

ATscale

CAMBODIA 3-YEAR CONCEPT NOTE

Project details:	Concept Note requesting for ATscale support for the Government of Cambodia to strengthen the assistive technology services in Cambodia	
Country:	Cambodia	
Co-Chair(s) of Country Secretariat	Ministry of Health and Ministry of Social Affairs, Veterans and Youth Rehabilitation	Ministry of Health
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Budget	\$3.2 Million over 3 years (all inclusive)	

Executive summary

Assistive technologies (AT) are essential for society, but there exists a large gap between the need for AT and the provision. Assistive Technologies, such as glasses, hearing aids and prosthetics, enable people to live healthy, productive, independent, and dignified lives, and to participate in education, the labor market and civic life. In Cambodia, the need for assistive technology is high – with an estimated 2.2 million people living with disabilities, including over 320,000 people with very significant difficulties functioning.

The concept note below outlines the Government of Cambodia’s ambition and commitment to rapidly expand access to assistive technologies, while strengthening the enabling environment and promoting long-term sustainability of their services. It was developed through a consultative approach, led by a cross-ministerial team from MOSVY, MOH, MOEYS, DAC with representation from Organizations of People with Disabilities.

Mobility domain

In response to the high need for physical rehabilitation and mobility products, due to years of conflict, NGOs have invested over the past three decades to set up service delivery infrastructure and capacity in Cambodia. In 1992, ICRC initiated its Physical Rehabilitation Program (PRP), becoming one of the first (along with Handicap International) of many organizations to provide prosthetics and wheelchairs services to the people of Cambodia. After nearly 30 years of investment and support, Cambodia has a network of 11 Physical Rehabilitation Centers (PRC), three NGO-run wheelchair manufacturers and a prosthetic component factory. In addition, with support from Exceed Worldwide, the Cambodian School of Prosthetics and Orthotics, with a 3-year bachelor’s degree and a unique 1-year International Certificate Prosthetic and Orthotic (P&O) Technician program, as well as the Khmer Association of P&O were developed to build capacity of human resources. Together, these efforts contribute to a relatively

mature – in comparison with other LMICs – service network for mobility products and physical rehabilitation that supports over 26,000 Cambodian living with physical disabilities every year.

Over time, NGOs have reduced financial, operational and management support to the PRC and factories, putting continued successes at risk. Responsibilities for 5 PRC and the components factory have already shifted to the Government of Cambodia. In late 2022, one wheelchair factory will additionally be transitioned, and other International Organizations have indicated transition is likely in the near future. Concerns over quality of transitioned PRC and operational efficiency of the factories have been raised by both the government of Cambodia and partners. In recent years, there has been a decline in number of clients presenting at PRC, with the largest decline seen in government-managed clinics. This decrease in government managed clinics has shifted some of the demand and the PRC supported by ICRC, HI and Exceed are facing an overload of patients.

This context has created a unique mix of a strong baseline for service provision in Cambodia from which to expand services, with an acute need to build capacity to sustain the services. The concept note outlines activities designed to increase the number of prosthetics and wheelchair users through:

1. Extending services to communities through mobile outreach activities, which account for over 50% of clients seen by ICRC-managed PRC
2. Increasing demand for PRC services through initiatives which improve linkages between PRCS and primary health care, hospital surgery departments and community outreach activities
3. Strengthening quality of PRC services through upgrading facility equipment and developing a pipeline of qualified P&O staff

In addition, the concept note outlines critical analytical support and innovation activities that will strengthen sustainability of government systems to provide continued care for years to come. This includes:

4. Supporting the relocation of the central PRC and factories to a single location, to build managerial capacity and identify efficiency opportunities, and avoid disruption of production
5. Identify and test mechanisms to increase financial support to PRC, including through cost recovery mechanisms such as those piloted by Exceed Worldwide
6. Developing and implementing data systems to track PRC users, and client satisfaction to inform further quality improvements and better plan for evolving AT need

Vision domain

Compared with mobility services, eye health is a more recent priority for the government of Cambodia. The National Eye Health Program was established in 1994, under the Ministry of Health. With support from donors and implementing partners, 18 vision centers have been established across the country. These continue to receive financial and management support from NGOs. Under the first grant from ATscale, the NEHP has additionally been expanding geographic coverage of eye health services through the establishment of 9 new vision centers under provincial hospital management.

As a relatively new national program, priorities for eye health include expanding coverage of screenings and the affordable provision of eyeglasses by the public sector. In combination with a donation from VCF, these activities are expected to increase the number of glasses provided by the public sector each year:

1. Implementation of 3 new vision centres each year, to ensure every province has at least one government-run vision centre and the upgrade of 3 existing vision centres each year.
2. Upskilling existing and training new refractionist nurses to ensure the quality of services provided in the new and existing vision centres
3. Expansion of existing school-based screening program, to reach an additional 100,000 students each year
4. Increase demand for eye health services through initiatives which improve linkages between vision centres and primary health care and community engagement activities

As with mobility services, these activities will be supported with interventions to promote the sustainability of eye health services, including:

5. Mapping of eye health services, including in private sector, to support development of a coherent approach to expanding services
6. Strengthening procurement practices, including through the development of a revolving fund for glasses, using the VCF donation as bridge towards sustainability

Enabling environment (+ increasing visibility over other domains)

Although services for mobility and vision assistive technologies are already established, Cambodia does not currently have strategies or policies which address assistive technologies comprehensively. This is reflected in the relatively less developed domains for hearing, speech, communication and cognitive disabilities. It additionally results in missed opportunities to implement interventions that can comprehensively improve assistive technology across vision and mobility services.

With support from ATscale, the government seeks to develop a clear understanding of AT needs and delivery capacity, and implement cross-cutting planning activities that will build strong foundations needed to set up delivery systems across AT areas. This includes:

1. A full situation analysis using the ATA-C and STARS tools in parallel to guide the development of a coherent plan to increase access to AT and rehabilitation services
2. The development of a national strategic plan to be endorsed by both the MOH and MOSVY and of a national list of priority assistive products
3. Strengthen the financing for assistive technologies through the development of a costed investment case to advocate for an increase of domestic funding.

Throughout the development of this concept note both the MoH and MoSVY have shown strong engagement and confirmed the commitment of the Royal Government of Cambodia to make a priority of improving AT and rehabilitation services. Each ministry has nominated focal points that have been instrumental in providing the country context and identifying the area and activities to be prioritized and are presented in the following section of this note.

Background

The WHO-UNICEF Global Report on Assistive Technology (AT) estimates that worldwide, more than 2.5 billion people need one or more assistive products, such as wheelchairs, hearing aids, eyeglasses, or apps that support communication and cognition. AT enables people to live healthy, productive, independent, and dignified lives, and to participate in education, the labor market and civic life. People who most need AT include people with disabilities, older people, people with noncommunicable diseases such as diabetes and stroke, and people with gradual functional decline. No comprehensive data exist on the AT need in Cambodia, but the Cambodia general population census from 2019¹ identified 689,532 Cambodians as persons with disabilities. Recent estimates from the WHO suggest that many more Cambodians, around 2.2 million people, are likely to have a disability, including over 320,000 people with very significant difficulties functioning. Based on the Physical Rehabilitation Center Statistics and Key Indicators in 2017 and Trends 2012 – 2017, the total clients by cause of disability are: Mine/UXO accident: 9,659, Congenital: 5,781, Illness/Disease: 5,169, Traffic Accident: 2,343, all other accident: 1,895. These estimates do not account for the Cambodian with mild impairments, for instance those who may need eyeglasses. According to the national strategic plan for blindness prevention and control 2021-2030, there is an estimated 0.5% of the population with uncorrected refractive error², meaning that about 750,000 Cambodian are needing spectacles. In the upcoming years, it is anticipated that these number will greatly increase as Cambodia's population is growing and ageing.

The below outlines a concept note prepared by the Royal Government of Cambodia to dramatically increase access to assistive technologies, in particular: prosthetics, wheelchairs and glasses. The concept note was developed through a consultative process, led by a small group of technical government officials from the Ministry of Health (MOH), Ministry of Social and Veteran Affairs (MOSVY), Ministry of Education, Youth and Sports (MOEYS), People with Disabilities Foundation (PWDF) and representatives from the Cambodia Disabled People's Organization (CDPO), with technical input from ACCESS project and Fred Hollows Foundation (FHF) and coordination support from the Clinton Health Access Initiative (CHAI). An initial list of activities was developed by this technical working group, based on government expertise and one-on-one consultations with different departments, in-country donors and partner organizations. This proposed activity list was shared with relevant stakeholders in advance of a consultative workshop held on 11 July 2022. The workshop included representation from donors, NGOs, for profit organizations, and civil society. A full list of organizations invited to this consultative workshop is provided in annex 01. During this workshop, stakeholders ranked relative importance of activities and provided input into the appropriate approach and cost for each priority activity. This led directly to the list of prioritized actions presented.

Country context

In Cambodia, there is no single organization or entity that is responsible for assistive technology. Each type of disability and corresponding assistive technology presided by a different ministry or department, as outlined below. A coordination body, the Disability Action Council (DAC), was formed in July 2009 to convene the different entities supporting people with disabilities and ensure coherent plans and policies are in place.

¹ National Institute of Statistic Cambodia (2019). Final General Population Census 2019.

² The National Strategic Plan for Blindness Prevention and Control 2021 - 2030

Organization of physical rehabilitation services in Cambodia

In 1989, the Ministry of Health (MoH) transferred that responsibility of rehabilitation services to the Ministry of Social Affairs, Veterans and Youth Rehabilitation (MoSVY). The MoSVY, via the Persons with Disabilities Foundation (PWDF) and non-governmental organizations (NGOs) like Exceed Worldwide, ICRC, Humanity & Inclusion (HI), is currently in charge of providing physical rehabilitation services, including physical therapy, prostheses, orthoses, and other assistive devices, at 11 Physical Rehabilitation Centers (PRC) that are located around the country.

Cambodia has an existing legislative and policy framework that guarantees the rights and addresses the needs of persons with disabilities. The key national legislation is the 2009 *Law on the Protection and the Promotion of the Rights of Persons with Disabilities* ('Disability Law'). This law specifies that "people with all kinds of disabilities get free of charge physical rehabilitation". However, legislation and policies have not been effectively implemented. In 2012, with the hope to standardize and ensure quality of the services delivered at the PRC, the MoSVY adopted a Standard Working Procedure (SWP) for PRC. The SWP was part of the general country Guideline on Physical Rehabilitation and describes services and management requirement at the PRC. Similar to the legislative framework, the SWP has not been fully implemented and there remains a great need to standardize and ensure equal quality of services across all PRC.³

The 11 PRC were originally set up by international organizations⁴ and serve approximately 26,000 patients every year. PRC offer outreach rehabilitation, including mobile repair as well as wheelchair and prosthetic provision. Follow up and referral were also conducted for 5,633 persons with disabilities. In addition, 1,628 patients with spinal cord injuries received rehabilitation services from Spinal Cord Injury Center. Since 2011, the management of these PRC is progressively being transferred from these international organizations to the PWDF, which is a public administration institution under the MoSVY responsible for delivery of rehabilitation services. To date, five centers have been fully transferred to be managed by the government. The remaining six are under the management of the organizations that set them up: one supported by Humanity & Inclusion (in the Kampong Cham province), two by ICRC (in Battambang and Kampong Speu) and until the end of 2022 three are supported by Exceed (1 in Phnom Penh, and 2 in the Kampong Some and Kampong Chhnang provinces). The difference of leadership across the PRCs is provoking inequity and disparity in the funds available for the functioning of the PRC creating gaps in the quality of services provided and HR compensation.

The PWDF Strategic Plan 2021-2023, which has been funded by the government and donors, aims to provide services at the PRC level to 28,000 Cambodians. The Plan also defines four strategic objectives: 1) strengthening rehabilitation services in a high quality and sustainable manner, 2) planning budget and financial resource mobilization to achieve the objective of the PWDF, 3) enhancing and strengthening the self-supported living of persons with disabilities, social integration, and inclusion in social economic activities of persons with disabilities, and 4) institution capacity strengthening and partnership development.

There are four manufacturing sites for assistive products in Cambodia. Three are wheelchair factories which have been supported by different NGO partners: Veteran International Cambodia (VIC), Association for Aid and Relief Wheelchair for Development and Jesus Release Cambodia. VIC has planned

³ Final report rehab transition analysis 2016

⁴ HI, ICRC, Exceed, Veteran International Cambodia

to transfer the management of the factory to PWDF due to limited funding. There is also one factory of prosthetic components, originally established by ICRC, and currently under the management of PWDF. There are plans to move each of these factories into a single location, near the soon-to-be established rehabilitation center on the outskirts of Phnom Penh. The prosthetic components factory follows international norms and is CE certified, which would allow Cambodia to export goods to address the demand from countries in the regions (Philippines, Indonesia, Myanmar). However, the country needs to develop and implement a sustainable import/export mechanism. Since 2016 the PWDF generated income of 1,627,070,000 Riels, equivalent to 406,767 US Dollar⁵. This income was generated across different sources including physiotherapy services, prosthetic components sales, interest of loan, payment contribution from government ministry and individuals, sale of products from person with disability and fund raising.

Organization of the eye health services in Cambodia

The National Eye Health Program (NEHP) was established in 1994 and is responsible to provide eye health screening and treatment, including eyeglasses. NEHP is hosted by the Department of Preventive Medicine under the leadership of the MoH. The NEHP is responsible for developing and implementing National Action Plans for the Prevention and Control of Blindness and to assist in coordination of all eye care activities in Cambodia. Currently, the program is fully donor funded with most support from NGOs such as Fred Hollow Foundation (FHF). NEHP works closely with various partners such as the University of Health Science (UHS) to increase number of ophthalmic professionals, the Ministry of Education Youth and Sport (MoEYS) for eye screening among school children, and the Ministry of Woman Affairs (MoWA) for awareness raising and access to eye care services.

The NEHP has made remarkable progress despite facing human and financial constraints. The National Strategic Plan for Blindness Prevention and Control 2021-2030, which was developed in partnership with MoH, NGOs and WHO, highlights human resource as a top priority. Recently, a variety of trainings have been provided to increase the national human resources capacity. In total, 60 sub-specialist ophthalmology, 3 neuro-ophthalmologists, 2 retina ophthalmologists and 2 pediatric ophthalmologists have been certified. The country also strengthens its human resources capacity through the provision of 4-6 months training to 24 ophthalmic nurses and 24 refractionist nurses co-funded mostly by FHF, other NGOs and a few by personal funding. Partner ministries and NGOs have aligned themselves on this priority. The Seva Foundation supported the training of 21 Primary Eye Care trainers for supervision visits across the country. With the support of the Fred Hollow Foundation, 433 staff members at 156 health centers had received mentoring and clinical supervision on Primary Eye Care. Lastly, the FHF supported the training on basic knowledge on eye care to 10,554 community members including 6,928 females through MoWA.

In term of service delivery, report in 2021 indicated that approximately 415,502 clients received eye care (outpatient) services. A total of 32,905 patients received eye surgery of which cataract made up two-thirds. NPEH collected the data from both private and public vision centers. The report also showed that the total of spectacle provision across the country is 77,808 pairs, of which only 877 (1.1%) were provided by public vision centers⁶.

The NEHP is supported by various types of donations at different levels of the health care system. For example, Sight For All has donated a full set of equipment for establishing a pediatric ophthalmology

⁵ PWDF strategic plan 2021 - 2023

⁶ The National Strategic Plan for Blindness Prevention and Control 2021 - 2030

clinic at Preah Ang Doung and other necessary equipment to the Khmer Soviet Friendship Hospital. The Seva Foundation approved funds to purchase basic instruments for mobile eye camps. Other partner NGOs, such as Eye Care Foundation, FHF, Sight For All, Seva Foundation-Cambodia, Caritas Takeo Eye Hospital, Battambang Ophthalmic Care, have worked directly with selected provinces and eye units to donate equipment, instruments, consumables as well as COVID-19 protection materials to their provinces.

Organization of the hearing health services in Cambodia

Currently the government of Cambodia does not have an Ear Health national program. In the public sector, the Preah Angduong hospital is the only one nationwide providing, at the patient cost, audiology testing and hearing aids. All Ears Cambodia (AEC) is a local NGO, supported by All Ears International (AEI), established to work for the relief of persons with hearing impairment, deafness and the preservation and protection of hearing in Cambodia. The AEC has provided ear and hearing health care for those in need through their clinics in several provinces in Cambodia: Phnom Penh, Siem Reap, Battambang and Kratie. Following international standard, AEC works include diagnostic and treatment service for hear infection, basic audiological test. AEC also provides a comprehensive range of hearing aids for clients and patients. The clinics also has laboratory and hearing aid repair service. In response to the lack of health care accessibility, the team also runs outreach clinics to bring healthcare to those in need for eight provinces as well as across Phnom Penh municipality. As a part of programs, AEC established the Continuing Professional Development Program through the provision of the in-service training for primary ear health care and audiology for its trainees.

Although there is likely substantive, undocumented need for assistive products to support hearing and other disability services, the government of Cambodia does not have a coherent strategy and governance structure to support these services. As a result of this, the focus of the support for these services in the proposed concept note will focus on generating increased understanding of the need for AT through WHO-designed surveys and on incorporating these into a comprehensive AT strategy and technology list with clearer implementation and oversight responsibilities defined via the DAC.

Key actors and initiatives supporting AT-related services in Cambodia

Fred Hollows Foundation (focus = eyeglasses)

FHF works with government partners on efforts to eliminate avoidable blindness in Cambodia. The main partners are MoH through the NPEH, the University of Health Science and the MoEYS and other NGOs to promote the eye health service in Cambodia. FHF focuses on health system strengthening in leadership and governance, health financing and workforce development. FHF has provided support to eye health program and University of Health Science to establish the Ophthalmology Residency Training course and Diploma of Ophthalmic Nurse and provided scholarship to training nurses. To strengthen the health care workers at health center level in primary eye care, the Foundation has been supporting the NPEH to conduct training on mentoring and clinical supervision on primary eye care. FHF has also worked closely with health school department/MoEYS to finance and conduct eye screening for school children. The Foundation partnered with Eye Care Foundation, SEVA Foundation, Sight For All, Caritas Takeo Eye Hospital, Battambang Ophthalmic Care, to donate eye health equipment for eye diagnosis, treatment and surgeries.

USAID (focus = inclusive education)

USAID has funded All Children Reading Cambodia (ACR-Cambodia) project which embeds inclusive education targets into the design of early grade reading package which includes teacher's guide, student

supplemental books, story books and other supplemental materials and into teacher training programs for grades 1 and 2 in the mainstream schools. The package was adapted into braille and Cambodian Sign Language for use at special schools. Following trials of in-school screening tools for disabilities, ACR-Cambodia project supported the MoEYS' Special Education Department to further refine, test, and develop the national disabilities screening, referral protocols, and guidelines for assessing disability in learners at the primary, lower secondary, and high schools.

Australia-Cambodia Cooperation for Equitable Sustainable Services (ACCESS) Cambodia (focus = physical rehabilitation)

The ACCESS Program is a five-year (2018-2023) initiative undertaken with the financial support of the Government of Australia through the Department of Foreign Affairs and Trade (DFAT). ACCESS support focus on human rights, gender equality and disability-inclusive development in the sub-region. To improve the coverage, quality and inclusiveness of services for persons with disabilities, ACCESS Program works in direct partnership with the MoSVY and aligned its intervention with the priorities of the National Disability Strategic Plan (NDSP) with a special focus on three strategic areas: 1) improvement of disability sector coordination at national and sub-national level, 2) effective management of PRC hand-over to the PWDF, 3) increased provision of economic opportunity to person with disabilities. A second phase of this project is currently being designed, with close collaboration between the ATscale technical working group and the ACCESS design team to avoid duplication and ensure continued stakeholder and funding alignment.

Cambodia Disabled People's Organization (CDPO) (focus = cross-sectoral)

CDPO works in partnerships with its network of Disabled People's Organizations (DPOs), government, private sector, and PRC to contribute to the implementation of the NDSP. The project aims to support improved access to inclusive employment opportunities for women and men with disabilities. CDPO interventions focus on:

- Develop soft skill training package, disability inclusive toolkit, and women with disability/gender-based violence module and provide training to partners
- Identify job seekers with disabilities and refer them to economic opportunities through central referral system, disability data application, and disability service desk at PRC
- Using National Employment Agency sources to conduct market analysis
- Implement annual award program for Disability-Inclusive employers
- Development of national DPO Community of Practice (on Disability-Inclusive employment)
- Community awareness campaign on Disability-Inclusive practice

UNICEF (focus = special education and data for disability management)

UNICEF Cambodia works with partners to raise awareness around disability. Epic Arts is the main partner who delivers public performances throughout the country to spread the message of inclusivity no matter whether an individual has a disability. In addition, UNICEF Cambodia supports teacher training for inclusive education, advocates for inclusive school designs and the Cambodia' first national diploma for special need teachers. UNICEF's Social Protection team is additionally providing support to MOSVY to develop and roll out a new disability database at the community level. This database is used to identify individuals and families eligible for a variety of social services in Cambodia and will provide an opportunity to better understand AT needs in the country.

WHO (focus = primary health care and aging populations)

WHO Cambodia does not currently have a dedicated team responsible for assistive technology but provides support to the Ministry of Health to strengthen their Primary Health Care system and to help

shift focus to the service needs of the country's aging population. These will be important platforms for decentralizing delivery of AT services to lower levels of the Cambodia health system, as proposed below.

Barrier and challenges in accessing services

Despite a relatively mature – in comparison with other LMIC - service delivery system, Cambodia is facing several challenges in the delivery and access of AT:

1) Limited leadership and coordination

Both the MoH and the MoSVY are important actors in the provision of AT. Comprehensive and successful delivery of AT requires a strong coordination between these two ministries to ensure continuation and synergy between strategic plans. A third inter-ministerial entity, the Disability Action Council (DAC), under the leadership of the MoSVY, is supporting these ministries, and others, in the development of policy on disabilities. Despite the creation of the Disability Action Council, there is a critical lack of coordination and communication between relevant ministries preventing an efficient integration of services. For example, for post amputation, there is no effective referral system that links patients from the surgery ward to the PRC. Additionally, previous coordination meetings convened by the DAC have recently been discontinued posing challenges in coordination between ministries and their international implementing partners.

2) Human Resource limitations

The workforce is insufficient to meet the needs, both in terms of quality and quantity across AT areas. PRC are facing critical staff retention issues. The government salary scale is too low for a reasonable standard of living, with staff positions treated as “contractors” and not civil servants. This leads to experienced staff leaving the PRC or not working at full capacity. ACCESS Project is providing support to the government of Cambodia to advocate for inclusion of PRC staff in national systems, but progress has been slow. To help fill the staffing gaps, the Cambodian School of Prosthetics and Orthotics, which was established by Exceed in November 2010 and still operates under its management, continues to provide specialized internationally accredited training for prosthetic and orthotic (P&O) professionals. However, only 12-15 students graduate each year and many of them (both local and international students) leave the country as soon as they have graduated. The school is largely donor funded with a three-year program costing 12,000 USD per student per year. Despite ongoing discussion, there is currently no co-financing from government secured and donor funding is uncertain to enroll future students. The NEHP is facing similar human resource constraints. It is estimated that only 80 ophthalmologists are nationally available, which is only 51% of the WHO target⁷. However, they are unevenly distributed as 60% of them are based in Phnom Penh. Efforts have begun to improve access to eye health services through upskilling nurses to provide basic services at the provincial level, including refractive error screening. This tool is donor funded with limited certainty on future funding.

3) Uniform national data system

Data on the need and services provided to people with disabilities is sparse in Cambodia. The MoSVY introduced a standardized patient management system and a stock management system to collect data from the PRC. However, these systems are not used by all PRC and the PWDF is using an Excel spreadsheet for reporting of services. Similarly, for eye health, the data is captured through two systems, with substantial concern over the quality and timing of collection. The NEHP encourages vision centers, with help from NGOs, to submit data through the national HMIS system, but this is not consistently or

⁷ The National Strategic Plan for Eye Health 2021 - 2030

accurately done. Additionally, annual data is collected from different NGOs implementing eye health programs by NEHP for annual reporting purposes.

In terms of equipment availability, most of the vision centers manage their own procurement and do not always inform the NEHP of their acquisition. The lack of data tracking for equipment purchases makes it difficult for the government to identify investment needs.

4) Lack of financing; high out-of-pocket expenditures

Today about half of the population is covered by either one of the two assurance schemes in Cambodia - 30% via the National Social Security Fund and 20% via the Health Equity Fund. Most AT services are not covered by NSSF and HEF insurance packages, despite covering approximately 50% of Cambodia's population. Except for Exceed-managed PRCs, most PRC do not receive reimbursements from HEF or NSSF. Currently, rehabilitation services are provided free of charge to clients. This means that PRCs receive funding only as a line-item budget, and not in line with the number of services provided. Introduction of rehabilitation services into the HEF and/or NSSF would help create an incentive for service provision. Due to the cumbersome financial management, the funds disbursed to the PRC and other facilities can be delayed up to 6 months which then impacts the ability of the PRCs to provide quality and timely services. In the eye sector, NEPH receives funds almost exclusively from donors to run its management activities and develop eye health services across the different levels of care. Facilities receive some funding from external sources such as foundations or NGOs and mainly out-of-pocket payment. In the case of glasses, only consultation fees are covered by the HEF or NSSF insurance package, and not the cost of lenses or frames. This means patients need to pay out of pocket for the lenses and frames and often prefer to do this in the private sector where costs are comparable and the variety of frames wider. Centralized procurement limits stock and low budgets mean vision centers are not able to adequately provide products when clients do come. Additionally, NEPH receives funds almost exclusively from donors to run its management activities and develop eye health services across the different levels of care.

5) Complex referral system/patient's pathway

Rehabilitation services are split between two ministries: services provided within the hospital physical therapy units fall under the leadership of the MoH, and the services provided by the PRC fall under the leadership of the MoSVY. Rehabilitation interventions require a multi-disciplinary approach with a continuum of care from post-acute to longer term rehabilitation services, which can be complex and time consuming. Patients and their family need to navigate from one institution to the other inducing time and financial burden.

6) Parallel registration systems for people with disabilities

UNICEF has been supporting the MoSVY to develop and implement a national Disability ID registry. Per MoSVY policy, the presentation of this card to the PRC entitles the patient to free care. However, this card is not recognized at the health facility level, where patients also present for physical therapy services. The registration for the Disability ID card is done at the local authority office and the patients are subsequently registered in a national registry hosted at the MoSVY. However, this database is not accessible by PRC, where patients may present that need care but have forgotten or lost their cards. Aside from the Disability ID card, the sub-national council for disabilities evaluation, which is embedded in the MOH, is responsible for the evaluation of clients with disabilities and to provide them with a disability certificate that can be presented for administrative procedures such as obtaining a driver license or being cleared at the professional medical visit. These two systems are completely separated.

Moreover, the systems are not linked to registration for the country's ID poor card which provides access to the Health Equity Fund to the poorest 20% of the Cambodian population.

7) Challenges in local production

Cambodia has the capacity to produce wheelchairs and prosthetic components. The three wheelchair factories are currently managed and located in three different locations. The government has decided to regroup them in one central location. One workshop is run by Veteran International Cambodia, but the funding is scheduled to finish at the end of November 2022. This workshop will then be moved to the central new location and management will be transferred to PWDF. The second workshop is supported and managed by the Association for Aid and Relief Wheelchair for Development. Due to a lack of funding, the transfer of management to PWDF has not been determined just yet but will still be physically moved to the central location. The third workshop is managed and supported by Jesus Release Cambodia (JRC) and is already located in the same campus of new location. JRC has funding for the upcoming year(s) so the management transfer to PWDF has not been scheduled. The orthopedic component factory is managed and supported by the PWDF and located in the MoSVY compound. This is the only factory that produces orthopedic components to all PRC across the country. The PWDF and government have decided to also move this factory to the new location.

This important relocation effort comes with logistical challenges and the country needs to plan accordingly to ensure continuity of services during and after the move. The orthopedic component factory as well as the wheelchair factory are facing many challenges. Manufacturing equipment is outdated and not properly maintained. As mentioned above, the factories are also facing serious staffing limitations. Furthermore, despite being internationally qualified, there lacks protocols and planning to support the export of product to neighboring countries.

8) Supply chain burden

The factories are facing critical inefficiencies in the procurement processes. Currently, the procurement of consumables and other supplies is managed by the Ministry of Economy and Finance. The government processes are reported to be cumbersome and strict. The current regulation stipulates that only one supplier per category of goods can provide the full range of materials within each category and that only one purchase per supplier is possible per year.

Country strategy

Goal

The overall goal is to attain equitable, affordable, accessible, and quality AT for every Cambodian that needs them.

Objective

Through an integrated and collaborative approach, MoH, MoSVY and all relevant stakeholders have identified and prioritized activities to catalyze the number of Cambodians accessing AT throughout the country. These activities directly address the most critical challenges and gaps outlined above and focus on both the need to expand and sustain the current services as well as strengthen sustainability of government system to ensure continuation of care for the years to come. Through the consultation, stakeholders agreed to focus on three key ATscale priorities:

1. Enabling environment
2. Visual impairment

3. Physical rehabilitation and mobility services

By strengthening the enabling environment, the Government of Cambodia seeks to make progress across all AT domains, including hearing and speech therapy and services for cognitive disabilities and mental health. As mentioned above, these areas lag behind rehabilitation and visual AT services in terms of government coordination and service provision and therefore will benefit first from a focus on cross-cutting enabling environment improvements.

The Government of Cambodia is requesting for ATscale’s partnership to implement a 3-year plan that will:

- i. Strengthen coordination between MoH and MoSVY
- ii. Bring focus to under-developed domains of the AT sector to shape plans and investments
- iii. Expand the provision of eyeglasses in the public and private sector
- iv. Increase the utilization of PRC services
- v. Increase the production of wheelchairs and prosthetics

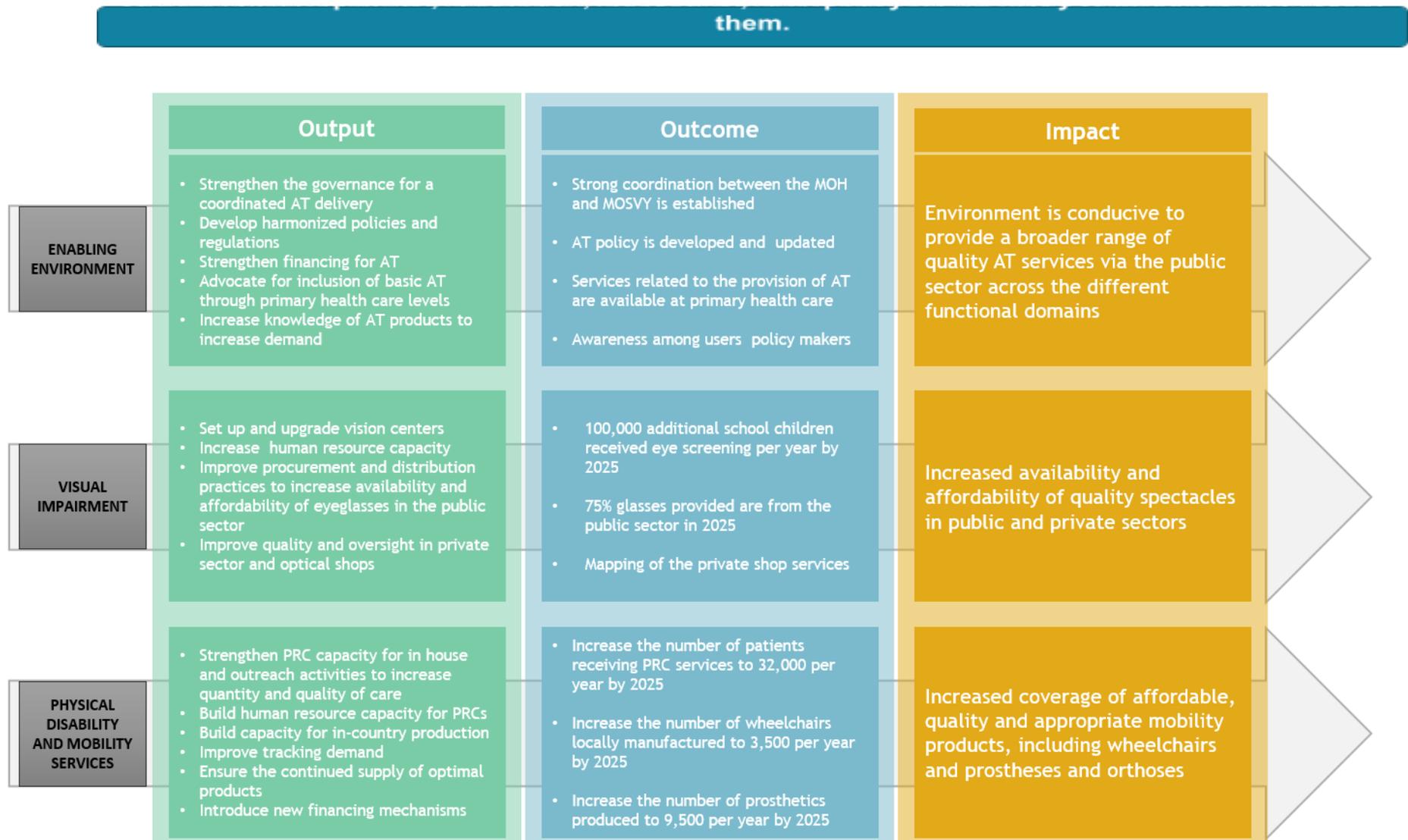
		Targets			
		Baseline	Year 1	Year 2	Year 3
Vision					
Improve procurement and distribution practice to increase availability and affordability of eyeglasses in public sector	Number of school children receiving eye screening per year	6,537 (2021)	100,000	100,000	100,000
	Percentage of eyeglasses provided by the vision centers in the public sector*	1% provided by the public sector. With a yearly total of 77,808 eyeglasses provided	50% provided by the public sector. With a yearly total of 78,000 eyeglasses provided	75% provided by the public sector. With a yearly total of 78,000 eyeglasses provided	75% provided by the public sector. With a yearly total of 82,000 eyeglasses provided
Disability					
Strengthen PRC capacity for in house and outreach activities to increase quantity and quality in care	Number of clients receiving PRC service per year	26,243 (2017)	28,000	30,000	32,000
	Estimated # new wheelchair beneficiaries**	1,312 (2017)	1,356	1,453	1,549
	Estimated # new P&O beneficiaries**	6,992 (2017)	6,399	6,856	7,313
Build capacity for in-country production	Number of wheelchairs locally manufactured	1,477 (2017)	1,500	2,500	3,500
Ensure the continued supply of optimal products	Number of prosthetic products locally manufactured	6,992 (2017)	7,500	8,000	9,500

*As mentioned, most glasses are provided through the private sector in Cambodia, due in part to a lack of supplies in the public sector. During the first years of implementation of the ATscale program, leveraging a VCF donation (lenses, ready to clip glasses, reading glasses) the government will seek to progressively shift the percentage of glasses provided from the private sector to the public sector. This will improve the equity of access for glasses.

**Assumes consistent % of PRC clients will receive wheelchairs and P&O as in previous years. A breakdown of new prosthetics uses (without orthotics) is not available for baseline year.

Theory of Change

The strategy is anchored around 15 strategic outputs, across a three-year period, which form the implementation framework as outlined in the following section:



Proposed Interventions

PRIORITY 1: ENABLING ENVIRONMENT

Output 1.1: Strengthen the governance for a coordinated AT delivery

AT working group - Estimated timing of completion: Year 1

Cambodia has already taken steps to strengthen cross-sectoral support for disability services through the inter-ministerial Disability Action Council. This includes representation from MoH, MoSVY and other key ministries. The Disability Action Council is responsible for coordinating the development of national policies and strategies for disabilities. Despite this mandate, the Disability Action Council has a limited role and capacity in monitoring the implementation of policies and strategies carried out by individual ministries. The latest NDSP was drafted (2021-2023), but not endorsed or finalized. As a result, the implementation of this plan remains weak. Engaging parts of the ATscale funding, the Government of Cambodia seeks to **strengthen capacity to coordinate the implementation of critical strategies to increase access to AT**. This would work in conjunction with existing capacity building support provided by DFAT funded ACCESS Project to the Disability Action Council. The additional assistance from ATscale would complement this by developing an AT sub-working group within the Disability Action Council which is focused on increasing use of life-changing AT in Cambodia. This sub-working group will be led by focal points for the ATscale project, and will monitor the successful, coordinated implementation of ATscale activities across ministries.

Output 1.2: Develop harmonized policies and regulations

To ensure that the Disability Action Council and other key stakeholders play a coordinated role in increasing access to AT and other disability services, there is a need to develop harmonized and evidence-based policies to guide implementation and future investments.

Situational analysis - Estimated timing of completion: Year 1

Through the development of this concept note, a situational analysis was initiated by CHAI and Fred Hollows Foundation on the current state of AT provision in Cambodia. To guide this analysis, the WHO's AT-Assessment Capacity (ATA-C) is being used. In the first few months of implementation, the government of Cambodia will **expand on this situational analysis** to ensure that stakeholders have a baseline understanding on the country's need for AT, and the capacity to meet this need. WHO experts advise to complement the current assessment using the ATA-C tool with two other analyses to provide baseline information and identification of challenges / priorities for action that can provide a foundation for the development of a national plan. Firstly, given the overlap with rehabilitation services and the intent of this concept to strengthen the roles and responsibilities between stakeholders in this space, the WHO's Rehab2030 initiative proposes a comprehensive guide for action. This resource leads governments through a four-phase process, which starts with a systematic assessment of the rehabilitation situation (STARS). Based on experience from other countries, it is **proposed to conduct and complete ATA-C and STARS in parallel to guide the development of a coherent plan for increasing access to AT and rehabilitation services**. Secondly, as stated in the introduction, baseline data on the (un)met need are not available in the country. To guide the development of the plan and prioritization of activities that address the greatest need, a population-based needs assessment is proposed. This assessment may be based on the **WHO's rapid-AT Assessment** tool or equivalent survey instruments. The situational analysis will rely on existing information to avoid duplication of data collection, and will

comprehensively look at all forms of disabilities, including visual, hearing, mobility and cognitive and mental health issues.

The results of the situational analysis will be cross cutting and provide a clear picture of the in-country capacity to respond to the Cambodian needs of AT. Results will be used as the foundation in multiple outputs listed below. The national strategic plan (listed below) as well as the mobility national HR strategy, both identified as key priorities by the ministries, will be developed based on this baseline assessment. In his National Strategic Plan for Eye Health (2021 – 2030), ‘adequate number and well trained, competent and well-motivated eye health workforce’ as its strategic objective #2. The results of the situational analysis will guide the government to estimate the requirements to achieve the HR targets by 2030.

National strategic plan - Estimated timing of completion: Year 2

As the current national strategic plan runs until 2023, the results of the situation analysis (mentioned above) will be used to **develop a national strategic plan to be endorsed across ministries**. This process will be co-owned by both MoH and MoSVY, with consultation with other relevant ministries. The policy will be used to help develop a coherent vision for the provision of disability services, including AT, and create a stronger understanding of roles and responsibilities of each ministry in the provision of care for people living with disabilities. This will be done in the first year, to inform the update to the NDSP starting in 2024.

Assistive Products List and specifications – Estimated timing of completion: Year 2

Cambodia does not have a **national list of priority assistive products (APL)**. This will be developed alongside the National Disability Policy as a first step to strengthening procurement and donation practices in Cambodia. The development of this national APL will be co-owned by both ministries and will be informed by the WHO APL to tailor this to the national context. This list will be **inclusive of all types of disabilities**, including vision, hearing, and mobility, and will include clearly defined product specifications. This will be an opportunity to take steps to address neglected forms of AT, such as magnifying glasses for severe vision impairment and hearing aides that are not yet provided in the public sector. In developing this APL, MoH and MoSVY are committed to defining robust procurement practices and clear roles and responsibilities between the two ministries. Creating comprehensive and harmonized disability policy and APL will be an important step for Cambodia towards the coherent and sustainable management of AT procurement and provision.

Output 1.3: Strengthen financing for AT

For this output, all the activities listed below will focus on combining **into a single and integrated AT approach** the work already undertaken by ACCESS and FHF as well as integrate other neglected area such as hearing.

Investment case – Estimated timing of completion: Year 1

Across AT domains, there are common financial challenges: 1) the cost of assistive devices provided in the health sector are not currently covered by the two social health insurance schemes; 2) each domain has insufficient government investment; and 3) the lack of an APL or inclusion in the Essential Medicine List means that assistive devices do not always have a centralized procurement system. There is substantial interest from both MoH and MoSVY to address these financial barriers to expanding access, through joint advocacy to Ministry of Economy and Finance. A consultant will help bring together evidence on the need (see Output 1.2), costing information and global evidence on the returns to build an **investment case to increase domestic funding** to AT, as well as to advocate for the inclusion of AT

services into the current insurance packages (HEF and NSSF). The goal will be to tailor available global and country evidence and new analyses into a single investment case for advocating for increased domestic funding in the context of Cambodia.

Costing analysis – Estimated timing of completion: Year 1

The consultant will also develop a costing analysis, including all priority AT product, to inform **the potentials for sustainable inclusion of AT services into the Health Equity Fund and National Social Security Fund**. In the case of hearing and vision aids, this will require advocacy for a portion of the cost of the devices to be covered by the insurance schemes. For mobility services, MoSVY will advocate for the inclusion of mobility services provided by PRC into the Health Equity Fund package.

Output 1.4: Extend provision of basic AT through primary health care levels

The MoH is currently undergoing ambitious reforms to strengthen primary health care in Cambodia. It is essential that **provision of AT is extended to these primary care levels**. This has the potential to increase the number of service delivery points for basic services and strengthen referrals to established centers. For the vision domain, this work will build on lessons learned from an ongoing pilot to extend eye health services to health centers in two provinces, which is led by Eye Care Foundation.

Integration of services at primary health care levels – Estimated timing of completion: Year 3

In the Primary Health Care booster strategy, the government of Cambodia has made it a priority for the Primary Health Care services to be better linked to other social services. For mobility, MoH and MoSVY will **identify opportunities to integrate basic services and community engagement activities into the primary health care system**. Working with experts in service provision for mobility services, the MoH will review potential services to be included in the basic package of services within health facilities, with clear linkages to nearest hospital or PRC for specialized care. To incorporate these services into the primary health care level, senior management of MoH will need to advocate in decisions about benefit package design. Following successful inclusion of select services, the MoH and MoSVY will work together to develop curricula and pilot training packages for Village Health Support Groups and health centers. Wherever possible, this training will be incorporated into existing plans to reinvigorate PHC services, so that disability services are fully integrated into lowest level of primary care.

Output 1.5: Increase knowledge of AT products to increase demand

Pilot AT sensitization training – Estimated timing of completion: Year 1

In addition to expanding services through inclusion in primary health care and through disability-specific service expansion, stakeholders need to increase awareness of services available, including the types of AT that are provided in Cambodia. Due to the complex referral pathway, patients identified with a disability may have limited to no visibility on the type and location AT services available near them, leading to potential long timeframes where AT services are not utilized. MoSVY and MoH will work together with **Organizations Representing People with Disabilities (OPDs) and Older People Associations (OPAs) to increase awareness of AT and disability services through community outreach activities**. A joint training curriculum will be developed to encompass all domains of AT and all forms of disabilities to comprehensively increase potential demand for AT services across domains. This curriculum will be piloted in the first year in eight provinces, to ensure it builds an adequate understanding for an individual to be able to identify their own disabilities. They would also learn about the available assistive devices and the appropriate point(s) of care to receive these services. This will help to build awareness of availability of services.

High-profile events – Estimated timing of completion: Year 1

The Disability Action Council will work to **raise awareness of assistive devices by leveraging two high-profile events hosted in Cambodia in 2023**: The 5th Asia Pacific Community-Based Inclusive Development Congress (March 2023) and the 12th ASEAN Para Games (June 2023). These two events present opportunities to bring further attention to AT and advance the AT agenda in country. Firstly, we will take advantage of these events to strengthen national leadership for AT provision. This may involve launching new policy, plans or financing commitments. This may also involve presenting on the current state of AT provision in the country. Second, we will take advantage of these high-level events to invite service providers to showcase the latest products and technologies to generate demand and interest in assistive devices in Cambodia and across the Asia Pacific region. A communication expert will be hired to design a communication strategy to increase awareness of AT during these events. For the ASEAN Para Games, Disability Action Council will work with the organizing committee to organize community engagement visits to generate community-level interest in Cambodia. The implementation of communication strategies and side-events will be led and funded by the Government of Cambodia.

PRIORITY 2: VISUAL IMPAIRMENT

Output 2.1: Set up and upgrade vision centers

Upgrade and expand vision centers - Estimated timing of completion: Year 3

In its National Strategic Plan for Eye Health 2021 – 2030, the NEHP has identified the need to extend the availability and improve the quality of basic eye health services across the country. In the capital Phnom Penh, availability and readiness of eye health services is significantly better than in the provinces. The FHF is supporting the upgrade of existing vision centers as well as implementing new health centers across 16 of the 25 provinces. To complement the work by the FHF, the MoH will rely on the AT scale funding to **upgrade an additional 9 existing vision centers and support the establishment of 9 new vision centers**. For the implementation of the new vision centers, the NEHP will prioritize provinces with the most urgent need and provide a host building either independent or within the provincial hospital. FHF will be invited to advise on how three new vision centers will be equipped and properly staffed in each year. For the upgrading as well as the establishment of new vision centers, the country will use some of the AT scale funding to procure specific refraction equipment (Slit lamp, auto-refractometer, retinoscope streak etc.) and specific dispensing equipment (auto lens ledger, grooving machine, lens drilling....). Investments in building new vision centers will increase access to critical eye care, including refractive error, diagnosis of irreversible eye impairments and acute infections, etc. Coupled with improved data collection processes, the need for other assistive devices, such as magnifying glasses, can be better quantified and tracked to inform future decisions of expanding the types of assistive devices provided by the public sector.

Output 2.2: Increase human resource capacity

Train 60 new and upskill 25 refractionist nurses - Estimated timing of completion: Year 3

There is an uneven distribution of eye health personnel, with more than half located in the capital. In addition to upgrading and building new vision centers, **upskilling of 25 existing and 60 new refractionist nurses via trainings will be carried out**. The trainings will follow the same geographies and timelines of output 2.1 with 20 new refractionist nurses trained each year. The upskilling of the existing refractionist will be done through a three-day refresher course and additional capacity strengthening will be provided through on-site mentoring visits on a yearly basis. These trainings have already been tried and tested

with support from FHF to the NEHP. Currently, to ensure retention of staff, nurses are nominated by the relevant hospital that will receive investments to build a vision center and are required to return to their hospital following the training. By focusing on refractionist nurse trainings, this activity supports task shifting and reduces dependence on specialized ophthalmologists for provision of basic services.

Vision screening in schools - Estimated timing of completion: Year 3

In recent years, in partnership with the MoEYS, a school-based vision screening program has been successfully rolled out in Cambodia. Leveraging the ongoing effort and materials, the **NEHP will train 180 teachers across several provinces to provide basic eye screening, covering approximately 300,000 students**. Following the school eye screening, a trained refractionist nurse will visit the school to perform a more comprehensive eye exam and leveraging VCF donation will provide ready to clip glasses as needed.

Strengthen sub-national school eye health program - Estimated timing of completion: Year 3

Building on the strong relationship established at the national level between the MoEYS and the MoH, capacity building between Provincial Health Department and Provincial Office of Education will be implemented to further **increase the coordination and collaboration of education and eye health at the provincial level**. Cambodia is in the midst of a large-scale decentralization reform, which is shifting financial and management responsibilities to provincial governors. In the absence of a central level budget for the National Eye Health Program, expansion of vision services will increasingly rely on provincial departments to prioritize funding for these activities. The Minister of Education wrote a letter to the Minister of Health on 10 June 2022 to request for assistance from the provincial vision centers to conduct eye examination in his schools upon completion of the basic vision screening conducted by teachers. Twice a year, a coordination meeting between the Provincial Health Department and the Provincial Office of Education will be held. During these meetings, new or updated strategy/policy and past and on-going activities will be presented, and further collaboration initiatives will be identified.

Output 2.3: Improve procurement and distribution practices to increase availability and affordability of eyeglasses in public sector

The National Eye Health Program will leverage a planned donation from VCF to initiate innovations in procurement and distribution practices. The donation will serve as an important injection of lenses and readymade glasses into a revolving fund and provide a more accurate estimate of procurement needs for coordinated procurement efforts. The details of the donation are under discussion with VCF.

The ATscale investments, through FHF and these newly proposed activities, are expected to significantly expand the national eye health program in the next three years. Despite the wish for eye health to be included in the insurance schemes, the lack of availability of patient data is limiting the MOH to build a strong advocacy case for its inclusion. The public sector procurement data generated through the upcoming years will be critical for the MOH to quantify and advocate to the MEF for the inclusion of eye health into these schemes (see Output 1.3).

Revolving fund for eyeglasses - Estimated timing of completion: Year 2

Government supported vision centers are mostly financed by out-of-pocket payments and will commonly only provide vision screening services. Most public vision centers will not provide spectacles, or would otherwise provide it through the private sector, thereby increasing the out-of-pocket cost to the user. The vision centers supported by NGOs will provide the spectacles free of charge. The Fred Hollows Foundation, through its ongoing project in collaboration with ATscale, will lead the creation of **the**

technical working group (TWG) responsible for the definition of revolving fund model that could be implemented at the vision centers and allow the country to introduce provision of spectacle in the public sector.

Coordinated procurement - Estimated timing of completion: Year 2

The TWG will also be responsible for the development of policy defining clear forecasting and quantification procedures to ensure cost efficient procurement. Finally, the TWG will have a role to play in organizing the communication of the different partners and NGOs currently procuring spectacles for the vision centers they are supporting and promote pooled procurement procedures.

Output 2.4: improve quality and oversight in private sector optical shops

Capacity mapping - Estimated timing of completion: Year 1

In Cambodia, the current process to open a private vision center involves an application to the local authority which processes the application and gets approval from the Ministry of Commerce. In this process there is no involvement of the MoH which is creating an important lack of visibility on the availability and the quality of eye health services provided in the private sector. During the first year, to better understand the availability of services and the human resource capacity of the private sector, **a general mapping of the private optical shop** will be undertaken. During this national mapping, teams will be visiting the local authority office to conduct a census of the private optical shop officially registered at the provincial level. This data collection will be completed by a physical visit to the centers to confirm that they are still functioning as well as to located and account any other unregistered optical shop. This work will help create a strong baseline understanding of the available public and private sector eye services available to the people of Cambodia. This understanding is essential to identify opportunities to ensure equitable and comprehensive access to high quality services.

Regulation - Estimated timing of completion: Year 2

With ATscale funding, the MoH will hire a legal specialist to **develop regulation procedure and propose an implementation plan for the accreditation and monitoring of the private optical shops** in Cambodia. The implementation of the regulation will aim to ensure uniformity and quality of services provided across the country. To ensure continuation of services of the private sector a set period of few (2 to 3) years will be granted so the private shops can make the required arrangements to become or remain compliant with the new established requirements. Lessons will be drawn from the Quality Improvement Project, which seeks to assess quality of private sector hospitals in Cambodia without causing a disruption of services.

PRIORITY 3: PHYSICAL DISABILITY AND MOBILITY SERVICES

Output 3.1: Strengthen PRC capacity for in-house and outreach activities to increase quantity and quality of care

Upgrade of PRC - Estimated timing of completion: Year 2

The lack of adequate or functioning infrastructure is a significant barrier to AT provision in Cambodia. The government recognizes that the PRC should be upgraded as the equipment is old and worn out. However, there is a lack of visibility on what is exactly needed for the PRC to provide high quality services. The government will leverage ATscale funding to **support a full evaluation, including equipment inventory and human resources capacity of the 5 PRC** already transitioned to the

management of the PWDF. These are in the Takeo, Prey Veng, Sihanoukville, National Kean Klay, Kratie provinces. To do this assessment, the government will rely on the experience of PWDF and the Cambodian Association of Prosthetists and Orthotists (KHAPO) and other relevant actors as well as the results of the STARS survey (output 1.2) to develop a country specific assessment tool. **The tool and process developed will be repeated regularly for continued assessment and improvement of the PRC.** Following this first assessment, the government will invest some of the ATscale funding to repair or replace faulty equipment. To ensure proper longevity of the new equipment, the assessment will contain a section on the possibility to set up service and maintenance agreement. The results of the human resources assessment will be leveraged to update the HR national policy and training materials.

Pilot outreach model - Estimated timing of completion: Year 3

Even if the services are provided for free at the PRC, traveling to the PRC remains a challenge for most Cambodians who cannot afford missing multiple day(s) of work and the expense generated by day(s) of travel. Conscious of this challenge, the MoSVY is planning on **extending outreach activities at the community level**. However, there is currently no national policies or guidelines for the implementation of such activities, although have been tried and tested by international organizations and seen success in increasing access and uptake of assistive technologies. The government will establish a TWG (with representant of the civil society) **to define and develop national standards for the institution of outreach activities, consolidating both wheelchairs and prosthetic and orthotic delivery into the outreach activities.**

During the third year, once the policy is developed and the PRC have been re-equipped and are appropriately staffed, the government will design and **implement three mobile workshops selected out of the 5 PWDF-managed PRC**. The government will rely on the UNICEF data system and select the provinces identified with bigger needs. The selection will also be based on the strength of the community referral system implemented in these provinces, the general performance and HR capacity of the PRC. The mobile workshops will be all inclusive from pre-demand generation activities to procurement of prosthetics and wheelchairs for delivery. The data collected will be integrated into the national data system in order to properly account for the services provided and inform upcoming procurement. The general results of the pilot will be analyzed and inform deployment of mobile workshop in other provinces.

The government will be able to rely on previous experience and key learnings from ICRC who has successfully carried similar outreach activities in the past. **Based on ICRC, outreach activities significantly increase uptake of AT**. On average 60% of wheelchairs are provided through outreach, and 50% of PRC clients are referred from outreach programs.

Standardizing user feedback - Estimated timing of completion: Year 2

The lack of adequate of quality AT services at the PRC is a key factor demotivating patients to visit PRCs, which immediately affects the demand. **Collecting and interpreting person with disabilities' feedback** is critical to improve quality of services and ensure the technologies delivered are delivering strong outcomes for Cambodians. For the PRCs managed by PWDF, there are currently no processes to **routinely collect, review and respond to client feedback**. For the PRCs supported by NGOs, clients' feedback is collected but each NGOs is implementing their own tool and the experience of patients is not shared with other PRC. A working session will be organized among the key actors to develop a uniform and standard tool with its implementation guide and training materials. This tool will leverage existing in-country tools already used by disparate PRCs to create a uniform system that can be managed and implemented by government run PRCs. Collecting user feedback is a specific exercise and the teams from

five selected clinics will be trained on the newly developed tool and the proper questionnaire administration procedures. The data collected will be shared across the five clinics as well as with the central level and other supporting NGOs so the learning can be used nationally.

Output 3.2: Build human resource capacity for PRC

National human resources strategy - Estimated timing of completion: Year 2

Human resources are recognized as one of the biggest needs to improve PRCs and ensure the sustainability of high-quality mobility services in Cambodia. The development and dissemination of a national Human Resources strategy is essential to ensure that newly hired and existing staff understand their role and responsibilities, are retained and appropriately compensated. In its Strategic Plan (2018-2023) the MoSVY recommends **the development of comprehensive human resources strategic plan**; however, the in-country capacities to develop the plan are limited. ATscale funding will be leveraged to lead a technical working group (TWG), named by the government, for the development and dissemination/communication of a national Human Resources strategy. The TWG will use the results of the situational analysis (output 1.2) to establish a strategy based on the existing in-country human resources. Taking into consideration the HR limitation, during the development of the strategy the TWG will explore the possibility to implement new strategies, for example task shifting and/or multi-disciplinary service models, and by securing senior level involvement in the process will aim to tackle critical identified issues such as inclusion in civil service, compensation and career progression. Critical activities identified in the strategy will be used to inform implementation priorities for Year 2 and 3.

Scholarship program – Estimated timing of completion: Year 3

The assessment of PRC (see output 3.1) will provide more clarity on the human resource gaps and challenges faced by the PRC. Additionally, the HR strategy will inform interventions to strengthen retention of P&O staff at public sector PRCs in the long-term. However, given already identified HR shortages, it is essential that steps are taken to fill HR gaps quickly. Through support from ATscale, the Government will introduce mechanisms to increase the number of Cambodian nationals trained in P&O.

The Cambodian School of Prosthetics and Orthotics is internationally accredited and recognized as a top-ranking P&O school in the region, but training of P&O staff remains reliant on donor funding. Through support from ATscale, the government will **explore a scholarship and partnership mechanism** supporting portion of the tuition fees (see table below) of a cohort of Cambodian students to be ISPO Category II P&O professionals (three year-program; Cambodian Bachelor of Science in Prosthetics and Orthotics) or specialized technician (1 year program; Certificate for Prosthetic and Orthotic Technicians). The scholarship program will aim to promote employment of trained professionals in PRC. In compliance with the country's labor regulations and laws, a few possibilities will be explored to ensure that the newly trained staff is hired and retained at PRC in country. For example, once graduated, the students may have to work at one of the country PRC for the same number of years they benefited from the scholarship. Another example that will be explored is to implement a 'payback' tuition fees model. The tuition fee is approximately US\$ 12,000 and 8,000 per student per year for the P&O professionals and specialized technician respectively. Over the course of the 3-year program, **ATscale subsidies will progressively decline. A specific plan for the scholarship mechanism sustainability will be developed in consultation with all stakeholders during the HRH strategy development**, and will be based on the specific needs (e.g. category II professionals versus technicians) be provided below is a potential example of implementation of the scholarship program:

Subsidy by ATscale	2023	2024	2025
Category II P&O professionals	6 students Financed at 100%	6 students Financed at 75%	6 students Financed at 50%
Certificate for Prosthetic and Orthotic Technicians	3 students Financed at 100%	3 students Financed at 75%	3 students Financed at 50%

During the development of the requirements and specifications of this scholarship and partnership mechanism, the government will be able to collaborate with expert from the Exceed program. The final arrangements of the scholarship programs, including the HR retention strategy, will be included in the national mobility HR strategy that will be developed (output 1.2).

Output 3.3: Build capacity for in-country production

Wheelchair quality standard - Estimated timing of completion: Year 1

In Cambodia, there is no national standard to ensure a minimum quality for the production or the donation of wheelchairs. The absence of such is resulting in the importations of wheelchair that are made of component which are inaccessible in Cambodia. Broken wheelchairs often cannot be repaired and become obsolete within only a few years of use. Based on the existing guideline by the International Society of Wheelchair Professionals and WHO’s recent publications of wheelchair training packages, a consultant will develop **production and evaluation guidelines that clearly define the expected minimum national quality standard**. The guideline will also detail the training requirements of the wheelchair technologist responsible to provide services to the wheelchair user on how to adapt and use the chair safely and appropriately. The consultant will coordinate with the key actors, such as PWDF, the factories, KHAPO, WHO and others to ensure the guideline are fit to the Cambodia context. The government will re-invigorate the wheelchair subcommittee for the development, dissemination and application of the guideline.

Simplifying referral pathways – Estimated timing of completion: Year 2

Rehabilitative care is multi-disciplinary making the patient journey complicated and prone to being lost to follow up while navigating from one unit to the other. A strong **link between the health facilities and the PRC needs to be established with a clear communication procedure so referral to patients from health facilities become easier and efficient**. Both ministries involved, MoH and MoSVY, will work with the University of Health and Science to develop a specific curriculum for the training of doctors and surgeons on post-surgery information for amputees and referral pathway to PRC. This work will help to institutionalize the success of the pilot conducted, in which linkages between referrals hospitals and PRC in one province substantially increased demand for PRC services.

To further promote a focus on disabilities and assistive technology within hospital, the Government of Cambodia will strengthen the sub national Council for Disability and Evaluation’s ability to not only identify and evaluate disabilities, but also **ensure that appropriate linkages to care and AT are established**. This will include developing a tool with its implementation guidelines. The training material that will be elaborated for the training of medical doctor responsible for the evaluation and delivery of

the disability certificate will incorporate clear explanations **of the appropriate referral pathways for individuals seeking a disability evaluation**. To further capacitate the medical doctor with the delivery of the disability certificate the council will organize supervision visits in 5 regions. Key learnings and best practices identified during the supervision visits will be gathered to update the tools and training materials as needed.

Output 3.4: Improve tracking of needs

Unified data management system - Estimated timing of completion: Year 2

As mentioned above there is no data management system at the national level. Each factory and PRC are collecting data on Excel which makes it difficult for the MoSVY to accurately quantify the use of services, track potential unmet demand, and use the data to inform procurement and policy. The implementation of a **uniform data management system** can be a complex exercise. A consultant specialized in data management system will be hired to evaluate existing options and develop and propose suitable solutions. The consultant will evaluate the previously proposed, by the MoSVY, standardized patient management system and a stock management system and advise on its potential for implementation. Similarly, the consultant will assess the feasibility to scale up the Electronic Medical Records system recently piloted by ICRC. A final decision on the best solution for the country to adopt will be made through a consultative workshop including all the relevant stakeholders.

Output 3.5: Ensure the continued supply of optimal products

Facilitate relocation and strengthening of local manufacturing, including establishing export procedures - Estimated timing of completion: Year 1

The move of wheelchair and prosthetic component factories is expected to take place at the end of 2022. The government is aware of the logistic challenges they will face during this move and hired an external firm to support them with the physical relocation of the three factories. With funding from ATscale, the government will hire a technical expert to assist throughout the move and provide technical input for strengthening local manufacturing including procedures for export. .

The technical expert will be responsible to conduct a cost benefit analysis of local production and to develop a short- and long-term business plan. Local manufacturing is embedded in the financial ecosystem of the AT services and discontinuation could generate a financial gap. The cost benefit analysis will allow to investigate further how to best optimize and balance local production versus importation. In the short term, the business plan will **ensure the country is properly equipped and ready to guarantee continuation of services during the relocation**. The government will leverage some of the funding to support smooth continuation of manufacturing and ensure access to adequate procurement of wheelchair and prosthetic components. The relocation will entail important human resources movements with the implementation of new teams with newly hired staff but also staff coming from the different factories. The technical expert will make use of existing training materials/resource to train staff and help set up a strong governance structure and management team.

The long-term vision of the business plan will include **the steps and requirements (HR and financial) to develop capacities and processes to export Cambodian-produced components** to the countries of the sub-region. The goal is to ensure efficient production of wheelchairs and prosthetics to contribute to long-term program sustainability. This will generate revenue for PWDF to channel into further improvements to PRCs in the future.

Output 3.6: Introduce new financing mechanisms

Explore sustainable funding mechanisms for physical rehabilitation – Estimated timing of completion: Year 2

Funding from NGO and other partners to PRC will continue to steadily decrease. As a result, the financial pressure is growing on PWDF. PRC need to be financially more independent and generate income to provide for their own sustainability. In addition to developing export capacity of the prosthetics components factory, to generate more funding, the government will explore other funding mechanisms to improve sustainability of the PRCS.

The government will hire a consultant to **study the potential to implement a revolving fund**. The study will review the feasibility of the propositions already developed by Exceed through the implementation of fee for services model for the VIP clients. The study will outline the different potential **implementation phases and include a cost generation analysis to provide clear visibility to PWDF on the financial investment required**. The results of the study case will be presented to the relevant stakeholders and will serve for advocacy with the MoSVY and MEF. Funding has additionally been requested to test the model selected.

The government is also committed to negotiating for inclusion of prosthetics and orthotics provided by PRCs into the National Social Security Fund (NSSF) and Health Equity Fund (HEF). This would create a new provider payment mechanism within the government to increase incentives of the PRCs to provide services, as service provision is more closely linked with financial rewards. This is outlined in Output 1.3 as it will be done in connection with other forms of assistive technologies.

Flow of the ATscale program’s fund

Implementation of ATscale funding will require close collaboration between MOH and MOSVY. The two ministries are open to discussions with ATscale about a mutually beneficial funding arrangement that will promote government ownership and facilitate rapid implementation and fund execution. To this end, MOH and MOSVY propose two potential mechanisms for funding flows for consideration by ATscale:

1. Direct transfer from ATscale to MOH and MOSVY. A Project Management Unit (PMU) would be established, with separate bank accounts, to comply with ATscale’s requirements. In this case, the government would take full responsibility for financial management and progress reporting to ATscale.
2. Transfer via external organization, such as NGO or UN organization, to support MOH and MOSVY in financial and project management. This approach should allow onward transfer of funding to the government of Cambodia for implementation, with the appropriate oversight mechanisms to comply with ATscale requirements. The external organization should be required to build government capacity to manage ATscale funding in the future.

The designated focal points look forward to further discussion and agreement with ATscale on the appropriate implementation arrangements.

Monitoring and Evaluation framework

Monitoring and evaluation plan

The implementation of the proposed activities of this concept note will be the responsibility of multiple ministries and organization working together to drive impact. The overall measure of achievement of this program will be the additional number of people accessing assistive technology services and/or eye health services through ATscale financing. Each indicator will be collected with different timeline matching the country reporting/data collection schedule. The deliverables and quantitative measures to be monitored are summarize in the table below:

Deliverables	Department	Unit	Frequency of measure
Coordination meetings	AT enablers	Number of coordination meeting held	Annually
Availability of APL	AT enablers	Existence of APL	Once
National Disability Policy	AT enablers	Existence of a National Disability Policy	Once
HR strengthening	Visual impairment	Number of medical HR trained on eye health services	Annually
HR strengthening	Visual impairment	Number of teachers trained on basic eye health screening	Annually
School screening	Visual impairment	Number of students screened	Annually

Spectacles	Visual impairment	Number of spectacles procured	Annually
Vision center	Visual impairment	Number of vision center newly implemented	Annually
Vision center	Visual impairment	Number of vision center renovated	Annually
PRC services	Mobility services	Number of patients receiving services at PRC	Annually
Wheelchair factory	Mobility services	Number of wheelchairs locally produced	Annually
Prosthetic factory	Mobility services	Number of prosthetics locally produced	Annually
HR strengthening	Mobility services	Number of HR trained on mobility services	Annually

Implementation risk and measure

For this multi-year program, there are a few potential risks that may be faced by the government. The risks and mitigation strategies are summarized below:

Potential Risk	Mitigation Strategy
Interruption of outreach activity due to recurrent COVID outbreak	Focus and reinforce COVID prevention procedures and implement smaller scale of outreach activity as needed
Delay in the national move of the factories	Strategy is developed to ensure availability of an adequate stock of prosthetic products and wheelchairs for clients
Delay in the implementation of activities tied to various partners and slowing the roll out of key intervention	A clear matrix listing deliverables and timelines will be implemented with each engaged partner
Current limited HR capacity at the PRC and manufactories	This will be addressed with the establishment of the scholarship program as well the HR strategy outlined above.

Budget

Considering the potential financing by ATscale of \$4.7 million over the next 3 years and taking into consideration that \$1.5 million have already to HFH, the government of Cambodia plans to utilize the funding as detailed in the summary budget below. All budget items are aimed at contributing towards increasing access to rehabilitative services, while strengthening the health system.

SUMMARY OF BUDGET: CAMBODIA				
Strategic Thematic Areas	Y1	Y2	Y3	Total
A. Program Cost				
HRH Strengthening	\$225,624.00	\$202,034.00	\$162,864.00	\$590,522.00
Data and Information	\$74,872.00	\$25,605.00	\$0.00	\$100,477.00
Service Provision	\$540,141.67	\$359,599.17	\$296,641.67	\$1,196,382.50
Leadership/Partner Coordination	\$22,716.00	\$22,716.00	\$22,716.00	\$68,148.00
Guidelines/Policy/Financing	\$71,618.00	\$108,097.00	\$0.00	\$179,715.00
Advocacy/Demand Generation	\$40,632.00	\$25,020.00	\$111,360.00	\$177,012.00
Supply Chain Strengthening	\$23,159.00	\$0.00	\$0.00	\$23,159.00
Innovation	\$0.00	\$0.00	\$0.00	\$0.00
Total (A)	\$998,762.67	\$743,071.17	\$593,581.67	\$2,335,415.50
B. Procurement Cost				
Assistive product procurement (m	\$0.00	\$0.00	\$0.00	\$0.00
Assistive product procurement (vis	\$50,000.00	\$50,000.00	\$50,000.00	\$150,000.00
Total (B)	\$50,000.00	\$50,000.00	\$50,000.00	\$150,000.00
C. Program Management and Coordination Cost				
Program Management and Coordination Cost	\$130,000.00	\$130,000.00	\$130,000.00	\$390,000.00
Total (C)	\$130,000.00	\$130,000.00	\$130,000.00	\$390,000.00
D. Overhead (up to 10% of A,B and C)				
Total (D)	\$117,876.27	\$92,307.12	\$77,358.17	\$287,541.55
Total Amount (A+B+C+D)	\$1,296,638.93	\$1,015,378.28	\$850,939.83	\$3,162,957.05

Annex 1: AT scale workshop participants list

AT Scale Workshop Date: 11 July 2012 Venue: Himawari Hotel Apartments						
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AT Scale Workshop

Date: 11 July 2022

Venue: Himawari Hotel Apartments

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