Opening the GATE to inclusion for people with disabilities

For more than an estimated billion people with disabilities, assistive technologies are crucial mediators for realising people’s rights, and for promoting access and empowerment—the theme of the International Day of Persons with Disability for this year (Dec 3, 2015). By 2050, the number of older (aged over 60 years) people will have increased, worldwide, from about 840 million in 2013 to more than 2 billion, many of whom will also need assistive technology to remain independent. Some older people will need several assistive products, as will the increased proportion of people living with chronic diseases. Access to assistive technology is now becoming as important as access to any other medical or health product; however, today, only 5–15% of the population in need actually has access to assistive products. Available statistics vary between countries and types of assistive technology; for example, in the case of hearing aids, WHO estimates that only 3% of the need is being met in low-income countries.

With a longer-living global population, we now need to embrace the concept of assistive services in addition to promotive, preventive, curative, rehabilitative, and palliative services. WHO has responded to this challenge by establishing the Global Cooperation on Assistive Technology (GATE), seeking to remove barriers and to open the metaphorical gate to overcoming activity limitations, and facilitating inclusion and participation in society.

We define assistive technology systems as the development and application of organised knowledge, skills, procedures, and policies relevant to the provision, use, and assessment of assistive products. 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. The most common examples of assistive products include wheelchairs, prosthetic and orthotic devices, and tricycles for people with mobility impairments; white canes, and software for computer-screen magnification or reading for people with visual impairments; hearing aids and cochlear implants for people with hearing impairments; speech synthesisers and communication boards for those with speech impairments; and symbol pictures and calendar pill boxes for people with cognitive impairments. At present, areas of great interest are the development of assistive products associated with dementia and provision of assistive products in low-income settings, where civil society organisations play a key part.

The United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) identifies assistive technology as a human rights obligation of both States and international donors. Countries that have ratified the UNCRPD (now 157) must ensure the availability of high-quality, affordable assistive products as a right, because they are recognised as the first crucial—and mediating—step towards equal opportunities.

Absence of awareness or availability, high cost, and apathy are among the key reasons for poor access to assistive technology, confining many individuals in need to their homes to live a dependent, excluded, life, locked in.

Figure: key questions for systems providing assistive products

- **Assessment**: Are there skilled personnel to assess the need for and prescribe assistive products?
- **Rights**: Has the use of the assistive products increased the realisation of rights?
- **Procurement**: Can quality affordable assistive products be reliably provided to the required scale?
- **Policy**: Is there a national assistive technology policy in place?
- **Technology**: Does the assistive product function as intended?
- **Sustainability**: Are there sufficient resources to support maintenance of the assistive products?
- **Environment**: Are facilitators for assistive products in place?
- **Usability**: Are users of the assistive products satisfied with their usefulness?
into poverty and stigma. This situation is reminiscent of the poor and inequitable access to medicines in the 1960s and 70s; WHO’s Essential Medicines List (EML), described as a peaceful revolution with positive repercussions for international public health, provided an incentive to rally public opinion and mobilise resources, creating more competition and a stimulus for States to develop national lists to promote access in their own context.

Although many assistive products might be considered essential by their users, some address needs that are more basic and more common than others. Like medicines, assistive products also vary greatly in their price and supply. Building on the experience of the EML and other global initiatives, WHO seeks to develop a list of priority assistive products, based on addressing the greatest need. Development and delivery of an appropriate list of assistive products has its own set of unique problems, challenges, and opportunities.

First, there is identification of what products should be on the list. We are addressing this through a three-step strategy. Nearing completion is a Delphi consultation with more than 200 users, providers, and other stakeholders identifying key assistive products (covering a range of functioning) through an iterative process. Next, a global survey, translated into 50 languages and allowing web-based, paper-based, and assisted responding is going live on Dec 3, 2015 at the GATE website, for 3 months, and will constitute a substantial open-access database, with a consensus conference planned for March, 2016. This process will identify 50 essential (priority) assistive products, a minimum—not a maximum—to guide country-level service development.

The development of national assistive technology systems, capable of providing end-to-end services, includes procuring reliable, quality, and affordable products to scale, and training and supporting a skilled and motivated workforce to assess, fit, and maintain the products, with effective monitoring and assessment (figure). Feedback into a resilient, responsive assistive technology system will require the development of national assistive technology policies; a new cadre of workers; new working relationships between assistive product users, national service providers, civil society, and corporate partners; and cross-sectoral information systems. This approach will also require new ways of developing policy, working across the relevant sectors, and engaging users of assistive products—the beneficiaries—centrally in the policy process.

 Provision of appropriate, affordable, and effective assistive technology will become a key global metric for commitment to achieving the Sustainable Development Goals, with their strong emphasis on social inclusion. The GATE initiative is urgent, is underway, and is wide open: join the GATE community.

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