ROMP
Range of Motion Project

Denver | Guatemala City | Quito

www.rompglobal.org

Expanding Access to Community-Based Rehabilitation for People with Amputation in Guatemala

- 2023 Year-End Report -

Project Implemented By:

The Range of Motion Project in Guatemala, Guatemala

The Range of Motion Project (ROMP-Global), United States

Universidad Mariano Gálvez, Guatemala

Project Supported By:

The Pro Victimis Foundation, Switzerland

The Dorothea Haus Ross Foundation, United States

The Cotopaxi Foundation, United States

The John Trone Foundation, United States

The Barr Amputee Assistance Fund, United States

Tawingo Fund, United States

The IROH Foundation, United States

Stephen Brown, United States

Naiomi Lundman, United States

Dr. Ranee Shenoi, United States

Table of Contents

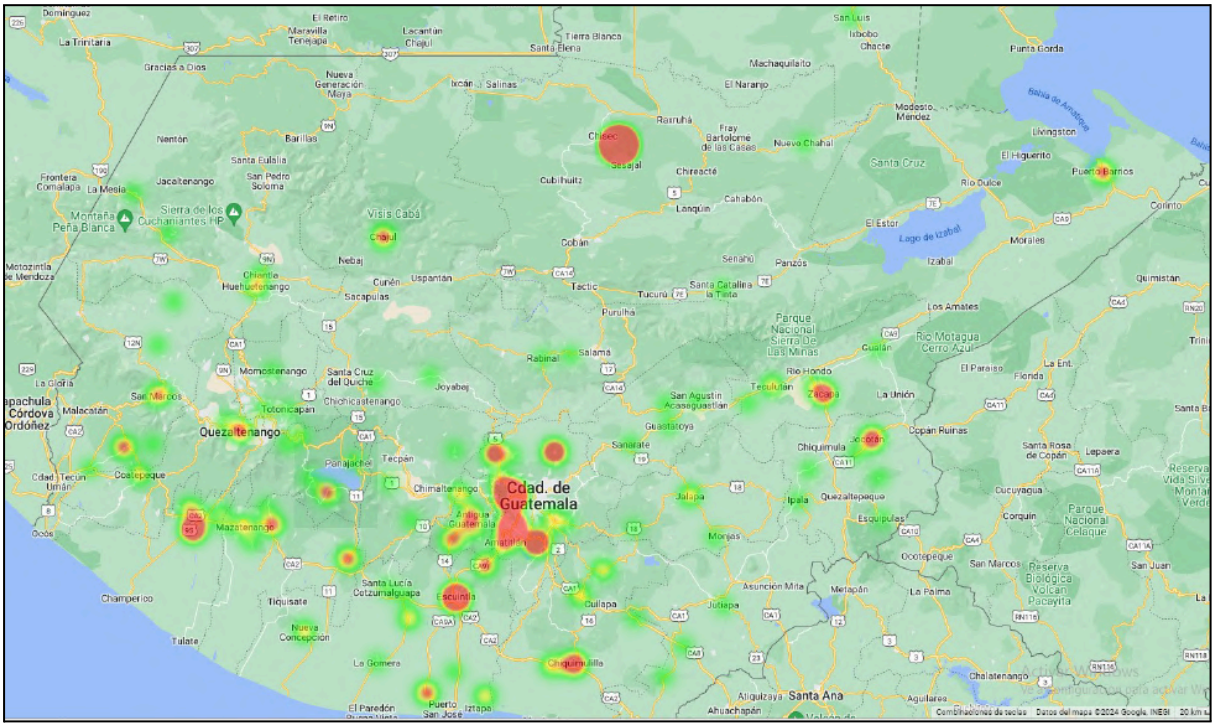
Global Progress

At a glance we:

- ★ ***Delivered more prosthetic devices than ever before.***
- ★ ***Doubled the size of our CBR Program in Guatemala.***
- ★ ***Established a satellite clinic in the Ecuadorian Amazon.***
- ★ ***Created a global administrative department.***
- ★ ***Implemented systems for outcomes, quality, and inventory.***
- ★ ***Developed our plan and budget for the 2024-2025 period.***

ROMP in Guatemala

Update by Davy Martínez, Country Director for Guatemala



At a glance we:

- ★ ***Completed the construction and installation of our workshop.***
- ★ ***Delivered 31% more prosthetic devices than last year.***
- ★ ***Graduated 100% more CBR participants than last year.***
- ★ ***Conducted mobile clinic visits to Puerto Barrios.***
- ★ ***Faced difficult political situation in final quarter of the year.***
- ★ ***Developed our plan and budget for the 2024-2025 period.***

➔ In *January*, Guatemala hired and trained new Country Director Davy Martínez to take over from interim director Jonathan Naber. Davy has significant experience in financial and human resources management, and fundraising, in both the private and nonprofit sectors in Guatemala. She has had a key focus on the culture and strategy of the organization. We also furthered our partnership with Universidad Mariano

Gálvez, training 19 physical therapy students to serve as volunteer Mobilizers in our Community-Based Rehabilitation (CBR) Program. We hired and trained new Physical Therapist-Mobilizer Erika Fuentes. Erika is a physical therapist with experience in providing physical therapy on the community level in Guatemala. She spends half of her time in the clinic providing physical therapy to pre- and post-prosthetic patients, and the other half of her time in the field conducting CBR home visits. We also received a visit from Ken Goody, Foundation Executive of the Dorothea Haus Ross Foundation, one of the largest supporters of our programs in Guatemala.

➔ In *February*, we conducted our first Clinical Volunteer Program of the year. The program included 7 volunteers from the United States and 25 volunteers from Guatemala. We delivered a total of 15 prostheses during this week. We also provided a training session on prosthetic components to 70 physicians at Hospital General San Juan de Dios, one of the most important amputating hospitals in the country of Guatemala. Davy held the first culture and strategy meeting with the entire ROMP Guatemala team, which enabled her to develop rapport with the staff. We also began working with Social Worker Dalia Guzman on a part-time basis to conduct socioeconomic studies of patients referred to ROMP. We began screening candidates for participation in Cohort 10 of the CBR Program, including an initial telephone screen, an in-person screen, and a full mental health evaluation.

➔ In *March*, we completed the construction of our new prosthetics workshop, located directly behind the clinic. ROMP received a $20,000 grant from the PayPal Company/Rotaract to finance this project. This workshop provides a larger, safer space for prosthesis fabrication. It led to a reorganization of the clinic layout, which has improved the space for patients and staff. We also received a visit from Stephen Herrick and Chuck Mosher, the directors of the Functionally-Active Kids Foundation (FAKS), a key supporter of various patients from the region. We began working with a new accounting team to manage the books in Guatemala. We also began making Mobile Clinic visits to Puerto Barrios, a city on the Caribbean coast of Guatemala at a strategic point in the three-country region of Guatemala, Honduras, and Belize. We conducted a first visit to evaluate 13 patients for subsequent casting in April and delivery in May. As part of the third 2023 Organizational Goal: Achieve total quality management (TQM) across all programs, we hired and trained our new Monitoring and Evaluation and Grants Associate (MEGA) José Ramos. José has deep experience in evaluating and operating nonprofit programs in Guatemala. He has been key to the ongoing development of the OpenMRS electronic medical record system, total quality management (TQM), outcome measurement, and grant writing and reporting.

- In *April*, we hosted our second Volunteer Clinical Program of the year. The program included 17 volunteers from the United States and 20 volunteers from Guatemala. We delivered a total of 28 prostheses during this week. We also began taking a wider set of outcome measures for all patients at the clinic. This enables us to more completely measure the impact of our programs on our patients' lives. We began tracking all of the individual services provided in each visit, rather than simply the highest-value service provided. This will give us a better understanding of the amount of care provided by our clinics. We also began implementing standardized surveys to measure and continually improve patient and volunteer satisfaction. We conducted the second visit of our Mobile Clinic in Puerto Barrios, casting 12 patients and evaluating 3 new patients. We also delivered the prostheses of approximately 90% of the cohort 10 participants. We received a private donation from Naiomi Lundman to support the development of our CBR community-contact program. In this program we train a key community contact for each CBR participant in order to support the participant in the community, and to refer new patients for prosthetic care at ROMP.

- In *May*, we conducted the third visit of our Mobile Clinic in Puerto Barrios, delivering ten prostheses and casting two new patients for delivery in June. We also brought-on our first long-term volunteer in Guatemala, Daniela Wilcock, to assist in outcomes measures digitization and prosthetic component inventory. We held a training session for our prosthetists on the use of Vivac plastic and sealing-ring liners, which will greatly improve the quality of care provided and the utilization of existing inventory. We also began piloting the new modules of the OpenMRS system. These modules included patient referral management, socioeconomic study, and reporting. CBR patients participated in group therapies for adult and pediatric patients, and they also received a pre-employment workshop from partner association ASCATED.

- In *June*, we conducted the fourth visit of our Mobile Clinic in Puerto Barrios, delivering the remaining two prostheses. We also made a shift in our clinical staff, removing Mauricio Canales from the Senior Prosthetist role, promoting Katherine Villatoro into the Senior Prosthetist role, and hiring Gerrardo Quintanilla for the Associate Prosthetist role. Gerardo has five years of experience as a prosthetist in his native El Salvador. He will be responsible for providing clinical care as well as managing the warehouse and inventory. ROMP is supporting Katherine and Gerardo in their applications for permanent residency in Guatemala. We began definitively using the new modules of the OpenMRS system. We also began utilizing Inflow, our new inventory and supply chain management system. We trained the CBR community contacts. We provided each contact with a ROMP CBR informational sheet, and we began involving them in home visits to participants.

- In *July*, we began ordering prosthetic components from ROMP USA via our inventory system, InFlow. We initiated a partnership with Horus Prosthetics, a German company with an innovative approach to prosthetic socket fabrication. We made a major purchase of plastic from Curbell Plastics in the United States, which will enable us to use sealing-ring liners in clinical care. We initiated a partnership with Rafael Landivar University, securing 2 physical therapy students to serve as volunteer mobilizers in the CBR program. We graduated 40 participants from Cohort 10 of the CBR Program. We conducted screening of candidates for Cohort 11 of the CBR Program. We updated the socioeconomic study algorithm in our electronic medical record system, OpenMRS. We hosted our third volunteer program of the year. The program included 9 volunteers from the United States and 29 volunteers from Guatemala. We delivered a total of 14 prostheses during this week. During this program we implemented the use of check sockets to improve the fit quality of the definitive prostheses, and to facilitate the use of sealing ring liners. We installed an outdoor awning to protect the "outcome measurement" area, as well as a ramp for patients in the physical therapy area and outdoor lighting, thanks to Rotaract.

- In *August*, we built a partnership with the Diabetic Foot Unit, establishing a two-way referral channel and educational exchange. We visited the Hospital of Chimaltenango, where we spoke to 23 traumatologists and surgeons. We held meetings with SOSEP and SBS, governmental entities that will facilitate referrals of pediatric patients to ROMP. We initiated an Occupational Therapy Program via two highly-talented students, Elly and Made. We launched Cohort 11 of the CBR Program. We conducted performance evaluations for all staff in Guatemala.

- In *September*, we re-trained the Guatemala staff on patient case management using OpenMRS. We hosted a visit by the Rotary Club of Corozal, Belize, to plan for a ROMP mobile clinic there in 2024. We partnered with private prosthetist Alejandro Méndez of Quetzaltenango, opening a route to care for patients who do not qualify for prosthetic care with ROMP due to being at a higher socioeconomic level. We continued with the pre-prosthetic phase of CBR for participants of Cohort 11. We began the process of strategic planning for the 2024-2025 period.

- In *October*, we faced a challenging political situation with over 190 roadblocks which significantly impeded patients from traveling to the clinic from their homes. Due to this crisis we were forced to cancel the October volunteer program and the annual Mobility Conference. Nonetheless, ROMP provided clinical care and CBR services through video calls to our patients. We also developed a partnership with the Ronald McDonald House of Guatemala City to provide lodging for pediatric patients and family members when they travel to our clinic for care. We conducted budgeting for

the 2024-2025 period. We completed the legal incorporation process for ROMP as a Guatemalan branch of the global organization.

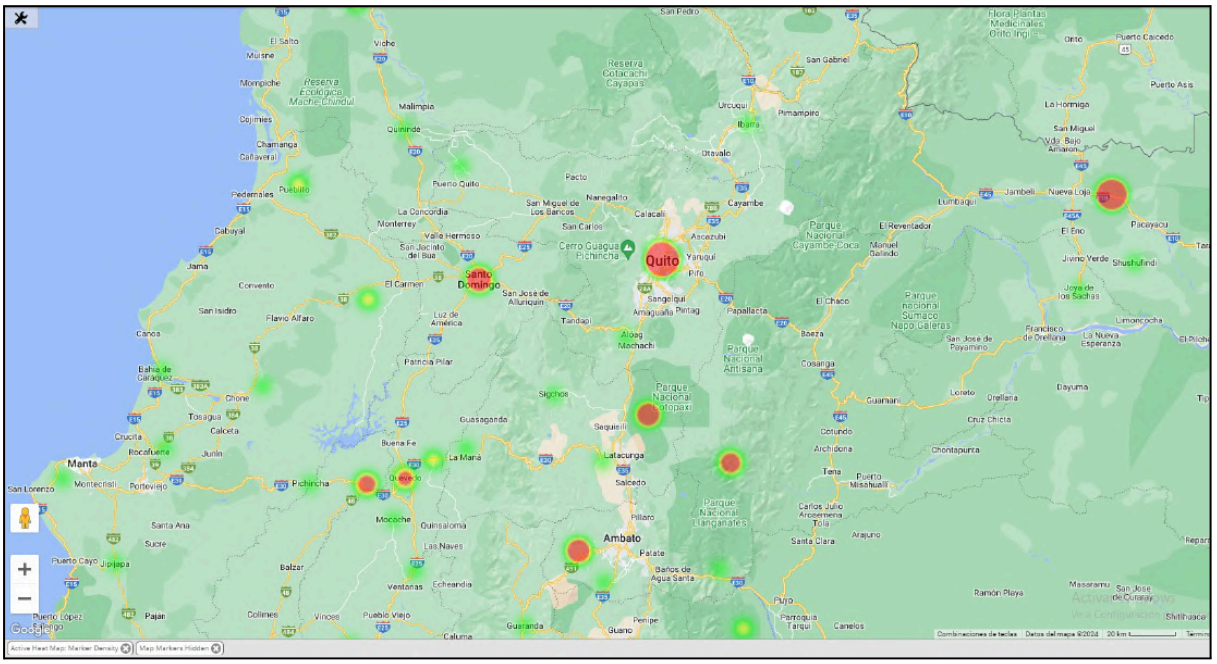
➔ In *November*, our Guatemala staff underwent a special training with our partner Diabetic Foot Unit on the topic of preventing secondary lower limb amputations in diabetic patients. We began the search for an Operational Assistant to offset burgeoning administrative bandwidth in the clinic. We began clinical knowledge exchange meetings between our prosthetists Kathe and Gerardo with our Executive Director David. The M&E department accompanied the mobilizers on home visits to supervise the implementation of the CBR program. Mobilizer Martha Vásquez was removed. She was immediately replaced by Elly, one of the rising occupational therapists. Made, the other occupational therapist, was hired as a Mobilizer to start at the beginning of 2024. We distributed EcoFilters to CBR participants lacking clean drinking water in their homes. We further invested in the infrastructure of the clinic, installing new cameras throughout the facility, as well as moisture control measures in the workshop area. In partnership with Tawingo Fund and Dorothea Haus Ross Foundation, we completed the creation of the first edition of the National Rehabilitation Services Guide, which has the purpose of enabling community leaders throughout the country to identify cases of disability in their communities, and refer them to rehabilitation services that can improve their quality of life. We completed the planning and budgeting process for the 2024-2025 period.

➔ In *December*, we met our annual targets for prosthesis deliveries and clinical appointments for the year. We graduated 42 participants from Cohort 11 of the CBR Program. We completed the legal process of appointing a legal representative of the ROMP Guatemala branch and we initiated the process for obtaining the Tax Registry Update (RTU) and Tax Identification Number (NIT) for ROMP in Guatemala. We further invested in the facility, installing a dust extractor, noise-canceling enclosure, racks for molds, sewing machine organizer, modification area organizer, rivet bar, and other equipment in the workshop area. We prepared to begin distribution of the National Rehabilitation Services Guide in January 2024. We conducted a year-end inventory count for adjustments in the InFlow system.

Back to table of contents.

ROMP in Ecuador

Update by Lili Romero, Country Director for Ecuador



At a glance we:

- ★ ***Completed the installation and opening of the Macas satellite.***
- ★ ***Delivered 18% more prosthetic devices than last year.***
- ★ ***Conducted mobile clinic visits to Lago Agrio.***
- ★ ***Initiated a major local fundraising partnership with Vitality.***
- ★ ***Initiated a sports prosthetics program.***
- ★ ***Developed our plan and budget for the 2024-2025 period.***

➔ In *January*, Ecuador reviewed the 2023 workplan and started providing prosthetic care at our clinic in Quito, as well as through affiliated clinics. The affiliated clinics provide a significant amount of the care for our access-limited patients in Ecuador, utilizing components supplied by ROMP. We also prepared to stand-up our first satellite location in the city of Macas, in the Ecuadorian Amazon, including securing a clinical space, managing the initial group of patients, purchasing machinery and supplies, and packing prosthetic components. We began to develop a fundraising

partnership between ROMP and the Vitality Company, the maker of a health-focused app for mobile devices.

➔ In *February*, we opened the satellite in Macas. In addition to setting-up the facility, we conducted evaluations, castings, and deliveries for 13 patients during this trip. We will make an additional 16 deliveries during the rest of the year. This operation was a joint effort of the Ecuadorian and Global teams. We also conducted team development activities in our Quito clinic. We legalized the agreements we have in place with our various affiliated clinics.

➔ In *March*, Chief Program Officer Jonathan Naber and Monitoring and Evaluation and Grants Associate José Ramos traveled to Ecuador to visit the satellite clinic in Macas, to inform ongoing programmatic grant writing. They also trained the Ecuador team on the use of the new modules of the OpenMRS patient information system, and the Inflow inventory and supply chain management system. We hosted our first Clinical Volunteer Program of the year in Ecuador. This included 7 volunteers from the United States and 5 volunteers from Ecuador. We delivered a total of 21 prostheses during this week. Additionally, we delivered a total of 22 prostheses to patients in the Municipality of Lago Agrio.

➔ During *April*, we made a shift in our administrative staff, removing Administrative Assistant Jacqueline Paz. We started tracking individual services for all patient visits.

➔ In *May*, we began piloting the new modules of OpenMRS that enable us to manage patient referrals and administer socioeconomic studies using this integrated platform. We held a meeting with Vitality and discussed the legal and financial elements of our partnership. We conducted our second Clinical Volunteer Program of the year in Ecuador. This included 19 volunteers from the United States and 4 volunteers from Ecuador. We delivered a total of 18 prostheses during this week. Additionally, we re-started our partnership with CEFAS, a community-development organization based in Macas. We signed an agreement in which CEFAS will provide financial support to patients who need follow-up or urgent prosthetic care.

➔ In *June*, we were given the official campaign for our partnership with Vitality. We conducted planning for our first clinical volunteer program in Macas in November. We also began planning mobile clinic visits to the cities of Ambato and Pasaje. We began working on two public relations initiatives in Ecuador: *Actors of Change* and *Beyond Mobility*. Actors of Change is a program that empowers our most exemplary patients to generate opportunities for people with amputation in their respective places of work and influence. Beyond Mobility is a program that promotes a group of patient

athletes in representing the country in their respective sports. We started using the final version of the new OpenMRS system. We also began utilizing Inflow, our new inventory and supply chain management system. ROMP was also awarded a grant from the AMB Foundation, an organization that is dedicated to benefiting indigenous peoples throughout the Americas. The funds will be directly applied toward the development of the new satellite location in Macas.

➔ In *July*, we conducted our third clinical volunteer program of the year in Ecuador. The program included 14 volunteers from the United States and 3 volunteers from Ecuador. We delivered a total of 14 prostheses during the program. The Macas Satellite Clinic provided services for a week, focusing on transtibial prosthesis fabrication. We conducted planning for the formal inauguration of the Macas satellite. We also held discussions with Sucumbios and Pasaje to develop additional partnerships for providing prosthetic care. We sent out our semi-annual financial statements. We conducted performance evaluations of all staff in Ecuador.

➔ In *August*, we established a partnership with Horus Prosthetics, and we piloted the technology with two patients. We opened a local savings account to safeguard staff funding and allocate surplus towards workshop improvements. We initiated monthly meetings with the global communications team. We began the planning process for the 2024-2025 period. We hired the addition of a second prosthetist, Pablo, who is a graduate of the ISPO-certified program at the Universidad Don Bosco in El Salvador.

➔ In *September*, we conducted our fourth clinical volunteer program of the year in Ecuador. The program included 8 volunteers from the United States and 6 volunteers from Ecuador. We delivered a total of 19 prostheses during the program. We conducted a 9-month follow-up for patients in Lago Agrio. We also evaluated the possibility of a second phase of the Lago Agrio project, which would bring care to 20 more patients in 2024. We established a contract social media manager. We finalized an agreement with a public relations and social media firm. We continued planning for the Macas opening. We finalized planning with Vitality company for the upcoming fundraising partnership. We continued planning for the 2024-2025 period.

➔ In *October,* we completed the planning and budgeting for the 2024-2025 period. ROMP was represented by 6 participants in the Ecuadorian Paralympic Games who traveled to Riobamba to compete in this high-level event and effectively inaugurated our sports prosthetics program. The Vitality campaign was formally launched. Corporate partners Saludasa and Equinoccial began fundraising efforts for ROMP.

- In *November*, we conducted case reviews with partner centers to wrap-up the year. We undertook social media communications to boost the Vitality campaign. We conducted our fifth volunteer program of the year in Ecuador. The program included 6 volunteers from the United States and 6 volunteers from Ecuador. We delivered a total of 18 prostheses during the program. We invested in our workshop infrastructure to accommodate the machinery needed for continually increasing clinical care. We traveled to Macas to provide care to the last 7 patients covered under our 2023 project. On this trip, we also officially launched the satellite location, including a press conference and opening event with key health and political actors and allied foundations in attendance.

- In *December*, we completed clinical care for the year. We conducted a year-end inventory count for adjustments in the InFlow system. The Vitality campaign secured sponsorships for three patients, and we began the production of these prostheses.

Back to table of contents.

ROMP in the United States

Update by Jonathan Naber, Chief Program Officer

At a glance we:

- ★ ***Delivered 95% more devices than last year.***
- ★ ***Implemented a system for inventory control and valorization.***
- ★ ***Piloted a volunteer program model for care in San Antonio.***
- ★ ***Developed our plan and budget for the 2024-2025 period.***
- ★ ***Restructured programs staff for the 2024-2025 period.***

➔ In our *Volunteer Programs*, we operated eight of the nine volunteer programs planned for 2023. The programs took place in February, April, and July in Guatemala, and March, May, July, September, and November in Ecuador, as detailed in the preceding sections. Between these eight programs, we had a total of 87 volunteers of the approximately 130 we expected in 2023. The program for October in Guatemala was canceled due to ongoing political unrest, which is the primary reason we did not hit our 2023 goal for volunteers. Volunteer program management was delegated from the Chief Program Officer to the US Program Manager. We implemented key changes to volunteer programs throughout the year, improving communication with volunteers, component ordering by branches, and socket quality control. We also implemented a volunteer satisfaction survey and post-program debrief with the Country Directors to continually improve our volunteer programs.

➔ In our *US Assistance Program*, we provided 37 protheses to hardship cases in various locations throughout the United States in 2023. The process in each case involved connecting the patient to a local prosthetist, coordinating the patient's appointments, fulfilling the order for prosthetic components, and conducting the necessary follow-up at each step along the way. US patient management was delegated from an external USAP Coordinator to the US Program Manager. We implemented the changes to the program that we had planned during 2022, improving the quality, transparency, and communication of this program. We also implemented a patient satisfaction survey and a prosthetist satisfaction survey to facilitate the continual improvement of the USAP. At the end of 2023, we made a strategic decision to place a pause on further care through the USAP in order to focus further on our work in Guatemala and Ecuador.

- ➔ In late 2023, we piloted a new model for patient care in the United States in San Antonio. Patients were identified by Connect+Ability and Center for Refugee Services in the San Antonio area. These patients received a pre-prosthetic evaluation at the pro-bono clinic of the Physical Therapy Program of the University of Incarnate Word. These patients were then provided prosthetic care by Certified Prosthetist at Prescotts Prosthetics & Orthotics with the assistance of resident prosthetists and professors of prosthetics from the Baylor College of Medicine. This care took place over three visits to Prescotts, which included casting, fitting, and delivery appointments. A total of 8 prostheses were provided to 7 patients who were from Mexico, Honduras, El Salvador, Ukraine, and Afghanistan. This pilot set the stage for future clinical volunteer programs in the United States, and will likely replace the USAP model when we resume clinical care activities in the United States.

- ➔ In our *Components for a Cause* (C4C) Program, we began measuring the success of the Program by the total number of high-need items received instead of the total weight of donations received. This new KPI covers feet, knees, and liners of key sizes. It enables us to reduce shipping costs by being more selective with the components we receive from donors. By the end of 2023, we had collected 448 feet, 319 knees, and 588 liners. In early 2023, we hired a part-time US Warehouse Assistant to help with the tasks of receiving, picking, packing, and shipping inventory. We launched InFlow, a cloud-based system for inventory and supply chain management across our three countries of operations. The inventories of Guatemala, Ecuador, and the United States now utilize a standard list of components, and they are completely controlled and valorized through this system. This provides ROMP with increased financial transparency, as well as leverage in applying for grants.

- ➔ In late 2023, we removed the US Program Manager. In 2024, we will be hiring a new Denver-based Warehouse and Inventory Assistant and a new Guatemala-based Global Program Assistant.

Back to table of contents.

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 2022 and 2023, by country.

	Prostheses Delivered		
	2022	**2023**	**% Change**
Guatemala	182	240	+32%
Ecuador	202	239	+18%
United States	19	37	+95%

In Q2 2023, ROMP began tracking individual services provided in each patient visit to the clinic in all three countries. The following table shows the number of individual services provided during the Q2-Q4 2023 period, by country.

	Individual Services Provided		
	Q2-Q4, 2023	**Q2-Q4, 2023**	**Q2-Q4, 2023**
	Guatemala	**Ecuador**	**United States**
Service Provided	-	-	-
First prosthetic evaluation	117	164	26
Prosthetic re-evaluation	217	235	6
Casting	193	161	23
Socket test	47	94	34
Prosthesis delivery	133	150	31
Pre-prosthetic physical therapy	141	105	0
Post-prosthetic physical therapy	268	205	0
Prosthesis adjustment	53	212	0
Prosthesis repair	25	96	0
Socket change	53	29	0
Component change	28	111	0

Appointment with psychologist	N/A	26	0
Appointment with physician	N/A	N/A	0
Guidance on alternative services	N/A	N/A	0

Back to table of contents.

CBR Project Progress

At a glance we:

- ★ ***Graduated more participants (82 in 2023 v. 40 in 2022).***
- ★ ***Covered more provinces (20 in 2023 v. 14 in 2022).***
- ★ ***Adapted the protocol for upper-extremity amputation.***
- ★ ***Hired new mobilizers Erika, Elly, and Made.***
- ★ ***Initiated a formal Community Contact Program.***
- ★ ***Began taking scientific-grade outcome measures.***
- ★ ***Empowered the new Country Director to lead the Program.***
- ★ ***Secured new sources of funding to enable growth.***

Personnel Development

We continued to employ Field Supervisor Lourdes and Mobilizer Zoila. We hired and trained one dual Physical Therapist-Mobilizer Erika Fuentes, and two dual Occupational Therapist-Mobilizers Elly Centeno and Made Marin. The Mobilizers were responsible for conducting home visits, coordinating services, supervising physical therapy students, and collecting outcome measures. Additionally, Erika provided pre- and post-prosthetic physical therapy at the clinic, and Elly and Made provided pre- and post-prosthetic occupational therapy at the clinic. For the first time, we have both physical and occupational therapy permanently integrated into our clinic.

In January, we trained a total of 19 volunteer physical therapy students from the Universidad Mariano Gálvez to serve in the CBR Program. Each volunteer was assigned around 3 participants, and they provided virtual home visits to their respective participants. They documented these visits in a booklet that was shared with their designated Mobilizer. Additionally, physical therapy students from both Universidad Mariano Gálvez and Universidad Rafael Landívar provided physical therapy at the clinic under the supervision of Erika. In order to ensure that services are provided as consistently as possible to all CBR participants, we decided that in 2024 we will utilize the volunteer physical therapy students exclusively for physical therapy in the clinic and not for carrying out visits to participants.

We provided several training sessions to the CBR team throughout the year. In January, we provided a comprehensive training to the entire CBR staff, refreshing existing Mobilizers on program protocol, and integrating Erika into the team. In April, we conducted a re-training of the CBR staff on the topic of outcomes measurement, in order to ensure that scientific-grade data are being taken. In May, we conducted another re-training of the CBR staff on the topic of home visit protocols, in order to improve their adherence to the protocol. Finally, in November we provided comprehensive training to new Mobilizers Elly and Made. In January 2024, we will provide a re-training on outcome measurement to the CBR staff. We will also provide training on *MoviliApp*, the new platform to guide home visits.

Participant Recruitment

At the beginning of 2023, we conducted outreach to numerous physicians, municipal governments, community leaders, and past participants throughout the country in order to identify candidates for Cohort 10 of the CBR Program. We also reviewed our database of patients referred to ROMP since moving to Guatemala City, as well as our database of patients from when we were located in Zacapa. In the middle of 2023, we identified candidates for Cohort 11 by first looking at referred patients in our Referral Management

Table in OpenMRS, and we also conducted outreach like that of cohort 10. This shift in how we identify candidates represented a major improvement in the efficiency and equity of our provision of CBR services.

All patients were administered a complete socioeconomic study in order to objectively determine their relative level of vulnerability. For Cohort 10, this study was conducted in a Google form, but in Cohort 11, this study was conducted in the Socioeconomic Study Module of OpenMRS. Adult candidates designated as segment 1 and segment 2, as well as all children candidates, were administered a short questionnaire to determine if they met the high-level requirements of the program, and then a longer questionnaire to determine if they met the more detailed requirements of the CBR Program. Any segment 1 candidates who did not meet the requirements of the program were scheduled to receive their prosthetic care, free of charge, during the next clinical volunteer program.

Descriptive characteristics of the Cohort 10 and 12 participants are given below.

Cohort 10 (February-June 2023) - Total of 40 Participants				
Sex	**Age (Years)**	**Province**	**Amputation Level[1]**	**Amputation Cause**
Female = 14 Male = 26	Oldest = 61 Youngest = 6 Average = 34	Guatemala = 8 Chimaltenango = 1 Sololá = 1 Escuintla = 6 Suchitepéquez = 2 Sacatepéquez = 1 Quetzaltenango = 1 Retalhuleu = 2 Santa Rosa = 3 Quiché = 2 Jutiapa= 3 Izabal = 4 Chiquimula = 2 San Marcos = 2 El Progreso = 1 Alta Verapaz = 1	Transfemoral = 23 Transtibial = 11 Knee disarticulation = 0 Hip disarticulation = 2 Transradial = 5	Diabetes = 7 Trauma = 22 Cancer = 5 Congenital = 6

Cohort 11 (June-December 2023) - Total of 42 Participants				
Sex	**Age (Years)**	**Province**	**Amputation Level[1]**	**Amputation Cause**

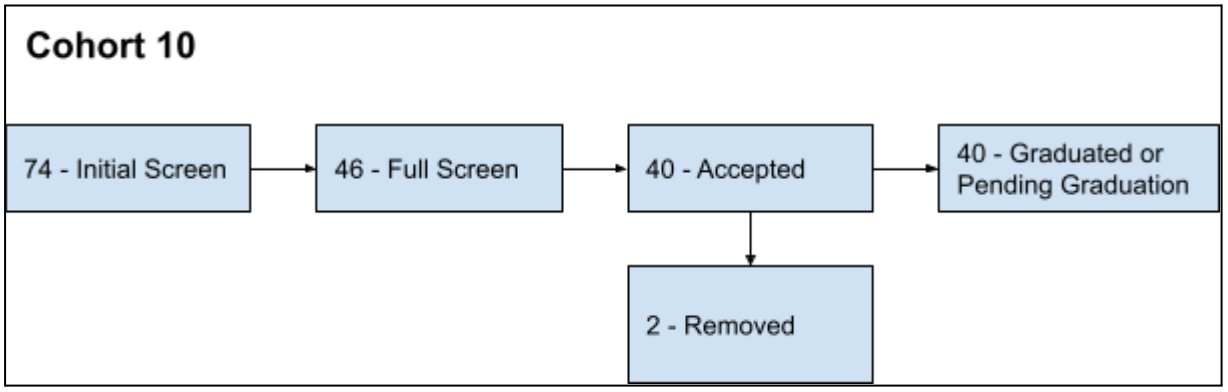
[1] Note: This number is higher than the total number of participants because one of the participants had multiple amputations.

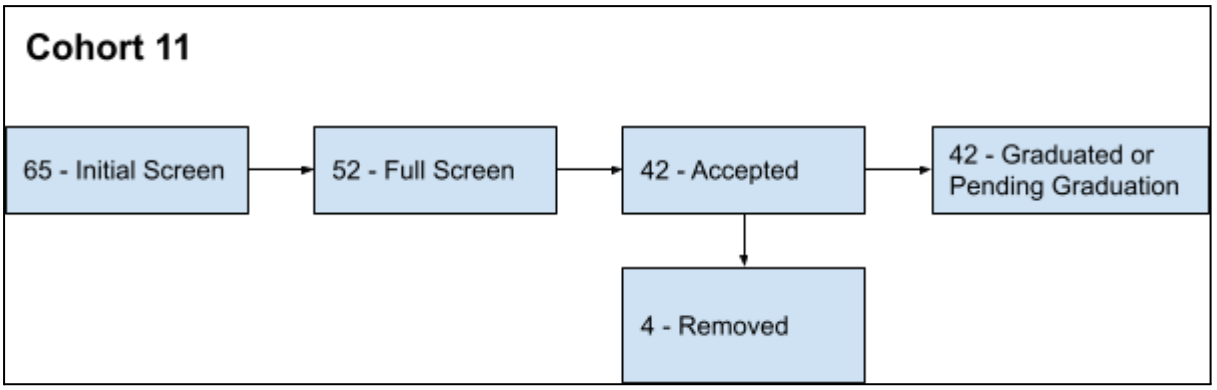
Female = 12 Male = 30	Oldest = 65 Youngest = 4 Average = 34.5	Guatemala = 14 Chimaltenango = 2 Sololá = 1 Escuintla = 5 Suchitepéquez = 3 Sacatepéquez = 1 Quetzaltenango = 1 Retalhuleu = 1 Santa Rosa = 2 Quiché = 1 Alta Verapaz = 1 Petén = 1 Totonicapán = 2 Jalapa = 1 Chiquimula = 2 San Marcos = 2 El Progreso = 1 Baja Verapaz = 1	Transfemoral = 23 Transtibial = 9 Knee disarticulation = 0 Hip disarticulation = 3 Transradial = 4 Partial feet = 2 Transhumeral = 1	Diabetes = 16 Trauma = 14 Cancer = 3 Congenital = 7 Electric current = 2

Intake Screening

Candidates who passed the first two screens underwent a comprehensive mental health evaluation by one of the three psychiatrists affiliated with the CBR Program. This evaluation looked at the participant's capacity for participating in the program, as well any tendencies towards substance abuse and interpersonal violence.

Candidates who passed the mental health evaluation then received a first home visit by their designed Mobilizer. In this visit, the Mobilizer took informed consent, collected baseline outcome measures, and performed the first visit of the 10 visit protocol. If all went well in the visit, the candidates were formally accepted into the program and considered participants.





Intervention Planning

Once a participant was accepted to participate in the CBR Program, the Mobilizer and the participant co-created a list of five goals for their intervention. The Mobilizer then worked with the Field Supervisor to develop a comprehensive intervention plan for each participant, referring to the official 'menu' of services available for coordination by the CBR Program.

Intervention plans were digitized and updated regularly by the Field Supervisor. She created a weekly work plan for all personnel based on the plans. The progress of these goals was checked around the midpoint and around the endpoint of the cohort.

Home Visits

The Mobilizers conducted the first home visit to each candidate prior to formally approving their participation in the program. Following this visit, each participant was sent 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 Exercises Booklet.

Home visits were conducted twice-per-month during five months, meaning that each participant received a total of 10 visits.[2] During each home visit, the Mobilizer reviewed the participant's progress with the activities specified in the last one or two weeks of their Rehabilitation Wheel, as well as the participant's activities for the next one or two weeks of the Wheel. They performed the activities corresponding to that week, to ensure the participant was clear on what to do. We utilized distinct versions of the Rehabilitation Wheel for adults and children.

[2] Except for those that were 'latecomers' to the Cohort.

Approximately 40% of all home visits were conducted in-person, and approximately 60% virtually, in order to optimize use of resources across a wider geography than ever before. The volunteer physical therapy students conducted virtual visits with periodic supervision of the designated Mobilizer. In the event that the volunteer could not conduct a given visit, the Mobilizer conducted the visit. The staff Mobilizers conducted all in-person visits. The Field Supervisor continually updated the weekly agenda to track visits.

The volunteers and staff Mobilizers provided physical therapy to participants as part of the twice-per-month home visits. The exercises were specified in the Pre-Prosthetic and Post-Prosthetic Exercises Booklets provided to all participants.

Due to an increased number of participants with upper-extremity amputations, we located and translated materials for upper-extremity exercises and activities of daily living (ADLs). The most useful materials came from the United States Veterans Administration (VA) Health System. We developed a new Upper-Extremity Exercise Booklet during Cohort 11, and we developed Upper-Extremity Rehabilitation Wheels for Children and Adults, all of which will be used in 2024 onwards.

Around the midpoint of each cohort, we 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 Program. We updated the booklet in early 2023.

Coordinated Services

The staff Movilizadores coordinated services for each of their designated participants, based on the intervention plans created after intake screening.

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 ready. The prostheses were fabricated with the components indicated for each patient's activity level. Participants then received follow-up care as needed. Additional assistive devices like crutches or canes were provided when necessary.

Group therapy was offered to all participants by psychologists affiliated with the CBR Program. Participants requiring individual follow-up received appointments with one of the three psychiatrists affiliated with the CBR Program. Several participants received antidepressant medication. In Cohort 10, 4 sessions of group therapy were provided to pediatric participants, and 2 sessions were provided to adult participants. In Cohort 11, 5

sessions of group therapy were provided to pediatric participants, and 3 sessions were provided to adult participants. Sessions were conducted virtually to maximize the number of participants from a wide geography.

Medical care was coordinated for various participants. This included participants who needed surgical modifications in their residual limb to be able to become prosthesis users. ROMP helped to coordinate the surgeries through CBR Program contacts in the public health system. In Cohort 10, this included 3 children and 2 adults. In Cohort 11, this included 3 children and 2 adults. We also provided post-surgical wound care support to participants. We also helped to coordinate other clinical services like nutrition, gynecology, pediatrics, and dentistry. We coordinated clinical services to address diabetes-related issues, like diabetic foot and metabolic management.

We provided EcoFiltro water filters 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 10, we provided 20 of the participants with filters. In Cohort 11, we provided 14 of the participants with filters.

We partnered with Guatemalan association ASCATED, to provide pre-laboral workshops for adult CBR Participants. This was coupled with CV reviews and accompaniment through their return to work. In Cohort 10, 6 participants were impacted by the ASCATED workshop. In Cohort 11, 4 participants were impacted by the ASCATED workshop.

We developed a formal Community Contact Program for all CBR participants. The purpose of this Program is to introduce CBR participants to a key contact in their community who can connect them to local services and resources, and who can refer new patients to ROMP for prosthetic care. These contacts are identified in the participants' churches, local governments, and neighborhoods. ROMP provided training virtually to community contacts in these key topics, as well as follow-up as they stepped into the role of supporting their designated participants. In Cohort 10, 38 patients were paired with Community Contacts. In Cohort 11, 39 patients were paired with Community Contacts.

Each participant was also connected to a participant of a past cohort of the CBR Program. The Mobilizer of each participant facilitated a three-way call with the current and past participants with the idea that they can continue to communicate as they desired.

Outcome Measurements

In 2023, ROMP implemented a new global standard of outcome measurement with patients in Guatemala and Ecuador. Throughout the entire year, we collected comprehensive

outcome measures for patients upon the delivery of their prosthesis, as well as during standard 3-, 6-, and 12-months post-delivery follow-ups. For all CBR participants, we also collected data upon their entry into the CBR Program (which nearly always preceded the delivery of their prosthesis). All physical outcome measurements taken at the clinic are taken in an area that was created for this purpose, with strictly marked distances.

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	Physical functioning Pain	18+ (All points)

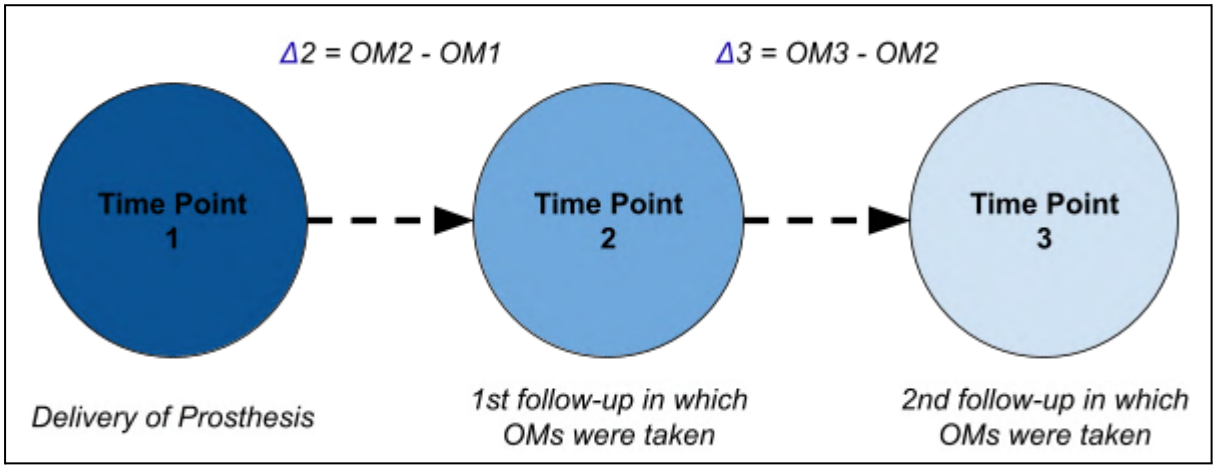
	Mental health	Role limitations due to health problems Role limitations due to emotional problems Emotional wellbeing Social functioning Energy/fatigue General health	
WHOQoL-BREF (18+ only)	Quality of life	Physical quality of life Psychological quality of life Social quality of life Environmental quality 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)

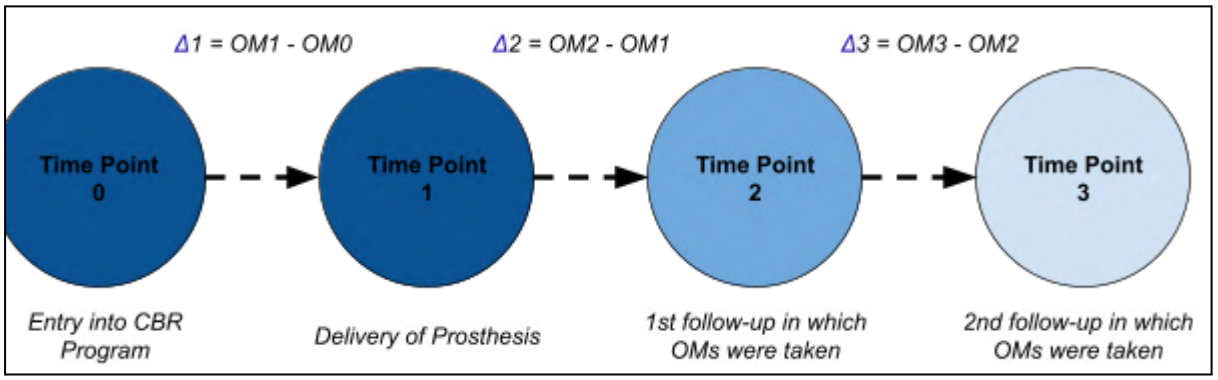
Outcome measures were taken by ROMP staff on paper packets, throughout 2023. This data was transcribed by a Guatemalan digitizer into a table in Google Drive, in December 2023. The Monitoring & Evaluation Department copied and trimmed the tables in Drive to include only patients delivered between 14 April 2023 to 31 January 2024, in January 2024. This cutoff was made since 14 April was the date on which the quality of the data collected reached scientific-grade quality. The Data Scientist cleaned, structured, and consolidated the data into a summary table, using Python, in January 2024. The Monitoring & Evaluation Department used the summary table to produce graphs and interpreted and wrote-up the results, in February 2024. The Monitoring & Evaluation Department will be conducting an executive overview of the results with the Executive Director, Guatemala Director, and Ecuador Director, in February 2024.

The data were structured such that for each patient, the data taken upon the delivery of the prosthesis were considered Time Point 1. The data taken upon the 1st follow-up in which outcome measures were taken were considered Time Point 2, regardless of how long post-delivery it was. The data taken upon the 2nd follow-up in which outcome measures were taken were considered Time Point 3. Additionally, for CBR patients, the data taken upon entry into the CBR Program were considered Time Point 0. It is important to note that the total number of patients represented at each time point decreases from time point 1 to 2 to 3 for a few key reasons. These include limited administrative bandwidth and the national

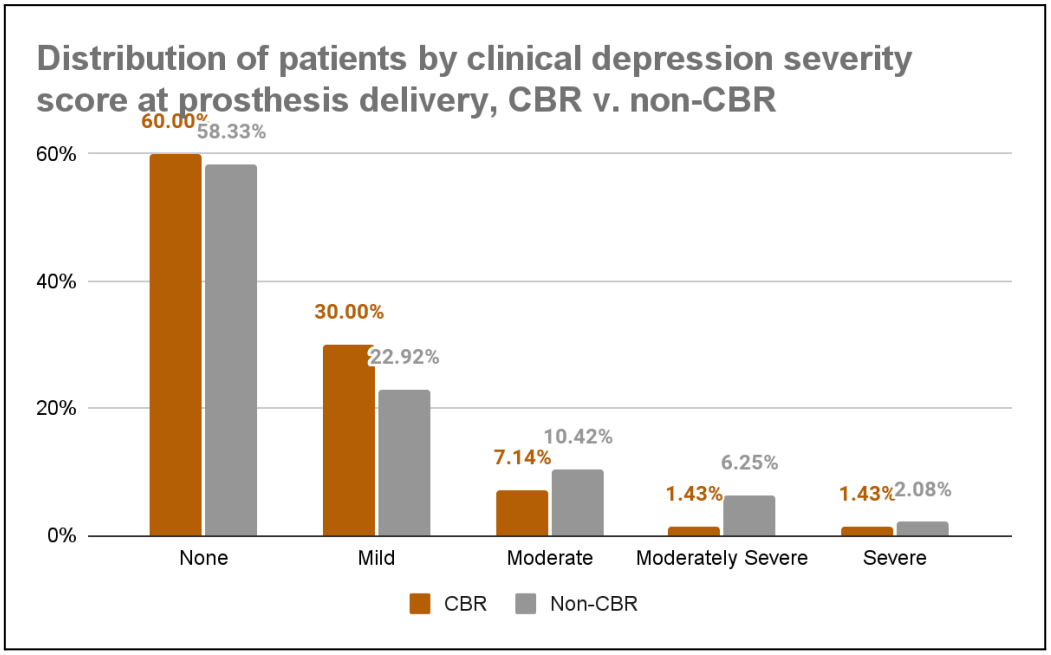
political crisis and blockages experienced in late 2023. With the hiring of an Operations Assistant and the resolution of the political situation, we anticipate achieving a significantly higher rate of longitudinal data collection in 2024.

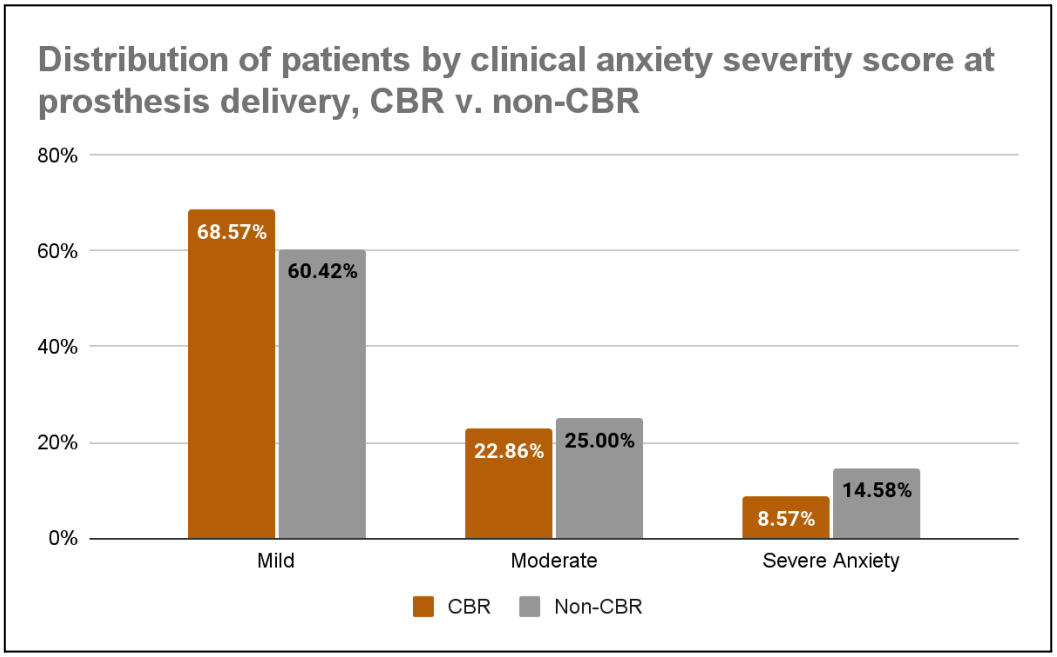
The basic premise in this analysis was to look for the delta (Δ) in outcome measures from one time point to the next. This tells us how a given outcome measure changes from delivery to 1st follow-up in which OMs were taken (Δ2), and similarly from 1st follow-up in which OMs were taken to 2nd follow-up in which OMs were taken (Δ3). For CBR patients, an additional delta was taken from entry into the CBR Program to delivery (Δ1).

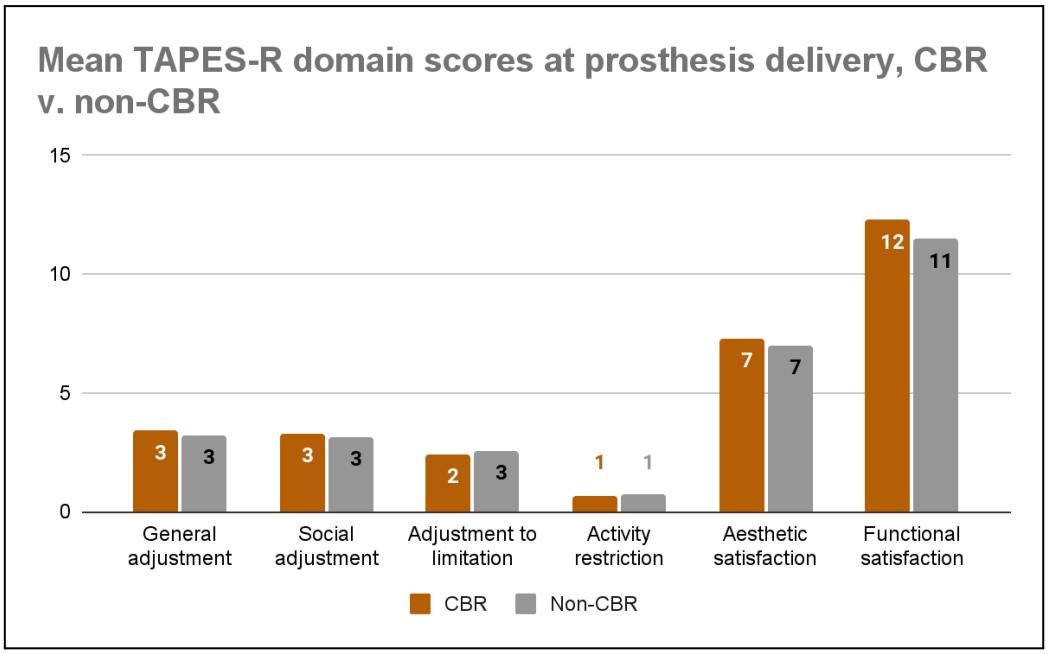


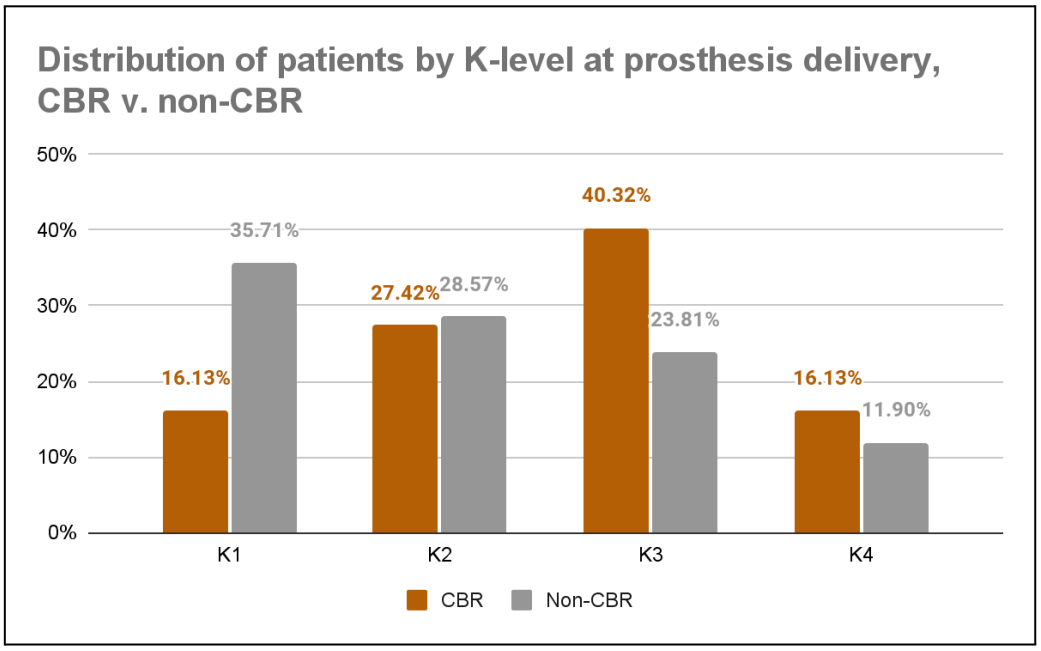


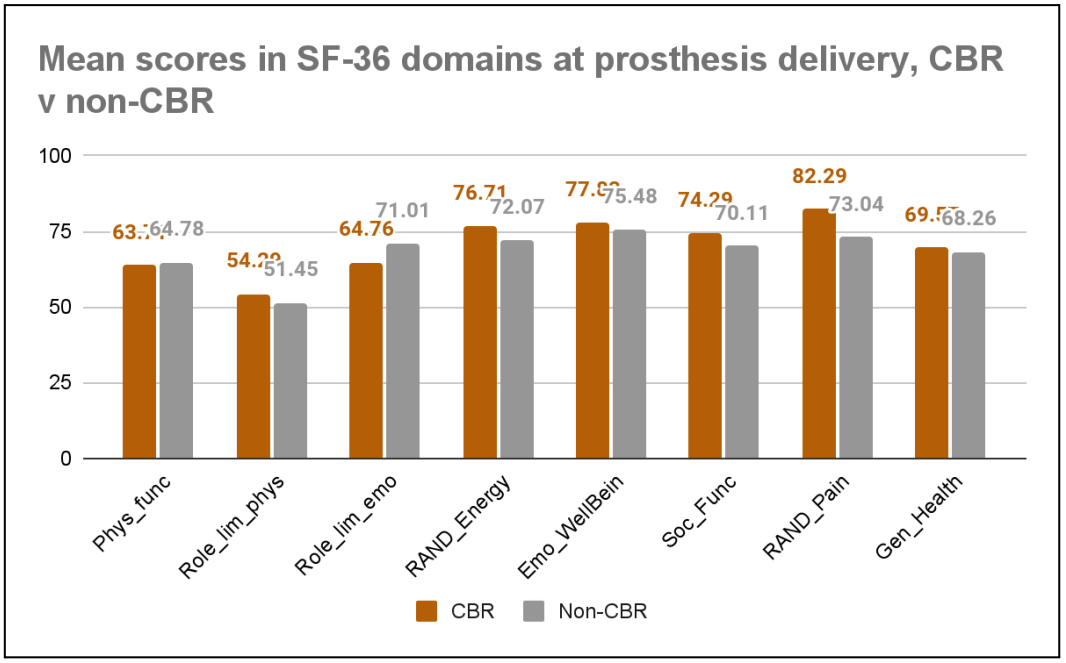
The data comparing outcomes of CBR versus non-CBR patients at time point 1 (delivery) are shown below:

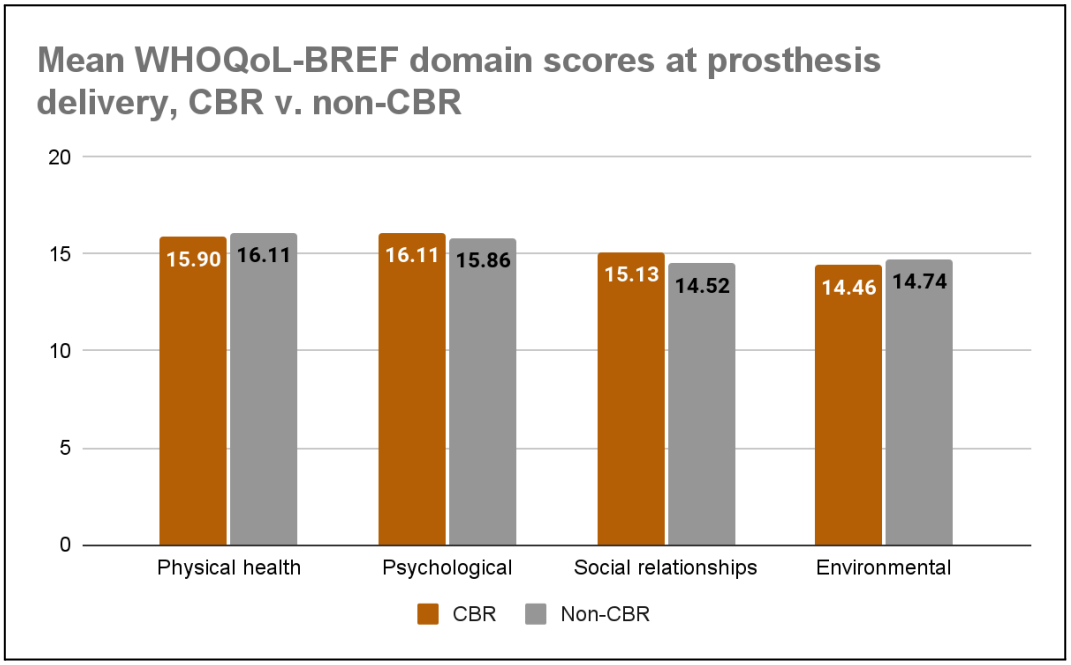





Mean TAPES-R domain scores at prosthesis delivery, CBR v. non-CBR
15
10
5
0
3
3
3
3
2
3
1
1
7
7
12
11
General adjustment
Social adjustment
Adjustment to limitation
Activity restriction
Aesthetic satisfaction
Functional satisfaction
CBR
Non-CBR


Distribution of patients by K-level at prosthesis delivery, CBR v. non-CBR
50%
40%
30%
20%
10%
0%
16.13%
35.71%
27.42%
28.57%
40.32%
23.81%
16.13%
11.90%
K1
K2
K3
K4
CBR
Non-CBR


Mean scores in SF-36 domains at prosthesis delivery, CBR v non-CBR
100
75
50
25
0
64.78
54.22
51.45
64.76
71.01
76.71
72.07
77.62
75.48
74.29
70.11
82.29
73.04
68.26
Phys_func
Role_lim_phys
Role_lim_emo
RAND_Energy
Emo_WellBein
Soc_Func
RAND_Pain
Gen_Health
CBR
Non-CBR


Mean WHOQoL-BREF domain scores at prosthesis delivery, CBR v. non-CBR
20
15
10
5
0
15.90
16.11
16.11
15.86
15.13
14.52
14.46
14.74
Physical health
Psychological
Social relationships
Environmental
CBR
Non-CBR

Our key takeaways from these data are:

- There was an important difference between the 2 groups in average distance walked in the 2MWT at time point 1, with CBR participants walking further than non-CBR participants. This likely indicates better walking ability of patients at delivery of their prosthesis if they have received CBR services than if they have not. **CBR appears to be preparing patients to become more physically mobile at delivery.**
- There is a tendency towards higher K-levels for CBR patients compared to non-CBR patients at time point 1. This likely indicates a higher functional level of patients if they have received CBR services than if they have not. **CBR appears to be preparing patients to become more physically mobile at delivery.**
- There appears to be a tendency towards lower depression severity for CBR patients compared to non-CBR patients at time point 1. This likely indicates lower depression severity of patients at delivery of their prosthesis if they have received CBR services than if they have not. **CBR appears to be reducing depression severity in patients at delivery.**
- There appears to be a tendency towards lower anxiety severity for CBR patients compared to non-CBR patients at time point 1. This likely indicates lower anxiety severity of patients at delivery of their prosthesis if they have received CBR services than if they have not. **CBR appears to be reducing anxiety severity in patients at delivery.**
- **Overall our patients are more physically mobile, less depressed, and less anxious at delivery if they have received CBR services.**

Our key takeaways about our program for outcome measures in general are:

- There is an urgent need, on a global level, to begin collecting outcome measures digitally instead of on paper. We have now completed development and testing of the Outcome Measures Module in OpenMRS to enable data to be collected, stored, and downloaded from this system. This will eliminate the need for time-consuming, costly digitization labor, and it will enable the on-demand analysis of results that will be most helpful to our organization.
- There is an urgent need, on a global level, to systematize the scheduling of patients for follow-up appointments, on the 1-, 3-, 6-, and 12-month post-delivery scheme. This has been carried-out more effectively by Ecuador than Guatemala, due primarily to bandwidth issues in Guatemala during the 2023 year. The hiring of an Operations Assistant in Guatemala will greatly improve adherence to this scheme. Additionally, we are currently developing an Appointment Management Module in OpenMRS to enable appointment scheduling and tracking. This will help ROMP to increase follow-up rate, and therefore longitudinal data collection rate.

- There is also a need to conduct (re)training of all staff members who are collecting data. Special focus should be placed on data collection techniques, like minimizing bias. This training will be conducted in Guatemala in January 2024, and in Ecuador during the Macas mobile clinic in February 2024.
- We developed a close working relationship with a data scientist for this project. This was critical for the appropriate handling and analysis of outcome measures data. The Monitoring & Evaluation Department prepared the raw data for the Data Scientist and drove the lines of inquiry, while the Data Scientist structured, cleaned, and operated the database.
- The next step of the Monitoring & Evaluation Department will be to create a 1-pager with key socio-demographic-economic-clinical characterization of our 2023 patients on one side, and key impact results on the other side. We will produce this sheet for both Guatemala and Ecuador. It will be used with grantors, donors, partners, staff, and other stakeholders. This information will also be posted within the Guatemala and Ecuador facilities to keep the teams well-informed of the patient population they are serving, and the impact their services are having on their lives. We will also be equipping the Executive Director with the content needed for his outreach presentations at universities, partners, and donors.

In 2023, we continued to develop our research collaboration with Dr. Cody McDonald, an Assistant Professor in the Department of Rehabilitation Medicine at the University of Washington. Dr. McDonald is a member of the Research Committee at the International Society of Prosthetics and Orthotics (ISPO) and a respected researcher in the field of prosthetic rehabilitation. The purpose of our research with Dr. McDonald is to compare the effectiveness of the CBR Program with the prosthetic standard of care. In late 2023, we were awarded a research grant through the University of Washington to conduct our first-ever prospective study comparing the outcomes of CBR patients with non-CBR patients during the Cohort 13 in the second half of 2024.

Back to table of contents.

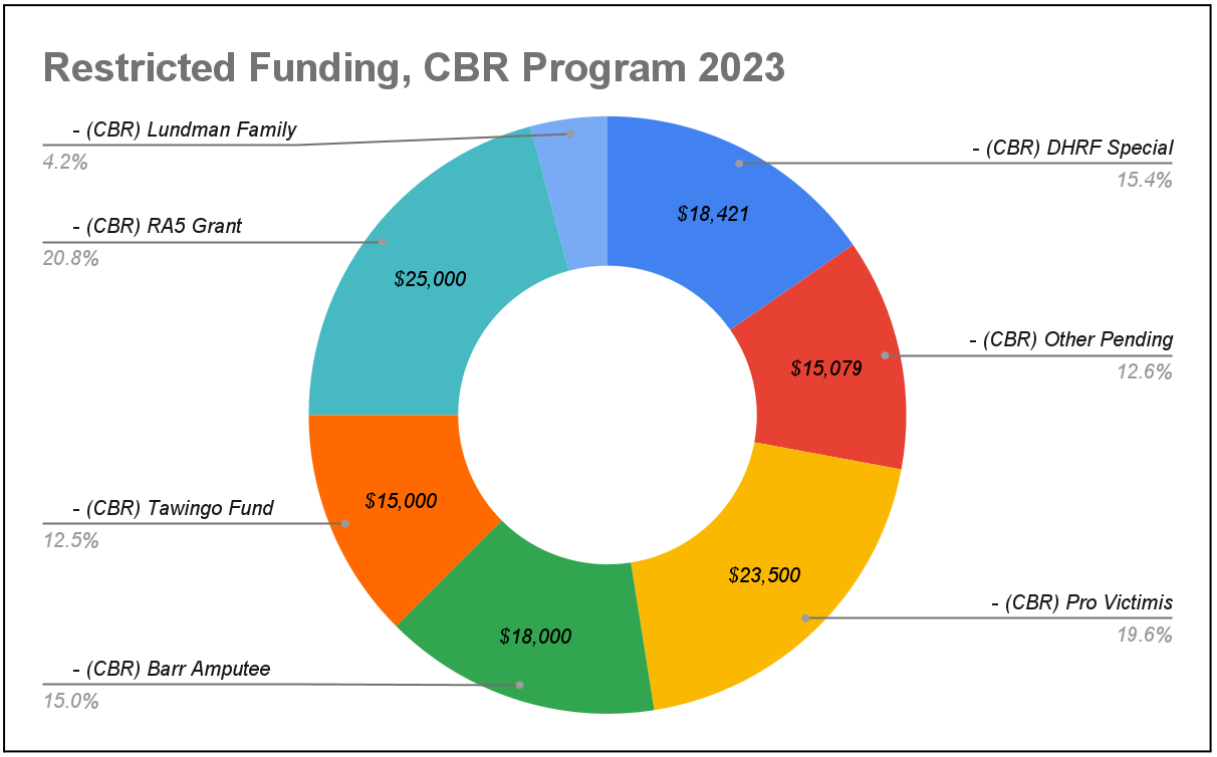
CBR Project Finances

At a glance we:

- ★ ***Spent a total of $103,627 in 2023, staying on budget.***
- ★ ***Secured new funders for the CBR Program for 2024 onwards.***

Incomes

ROMP Global budgeted a total of $120,000 for use by the CBR Program in 2023. This funding came from grants and donations restricted to the CBR Program. The following chart shows the breakdown of funding sources for the CBR Program in 2023:



Expenses

The ROMP CBR Program projected a total expense of $117,786 in 2023. We spent a total of $103,627. The following table shows the projected versus actual expenses incurred by the CBR Program in 2023:

	JAN-DEC 2023		
	PROJECTED	ACTUAL	% EXECUTED
	JAN-DEC	JAN-DEC	JAN-DEC
INCOMES			
- CBR Program			

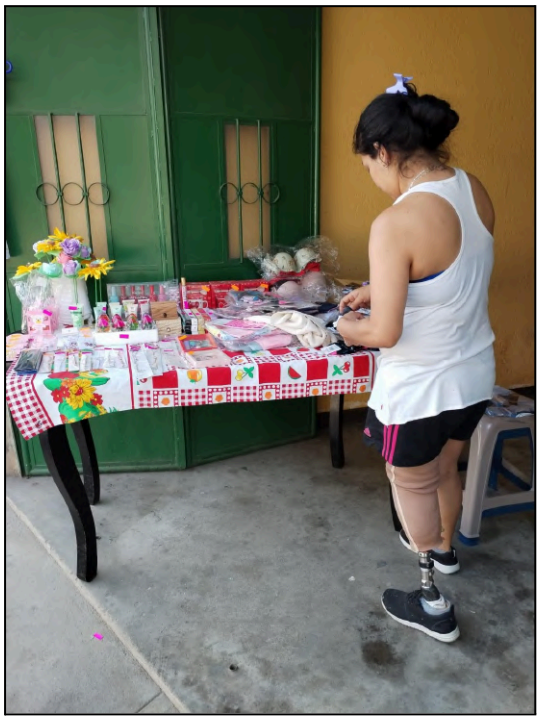
- ROMP Global Financing	*$120,000*	*$121,196*	*101%*
	$120,000	*$121,196*	*101%*
EXPENSES			
- CBR Program			
- Field Supervisor Salary	*$11,643*	*$11,123*	*96%*
- Mobilizer 1 Salary	*$7,762*	*$7,439*	*96%*
- Mobilizer 2 Salary	*$7,762*	*$7,311*	*94%*
- Mobilizer 3 Salary	*$6,986*	*$6,151*	*88%*
- Aguinaldo Benefit 8.33%	*$2,845*	*$2,777*	*98%*
- Bono 14 Benefit 8.33%	*$2,845*	*$2,728*	*96%*
- Indemnification Benefit 9.72%	*$3,320*	*$2,290*	*69%*
- IGSS Benefit (IGSS, IRTRA, INTECAP) 12.67%	*$2,518*	*$2,518*	*100%*
- Vacations Benefit 4.16%	*$1,421*	*$1,421*	*100%*
- Staff phone service	*$1,857*	*$1,550*	*84%*
- Staff transportation	*$7,762*	*$7,700*	*99%*
- Mobilizer kits	*$776*	*$2,644*	*341%*
- Participant kits	*$2,122*	*$1,350*	*64%*
- Assistive devices	*$1,856*	*$1,687*	*91%*
- Medical services	*$6,365*	*$2,497*	*39%*
- Occupational therapy materials	*$3,713*	*$48*	*1%*
- Participant transportation	*$6,365*	*$434*	*7%*
- Printing	*$1,061*	*$1,906*	*180%*
- Prosthetic care at ROMP	*$38,810*	*$40,054*	*103%*
TOTAL	*$117,786*	*$103,627*	*88%*

Back to table of contents.

CBR Project Case Studies

Narratives by Lourdes Quiñónez, Field Supervisor

Participant Rosario, Cohort 10, Province of Quiché



Rosario is a 36 year-old single mother of three girls and one boy. One night while returning home from her work as a bartender, a bus ran over Rosario. She suffered the amputation of her left leg, on August 25th 2022, and was hospitalized for six months at Roosevelt Hospital. Having to accept a new reality, and without any income to sustain her children, a hopeless feeling took over her mind. Prior to her accident, Rosario was an independent and active woman, practicing several sports. In her mind, she would no longer be able to do these activities. She felt lost and useless, and thought that it would have been better to die.

Rosario was referred to ROMP by Hospital San Juan de Dios. Our social worker Dalia Gúzman conducted a socioeconomic study of Rosario in which we determined that she was amongst the most vulnerable patients of ROMP and was therefore considered as a candidate for our CBR Program. She received a series of screens and evaluations to ensure that she would stand to benefit from the program, and upon being accepted she began receiving twice-per-month visits and special services.

At the time of our first contact and home visit, she was highly depressed, with altered eating and sleeping patterns. She slept most of the day and at night she suffered from insomnia. Additionally, she did not do any physical activity or work, simply moving between her bed and her wheelchair. She was shutting her family and friends out of her life, and she was not communicating with the outside world. She was ashamed to be seen in “those conditions.”

During the CBR Program, Rosario received in-person and virtual visits by her designated Mobilizer Erika. Erika provided Rosario with emotional support, enabling her to express her sadness. As Rosario progressed in the Program, she began to express her desire to accept her new reality and overcome what she had experienced. She started believing that “Life doesn’t happen to you, it happens for you”. Rosario began following every indication provided by herMobilizers, maintaining discipline in her exercises, eating, and sleeping.

In April 2023, about halfway through her participation in the CBR Program, Rosario received her prosthesis at the ROMP clinic in Guatemala City. From that moment she was determined to not depend upon assistive devices like crutches, and so it was a week later that she was walking to the market and buying her own food without any device; she was literally standing for herself and her children.

Rosario also started her own business of making and selling artificial flowers and ornaments. Her mother became her business partner and just like that, in three weeks after receiving her prosthesis, she had resumed her laboral activities. She had a completely different attitude- positive and cheerful. She now makes plans for the future and feels like the active and independent woman she had always been.

Rosario feels very grateful to ROMP, because it gave her the opportunity to receive a prosthesis, which allowed her to gradually resume her life, regain the independence that she had since she was a child. Rosario is also thankful for becoming economically active once again. She feels very blessed; life has smiled at her again. "Thank you ROMP for giving me back the desire to live".

Participant Edin, Cohort 10, Province of Baja Verapaz

Edin is a 25 year-old father of two children who farms for a living. When returning home from working the fields, the motorcycle he was riding with his brother and cousin was hit by a trailer. Both his brother and his cousin were killed, and Edin left in a coma. It was a brutally difficult situation for his mother who had to bury her son and nephew, while her other son struggled between life and death.

Edin managed to come out of the coma, but upon regaining consciousness he found out that not only had he lost his brother and his cousin, but also that he had lost his lower limb above the knee. Being the sole provider for his family, Edin's family entered a difficult time for his family,taking into account that he was the sole provider. Before the accident, Edin did not live with his mother, but when he saw his amputated limb and learned of his mother's emotional situation, he moved in with his mother.

Edin found out about ROMP through a friend, who happens to be someone who received care from ROMP in the past. He was administered the ROMP socioeconomic study by Social Worker Dalia Guzmán. The study indicated that Edin was highly vulnerable, relative to other patients referred to ROMP, and for that reason he was considered for participation in the CBR Program. After an initial telephone screen, he received an in-person screen and a full mental health evaluation. He was selected into Cohort 10 of the CBR Program, and began receiving home visits and service coordinations by his designated Mobilizer Zoila Mérida.

Motivated by the opportunity to receive his prosthesis at ROMP, Edin carefully followed the pre-prosthetic instructions and recommendations made by his Mobilizer. He experienced progress in his physical and emotional states. Edin's community is extremely difficult to mobilize via wheelchair or crutches, having to climb more than 500 steps to arrive at his house. During this pre-prosthetic phase, Edin's willpower, discipline, and patience enabled him to overcome this challenge and go up and down those stairs as necessary.

After a couple of months in the Program, Edin received his prosthesis in April 2023. Many emotions filled Edin and his family, and it was a day they will always remember. He was able

to stand with, and use, his prosthesis from the moment it was delivered, using only a cane to support himself. Within two weeks, he only used the cane to go up and down the 500 steps in his community, and within four weeks he completely abandoned the cane.

Edin returned to work, driving a motorcycle taxi, or tuk tuk. ROMP motivated Edin through his Movilizadora Zoila, ROMP also facilitated Edin's participation in ASCATED training. Edin learned laboral tips and his limits were pushed. Today, Edin not only resumed his economic activity but he made an upgrade and went further, today he drives a tuc tuc, with the difference that he is making down payments, and soon the vehicle will be his, before he would rent a tuk tuk. Edin really soaked up what the folks from ASCATED and his Mobilizer had to say. This has enhanced his economic and emotional wellbeing. He enjoys being more independent, instead of relying on everyone to accomplish basic activities. As a result of his earning a living once again, and increased independence, Edin's family relationships have improved. This is especially true with his mother, which has allowed him to accept his new reality as a person with amputation.

Edin's whole family have expressed their gratitude towards ROMP, especially his mom. This life-changing event has allowed him to mobilize in all aspects, "When he received his prosthesis, he not only received from ROMP, "the device", but he received a lot more." The day Edin received his prosthesis and his mom saw him walking again, she thanked God for this miracle and for laying out in her son's path a new prosthesis.

Participant Adalí, Cohort 10, Province of Escuintla

Adalí is a nine year-old girl who lives with her parents and her nephew, who is like a brother to her. She has lived through several very difficult situations, including having had to live for a time in a state protection home, due to situations with her older sister. Shortly after returning home with her parents, she fell and hurt her leg, but her parents did not place much importance upon it. As the days went by, Adalí complained of sharp, unbearable pain, and her parents noticed a lump of tissue on her knee.

She was taken to the Hospital of Escuintla, where she was hospitalized, and later transferred to the National Pediatric Oncology Hospital (UNOP), where Adalí and her parents received the jarring diagnosis of osteosarcoma - bone cancer - and her leg had to be amputated up to and including the hip joint. In addition to the amputation, Adalí received chemotherapy, which led to her being extremely thin, pale, and low-energy. She was referred to ROMP by Dra. Thelma Velasquez, an oncologist and key referral partner of ROMP at UNOP.

Due to her delicate health situation, Adalí's participation in the CBR Program was placed on hold until her health, and particularly diet, improved in order to effectively participate in the program. The ROMP CBR team continued to follow-up with Adalí in the months following her referral to the program, and she entered Cohort 10 of the Program in 2023. Like Adalí, other patients with significant physical health challenges are followed-up with by the CBR Program to ensure that they are entered into the Program when they are truly ready for it.

Throughout her journey, Adalí's father has been by her side. In spite of a difficult work schedule, he takes care of her, ensures that she does her exercises, and maintains fluid communication with her Mobilizer. Adalí feels motivated and encouraged by her father's effort and dedication.

Adalí received in-person and virtual visits by her Mobilizer Martha twice per month during a period of five months, as well as the coordination of special additional services, for instance three group therapy sessions. ROMP also spoke with UNOP to coordinate sessions with

their nutritionist and psychologist. The family also received an EcoFilter, which is now providing them with clean drinking water.

Nearly 12 months after she was referred to ROMP, Adalí was ready to receive her prosthesis in April 2023. She was cast by prosthetists at the ROMP clinic in Guatemala City, and her prosthesis was fabricated and delivered a few days later. Having a hip disarticulation amputation meant that her prosthesis needed a hip, knee, and ankle joint. Although her physical recovery is ongoing, she uses her prosthesis every day. Her Mobilizer has utilized the home visits that followed the delivery of her prosthesis to work on post-prosthetic exercises. She is continually improving in her ability to walk once again.

Adalí is currently in third grade. Her teachers were opposed to her attending classes, stating that “in her condition she could fall and hurt herself.” ROMP intervened by speaking with her parents to emphasize that an important part of her rehabilitation process was interacting with her peers. Her teachers accepted this approach and today Adalí attends her classes in person like other children her age, she enjoys coloring while being in school. When she grows up, Adalí wants to become a Doctor.

Adali’s parents have expressed their gratitude towards ROMP, for creating the opportunity for their child to have a prosthesis that provides mobility. Adali has expressed her gratitude that today, she no longer depends on a wheelchair, she is still using crutches, but she can now get around on her own. She has a ways to go, but gradually Adalí has started to resume her life, and be a happy and active child.

Participant Eduardo, Cohort 11, Province of Sololá

Eduardo is 51 years old and lives by himself. Eduardo's amputation story began when his wife was hospitalized at Hospital Roosevelt in Guatemala City. The doctors advised him that staying at the hospital and waiting for his wife's condition to improve would be futile, so he decided to return home. On his way, he received the news that his wife had passed away. As he made his way back to the hospital, Eduardo was hit by a bus. He suffered numerous injuries, including the transfemoral amputation of his leg.

Recovering from his accident, Eduardo was unable to plan or attend his own wife's funeral. He fell into a state of depression, unable to work his crops, which were a key part of his sustenance. Eduardo had no one to accompany him or help in his recovery. His sisters supported him to the best of their abilities. He and his family are people of limited resources, living with the bare minimum.

Eduardo was referred to ROMP by partner organization ADISA. When he entered the ROMP CBR Program, he was depressed, had limited mobility, and was entirely dependent upon other people supporting him. Upon completing the screening process,he learned that he would receive his prosthesis from ROMP. Eduardo became a great participant in the Program, following all instructions given by his Mobilizer Zoila during both in-person and virtual visits, which took place twice-per-month during a five-month period of time. He also started receiving physical therapy at ROMP partner ADISA, significantly improving his mobility. In October, Eduardo received his prosthesis and entered the post-prosthetic phase.

During the pre-prosthetic phase of his rehabilitation, Eduardo learned through ROMP to make and sell artisanal jewelry, helping him cover some of his key expenses. Upon receiving his prosthesis, Eduardo began working in other economic activities, such as making plastic baskets, with the support of ROMP. Today, he is learning carpentry and has even repaired roofs. Eduardo has excellent mobility, using only crutches for support when traveling to distant places; otherwise, he uses a cane for support. Eduardo's mood has improved significantly, and he is a more resilient person.

Participant Joel, Cohort 11, Province of Santa Rosa

Joel is 55 years old and lives with his wife in the stables of the village of El Zapote. Returning home after a day of work, walking along the edge of Lake Amatitlán, he was assaulted by bandits. He resisted the attack and tried to run, but he was shot in the leg. As a result of the gunshot, his bone fractured into several pieces.

Joel remained hospitalized for six months at the Hospital Roosevelt, where doctors attempted to save his limb. In spite of their efforts, an infection set in, leading to gangrene. In June 2021, Joel's leg was amputated at the Hospital of Antigua. He now knows that he has diabetes, but is unsure whether he was already diabetic before the incident, or if it developed due to the situation. Following his amputation, Joel went to live with one of his children. While recovering, his wife stayed living and working in the stables, as it was their only source of income.

Joel was referred to ROMP by the Municipality of Villa Canales. He was determined to be a candidate for the CBR Program through the socioeconomic study administered to every single person referred to ROMP. From the beginning of his participation in the Program, Joel dedicated himself to following the instructions and recommendations provided by his Mobilizer Zoila. He completed two months of pre-prosthetic care, and was delivered his prosthesis in October at the ROMP clinic.

As Joel was about to receive his prosthesis, his son also fell victim to violence, suffering a severe beating that required intensive care and wheelchair use. This situation was an emotional setback for Joel, but upon receiving his prosthesis, his hope returned because he knew that he would no longer depend on others, but instead he would be able to resume working and to contribute financially to his family. Within 10 days of receiving his prosthesis, Joel had returned to work at the stables. He is already working with excellent mobility, managing a team of workers on a farm. Joel and his wife support each other, as well as his son and his family.

Participant Maria, Cohort 10, Province of Guatemala

María is an 8-year-old girl who lives with her parents and her brother. She was born with various health conditions, including clubfoot, malformation of her right leg, syndactyly, and cleft lip and palate. A significant part of Maria's life has been spent in hospitals, health centers, and other places where medical attention has been provided for her health conditions.

María's family has very limited economic resources, and lives in a place with challenging terrain. However, economic and other terrain have not prevented Maria from resolving the health situations she was born with. Her parents are committed to finding means to overcome each of María's health conditions. Their attitude has strengthened her emotional situation, and she is a happy child with immense desires for her life.

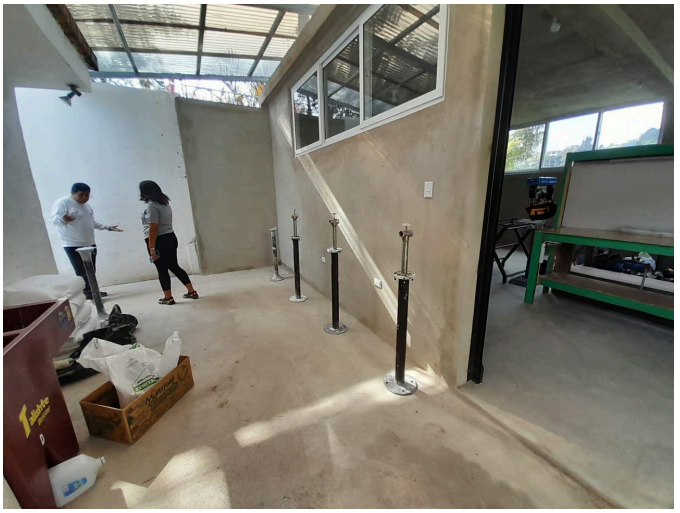
Maria was referred to ROMP by Hospital San Juan de Dios. When she entered the CBR Program, María had recently undergone surgery for her clubfoot at Hospital San Juan de Dios. Her participation in CBR was initiated while she was recovering from surgery. Support was provided to monitor wound healing and initiate mobility. During her participation in the Program, her Mobilizer Zoila prepared María to receive her prosthesis, focusing on physical and mental health, residual limb, and pre-prosthetic exercises.

Maria took her first steps at the ROMP clinic on the day she was delivered her prosthesis. Initially, Maria was fearful because walking was new for her, having previously only moved-around by crawling or using plastic stools as an improvised walker. Within a few days of receiving her prosthesis, however, she no longer needed support equipment beyond her prosthesis. Despite living in rugged terrain, she is now able to be fully mobile.

Recently when she returned to the clinic for follow-up, María walked as if she had been using a prosthetic limb her entire life. She even approached adult patients and gave them instructions on how to use their prosthesis to walk. In the final days of classes for the year, María attended school in person, having previously studied only remotely. Maríais a child with a bright spirit who motivates everyone to see that life is wonderful, despite its difficulties and setbacks.

Visual Guide

The new ROMP clinic in Guatemala City.



The newly-constructed prosthetics workshop.

New Country Director, Davy, and new PT-Mobilizer, Erika.

The new M&E and Grants Associate, José Ramos.

Taking scientific-grade outcome measures at the clinic.

Conducting an outreach visit to Hospital San Juan de Dios.

New volunteer Mobilizers from UMG PT Program.

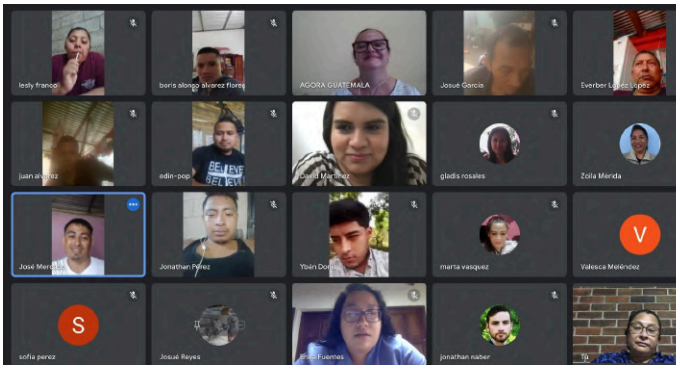
The first mobile clinic visit to Puerto Barrios.

Mobilizer Martha conducting a home visit to Px Adalí.

Mobilizer Erika conducting a home visit to Px Lesly.

Mobilizer Zoila conducting a home visit to Px Antony.

Visit by Ken Goody from DHRF to Px Lupita.



Livelihood development session with partner ASCATED.

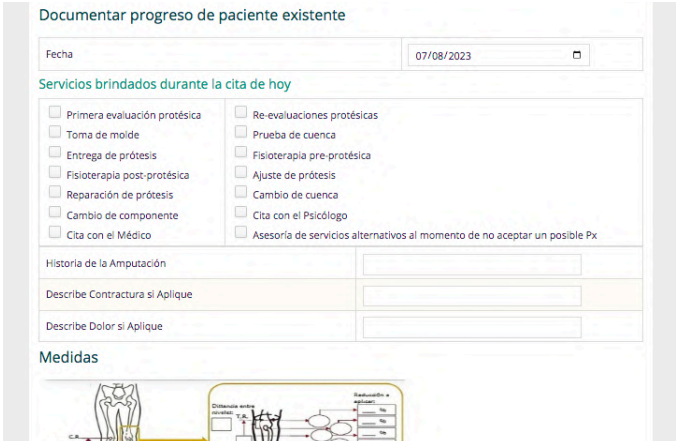
Group therapy session for pediatric participants.

Group exercise session with volunteer Mobilizers.

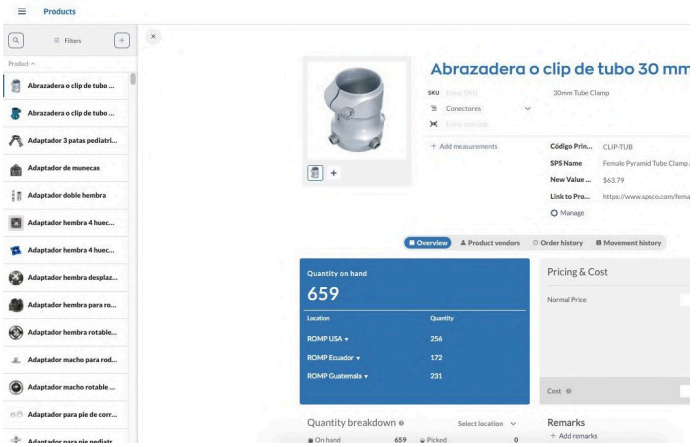
Accompanying Px to Hospital Roosevelt for limb revision.

The new version of the Managing my Health booklet.

ROMP information sheet for community contacts.



The OpenMRS patient information system.



The InFlow inventory management system.

Using the rehabilitation wheel and exercise booklet in a visit.

Conducting pre-prosthetic mirror therapy in a home visit.

Conducting pre-prosthetic physical therapy in a home visit.

New Mobilizers Elly (Left) and Made (Right), with Zoila.

Ecofiltro for a patient without clean drinking water.

Reorganized inventory of prosthetic components at the clinic.

Physical therapy students under the supervision of Erika.

Test socket fabrication to improve the fit quality of prostheses.

Guatemalan National Rehabilitation Services Guide.

Back to table of contents.