Global Cooperation on Assistive Technology

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Why Assistive Technology

1. To address the current and emerging need
2. To look beyond physical disability – in fact, beyond disability
3. To diversify Prosthetics and Orthotics Sector – to be valued more and remain relevant
4. To ensure the benefit of Universal Health Coverage (UHC) reaches to all
5. To assist countries in implementing the Convention on the Rights of Persons with Disabilities (CRPD)
What is Assistive Technology

• It is a subset of Health Technology
• It assists to maintain or improve functioning
• Providers are mostly health personnel and
• It is beyond products
Assistive Products: Cane to assistive robots
Why AT should be a global priority?

20 Century

21 Century

1950 2000 2050

Ageing

Non-communicable disease (NCD)

Road Traffic Injuries (RTI)

Communicable disease (CD)
Health intervention/system

20 Century

- Preventive
- curative
- Promotive
- Rehabilitative

21 Century

- Preventive
- Promotive
- Curative
- Rehabilitative
- Assistive
Health sector intervention – Policy, Products, Provision and Education are still very much based on realities of 20th Century -50. In fact 0-100+

Health sector intervention – Policy, Products, Provision and Education needs to match the need of 21st Century, especially 50+. In fact 0-100+
Beyond traditional health products

20 Century

Medicines
Medical devices
Vaccines

21 Century

Medicines
Assistant products
Vaccines
Medical devices
The 4th pillar: Assistive Products

HEALTH PRODUCTS

VACCINES

MEDICINES

ASSISTIVE PRODUCTS

MEDICAL DEVICES

HEALTH TECHNOLOGY
Changing disability scenario
Pathology, perception, experience, morbidity
Uni to multi-morbidity

20 Century

1950

2000

21 Century

2050
Uni-morbidity

-50

Multi-morbidity

50+
Gap between LMIC & HIC is getting reduced

More Age More Assistive Products – multi-morbidity
More than 1 Billion people now & 2 Billion people by 2050 will need assistive products

Only 5-15% of the population in need can access assistive products.
Major barriers

1. Awareness – who knows the sector and its importance – where is the evidence?

2. Policy – lack of national policies/programmes

3. Products – quality-products are overpriced, affordable products are often of low-quality – no middle-class here…

4. Provision – segregated, isolated and often locked in big cities

5. Education – not SMART enough – not for all

We need to change this scenario
GATE

A multi-stakeholder platform for making a change
GATE: Getting the stakeholders together

- Service Providers: 18
- International Organizations: 12
- Academia: 6
- Industries Public & Private: 16
- User Groups: 6
- Governments: 8
GATE:
4 actions

1. Policy
   (Research & advocacy)

2. Products
   (APL and Innovation)

3. Provision
   (Single-window 1APP)

4. Training
   (P&O, Wheelchair, ATP)
Action 1. Influencing policy using evidence

• Setting the research agenda
• Encouraging research
• Making professionals interested in policies and legislations

1. Cost-effectiveness – return against investment
2. Scoping exercise - modelling of the future need
3. Outcomes/impact of assistive technology
4. AT and ageing – emerging AT sector
5. Appropriate AT service provision systems
Action 2. Making high-quality affordable products for all

Current market beneficiaries
Very little choice for people
A familiar scenario of the past

Medicines sector

• A few companies, mostly for the population/country who can afford, high-margin – low-volume

• 1977, WHO introduced the Model list of essential medicines – a peaceful revolution in International Public Health

• It changed the market – now most high-quality essential medicines are available at an affordable cost

• Government invested in innovation, technology transfer and absorbing R&D cost
Developing a List of 50 Priority Assistive Products

• Systematic review
• Delphi study
• Global survey
• Consensus meeting

To know more about the process, please join:
Session No: 51
Date: 23 June 2015,
Time: 14:30-15:45
### A sample of Global Survey

Select 50 most essentials among 100

<table>
<thead>
<tr>
<th>Spinal orthoses</th>
<th>Number</th>
<th>Device Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>34</td>
<td>Thoraco-lumbo-sacral orthosis 06.03.09</td>
<td>Orthosis that encompasses the whole or part of the thoracic, lumbar and sacro-iliac regions of the trunk</td>
</tr>
<tr>
<td>35</td>
<td>Cervical orthosis 06.03.12</td>
<td>Orthosis that supports the whole or part of the cervical spine</td>
</tr>
<tr>
<td>36</td>
<td>Protective helmet</td>
<td>Helmet that protects the head in case of falls</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lower-limb prostheses</th>
<th>Number</th>
<th>Device Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>37</td>
<td>Below knee (trans-tibial) lower limb prosthesis 06.24.09</td>
<td>Device that replaces part of the lower limb between the knee joint and the ankle joint after amputation or in cases of limb deficiency</td>
</tr>
<tr>
<td>38</td>
<td>Above knee (trans-femoral) lower limb prosthesis 06.24.15</td>
<td>Device that replaces part of the lower limb between the hip joint and the knee joint after amputation or in cases of limb deficiency</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Upper-limb prostheses</th>
<th>Number</th>
<th>Device Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>39</td>
<td>Trans-humeral (above elbow) upper limb prosthesis 06.18.15</td>
<td>Device that replaces part of the upper limb between the shoulder and elbow joints after amputation or in cases of limb deficiency</td>
</tr>
<tr>
<td>40</td>
<td>Trans-radial (below elbow) upper limb prosthesis 06.18.09</td>
<td>Device that replaces part of the upper limb between the wrist and elbow joints after amputation or in cases of limb deficiency</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Devices for standing</th>
<th>Number</th>
<th>Device Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>Standing frame 04.04.08</td>
<td>Stationary equipment for providing support to a person for keeping an upright position</td>
</tr>
<tr>
<td>42</td>
<td>Tilt table 04.28.21</td>
<td>Platform for positioning and supporting a person while progressively moving him/her from a lying position to an upright position</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Special devices for children with</th>
<th>Number</th>
<th>Device Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>43</td>
<td>C.P. walker</td>
<td>Provides balance and mobility to children with cerebral palsy while walking</td>
</tr>
</tbody>
</table>

Uniting the fragmented sector to address multi-morbidity

- 20-30 APL items for Referral level
- 20-30 APL items for PHC/Community level
Action 4. Training, Training, Training

Generic

Wheelchair

Specialized

Prosthetics & Orthotics

AT
Action 4. Generic Comprehensive AT Training Package (ATP)

20-30 APL items for Referral level

20-30 APL items for PHC/Community level

For Generalists

For Specialists

Priority Assistive Products List

Specialists

Non-specialists
Action 4. Specialized Training: Wheelchair

Guidelines on the provision of Manual Wheelchairs in less resourced settings

To know more, please join: Session No: 68
Date: 23 June 2015,
Time: 16:30-17:00
Action 4. Specialized Training: Prosthetics & Orthotics
Action 4. Specialized Training: Prosthetics & Orthotics

• Consensus conference
  9-13 November 2015

• Launch
  8 May 2017
Action 1+2+3+4 = Globalizing AT (GATE)

Upcoming events:

1. GATE Research Group Meeting – 9 September, Budapest
2. GATE Expert/Industry Consultation – 29&30 October, Beijing
The first step out of poverty.

The first step into education.

The first step into work and employment.

The first step towards inclusion & participation.

The first step to enhance mobility, independence, and freedom.

Thank you