Assistive Technology: Systems Thinking and Market Shaping

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WHO GATE Forum on Assistive Technologies
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Sustainable Development Goals (SDGs) “Leaving No One Behind”

• Of the estimated 1 billion+ people who could benefit from assistive technology, only 10% have access to it – leaving behind 90% in terms of their access to education, employment, health, justice.

• Those with disabilities, chronic illness, frailty and the functional decline often associated with older age, are a rapidly growing population.

• Existing approaches and systems for assistive technology cannot, and will not, address this challenge. Radical, disruptive and transformative change is urgently needed to address this.
Some Definitions

• An **assistive product** is “any product (including devices, equipment, instruments, and software), either specially designed and produced or generally available, whose primary purpose is to maintain or improve an individual’s functioning and independence and thereby promote their wellbeing”

  • “assistive technology” is often used as a generic term.

• **Assistive technology systems** refer to “the development and application of organised knowledge, skills, procedures, and policies relevant to the provision, use, and assessment of assistive products” (Khasnabis, et al 2015).

  Includes other infrastructure and technologies, such as ICT and IoT that promote the effectiveness of assistive technology.
Why develop a Priority **Assistive Products List (APL)**

- Awareness
- Availability – bridging the gap
- Setting minimum standards
- Market shaping – bulk purchase
- Innovation
- Training
- Financing - Insurance
Priority Assistive Product List (APL) development process

Scoping exercise
3 rounds of Delphi
Global survey

1 year
N = 200 + 10,206
52 languages
161 countries
38%
200 -> 100 products

38%

Consensus Meeting Day 1
Delphi 50
Global 50

Consensus Meeting Day 2
50 APL

World Health Organization
GATE
Some anticipated outputs

- The Results of the Delphi/Global Survey/Consensus Meeting – A Priority List
- Priority Assistive Products Compendium – a chapter on each AP
- Forum for Debate: Pros & Cons of APL
- Next Steps – how to
WHO APL

Key messages:

- It is a WHO model list – a guide to the minimum – every country should have a National priority Assistive Products List;

- APL is not restrictive; every country can add any number of assistive products according to national need and available resources;

- Like the WHO Model List of Essential Medicines (EML), the APL can also be used to guide product development, production, service delivery, market shaping, procurement, and reimbursement policies (including insurance coverage).
GREAT Summit – Geneva, 2017
(Global Research, Innovation and Education on Assistive Technology)

Forthcoming are Position Papers on 5 Ps
Policy
Products
People (users)
Personnel
Provision
Next Step: The Zero-WHO Forum on AT

• What is now needed to resource and commit to a transformative change in this area?

• States parties, civil society and industry will share ideas about making the SDG more inclusive of some of the most marginalised across low-, medium and high-income contexts – through the use of Assistive Technology.

• Ideas from Europe, Africa, Middle-East and North America.

• Examples of some good practices and identification of the barriers and facilitators to provision of Assistive Technology - across differing contexts, resources, systems and cultures?
10 Punishing Ps
Examples of **Non-Systems Thinking** in the AT sector

- **People** – users have to attend multiple professionals in multiple locations.
- **Policy** – no coherent overall national **vision** or rational resource-allocation.
- **Procurement** – based in advocacy efforts, not census or national survey data.
- **Provision** - different products are provided in different locations.
- **Products** – product development is **industry-led**.
- **Personnel** – specialist practitioners are **protective** of their profession domain.
- **Place** – focus on products not the process and resources available in **context**.
- **Pace** – changes in services are determined by supply chain and **linear thinking**.
- **Partnership** – **opportunistic**, reactive or short-term and in a similar sphere.
- **Promoting** – products promoted without reference to **infrastructure** or **attitudes**.
Market Shaping

• Think about reading glasses...
Figure 4. Conceptual Framework of the Market Shaping Pathway*

**Observe**
- Market Shortcomings
  - **MARKET HEALTH PRE-INTERVENTION**
    - Affordability
    - Availability
    - Assured Quality
    - Appropriate Design
    - Awareness

**Diagnose**
- Root Causes
  - High Transaction Costs
  - Limited Market Information
  - Risk imbalances between Supply and Demand

**Assess**
- Market Shaping Options
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<th>Potential Interventions</th>
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<td>1 Reduce Transaction Costs</td>
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<td>2 Increase Market Information</td>
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<td>3 Balance Supplier and Buyer Risks</td>
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**Implement**
- Customized Intervention
  - **MARKET HEALTH POST-INTERVENTION**
    - Reduce Transaction Costs
    - Increase Market Information
    - Balance Supplier and Buyer Risks
In our presentations in these sessions

We are open to all questions