Medical Device Opportunities in India Today
*Marketing, Engineering and More*

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http://www.amritt.com/med-device

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For a limited time, a recorded version of this webinar will be available at  http://www.amritt.com/Med-Device-Webinar
Chicago *Metra* Buys 400 Automated External Defibrillators

- $1 million order on Cardiac Sciences Corp.
- For ~400 PowerHeart G-3 automated external defibrillators
- *Cardiac Sciences is owned by Bangalore India-based Opto Circuits, $64 million M&A*
Medtronic India expands audiology market

- August 2013 – Pilot program, *Shruti*; 70,000 patient pilot includes
  - Medtronic India
  - Mobile health startup with MIT roots
  - Indian design firm
  - Dr. Shroff’s Charity Eye Hospital, New Delhi, and Health Management & Research Institute, Hyderabad.
- Improve diagnosis and treatment of ear infections
Amritt: Helping Medical Device Companies to leverage Emerging Economies

• Working with corporate and business unit leaders at large and emerging device companies in America and Europe
  ➢ Helping them to engage with India/China etc.
• Engage directly with markets or via partners.
• Access technologies, products, tech skills.
  • Directly or via partnerships.
• Amritt Clients include large and small medical technology companies globally
Agenda

Sell *Made in USA* product in India

Use India’s Engineering Skills for Western markets
Globalize: Reach Next 3 Billion Medical Consumers

Selected Emerging Country Drivers:
- small wallets (patients, doctors, hospitals)
  - Big chunk of market is out-of-pocket
- low-cost labor (at customers)
- lower legal risk
- “Radical Redesign” can produce 3x sales multiple compared to “Incremental Cost and price Reduction”

India is Not China 2.0
- Demand side economy vs China’s supply side situation
  - Creating airlines before airports; cars before highways
- To maximize long term India profit/ reach down to grab the market, before unmet needs are filled by Indian cos.
- Waiting for India to rise up to developed country expectations of price/quality may allow nimble Indian upstarts to eat your lunch.
India: a big, relatively untapped market

• **1.2 billion people, $1.8 trillion economy, growing at ~6%**
  - Healthcare market growing at 12-15% annually
  - ~50% of population has no access to western-style healthcare
• **Medical Device market is ~$4 billion in 2013**
  - Foreign companies have ~65% market share
• **70% of healthcare expenses are fully out-of-pocket**
• **Private Insurance is small, but growing (1% in 2009, ~6% in 2013)**
  - Govt. as payer – community insurance for people below poverty line
  - Govt. is doubling healthcare spend to 2.5 percent of GDP
    - Most of healthcare is a state (not federal) subject,
    - via L-1 Tenders
  - Some states have corruption issues (watch for FCPA flags)
  - U.S.A. companies can and do win

*Amritt estimates*
Recent International Med-tech entrants

Sweden’s Mölnlycke Healthcare: $1.5 billion global sales
- Wound Care, Consumables (drapes, gowns, masks)
  - Entered in 2012
  - Competes with 3M, Kimberly Clark, India’s Romsons ( ~30% of 3M’s prices)

California’s Cepheid, Inc.: $416 million global sales
GeneXpert MTB/RIF molecular diagnostic blood test for tuberculosis
  - Cartridge Based Nucleic Acid Amplification Testing
  - Much faster than sputum Culture; also tests for MDRT
  - Special price negotiated by Gates Foundation for Government - $10
  - If pilot successful at top govt. hospital, national rollout intended
  - Also offered in 15 other countries including Bangladesh, Indonesia, Myanmar, Nepal, Pakistan and Vietnam
Apollo Hospitals
Featured as Harvard Case Study
Founded by returning Indian American cardiologist Prathap C Reddy

Vast contrasts in quality of service

General Hospital
Not featured in HBR
Run by govt.
Photo: The Hindu
Many large, viable segments
*Skim the wealthy cream or*
*Approach the aspiring middle class*

- **Inpatient facilities**
  - **Private (for-profit, or foundations)**
    - Global class, Corporate: ~100 high-end locations (5% beds)
      - *Medanta, Apollo, Fortis, Asian Heart, Narayana Hrudulaya*
    - ~500 medium sized legacy hospitals (15% of beds)
    - Thousands of specialty “nursing homes”
      - < 50 beds, 60% of beds
  - **Government (tender); Free, 20% of beds**
    - Teaching, research hospitals (750+ beds)
    - State, District, Community (30 to 300 beds)
    - Autonomous government: Defense, Railways, Utility Companies
  - **Outpatient Doctor Clinics; > 1 million**
  - **Emerging Home Care solutions**
Segmenting creatively can uncover profit
Intravenous Catheters ~ 300 million units; $75 million annual sales

Traditional Western Target:
The Rich
Margins are similar to those made in Western countries

Remaining Population:
NOT currently reached by new Western entrants

Insight:
• There is a willing hidden market niche within this latter population: Aspirers
  • Significant portion of remaining population willing to spend more than the base amount, but less than wealthy

Wealthy
Spend 60¢ for higher quality Western company IV Catheters (15% Vol, 40% Value)

Aspirers
• Currently spend 20¢ for a domestic brand (~85% Vol, 60% Value)
  • However, willing to spend a premium for higher, more consistent quality

Remaining Population
• Spend 5¢ for winged needle set
• Declining segment
“Mining” for Med-Tech Treasure in India

Opportunity

Education, Concept Sell
In-servicing – skill building

Volume and Value share gain through upgraded experience & Patient Outcomes

Seize your fair share in growing market

New Concept
No Competitors
Robotic Surgery

Significant advancement in existing category
Other Global Competitors
Patient, worker, Safety products

“Me Too“ Product
Entrenched Legacy Competitors
Intravenous catheter

No Competitors
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Opportunity

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Intravenous catheter
Distributors are fragmented

Scenario

- Hundreds of “mom-and-pop” regional or metro distributors
  - A few claimed “national” distributors
    - essentially those with stronger finances and ability to handle import licenses. National reach through network of “sub-distributors”
- Box Pushers, wholesalers, limited value added selling
- If your distributor sells your competitors’ products they are less inclined to promote / push yours

Concerns

- FCPA Compliance
- Disproportionately High Mark-ups
  - Slow share gain
- Transparency in pricing, margins
- Cross channel conflict
One Creative Amritt Solution

Enter through Distributor…… and combine with a strategic partner

- Senior, experienced India-Domain experts, high strategic capability – on a “variable cost” basis
- Augmented “translational” interface between Company and distributor
- Custodian of Ethics, Compliance, culture
- A ready “Sales and Marketing department”
  - Plan, propose, and execute demand generation activities
  - Distributor management, drive commitment to our brand
- Possible advocacy to shape policy, create long term, multi stakeholder PPPs – positioning company as “knowledge partner”, to address large social health issues, while embedding select technologies as an integral part of the solution

Amritt – a partner beyond India, in the journey into Emerging markets of Asia and Africa

Retrieved from Novartis (2009)
Agenda

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Use India’s Engineering Skills for Western markets
Engineers in India help Western device companies

“Captive” Engineering Centers for GE, Siemens, Philips, Covidien, etc.
- GE Lullaby Baby Warmer, a good example
- Designed in and for India, sold in Europe as well

External “Engineering Service Providers”
- For Product design, testing, sustaining engg.

Clinical Trials of Devices in India
- Can accelerate time to market in West

*IP and patents in cases above are owned by Western companies*
Selecting the portion of the development lifecycle you can offshore or outsource

- Many companies start with offshoring or outsourcing design verification or analytical testing to India/China
- Over time they move upstream in the product development process lifecycle

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<th>Project</th>
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<td>Investigation</td>
<td>Concept</td>
<td>Design</td>
<td>Develop</td>
<td>Test &amp; Verify</td>
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*Note: X indicates phases that can be offshore or outsourced.*
Extend U.S. R&D team (Release US team for higher value projects)  
*Company ‘A’ Example*

| Why captive model selected | Cost arbitrage  
|                           | Establish brand presence  
|                           | Improve Time-to-Market  
| Geographies considered    | Japan, China, India  
| Potential locations in India | Bangalore, Hyderabad, Chennai  
| Project selection strategy | Non-core components  
|                           | Refresh of older products  
| Path to Captive R&D Center | Established captive center from the beginning, but outsourced first to start process.  
|                           | Benefits of flexibility of outsource resulted in a hybrid model later  

Gain R&D Footprint in Local Economy (Outsource first – hybrid model later)

*Company ‘R’ Example*

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<th>Drivers</th>
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<td><strong>Cost arbitrage</strong></td>
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<td><strong>(Later) Maintain some resource flexibility</strong></td>
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<th>Geographies considered</th>
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<td>Germany, China, Japan, India</td>
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<th>Potential locations in India</th>
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<th>Project selection strategy</th>
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<td>Extension of US teams – Design &amp; Test phases</td>
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<td>Initially outsourced. Moved some work in-house later</td>
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Balancing the Med. Device R&D Center: Size and Access to Local Innovation

- Collaborative R&D relationship with a domain expert
- Service agreement with provider
- Contractual development with CRO

“Captive” R&D Center

Staffing base can be much smaller

Harnessing Local Innovation

Investment in Time & Cost
Next Steps for Success in India

Amritt, Inc.
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- Send email to request email newsletter
  - “Globalization is Great”
  - Harvard Business Review article on “Overcoming Pitfalls in India’s Market”
  - Research Report on The Medical Device Market in India
- Register on amritt.com
  - Download white papers on Selling to India and more
  - Contact us for any advice or guidance on entering or expanding into India’s market, regardless of industry.
Devices are regulated as Drugs

• Federal regulations under “CDSCO”
  • Few limitations on what can be imported/sold
  • Foreign approvals from US FDA or EU’s CE accepted
    • Indian inventors currently at disadvantage on multiple counts
    • Many Indian states have their own FDA, in addition

• Device regulations discussed since 2005
  • 3 Indian ministries involved: Health, Electronics, Chemicals
  • Bill to be introduced in Parliament “soon” as of June 2013
    • After bill becomes law, regulations may take a year
    • Amritt prediction: see final regulations in ~2015
  • Foreign companies worry about surprises
  • Possible knee-jerk reactions by regulators
India: a Source of Innovation?

• Software talents driving some innovation
  • iPhone Apps, ERP integration, embedded capability
• “Frugal innovation” driven by local needs
  • Use models (pay per use, share, 24x7 operation)
  • Re-usable rather than disposable systems
  • Tele-diagnosis
    • Leapfrogging the landline
    • Fewer legal liability hassles

• A few venture-funded Indian startups address global markets from India

In these cases patents/IP owned by Indian companies