

1 ☐ **Globalization of P&O Business**

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2 ☐ **Origins of the Industry:**

- ◆ **Amputee Self-Help**
- ◆ **Hegesistratus [484 B.C.]**
 - Self-amputation to escape the stocks
 - Carved wooden partial foot prosthesis
 - Survived as a soothsayer until recaptured
- ◆ **Peg Legs [Only option until 1700's]**

3 ☐ **Middle Ages:**

- ◆ **Rise of Artisans [non-amputees]**
- ◆ **Armorers = Part-Time Practitioners**

4 ☐ **Guild Grows in Germany:**

- ◆ **Recognized Full-Time Specialist**
- ◆ **Training & Practice Regulated**
 - State Control
 - State Protection

5 ☐ **Post Civil War:**

The First Hanger Revolution

- ◆ **Citizenry Demand Improved Prostheses**
- ◆ **U.S. Government Funds Veterans' Care**
 - In 1866, one-fifth of the entire Mississippi state budget was spent on artificial limbs
 - Providing artificial limbs to veterans eventually cost Federal gov't more than entire War effort!
- ◆ **U.S. Industry Begins**

6 ☐ **1919:**

Otto Bock Breaks the Rules

- ◆ **Industrialized Production of Components**
- ◆ **Centralized Fabrication Levels the Field**
- ◆ **Technical Skills Diminish in Importance**
- ◆ **Adjustable Modular & MyoBock Technology “Raise the Bar” for**

Practice

7 ☐ **Post WW II:**

The Golden Era

- ◆ **Citizenry Demand Better P&O Care**
- ◆ **Federally Funded Studies Bring Engineering and Science into Field**
- ◆ **Federal Grants Standardize Short Term Training & Practices**
- ◆ **NYU Inaugurates University Education**
 - “Over-Educated Clinician” is Born
 - New Practitioners Learn Quickly & Continuously and Adapt to Changes

8 ☐ **Recent Decades:**

Global Trends Begin

- ◆ **Dawning of Thermoplastics**
 - Low Cost, Simple Fabrication Method
 - Suitable for All Climates, Cultures
 - Standardized Worldwide Technique
 - Facilitates More Intimate Fittings, Lifetime Adjustability of Devices

9 ☐ **Recent Decades:**

Global Trends Begin

- ◆ **Development of ISO Terminology**
 - Universal Language of P&O
 - Facilitates Interchange of Ideas and Data

10 ☐ **Recent Decades:**

Global Trends Begin

- ◆ **Era of Cheap Computing Erupts**
 - EDP Becomes Ubiquitous
 - Internet Shatters Time & Distance Barriers
 - Information Lag Progressively Shortens
 - Knowledge, Technique, Technology & Practice Norms Evolve Rapidly

11 ☐ **Recent Decades:**

Global Trends Begin

- ◆ **Medical Advances Change the Rules**
 - Poliomyelitis is [Almost] Eradicated
 - Industrial & Transportation Safety Decrease Traumatic Injuries
 - Limb Salvage Procedures Proliferate
 - Gerontology Prolongs Health & Delays Disability

- 12 ☐ **New Millennium:
Era of Global Opportunities**
- ◆ **Consumer Demands Drive Development**
 - » W.I.F.E. = Weightless, Invisible, Free, Effortless Bionic Replacement
 - » Empowered Consumers = Stronger Advocates for Change
 - ◆ **Economic Conditions Determine Rate of Growth in Health Care**
 - » Always “Hot Economy” Somewhere
 - » Massive Needs in Developing World

- 13 ☐ **New Millennium:
Era of Global Opportunities**
- ◆ **Worldwide Data Interchange Shatters Parochial Barriers**
 - “Click Once” for Gov’t Policies & Data
 - “Data Mining” Reveals Inconsistencies
 - “Not Available” is Not Acceptable

- 14 ☐ **New Millennium:
Era of Global Opportunities**

- 15 ☐ **New Millennium:
Era of Global Opportunities**
- ◆ **Competition Between Medicine and P&O Continues Unabated**
 - Medical Innovations Make Old P&O Solutions Obsolete, and Vice Versa!
 - Viability of P&O Options Depends on Available Medical Care
 - Medical Care Varies Worldwide

- 16 ☐ **New Millennium:
Era of Global Opportunities**
- ◆ **Key to Survival = Constant Innovation**
 - Chronic Change is Nothing New to P&O
 - Leather>Wood>Laminate>TP>PrePreg
 - **Familiar Cycle:**
 - » Clinical Observation
 - » Conceptual Hypothesis
 - » Experimentation
 - » Simplification of Idea
 - » Widespread Dissemination
 - » Commercial Prefabrication

- 17 ☐ **Y2K Paradox: Globalization Increases Local**

Opportunities

- ◆ **We deliver care, 1 on 1, to each person**
 - Practice of the Future is “High Tech + High Touch”
 - “Personalization of Care” Drives Referrals
 - “Solving Local Problems with Global Resources” is Key

18 ☐ **Y2K Paradox: Globalization Increases Local Opportunities**

- ◆ **Megaliths Not the Only Solution**
 - J.E. Hanger Growth and Dissolution
 - Failure of NovaCare Experiment
 - RDA Restructuring
 - Hanger Orthopedic Group Consolidation
 - AOPA Survey 2000 = Small Independents More Successful in Current Climate

19 ☐ **Y2K Paradox: Globalization Increases Local Opportunities**

- ◆ **P&O Future is Exciting & Promising**
 - “Change or Die”
 - Listen-Learn-Innovate-Evaluate-Adapt
 - Fundamental principles will endure, but our practices will continually change
 - Our future is just the continuing evolution from the familiar past, but...
 - ...The rate of change is accelerating!!