

International Seminar 2023 on

**Approach to Improve Access to Assistive Technology and
Products: To Ensure that Everyone Has Sufficient Access**



February 26, 2023

National Rehabilitation Center for Persons with Disabilities

Japan

WHO Collaborating Centre for Disability Prevention and Rehabilitation

Program

Time & Date: February 26, 2023, 14:00-16:40 (JST)
Conducted via Zoom.

14:00-14:05 Information for audience

14:05-14:10 Opening Address

Koichi Mori, President, National Rehabilitation Center for Persons with Disabilities (NRCD), Japan

14:10-14:30 Presentation 1, Keynote Lecture

“Inspiring action through the Global Report on Assistive Technology”

Kylie Shae OAM, Team Lead, Access to Assistive Technology (ATA) Team, Medicines and Health Products, World Health Organization, Geneva, Switzerland

14:30-14:50 Presentation 2

“Improving Access to Assistive Technology: The Philippine Experience”

Paul Matthew Jiao, Assistant Professorial Lecturer, Department of Rehabilitation Medicine, De La Salle Medical and Health Sciences Institute, the Philippines

14:50-15:10 Presentation 3

“Status of Prosthetics & Orthotics Services and Education in India”

Aratran Patra, Faculty (Orthotics), National Institute for Locomotor Disabilities, Kolkata, India

15:10-15:30 Presentation 4

“Access to Prosthetics in Indonesia: Current Challenges”

Christa Adriane Tenges, Physiatrist, Fatmawati General Hospital, Indonesia

15:30-15:50 Presentation 5

“Access to personal mobility for children with disabilities in Fiji”

Sureni Perera, Chief Executive Officer, Frank Hilton Organization- Fiji, Fiji

15:50-16:10 Presentation 6

“Current Status of Assistive Products and Provision System in Japan”

Nobuya Yamasaki, Senior Specialist for Assistive Products Evaluation, Office of Information and Support of Assistive Products for Persons with Disabilities, NRCD, Japan

16:10-16:35 Discussion among speakers, Q&A

Facilitator: **Takenobu Inoue**, Director, Department of Assistive Technology, Research Institute, NRCD, Japan

16:35-16:40 Closing Address

Nobuhiko Haga, Director, Rehabilitation Services Bureau, NRCD, Japan

Languages: English and Japanese with simultaneous interpretation

Table of Contents

Opening Address	1
Koichi Mori , President, National Rehabilitation Center for Persons with Disabilities (NRCD), Japan	
Presentation 1, Keynote Lecture	3
“Inspiring action through the Global Report on Assistive Technology”	
Kylie Shae OAM , Team Lead, Access to Assistive Technology (ATA) Team, Medicines and Health Products, World Health Organization, Geneva, Switzerland	
Presentation 2	8
“Improving Access to Assistive Technology: The Philippine Experience”	
Paul Matthew Jiao , Assistant Professorial Lecturer, Department of Rehabilitation Medicine, De La Salle Medical and Health Sciences Institute, the Philippines	
Presentation 3	11
“Status of Prosthetics & Orthotics Services and Education in India”	
Aratran Patra , Faculty (Orthotics), National Institute for Locomotor Disabilities, Kolkata, India	
Presentation 4	17
“Access to Prosthetics in Indonesia: Current Challenges”	
Christa Adriane Tenges , Physiatrist, Fatmawati General Hospital, Indonesia	
Presentation 5	20
“Access to personal mobility for children with disabilities in Fiji”	
Sureni Perera , Chief Executive Officer, Frank Hilton Organization- Fiji, Fiji	
Presentation 6	24
“Current Status of Assistive Products and Provision System in Japan”	
Nobuya Yamasaki , Senior Specialist for Assistive Products Evaluation, Office of Information and Support of Assistive Products for Persons with Disabilities, NRCD, Japan	
Discussion among speakers, Q&A	29
Facilitator: Takenobu Inoue , Director, Department of Assistive Technology, Research Institute, NRCD, Japan	
Closing Address	38
Nobuhiko Haga , Director, Rehabilitation Services Bureau, NRCD, Japan	

Opening Address

Koichi Mori, President, National Rehabilitation Center for Persons with Disabilities (NRCD), Japan

Good afternoon, everyone. Thank you for participating in today's seminar hosted by the National Rehabilitation Center for Persons with Disabilities.

This Center holds annual international seminars on topics related to disabilities and rehabilitation as one of the World Health Organization (WHO) Collaborating Centres for Disability Prevention and Rehabilitation. The topic for this year's seminar is "Approach to Improve Access to Assistive Technology and Products to Ensure That Everyone Has Sufficient Access."

WHO released a report of the conference titled "Rehabilitation 2030: A Call for Action" held in 2017, and its Japanese version can be downloaded from this Center's website. It calls for action to ensure that everyone would be able to enjoy the benefits of high-quality assistive technology by 2030, including those living in remote areas.

The assistive technology mentioned here today includes assistive products, as well as the technology, systems, provision systems, and services that enable the use of these products. It includes several well-known products and equipment such as hearing aids, eyeglasses, wheelchairs, prosthetic legs, slopes to eliminate step heights, and handrails, as well as smartphone applications that guide step by step procedures of complex tasks, and text-to-speech technology that converts one's intent or wishes into text or picture. Assistive technology encourages people who are unable to freely participate in the daily activities or in the society, or those who have become marginalized with various disabilities and/or old age to participate in an inclusive society at the same time and in the same space with the general public. These products also improve people's quality of life. Facilitating an inclusive society is also required by the Convention on the Rights of Persons with Disabilities, which Japan has ratified.

In 2022, WHO and the United Nations Children's Fund (UNICEF) jointly published an global report on assistive technology ("Global report on assistive technology: A WHO-UNICEF joint report," 2022), indicating that the use of assistive technology is a human right, and that despite the increasing demand for the technology, it is not adequately provided for those who need it. The report also mentions that most people may require assistive technology at an older age. It delineates a roadmap to ensure that high-quality assistive technology is available for more people. In order to achieve this goal, transformation of the social system is required, including that of the habitual thinking of people with and without disabilities. It should also be noted that the plans and efforts towards this objective must be aligned with the circumstances of each country. The 2022 report on assistive technology is a thick document with more than 120 pages. However, I expect that the today's audience would be able to get the gist of it in this afternoon.

I would like to briefly introduce today's invited speakers, who are six experts representing WHO and the Asia-Pacific region. In the first keynote speech, Ms. Kylie Shae, a WHO specialist, will discuss the background to creating the global report on assistive technology

as well as the proposed contents and initiatives. Thereafter, we will hear from five experts on assistive technology and products. They will discuss the current status, issues, and directions of access to specific assistive technologies and products in their respective countries. Please refer to the program booklet for information on the biographical background of the presenters and the abstracts of the lectures.

There will be a Questions & Answers session at the end of the seminar for the audience. Please enter your questions in the Q & A chat box, and all the submitted questions will be answered in the session. As the organizer of this seminar, I sincerely hope that all the participants will stay tuned until the end of the seminar, and obtain a deep understanding, and hopefully a good insights, about the directions that the global community should be aiming at in order to facilitate the dissemination of high-quality assistive technology, as well as the relevant current status, issues, and initiatives in respective countries.

I hereby declare the opening of the International Seminar 2023 at the National Rehabilitation Center for Persons with Disabilities entitled “Approach to Improve Access to Assistive Technology and Products to Ensure that Everyone Has Sufficient Access.”

Inspiring action through the Global Report on Assistive Technology

Kylie Shae OAM, Team Lead, Access to Assistive Technology (ATA) Team, Medicines and Health Products, World Health Organization, Geneva, Switzerland

Thank you so much for the opportunity to join this international forum! It really is an honor to speak to you on behalf of the Access to Assistive Technology Team at the World Health Organization. I'm very grateful for the invitation.

I'd like to start with just a few scene setting slides, which pick up very well from the introduction that we've just had. And then, I look forward to sharing with you just a few highlights from the Global Report on Assistive Technology and the key activities of the Assistive Technology Team at WHO for your information. I would like to add as well, it is a long report, but we have a summary report, which is on the website now. So if anyone would like the shorter read, please do go and have a look at our website. And we will soon have an easy-read version and audio versions as well, and we will keep notifying through our GATE community as these developments happen.

So, let me start first with just talking a little bit about what it is that we have in our minds when we think about, "Who uses assistive technology?" And I think for many of us, particularly when we're professionals, we start with this idea that assistive technology is used by people with disabilities: people who are blind, people who cannot walk, people who are unable to talk. But in actuality, the diversity of people who uses assistive technology is huge. As you can see on this slide, we are looking at people from all cultures, from all ages, with many different types of impairment. And I am sure that there are many of you in this seminar who use assistive technology who possibly don't even think about it. I use contact lenses. And without those, I would not have been able to pursue an education, I wouldn't have been able to go to high school/university and end up in the role that I'm in now. And I'm sure many of you can think about similar examples of yourselves or friends/family that use assistive technology. And we are all different. And for those of us who use assistive technology, our needs are a very complex interaction of many factors, including our health, our capabilities, our impairments, our goals, our context, social support, economic status, personal preference, and more.

Assistive products are the fourth health product. For WHO, we see assistive products as one of the four health products that should be provided through health systems. That doesn't mean that assistive products/assistive technology should not also be available through other sectors, for example, education, livelihood. But within WHO, assistive technology is within medicines, vaccines, medical devices, and assistive technology. Assistive products are products that maintain or improve a person's function. They are part of universal health coverage, and they are needed across the spectrum of healthcare in promotion, prevention, curative, rehabilitation, and palliative care. Assistive technology also makes healthcare more equitable for people with disabilities and helps to include people with disabilities within healthcare systems.

When we talk about assistive technology, we're talking about the ecosystem that ensures that the right product can be matched to the individual based on their individual needs. So assistive technology is the organization of the systems and the services that are needed for people to have access to assistive products.

And then, I come to the Global Report on Assistive Technology, which was mandated by the World Health Assembly Resolution on Assistive Technology in 2018. It's the first World Health Assembly resolution on this subject. And one of the mandates from the resolution was a request to the WHO to prepare a global report so that we can understand the situation and the status of assistive technology globally. It's quite a heavy slide with text, but I've just pulled out a few key things that were written in the foreword of the assistive technology and signed by the Director General of WHO and the Executive Director of UNICEF who both put their names to these words: "Access to assistive technology deserves greater attention now than ever before. Access to assistive technology means enabling education, participation in the workforce, independence, and aging with dignity. It empowers, it enables - and it's a precondition for realizing the Convention on the Rights of Persons with Disabilities and achieving Sustainable Development Goals. Essentially, it's a life changer."

In preparing the Global Report, the key thing that we needed to do that would be different for the situation and would help us to move forward is to be able to better collect the data that we need so that we can understand, as a global community, the need for assistive technology, the unmet need, the experiences of people who are trying to access assistive technology for themselves or family members, and then also, "What's the capacity of countries to be able to deliver on this need?" So the WHO AT Team, led at that time by Chapal Khasnabis, who many of you may well have met in his very long career in this area... So Chapal led this work on gathering the data that we need and developing the tools. We developed an assistive technology assessment for countries to be able to understand the capacity of countries to deliver on assistive technology. And we developed the rapid Assistive Technology Assessment, which is a population-based household survey that enables us to understand at a household level who needs assistive technology, whose needs have been met, and what the experience of those who've accessed it is in getting this technology. We also developed 10 progress indicators for national system preparedness.

So if we think about the rapid Assistive Technology Assessment - so that's a household survey - for the Global Report between 2019 and 2021, we had more than 300,000 respondents, nearly 1,700 trained enumerators in countries, 28 languages, 35 countries responding, of which 29 completed either a national or a sub-national survey. And you can see on the map where the different countries are that were involved.

From that data, we were able to understand that the need for assistive technology is far greater than has ever been estimated before. And we estimate that at least 2.5 billion people need assistive technology today, and that will grow to 3.5 billion. As countries are aging, we have more older people in our populations and issues with chronic health such as the conditions of non-communicable diseases and the impact that that has.

And here are just a few headlines from what the data tells us. We see huge global inequity in access to assistive technology. In some countries, as low as 3% of people surveyed were able to access the assistive technology that they needed. In comparison, in some high-income countries, 90% of people are accessing the assistive technology they need. So we can see that there's a huge disparity between where you live.

The other very important statistic - and it was mentioned in the introduction to this seminar - is that the largest group of people using assistive technology is older people. Two out of three people aged over 60 need at least one assistive product. And yet, many of our systems of provision are targeted at people with disabilities through rehabilitation services. So older people are not accessing those services, and they are very often not accessing these products. But it makes such a difference in how they are able to age.

The other key factor for us to consider, particularly when we're thinking about the context of rehabilitation... Because I think almost everyone on this call is going to say that somebody who needs assistive technology should have support to access that, so they can find the right product to meet them, they can learn how to meet their needs, they can learn how to use that product effectively, they get follow-up support. However, over 67% of people who were accessing assistive technology in the survey reported that they accessed it through a private shop or a private clinic and they paid for it themselves. So we know that many people are accessing the products independently, and we know that there are probably issues with how effective those products are for them. So we need to think differently.

So the barriers that people cited are a high cost, lack of support, and low availability of products. And the picture you see on the slide here is of a young girl who is blind. And you can't see it in the picture, but the white cane that she is holding is way too short for her because she received that product when she was four years old. She's now 13. So the white cane doesn't even touch the ground. But she was unable to get a new white cane because she lives in the Marshall Islands and there's no supply. So low availability is a huge issue for many people in many countries.

So I mentioned that we developed three different data tools. One was looking at the household survey - the ATA. Another one was looking at country capacity. And another one looks at the indicators. So between the country capacities that we've been able to run in partnership with national governments in a range of different countries and the indicators that 70 countries responded to for the Global Report, we can see where the gaps are in the systems that are needed to support access to assistive technology. We know that in order for people to access assistive technology, there needs to be the right policy environment, we need to have good quality, affordable products available in the country, we need to have provision systems in place that meet everybody's needs, and we need personnel who are trained and able to provide the products. And the greatest weakness that we can see - and this is reported in the Global Report - is in the service delivery, the provision systems, and the training for personnel. Many countries are moving ahead with legislation that supports access to assistive technology. They are accessing products. There are huge gaps, but the largest gaps are in developing the workforce and ensuring the provision systems are there and reaching out to all those in need.

And so now, I'm just going to go through a few key messages and some things to think about in terms of strengthening access to assistive technology. A key message that we have at WHO is integration. Now, we're from the health focus. That's how we think. We think about strengthening health systems. But this principle of integration applies across other sectors as well. But from a health perspective, if we think about the three, or in some countries, it's five, tier services, with primary health/community health being on the frontline of healthcare for people, this is where people can first be identified as needing assistive technology and either having their needs met there, rather than being referred to a tertiary-level service. So think about if, at the primary healthcare level, people can have a vision screen and be provided with simple assistive products right there and then while they're at the primary healthcare service. So reading glasses and magnifying glasses - that could be provided at the primary health level. The same for simple walking aids, for older people who are beginning to be a "falls risk", who are beginning to be unstable on their feet could be met with walking aid provision and training in how to use that at the primary health level and not referred on to some other center where they may not go to access their assistive technology. Of course, we need to think about the secondary and tertiary level services as well for the more complicated products where you need staff with greater training or you need more resources.

But our message is to think really hard about how we can begin the process of assistive technology, identification of need, and provision at the primary health level.

The other thing, which I think is very relevant in your region, is the fact that we know that the need for assistive technology increases during crises. And yet, still, the response is not integral in terms of assistive technology. It's always an afterthought. We're always scrambling after an event to try and meet this need, and we don't do it well as a global community. This is an area that needs a lot more thought and a lot more preparation.

Also, to just say, it makes good social and economic sense to invest in assistive technology. And if you need this as an argument to advocate within your work, then there is data in the Global Report that tells you this.

And finally, we can't forget about the enabling environment that enhances the potential of assistive technology. So here we have a slide just showing the simple message that for this woman to use her wheelchair effectively, she needs ramps. And for ramps to be well used, people need wheelchairs. They go hand in hand. We have to think about the environment in which people are using their assistive technology, and we know that the results are better when both are matching.

So the Global Report has 10 recommendations. And I'm not going to go through each of them now. And I'm sure this PowerPoint will be shared, which is a quick snapshot of the recommendations. But again, the summary report provides these. And it's useful for people working in this field to have a look and see where their work is contributing within these different recommendations.

And I'd just like to finish with just a few slides talking about what it is that WHO is doing. We are always happy to hear from you, and we are always happy to share these tools. Everything that we do is available online. They're free resources, and they're there to help member states in strengthening their access to assistive technology.

One of the key enablers that we developed before the Global Report back in 2016 was the first Priority Assistive Products List. So this is a parallel list to the Essential Medicines List and the Essential Medical Devices List. And what it does is it highlights for governments just 50 products that we would see, from a consensus/global process, that these are the products that governments need to make available through universal health coverage. Now this list was developed in 2016. The idea is that countries adapt it to their own needs. We have some countries that have very limited access to assistive technology through their government systems, who have a much smaller list than this, but they've taken this list and built on it. We have other countries that have way more products than is on this list. So it's a starting point, and it can be contextualized for each country. We are now working on the second Assistive Products List. It will probably have more than 50 products on it. But again, it will need contextualization for each country. We've also developed a Manual for Public Procurement to support the procurement of products in the countries where there is less experience in this area and Assistive Product Specifications, which is for 26 of the products on the Assistive Products List. For countries that are not yet strong in their own import and that don't have their own guidelines on the provision of assistive technology, these tools are very useful.

We also develop guidance documents. So we have the Standards for Prosthetics and Orthotics. And we very, very soon will be launching a standards assessment tool that will allow countries to assess the strength of their prosthetics and orthotics services against each of these standards. We are also launching, at the end of April at the ISPO Congress in Mexico, the second Wheelchair Provision Guidelines, and I really look forward to being able

to release those. And I hope very much that you'll attend the virtual, if not the in-person, launch.

In terms of personnel, which is such an important area, we've been working really hard to develop a tool, a training tool online that can support that primary healthcare level that I talked about earlier. So we have stripped back the process of providing simple assistive products to just four steps: to select the right product using a simple assessment process tailored to each different product, to fit that product for the person, to teach them how to use it, and then "What are the things to think about during follow-up?" And we've developed an online platform that hosts modules for each of the different products on the Assistive Products List that can be safely provided at a primary health level. So, for reading glasses, magnifying glasses, pillboxes, simple communication aids, walking aids, ramps, portable ramps, transfer boards, these sorts of products, we've developed this training. And we very much encourage you to go and have a look and to use it to build awareness and to train your staff.

In emergencies... As I said, this is a very key area, and it's something that I personally would like to do a lot more on within my role at WHO. And so we are systematically looking at what WHO's response could be in ensuring that we have a stronger integrated response on assistive technology. WHO always responds to serious emergencies and has a great opportunity to be able to ensure that assistive products are deployed along with the health supplies that we provide. We were successful in Ukraine. And you can see here the Director General of WHO in a warehouse in Ukraine, who is looking at products that we provided through our team to health facilities across the eastern front in Ukraine. We are now responding again to the Syria and Turkey earthquakes - with our response focused on Syria. And we would like to make sure that for all Grade 3 emergencies, we are responding. We also would like to work with partners who'd like to strengthen their response in their countries.

And on that, I'm just going to finish with this slide, which you will have available, which gives you links to all of the products that I've just talked about. I guess I would just really like to say that the breadth of the work that needs to be done to strengthen access to assistive technology can't be underestimated. But initiatives like this, which bring people together to discuss this issue, to think about the different areas that need to be considered, and to share their expertise... There are some great speakers that we'll hear from shortly who are doing this work in different countries, and I'm really looking forward to hearing from them myself. Thank you very much!

Improving Access to Assistive Technology: The Philippine Experience

Paul Matthew Jiao, Assistant Professorial Lecturer, Department of Rehabilitation Medicine, De La Salle Medical and Health Sciences Institute, the Philippines

Hello! Good afternoon, everyone! Konnichiwa. It is my pleasure to share with you our experiences in the Philippines as different sectors work together to improve access to assistive technology in our country.

This will be the flow of my discussion. We will start with an overview of the Philippines setting and identify the factors, which affected access to assistive technology in our country. This will be followed by an overview of improvements we have attained over the past decade. Lastly, we look forward to future directions as we support each other in the global community.

Let me first give you a brief introduction to my country - the Philippines. You may have heard about the Philippines from friends who rave about the sweet mangoes produce or the beautiful beaches where you can relax. Do visit us to enjoy this on your next vacation.

We are located in Southeast Asia. We are an archipelago of more than 7,000 islands. In addition, shown in the map are different mountain ranges that contribute to the difficulty of access to healthcare. We are divided administratively into different regions, reflecting the different languages and local cultures that make up the population.

As of the latest country census, we are about 110 million. For every 1,000 Filipinos, 16 have some form of disability. Assistive technology devices can help improve their quality of life. However, factors like geographical barriers, financial concerns, and a lack of healthcare professionals make access to assistive technology difficult.

These challenges inspired different sectors of Filipino society to push for changes to help improve access to assistive technology in the country. Over the next few slides, we will discuss the improvements accomplished over the past 10 years.

Key improvements can be roughly divided into three points. Changes in health policy helped divert government resources more efficiently to improve access to assistive devices. The expansion of health education and human resources for health training improved the number of qualified health professionals involved in the provision of assistive devices. A growing number of partnerships between the government and private sectors have also increased assistive technology research.

These are some of the improvements we have attained in the field of health policy. For several decades now, the Philippines has a government-run health insurance system. This is the Philippine Health Insurance Corporation (or PhilHealth). It is a government-owned and controlled corporation, which administers the National Health Insurance Program. PhilHealth subsidizes healthcare-related costs. Over the past few years, it has expanded its coverage to include assistive devices. To date, there are three PhilHealth packages, which are aimed at assistive device provision. These are the ZMORPH package, the Expanded ZMORPH package, and the Children with Disabilities packages.

The ZMORPH (or the Z Benefits for Mobility, Orthosis, Rehabilitation, Prosthesis Help) package was the first package, which was rolled out. This was the initial package and covered only the provision of transtibial (or below-knee) amputation prosthesis. Several years later, the package was expanded to include other devices like transfemoral prosthesis, upper extremity prosthesis, and orthotic devices or braces.

However, these two packages mostly covered the adult-age population. To address the needs of the pediatric population, PhilHealth developed the CWD (or Children with Disabilities) packages. This is a set of packages, which aim to provide assistive devices for children with hearing, vision, mobility, and developmental disabilities. All of these PhilHealth packages also include a subsidy for therapy sessions to aid recipients in training to use their assistive devices.

These are the improvements we have attained in the field of education and human resource for health. Aside from improvements in the field of health policy, strides were made to improve the state of human resource for health. The Philippines recently had its first School for Prosthetics and Orthotics. This is aimed at providing college-level education for students who want to train and become certified prosthetists/orthotists. The Philippine School of Prosthetics and Orthotics is operated by the University of the East Ramon Magsaysay Memorial Medical Center. This endeavor was made possible with the support of the Nippon Foundation and Cambodia Trust.

Under the technical vocational training sector, the Philippine government through the Technical Education and Skills Development Authority (or TESDA) recently promulgated training programs for prosthetic technicians, orthotic technicians, and wheelchair service personnel.

In already well-established educational programs like Physical Therapy and Occupational Therapy, training opportunities for students were expanded to include courses in wheelchair service provision and the use of 3D printing in assistive device fabrication. These are snapshots of a course I taught in the university, where we see OT students train to perform 3D scanning and 3D printing.

These are the improvements we have attained in the field of research and development. In the field of research, the past decade has welcomed a number of partnerships among the government and the private sector. The Department of Science and Technology and its different agencies have been dynamic in supporting research. These are only some of the more prominent partnerships, which focus on research for assistive technology.

SIBOL is a program by the University of the Philippines - the state university - supported by the Department of Science and Technology. SIBOL is an acronym for Surgical Innovations and Biotechnology Laboratory. In Filipino, the word "sibol" also means "growth" or "to sprout" - a poetically appropriate name for a program, which has contributed to the expansion of biotechnology innovation in the country.

Our Department of Science and Technology also partners with private universities to promote research into assistive technology. One of these partnerships is with the De La Salle University - Institute of Biomedical Engineering and Health Technology. To date, these are some of the projects this partnership has already produced. Some of these projects are focused on assistive device development.

Project Agapay is one of the projects under the Institute of Biomedical Engineering and Health Technology. This project was funded by the Department of Science and Technology - Philippine Council for Health Research and Development. A wearable robotic exoskeleton

was developed by DLSU-IBEHT in cooperation with the rehabilitation medicine doctors at the University of the Philippines - Philippine General Hospital, Department of Rehabilitation Medicine.

To end my presentation, allow me to share some of the key points in the Philippine experience that may guide future directions for the growth of assistive technology. Over the next few years, we see the innovation of these strong public-private collaborations. Strong partnerships between the government and private sectors are a key factor in the improvement of assistive technology access in the country. These partnerships allow both sectors to support each other's weaknesses and synergize on their strengths.

In the Philippine experience, the government and diverse towards assistive technology access benefited from the support of non-government organization partners. For example, the PhilHealth packages for assistive device provision were heavily supported by Physicians For Peace, Philippines - a non-government organization. Members of professional organizations like the Philippine Academy of Rehabilitation Medicine and the Association of Filipino Prosthetists and Orthotists also take part in other government and diverse towards improving access to assistive technology.

The academe is also fertile ground for partnerships. Faculty from both government and private educational institutions regularly serve as technical experts in state-sponsored and diverse towards assistive technology provision.

International partnerships also contributed to the growth of assistive device accessibility in the Philippines. For example, the PhilHealth Children with Disabilities packages were developed with the support of UNICEF. Assistive technology projects by local non-government organizations were also supported by international organizations like the Nippon Foundation, Cambodia Trust, Mahaveer Philippine Foundation, and the Latter Day Saints Charities.

One important lesson we can learn from the Philippine experience is that strong partnerships between public and private sectors as well as local and international partners play an important role in improving access to assistive technology.

I would like to thank everyone for your kind attention. Should you have any questions or if you require further information, you may also contact me using the email address below. Thank you very much!

Thank you very much for playing my video aid! So, I think that wraps up my discussion for this afternoon. Should you have any questions or clarifications, I look forward to the Q&A part of our discussion this afternoon. Thank you very much!

Status of Prosthetics & Orthotics Services and Education in India

Aratran Patra, Faculty (Orthotics), National Institute for Locomotor Disabilities, Kolkata, India

Good afternoon, everyone. I'm indeed grateful and very much thankful to National Rehabilitation Center for Persons with Disabilities, Japan, for giving me this opportunity to speak on the status of prosthetics and orthotics services and education in India.

Access to prostheses, orthoses, and assistive devices can mediate the process of social inclusion, improve the quality of life for persons with disabilities and anybody having a physical impairment or functional limitations. This will enable them to live healthy, productive, independent, and dignified lives and to participate in education, the labour market, and social life. P&O technology plays a crucial role to mitigate the gap between the common man and the persons who need it.

The UNCRPD and the Sustainable Development Goals (SDGs) are global initiatives that aim to create an inclusive society where everyone can contribute to the country's development. But in India, we are yet to achieve the desired goals due to the lack of awareness, affordability of technologically appropriate prostheses, orthoses, and assistive technology.

The Government of India is putting all efforts to ensure "the approach to improve access to assistive technology and products, including prostheses and orthoses," and everyone should have sufficient access to it.

According to the 2011 census, there are 26.8 million people with disabilities in India, out of which 20% or 5.4 million have locomotor disabilities. Moreover, there are 138 million elderly people who may also require some form of assistive device. Therefore, the total potential demand for assistive devices in India is around 144 million people. To achieve the 2030 Agenda for SDGs, we need to ensure that these devices are accessible and affordable for all.

The history of prostheses in India dates back to 3500 to 1800 BCE, when the first recorded prosthesis was mentioned in the Book of Vedas, written in Sanskrit. However, the first clinical setup for artificial limbs in India was established in 1944 at the Armed Forces Medical College, Pune, under the name of Artificial Limb Centre. Despite this, prostheses, orthoses, and assistive devices are still mainly available in urban areas and have not reached the rural population.

The first training program for prosthetics and orthotics in India started in 1963 as a certificate course. Since then, the education level has progressed to the Ph.D. level. However, we still face challenges in providing prosthetic and orthotic services to all the people who need them.

Here is a brief overview of the chronological development of prosthetic and orthotic services in India:

1944: The first Artificial Limb Centre was established in Pune under the Indian Army to provide artificial limbs to the casualties of the two World Wars.

1950: Safdarjung Hospital, Delhi, a government medical college, started its Prosthetics and Orthotics centre.

1955: All India Institute of Physical Medicine and Rehabilitation, Mumbai, started its centre to cater to the needs of Prosthesis and Orthosis in the western part of India.

1960: Government General Hospital, Chennai, started its centre to provide P&O services.

1970: Saint Marthas, a Christian Hospital, started its centre.

1972: The Government of India started a prosthetic and orthotic component manufacturing company in Kanpur, called Artificial Limbs Manufacturing Corporation of India (ALIMCO). ALIMCO now also provides services along with manufacturing the components.

1975: Bhagwan Mahaveer Viklang Sahayata Samiti a Non-Government organization started providing "Jaipur Prosthesis" and conducting camps in rural areas.

1976-1978: The Government of India started three national institutes: NILD in Kolkata, SVNIRTAR in Cuttack, and PDUNIPPD in New Delhi. These institutes initially provided services and then started training programs.

1985: 11 District Resource Centers were set up in districts that had Prosthetics and Orthotics centers.

1990: Around 310 District Disability Rehabilitation Centers (DDRCs) were launched across the country.

2000: The idea of Composite Regional Centers (CRCs) was conceived by Department of Empowerment of Persons with Disabilities, Govt. of India where both training and service would be offered. Initially, nine CRCs were started and now there are 19 in different states. However, there are still nine states that do not have a CRC.

The current Indian healthcare system for prosthetic and orthotic services faces a severe lack of organized and integrated service providers. This is because most of the services are provided by the social sector, not by the health system. For prosthetic and orthotic services, the main mode of delivery is through camps. 95% of the services are delivered through camps, and only 5% are delivered through centers. The Government of India provides most of the Prosthesis, Orthosis and Assistive devices for free, either in camps or in centers. Only some people pay for their services. However, we can only do follow-up care and repair maintenance for 5% of the people who receive services through centers. For the 95% who receive services through camps, we don't know if they use the devices that we provide or if they have any problems with them since there is no follow-up system in the camp approach.

The Government of India has a commitment to enable and empower PWDs. To support this, they provide free Prosthesis, Orthosis and assistive devices costing up to Rs. 15,000/- to any Indian citizen of any age who has a 40% Disability Certificate (Benchmark disability) and a monthly income of less than Rs. 22,500/- from all sources. The person should not have received assistance for the same purpose from any source in the last 3 years. However, for children below 12 years of age, the minimum time of assistance is one year. The person who has a monthly income between Rs. 22,501/- and Rs. 30,000/- can get the Prosthesis, Orthosis and assistive devices with 50% cost waived.

India is the only country that has made CSR (Corporate Social Responsibility) mandatory for some select categories of companies registered under the Act. This means that these companies have to spend 2% of their average net profits of the last three years on social welfare activities. This CSR initiative aims to promote sustainable development goals and public-private partnership in transforming India. Some PWDs benefit from this initiative by getting high-end P&O devices from the CSR funds. Other sources of funding for P&O devices

include social security funds from some state governments and private clinics where people pay from their own funds according to their affordability.

The P&O service providers in India include the following:

Organizations and institutes under the Government of India and state governments

Non-government organizations (NGOs)

Corporate sectors (companies)

P&O clinicians (those who have completed their courses from the institutes approved by Rehabilitation Council of India and have set up their own clinics in different cities)

The P&O services under the Government of India and state governments are provided by two different ministries:

The Ministry of Empowerment of Persons with Disabilities and the Social Justice and Empowerment Ministry, Government of India

The Ministry of Health and Family Welfare, Government of India

Some state governments also have their own ministries that provide P&O services. These ministries may have different names, such as Social Justice, Social Welfare, or Differently-abled.

The P&O service providers under the Department of Empowerment of Persons with Disabilities, Govt. of India include the following:

Nine National Institutes under the Government of India, out of which seven provide P&O services.

Artificial Limbs Manufacturing Corporation of India (ALIMCO), which is a component manufacturing company for P&O devices. They have regional centers that provide P&O services through camps under the ADIP scheme of the Government of India.

19 Composite Regional Centers (CRCs) established by the Government of India that have P&O centers. Two Regional Centres are under two National Institutes.

325 District Disability Rehabilitation Centers (DDRCs) established by the Government of India and only 29 of them are providing P&O services.

Under the Ministry of Health and Family Welfare, Govt. of India the following institutions provide P&O services: All India Institute of Physical Medicine and Rehabilitation, Mumbai, 19 All India Institute of Medical Sciences (AIIMS). and Six Government Medical Colleges under the Government of India. Apart from that there are Two P & O centres in Railway Hospitals

The State Government of Tamil Nadu operates 38 P&O centers under the Differently-abled Department and seven centers under the Health and Family Welfare Department. The Odisha State Government runs 19 centers under the Social Security Department. In addition, 28 state government run medical colleges that offer prosthetic and orthotic services.

84 NGOs (non-government organizations) get funds from the Department of Empowerment of Persons with Disabilities, the Government of India under the ADIP scheme. They provide services to persons with disabilities free of cost.

There are around 19 corporate houses that provide P&O services in India, including multinational and Indian companies. Ossur is one of them, but it only supplies components.

The rest are: Otto Bock: 24 clinics in different cities, Endolite India Limited: 27 clinics, College Park India, P & O International, Vispala Technologies, Robotics Rehab, Bionic Rehab, Ideal Artificial Limb Solution, Born Life, Surehab Health Care Pvt. Ltd., Instalimb, Friends Surgical, Aether Biomedical, Limbscart, Bhatt P & O Centre, Motorica, Sai Rehab and Regenesis. Instalimb is from Japan and it specializes in upper limb prostheses.

We have 189 P&O clinics across India that provide prosthetic and orthotic services by qualified P&O clinicians. However, there are also 3,000 unqualified people who practice P&O without a formal qualification in P & O. They also provide service to the patients, but we cannot stop them. According to section 13 of the RCI Act, they can be prosecuted by the state if they provide services to persons with disabilities. But they claim that they only provide services to “other than” disabilities, that is those who are not benchmark disability. Therefore, we cannot take any action against them. This is the problem of having non-qualified people providing services.

According to the Survey of Persons with Disabilities conducted by the National Statistical Office in its 76th round (July – December 2018), only 21.8% of Persons with Disabilities received any aid from the government and only 1.8% received any help from non-governmental organizations.

The table below shows the number of beneficiaries who received prosthetics, orthotics and other assistive products through camps and centres, and the funds utilized for these activities in 2021-2022.

Mode of Distribution	Number of Beneficiaries	Percentage of Beneficiaries	Funds Utilized (in Million INR)	Percentage of Funds Utilized
Camps	358825	95%	3120	95%
Centres	20885	5%	193	5%
Total	379710	100%	3313	100%

As can be seen from the table, most of the beneficiaries (95%) received aids and appliances through camps, while only a few (5%) received them through Centre’s. Similarly, most of the funds (95%) were utilized for camp activities, while only a small amount (5%) was utilized for Centre activities.

The Rehabilitation Council of India (RCI) is a statutory body set up under an Act of Parliament. It was established as a registered society in 1986 and became a Statutory Body on 22 June 1993. The mandate given to RCI is to regulate and monitor services given to persons with disability, to standardize syllabi and to maintain a Central Rehabilitation Register of all qualified professionals and personnel working in the field of Rehabilitation and Special Education including Prosthetists and Orthotists. The Act also prescribes punitive action against unqualified persons delivering services to persons with disability. However, while education is regulated effectively, it is very challenging to regulate the services in a large country with 1.38 billion people.

The field of Prosthetics & Orthotics in India has evolved over the years. The first certificate courses of one to one-and-a-half years were introduced in 1963. The diploma courses of two-and-a-half to three years were offered in 1972. After the establishment of the Rehabilitation Council of India (RCI) in 1986, the diploma courses became uniform and lasted for two-and-a-half years. The first bachelor's degree program in Prosthetics & Orthotics was launched in 1984, which was a three-and-a-half-year course. This was later extended to four and a half years in 2003. In 2006, the RCI started a two-year master's program in Prosthetics & Orthotics.

The current status of Prosthetics & Orthotics education in India is as follows: There are seven institutes that offer postgraduate programs with a total intake capacity of 78 students. However, only 46 students have enrolled in 2022-2023. For undergraduate programs, there are 17 institutes with a total intake capacity of 420 students. However, only 220 students have enrolled in 2022-2023. For diploma courses, there are three institutes with a total intake capacity of 75 students. However, only 10 students have enrolled in 2022-2023. Therefore, the seat occupancy rates are 13% for diploma courses, 52% for undergraduate courses, and 59% for postgraduate courses.

The number of professionals in Prosthetics & Orthotics who are registered with the Rehabilitation Council of India (RCI) are as follows: 422 certificate holders, 115 diploma holders, 1,302 bachelor's degree holders, and 121 master's degree holders. However, out of the 2,430 people who completed the bachelor's degree course, only 1,300 are registered with the RCI. The rest have either not registered or have switched to other professions.

There is a huge gap in human resources for Prosthetics & Orthotics in India according to a report by the Institute of Applied Manpower Research submitted to the RCI. India has 6,612 blocks, each with a population of two lakhs. If we assume that each block needs two P&Os, then we need 13,224 P&Os in total. However, we only have 10% of this number. This means that 90% of the blocks do not have any P&Os.

Some of the challenges and solutions for Prosthetics & Orthotics in India are:

Appropriate and affordable technology and products

Education that is globally recognized. Out of the 17 institutes that offer P&O education, only one is recognized by ISPO. The others need to get recognition as well.

Mainstreaming of P&O education to bridge the demand and supply gap. Currently, P&O education is under the Ministry of Social Justice and Empowerment. It should be under the Ministry of Education so that it can be integrated with other disciplines.

Trained and competent human resources

Delivery system with a logical follow-up mechanism

Policy: The state should be responsible for its citizens and provide them with adequate social security programs. Amputation and prosthetic solutions as well as paralysis and orthotic solutions should be considered as health issues and not just rehabilitation issues. Every district should have a P&O center or be attached to a district rehabilitation center.

The disability discourse has evolved significantly since the first law on disability was enacted in India in 1995 and the subsequent RPWDs Act 2016. Through laws, social inclusion, and different imaginations of accessibility, persons with disabilities have achieved professions and ambitions that were previously seen as beyond their capabilities. However, there is still room for improvement in technology if it is used effectively to enhance the living conditions and access for persons with disabilities. This can help realize the goals of the global initiatives such

as UNCRPD and SDGs. India is also facing an aging society, which requires more access to prostheses, orthoses, and assistive technology. Thank you all for your attention!

Access to Prosthetics in Indonesia: Current Challenges

Christa Adriane Tenges, Physiatrist, Fatmawati General Hospital, Indonesia

Hello, everyone. It's - Christa. I'm going to start with this. Have you ever wondered how it feels to live in a country consisting of literally 17,000 islands? Please allow me to give an example. I live here in Jakarta, and my sister lives here in Manado. So, whenever one of my nephews is having their birthday, they always ask me to attend their birthday party. What I did was take an hour's ride - depending on the traffic, it can be two hours - to the airport. And then, I took a three hours flight and one hour to reach their place. So it took six hours and cost me about 400 to 500 US dollars for transportation only. So with that, we already struggle to go into places. It's not always a negative thing. But the positive thing is that we always have places to explore.

With that, I want to share with all of you, "What are the current challenges that we face here, in Indonesia, for persons with disabilities to access a prosthetic or artificial limb?"

As we know, WHO stated that 16% of the global population experience significant disability. And we're also aware that prosthetic is important because it will improve functioning and independence. Indonesian National Development Plan is aligned with WHO Action Plan to increase the inclusiveness of persons with disabilities in every aspect of livelihood, budgeting, implementation, monitoring, and evaluation. It's not just for the clinical practitioner to remember, but all of us must pay attention to this: that improving persons with disabilities towards full participation in society is crucial though we know it's not easy for a person to access assistive products. Each country has its own struggles.

So, here are the five gaps that I want to share from my point of view as a clinical practitioner, a rehabilitation doctor who works in a National Referral Hospital for Orthopedics and Traumatology, which means that my patients with amputation come from all around Indonesia.

The first is data collection. Our national basic health data sets are collected every five years. And on the national report on disabilities - they did that based on population in 2018 - there are 12% or nearly 30 million citizens living with disabilities. Unfortunately, the data was collected did not specify the type of disability, whether a walking disability or any other types of disability. So, therefore, there is a very significant lack of data and a mismatch between the need and demand. We won't be able to calculate how many amputation patients need prosthetics. This is the first gap that we face nowadays.

The second is the lack of human resources. To get a good, functioning, and proper prosthetic, an amputee patient needs integrated management from the rehabilitation team, which consists of rehabilitation specialist, prosthetists and orthotists, occupational therapist, and also physiotherapist. These are the number that you can see for how many active professionals work in 2023. Especially for prosthetics and orthotics, they only met 0.66% of the total needs based on the overall population. And most of them are mainly in the main cities.

The third is access to the main cities. As I mentioned before in my presentation, that access may be possible, but it's time-consuming and the costs are prohibitively expensive.

This is the eastern part of Indonesia. One of my friends - also a doctor - works in Biak. She has a patient who needs a prosthetic. To have a prosthetic, the patient must be referred to the closest facility that can make prosthetics. In this term, it's here in Manado. So, when the patient wants to get the prosthetics, he has to take a plane to Jayapura, which will cost nearly \$130. And then, from Jayapura, he has to take another plane to Manado, which will cost like \$260, not including the accommodation (maybe \$20 a day). So, with that, we can imagine how much the patient has to spend to get a prosthetic. And if the patient were on a budget, maybe he could take cheaper transportation, like taking a ship or anything else, but it will take days to weeks.

The fourth gap is the high-cost prosthetics. We all know that prosthetics are relatively expensive. One of the points is that most of the materials needed to make prosthetics in Indonesia are still imported from abroad. Although some private insurance gives full coverage, national insurance only covers 10% to 15% of prosthetics, and it also requires a lengthy procedure. And our data in 2019 stated that only 25.6% of people with disabilities have a sustainable job. And most of them are in very low economic status.

The fifth gap is the lack of public information. Not everyone knows that the perfect fit and a good quality prosthetic need to be handled by a professional. Actually, in our daily practice, there are many craftsmen making prosthetics that do not meet the qualifications for a good prosthetic but are cheap and promoted by the media. For example, there is this one person who was quite popular among the public because he made his own prosthetic after having an accident. He made the prosthetic from wood. And then, the media blew up the story. So he made a lot of prostheses for those who needed them. Of course, it's a good intention, and we do really appreciate it, but a good intention without knowledge of basic biomechanics and basic medical science. We can imagine the future consequences when someone with various medical problems - let's say a diabetic patient - use one of those prosthetics. I have a number of below-knee amputee patients, who wore low-quality prosthetics, got some blisters, injuries, and eventually had to be amputated again on the higher level of amputation.

So, what do we do to narrow the gap? Here are some actions that we are continuing to take: As for the problem of data collection, currently, the Ministry of Health is currently building an integrated medical record system that will later be used in all government hospitals. We hope that the data collection will be more specific based on patient diagnosis. But of course, there will be challenges like technology illiteracy and also limited internet coverage in remote areas. And then, for the second step, currently, data are being collected more specifically. Of course, the challenges are to re-educate the officers who collect data so they know how to collect specific data.

And for the problem of a lack of human resources, currently, universities begin to increase the number of admissions to increase the number of graduates. But on the other side, it will need to have more lecturers. And second, an equal distribution of health practitioners is needed. But the challenges are not everyone wants to go to other cities. And when they move to some areas, there are still limited facilities. So it cannot accommodate its needs either. And third, there are contractual agreements. Several institutions nowadays provide scholarships with agreements: after they graduate, they must be willing to be placed in other cities that need their profession, not in the main cities. The challenges are that sometimes the bureaucracy is so complex and there is inadequate dissemination of scholarship information.

And to narrow the gaps in how to go to the main cities, nowadays there is new interprovincial and island access that has been built by the government, like Trans-Sulawesi, Trans-Java, and everything. But the challenges are that the fare is still high, and sometimes the government's subsidies just don't match the needs. The second is distributing facilities to remote areas. The challenge is that we will need multi-sectoral collaboration on this.

And to narrow the gap for the high-cost prosthetic problem, first, of course, we try to make it locally manufactured. But the challenges are the gaps between technology and resources. The second is lowering import duties. I hope someone who is in charge can hear about this. But of course, it also needs multi-sector review and evaluation. What I know from the news is that the Ministry of Finance said that they already have a policy or regulation for exemption tax rates and import duties for goods that are needed by persons with disabilities. So, we're still waiting for the good news.

And one that really helps our patient is charity projects. There are a lot of charity projects in Indonesia, but I just mentioned these two because I know well about these two institutions. It is Pusat Rehabilitasi Harapan Jaya, Siantar in North Sumatra. In 2022, they provided 41 free prosthetics for patients. And YBM PLN who work with our hospital also gave 10 prosthetics to 16 patients that needed them - and they're still progressing with their numbers.

And, of course, for the lack of information in public, the actions that are made are, we think, for the technology at centers where education through social media and direct education are being carried out more frequently and intensively.

In my conclusion, there are challenges, there are solutions, and it will be more benefits if we can figure it out together what add at this day. That's, ladies and gentlemen, what I wanted to share with you. Thank you! Terima kasih.

Access to personal mobility for children with disabilities in Fiji”

Sureni Perera, Chief Executive Officer, Frank Hilton Organization- Fiji, Fiji

Good evening. Konnichiwa. Because I'm still in the Fiji Islands, I start by acknowledging with respect to the ancestral owners of this land and the ancestors of the people with generational links within Fiji's diverse community. I also acknowledge the speakers who shared an immense wealth of knowledge before me, especially Kylie Shae, who was instrumental in setting up our mobility device service at the Frank Hilton Organization during her tenure at Motivation Australia.

So, I'm unable to provide you with an accurate country-level perspective. And I am by no means an expert on assistive technology. And therefore, my presentation will focus mainly on the Frank Hilton Organization pediatric mobility device service. However, I will attempt to give you a broader view of the landscape and context within which we work.

The Fiji Islands comprise 330 islands in the South Pacific. We are noticed from New Zealand and the west of Australia. Out of these, 100 islands are inhabited. A total population of close to 850,000 people, of which nearly 450,000 live in urban areas and 390,000 live in rural, remote and maritime regions. The male and female population is nearly equal. And life expectancy in Fiji has increased from 65 in 1990 to nearly 70 in 2017.

So, it is noted that Fiji has a growing young population. Fiji has a very young population, out of which 13% to 15% over the age of three in Fiji has been identified with a disability. Although Fiji is identified as a middle-income country, 28% of Fijians live below the poverty line and the majority work in the informal setting.

Unfortunately, Fiji has one of the highest rates of NCDs in the world and is faced with an NCD crisis. The growing rate of NCDs (NCD-related disabilities) makes universal access to assistive technology crucial in Fiji. The NCD death rate alone is nearly 78%. And although Fiji is ranked probably number one in the world where rugby is concerned, unfortunately, Fiji also is ranked number one with diabetic-related deaths in the world.

When speaking about children with disabilities, 8.8% of children aged two to 17 years in Fiji were reported to have at least one functional difficulty. Early identification is limited, and most often children are brought into the special education system at around six years of age. There is, however, a well-established special education system with schools on three of the main islands: 15 primary-level special schools and two vocational training centers, providing education support to nearly 1,000 children with disabilities.

When you look at the policy framework, Fiji ratified the CRPD, the CRC, both of which include specific articles, outlining the rights of children with disabilities to the same opportunities as all children. There is a Persons with Disability Act. There is a Policy on Special and Inclusive Education. There is a Rehabilitation Policy (in draft). And there is also an Early Childhood Development Policy (in draft).

This brings me to the Frank Hilton Organization, which is the only early intervention service provider in Fiji. And we are a charitable organization that has been in existence since the 1960s. We started as a care facility. And in recent history, we branched out to detection/early intervention services to bridge the gap of services to children and families with disabilities

during formative years. And now, our outpatient division has a range of services, one of which is a pediatric mobility device.

We work in accordance with the Nurturing Care Framework, where key pillars of access to quality education, access to good health, nutrition, child protection and security, and improving the skills and capabilities of caregivers are amongst our priorities.

So to talk a little bit about our other strategic pillars, we have an evidence-based service delivery. And although we are a charitable organization, we stress service delivery as a right. Service is made available when needed and not necessarily when possible. Our second pillar is local capacity development because, in Fiji, we lack the human resources and skills to continue services for children and persons with disability. So, capacity development is another key pillar within the organization. And of course, to share the knowledge that we work and to ensure sustainability in what we do, we look at collaborative partnerships and sector collaboration as our third pillar.

Our service delivery approach is collaborative, multidisciplinary, multi-sectoral, intersectional/equitable, family-centered, and culturally responsive.

And talking about assistive technology in Fiji, the table shows a vast array of AT. But from a Fiji perspective, we are extremely limited. It is more viewed from a charitable perspective, and there is currently no recognition of the need for assistive technology in Fiji. There is no product listing. There is very poor accessibility. Access is mainly user paid or through charitable donations. There is limited availability and affordability. Again, it is mainly through CSOs and charitable organizations. Limited adaptability. And quality is also dependent on availability and access.

At the Frank Hilton Organization, touching on other AT services, Our Speech Pathology Department uses AAC (low-tech devices). And our Audiology Department provides hearing aids, FM systems for children with hearing loss. Again, all our services are absolutely free of charge.

Looking at the broader landscape and what the other actors do with the mobility device services in Fiji, it's mainly through civil society organizations that procure products or receive donations through external agencies. There are P&O services, which are conducted at the National Rehabilitation Hospital. And although medicines are largely made available through Fiji Pharmaceutical and Biomedical Services, we have been informed that they do not procure any assistive devices. The Rehabilitation Hospital receives devices through donations from civil society and religious organizations. There are Wheelchair... Sorry, WHO Service Training. A basic level is provided to all physiotherapists within the Fiji National University. And in-service training is also conducted through external agencies for both clinicians and technicians. Clinicians and technicians in some hospitals are trained at an intermediate level. And basic wheelchair fitting is done mainly for adults. At the Frank Hilton Organization, we mainly receive referrals for intermediate-level mobility device fittings through the National Health System, through schools, and through communities.

So pediatric mobility devices at the Frank Hilton Organization are provided to realize the rights of personal mobility and full participation and inclusion in education, social and religious activities for children with disabilities in Fiji.

Looking at the numbers, in the past three years, we have approximately 170 clients across four main regions of Fiji and nearly an equal proportion of male and female clients. Again, the clients are not subjected to any costs. And the products are procured by the organization

through fundraising activities that we have every year. The cost of products is approximately 175,000 within the past five years since we started procuring our products.

So we follow the WHO eight-step wheelchair service delivery, which talks about assessment, prescription, funding and ordering, product preparation, fitting, user training, and follow-up.

We've got basic and intermediate-level mobility and postural support devices. We've got approximately nine different product ranges, and we procure products through CLASP, Wheelchairs for Kids, Motivation Australia. We also receive products from PhysioNet UK. Like I said, the costs range considerably. And we've invested approximately 174,000 Fijian dollars during the past five years since our services commenced.

These are a few of the products that we carry.

The little product over there - the Moti Start - I think it's a Motivation Australia product, which children of six months and above can be fitted into this product as well.

So, talking about personnel, my pride and joy, we've got seven people on the team who are all trained at the intermediate level. We've got three physiotherapists, two community rehabilitation assistants, and two wheelchair technicians. These amazing humans provide services through our office, which is centralized in the Central Division and Western Division, as well as go on outreach in communities, and look for children with disabilities who need support.

Here you see some assessments for children as well as some follow-ups and maintenance of the mobility device. And also, the picture on your left shows what the terrain looks like in most cases.

Let's talk about a few challenges that we face in service delivery. Again, identifying, screening, and referral is a challenge. Most parents wait till the child is of school-going age to bring the child to us. Most health workers also wait until the child needs access to school to bring the child, to refer the child to us. Therefore, referrals come in rather late. When the assessments are done, at times, we have limited access to products, so the prescriptions need to be adjusted to suit the products that are available. Again, funding and ordering. We run fundraising activities to actually raise the funds to procure the products that we get. And if I just ask you to look at the picture to your left, which indicates a rather bigger challenge in accessibility where although we actually provide chairs to children within the homes, usually the chair stays within the homes because accessibility is so poor.

Once again, in product preparations, it is still left to two technicians to service all the referrals we get from across Fiji. Fittings depend on availability. And sometimes, the child has to wait two-three months for a product. And in most cases, we have to do a reassessment because the child has grown from the first time the child had an assessment. And follow-up and maintenance. Our small team works all across Fiji. And to keep up with three- to six-month follow-ups for every child on our caseload is extremely, extremely difficult. Here you see in one of the pictures our technician carrying the chair on his shoulders to get to the house of the child who needs it. And in another picture on your right, you see the house is on stilts and the chair will stay within the house. So, at times, we wonder whether the child will actually achieve the outcomes we wish him to achieve because of the lack of accessibility.

And then, like my colleague in Indonesia shared, we have geographical challenges. If you look at the pictures, far on the horizon is where our vehicle stopped to visit the communities. So there is a very poor chance that the child or the person who receives the mobility device can actually use it beyond the walls of their own house. The picture on your right was taken

just yesterday or the day before, just a couple of days before, when my team went out to an island to do a follow-up on a wheelchair.

These pictures show access within urban areas, understanding that most of our communities live within informal settlements. We also have barriers. We have no transport and no accessible transport. And in most cases, even the schools are not accessible. So, at times, we have to look to give one wheelchair to the home, for the child in the home, and one wheelchair actually to the child in the school.

Again, our recommendations based on our experience as service providers in the field are consistent and in line with the Global Report on Assistive Technology. However, one recommendation that we wish to add is that there needs to be a lot of advocacies, and politics will to integrate AT into universal health coverage. We have a huge evidence gap, a data gap. We don't know the enormity of the problem on the ground, and we need to understand what we need to prepare for. So, investment in data and evidence-based policy is crucial. Improving access to assistive technology is absolutely crucial, and it needs to be multi-sectoral, not just left to civil society. Health, education, labor, and social sectors all need to pitch in. Local availability for products is important. At this point, we don't have products available in the country. We need mobility devices or hearing aids, we don't have them within the country, and they need to be imported. Workforce capacity and skill are again hugely, hugely important as we talk about sustainable services. Active involvement of users. At present, although we are in the organization that looks at a family-centered approach, mostly the provision of products look at an approach of a recipient and a service provider. We need people who use products to actually help us identify and draft policies that are suitable to them and to us alike. Investment in enabling environments and accessibility is again a huge problem in Fiji. We also need technical and economic assistance through international corporations to support our national efforts. And again, we need to increase public awareness to combat stigma.

But it's all not doom and gloom. It's all not lack. There are many opportunities. And as I said, the smile makes it worthwhile. This child lived in an urban settlement, very close to Suva. However, she was not able to attend school due to the lack of a mobility device within the home and within the school. She had meningitis at six months, and she had lower limb paralysis. At seven years, her father brought her to us for an assessment, and we fitted her with a chair. However, when we went for a follow-up in three months' time, that chair was in a terrible state because they had to take the chair out of the house, tie it onto a top of a taxi, and bring it to the school because we don't have accessible transport. We then were able to support her with two chairs: one for the house, one for the school, which is not an ideal situation, but it was the best for her because now she participates in her education and extracurricular program with her peers at the Hilton Special School. And she has a very high attendance rate in school as well.

So, I hope I was able to give you a little snapshot of what the landscape in Fiji looks like. And I will stop by thanking, again, the National Rehabilitation Center for providing me with this opportunity. And if there are any questions, you can reach out to me at any point.

Current Status of Assistive Products and Provision System in Japan

Nobuya Yamasaki, Senior Specialist for Assistive Products Evaluation, Office of Information and Support of Assistive Products for Persons with Disabilities, NRCD, Japan

Thank you for the opportunity to speak to you all today. My name is Yamasaki, and I am a senior specialist for assistive products evaluation. There are many different types of assistive products available worldwide, and today I will introduce the system in Japan that enables the use of these assistive products.

Assistive products are products that assist persons with disabilities. The system in Japan should be considered based on not only persons with disabilities but also older adults with reduced mental and/or physical function who encounter difficulties in their everyday lives. Thus, the equipment and prosthetic devices are organized to improve convenience for the activities of daily living. These products include prostheses, orthoses, comfort modular seating systems, wheelchairs, electric wheelchairs, hearing aids, eyeglasses, and communication assistive devices for persons with severe disabilities. Daily living equipment includes long-term care and training support equipment, independent living support equipment, home care support equipment, information and communication support equipment, excretion management support equipment, and home life support equipment. Also, there are modern information technology equipment and 3D printers.

In Japan, several laws have been enacted to ensure that assistive products are provided to the people who need them. Different systems have been established under each law. I will now introduce the six laws related to assistive products and the purpose of each of these laws.

The Workers' Accident Compensation Insurance Act provides the necessary insurance benefits for injury or illness incurred by workers because of their work or commute, and this law has also established systems to promote the social rehabilitation of non-working people. The purpose of this law is to promote the welfare of workers by supporting their social reintegration, supporting them and their bereaved families, and ensuring their safety and health.

Compulsory automobile liability insurance only covers automobile accidents involving bodily injury; hence, the compulsory Automobile Liability Insurance Act aims to ensure compensation for basic bodily injury by compensating for the financial burden borne by policy holders.

The Health Insurance Act established the health insurance system in Japan, with the aim of contributing to the stability of Japanese people's lives and improving their welfare.

The Long-Term Care Insurance Act was established for people who require long-term care owing to age-related illness, with the aim of improving public healthcare and increasing welfare.

The General Supports for Persons with Disabilities Act is for individuals with a disability certificate. It aims to improve the welfare of adults and children with disabilities and contribute to facilitating local communities where people respect each other's individuality regardless of disability; thus, it fosters peaceful living.

Independent subsidy systems provided by local governments are systems established independently by each local government for expenses considered to be necessary, regardless of whether a person has a disability certificate. These systems contribute to subsidization of the cost of modifying vehicles, education of children with hearing loss, and promotion of language and life adaptation training.

The assistive products handled under each of the laws are defined as shown here. Prosthetic devices such as prosthetic limbs are covered under the Worker's Accident Compensation Insurance Act; orthoses for medical treatment are covered under The Health Insurance Act; and Equipment for Long-Term Care Covered by Public Aid is covered under the Long-Term Care Insurance Act. Systems to handle the various assistive products have been established under each law. The workers' accident compensation insurance system is covered under the Workers' Accident Compensation Insurance Act; the compulsory automobile liability insurance system is covered under compulsory Automobile Liability Insurance; the health insurance system is covered under The Health Insurance Act; the long-term care insurance system is covered under the Long-Term Care Insurance Act; prosthetic devices and daily living equipment are covered under the General Supports for Persons with Disabilities system, which is defined here as part of the system provided by the General Supports for Persons with Disabilities Act. The independent subsidy systems provided by local governments will be discussed as is, as independent subsidy systems established by local governments.

I will now explain the relationship between assistive products and the provision systems. First, the assistive products and provision systems do not have a one-to-one relationship. The target of the provision system differs depending on the purpose of the provision system. Thus, there may be multiple provision systems for a single assistive product. For example, the provision system differs depending on whether the cause of an injury was an injury at work or an illness. The system also differs depending on whether it applies to training equipment for rehabilitation or equipment required for daily life. Owing to the multiple systems for a single assistive product, users must determine the specific procedures needed for a particular provision system, so they can access the assistive products.

Next, I will explain using specific examples. I will first explain using a prosthetic leg as an example. There are four systems that cover prosthetic legs. Let us consider which of the four systems would apply to a specific case. The Workers' Accident Compensation Insurance System would be applicable if the reason that a person now requires a prosthetic leg is due to an on-the-job accident. The Compulsory Automobile Liability Insurance System would apply if the person was involved in a car accident not during work. If it is determined that an amputation due to injury or illness is not covered by either the Workers' Accident Compensation Insurance System or the Compulsory Automobile Liability Insurance System, and a prosthetic leg is needed for walking training, the Health Insurance System would then apply. At the completion of the walking training, when a prosthetic leg is needed for daily life, the General Supports for Persons with Disabilities System would apply to the second prosthetic leg onward. The system to be used differs depending on the reason the prosthetic leg is needed, and whether the manufactured prosthetic leg is the first or subsequent prosthetic leg.

Next is an example using a wheelchair. Unlike the previous example of prosthetic legs, the Health Insurance System changes to the Long-term Care Insurance System. The following four systems cover wheelchairs: The Workers' Accident Compensation Insurance Act is applicable if the reason that a person now requires a wheelchair is due to an on-the-job accident. The Compulsory Automobile Liability Insurance System would apply if the person was involved in a car accident not during work. If a doctor has determined that the condition is a permanent disability, which is not covered by the Workers' Accident Compensation Insurance System, and the person has a disability certificate, then the General Supports for Persons with Disabilities Act would apply. The Long-term Care Insurance System would apply to persons to whom the General Supports for Persons with Disabilities system and systems under the General Supports for Persons with Disabilities Act do not apply, if the person is aged 65 years or older, and they now require long-term care due to age-related illness.

Next is the example of crutches. There are four systems that cover crutches, the same as the previous example of wheelchairs. The Workers' Accident Compensation Insurance System is applicable if the reason that a person now requires crutches is due to an on-the-job accident. The Compulsory Automobile Liability Insurance System would apply if the person was involved in a car accident when not at work. If a doctor has determined that the condition is a permanent disability, which is not covered by the Workers' Accident Compensation Insurance system, and the person has a disability certificate, then the General Supports for Persons with Disabilities Act would apply. The long-term care insurance system would apply to persons to whom the Workers' Accident Compensation Insurance system and systems under the General Supports for Persons with Disabilities Act do not apply, if the person is aged 65 years or older, and they now require long-term care due to age-related illness.

Similarly, to use the example of hearing aids, unlike the previous example of crutches, hearing aids are not covered by long-term care insurance system; instead, the provision system changes to independent subsidy systems provided by local governments. There are four systems that handle hearing aids, the same as for crutches. The Workers' Accident Compensation Insurance System is applicable if the reason that a person now requires hearing aids is due to an on-the-job accident. The Compulsory Automobile Liability Insurance System would apply if the person was involved in a car accident not during work. If a doctor has determined that the condition is a permanent disability, which is not covered by the Workers' Accident Compensation Insurance System, and the person has a disability certificate, then the General Supports for Persons with Disabilities Act would apply. Some local governments provide subsidies for hearing aids for persons younger than 18 years and older adults with mild to moderate hearing loss, even if they are not eligible for a physical disability certificate.

Finally, let us look at the example of smart speakers. Smart speakers are voice-operated and can turn home appliances off and on through voice commands. These speakers can be used effectively by both healthy persons and persons with disabilities. Because none of the current systems cover these devices, if a person wishes to use these speakers, they must pay for them out of their own pocket. There are many other products that must be purchased by the individual, and no system covers products such as convenient goods prototyped using a 3D printer at the rehabilitation stage.

I have presented five examples, and as I have shown, once a user decides on the required assistive product, they must then search for the applicable system and follow the relevant procedures depending on the reason the assistive products are needed, and the purpose of use of the assistive products. Each of these systems has a different priority level. This diagram shows the order of priority. The Workers' Accident Compensation Insurance System

has the highest priority, followed by the Compulsory Automobile Liability Insurance System, Health Insurance System, Long-term Care Insurance System, General Supports for Persons with Disabilities Act, and Original Subsidy System by the local government. Any products not covered by these systems must be purchased at the personal expense of the user. Most users obtain information about the procedures from related personnel such as hospital staff, learn about the systems, and complete the procedures once they find that they need assistive products due to a disability.

I will now introduce the chronological order of the flow of users obtaining information on assistive products, using a prosthetic leg as an example. Starting from when the leg was amputated due to illness, a prosthetic leg is manufactured for training, and the person undergoes rehabilitation. Then, this diagram shows the process until the person is discharged from hospital, and the second prosthetic leg is manufactured after starting social reintegration.

The Health Insurance System is applicable as the system that manufactures the first leg as an assistive product because the leg was amputated due to illness. Since the user is likely still hospitalized when the prosthetic leg is manufactured, doctors and medical staff are available to explain the system to the user as needed and the user can clarify any doubts that they may have. However, the General Supports for Persons with Disabilities system is applicable to the manufacture of the second prosthetic leg because the amputation was not due an accident at work, and the prosthetic leg is an assistive product required for daily living. At this point, the user has likely been discharged from hospital and nobody is readily available to inform them of the subsequent procedures. Therefore, the user has to determine the required steps and submit the relevant application to start the manufacture of the second prosthetic leg.

The difference for the user when the first prosthetic leg is manufactured versus when the second prosthetic leg is manufactured is that there is nobody to provide guidance for the procedures required for the second prosthetic leg. Additionally, the impetus for starting manufacture of the first prosthetic leg is a medical examination by a doctor, whereas for the second prosthetic leg, the user is required to go to the necessary contact point himself/herself and submit an application to start the manufacture process. Furthermore, because the systems differ, the necessary procedures also differ.

The most confusing part of the procedure is that the contact point for submitting applications differs depending on the system. Therefore, it is important to understand and remember how to submit applications to be able to use the system and obtain assistive products.

I will now introduce the various points of contact for each system. The person's medical institution is the point of contact when using the Health Insurance System; the local municipality is the point of contact for the General Supports for Persons with Disabilities System; designated in-home long-term care support providers are the point of contact for the Long-term Care Insurance System; the labor bureau is the point of contact for the Workers' Accident Compensation Insurance System; and when purchasing a product as a personal expense, the person should liaise directly with the service provider or business operator. The user must know where to go and who to speak to when in need of assistive products.

This system has a few challenges: the systems that can be used differ depending on the assistive products and systems, and the reason the assistive products are required. There may be multiple systems handling the same assistive product. In terms of the procedure flow, there is an order of priority for using the system; thus, the users must know which systems he/she can use. When moving from medical care to the welfare system, the environment

may change due to a change in the people involved with the user. As the system that handles assistive products changes from medical care to the welfare system, the contact points for applications and the procedures also change. There are also assistive products for which the system cannot be used. Not all newly developed assistive products can be used in the provision system. Because products made with a 3D printer, etc., are not available for general sale, they are often not included in the provision system.

To summarize, the provision system for assistive products in Japan is divided into detailed systems to ensure that detailed aspects of the system can be reached. Therefore, users who require assistive products must thoroughly understand the system they use and proceed with the procedures. However, the procedures may differ depending on the system. Since users do not access these systems very often, it further increases the difficulty of the procedures for them. It is essential to prepare an environment that allows users who require assistive products to access the necessary information, and complete the procedures smoothly. It is very difficult for users to understand the entire system, but the office I work in is now providing information as part of its operations. A number of locations have been set up to provide information on the systems, but I believe that more information will be needed in the future.

That concludes my presentation. Thank you very much for your kind attention.

Discussion among presenters, Q&A

Facilitator: Takenobu Inoue, Director, Department of Assistive Technology, Research Institute, NRCD, Japan

Inoue (Facilitator): Thank you very much! I will facilitate the discussion here. And all the speakers, thank you very much for giving us a lot of information, which is all valuable. My "thanks" goes to all of the speakers. And those participants had a flood of information. So now, you can relax. And we would like to have a good exchange of opinions and also have a fruitful discussion. We have about 25 minutes for Q&A and discussion. We don't have enough time. Basically, this will focus on the question and answer session. So if you have any questions or comments, your comments and questions are appreciated.

Throughout the seminar, we focused on the access to assistive technology. In the world, especially from Asia and East Asian representatives with us... So we would like to focus on this area for the Q&A session. And your comments and questions are appreciated.

From the floor, I was wondering whether we have any questions. But so far, nobody entered any questions in the Q&A box yet. So, hearing the discussion, if you come up with the questions, please enter your questions. Your questions are appreciated.

Among all the speakers, different environments and different cultures were discussed. Countries with different backgrounds and cultures made a presentation. So if you have any questions or comments, we would like to hear if there are any questions or... Especially if you are interested in others' presentations.

So, now, Kylie-san, you raised your hand. Thank you very much! So, Kylie-san, the floor is yours.

Kylie Shae: Thank you very much! And thank you once again for this really interesting and very informative webinar! And it's been so good to hear these perspectives from the different countries in the region. And actually, I want to throw this back to those of you that have spoken.

The common thread amongst all of your presentations was - what I would call - "silosism". You've all touched on it. We are looking at assistive technology broken into pieces across systems depending on what kind of functional impairment somebody has, what age they are, whether they're attending a government or a private service or a non-government service, whether the support is being provided through a charitable system, whether it's through rehabilitation, whether it's through health, whether it's through social welfare. And this disintegration of this one primary need for people I see as being one of the biggest barriers that we face. And I guess I'd like to ask each of you or whoever would like to comment, "We see this as a problem. You've presented it as a problem. What can you actually do in your countries to bring the sector together? What has to happen?" And it's good...

I want to hear this because, in my role at WHO, I can help to play a part in raising your voices at the UN level. But I'd like to hear, "What is the solution to breaking down the silosism and integrating the provision of assistive technology so that the users are not confused about

where they go, who they go to, how they fund the products that they need?" Any thoughts from any of you? Don't be shy.

Inoue: Thank you, Kylie ! This is a very important point. And WHO focused on this system, and this has been the stumbling block so far, and so, each one of you - we would like you to respond to this question. So, based on the order of the presentation. So, Dr. Jiao, please.

Paul Jiao: Good afternoon, again, everyone. Thank you for this opportunity to answer the question! I think I'd like to think about siloism from two points. One point is siloism from the service-provider perspective, and another point is siloism from the perspective of the person in need of assistive technology.

From the perspective of the service provider, sometimes siloism happens wherein different service providers will only move on their own, without rather coordinating with their fellow service providers. For example, if I have a patient who has cerebral palsy, this patient will definitely need assistive technology for mobility. The patient may need continuous rehabilitation services like occupational therapy, physical therapy, and the like. Then, there would of course be social services that will be needed by the family. But what can happen after this is that all these service providers do not talk with one another. Hence, their efforts may not be streamlined. However, one thing that we have seen is, if there is a team within, for example, a university hospital, like there's a rehab doctor, there's a team of PT, OT, CPOs, wheelchair providers, then they can adopt the team approach.

I think one thing that we can also consider is if a country has a well-established system like... When I trained in NRCD, Japan, I found that they have a very good system there, wherein they have a hospital, then the hospital is linked to a social rehabilitation institution. And they even have dormitories for those who will need to travel and train within the Social Services Unit. I think that is one thing that we can also consider. If each country can have something like that, I think we can combat the siloism that is happening.

Now, from the perspective of a person in need of assistive technology, I think one problem here is that the person has difficulty knowing where to go to. For example, he would not know if he has to go to a private doctor, to a hospital, or to the Social Welfare Office. I think here in our country, we have sort of addressed that problem with the establishment of our Malasakit centers. A Malasakit center is a one-stop shop, and it has been incorporated into different government hospitals. So, for example, if I am a patient and I am in need of a transfemoral prosthesis, then I can go to a government hospital, be seen there by a rehabilitation specialist, assessed together with their PTs, OTs, CPOs. Then, if I am already in need of the device and my problem is I do not have money to pay for it, then I can be linked to a Malasakit center, and that center will be the one to course through different government funds or different donors and match me to a donor or to a fund that can help me get access to the assistive technology that I need. I think that's one thing that we can also consider. I think that's my sharing at this point. Thank you!

Inoue: Thank you very much. So siloism is a problem. And now, a one-stop organization for connecting all of the different teams will be necessary as mentioned. And next, Dr. Aratratran Patra. Please.

Aratran Patra: One of the challenges we face is how to integrate services for prosthetic, orthotic, and assistive devices into the health system. We tend to view health issues as those that affect people with fever, or some diseases. But not those that affect people with amputation, cerebral palsy or other disabilities. We categorize them differently and neglect their needs. This needs to change. We need to have a dedicated professional for prosthetic, orthotic, and assistive devices in every district hospital, just like we have doctors. This person would work with other health workers to provide care for people who require these devices. This way, we can ensure that everyone has access to the services they deserve.

One of the problems we face in India is that we don't recognize prosthetic, orthotic, and assistive devices as part of the health system. We treat them as a social issue, rather than a medical one. But we need to realize that people with disabilities have health needs just like anyone else. Whether they have polio, amputation, or any other condition, they deserve to have access to quality Prosthesis, Orthosis and Assistive devices. That's why we need to establish P&O services in every district and block hospital, and have trained professionals who can provide these devices. We also need to advocate for the inclusion of P&O professionals in the National Commission for Allied Health Professionals, which is a new initiative in India. This would help us integrate P&O services into the health system and improve the lives of many people. That's all. Thank you.

Inoue: Thank you very much. And Kylie-san, you have raised your hand. Do you have any comments right now?

Kylie Shae: Yes, I do. And I couldn't agree more with Professor Patra that, of course, the need for assistive technology is something that needs to be addressed within the health system. And WHO sees the health sector as being the lead on assistive technology.

Across the health systems and the workforce, we have the strength and the capacity to be able to meet this need in different ways. But the challenge that I would like everyone, our speakers as well as those that are attending, to think about is, "How do we actually mobilize the primary health?" So, it's a very good point that, yes, if you're setting up a new district hospital, then you need to think about prosthetics and orthotics because it's so very much needed. You also need to think about the provision of wheelchairs. And these are specialist areas where you need people that have got extra training just as... You don't use a general practitioner to do surgery, for example. You certainly wouldn't be providing a prosthetic limb by someone that is a community-based rehab worker. They don't have the skills and the training for that. But globally, we've seen the need. We are never going to meet the need for assistive technology while we rely only on degree- and above-qualified professionals to be providing it.

So we have to think about, "What can the primary health, the community health personnel do to support this need?" Because not every assistive technology needs specialist allied health professionals to provide it. We can also use the primary healthcare personnel to identify the need in the first place to meet this big lack of awareness that everyone has spoken about. And we can also use the primary health workforce to support some of the needs for those more complex products. It doesn't take a specialist to pump up a wheelchair tire, and it doesn't take a specialist to identify that someone using a prosthetic leg has developed a blister. And we want that identified soon. We don't want that identified at the annual checkup at the prosthetic service that the people can't get to because they live on an island a five hours flight away. We need the primary health workforce to be on board with this, to be

supporting us, to be supported to support us. So that, I think, is a challenge that I'm going to speak about more and more and more because I do not see how we will meet this need without mobilizing and supporting that aspect of the health workforce to assist us. Thank you!

Inoue: Thank you very much! Let me continue with Dr. Tenges. Do you have your thoughts? Could you share with us?

Christa Adriane Tenges: Thank you! Yes, I really agree with what has been shared by Professor Paul about collaboration in every team. And the question that really gets me is the question from Miss Shae: mobilize primary healthcare. It's not an easy thing to do, but what we do now is...

Actually, I'm also a lecturer at the university. So the things that we do are that we give continuous re-education for the general practitioner that has been placed in a remote area and everything to see the perspective. Like I said, when it's the first time to see the patient, they don't need to send the patient into other facilities, but they can do the first thing, the first assessment to make sure that everything can be handled there. And of course, in our program exchange, some of our students in their late semesters or almost graduates take a program where they will be placed for a couple of months in a remote area to give some assessment to the patient and then come back and see what really happens in those areas. That's what I can add to this problem, I guess.

Inoue: Thank you very much. So, education for a GP and mobilizing the primary healthcare practitioners - I mean, that's really key. Okay. What about you, Sureni-san? Do you have your thought?

Sureni Perera: I can't even start to comment because we, in Fiji, live within a complexity of constraints. With huge gaps across products, provision, personnel, and huge challenges, we do not have a system, let alone a well-established system. And the huge competing health priorities within Fiji just don't enable us to even talk about AT. The only thing I can say to bridge the gaps and see some light at the end of the tunnel for us is strong advocacy from a service delivery perspective. Just advocate, advocate on the need, as well as look at technical support to quantify or substantiate that need through evidence and data, look at how we can do surveys, and map the need, and to actually show governments that there is - and there always will be - a huge need. As well as look to agencies, external agencies, for technical support to show us what a system actually looks like. But for now, from a service delivery perspective, all I can think of is, the most important thing for us is making sure that our service is consistent with quality and standards and keep delivering where possible, and strongly keep advocating on the need for us of AT, especially with the cases of NCDs on the rise in Fiji.

Inoue: Thank you very much. Well, including the users, I think that awareness or recognition of AT really needs to be deepened and reinforced. Oh, Dr. Jiao, would you like to speak for a minute?

Paul Jiao: Yes, thank you for acknowledging. I'd like to add a few thoughts regarding mobilizing primary care for assistive technology provision. A few years back, I worked with UNICEF and an NGO, wherein we developed home-based rehabilitation option training and we leveraged village workers. We also tapped into the municipality or the town health officers to aid in the training of village workers. But however, this project more focused on children only because it was under UNICEF. But I think if we can develop something like that, this time to include not only children but even adults who are in need of assistive technology provision, then I think that is one thing we can do to mobilize primary care to better assist in the provision of AT. Thank you.

Inoue: Thank you very much. Okay, Yamazaki-san, do you have a thought?

Yamazaki: Okay, thank you. I shared with you some examples of a provision of prosthetic legs. Let's say that this prosthetic leg is perfectly made. And let's say that the user starts living his life once again. When there is a problem with the prosthetic leg, he may not have somebody he can ask the question, for malfunction or some quality issue. And in that case, this person, of course, cannot assess or cannot evaluate whether it's really good that can deteriorate his quality of life. And it's not perfectly fitting, but if the user continues using it, it can be a problem. So we are now working on what we can do in order to detect such problems so that we can identify any malfunction or any problem with that prosthetic leg. So, I think that between different systems, we can work on making links between systems. In Japan, we still have some trials and errors. But we are working on that.

Inoue: Thank you very much. Thank you very much for giving us very valuable information and opinions. And during this seminar, the WHO issued the Global Report. And this is a very important report into the access and also the proliferation of the use of AT. I think the Global Report on AT by WHO had a great impact. And are there any comments on the impact on each country from the speakers? Sureni-san, do you have any comments?

Sureni Perera: No, not really. Sorry. I can't elaborate on that right now.

Inoue: Thank you very much. Not only a Global Report of WHO, but, Sureni-san, 5P were mentioned in the slide. And this is also in line with the major movement of WHO. So what about Yamazaki-san?

Yamazaki: I don't have anything pop up in my mind yet. Thank you.

Inoue: I would like to talk about this. So, in the case of welfare devices or ATs, the awareness is not that high. And in the case of ICF, assistive products were identified; this was a good move. And global movement started based on this, and we have to promote access to assistive products, and this has started. Hearing from all the speakers' presentations, based on the situations of each country, for example, the archipelago and the wide land in India, each country has a different environment. And based on their

environment, they are trying to overcome access to assistive technology. But thinking about access, environment, infrastructure, and human resources, advocacy, and awareness, different issues are in hand and we have to tackle all of these. And those are quite common in all countries. So, the Global Report is one of the triggers to tackle those issues. And we need collaboration amongst the countries in order to overcome this problem. That was a common perspective.

And it looks like we have two-three questions raised by the audience. I hope that you all are able to see the questions. I think that this can be read by the audience. Well, Kylie, do you have any comments on this?

Kylie Shae: Yes. I mean, in terms of "What can we do to strengthen primary healthcare?", it's not an easy fix. And we know that everybody... With all of the different issues, if we think about improving vaccination rates, if we think about non-communicable diseases and addressing the medical care for those - for people with NCDs, if we think about HIV, for example, everybody would like their issue to be addressed through primary healthcare. So, really, this needs a whole-of-government response to say, "Primary healthcare is the frontline for our health services, and we need to equip them, and we need to invest more in primary healthcare."

So across the board, this is something that WHO very, very strongly supports. And we talk about universal health coverage and an emphasis on building the capacity, strengthening the resources, increasing the workforce at the primary healthcare level in order to achieve goal number three - healthy living for all - for the Sustainable Development Goals.

When it comes to assistive technology, which is my area, of course, we would like to see more capacity at the primary healthcare level. But it doesn't mean trying to do everything at once. We are working with a number of countries at the moment. And in fact, Nepal is one of them, where we are in the process of setting up a pilot with the country office, the WHO country office, and our regional office. And there are other countries that we are working with, who really want to try what they can do to put at least some assistive technology work into the primary health system.

So my thinking and my recommendation are, "You start simple." Start with just referral and identification. And there are examples on this call of people that are doing that. Build that capacity and that knowledge and that awareness into the workforce at the primary health level. Put some questions into the screening when people come into primary health that'd help to trigger whether there might be a need for simple assistive products.

In Egypt, just recently, I saw quite a remarkable example. The government there is looking at strengthening universal health coverage across the nation. They have three pilot governorates that they're working in. And they took us to visit one of the governorates' primary, secondary, and tertiary levels. In the primary center, I witnessed older people being received at the entrance to the Primary Healthcare Center, having a quick check on their "falls risk", being identified as having a risk of falls. So then, they had a huge big "F" (for "fall") put on their... Like a tag, like a conference goer - a label. And then, they had someone assigned to them for the whole time they were at the facility to make sure that they were safe. And those that really needed it were given a wheelchair that belonged to the facility. But when they'd finished their tests and their meetings with the doctors and done all of the work they needed at the primary health center, they were taken to the front door and they left. The person is still a "falls risk", but they received nothing in the primary health center to support that. And it's not difficult. They've already done the screening. The next step is to train the

assistant that was there to spend the time to do a quick assessment of the walking aid that the person might need and teach them how to use it, which to me would be a better use of time than assigning someone for half a day to walk alongside that person and make sure they don't fall.

So this is where WHO wants to help. So we have developed TAP (Training in Assistive Products) - online training. It targets primary healthcare personnel. We are also working to understand, "What are the resources that are needed at the primary healthcare level so that this system can be implemented?" So we're providing tools and resources, but we need countries, we need Ministries of Health to be making this a priority. And for that to happen, we need people like yourselves to be saying, "This is a priority in our country." And in this way, we can save costs. We can prevent a hip fracture from somebody falling at home if we can identify in the health system early on that they are a "falls risk" and do more about it than ticking a box on a form and actually providing that person and their family with the resources they need so that they don't fall and so on across the different product range. Thank you.

Inoue: Thank you very much.

Aratatan Patra: I've got one question for Kylie.

Inoue: Of course, please.

Aratatan Patra: So, Kylie, you can just intervene with the WHO SEARO New Delhi, and ensure that the Priority Assistive Products List is prepared properly. The ICMR (Indian Council of Medical Research) is preparing Priority Assistive Products list, but they are not involving P&O professionals in the process. This is unacceptable, because P&O professionals are the experts in the assessment, prescription, design, fabrication, fitting and training of Prostheses, Orthoses and other Mobility rehabilitation Aids for persons with locomotor disabilities, Orthopedically and neurologically afflicted persons. These devices are essential for improving the mobility, function and quality of life of persons with disabilities and aging population in India. P&O professionals have a four-and-a-half years degree course and have a greater role to play. The exclusion of P&O professionals from the NLEAP process is a gross injustice and violation of our rights and dignity as qualified and registered clinicians under Rehabilitation Council of India. It also undermines the standards and quality of assistive products and services in the country. It is unacceptable that such an important document that will have a significant impact on the lives of millions of persons with disabilities and aging population is prepared without consulting or involving the P&O Clinicians/ Professionals. Our association strongly opposes this exclusion and demands that P&O professionals be consulted in preparing the list. Otherwise, the list will not reflect the actual needs and preferences of the people who use these products. Thank you.

Kylie Shae: Thank you. I can just respond quickly. I'm aware of the Assistive Products List process that's ongoing, and I understand that ICMR is a lead, but... And I am also aware that there is most definitely consultation in the planning. So, I can make that comment back to the regional office bearing in mind that everyone should know that with WHO, we're led by our

country office first, our regional office next, and then we support at HQ. People often think because we're headquarters, we get to say what's what in the country. It's the other way around: the country tells us what's what and we respond. But I can most certainly have a conversation to ensure that consultation does happen. And my understanding is that there most definitely will be. It's a long process. And I understand that just at the beginning, looking at the criteria at this point, not at the products themselves. But for sure. Thank you for your comment, and I've made a note.

Inoue: Thank you very much, Shae-san. And, Patra-san, thank you very much for your sharing. We also have a comment from Christa. Thank you very much for sharing your comment. And also, a funding issue has been mentioned due to siloing in bureaucracy. And I appreciate all of your questions and also your feedback from the speakers. Well, Kylie-san, do you think you can have another comment on closing this session panel discussion part?

Kylie Shae: Well, that's an honor to be asked to give some closing remarks. We were discussing before the webinar actually opened amongst ourselves that this is a really nice moment to acknowledge the great work of Chapal Khasnabis, who was the Lead for the Assistive Technology Team ahead of myself. I only stepped into the role at the beginning of February on Chapal's retirement right at the end of January. He has been an absolute inspiration in this sector, and I'm sure that there are many of you on the call who will have met him - and if not met him - seen him present on this issue over many years. Well, he's really led the charge at WHO and has mobilized our organization to be in this with you.

We are really behind and supporting the efforts of everyone in this sector to strengthen access to assistive technology. We understand the challenges. We appreciate the huge work that the rehabilitation workforce, in particular, does to make it possible for people to access the products that they need on a day-to-day basis. It's then in your role as advocates and leaders in your countries to really make sure that our governments are listening, that the stakeholders that need to be involved, including people with disabilities, their representative organizations, all the people's associations are around the table and part of the conversation as we try and work towards solutions.

This is something again, coming back to Chapal and his leadership, he was someone that really brought partnerships together. He inspired many, and he brought many together because without working together on this, we really are not going to achieve much. And our conversations about siloism are absolutely highlighting this. We need to break down the silos. We need to bring together the partners. We need the right people around the table to be looking at the solutions that will help us move forwards and increase access to those 2.5 billion people in the world right now who need one or more assistive products.

And thank you so much to the National Rehabilitation Center for bringing this forum together. It's been a real pleasure to have the conversation and be with you today. Thank you!

Inoue: Thank you very much. We had the discussion - I joined as well - at that time whether an electric wheelchair was included or not. It was on the border. And Chapal mentioned that electric wheelchairs to be utilized all over the world - that will be a cornerstone of the proliferation of AT in the world. That was impressive. And we have to make one step at a time. And then, now, we have implemented a lot of programs. And also, collaborations are necessary for East Asia and also West Pacific region. Those collaborations have to be

promoted. We are 10 minutes behind schedule, but we had a very, very important discussion. So, all of the speakers and also the audience, thank you very much for your participation.

Closing Address

Nobuhiko Haga, Director, Rehabilitation Services Bureau, NRCD, Japan

Thank you everyone for attending today's international seminar - "Approach to Improve Access to Assistive Technology and Products: To Ensure that Everyone Has Sufficient Access." I would especially like to express my sincere gratitude to the six presenters.

As Kylie Shae discussed in her presentation, the WHO and UNICEF's "Global Report on Assistive Technology" was released last May, and the report indicated the challenges in accessing assistive technology. Furthermore, the WHO released the "Global Report on Health Equity for Persons with Disabilities" last December, which included the many problems associated with accessing assistive products. I feel it is extremely significant that we were able to conduct this plenary session in such a timely manner.

Today's presentations included discussions on the problem of siloed systems, which was mentioned earlier, as well as issues with the cost of assistive products, challenges of transportation, especially in island nations, and the challenges of training and educating experts in assistive products. I hope that today's discussions will improve access to assistive products and technology for all persons with disabilities, and we will continue to work together in the future. Thank you very much for your kind attention today.