

## **Guatemala 2020 Rio Dulce Medical Program Report**

By Dr. Timothy Lee and Nasha Zaheer, February 2020

**1. Project TITLE:** Guatemala 2020 Rio Dulce Medical Program

**2. Project DESCRIPTION:**

A medical team spent eight days in Guatemala, supported by Ak' Tenamit, offering health services and providing medicine, as well as educating the local community. They consisted two nurses, a technical advisor, all Canadian trained, two Guatemalan nurses and translator.

**2.1 Project GOAL:**

Provide health services, education and medicine to the local community serviced by Ak' Tenamit, Rio Dulce, Guatemala, to assist the vulnerable Guatemalan Indigenous population.

**2.2 Project PURPOSE:**

Provide medicine and new knowledge to community members and health promoters.

**2.3 Project OUTCOMES:**

- a. Better inventory of medication with better knowledge on their usage
- b. Increased knowledge level of health promoters
- c. Urgent care of the local population in remote villages

**2.4 Project BENEFICIARIES**

. Direct Beneficiaries: Local indigenous population suffering from prevalent diseases.

**2.5 EQUIPMENT**

Otoscope, stethoscope,

**2.6 MEDICATION**

See Appendix A "TimMedicamentos2020.numbers" & "Medicamentos2020.numbers"

**2.7 RECORD-KEEPING**

See Appendix B at end of report: "G2019 Medical Project Stats"

**2.8 OPERATIONS and DURATION**

- 1) Sunday Feb. 2: meetings, training, orientation, inventory, packing of medication
- 2) Monday Feb. 3 – Friday Feb. 7th, 2019: clinic days at villages 6.25- 8 hours of patient care and education

**SITES:** Livingston, Guatemala: Villages of Quebrada Seca, Cerro Blanco, Creek Calix, Ak'Tenamit Health Clinic at "Site 1"

- 3. Partner (Joint Venture Participant): Asociación Ak ' Tenamit ( [www.aktenamit.org](http://www.aktenamit.org))**  
Avenida A 9-39, zona 2, Ciudad Nueva, Guatemala City, Guatemala, Central America.

### **Staffing**

Technical advisor: Dr. Timothy Lee

Nurse: Nasha Zaheer

Nurse: Denis Croft (experienced Canadian volunteer with several years experience at Ak'Tenamit)

Nurse, Ak'Tenamit: Maria Bolom Maas

Health Promoters, Ak'Tenamit: Martin Coc, Alejandro Buca

Translator: Rogeria Pec

Only Ak' Tenamit staff and the translator were paid

### **4. Budget**

Approximate Cost: \$5500 ( including airfares). Medication costs were approx. \$1000 ( Medication value was greater because of donations from various sources including HPIC) Extra fuel costs for the medical team was approx. 2000 Q ( \$400)

### **5. Activities**

#### **Services Offered**

Consultation and Dispensing of Medicine

Basic antibiotic treatment of common infections, injury management and wound care

Nutritional advice

Management of skin infections

Wound management

#### **Itinerary**

##### **Day 0 - Ak'Tenamit Medical Clinic Site 1**

Organizing and packing of medication was accomplished on Sunday . Denis Croft arrived first and recruited Ak' Tenamit Volunteer's to do most of the preparations. Medicine For the next day was placed in clear Ziplock bags and labelled. The bags were then placed in large Dry-Sac bags lined with garbage bags . Garbage bags were necessary because the Dry -Sac bags were in poor condition. Heavier aqueous meds were placed at the bottom so lighter items would not be crushed.

##### **Day 1 – Quebrada Seca**

The trip to Quebrada Seca included a 20 minute boat ride followed by a 45 minute hike. Apparently one could take a motorcycle 2 hours on a new road to reach Rio Dulce town. The clinic was a Women's clinic- Clinica De La Mujer

The president of this village is Thomas Caal Xi and the vice president is Merardo Maas. What was notable was that the medications that were previously left on the clinic floor to expire were removed. The clinic did take our recommendation and had cleaned up the mess from previous years that were noted. There is still no nurse or health promoter for the Clinica De La Mujer due to funding. The previous health promoter at this clinic earned 700 quetzals which was not enough for her own living and transportation expenses.

Through interviews with local village committee members it was revealed that prior to a nurse or health promoter being able to work in this clinic, the village has to come together and collectively vote on a person they trust to be working in this clinic. Medications in Quebrada Seca that were stored in the back of the medical clinic on the floor were cleaned up prior to our team arriving. The clinic was clean and ready for us. Our translator Rogerio had called prior to our visit announcing our arrival. The bathroom in the clinic was repaired and the medical team was able to collect urine samples to diagnose some of the conditions. Total number of patients seen was 115. In the first day of this medical mission trip, we estimated seeing around 120 patients. Unfortunately, some patients were not seen for lack of time.

Cell phone coverage was poor. There was almost no electricity in the rooms for lights. Patient demand was high because there is no full time health promoter staffing the clinic. Denis and Maria each took an exam room and Tim and Nasha prepared an area for dispensing meds.

Pedro Caal Chub is the treasurer and also a health promoter. Pedro has to provide this service out of his house, where he purchases medication and charges more to cover his time. He prescribes medication and even sutures people who cut themselves. The next place for sick people to receive care would be Puerto Barrios but it requires a lot of travel time.

### **Prevalent Conditions:**

Tinea Capitis, Tinea Corporis, Scabies, various skin parasites, intestinal parasites, musculoskeletal, respiratory problems.

### **Day 2 – Cerro Blanco**

The second day the medical team travelled to a small Village called Cerro Blanco. The population of this village is approximately 500 people. From Ak'Tenamet a 45-minute boat ride is required to reach the coast near the village. From there an approximate 1 hour and 45 minutes hike is needed to reach the village. The remoteness of this location makes health care inaccessible. The team reached the village at 1100 and started the work day at 1300. The clinic day lasted until 1800.

The Health Clinic was built by Fundeco. It was small, with a cement floor. There was a shower stall and a washroom with the only flushing toilet in the village. The rooms included a waiting room, 2 consult rooms with another double room which was used for consults and examinations. The shower did not work. New this year was an extension of the metal roof which offered cover two patients waiting outside. This allowed more space for technicians to work inside. As a result medication was arranged and organized in the former reception area and patients were restricted from entering unless they were close to being seen.

A variety of illnesses were present as well as many pregnant women coming to receive a check up and vitamins needed for the healthy development of their baby. This village is known to withhold naming their new born babies until the age of almost 2 to avoid attachment. This is due to the high infant mortality rate. 1 in 5 babies do not survive.

Women here are not able to access prenatal vitamins and receive only what nutrients they can get through foods that are available each season. Currently there is 1 health promoter in the Clinica De la Mujer funded by Canadian nurse Denis Croft. Marcelino is the health promoter, funded privately by Denis Croft. He is paid 2000 Q per month. Because of Denis's generosity, the people in Cerro Blanco have regular care. There are many political issues which result in lack of funding by the government for a nurse at this location.

Prevalent conditions: Scabies, skin parasites, intestinal parasites, musculoskeletal, neuro conditions, respiratory illnesses, complicated pregnancies (ectopic), prenatal problems, fungal infections, infected wounds, multiple decayed/infected teeth, malnourished patients, anemia.

Attendance on both days was very good. One reason was because schools were closed and children were available. There are no longer any teachers in Cerro Blanco.

### **Day 3 – Cerro Blanco**

The medical team again stayed overnight at health promoter Martin Coc's house. The day started at 0830 and finished around 1200. In our time here 251 patients were seen by Denis Croft, Nasha Zaheer, and Alejandro Buca. In previous years the medical team tried to educate the children at the school on oral health and cleanliness. However this year due to lack of funding there is no teacher for the village that has 130 children.

The medical team was approached by committee members. They were presented with a proposal requesting for help with a meeting that will be happening soon, joining 14 other villages together to discuss the educational barrier these children now face.

After the clinical day was complete the team met together again for one last lunch before their long journey down the mountain and back to Ak Tenamit. Dr. Lee responded to the proposal stating that HO is committed only to helping with health problems and could not as an organization fund anything else. Dr. Lee and Nasha did give funds personally.

An evaluation was completed by Tim to assess the possibility of a dental project in Cerro Blanco. He was escorted to the school with 4 community leaders.

Facility

- school classrooms were in disrepair. Covered space inside and outside under veranda.

Water- None

Latrines- One serving all students

Other - Teacher's house currently used for storage

Power- apparently 4 generators at the church all working

Accommodations for Volunteers

- House provided by Martin Coc
- Wooden house with large room with 6 hammocks and shelves and wooden benches along walls
- No mosquitoes at the time
- Noisy in the morning beginning at 6 am due to machinery , roosters, etc.
- Dry and spacious
- No privacy
- latrine 1 minute walk down the hill
  
- Meals prepared by the family of Martin Coc and Community leader : turkey soup, chicken soup, duck soup, cucumber and carrots , tortillas; sweet bread ; water or bottled soda

Treasurer: Sebastian

#### **Day 4 – Creek Calix**

This day was spent in a beautiful village named Creek Calix. The village had a well-established clinic with a functioning toilet running and great space. Two of the rooms were used as waiting spaces for the villagers who were given numbers as a place in line to be seen. One of the rooms was used as a pharmacy where medications were picked up from and organized in. In addition two rooms were used as spaces where patients were being seen by Nurse Denis Croft and Health promoter Alejandro Buca. 72 patients were seen in total at this site.

Creek Calix is a Community accessible by river 25 minutes by boat. It is sustainable by farming corn, bananas and raising cattle. There are 40 houses, surrounding one school, one teacher, and a classroom of 38 children. There is also a large church. The Health Clinic was constructed by Ak'Tenamit. Medicine was available. Medical care is not ongoing. If a villager has a medical problem, Irma is contacted and she meets the villager at the clinic. There are six rooms and two waiting areas. There is electricity, running water, and toilet facilities.

In the previous year teaching was done at the local school by Dr. Timothy Lee and Nurse Nasha Zaheer on oral self care. This year the team came to learn that Creek Calix is yet another village affected by the new government. There are no teachers at this village and again the children are left without an education. The clinic in this village is run by one health promoter who voluntarily helps the villagers. She comes to the clinic when someone is in need of medical care. The

medications that she has in the clinic through donations she sells to buy even more medications in order to help run the clinic.

Transportation is a big factor in why she has not received more training. For the future it would be ideal if this health promoter could come to Ak Tenamit and learn from either Denis Croft or Maria Bolom on topics she felt she needed more training on. Transportation and fees play a big role on why health promoters don't get trained on certain topics. The lack of confidence comes from not having the proper education.

Prevalent conditions: Scabies, respiratory illnesses, skin parasites, intestinal parasites, prenatal, musculoskeletal conditions.

Rotavirus is a condition which spreads throughout villages especially in March and April. The treatment may be simply rehydration. When it is cold and rainy, respiratory conditions are common. Warm weather brings on skin infections. Dengue fever usually manifests as multiple cases in a villages which resolves quickly within 2 weeks.

Prevalent conditions: Scabies, respiratory illnesses, skin parasites, intestinal parasites, prenatal, musculoskeletal conditions.

Below is an image (Appendix 3) showing the statistics for the week

### Conditions Treated and Medication Provided

The lists below are taken from the original G2020 Medical Program Proposal. Underlined are the conditions treated and medication dispensed during the project.

#### Prevalent conditions

- Malaria
- Parasites/viruses (giardia, rotavirus, scabies, H. pylori)
- Dengue
- Respiratory (i.e. asthma, air pollution, climate change, pneumonia)
- Integumentary (rashes due to various illness and parasites, machete wounds)
- Musculoskeletal (Working conditions as well as women overworking using the wrong positioning causing back problems, fractures)
- Acute conditions: Involving snake bites, bat bites, and various insect bites, allergies are common as no medical history is taken and there are no charts to refer to)
- High teen pregnancy rate
- Rampant dental caries
- Trypanosomiasis also known as 'chagas disease' in South America.

#### Medication Needs

- Tylenol preferable over advil due to increased hemorrhagic episodes
- Metronidazole (Flagyl) for giardia

- Tinidazole (Tindamax)
- Birth Control (Injections are cheaper in comparison to pills)
- Rabies vaccine
- Tramadol
- Diclofenac
- Salbutamol syrups (cheaper than puffers)
- Measles, rubella, diphtheria, hepatitis, tetanus vaccinations
- Pneumonia antibiotics
- Iron, multivitamins, folic acid

## 5. Analysis

The project was a success in that many patients were seen because we were well-staffed and well supplied with medication. Of the Objectives set prior to the project the ones underlined were somewhat achieved.

- a. Better inventory of medication with better knowledge on their usage
- b. Increased knowledge level of health promoters
- c. Urgent care of the local population in remote villages

One remaining obstacle is the language barrier between our Canadian team and the indigenous patients. Consultations took more time because of limited understanding.

A physician would provide more accurate and precise diagnosis, but would not necessary increase the scope of practice on this type of project. Many of the conditions treated were diagnosed using the experience of the providers in treating patients in the same villages as many times in the past. Without a physician, some conditions were simply not treated or only their symptoms were managed.

Health Outreach nurses currently give their clinical impression only. Ak'Tenamit staff to take responsibility in prescribing medication. For example, Canadian nurses only work under the supervision of Guatemalan nurses or health promoters.

Equipment was not purchased or donated for this project. An otoscope and stethoscope were adequate for the conditions seen. This year very little material and supplies were donated or These included gauze and suture. This year a lot of medication was acquired. Donations came from HPIC (Health Partners International), Robinson's Pharmacy in Streetsville, and drug representatives. Health Outreach funding for medication amounted to \$1000.

Denis Croft purchased medications at good prices using personal funds. Leftover medication was again stored in a hard grey suitcase for future HO medical projects.

Once again this year we discovered a recurring problem in the villages - There was no house promoter present employed by the government such that health promoters had to set up businesses on their own in order to provide services and support themselves and their family. Most ill villagers found this service adequate since the cost of transportation and time made visits to Government Health centres in Puerto Barrios prohibitive. .

## **6. Future Ideas**

Training health promoters - on site training and with workshops on Site 1 medical clinic . The costs would be transportation to and from clinic and meals. Apparently this cost is prohibitive for some of the health promoters, and also to Ak' Tenamit. Boat transportation to and from Ak t medical clinic and Creek Calix is Q 360 .

Better command of the language by Canadian volunteers

Funding for training of Health Promoters and transportation costs. For example, a health promoter can be trained at Ak' Tenamit but will require funding to offset their costs.

Zika and dengue testing with cbc testing

More specific medication such as Nix for scabies

## **7. Management Arrangements**

Denis Croft made all arrangements including boat transportation and horses to Cerro Blanco and collaboration with Nurse Maria Bolom Mass. Informed were Graciela Coy, Steve Dudenhoefer, Juan Shol and Maria Bollom Maas. This was a joint project involving Health Outreach and Ak' Tenamit. The Medical team traveled to different villages than the Dental team. Timothy Lee made arrangements with President Pravir Patel and Project Leader Ramzi Haddad.

## **8. Summery**

Health Outreach carried out another successful medical project, seeing 438 patients in five days in three different communities and at the Ak'Tenamit Medical Clinic.

The weather good with no rain during our activities. Medication was never in short supply during the week.

The Medical team felt much more comfortable with the experience acquired in the previous year. Although personal health was at risk with scabies, ascaris and other illnesses, our team stayed healthy during and after the project.

The goal remains - that project like this becomes a model for short -term medical projects.

## APPENDIX A

			presentati on	Country where it could be bought	Price in Quetzales (1\$ = 5.5Q)	estimated amount needed		what's left in Ak'Tenamit	expiration
Permethrin (nix)	cream	5 %	tube	Canada		10	Scabies for pregnant lady and younger kid		
Mupirocin	ointment	gr	tube	Canada		48	Impetigo/minor skin infection		
Artificial tears	eye drop	1	bottle	Canada		40	Dry eyes	2 bottles	2021-03
Lidocaine	injectable	1 %	vial 50 ml	canada		2	Local anesthesia/ Use for ceftriaxone dilution		
Lidocaine	injectable	2 %	vial 50 ml	Canada	9Q	2	Local anesthesia		
Clindamycin	Capsule	300mg/ 150mg		Canada		120 co	Antibiotic		
Amoxicillin	powder	250mg/ 5ml	bottle of 250ml	Canada	9Q	100 bottles of 250ml	Antibiotic	250mg/5ml of 100ml x25 bottles	2020-09
Amoxicillin	Capsule	500mg	1	Canada	31Q box of 100	1000 co	Antibiotic	500mg tab x550co	2022-06
Amox/cia	Tablets	500mg		Canada		450 co	Antibiotic	100co	2020-05
Amox/cia	powder	250mg/ 5ml	bottle of 250ml	Canada	27Q	20 bottles	Antibiotic	2 bottles	2020-08
zinc	Tablets	25mg	1	Canada		200 co	Mineral/ supplement in malnourished		
PeptoBismol	Tablets chewable		cajas de 24	Canada		4 cajas	Antidiarrheals		
Iron	Liquid	125mg/ ml	gotero de 30ml	Canada		30 bottles	Anemia		
MultiVitamins	Tablets			Canada		5000 co	Vitamins		
Diphenhydramine	Tablets	25mg		Canada		100 co	Antihistaminic		
Diphenhydramine	Liquid	12,5mg/ 5ml	it doesn't come in individual bottle	Canada		2 bottles	Antihistaminic		
Ibuprofen	Tablets	200mg		Canada		1000 co	NSAID/Antipyretic	600mg tab x 90co	2021-01
Acetaminophen	Tablets	500mg	1	Canada		2000 co	Analgesics/ Antipyretic		

			presentation	Country where it could be bought	Price in Quetzales (1\$ = 5.5Q)	estimated amount needed		what's left in Ak Tenamit	expiration
benzoato de benzilo 25%	Lotion	120ml	bottle	Guatemala	10Q	50	Lice/scabies		
Permethrin (nix)	Lotion	1 %	bottle	Canada		30	lice		
Permethrin (nix)	cream	5 %	tube	Canada		10	Scabies for pregnant lady and younger kid		
Mupirocin	ointment	gr	tube	Canada		48	Impetigo/minor skin infection		
bacitracin+neomycin	ointment	20gr	tube	Guatemala	8Q	48	Impetigo/minor skin infection		
Ketoconazole	Cream	15g	tube	Guatemala		15	ringworm/skin fungal infection		
Clotrimazol	Cream	1 %	tubo 20ml	Guatemala	6Q	72	skin fungal infection		
Clotriplex	Cream		tube	Guatemala	8Q	48			
Erythromycin ophthalmic	ointment	0.5 %	tube	Canada	42Q each tube	20	conjunctivitis and for new born	x4 tubes	2020-12
Artificial tears	eye drop	1	bottle	Canada		40	Dry eyes	2 bout	2021-03
Ciprodex	ear drop	1	bottle	Canada		10	External otitis		
Ciloxan	eye drop	1	bottle	Canada		20	Conjunctivitis	x2 bottles	2020-06 et 09
cloranfenicol	eye drop	1 %	1 dropper	Guatemala	7Q	20	Conjunctivitis		
Hydrocortisone	Cream	1 %	tube	Guatemala	7Q	72	eczema / pityriasis Alba		
Fluconazol	tablets	200mg or 150mg	1	Guatemala	3Q	40	vaginal candidiasis		
Clotrimazol	ovule	100mg	Box of 6 ovules	Guatemala	13Q	10	vaginal candidiasis		
Albendazol	Tablets	200mg	1	Guatemala	12Q box of 100	1000 co	Tapeworm/ Ascariasis/Larva Migrans/ Pinworm/		
Nystatin	Liquid	100000	gotero de 30ml	Guatemala	10Q	5	Oropharyngeal Candidiasis		
Albendazol	Liquid	200mg/ 10ml	bottle	Guatemala	3Q		Tapeworm/ Ascariasis/Larva Migrans/ Pinworm/		
Mebendazole	tablets	100mg		Canada			Ascariasis/ Pinworm/...		
Lidocaine	injectable	1 %	vial 50 ml	canada		2	Local anesthesia/ Use for cotriaxone dilation		
Lidocaine	injectable	2 %	vial 50 ml	Canada	9Q	2	Local anesthesia		
ciprofloxacin	Tablets	500mg	1	Canada	42Q box of 100	250 co	Antibiotic for adults over 18		
Trimethoprim/ sulfamethoxazole	Liquid	40mg/ 200mg/ 5ml	100ml	Guatemala	7Q	30 bottles	Antibiotic		
Trimethoprim/ sulfamethoxazole	Tablets	160mg/ 800mg		Guatemala	37Q box of 100	250 co	Antibiotic		
Clindamycin	Capsule	300mg/ 150mg		Canada		120 co	Antibiotic		

			presentation	Country where it could be bought	Price in Quetzales (1\$ = 5.5Q)	estimated amount needed		what's left in Ak'Tenmit	expiration
Doxycycline	Tablets	100mg	1	Canada		100 co	Antibiotic		
azithromycin	powder	200mg/5ml	1 bottle	Canada	13Q	15 bottles	Antibiotic		
azithromycin	Tablets	250mg		Canada		100 co	Antibiotic	100co	2020-05
dimenhydrinate	Tablets	25mg/50mg	1	Canada	16Q box of 100	100 co	Antiemetic		
Metoclopramide	Tablets	10mg	1	Guatemala	10Q box of 100	100 co	Antiemetic/Migraine		
Metoclopramide	Syrup	2.6mg/ml	sol oral 30ml	Guatemala	15Q	5	Antiemetic/Migraine		
Amoxicillin	powder	250mg/5ml	bottle of 250ml	Canada	9Q	100 bottles of 250ml	Antibiotic	250mg/5ml bout 100ml x25	2020-09
Amoxicillin	Capsule	500mg	1	Canada	31Q box of 100	1000 co	Antibiotic	500mg tab x550co	2022-06
Amox/cia	Tablets	500mg		Canada		450 co	Antibiotic	100co	2020-05
Amox/cia	powder	250mg/5ml	bottle of 250ml	Canada	27Q	20 bottles	Antibiotic	2 bout	2020-08
Suprax	tablets	400mg		Canada		100 co	Antibiotic		
metronidazol	Liquid	125mg/5ml	bottle	Guatemala	6Q	100 bottles	Antibiotic/ Amebiasis/ Giardiasis		
metronidazol	Tablets	500mg	caja de 100	Guatemala		500 co	Antibiotic/ Amebiasis/ Giardiasis		
Tinidazol	Tablets	500mg	1	Guatemala	24Q box of 100	500 co	Antiparasitic/ Amebiasis/ Giardiasis		
zinc	Tablets	25mg	1	Canada		200 co	Mineral/ supplement in malnourished		
Ranitidine	Tablets	300mg	1	Guatemala	32Q box of 100	1000 co	Gastritis		
Omeprazole	Capsule	20mg		Canada		500 co	Gastritis		
Pantoprazole	Tablets	40mg		Canada		500 co	Gastritis		
PeptoBismol	Tablets chewable		cajas de 24	Canada		4 cajas	Antidiarrheals		
Oral rehydration solution	pouch		1 L	Guatemala	1Q	100	prevent dehydration		
Iron / folic acid	Syrup	150mg/250mcg/5ml	1 bottle	Guatemala	35Q	30 bottles	Anemia		
Iron /folic acid	Tablets	105mg/1mg	1	Canada	32Q box of 100	2000 co	Anemia		
Iron	Liquid	125mg/ml	gotero de 30ml	Canada		30 bottles	Anemia		
MultiVitamins	Tablets			Canada		5000 co	Vitamins		
prednisone	Tablets	50mg		Canada	30Q box of 100	50 co	corticosteroids		
prednisone	Tablets	5mg		Canada		100 co	corticosteroids		

			presentati on	Country where it could be bought	Price in Quetzales (1\$ = 5.5Q)	estimated amount needed		what's left in Ak'Tenamit	expiration
dexametazone	Tablets	1mg		Canada		100 co	corticosteroids/anti-inflammatory		
Salbutamol or Albuterol	inhaler	spray		Guatemala	27Q	10	Bronchospasm		
Salbutamol	nebulizer solution	5mg/1ml		Guatemala	19Q	4 bottles	Bronchospasm		
Ipratropium	nebulizer solution	250mcg/1ml		Canada		2 bottles	Bronchospasm	1	2020-04
ambroxol	Syrup	15mg/5ml	1	Guatemala	10Q	30 bottles	Mucolytic agent		
Salbutamol	Syrup	2mg/5ml	1 botella	Guatemala	6Q	40 bottles	Bronchospasm		
Chlorpheniramine	Syrup	2ml/5ml	bottle	Guatemala	4Q	30 bottles	Antihistaminic		
Chlorpheniramine	Tablets	4mg	caja de 100	Guatemala	8Q box of 100	500 co	Antihistaminic		
Diphenhydramine	Tablets	25mg		Canada		100 co	Antihistaminic		
Diphenhydramine	Liquid	12,5mg/5ml	it doesn't come in individual bottle	Canada		2 bottles	Antihistaminic		
diclofenac	Tablets	50mg	caja de 100	Guatemala	15Q box of 100	1000 co	NSAID/Antipyretic	100co	2023-03
ibuprofen	Liquid	100mg/5ml	bottle	Guatemala	6Q	100 bottles	NSAID/Antipyretic		
ibuprofen	Tablets	200mg		Canada		1000 co	NSAID/Antipyretic	600mg tab x 90co	2021-01
Acetaminophen	Tablets	500mg	1	Canada		2000 co	Analgesics/Antipyretic		
Acetaminophen	Tablets	325mg	1	Canada			Analgesics/Antipyretic		
Acetaminophen	Liquid	120/5ml	1 botella	Guatemala	3Q	100 bottles	Analgesics/Antipyretic	6 x bout	exp2021-02
Epinephrine	injectable	1mg/1ml	ampoule	Guatemala		5	Anaphylaxis	2 amp	2020-11
Vitamin K	injectable	10mg/1ml	ampoule	Canada	4Q	2	Hemostatic	2 amp	2021-04
Oxytocine	injectable	5 ui/1ml	ampoule	Guatemala/Canada	20Q	3	haemorrhage post-partum		
Ranitidine	injectable	50mg/5ml	ampoule	Guatemala	290Q box of 100	10	gastritis/anaphylaxis	10 amp	2021-01
Chlorpheniramine	injectable	10mg/ml	ampoule	Guatemala	80Q box of 25	10	Antihistaminic	10 amp	2022-10
Diphenhydramine	injectable	50mg/1ml	1 vial	Guatemala	2Q	10	Antihistaminic		
dimenhydrinate	injectable	50mg/1ml	ampoule	Guatemala		10	Antiemetic	9 amp	2022-10
Metoclopramide	injectable	10mg/2ml	ampoule	Guatemala	70Q box of 25	10	Antiemetic/Migraine	10 amp	2020-08
ceftriaxone with lidocaine 1%	injectable	1gr	vial	Guatemala	20Q	20	Antibiotic		
Ceftriaxone	injectable	1g	vial	Canada		20	Antibiotic		

			presentati on	Country where it could be bought	Price in Quetzales (1\$ = 5.5Q)	estimated amount needed		what's left in Ak'Tenamit	expiration
tramadol	injectable	100mg/ 2ml	ampoule	Guatemala	4Q	10	Opioid analgesic	10 amp	2021-08
Tramadol	tablets	50mg	1	Guatemala	50Q box of 100	100 co	Opioid analgesic		
diclofenac	injectable	75mg/ 3ml	ampoule	Guatemala	81Q box of 100	10	NSAID/Antipyretic	5 amp	2021-04
dexamethason	injectable	8mg/2ml	ampoule	Guatemala	4Q	10	corticosteroids/anti- inflammatory		
Dicyclomine	injectable	10mg/ 1ml	ampoule	Canada		5	Antispasmodic / anticholinergic		
metamizol	injectable	1g/2ml	ampoule	Guatemala	25Q box of 25		Analgesic/ Antispasmodic/ Antipyretic/NSAID		
Depoprovera	injectable	150mg/ ml	vial	Canada	40Q	20	Contraception		
Furosemide	injectable	20mg/ml	ampoule	Canada		2	Diuretics		
Furosemide	tabletas	40mg	1	Canada			Diuretics		
Diazepam	injectable	10mg/ 2ml	ampoule	Canada		5	Anticonvulsants/ muscle relaxants		

## APPENDIX B

Consultations, Livingston, Izabal, Guatemala, HealthOutreach February 2020

Disease	total	0 to 11 yo Female	0 to 11 yo Male	12 to 29 yo Female	12 to 29 yo Male	30 and more Female	30 and more Male	Quebrada Seca TOTAL	Cerro Blanco TOTAL	Creek Calix TOTAL
gastro	49	1	0	20	1	25	2	7	33	9
gastro-intestinal	3	3	0	0	0	0	0	1	2	0
dermato	25	9	4	0	2	8	2	8	17	0
respiratory	29	15	3	4	0	6	1	8	18	3
URI	55	32	15	4	0	4	0	20	27	8
ophtalmo	5	1	0	0	0	2	2	3	1	1
Hemato	16	6	2	5	0	3	0	4	12	0
ORL	13	3	3	4	1	3	0	4	7	2
Dentistry	1	0	1	0	0	0	0	0	1	0
Neuro	1	0	0	0	0	0	1	0	1	0
Allergies	6	1	1	2	1	1	0	1	5	0
intestinal parasite	191	65	33	32	22	18	21	53	98	40
Skin parasite	41	14	8	9	1	6	3	15	26	0
Prenatal	18	0	0	15	1	2	0	8	9	1
Musculo- skeletal	92	6	0	32	4	45	5	14	63	15
Only to get medication	5	0	0	1	1	1	2	5	0	0
fever < 24h	9	8	1	0	0	0	0	0	9	0
Urinary	9	1	0	4	0	4	0	3	6	0
family planing	0	0	0	0	0	0	0	0	0	0
Gyne	4	0	0	3		1	0	2	2	0
symptom of STD	6	0	0	4	0	0	2	5	1	0
Others	6	1	0	2	0	3	0	2	4	0
0 to 11 years old	183							55	104	24
12 to 29 years old	134							29	80	25
30 years old and more	121							31	67	23
Male	137							35	79	23
Female	301							80	172	49
Total patients	438							115	251	72

### *Stats Summary - Medical Team Rio Dulce 2020*

*In the 5 clinical days that the medical team worked they were able to see a total of 438 patients. They were able to visit villages: Quebrada Seca for 1 day, Cerro Blanco for 2 days, Creek Calix for 1 day and Ak Tenamet for the last day. There were many prevalent conditions. Our stats showed: 49 Gastro cases, 3 gastrointestinal cases, 66 dermatological cases, 29 respiratory cases, 55 upper respiratory cases, 5 ophthalmological cases, 16 hematological cases, 1 dental case, 13 ENT cases, 1 neuro case, 6 allergy cases, 191 cases with intestinal parasites, 18 prenatal cases, 92 musculoskeletal cases, 9 cases had a fever upon visit, 9 urinary cases, 4 gynecological cases, 6 cases with symptoms of STD. All other cases such as coming to receive medications like vitamins were 11 cases. People from all age groups were seen, there were 183 cases from ages 0-11 ages. There were 134 cases from ages between 12-29. There were 121 cases of patient seen over 30 years of age. Gender wise 137 males were seen and 301 women. Patients were seen by Registered Nurses Denis Croft and Nasha Zaheer. As well as 2 Local Health Promoters Maria Bollom Maas and Alejandro Mucu. Dr. Timothy Lee was able to organize and dispense medications accordingly. Rogelio Mo Pec was able to translate in English, Spanish and Q'eqchi.*