

Systems Strengthening for Assistive Technology Information Systems



Data collection with lower-limb prosthesis users during the pilot phase of the LEAD and COMPASS project; a custom-built app is used to collect the results of the selected outcome measures. Photo credit: ISPO

What is systems strengthening for assistive technology?

Access to assistive technology relies on an effective system built on key interconnected building blocks; governance and leadership, financing, service delivery, workforce development, assistive products, data and information systems, all centered around people. Strengthening assistive technology systems requires coordinated investment in each of these building blocks to enhance their capacity and ensure they function efficiently and cohesively. Systems strengthening lies at the heart of ATscale's country investments, tailored to specific national contexts.



The critical 'building blocks' of systems strengthening for assistive technology

What are the key challenges?

Worldwide, more than 2.5 billion people need one or more assistive products, such as wheelchairs, hearing aids, prostheses, spectacles or digital assistive technology. This number is expected to rise to 3.5 billion in 2050.

Information systems include data collection, analysis, reporting, knowledge management and governance. If effective, these systems improve outcomes for users of assistive technology and their families, inform research and innovation and influence policy. Governments and organisations rely on this information as evidence for decision-making on funding and provision of services and products. Without this critical evidence, those in need of assistive products and services can go unserved and unseen.



Very few countries monitor data related to assistive technology or disabilities as part of their national health or social sector management systems. In many cases, any data that is recorded is fragmented or not integrated into national systems and therefore difficult to consolidate, analyse and use for governance. In low resource settings, additional barriers to information systems are poor connectivity, limited resources, poor coordination and limited use of data to inform decision-making.

Data collection is often done based on surveys, however these are expensive to carry out, quickly become outdated, may not have robust methodologies, may not be nationally representative or may not be accepted by the government. There can also be stigma associated with being identified as a person with disability, leading to further difficulties in data collection and need for greater sensitivity or alternative methods.

How does ATscale address these challenges?

ATscale supports interventions at both a global and national level through programmes to improve information systems, including identifying country needs and gaps, collecting and storing vital data relating to assistive technology and investing in innovative data collection, storage and analytic systems.

ATscale supports integration of assistive technology or disabilities-related data collection and monitoring within existing national systems. This aligns with the broader objective of integrating assistive technology within national frameworks such as universal health coverage (UHC). Including assistive technology into these systems allows a better understanding of the need and use of assistive products within countries, facilitating informed decision-making on the size and location of services.

Where data on assistive technology does not exist, ATscale-supported country programmes begin with data collection on the national situation to provide evidence to governments and other stakeholders about assistive technology need and capacity, leveraging validated standardised tools, such as WHO's rapid assistive technology assessment (rATA)² and assistive technology capacity assessment (ATA-C)³. This ensures evidence-based programme design, implementation and monitoring.

ATscale also supports new approaches to data collection and systems in specific thematic areas and is investing in knowledge-sharing resources to act as global public goods benefiting the sector worldwide.

Stories of Impact

In **Kenya**, rehabilitation and AT indicators have been integrated into the District Health Information Software 2 (DHIS2), the primary mechanism for tracking health indicators nationally, as part of ATscale's programme. This system allows real-time monitoring of service provision and resource utilisation. A National AT Dashboard has been created to strengthen the country's capacity for strategic coordination and transparency within the rehabilitation and assistive technology ecosystem and assistive products have been added to the healthcare logistics systems, making distribution easier and improving provision.



The KEMSA (Kenya Medical Supplies Authority) Warehouse, Nairobi, Kenya, where assistive products are now being stored and distributed through the established healthcare logistics system. Photo credit: ATscale

Data Collection - ATscale-supported country programmes start with data collection, often via WHO's ATA-C and/or rATA tools, to assess the current landscape of assistive technology in each country and provide evidence for programme design and activities in countries such as **Bangladesh, the Democratic Republic of the Congo, El Salvador, Guatemala, Honduras, Nepal, Peru, Senegal, Tanzania and Zambia.**

¹ WHO, 'Measuring access to assistive technology in countries', at <https://www.who.int/tools/ata-toolkit/rata>

² WHO, 'Establishing a country's readiness to provide assistive technology', at <https://www.who.int/tools/ata-toolkit/ata-c>

In **Indonesia**, the programme included Pusat Rehabilitasi YAKKUM, a local organisation of persons with disabilities in Central Java, and the data collection for the rATA tool was done entirely by persons with disabilities.



Pusat Rehabilitasi YAKKUM members collecting data in Purworejo, Central Java, Indonesia. Photo credit: Pusat Rehabilitasi YAKKUM

LEAD and COMPASS - Improving prosthetic services and measuring their impact for lower limb prosthesis users can be difficult due to a lack of standardised data and outcome measures. To combat this issue, ATscale funded a project by the International Society of Prosthetics and Orthotics (ISPO) to create LEAD (Lower Extremity Amputation Dataset) and COMPASS (Consensus of Outcome Measures for Prosthetic and Amputation Services). The data from these tools are collected via an app and stored in a database to allow the clinic to track the progress of prosthesis users under their care and ensure they are provided with the products and services they need. Pilots have been completed in Cambodia, Papua New Guinea and Thailand, with study results expected in the coming months.

ATconnect - In 2025, ATscale launched ATconnect, an online platform that gathers resources related to assistive technology. The purpose of this resource is to make assistive technology-related data and evidence easily accessible to the sector and create knowledge-sharing and collaboration opportunities for stakeholders globally.



About ATscale

ATscale is a cross-sector global partnership with a mission to improve people's lives through assistive technology. It catalyses action to ensure that, by 2030, an additional 500 million people in low- and middle-income countries get the life-changing assistive technology they need.

Together, let's ensure everyone, everywhere can access and afford the assistive technology they need, enabling a lifetime of potential.

