
1,50 %	2 Year	1,85 %	+ 0.11
1,95 %	5 Year	2,62 %	+ 0.16
2,10 %	10 Year	2,95 %	+ 0.16
2,35 %	15 Year	2,95 %	+ 0.16

Implications

- *Not enough money*
 - More old people than young people
 - Already at peak/near-peak healthcare spending in developed countries
- *Not enough providers*
 - Insufficient healthcare staff given current productivity
 - Covid demonstrated the limits of healthcare capacity



Suites, Not Product Lines

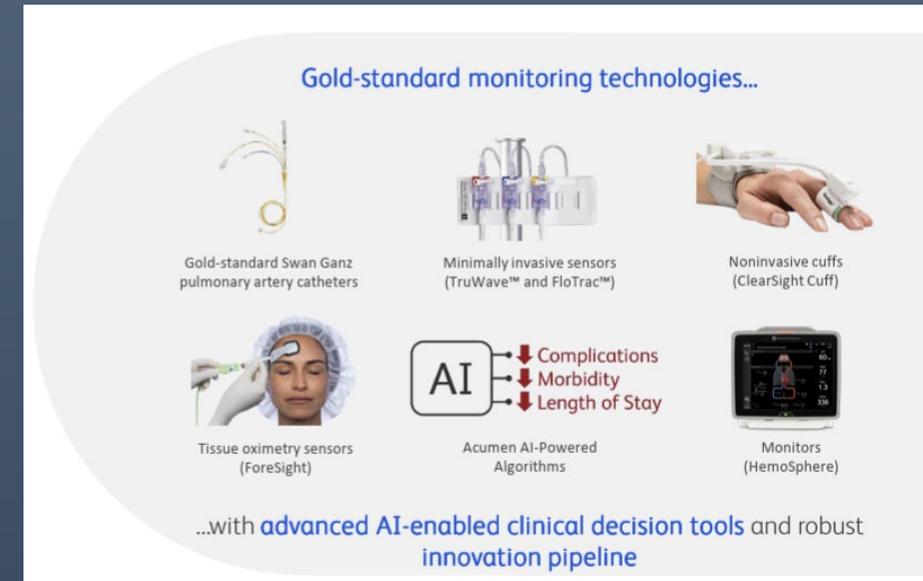
- Digitally linked devices organized into suites
 - Over 60% of announced medtech products have digital content
 - Therapeutic benefits →
Better outcomes, lower costs
 - Workflow benefits →
Lower costs, shifts responsibility off of care staffs

Barrier to entry for competing OEMs



Product Suites, Not Product Lines – Beckton Dickinson

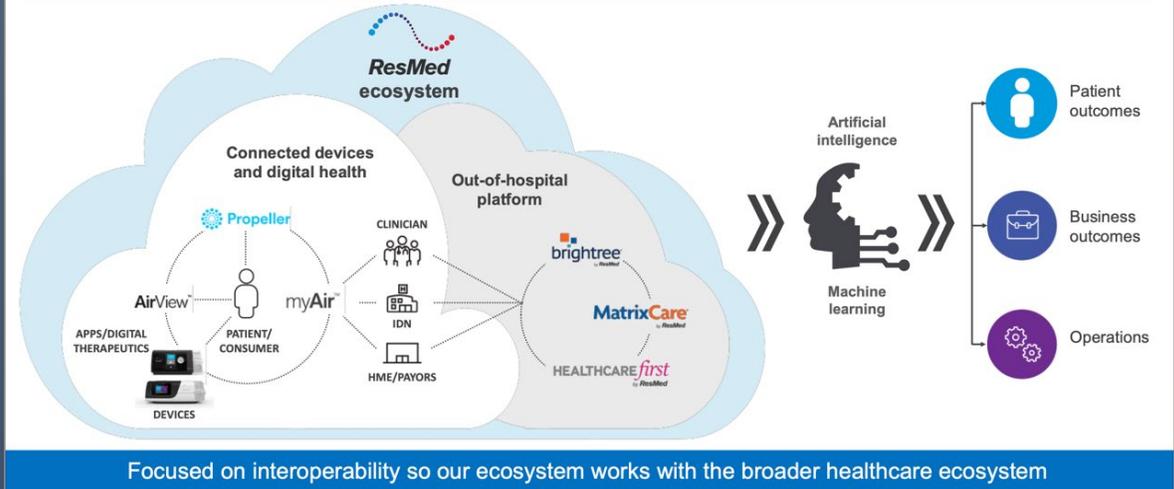
- 2024 - Acquired Edwards Critical Care
- Now called BD Advanced Patient Monitoring
- Combines hemodynamic with medication monitoring
 - Operating Rooms
 - CCU/ICU
- One system instead of two
- A barrier to products from other OEMs



Workflow Automation via Devices - ResMed

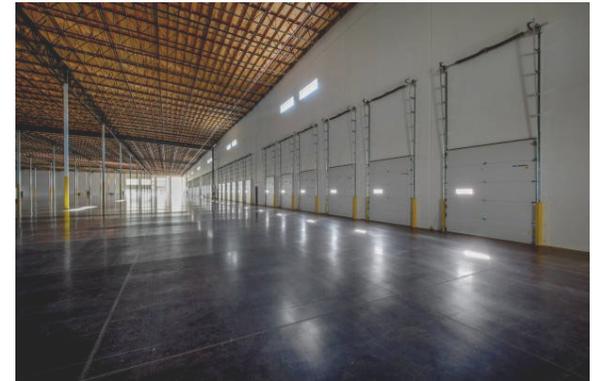
- ResMed known for breathing assistance, sleep apnea products
- Now offering an integrated suite
- Therapeutic monitoring, recording of results to medical records, reorders, and invoicing in one system
- SaaS revenues 13% of total

Our digital health solutions improve outcomes and lower costs



Political Issues

- Tariffs
- Healthcare spending cuts in the US



Tariffs – Una Guerra Sin Ganadores

- Raise import costs
- Raise labor costs
- Increase interest rates
- Disrupt supply chains
- Skew product selection criteria further towards price
- Suppress innovation
- For the United States, places drag on a major export market
- For Costa Rica, may(?) create opportunities in long run



Healthcare Spending Cuts

- Any cuts in US healthcare spending have an outsized effect on global medtech
- US overspends for healthcare making it the richest market
 - 37% of global medtech spending for 4% of global population
 - Products sold around the world “must?” succeed in the US market
 - US sales are the most profitable for OEMs
 - The US, therefore, subsidizes global medtech sales and development



Healthcare Spending Cuts

- Cuts to Medicaid, Medicare, VA Health
 - Will lead to immediate closure of hospitals, lower levels of care
 - Fewer devices used
 - Decline in the world's center of money for devices

Short term – Less spending, fewer orders
Long term – Less innovation

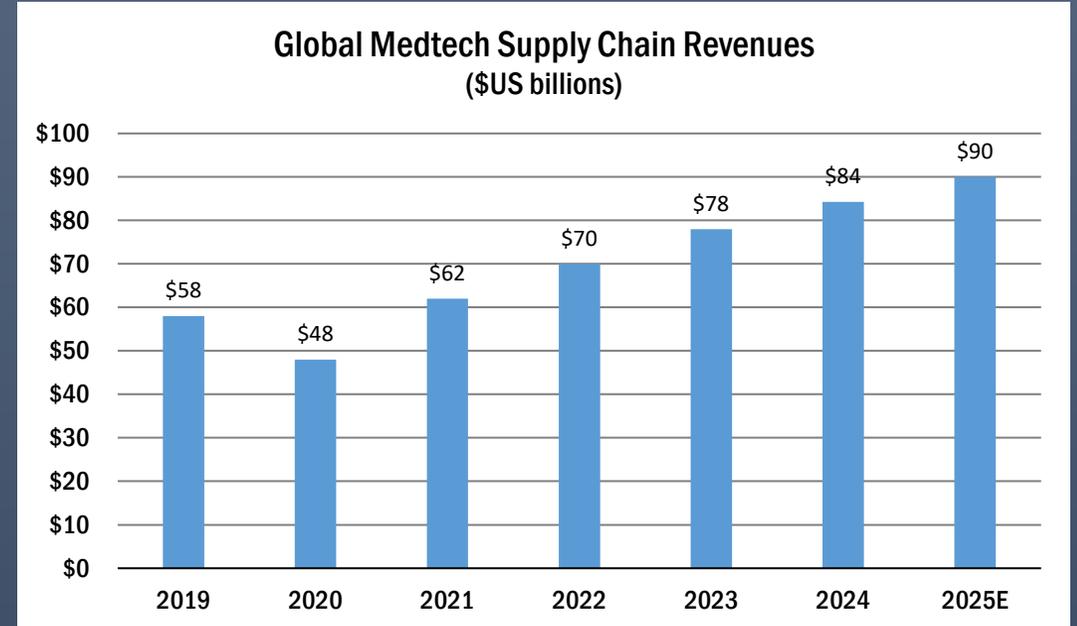


The Supply Chain



Supply Chain Size and Growth Rate

- Supply chain roughly ~\$90 billion in 2023
- Always a murky number
- ~34% of medtech is outsourced
 - “Sweet section” of growth curve
 - ASFA estimates 7-9% YOY growth through 2030
 - Lower than most estimates
 - Growth decline begins falling to medtech market growth starts in 4-6 years?



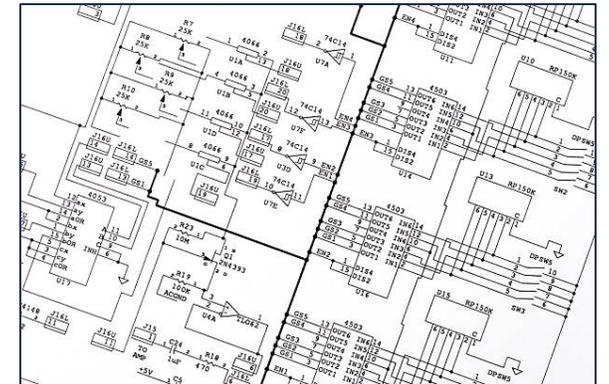
OEMs and the MedTech Supply Chain

- OEMs have crafted the supply chain they desired
 - Rise of the billion-dollar supplier
 - At least six companies
 - Another growing group over \$500 million in revenues
- Transferred the risk of manufacturing to suppliers
 - Capital expenditures
 - Management of sub-contractors
 - Financing of working capital
 - Complex quality systems
 - All for a 5 to 10% savings in cost of manufacture
- *Model is working, for OEMs*



Changing Roles For Some Supply Chain Companies

- Use of large outsource partners for pricing leverage
 - Medtronic has spoken openly about the strategy to enhance profits
- CDMO intellectual property
 - OEMs no longer have to own IP
 - Willing to let CMs with seminal design capabilities take the risk of developing and manufacturing new products
 - Most projects focused on “line fillers”



The Downside of Billion Dollar Contract Manufacturers

- Are OEMs overly dependent on too few large suppliers?
 - Not on a given product line but entire franchises
 - How does an OEM to enforce delivery and prices with larger suppliers?
 - When is the switching cost too high?
- Are OEMs creating competitors?
 - Higher gross margins and valuations for OEMs
 - What stops a well-funded, highly integrated contract manufacturer from becoming an OEM?
- *The Teleflex example*



Overcapacity in the Supply Chain?

- What are the causes of:
 - Lower than expected orders
 - Difficulty in winning the next big OEM customer
- Has the success of outsourcing led to overbuilding of facilities, equipment globally?
- If so:
 - Will capital expansion slow?
 - Will consolidation of suppliers continue?



For More Information

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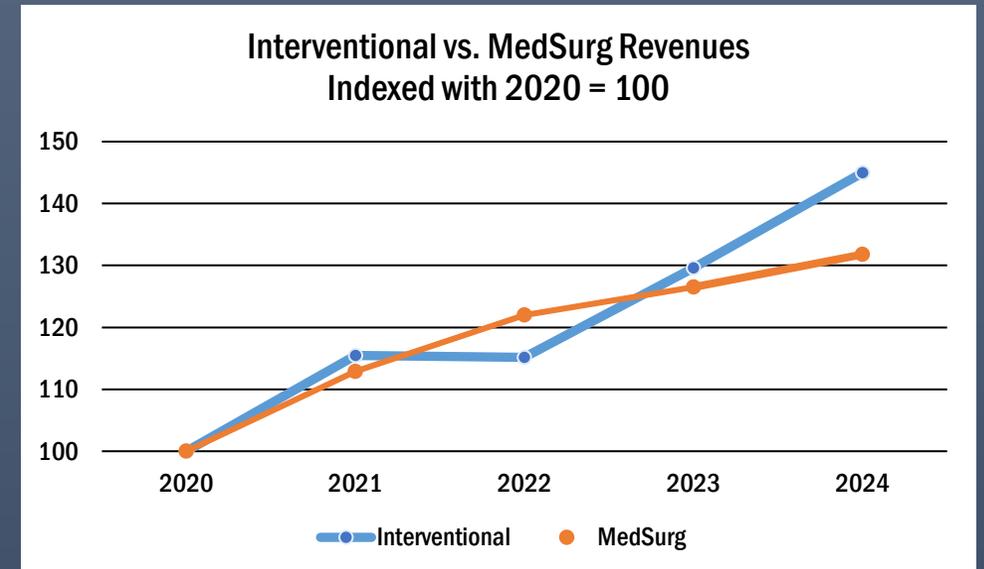
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A Costa Rica Focus – Interventional vs. MedSurg

- **Interventional and Structural Heart**

- CAGR = 9.7% (no consideration for inflation) FY2020-2024
- Currently tracking around 8%
- Demographic demand by baby boom generation
- Significant innovation of new product lines
 - PFA
 - Afib/anti-stroke products
 - Cather-based interventional CV and PV

Significant revenue growth

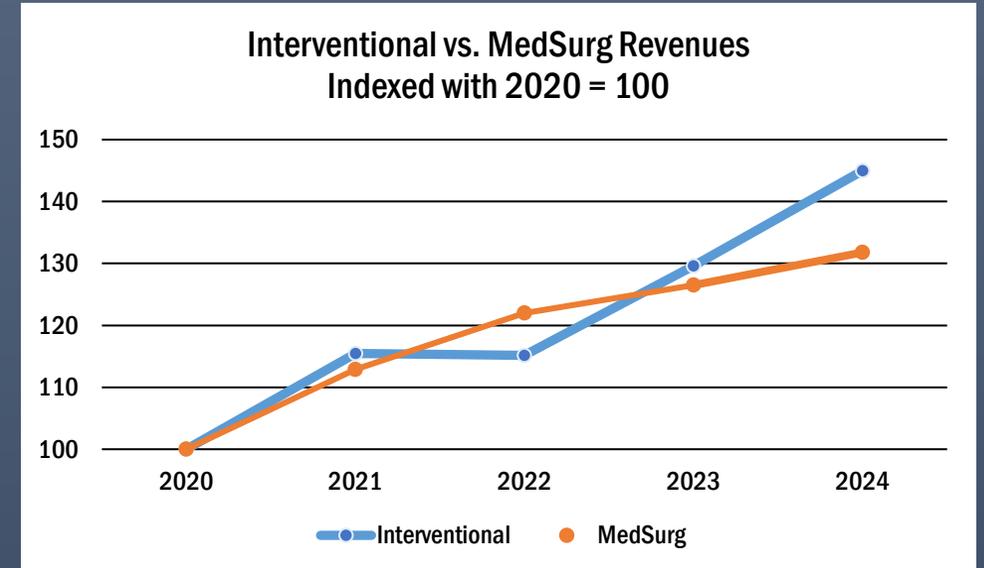


A Costa Rica Focus – Interventional vs. MedSurg

- **MedSurg**

- CAGR = 7.1% (no consideration for inflation) FY2020-2024
- No robotics, no orthopedics
- *3-5% growth in legacy surgical products*
- Driving costs out of legacy devices
- Limited innovation
 - Limited number of devices coming to market
 - Most major initiatives involve digitization and networking of devices

- *Slower growth*



Rationalization Era

- 2014 – today. Active planning completed by ~2018
- OEMs realized they could not be everything to every customer due to changing healthcare economics
- Fewer products, defensible/expandable market positions, more profits
- Major OEMs spun off less promising businesses
- Reinforced sustainable, profitable businesses
- Active M&A

Covid Era

- 2020-2024
- Disruption to OEMs lasted longer than the pandemic
- Once disrupted, hard to restart
- Strategy halted as OEMs moved to emergency/defensive tactics
- Profitable operations but growth was suppressed
- Product development came to near-halt, slowing product pipeline

Realization Era - Smooth Growth Based on Old Plans

- 2024 - 2025
- Tone of optimism by OEM CEO's
- Continued emergence of suites of products, not just lines or devices
- Back up to speed after Covid with the "strong franchises" plan
- Focus on execution of strategic plans, not redefinition
- Seeing results strong profits and more secure market positions