



# Medical Device Opportunities in India Today

## *Marketing, Engineering and More*

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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



Picture retrieved from: <http://goo.gl/8Gi03m>



## 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



Legacy hospital from pre-independence days



# 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

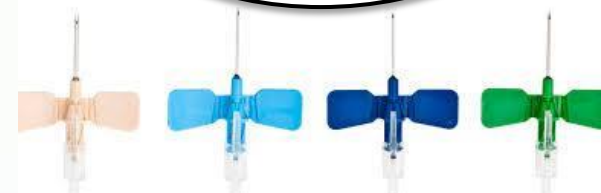
Spend 60¢ for higher quality Western company IV Catheters (15% Vol, 40% Value)

## Aspirers

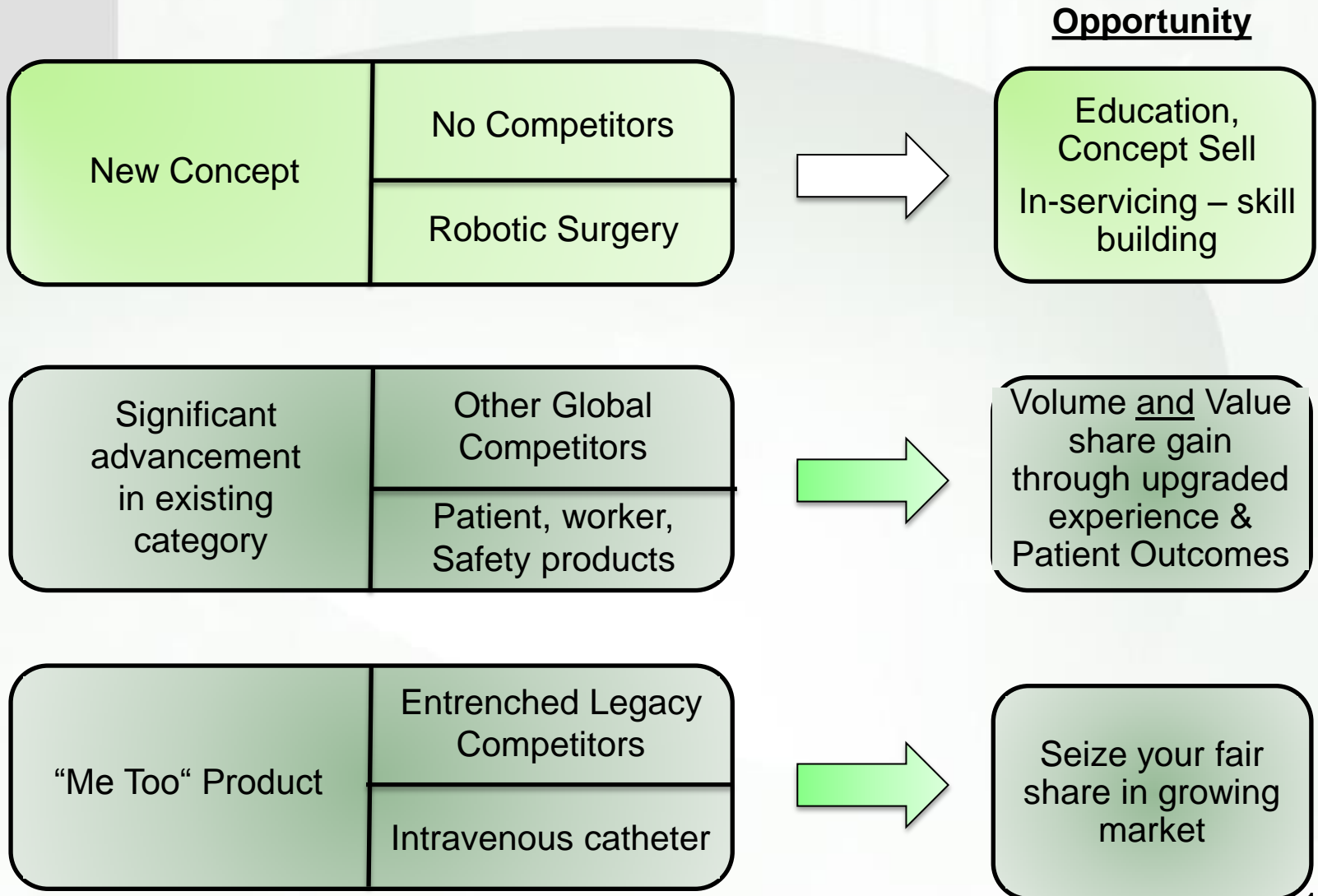
- Currently spend 20¢ for a domestic brand (~85% Vol, 60% Value)
- However, willing to spend a premium for higher, more consistent quality

## Remaining Population

- Spend 5¢ for winged needle set
- Declining segment



# “Mining” for Med-Tech Treasure in India



# 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)

PROPRIETARY & CONFIDENTIAL



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# Engineers in India help Western device companies



Lullaby Baby Warmer

## “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

Project	A	B	C	D	E	Phases
			X			Investigation
			X			Concept
			X		X	Design
	X	X	X		X	Develop
	X		X		X	Test & Verify

# 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

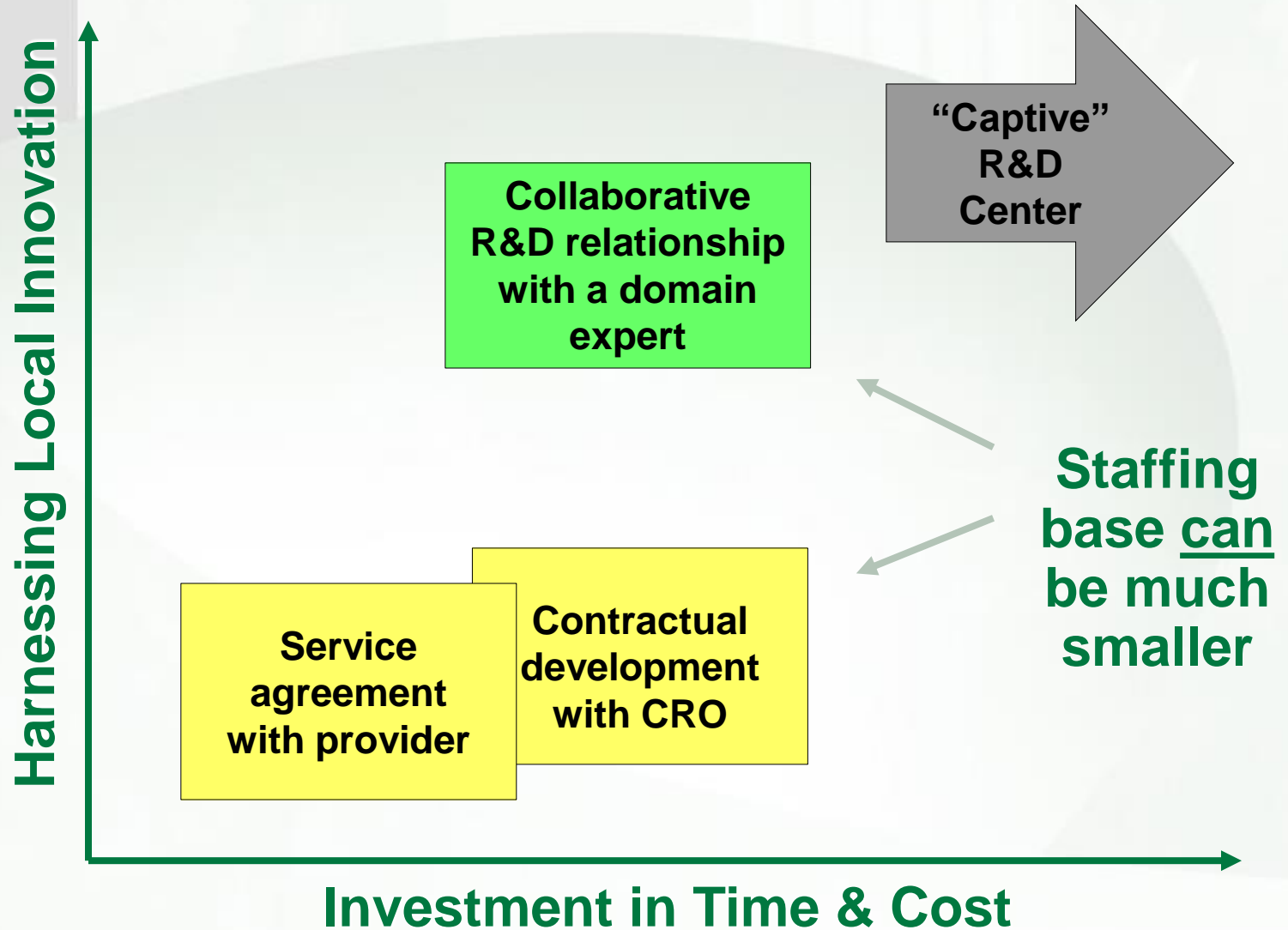
- Established captive center from the beginning, but outsourced first to start process.
- Benefits of flexibility of outsource resulted in a hybrid model later

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

*Company 'R' Example*

<b>Drivers</b>	<ul style="list-style-type: none"><li>▪ Quick ramp to functionality</li><li>▪ Cost arbitrage</li><li>▪ (Later) Maintain some resource flexibility</li></ul>
<b>Geographies considered</b>	<ul style="list-style-type: none"><li>▪ Germany, China, Japan, India</li></ul>
<b>Potential locations in India</b>	<ul style="list-style-type: none"><li>▪ Bangalore, Hyderabad Delhi/Gurgaon, Pune</li></ul>
<b>Project selection strategy</b>	<ul style="list-style-type: none"><li>▪ Extension of US teams – Design &amp; Test phases</li></ul>
<b>Path to Captive R&amp;D Center</b>	<ul style="list-style-type: none"><li>▪ Initially outsourced. Moved some work in-house later</li></ul>

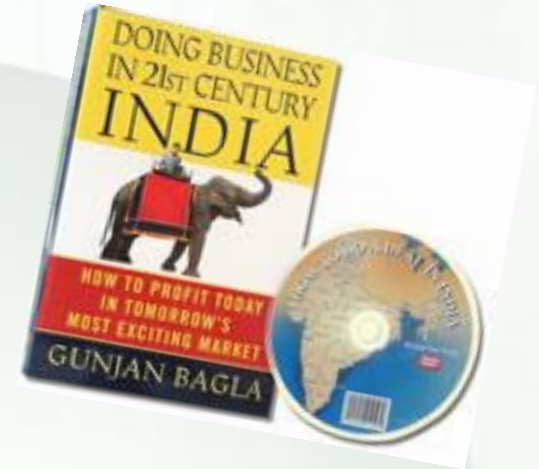
# Balancing the Med. Device R&D Center: Size and Access to Local Innovation



# Next Steps for Success in India



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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*