Global Scenario and
The Medical Device Industry in Malaysia
by
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Chairman
Association of Malaysian Medical Industries (AMMI)
31 October 2013
Agenda

- Global Scenario
- Medical Device Industry in Malaysia
- About AMMI
Global Scenario

Global Medical Device Market Size

USD ‘Billion

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>298</td>
</tr>
<tr>
<td>2018</td>
<td>440.5</td>
</tr>
</tbody>
</table>

7.5% CAGR

Source: Espicom. AMMI analysis
Medical Device Market – By Region

USA 45%
Asia/Pacific 24%
Eastern Europe 4%
Middle East/Africa 3%
Western Europe 24%

USA Market: USD127 Billion
Malaysian Market: USD1.2 Billion

Source: Espicom, AMMI analysis
Asia Pacific Medical Device Market

Source: Espicom, AMMI analysis
Agenda

Global Scenario

Medical Device Industry in Malaysia

About AMMI
Medical Device Market in Malaysia

Source: PEMANDU (NKEA), MIDA

- 2005: RM 2,400
- 2010: RM 3,600
- 2015: RM 5,100

CAGR 8%
Malaysia
Exports of Medical Devices

- Medical Gloves and catheters: RM 9.8 Billion
- Instruments for medical, surgical and dental: RM 3.1 Billion
- Electro mechanical devices
- Contraceptives
- Ophthalmic lenses
- Radiation devices
- Orthopedic implants

Total Exports in 2012: RM12.9 Billion

Source: MIDA
Export Outlook of Medical Devices from Malaysia

Source: AMMI analysis
Medical Devices Manufactured in Malaysia
Medical Devices Manufactured in Malaysia
Medical Devices Manufactured in Malaysia

Easy-Flo
Single Flow Precision Flow Controller
Structure of the Industry in Malaysia

- **MNCs**
  - About 26 companies
  - Bigger share of export revenue
  - Follow global standards and are fully compliant

- **LLCs**
  - About 47 companies
  - Follow global standards and are fully compliant

- **SMEs**
  - About 109 companies
  - Targeting domestic market
  - Not fully compliant, some exceptions

Total: 180+ companies in Malaysia
Medical Device Industry in Malaysia - Regional Clusters

NCER: Perlis, Kedah, Penang, Perak

Cluster

Cluster

Klang Valley

New companies in Iskandar
Medical Device Cluster in Koridor Utara
Medical Device Industry Ecosystem in Malaysia

**Materials:** Rubber, Plastics, Steel, Electronics, etc.

**Technology**
- Consumables
  - Latex
  - Plastic
- Surgical Instruments, Implants & Clinical Devices
  - Metal
  - Machining
- Healthcare Equipment
  - Electronics
  - Furniture

**Products**
- Consumables
- Surgical Instruments, Implants & Clinical Devices
- Healthcare Equipment

**Companies**
- Latex
  - Glove, Contraceptives, Catheters, Woundcare, Orthalmology, IVD, SUD
- Plastic
- Metal
- Machining
- Electronics
- Furniture

**Supporting Infrastructure**
- Sterilization
- Packaging
- Certification
- Biocompatibility and Clinical Trial
- Industry Groups
- Education Training
- Regulatory

**Supporting Companies**
- **Consumables**
  - WRP
  - B. Braun
  - Teleflex Medical
  - Covidien
  - VIGILENZ
  - Unomedical
  - Ciba Vision
  - Sagami
  - Ansell

- **Surgical Instruments, Implants & Clinical Devices**
  - St. Jude Medical
  - Acclarent
  - Delphax
  - Symmetry Medical
  - Orthopedics
  - Straits Orthopaedics
  - Small Bone Innovations, Inc.

- **Healthcare Equipment**
  - Ambu
  - PLEXUS
  - Jabil
  - Twin Advance
  - Skyked
  - Siemens

**Supporting Service Providers**
- SteriPack
- Bemis
- TUV SUD
- Sirim
- Info Kinetics
- AMMI
- MMDA
- Medical Device Authority Malaysia

**Supporting Organizations**
- UM, USM, UKM, UniMap, PSDC, Medsociate, Neville Clarke
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About AMMI

Total Workforce
25,606

RM5.9 Billion
Exports Reported Collectively

Source: 2012 Industry Survey from AMMI member companies (67% response rate)
Export of Medical Devices

Total Exports in Malaysia:
- RM12.9 Billion

Collective Exports from 2/3 of AMMI members’ surveyed:
- RM5.9 Billion

Source: MIDA & 2012 Industry Survey from AMMI member companies (67% response rate)
Cumulative Investments

<table>
<thead>
<tr>
<th>Year</th>
<th>Investments (RM'000)</th>
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<tbody>
<tr>
<td>2008</td>
<td>1,483,738</td>
</tr>
<tr>
<td>2009</td>
<td>1,829,729</td>
</tr>
<tr>
<td>2010</td>
<td>2,226,958</td>
</tr>
<tr>
<td>2011</td>
<td>2,813,272</td>
</tr>
<tr>
<td>2012</td>
<td>3,214,532</td>
</tr>
</tbody>
</table>

Source: 2012 Industry Survey from AMMI member companies (67% response rate)
Investment in R&D

R&D: RM44 Million

Cumulative Investment

2011
RM2.8 Billion
2012
RM401 Million
2012
RM3.2 Billion

New Investment

10%

Source: 2012 Industry Survey from AMMI member companies (67% response rate)
Significant Value Add

Source: 2012 Industry Survey from AMMI member companies (67% response rate)
Government - AMMI Partnership
Regional Cooperation

ASEAN

APEC

AMMI

ASEAN

APEC

The Kuala Lumpur Principles Medical Device Sector Codes of Ethics
Training & Development

MedTech Graduate Training Program
Regulatory & Technical
Moving Forward: AMMI Strategy 2015

- Best in class manufacturing
- Appropriate processes, structures, policies
- Skilled workforce
- Graduates
- Sharing of knowledge
- Market driven innovation and R&D
- Synergies between industry, academia and clinicians
- Align industry support
- Identify potential shared services
Thank you

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