

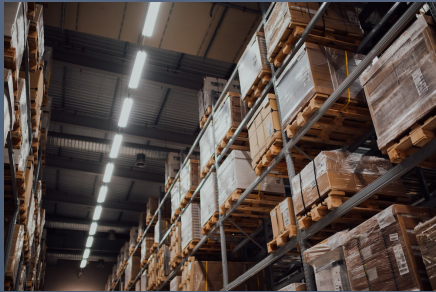
Global Trends in MedTech – 2021

A Consolidating Supply Chain?
A Tiering Supply Chain? Both?



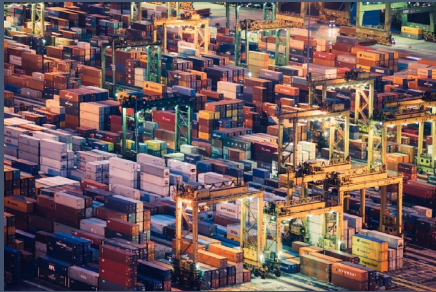
MPO Webinar Series
February 24, 2021

Three Events



Tuesday, February 23

The OEM Landscape and Business Drivers



Wednesday, February 24

***A Consolidating Supply Chain?
A Tiering Supply Chain? Both?***



Thursday, February 25

Panel Discussion of MedTech's Global Trends

About A.S. Freeman Advisors



Tony Freeman



- Merger and acquisition advisory services
- Corporate strategy in support of transactions
- Focus on precision manufacturing and specialty materials markets
- Publishes *Global Trends: Medical Device and Diagnostic OEM Strategy and Implications for the Supply Chain*

Perspective: Looking Out 3 to 10 Years

- Focus on the “seismic trends” driving the industry
- Three- to 10-year horizon
- Source materials:
 - OEM presentations to analysts and investors
 - Publicly-traded contract manufacturer (CM) presentations

Summary of Yesterday's Presentation:

The OEM Landscape and Business Drivers

- **Specialization**

- OEMs focusing specific areas of medical practice, less “many products for many specialties”

- **Digitization**

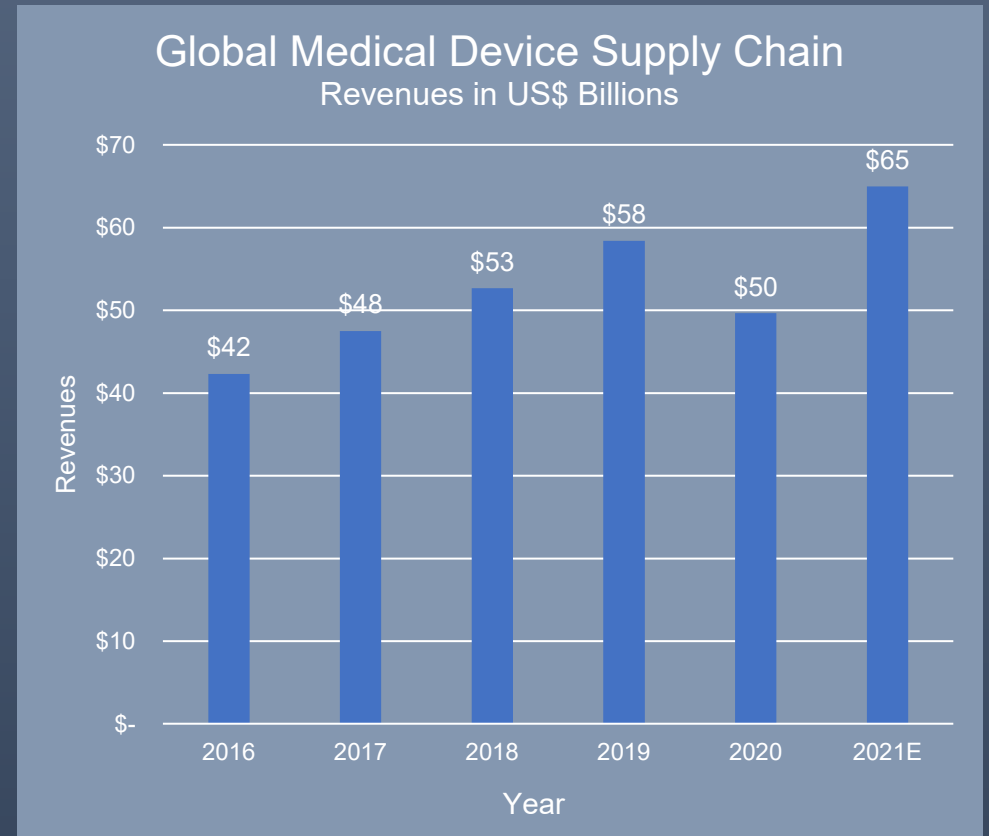
- Rise of digital devices and networked care systems

Results

- Strong brand fortresses in targeted medical specialties
 - Market focus
 - Networks are hard to displace
- Change in OEM economics
 - Becoming health solution providers with a mix of products and services
 - New focus on data capture, analytics, and AI products
- Change in OEM product management and decision making
 - Rise of software, electronics, system integration, and data science managers
 - New people planning the next generation of devices

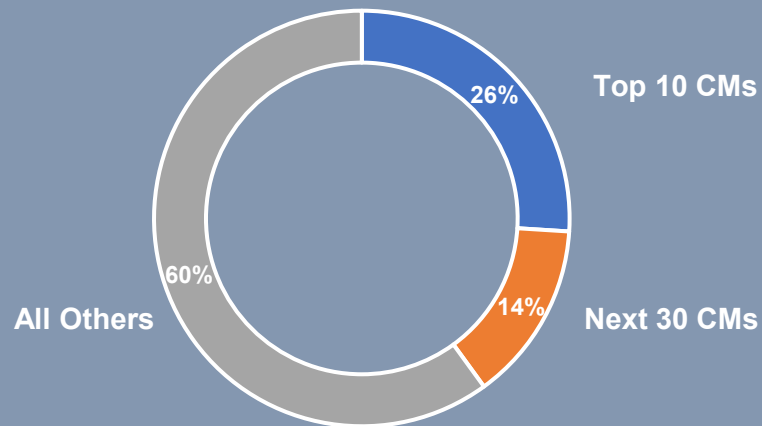
Supply Chain Size and Growth Rate

- Supply chain an estimated ~\$50 billion in 2020. Murky from Covid.
- Likely \$60 billion plus, adjusted for Covid pushouts
- Growing between 7.8% and 11.4% per annum through 2025. ASFA estimate 8-9%.



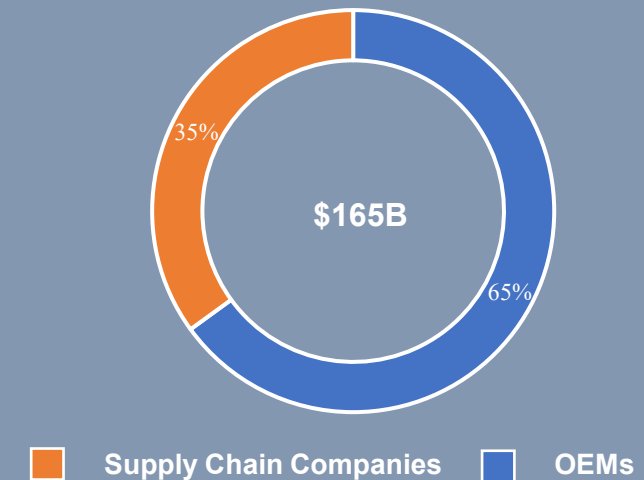
Concentration and Penetration

2019 Percentage Split by Scale



Source: Alira Health, Corporate financial reports,

2019 Medical Device Cost of Goods



- Estimates range between 4,000 and 15,000 suppliers
- Top 10 suppliers represent 26% of revenues, top 40 suppliers represent 40% of total revenues
- Growth rate is projected from 7.8 to 11.5% per annum through 2025
- Outsourcing represents approximately 35% of total medical device manufacturing

Top 10 CMs

Company	
Jabil	Over \$1 billion (2019E)
Flex	
TE Connectivity	
Sanmina	
Integer	
Plexus	
Celestica	
Viant	Under \$1 billion (2019E)
Molex	
SMC	

- “Best guess” regarding Top 10 CMs and revenue ranges
- Split between organic growth and growth through acquisition

Jabil

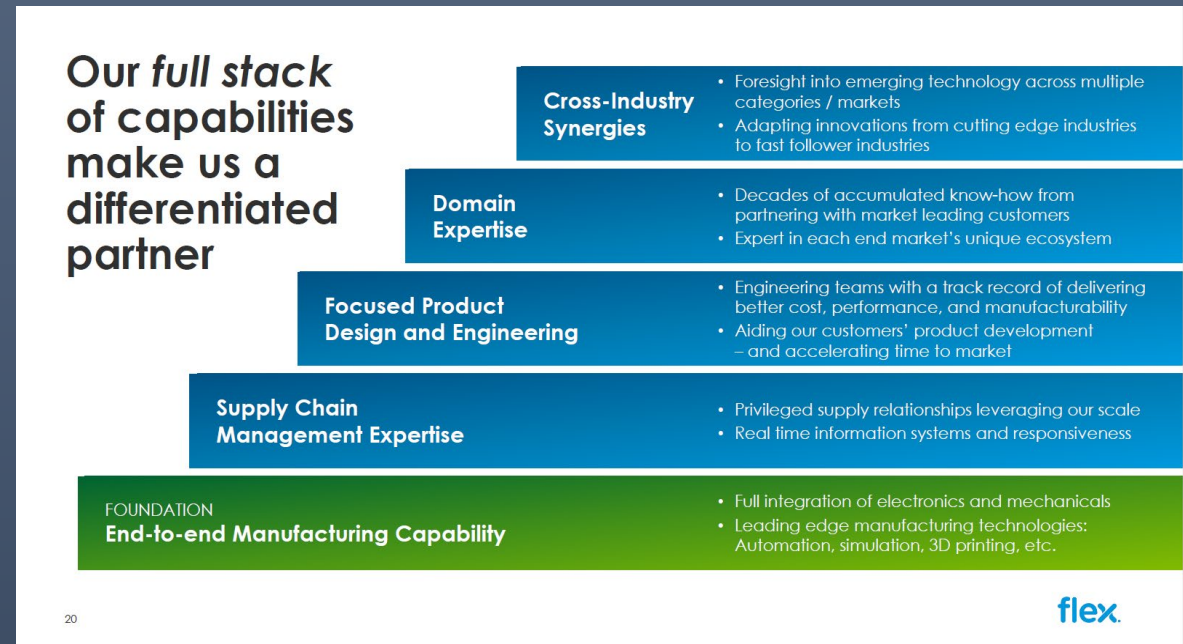
- In 2018 took over 14 J&J manufacturing facilities serving DePuy, Synthes, and Ethicon Endo divisions. Roughly 6,000 employees
- Nothing happened
- Demonstrates large scale risk transfer works
- Additional facility transfers to supply chain companies are under consideration by major OEMs



**Jabil's gross margin is 7.2%
over the trailing twelve months**

Flex

- Flex has a \$2 billion medtech business
- Over 530,000 square feet of dedicated medical manufacturing
- Offers full spectrum of design and manufacturing services including:
 - Seminal design
 - Manufacture of digital and electromechanical devices
 - Global sourcing of materials and components
 - Multiple LCC presence



Flex gross margin is 6.47% over the trailing twelve months

OEM Direction Matches Top 10 Capabilities

- Rise of digital devices and ecosystems favor supplier with:
 - Electronics assembly expertise
 - Understanding of software and systems integration
 - Broad range manufacturing portfolio
 - Expert sourcing capabilities
- The Top 10 CMs have these capabilities
- Top 10 likely to capture the majority of outsourced flagship projects
 - Better match of capabilities to products of the future compared to “traditional” med device suppliers
 - Risk reduction – Single point of contact, financially stable

Future Structure of The Industry

- Favored few will increasingly be given choice over supply chain partners
- Prime contractor – subcontractors model
- Rise of tiered supply chain
 - Like aerospace?
 - Closer to auto, not as defined as aerospace

How Fast Will The Change Occur?

- Glacial and bumpy pace
 - Why move current products or products close to launch?
 - Risk of switching vendors on live projects
 - Aggressive defense from the current incumbents
 - Any misstep from the “majors” will be highly publicized
- A few big events – more facility transfers
- Five to ten year for the new supply chain to take form

Pricing

- Pricing will remain under pressure for the supply chain
- OEMs have begun to successfully extract margin as a price for large projects
- Few suppliers show rising consolidated gross margins

Offshoring vs. Reshoring

- Some have proposed that we are entering a reshoring period
 - Supply chain disruptions early in the pandemic
 - Rise of automation
 - Significant investment in plant and personnel in North America, Europe
- Offshoring will continue
 - Lower labor costs in Mexico, Central America, and Asia
 - No barrier to automating anywhere
 - Growth in Asian markets will reinforce Asian manufacturers' capabilities and scale
 - The major international CMs are skilled at sourcing quality components at a good price in countries med device manufacturers have shunned

Watch For Additional Risk Transfer From OEMs

- Risk transfer worked so why not try more?
 - Price pressures to become universal, particularly on established and legacy products
 - Extended payment terms are to be expected – the supply chain the OEM's bank for manufacturing
 - Watch for a rise in inventory holding requirements, another working capital transfer
- Larger companies better suited to take on these responsibilities

Where Will “Historically Profitable” Work Be Found For Smaller Suppliers?

- Specialization! Unique or exceptionally deep knowledge or expertise
- Experience with digital products
- Program management
- Exceptional customer service will become a more critical capability for holding customers

New Players Intersecting Existing Companies

- Digital technologies and cloud players
- Microsoft, AWS, IBM, Apple, others

For More Information

Please contact:

Tony Freeman

tfreeman@asfreeman.com

(917) 868-0772