ROMP
Range of Motion Project

Denver | Guatemala City | Quito

www.rompglobal.org

The Prosthesis Alone is not Enough: Community-Based Rehabilitation for People with Amputation in Guatemala

- 2024 Year-End Report -

Project Implemented By:

The Range of Motion Project, Guatemala and United States

Project Supported By:

Pro Victimis Foundation, Switzerland

Dorothea Haus Ross Foundation, United States

Cotopaxi Foundation, United States

Trone Family Foundation, United States

University of Washington, United States

Barr Amputee Assistance Fund, United States

AllPeopleBeHappy Foundation, United States

Tawingo Fund, United States

IROH Foundation, United States

RTI International, Guatemala

Stephen Brown, United States

Mary Free Bed Hospital, United States

Kenneth Houck and Lezlie Adler, United States

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ROMP Guatemala

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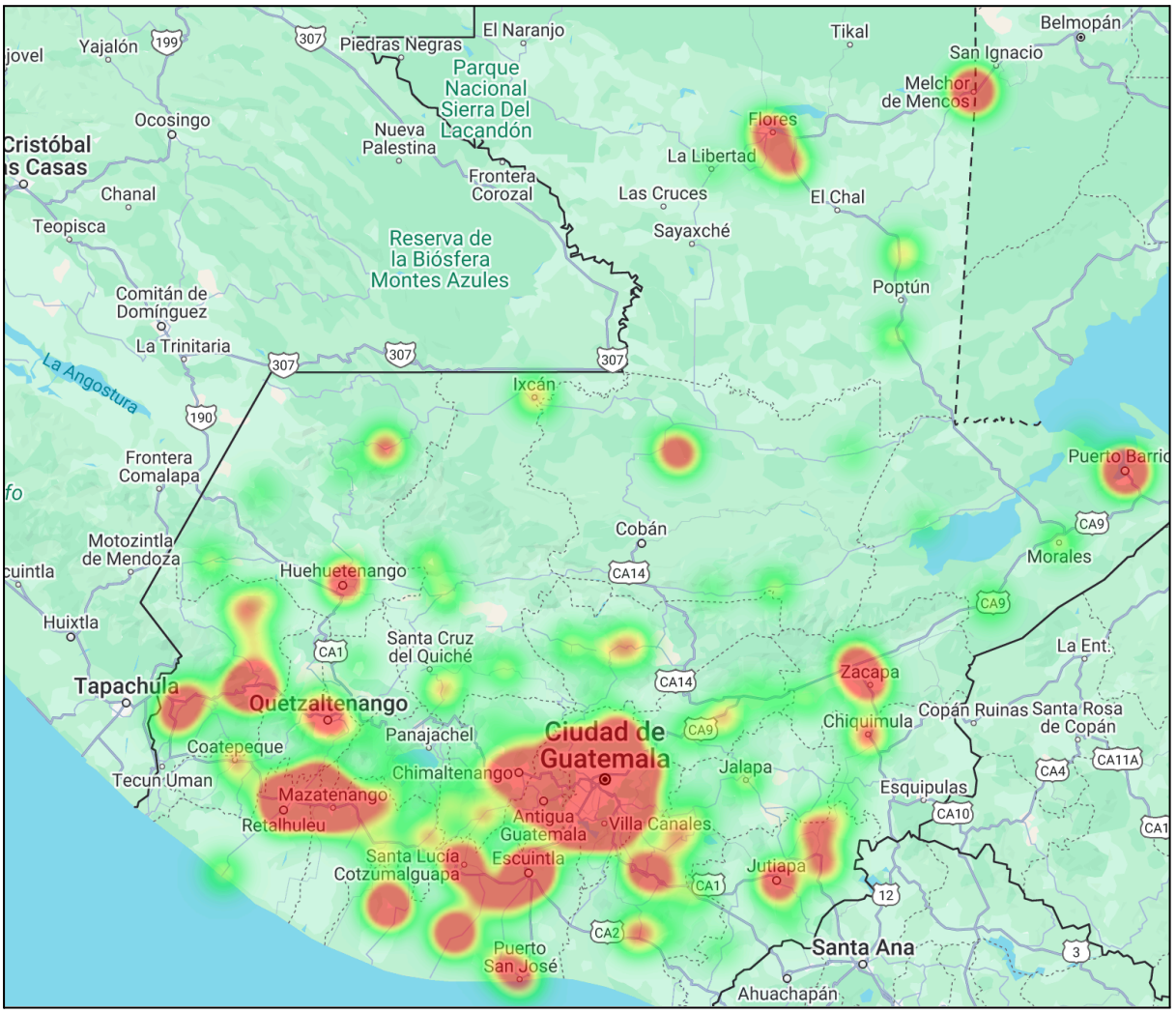

Geographic distribution of patient referrals to ROMP in Guatemala during the 2024 year.

At a glance we:

- ★ ***Delivered a record total of 379 high-quality prostheses in 2024, 99 more than originally planned.***
- ★ ***Provided CBR services to a record total of 137 participants in 2024, just under the number originally planned.***
- ★ ***Added key clinical and community capacity to address surging demand for our services.***
- ★ ***Conducted mobile clinics to provide care in two of the most remote parts of Guatemala.***
- ★ ***Conducted mass-delivery activity sponsored-by world-leading YouTuber Mr. Beast.***
- ★ ***Formed a partnership with a leading prosthetics school to train the future prosthetists of the region.***
- ★ ***Added lamination and adjustable socket capabilities to our prosthetics workshop.***
- ★ ***Made multiple visits to public hospitals in order to educate physicians and establish referral channels.***
- ★ ***Launched a national public relations and fundraising campaign.***

➔ In January, we made two new hires for our clinical team: Andrea Gómez as Operations Assistant and Celeste Montenegro as Clinical Hygienist. We made an outreach visit to the Hospital of Amatitlán, presenting to a number of surgeons and traumatologists about post-amputation care and patient referrals to ROMP. We made one new hire for the CBR team: Made Marin as Mobilizer. We launched Cohort 12 of the CBR Program, which will graduate a total of 70 participants. We continued working with Universidad Rafael Landívar and Universidad Mariano Gálvez, both of which provide physical therapy students to support physical therapy at our clinic. We began the first-ever audit process for ROMP in Guatemala with a local audit firm. We obtained our Tax Identification Number (NIT) from Guatemalan tax authority (SAT). We implemented the Rippling system for human resource management of our employees. All Guatemala staff attended the first-ever organization-wide meeting.

- In February, we traveled to the neighboring country of El Salvador to initiate a partnership with Universidad Don Bosco (UDB), through which ROMP will host prosthetics students at our clinics in Guatemala and Ecuador. We hosted a clinical volunteer program with expert clinicians from Mary Free Bed Hospital, which included a total of 16 national and international volunteers and mobilized a total of 21 patients. We conducted training on the Rippling platform for our employees. We created employment files for our employees. We opened several new bank accounts in Guatemala to improve financial management.

- In March, we created an inter-institutional partnership with the organizations BITOL and OSSA, as well as Dr. Carlos Herrera, that will lead to mobile clinic operations in the province of San Marcos. We conducted an outreach visit to the National Hospital of Cobán, presenting to a number of surgeons and traumatologists on post-amputation care and patient referrals to ROMP. We installed a lamination station in the workshop in order to allow for this new, high-quality method of socket fabrication later this year. We commenced fiscal accounting for ROMP in Guatemala, and the audit was completed and a report was submitted to ROMP Global. We conducted a quarterly team-building activity to facilitate the interpersonal dynamic between team members. All 11 contracts were finalized with our employees. We registered all employees with the Guatemala Social Security Institute (IGSS). We began the process to obtain residency and work permits for our Salvadoran employees.

- In April, we conducted the first visit of the mobile clinic to San Marcos, specifically to conduct the pre-prosthetic evaluations of over 25 patients. We conducted a visit to the National Hospital of Villa Nueva, presenting to a number of surgeons and traumatologists about post-amputation care and patient referrals to ROMP. We welcomed Elizabeth Johnsen, a Masters student in Prosthetics in the United States, for an extended clinic rotation, specifically in support of prosthesis fabrication. We interviewed several marketing agencies in order to secure assistance in improving the social media presence and public awareness of ROMP in Guatemala. We also joined the American Chamber of Commerce (AMCHAM) to facilitate networking with the private sector, particularly in search of corporate social responsibility support. We created a first draft of a fundraising plan in Guatemala.

- In May, we conducted the second visit of the mobile clinic in San Marcos, specifically to conduct the casting of the patients ready for prosthetic care. We returned there later in the month in order to deliver the prostheses. We welcomed five prosthetic students from UDB for their first-ever clinical rotation, as part of the ROMP-UDB partnership. We hired a marketing agency. We forged a partnership with the Turtle

Inn in Belize, providing care to a patient who is their employee, and receiving a major donation to fund a future mobile clinic in the Petén-Belize corridor. We also began developing a partnership with Hotel Vista Quince. We began developing a partnership with the Universidad del Valle de Guatemala (UVG), through which ROMP will host psychology students who will provide psychological support to patients at our clinic, starting in 2025. We hosted a training session of physical therapy techniques for people with amputation, for our employees and the university students, led by renowned Guatemalan physical therapist José Alfredo Velázquez.

➔ In June, we exceeded our production goal for the first half of the year, having delivered a total of 180 prostheses and a total of 1,141 appointments. The 5 UDB students and Elizabeth completed their clinical rotations with ROMP. We secured donations from FAKS Foundation, OSSA, and Naiomi Lundman to provide scholarships to the UDB students. We approved the communication and marketing strategy created by the marketing agency. We continued developing our partnership with Hotel Vista Quince, finalizing details for donations and exclusivity. We also developed partnerships with Universidad del Istmo (UNIS) and Instituto de Ciencias de la Familia (ICF) to bolster the psychology service at our clinic. We worked on plans for growing our occupational therapy service in the clinic in the second half of 2024. We registered ROMP Guatemala as an importer with SAT. We also implemented an expense approval system, Odoo.

➔ In July, we hosted a clinical volunteer program featuring training on carbon fiber lamination and the Click Medical adjustable socket systems. This program included a total of 5 volunteers from El Salvador and 10 international volunteers, and delivered a total of 10 highly-specialized prostheses. The CBR Program celebrated the participation of 70 participants from the first cohort this year. We received the first financial donation from Hotel Vista 15, initiating a program for recurring, monthly donations. We participated in a networking event by the American Chamber of Commerce (AmCham) in Guatemala, and held partnering meetings with key Guatemala companies, Linda Vista Foundation, and local prosthetist Eddy Fuentes.

➔ In August, we conducted planning for a mobile clinic in the northern province of Petén in partnership with the Turtle Inn Belize, and we prepared for an exploratory visit to Corozal, Belize, in partnership with Rotary Club Corozal. We began working with a public relations firm to coordinate a national public relations campaign and year-end fundraising event. We hosted a volunteer event with the staff of Hotel Vista 15 at the clinic. We held partnering meetings with the nonprofit organizations Faith In Practice and Partner for Surgery.

- ➔ In September, we conducted an exploratory visit to Corozal, Belize, and evaluated patients for the upcoming mobile clinic there in 2025. We conducted an outreach visit to the Public Hospital of Sololá. We made temporary hires of prosthetist Natalie Lucero and assistant Alicia Gonzales to facilitate increased patient volume during the fourth quarter of the year. We received a donation for patient sponsorship from the Believe in Belize organization. We conducted another event with the staff of Hotel Vista 15, as well as a patient event at Teatro Lux with sponsorship by the BAC and Eticket companies.

- ➔ In October, we hosted a clinical volunteer program, which included a total of 18 international volunteers and delivered a total of 30 prostheses, including upper-extremity prostheses. In parallel, we conducted a special, mass-delivery of 50 prostheses sponsored by YouTuber Mr. Beast. We conducted our first mobile clinic visit in the Petén province. We conducted our annual Mobility Conference at Hospital Cuilapa and Hospital San Juan de Dios with Dr. Danielle Melton as the invited speaker. We received significant donations including a vehicle for our mobile clinic from Mr. Beast, as well as tools from Cemaco to equip the mobile clinic. We completed registration as a guarantor for our prosthetists from El Salvador. We conducted strategic planning and budgeting for 2025.

- ➔ In November, we conducted our second mobile clinic visit in the Petén province. We received a donation to sponsor Belizean patients from the Turtle Inn Belize, and a grant from Telus International to develop our outdoor clinic infrastructure in 2025. We completed the clinical rotations of the physical therapy students from Rafael Landivar University, and we confirmed clinical rotations for psychology students from the Institute of Family Sciences in 2025. We conducted media tour interviews, year-end event planning. We started the process of securing temporary work residency for our Salvadoran prosthetists.

- ➔ In December, we surpassed our annual production goal, delivering a total of 379 prostheses against our original projection of 280, in 2024. We conducted our third mobile clinic visit in the Peten province, delivering a total of 25 prostheses. We closed the year with 579 patients on our waitlist for care in 2025, reflecting the surging demand for prosthetic care. We conducted our first-ever year-end fundraising event.

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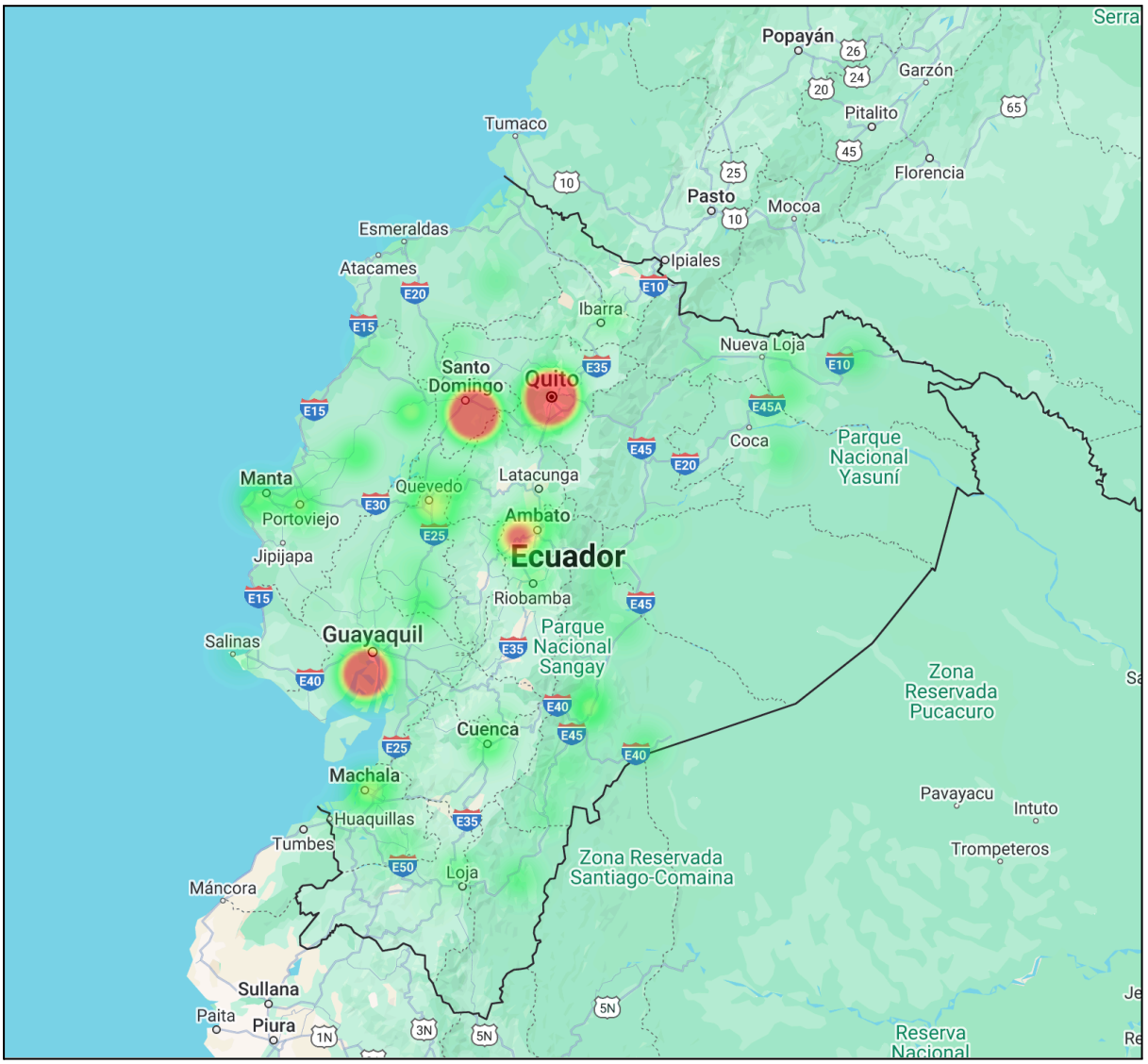
ROMP Ecuador

Update by Lili Romero, Country Director for Ecuador



Geographic distribution of patient referrals to ROMP in Ecuador during the 2024 year.

At a glance we:

- ★ ***Delivered a record total of 311 high-quality prostheses in 2024, 77 more than originally planned.***
- ★ ***Began incorporating periodic wrap-around services for physical and mental health, and livelihood promotion.***
- ★ ***Conducted mobile clinics to reach more geographically excluded patients in several regions of Ecuador.***
- ★ ***Enabled multiple patient-athletes to compete and medal in the Ecuadorian Paralympic Games.***
- ★ ***Increased production capacity of our prosthetics workshop through infrastructure investment.***
- ★ ***Conducted multiple clinical volunteer programs that increased production and facilitated information exchange.***
- ★ ***Secured numerous sponsorships from local governments and companies for non-paying patients.***
- ★ ***Built a powerful public relations platform throughout Ecuador to identify and sponsor patients for care.***

➔ In January, we conducted a mobile clinic visit to Machachi, specifically to develop a partnership for providing prosthetic care later in the year. We undertook various initiatives to strengthen our public relations and community engagement, specifically unveiling a mural aimed at raising awareness about mobility and diversity, demonstrating ROMP's commitment to inclusivity. Additionally, we were featured in the "Manos Solidarias" program on TC Television, specifically sharing the story of patient Eduardo Diaz and highlighting ROMP's achievements and impact. We renewed agreements with allied clinics. We delivered post-prosthetic kits in the first phase of the Vitality patient sponsorship program to patient beneficiaries.

➔ In February, we conducted mobile clinic visits to the province of Tungurahua, reaching patients from the towns of Píllaro, Cevallos, Ambato, and Riobamba, specifically to conduct first evaluations of patients. We also conducted a mobile clinic visit to the province of Morona-Santiago, specifically to conduct first evaluations, follow-ups, outcome measurements, and prosthesis deliveries. We initiated collaborations with the municipal governments of Putumayo and Gonzalo Pizarro,

which will result in prosthetic care being provided to their constituents through our mobile clinic. We finalized an agreement with the prosthetics program of the Universidad Don Bosco (UDB) of El Salvador, to provide their students with the opportunity to complete a clinical rotation at our clinic in Ecuador. We continued to strengthen our public relations and community outreach through various media channels in the towns of Píllaro, Macas, Putumayo, and Santo Domingo. We formed a partnership with IMPAQTO, specifically to channel their support program for women in the provinces where we have patients.

➔ In March, we completed significant infrastructure upgrades, including the construction of a new workshop with areas for lamination and assembly, and the increase from 2 to 5 workstations. We also inaugurated a ‘mobility tree’ wall to capture our wider community's experiences at ROMP.

➔ In April, we conducted a mobile clinic visit to the town of Putumayo, specifically to conduct first evaluations. We conducted a clinical volunteer program with 23 national and international volunteers, delivering a total of 24 prostheses. We continued to strengthen our public relations and community outreach through various media channels in the towns of Píllaro, Macas, Putumayo, and Santo Domingo. We delivered post-prosthetic kits in the first phase of the Vitality patient sponsorship program to patient beneficiaries.

➔ In May, we conducted a mobile clinic visit to the town of Putumayo, specifically to conduct prosthesis deliveries. We conducted a clinical volunteer program with 18 international volunteers, delivering a total of 25 prostheses.We welcomed 4 prosthetics students from UDB for the first-ever clinical rotation in the ROMP-UDB partnership. We maintained a strong presence in both local and national media channels, including Pichincha Universal, TC Televisión, and Ecuavisa, highlighting the "Moviendo Emprendedores" project. The latter showcased our first-ever entrepreneurship fair for patients who engage in economic activities to support themselves and their families. We received the draft version of the audit of ROMP in Ecuador, conducted by a local auditor.

➔ In June, we conducted a mobile clinic visit to the town of Machachi, specifically to conduct first evaluations of patients. We solidified an agreement with the municipal government of Lago Agrio, which will result in conducting mobile clinic visits to serve patients in this area. The 4 UDB students concluded their clinical rotations with ROMP. We secured sponsorship for 4 under-15 patients from the Fundación Hospital de los Valles, they are particularly committed to pediatric patients. We intensified communication efforts via content aimed at donors on social media platforms, with

the purpose of raising local funds. We advanced in the development of partnerships with Universidad de las Americas (UDLA) and Pontificia Universidad Católica del Ecuador (PUCE)commenced, aiming to enhance patient care and educational partnerships. Finally, we confirmed that Senior Prosthetist Mireya and patient Carlos Aguinda will participate in the ROMP elite in September of this year.

➔ In *July*, we hosted our third volunteer program, which included a total of 10 international volunteers and delivered a total of 21 prostheses. We visited our satellite clinic in Macas to conduct prosthetic evaluations. We began piloting a digital scanning and 3D-printing project in partnership with HORUS company. We held discussions about providing mobile care with public officials in the Sucumbíos Prefecture (Amazon region) and the Pasaje Municipality (Pacific region). We completed a re-training on outcome measures, as well as legal training on informed consent and patient data communication. We submitted our semi-annual financial statements and conducted two-way performance evaluations. Social media played a key role in raising awareness, as in the viral case of patient Patricio Guanocunga.

➔ In *August*, we hosted our fourth volunteer program of the year, which included a total of 5 international volunteers and delivered a total of 19 prostheses along with patient workshops on mental and physical health, and physical therapy sessions. We returned to our satellite clinic in Macas, conducting evaluations, casting, delivery, follow-ups, and outcome measurements, delivering a total of 8 prostheses. Devin Halvorson, a volunteer from Baylor College of Medicine, supported the team in Macas. The first edition of *Verano en Movimiento* was launched to showcase our work and promote sports participation for patients.

➔ In *September*, we partnered with the local governments of Quinsaloma and Centinela del Cóndor, treating a total of 5 patients. We also began developing a partnership with the government of Mimzach to provide care to patients in 2025. We initiated the second phase of our mobile care in Lago Agrio, evaluating a total of 20 new patients and conducting 9-month follow-ups with current patients. We conducted a SWOT analysis to assess our needs and vision for the next two years. We launched our national communication plan, partnering with public relations firm Randum. The Vitality partnership delivered its fourth batch of prostheses, and ROMP signed a formal contract with the Vitality company. We hosted the second *Verano en Movimiento* event with 50 participants, reaching the summit of mountain Pasochoa with local sponsors.

➔ In *October*, we conducted a special, mass-delivery of 54 prostheses sponsored by YouTuber Mr. Beast, including 6 running prostheses. We traveled to Riobamba to

support six para-athletes in the Ecuador Paralympic Games, marking the first time ROMP sent patients to a high-level competition and officially launching our sports prosthetics program under the name *No Limits*. We submitted our SWOT analysis, work plan, and budget for 2025 to the global team. Companies Saludsa and Equinoccial began fundraising efforts on behalf of ROMP. Mireya Moreno and Carlos Aguinda participated in the tenth-annual elite climb for ROMP on Cayambe.

- ➔ In *November*, we completed the second phase of our mobile care in Lago Agrio, delivering a total of 14 prostheses. We hosted our fifth volunteer program of the year, which included a total of 3 international volunteers and delivered a total of 19 prostheses in Macas. Despite facing 16 hours of power outages, the team successfully moved their operations across various transport methods to reach the required locations. We began the expansion of our workshop and improvements in machinery and equipment for future volunteer programs. Our athlete patients won second and first place at the VIII Cañar 2024 Adaptive Sports Games, and they also joined the Vitality Saludsa runners club. Pablo traveled to El Salvador for the "Uniendo Fronteras" conference, where he gained further clinical knowledge and shared his experience with ROMP.

- ➔ In *December*, we completed our final prosthesis deliveries, closed systems, finalized reports, and conducted a full inventory county. Vitality secured funding for three more patients.

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ROMP Global

Update by Jonathan Naber, Chief Program Officer

Recycled prosthetic knees and feet at the ROMP warehouse in Denver.

At a glance we:

- ★ ***Expanded the global warehouse space by 50% and hired a new Warehouse and Inventory Associate.***
- ★ ***Developed MoviliApp to enable digital management and scaling of the CBR Program in Guatemala.***
- ★ ***Developed modules for Outcome Measurement and Appointment Management in OpenMRS.***
- ★ ***Conducted country- and world-wide distribution of the Guatemalan National Rehabilitation Services Guide.***
- ★ ***Advocated with key Central America donors to increase commitments for disability-related funding.***
- ★ ***Created data-based pitch and information sheets for making the ROMP case with donors and partners.***
- ★ ***Created a Global Prosthetic Service Directory to guide people with amputation worldwide to providers of prosthetic care.***

➔ In January, we collaborated with the owner of the building where our global warehouse is located in order to construct an annex. This expanded our floor space by 50%, accommodating the growing volume of components received from donations and shipped to our clinical operations in Guatemala and Ecuador. We developed MoviliApp in the CommCare platform to enable the digital management of our CBR Program in Guatemala. We began shipping copies of the Rehabilitation Services Guide (RSG) to public and nonprofit contacts throughout the entire country of Guatemala.

➔ In February, we conducted a virtual training on the RSG for organizations that are members of El Directorio Guatemala.

➔ In March, we hired Toni Gloria, Warehouse and Inventory Associate. We packed major shipments of components for our clinical operations in Guatemala and Ecuador to boost their stock for this year's increased production. We moved into the annex and overhauled the layout of the warehouse to optimize our processes for taking-in and shipping-out inventory. We created one-page summaries of our patient populations and outcomes in Guatemala and Ecuador, for increasing awareness both within and beyond ROMP. We presented on the theme of disability and the RSG to

the Central America Donors Forum Donor Round Table (CADF DRT), in order to advocate for increased investment in disability and rehabilitation by these stakeholders. We launched the Outcome Measures Module in the OpenMRS system to enable digital outcome measures collection in Guatemala and Ecuador.

➔ In April, we conducted a national prosthetic limb drive during Limb Loss Awareness Month, leading to a significant increase in prosthetic component donations. We upgraded our processes by adding a station dedicated to cleaning components as part of their intake into the warehouse. We created the global pitch for ROMP, for fundraising and partnership development on a global level. We launched the Appointment Management Module in the OpenMRS system to enable digital scheduling of patient appointments in Guatemala and Ecuador. We conducted an in-person distribution of the RSG to the participants of the El Directorio event in the province of Solola. We supplied Focus Central America with copies of the RSG for distribution to their grantees from throughout Central America at their annual meeting in Guatemala City.

➔ In May, we completed our Q1 2024 analysis and reports for Guatemala and Ecuador, including for the first time a cumulative analysis of outcome measures from April 2023 to March 2024. We translated the global pitch into Spanish for use in Guatemala and Ecuador. We submitted our application for ethical approval for our upcoming scientific study to the ethics committee of the Nutritional Institute of Central America and Panama (INCAP). We sent a copy of the RSG to every public health center in the country of Guatemala. We conducted a virtual training on the RSG for the Organization for the Development of the Indigenous Maya (ODIM). We created editable, Spanish versions of the RSG and Poster to enable other Spanish-speaking countries to adapt this tool for their respective contexts.

➔ In June, we conducted a comprehensive physical inventory of the global warehouse, as well as in Guatemala and Ecuador. We added 200 new products into our global inventory management system. We launched a volunteer program, engaging Denver-based volunteers to assist with various tasks in the warehouse like sorting, cleaning, and counting. We conducted an in-person training on the RSG for staff members of Natun in the province of Solola, and the public health center in the province of Huehuetenango. We conducted an in-person distribution of the RSG to OSSA and Bitol in the province of San Marcos. We created editable, English versions of the RSG and Poster to enable English-speaking countries to adapt this tool for their respective contexts.

- ➔ In July, we conducted a virtual training on the RSG for community liaisons of RTI International throughout Western Guatemala.

- ➔ In August, we filled major component orders in our global warehouse for Guatemala and Ecuador in preparation of the upcoming mass-delivery of prostheses funded by YouTuber Mr. Beast. We conducted an in-person training on the RSG for public health staff in the provinces of Alta Verapaz, Totonicapan, and Huehuetenango, as well as for NGO staff in the Quiche province. We also began the development of the web app version of the RSG. Additionally, we began the recruitment of participants for the scientific study in Guatemala.

- ➔ In November, we created a Global Prosthetic Care Directory with the purpose of providing people with amputation around the world with interactive, online map of non-profit options for prosthetic care in their country.

- ➔ In December, we conducted our year-end inventory count at the global warehouse in Denver. We completed recruitment of participants for the scientific study in Guatemala.

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Operational Scorecard

Our most comparable output across our countries of operations is the number of prostheses delivered. We are achieving growth in this output in all three countries. The following table shows the number of prostheses delivered during 2024 and 2023, by country.

	Prostheses Delivered		
	2023	**2024**	**% Change**
Guatemala	240	379	+58%
Ecuador	239	311	+30%

In Q2 2023, ROMP began tracking individual services provided in each patient visit to the clinic in our countries of operation. The following table shows the number of individual services provided during 2024, by country.

	Individual Services Provided	
	2024	**2024**
	Guatemala	**Ecuador**
Service Provided		
First prosthetic evaluation	389	314
Prosthetic re-evaluation	502	164
Casting	334	310
Socket test	162	131
Prosthesis delivery	314	273
Pre-prosthetic physical therapy	836	236
Post-prosthetic physical therapy	750	367
Prosthesis adjustment	230	408
Prosthesis repair	19	26
Socket change	65	38
Component change	89	156
Appointment with psychologist	0	63

Appointment with physician	0	1
Guidance on alternative services	0	0

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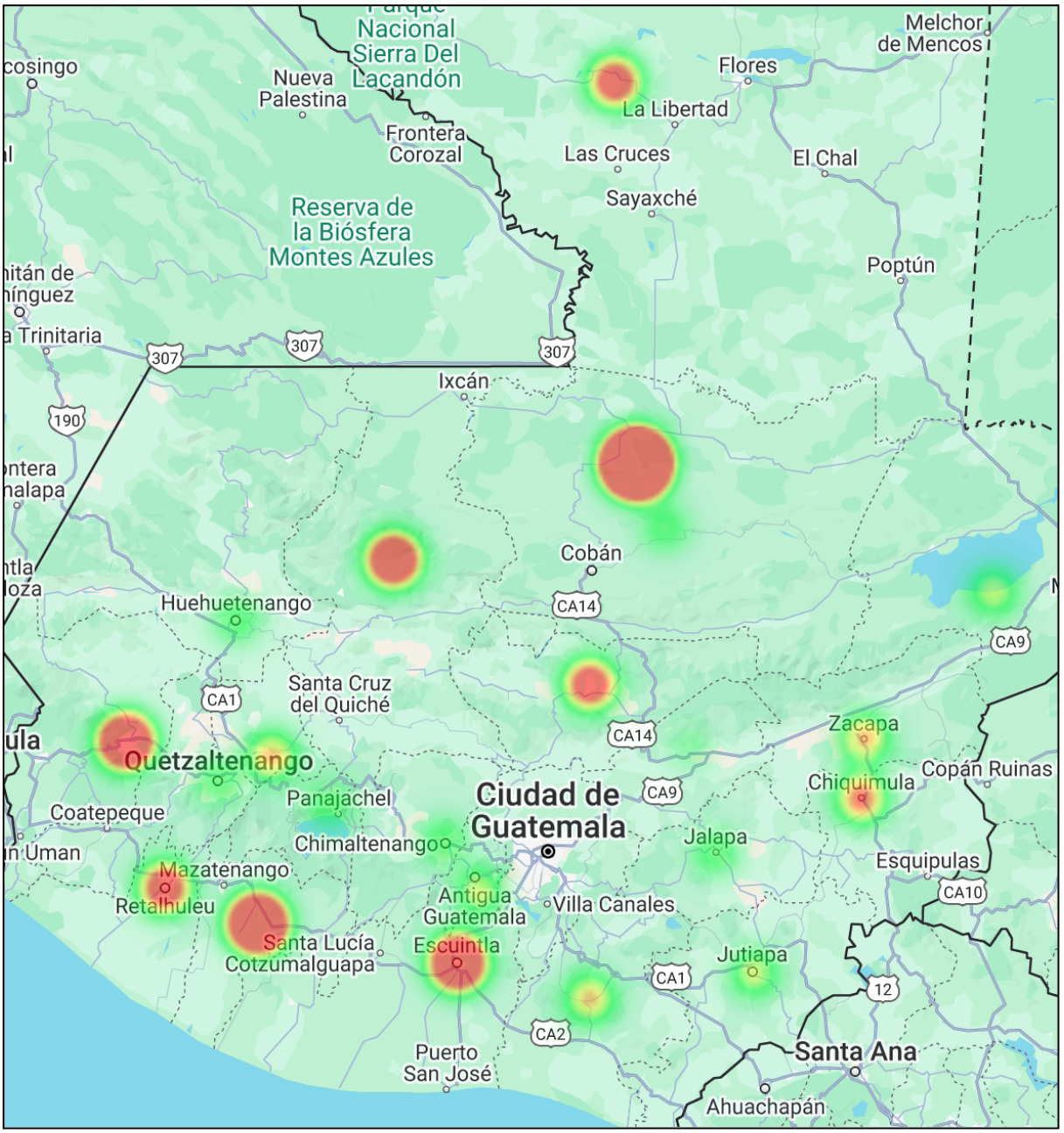
CBR Project Progress



Geographic distribution of CBR Program participants during the 2024 year.

At a glance we:

- ★ ***Hired two additional Mobilizers to meet increasing demand for CBR and OT services.***
- ★ ***Developed MoviliApp to digitally guide all home visits and intervention plans.***
- ★ ***Piloted a mindfulness program to improve the emotional management of participants.***
- ★ ***Launched a formal peer mentoring program to connect graduates and current participants.***
- ★ ***Coordinated multiple limb revision surgeries to enable patients to become prosthesis users.***
- ★ ***Initiated a randomized-controlled trial to compare the impact of CBR on the outcomes of patients.***

Capacity Building

In the first half of the year, we hired Made as a dual Mobilizer-Occupational Therapist, and in the second half of the year, we hired Donald as a Mobilizer-Physical Therapist. We also promoted Elly to Field Supervisor. The enhanced team now includes Elly as Field Supervisor, Erika as Mobilizer-Physical Therapist, Made as Mobilizer-Occupational Therapist, and Donald as Mobilizer-Physical Therapist. Our Mobilizers are responsible for conducting home visits to, and coordinating services for, our CBR participants. They are also responsible for providing physical/occupational therapy at the clinic, and collecting outcome measures with all patients at the clinic.

We conducted several training sessions for the CBR team throughout the year. In January, the team completed a re-training on outcome measures. In February, the team received training on using the new MoviliApp for conducting home visits. In April, the team completed training on Mindfulness. In May, the team received training on Human Subjects Research. In June, the team completed training on the study protocol. In July, the team received training on patient recruitment for the study and re-training on clinical documentation. We also provided management training to the Field Supervisor throughout the year.

Since 2023, we have a robust clinical rotation program for physical therapy students. In 2024, we trained a total of 19 physical therapy students - 15 from the Universidad Rafael

Landívar (URL) and 4 from the Universidad Mariano Gálvez (UMG), to support the CBR Program. Each volunteer was assigned around 10 CBR participants to whom they provided virtual physical therapy. Additionally, physical therapy students from both URL and UMG provided in-person physical therapy to both CBR and non-CBR patients at the clinic, under the supervision of Erika.

Participant Recruitment

We identified candidates for the CBR Program by reviewing the patients in the Referral Management Table in the OpenMRS system. All patients referred to ROMP undergo a standard socioeconomic study to objectively determine their relative level of vulnerability. Based on their responses in the study, they are characterized in a 'segment' between 1 (most vulnerable) and 4 (least vulnerable). Patients in segment 1 are not required to make a copayment for their prosthetic care at ROMP, while patients in segments 2 and 3 are. Patients in segment 4 are referred on to private providers outside of ROMP.

Adult patients designated as segment 1 and segment 2, as well as all children, were screened to determine if they met the requirements for participation in the CBR Program. In the affirmative, candidates were administered a brief mental health screen. Segment 1 candidates who did not meet the requirements/pass the mental health screen were scheduled to receive prosthetic care during the next scheduled clinical volunteer program. These volunteer programs take place throughout the year and serve non-paying patients via volunteer clinicians. Segment 2 candidates who did not meet the requirements/pass the mental health screening proceeded with standard prosthetic care.

In the first half of the year, we conducted special outreach to key institutions in search of pediatric patients. We also recruited a number of participants from the mobile clinic we conducted in the San Marcos province. During the second half of the year, we implemented a randomization approach to selecting the segment 2 participants for the CBR Program as part of our randomized-controlled trial. Segment 1 participants were selected according to our normal process.

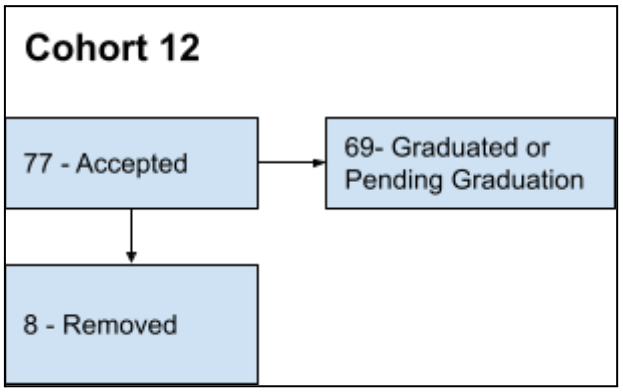
Descriptive characteristics of the Cohort 12 and 13 participants are provided below.

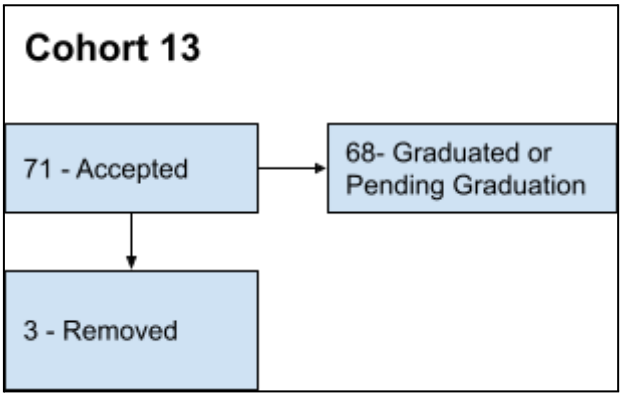
Cohort 12 - Total of 69 Participants				
Sex	**Age (Years)**	**Province**	**Amputation Level**	**Amputation Cause**
Female = 16 Male = 53	Oldest = 63 Youngest = 2	Baja Verapaz = 2 Chimaltenango = 1	Hip disarticulation = 6 Partial Hand = 4	Animal Bite = 1 Cancer = 4

	Average = 33	Chiquimula = 1 El Progreso = 1 Escuintla = 9 Guatemala = 14 Huehuetenango = 1 Izabal = 2 Jalapa = 1 Jutiapa = 1 Quiche = 5 Retalhuleu = 4 Sacatepéquez = 1 San Marcos = 10 Santa Rosa = 2 Suchitepéquez = 8 Totonicapán = 4 Zacapa = 2	Transfemoral = 41 Transhumeral = 2 Transradial = 3 Transtibial = 13	Congenital = 7 Diabetes = 21 Thrombosis = 1 Trauma = 35

Cohort 13 - Total of 68 Participants				
Sex	**Age (Years)**	**Province**	**Amputation Level**	**Amputation Cause**
Female = 19 Male = 49	Oldest = 69 Youngest = 1 Average = 40	Baja Verapaz =5 Chimaltenango = 1 Chiquimula = 3 Escuintla = 3 Guatemala = 23 Huehuetenango = 1 Izabal = 1 Jalapa = 1 Jutiapa = 2 Quiche = 5 Retalhuleu = 3 Sacatepéquez = 2 San Marcos = 2 Santa Rosa = 2 Suchitepéquez = 8 Zacapa = 2 Sololá = 2 Alta Verapaz = 1 Petén = 6 Quetzaltenango = 2	Hip disarticulation = 4 Partial Hand = 1 Transfemoral = 44 Transhumeral = 2 Transradial = 4 Transtibial = 14 Knee disarticulation = 1 Partial Foot = 1	Cancer = 5 Congenital = 5 Diabetes = 31 Thrombosis = 1 Trauma = 26

A flowchart outlining the recruitment process for Cohort 12 and 13 participants is provided below.





Participant Kits

Upon entry into the Program, each participant was provided a pre-prosthetic kit that contained materials for wound care, residual limb bandaging, sound leg care, and pre-prosthetic exercises. They also received their Pre-Prosthetic Rehabilitation Wheel and Pre-Prosthetic Exercises Booklet.

Home Visits

Each participant received a home visit by their designated Mobilizer, twice per month, during a period of five months. Approximately 40% of the home visits were conducted in-person, and 60% virtually, in order to optimize resource utilization. The Field Supervisor and Mobilizers continuously updated a participant management spreadsheet.

The Mobilizer was guided through each visit, on their mobile device, by MoviliApp, which displays each step in the visit protocol and requires the user to enter the information as they go. The visit protocol includes: details about the visit, vital signs, assistive technology, sound leg, residual limb, activities of the past two weeks of the Rehabilitation Wheel, and activities of the next two weeks of the Rehabilitation Wheel. They practiced the exercises corresponding to the next two weeks, to ensure the participant was clear on what to do. The Mobilizer submitted the information upon completing the visit, and the Field Supervisor was able to review it in real time from headquarters.

Around the midpoint of the cohort, the Mobilizer reviewed our *Managing my Health* booklet with the participant during two consecutive home visits. The purpose of this activity was to provide the participant with information about how to care for themselves and how to access publicly-available services following their graduation from the CBR Program.

Intervention Planning

During the first home visit the Mobilizer worked with the patient to create an intervention plan that detailed their 5 goals for the next 5 months, as well as the services required by the patient from the options available in the Program. The Mobilizer was guided through this process by, and uploaded the plan through, MoviliApp.

Around the midpoint and endpoint of the cohort, the Mobilizer reviewed the progress of the goals with the participant.

Service Coordination

Each participant received various services corresponding to what was specified in their intervention plan. Whenever possible, the CBR Program looked for publicly-available or donated services, in order to optimize resource utilization and to lay the foundation for continued access. Services included the following:

- Prosthetic care was provided at the ROMP clinic in Guatemala City. Participants received an initial evaluation during the pre-prosthetic phase of their participation, and then proceeded to casting and delivery when they deemed ready. Participants received follow-up care at 1-, 3-, 6-, and 12-months post-delivery. The physical therapy students conducted virtual physical therapy sessions for their designated participants, with a frequency that corresponded to the needs of the patient.

- Group therapy was offered to all participants by psychologists affiliated with the CBR Program. Participants needing individual mental health care were scheduled for

appointments with one of the mental health providers affiliated with the Program. A few participants received antidepressant medication. In Cohort 12, 4 group therapy sessions were provided to pediatric participants, and 5 sessions were provided to adult participants. In Cohort 13, 5 group therapy sessions were provided to pediatric participants, and 5 sessions were provided to adult participants. Sessions were conducted virtually to maximize participation across a wide geographical area.

- Medical care was coordinated for various participants, including those who needed surgical modifications to their residual limbs in order to become prosthesis users. ROMP helped coordinate the surgeries through our contacts in the public health system. In Cohort 12, this included 2 children and 5 adults. In Cohort 13, this included 2 adults. We also provided post-surgical wound care support to participants and helped coordinate other clinical services such as general, pediatric, and ophthalmological medicine.

- EcoFiltro water filters were provided to participants who did not have a reliable source of clean drinking water in their homes. ROMP receives a highly discounted rate from the EcoFiltro company in Guatemala. In Cohort 12, we provided 26 participants with filters, and in Cohort 13, we provided 13 participants with filters.

- We partnered with the Guatemalan association ASCATED to provide pre-laboral workshops for adult CBR participants. In Cohort 12, 18 participants were impacted by the ASCATED workshop. In Cohort 13, 10 participants were impacted by the ASCATED workshop. We also created a database of candidates for labor inclusion in companies. In Cohort 12, 12 participants were added to this database, and in Cohort 13, 8 participants were added. Additionally, we provided interview tips, CV reviews, and follow-up on the process for patients seeking wage employment. We also held a workshop on making fabric necklaces for patients and supported them in setting up their own economic activities.

Community Contacts

Each participant was connected to a community contact, who are influential members of the communities where participants live and help participants to connect to community-level resources. In many cases, the participant themself identified their community contact. ROMP provided virtual training and printed materials to these community contacts, and conducted follow-up. In Cohort 12, 58 patients were paired with community contacts, and in Cohort 13, 71 patients were paired with community contacts.

Peer Mentors

In 2024, we created a formal peer mentoring program for participants. Mentors are outstanding graduates of the CBR Program who share their lived experience of amputation/rehabilitation with current participants. These mentors were identified by our Mobilizers. ROMP provided virtual training to the peer mentors, and conducted follow-up. In Cohort 12, 59 participants were paired with peer mentors, and in Cohort 13, 71 participants were paired with peer mentors.

Special Project - MoviliApp

In January 2024, we created MoviliApp to digitally manage the cases in the CBR Program. We built the app on the CommCare platform, which allowed for customization according to our program's needs. The app contains four key forms: Intake, Pre-Prosthetic Home Visit, Post-Prosthetic Home Visit, and Intervention Plan. Each mobilizer fills out the Intake form for each of their patients. They work through the Pre- or Post-Prosthetic Visit form during each home visit and also complete an Intervention Plan form for each participant. All of these forms are administered from the mobilizer's mobile device. They are stored in the cloud and are accessible to program managers through the CommCare web interface. Implementing MoviliApp has greatly improved the consistency with which visits are conducted and centralized all information into a single digital location.

Special Project - Mindfulness

In April 2024, we piloted a Mindfulness Program for the participants of the CBR Program. The objective of this program is to help participants live a fulfilling life by accepting their present situation, fully experiencing their emotions, and realizing they have more inner resources than they may recognize, rather than struggling against them. The program includes two key elements: sending twice-weekly mindfulness recordings to participants via WhatsApp and teaching the practice of mindfulness during group therapy sessions. The recordings covered a wide range of topics relevant to the psychology of amputation. In Cohort 12 and 13 we sent out 34 recordings to each. All recordings were saved for reuse with future CBR participants and, eventually, with non-CBR participants.

Goal and Objectives Tracking

Goal: To lay the foundation for increased adoption of the CBR model both within and beyond ROMP.

Objective 1: Expand access to CBR services to reach 50% of all ROMP patients being delivered a new prosthesis in Guatemala.	*On track.* ● In 2024, we had a total of 137 participants of our goal of 140 participants. ● We increased our community and clinical capacity by hiring additional mobilizers and an operations assistant. ● We conducted mobilc clinic operations in the San Marcos and Peten provinces of Guatemala. ● We developed and launched a Guatemala communications and fundraising strategy.
Objective 2: Develop a digitial platform for managing the CBR Program and sharing the model with other organizations that serve people with amputation.	*On track.* ● We developed and implemented MoviliApp to conduct all home visits. ● We further developed OpenMRS in preparation to link it with MoviliApp. ● We launched a randomized-controlled study on the effect of of CBR services on patient outcomes. ● We developed a plan for distributing the ROMP Mobility Toolkit to mobility organizations worldwide.

Outcome Measurements

In Guatemala, all patients fall into one of two categories: patients who receive Community-Based Rehabilitation (CBR) services and patients that simply receive prosthetic care. For CBR patients, outcome measurements are taken when they enter the CBR Program (Point 1), when their prosthesis is delivered (Point 2), and during follow-ups at 3, 6, and 12 months post-delivery (Points 3, 4, and 5, respectively). The specific set of measures administered to the patient depends on their age range (5-12 years, 13-17 years, or 18+ years) and clinical status (pre-delivery, delivery, or follow-up).

The following table shows the instruments that are administered, the category(ies) they explore, the specific result(s) they include, and the version(s) of the battery in which they were included.

The data collected are shown below:

Instrument	Category	Specific Outcome	Version(s)
TAPES-R	Mental health Physical mobility Quality of life	Psychosocial adjustment Activity restriction Satisfaction with prosthesis Additional medical items	5-12, 13-17, 18+ (Delivery onwards)
2MWT	Physical mobility	Walking ability	5-12, 13-17, 18+ (All points)
TUG	Physical mobility	Basic mobility	5-12, 13-17, 18+ (All points)
AMP	Physical mobility	Functional level	5-12, 13-17, 18+ (All points)
Assistive device info	Physical mobility	Assistive devices used	5-12, 13-17, 18+ (All points)
SCS	Physical mobility	Socket comfort score	5-12, 13-17, 18+ (Delivery onwards)
Health info	Physical health	Health conditions	5-12, 13-17, 18+ (All points)
Clinical measurements	Physical health	Blood pressure Blood glucose Body mass index	5-12, 13-17, 18+ (All points)
PHQ-9	Mental health	Depression severity	5-12, 13-17, 18+ (All points)
GAD-7	Mental health	Anxiety severity	5-12, 13-17, 18+ (All points)
SF-36 (18+ only)	Physical mobility Physical health Mental health	Physical functioning Pain Role limitations due to health problems Role limitations due to emotional problems Emotional wellbeing Social functioning Energy/fatigue	18+ (All points)

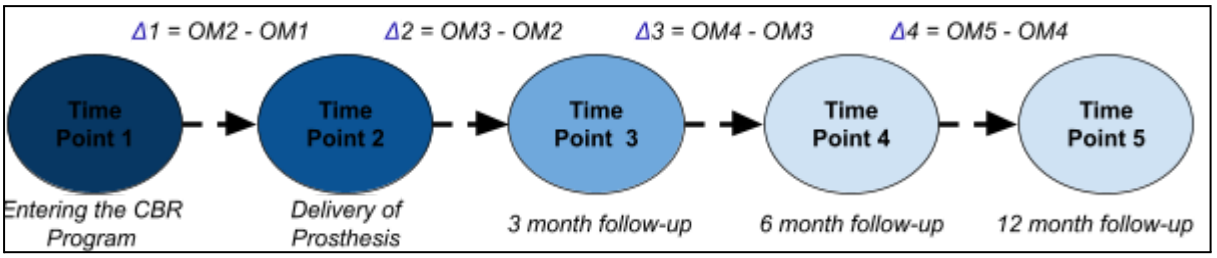
		General health	
WHOQoL-BREF (18+ only)	Quality of life	Physical quality of life Psychological quality of life Social quality of life Environmental quality of life	18+ (All points)
PedsQL (<18 only)	Quality of life	Physical quality of life Emotional quality of life Social quality of life Educational quality of life	5-12, 13-17 (All points)
LSMS (18+ only)	Livelihood	Having worked	18+ (All points)
Education (<18 only)	Education	Having studied	5-12, 13-17 (All points)

The data included in the following analysis is from patients measured between February 5, 2024 and January 29, 2025. This start date was established because it is from this day that all measurements have been collected in OpenMRS. The data scientist accessed the data from OpenMRS and consolidated it into a results table. Our Monitoring & Evaluation Department then analyzed and interpreted the results.

The data were structured so that for each patient, the measurements taken at the time of first evaluation were considered Time Point 1. Measurements taken at the time of prosthesis delivery were considered Time Point 2. Measurements taken at the 3-month follow-up were considered Time Point 3. Measurements taken at the 6-month follow-up were considered Time Point 4. Measurements taken at the 12-month follow-up were considered Time Point 5.

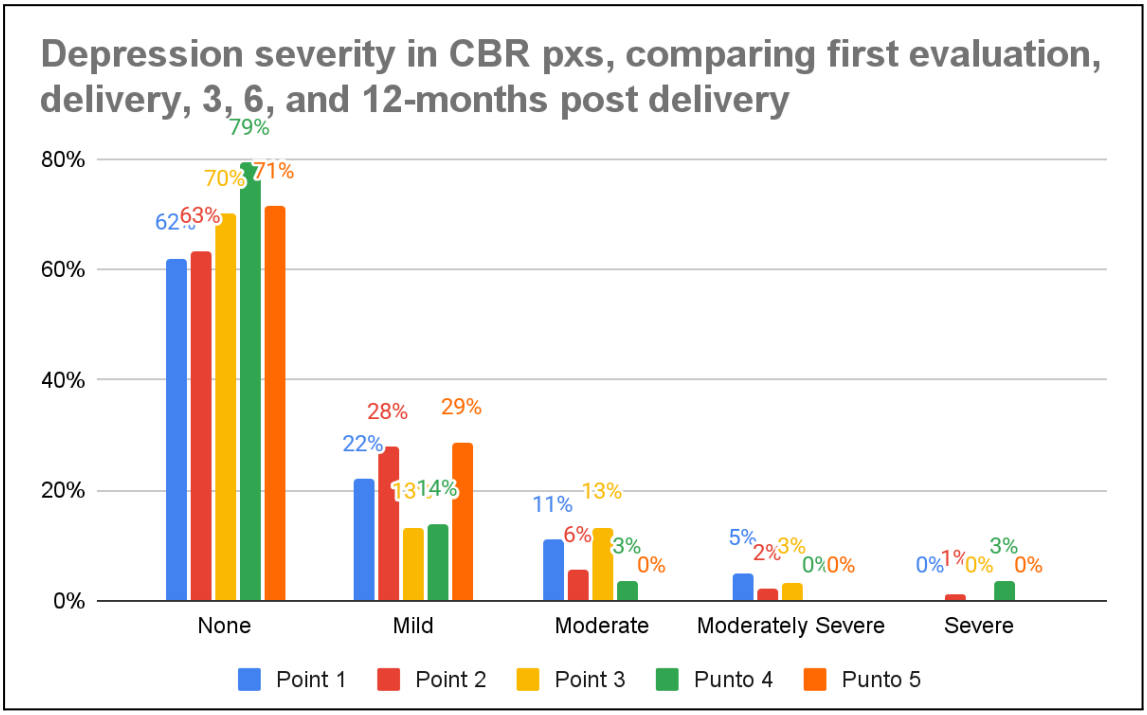
The basic premise of this analysis is to examine the change, or delta (Δ), in outcome measures from one time point to the next. This tells us how a given outcome measure changes from first evaluation to delivery (Δ1), from delivery to the 3-month follow-up (Δ2), from the 3-month follow-up to the 6-month follow-up (Δ3), and finally from the 6-month follow-up to the 12-month follow-up (Δ4).

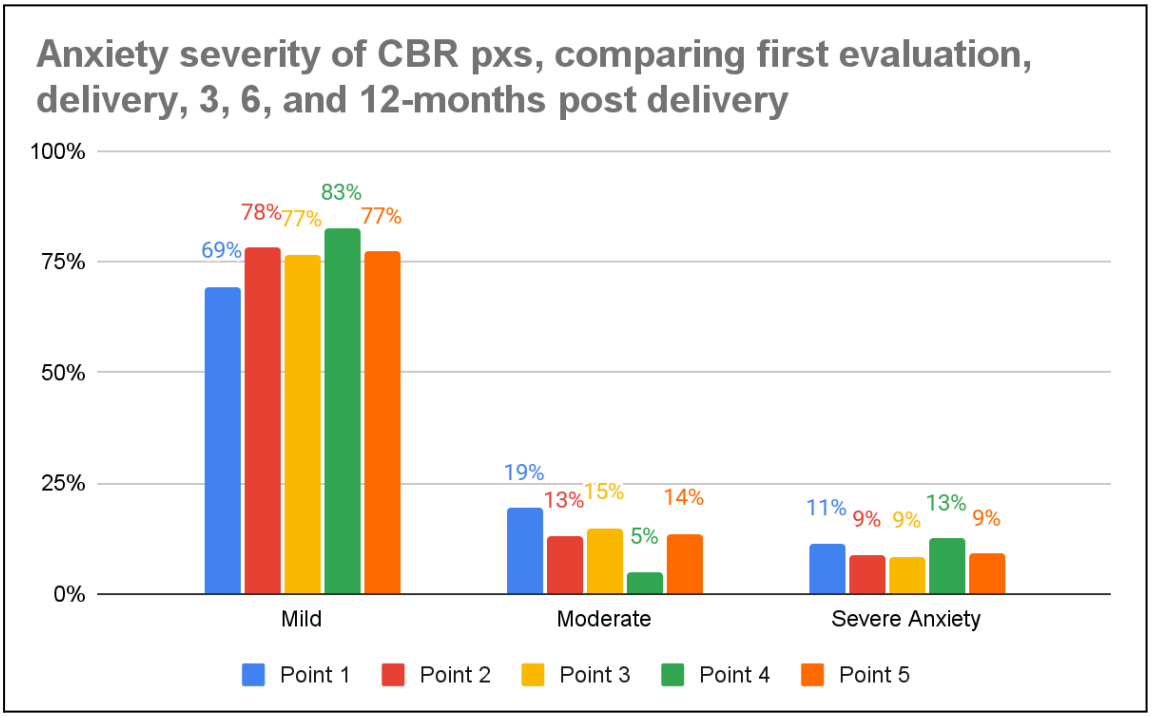
The following figure shows how the data were structured in the database and the concept of measuring deltas for CBR and non-CBR patients.

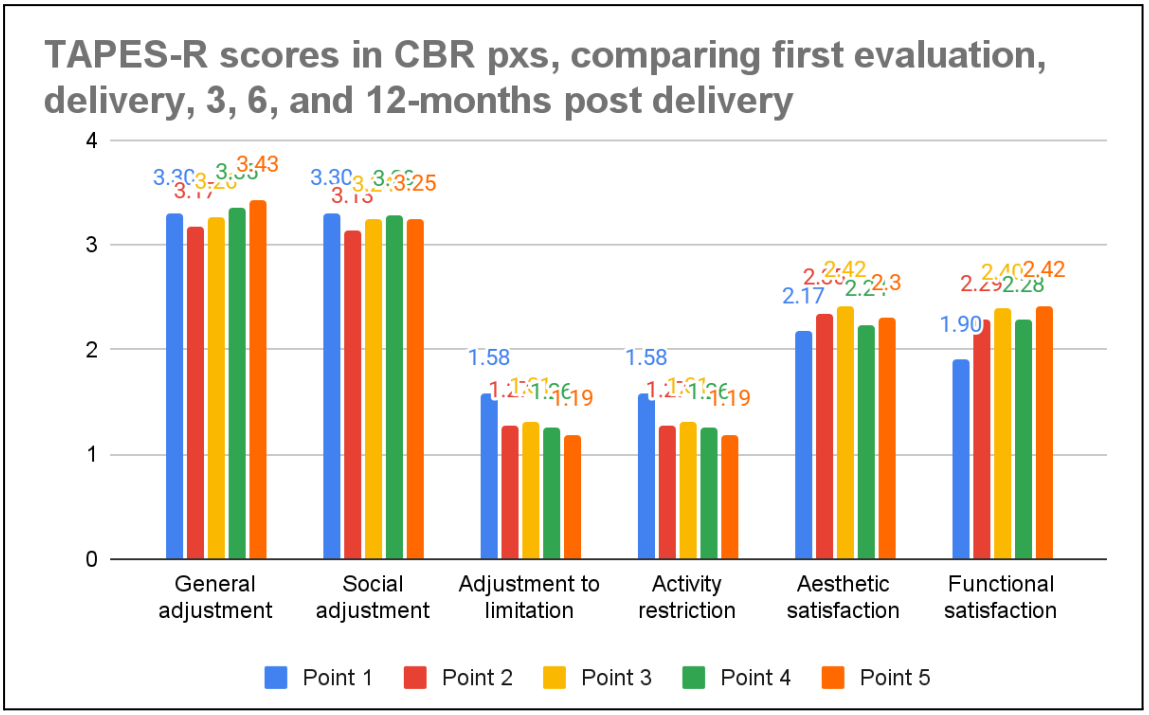


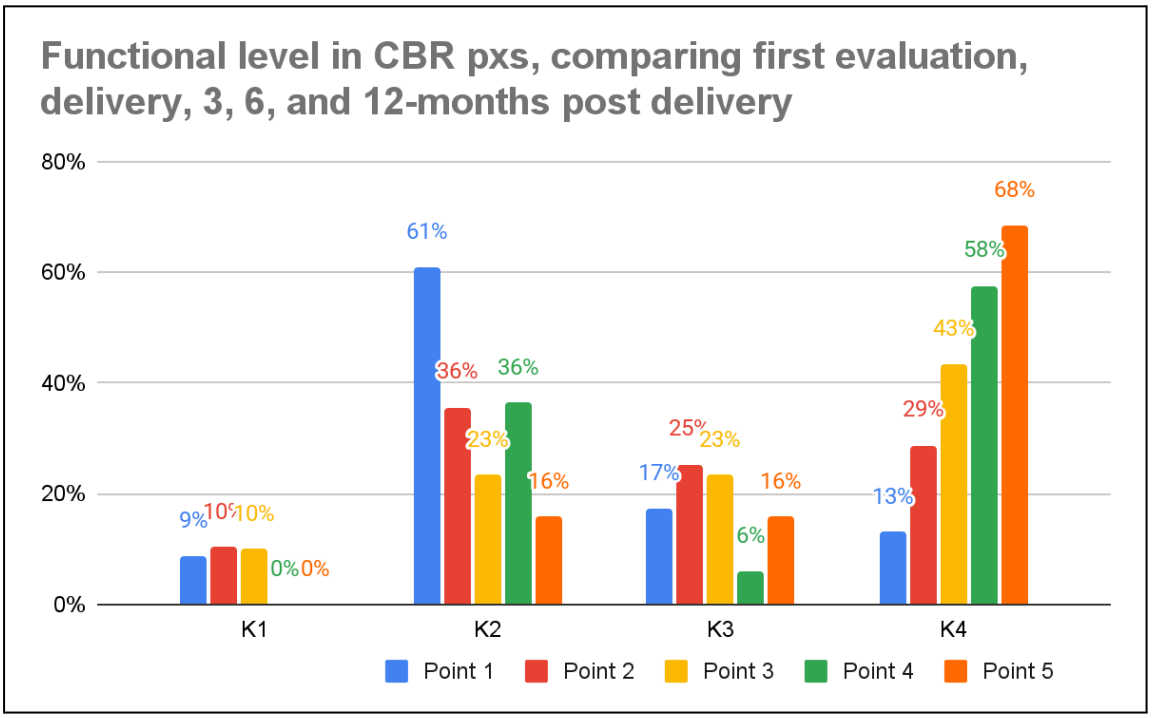
It is important to note that this analysis does not offer a perfect comparison between each time point since there is variation between the exact patients included in each time point. Therefore, these comparisons should be interpreted with caution. The ongoing randomized-controlled trial will provide a more valid and reliable analysis of the impact of the CBR Program on patient outcomes.

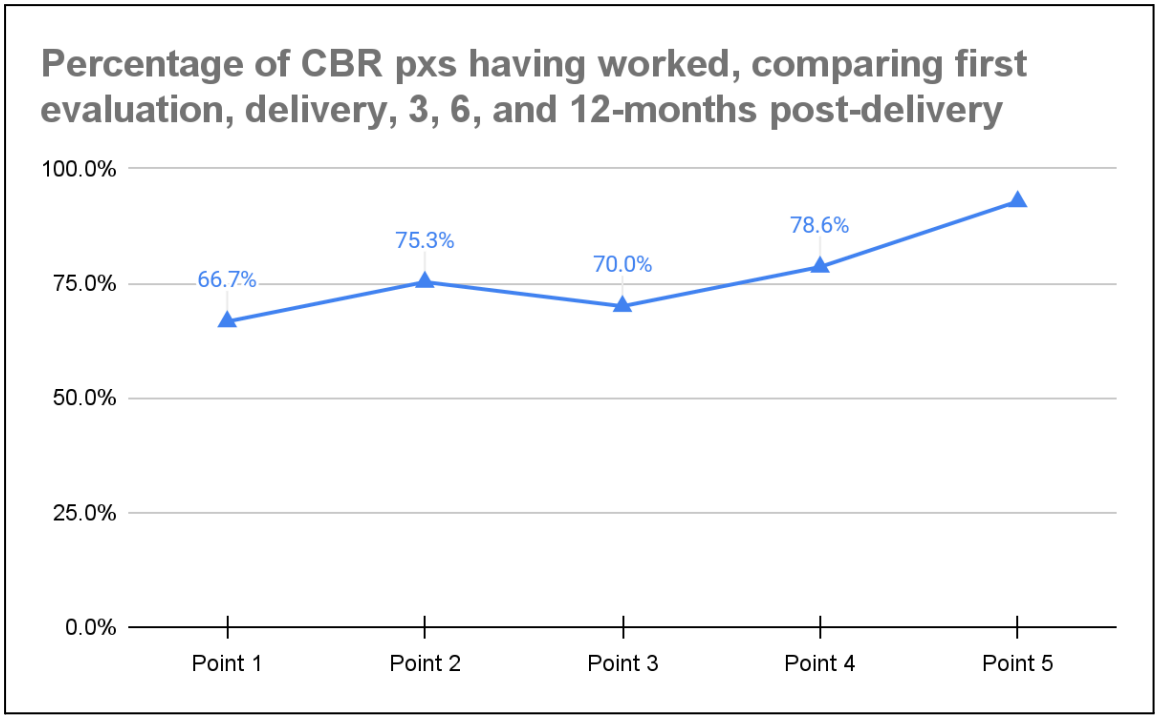
Results in Guatemala, CBR Participants at All Time Points, Cumulative from 5 February 2024 to 29 January 2025

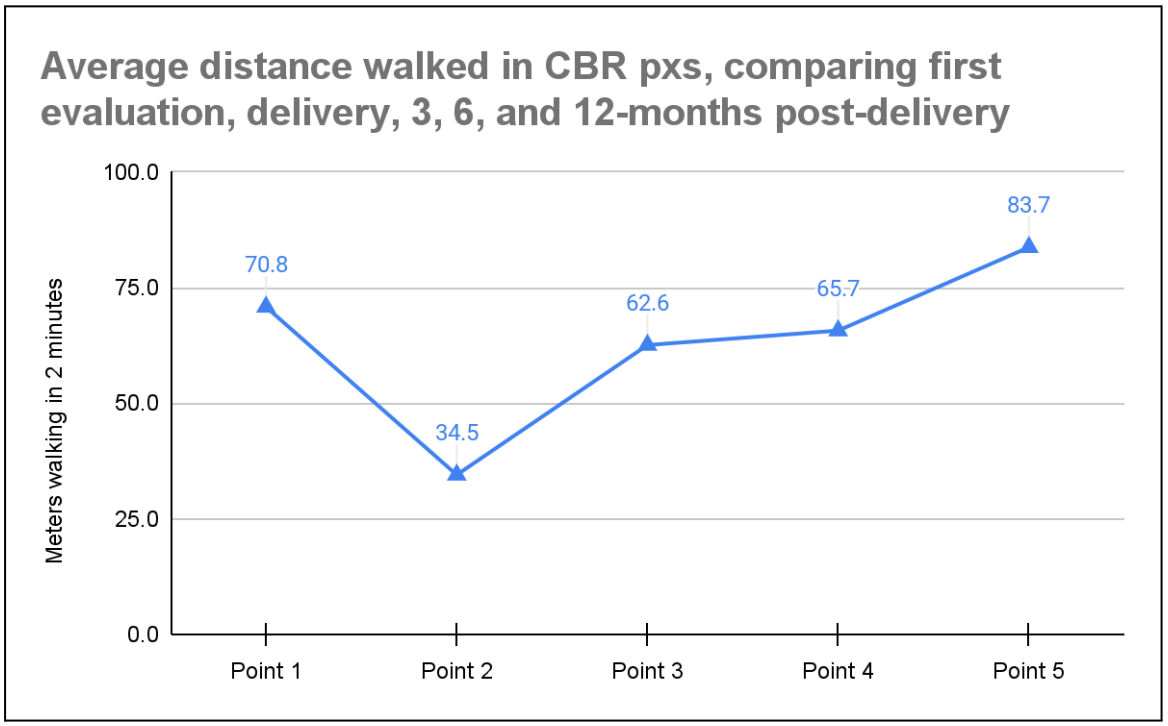





TAPES-R scores in CBR pxs, comparing first evaluation, delivery, 3, 6, and 12-months post delivery
4
3
2
1
0
3.43
3.25
1.58
1.58
2.17
2.3
1.90
2.42
General adjustment
Social adjustment
Adjustment to limitation
Activity restriction
Aesthetic satisfaction
Functional satisfaction
Point 1
Point 2
Point 3
Point 4
Point 5


Functional level in CBR pxs, comparing first evaluation, delivery, 3, 6, and 12-months post delivery
80%
60%
40%
20%
0%
9%
10%
10%
0%
0%
61%
36%
23%
36%
16%
17%
25%
23%
6%
16%
13%
29%
43%
58%
68%
K1
K2
K3
K4
Point 1
Point 2
Point 3
Point 4
Point 5


Percentage of CBR pxs having worked, comparing first evaluation, delivery, 3, 6, and 12-months post-delivery
100.0%
75.0%
50.0%
25.0%
0.0%
66.7%
75.3%
70.0%
78.6%
Point 1
Point 2
Point 3
Point 4
Point 5


Average distance walked in CBR pxs, comparing first evaluation, delivery, 3, 6, and 12-months post-delivery
Meters walking in 2 minutes
100.0
75.0
50.0
25.0
0.0
70.8
34.5
62.6
65.7
83.7
Point 1
Point 2
Point 3
Point 4
Point 5

When comparing time points in CBR patients:

- ➔ A trend is observed towards less depression and anxiety severity in CBR patients as they progress from Point 1 to Point 5. *This suggests that patients who receive CBR services experience decreased depression and anxiety severity as time progresses.*
- ➔ A difference is observed in the average distance walked in CBR patients as they progress from Point 2 (34.5 m) to Point 5 (83.7 m). *This suggests that patients who receive CBR services experience increased walking ability as time progresses.*
- ➔ A trend is observed towards higher functional levels in CBR patients as they progress from Point 1 to Point 5. *This suggests that patients who receive CBR services experience improved functional level as time progresses*.
- ➔ A higher percentage of CBR patients reported having worked at Point 5 (92.9%) compared to Point 1 (66.7%). *This suggests a higher probability of working in patients who receive CBR services as time progresses.*
- ➔ ***Overall, our CBR patients are less depressed and anxious, more physically mobile, and more likely to be working as time progresses.***

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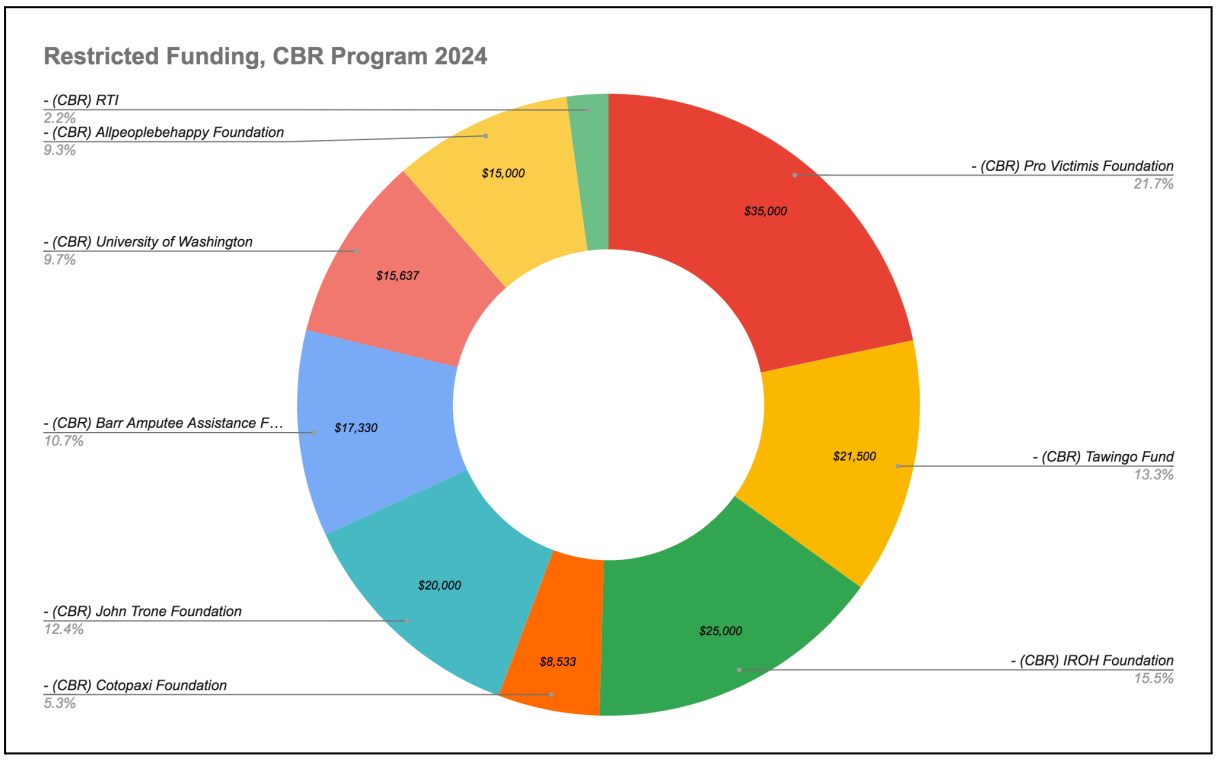
CBR Project Finances

Evaluating the residual limbs of a CBR Program participant with bilateral amputation.

Incomes

ROMP Global budgeted a total of $161,500 for use by the CBR Program in 2024, which included $154,000 for graduating 140 participants and $7,500 for MoviliApp development. This funding came exclusively from grant sources, as shown in the following chart:



Expenses

The ROMP CBR Program projected a total expense of $161,500 in 2024. As of 31 December 2024, the program had spent $137,439 (86% of the budget for the year). The following table shows the projected versus actual incomes and expenses for this time period:

	JAN-DIC 2024		
	PROJECTED	**ACTUAL**	**% EXECUTED**
INCOMES			
- CBR Program			
- ROMP Global Financing	***$161,502***	*$156,761*	*97%*

TOTAL	*$161,502*	*$156,761*	*97%*
CBR team salaries	*$62,000*	*$56,348*	*91%*
CBR team insurance	*$1,800*	*$385*	*21%*
CBR team technology	*$1,152*	*$989*	*86%*
CBR team transportation	*$6,192*	*$5,936*	*96%*
CBR team kits	*$600*	*$798*	*133%*
CBR participant pre-prosthetic kits	*$1,910*	*$2,037*	*107%*
CBR participant mobility aids	*$1,000*	*$487*	*49%*
CBR participant medical services	*$2,500*	*$2,719*	*109%*
CBR participant vocational training	*$1,000*	*$73*	*7%*
CBR participant water filters	*$2,000*	*$1,637*	*82%*
CBR participant transportation	*$1,274*	*$122*	*10%*
CBR printed materials	*$4,000*	*$2,683*	*67%*
CBR participant prosthetic care	*$66,885*	*$55,923*	*84%*
CBR MoviliApp development	*$7,500*	*$7,303*	*97%*
TOTAL	***$159,813***	***$137,439***	***86%***

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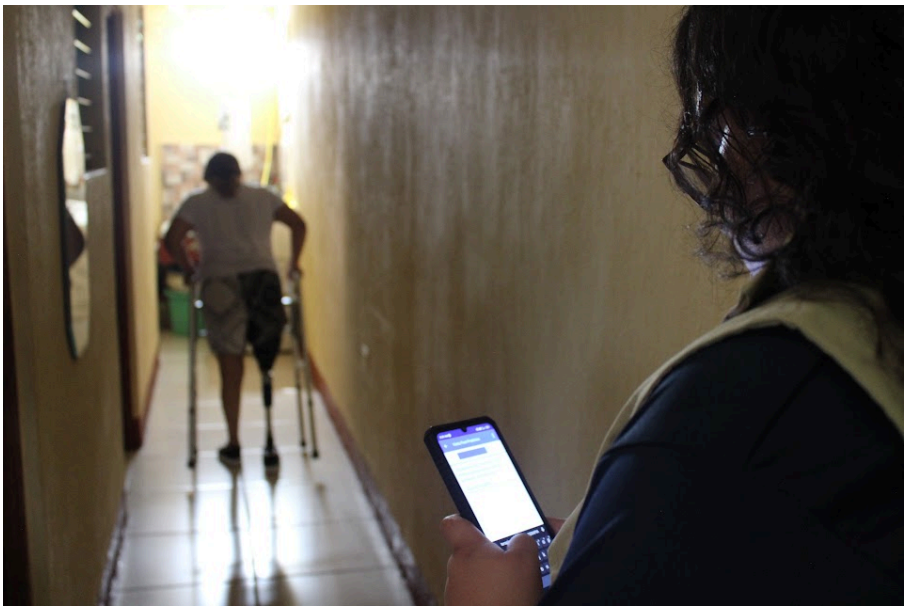
CBR Visual Guide

Conducting a post-prosthetic home visit to a CBR participant.

Conducting a pre-prosthetic visit using MoviliApp.

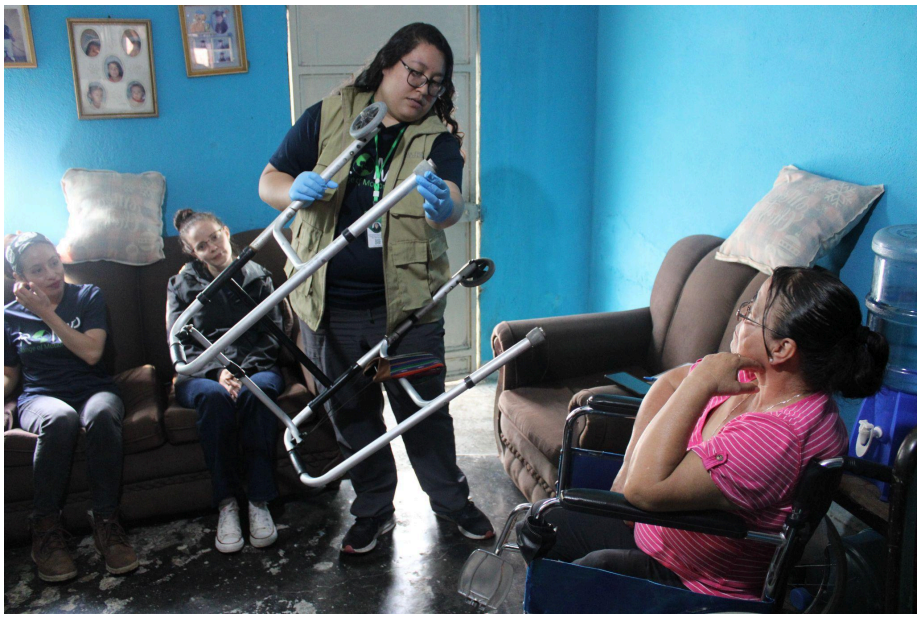
Using MoviliApp together with the Rehabilitation Wheel.

Using the photography function of MoviliApp.



Conducting a post-prosthetic visit using MoviliApp.

Home screen of MoviliApp.



Examining walker condition during a pre-prosthetic home visit.

Practicing exercises during a pre-prosthetic home visit.

Piloting the carbon fiber lamination technique at the clinic.

Providing occupational therapy to an upper-extremity patient at the clinic.

Teaching MoviliApp to a future Mobilizer from FAKS Foundation.

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