Canada-Africa Community Health Alliance
CACHA

I'Alliance de Santé Communautaire Canada-Afrique
ASCCA

UKEREWE FALL CARAVAN 2014

OCTOBER 15 - 30TH

Volunteers are drawn to CACHA medical missions with a variety of personal desires and with a range of life experiences. The 2014 fall caravan was no exception with participants travelling from Manitoba, Saskatchewan, Ontario, Quebec, Nova Scotia, Newfoundland and Nunavut and with life experiences that include that of an 80 year old ski instructor and grandmother, to 2 brave, passionate and tireless high school students, to caring health professionals working in Canada's northern communities. Canadian and Tanzanian team members blended together to form an integrated web of support and health expertise through which flowed close to 3000 patients. We, who were fortunate to be part of this amazing adventure, are forever indebted to our Tanzanian partners for welcoming us into their community with graciousness and caring. Finally I would be remiss if I did not highlight the amazing work and support we received by our Tanzanian Coordinator Irene Abusheikh. Without Irene, our medical missions would simply not happen.

CONTENTS

MEDICAL MISSION OVERALL BACKGROUND SUMMARY

Country:	Tanzania
Area:	Ukerewe, Mwanza District
Mission Dates:	October 15 - 30th
Mission Lead:	Cathy Cleary
Field Coordinator:	Irene Abusheikh
Team Lead(s)	Pharmacy: Warren Meek Medical: Chris Nolan and Karin Euler Surgical: Mark Hardy
Data Input and Statistical Analysis:	Elise Vaillancourt, Emma Berliz and Irene Abusheikh Kelly Speagle
Partners:	Ukerewe District Council and Nansio Hospital
Partner Contact:	Dr. Lawrence Nyanda

Overall Budget

Total amount of funds raised from Medical Missions	$100,086.02
Total amount transferred to the field	$34,450.00
Total amount spent on Canadian expenses including flights, supplies, administration and % to local projects…	$64,180.88
Total amount spent in field Tanzania	$31,494.29
Balance in CACHA Tanzania account	$2955.71
Balance in Canadian CACHA Account	$1455.14

I have never met more caring people - your mission is incredible. I have learned so much on this trip. It is all about giving - the rewards are wonderful and there is more joy in giving than receiving. I am very happy that I had the opportunity to get to know you all.
CACHA mission participant

Lovely relationships formed with Tanzanian partners such as nurses, translators, Drs. Michael and Nyanda, the catering team led by Salvatore.
CACHA mission participant

Team Composition

Team Role	CACHA team	Ukerewe Team
Surgeons and Surgical Nurse	3	5
Doctors	5	1
Clinical Officers	0	1
Nurses & Nurse Practitioners	2	8
Pharmacists & Pharmacy technicians	5	2
Logistics & Triage Translators	6	4
Dentist	0	1
Drivers	0	5
Ophthamologist	0	1
Total:	21	28

Overall Caravan Statistics

	2014		2013 for comparison	
Patients	Total: 2697		Total: 3207	
Adults	Male: 1075	Female: 1622	Male: 1307	Female: 1900
Prescriptions	13754		13052	
Consultations	3490		4074	
Referrals	165 includes 81 surgical and 83 testing (24 of which were for TB)		236	
Average Rx / patient	5.1		4.07	
New HIV Diagnosis	12/558 tested [2.0%]		15/744 [2.0%]	
Malaria Test Positive	219/505 tested [43.4%]		99/506 tested [19.6%]	
Syphilis Test Positive	3/131 tested		1/45 tested	

MEDICAL MISSION OBJECTIVES AND GOALS:

The Canada Africa Community Health Alliance (CACHA) is a non-governmental organization that seeks to improve population health and provide HIV care, orphan vocational centers for children affected by the HIV calamity and education to remote African communities.

In following the objectives of CACHA we worked with our Ukerewe partners to:

1. Provide access to high quality health care services and to support the local health care system including the sharing of information between Canadian and Tanzanian medical personnel.
2. Contribute to the prevention and treatment of HIV/AIDS, through free testing, referrals, counseling and access to condoms.
3. Offer the opportunity to mission participants to increase their knowledge in an area other than their designated mission role/profession (e.g. Pharmacist in logistics; Logistics in surgery)

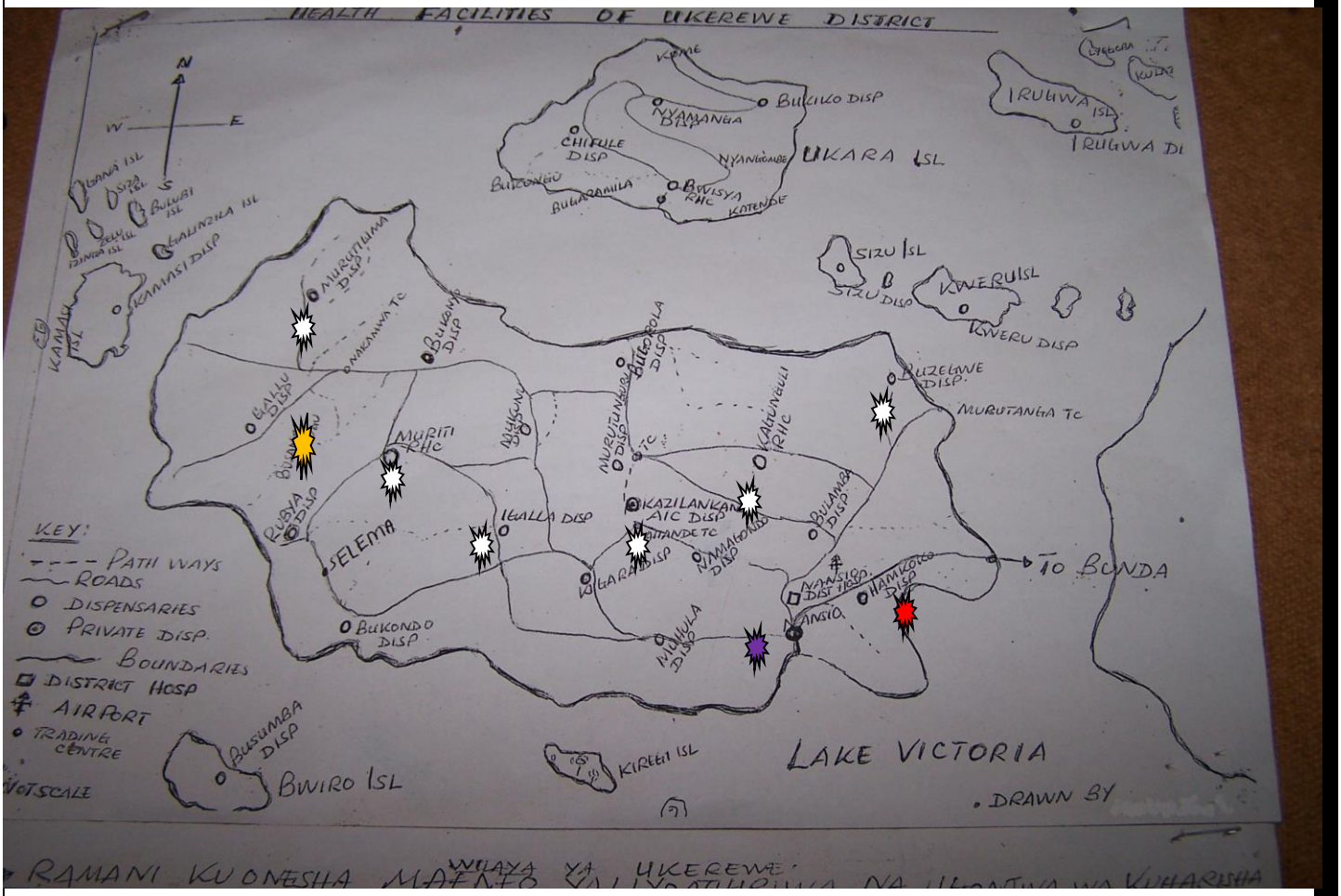
MEDICAL MISSION SCHEDULE:

Na	TAREHE / DATE	KITUO /SITE	MUDA/ TIME	SIKU / DAY
1	20.10.2014	**KASENI DISP**	2:00 ASB – 10:00 JIONI	JUMATATU
2	21.10.2014	**MURUTILIMA**	2:00 ASB – 10:00 JIONI	JUMANNE
3	22.10.2014	**MURITI H/C**	2:00 ASB – 10:00 JIONI	JUMATANO
4	23.10.2014	**IGALLA DISP**	2:00 ASB – 10:00 JIONI	ALHAMISI
5	24.10.2014	**HAMUYEBE DISP**	2:00 ASB – 10:00 JIONI	IJUMAA
6	27.10.2014	**KAZILANKANDA**	2:00 ASB – 10:00 JIONI	JUMATATU
7	28.10.2014	**KAGUNGULI R/C**	2:00 ASB – 10:00 JIONI	JUMANNE
8	29.10.2014	**BUZEGWE**	2:00 ASB – 10:00 JIONI	JUMATANO
9	30.10.2014	**MULUSENI DISP**	2:00 ASB – 10:00 JIONI	ALHAMISI

The best three aspect of my experience were "the interactions that I made with the local people, the connections that I made with the team (Canadian and Tanzanian), and seeing that I was making a difference in people's lives".

CACHA mission participant

MAP OF VILLAGES CACHA CARAVAN VISITED IN UKEREWE:



Muluseni Kaseni Hamuyebe (Approximate locations of 3 villages not shown on original map)

Original map drawn locally and hanging in local dispensary

MEDICAL TEAM

The medical team was led by Chris Nolan and Karin Euler. There were 7 medical stations which included one station dedicated to gynecology. Each station consisted of 1 Canadian (physician, RN, NP) and 1 Tanzanian (physician, clinical officer, RN, translator). The clinical team worked in close proximity to each other and often in the same room. This year there were 2 examination stations set up each day to facilitate easy access for physical examinations of patients as needed. There were days when the Tanzanian clinical officer and doctor saw patients on their own. This offered an opportunity to see an increased number of patients however it also decreased the opportunity for sharing/teaching between Tanzanian and Canadian clinicians on those days.

This medical team felt very strongly about having enough time to spend with patients in order to obtain a good medical history and therefore offer a high level of care. For some patients, the CACHA caravan is the only opportunity they have to access health care (often due to lack of money to pay for health care) and clinicians felt it important to spend the time to ensure a good quality of care.

SUCCESSES

- ✓ Having a testing table for urine dips and pregnancy tests with a logistics person to manage the tests was very helpful.
- ✓ Having logistics take temperatures of people with charts so that patients with temperatures could bypass the lineup and triage to limit sick people being in touch with others. This also allows for observing any critical cases e.g. wounds, obvious infections, etc. Logistics also took temperatures of the people we had to turn away to attempt to see people who had high temperatures and not turn away very sick people.
- ✓ Having access to 2 exam tables in Medicine – clinicians felt this was necessary.
- ✓ A nurse practitioner sat with triage and developed a number of questions to be used by triage to further clarify the health complaints/symptoms of patients.
- ✓ We initially handed out non sterile gloves but realized sterile ones would be more useful and then bought a few as a pilot project. They were very well received and we believe that more women may consider having their babies in a dispensary or hospital if they have this supplied.
- ✓ Laminated algorithms were carefully utilized for clinical decisions
- ✓ Rotating interpreters between clinicians allowed for diverse learning opportunities
- ✓ Daily review of surgical referrals with Mark was helpful and most interesting to medical team.
- ✓ 1 medical person was assigned daily too hand out masks and gloves to all caravan volunteers
- ✓ Having the preprinted bin manifest list to document supplies left on last day was very helpful.

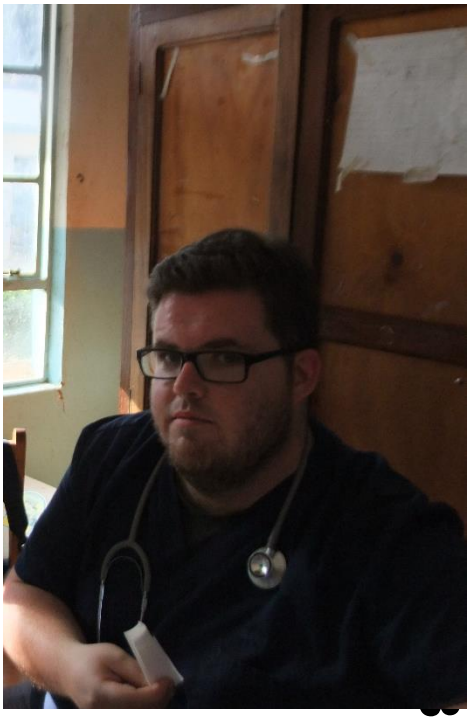
OPPORTUNITIES FOR CHANGE

- ➢ Depending on the number of logistics people available, trying to ensure all patients are weighed and temperatures taken helps to save time of clinicians. Having thermometer and scales easily accessible to clinicians also helps when patients are missed for any reason.
- ➢ Lack of health promotion teaching in the line of waiting people was noted. Unfortunately this was partially due to the Immunization Program happening while we were on caravan, which meant fewer Tanzanian partners were available. We had also tried to arrange to have IMIC nurses as teachers however this was not able to be accommodated.

- If possible having:
  - O2 stat monitor
  - 9 working otoscopes
  - 9 adult BP cuffs
  - Fetal Doppler
  - Pregnancy wheel
  - Measuring tape
  - Hemocue kits for anemia check on site (some research needed on this)
  - ++ kangas or table cloths for window coverings for privacy
  - ++ malaria tests – at least 100 / day
  - CACHA protocols in hard copy on site

> *The collaborative medical approach - the sense of working as a medical team with colleagues nearby for a quick discussion regarding diagnosis or mx plan. The Tanzanian partners were an absolute pleasure to work with right from the medically untrained translators to Dr. Michael. The med/surg evening de briefs were also appreciated.*
>
> CACHA mission participant

- Need clinicians to understand the prescribing process that occurs in real time - how the pharmacists make their decisions. Suggest that each clinician have mandatory 1 hour turn (with lead pharmacist) to see how Rxs get dispensed from pharmacy early in caravan (first 2 days)
- There is a need for the pharmacy and medical leads to meet early and determine how best to have the teams work together. Guidance from pharmacy is appreciated from the beginning.
- Would be ideal to have stamp on chart “Last schisto treatment?”& have question asked at triage
- Consider solar powered lights to be used in dispensaries where rooms may be very dark
- Have short explanation of KIT on chart “Kit = paracetamol +albendazole” so patents or other healthcare providers understand what meds they have received when KIT is indicated on chart.
- Have 100 Tanzanian prenatal charts to chart visit in so that pregnant women have the results of their visit with CACHA recorded to take with them including any medications dispensed.
- More focused/directed reading and prep in terms of common diseases/conditions to expect
- Record any follow-up required (including when) on chart in Swahili as instruction to patients.
- Determine a regular protocol for follow up at local dispensary – at initial meeting with TZ team
- Suggest introducing local clinical officer / nurse to entire medical team at each dispensary. Have them available for complex cases and to plan any required follow-up.
- Suggest announcing that families need to be seen together. E.g. need to track who is being treated for STIs (men coming through line separate from women) and have children seen with their parents.
- Evidence based handouts in Swahili or just with pictures
  - Back pain stretch sheet
  - Hypertension lifestyle advice
  - Rehydration advice
  - Boiling water/SODIS
  - Condoms during STI treatment (in handout format OR short video to watch on laptop with headphones)
- Scheduled daily case presentations and medical team debriefs, with Tanzanian partners, as time allows (syphilis, schisto, malaria, TB, typhoid) or perhaps presentations on first and middle weekend for 1-2 hours.



PHARMACY TEAM

The Pharmacy Team was led by Warren Meek and included 2 experienced CACHA pharmacists and 2 pharmacy technicians who were new to CACHA. Two experienced nurses from Nansio Hospital offered consistency staffing each day and were compassionate and knowledgeable in dispensing and providing local information and interpretation to patients and to the team.

The mornings were spent getting set up, as the traffic through pharmacy station usually picks up a few hours after clinicians begin to see patients. The number of people on the team made it possible for at least 1 person per day to assist in logistics which proved to be very helpful. Both pharmacy technicians took on the role of testing urine dips which was invaluable to the medical team.

A protocol for Schistosomiasis, followed from last year's caravan. Clients were shown a sample pack that contained PZQ and they were asked if they had received this medication in the past 3 years.

- If YES, we did not offer to re-treat for Schisto unless there were clinical signs.
- If NO, they were treated with the recommended dose of Praziquantel of 40mg/kg.

SUCCESSES

- ✓ Nansio Hospital provided two excellent and consistent pharmacy translators.
- ✓ Having three pharmacists with previous CACHA experience was well noted and appreciated.
- ✓ Pharmacy team appreciated the opportunity to spend some time in other areas including the medical and logistics team. It expand the opportunity for human touch and decreases possible boredom.
- ✓ Inventory purchased pre-caravan was well done and appreciated. Some miscommunication meant purchasing some medication on the island at a higher price but did not affect budget to any great degree.
- ✓ The continued protocol of clinicians assessing and diagnosing patients and pharmacists prescribing and dispensing continues to work well and adds value to the caravan. Pharmacy is always open to discussion and possible revision of protocol for clinicians to prescribe if it is agreed that there is a greater benefit to overall caravan flow.
- ✓ Pharmacy lead noted the need to be specifically attentive to the collaboration within the pharmacy team and with the clinicians in general, to ensure everyone "is on the same page".
- ✓ Focus of quality of care rather than quantity of patients seen reduced some of the hectic daily burdens seen by pharmacy in the past.
- ✓ With the successful dispersal of these meds in week 2 and the Saturday dispersal of the 2014 left over meds to an additional 4 villages, we should be well prepared to distribute left over meds at end of caravan 2015.
- ✓ The team prepared labelled bags for the first 2 days of the Spring 2015 mission.

OPPORTUNITIES FOR CHANGE

- ➢ Suggest a med and pharmacy team joint meeting upon arrival to review protocols and promote consistent understanding of process of diagnosis, prescription and dispensing.

- The degree to which pharmacy and meds interface is dependent upon both sets of team members. The ability to setup such that meds and pharmacy are within proximity is helpful in cases where there are questions about patient/chart for prescribing and dispensing.
- We are reminded that we all need to be flexible when working in an African country. Time moves differently here and we are visitors at the invitation of our Tanzanian partners. This is true for all Canadian participants. Roles and responsibilities vary and push us outside of our usual frame of reference and we each want to be open to the learning in this opportunity.
- On occasion a pharmacist will report wanting to be more involved with the local people and suggest that they may return in a logistics capacity.
- Pharmacy technician is a new role on this caravan and when new positions/roles are welcomed it would be helpful to have discussion before caravan on how the new roles will fit and be integrated into any team. This is true for pharmacy technician or any new position as we move forward.
- Pharmacy saw increased diagnosing of malaria, typhoid fever, schistosomiasis and sexually-transmitted infections. This put some stress on medicine supply.
- While we put processes into place in November 2013 with our local partners before leaving, the procedure to disburse post-mission medicines fell through the cracks and only 1 village received the medications left for them. All other packages of medications sat in storage at Nansio Hospital and were retrieved upon our return this fall. We therefore had to sort through all medicines remaining and expired medicine was segregated for incineration, and usable medicine was apportioned to 4 villages seen in the second week of the 2014 mission. Post-mission 2014 medicines remaining at end of caravan were distributed to Nansio Hospital and 4 villages of the first week of the current caravan, by two remaining pharmacy team members on the Friday at mission end. With the successful dispersal of these meds in week 2 and the Saturday dispersal of the 2014 left over meds to an additional 4 villages, we should be well prepared to distribute left over meds at end of May caravan 2015.

- The medication disbursement procedure will need to be evaluated and the hope is that both spring and fall caravans will follow the same process to divide and deliver left over medications to hospital/ dispensaries/ health centers to ensure consistency.
- Recommend the purchase of another tent for the pharmacy section to provide consistent protection for patients waiting for their medications.

LOGISTICS TEAM

The logistics team consisted of a small Canadian contingent and a larger number of Tanzanians. The Tanzanian school calendar was such that we lost 1 translator after 2 days and another after the first week as they were returning to school. Local dispensary staff and local villagers were often helpful in managing lines of waiting people and in assisting with tarping.

Our Tanzanian Coordinator, Irene, along with 5 local team members provided translation to the logistics team. With the large medical team, logistics translators were often needed in medicine. We were able to accommodate this as the translators were able to get patients moving through triage early as well as get the clinic setup completed before being needed in medicine.

SUCCESSES

- ✓ Upon arrival in Nansio it took a lot of time to locate the previous mission bins which were stored at the hospital. Dr. Nyanda, Irene and Cathy were able to find them after numerous challenges.
- ✓ Med Team set an indicator so that blood pressure was only taken on persons over 50 years of age. This assisted with moving the logistics line along and getting patients to meds more quickly.
- ✓ Temperatures were taken using ear thermometers (under arm thermometers for infants and small children).
    - Temperatures were taken firstly in line for everyone who had a chart – anyone with a fever over the indicated threshold was sent to the front of the med line for immediate attention.
    - Once the team lead decided that we could not see any more patients, we took temperatures for all those without charts who were still waiting. This allowed us to see the people with temperatures over the threshold indicated and also to get a look at any serious medical situations (open wounds, eye infections, etc.) - these people would be provided with charts and seen by the medical team.
    - Occasionally the med team was able to provide someone to assist with taking temperatures.
- ✓ Again this year we chose not to use numbers. Rather than handing out numbers and then charts, we handed out charts to those in line and used the numbers to call the patients in order. This helped keep the lines organized and help to avoid confusion.
- ✓ The triage tent was a huge success again and appreciated by the patients and triage team as it provided extra shade. Recommend: a long rectangular tent could be purchased for the waiting line or for use at pharmacy in dispensing.
- ✓ Our Canadian logistics team was small and so we counted strongly on our Tanzanian partners. This included having easy access to translators in triage/logistics areas.
- ✓ Counting stats at the end of the day, while still at dispensary waiting for caravan to finish up was useful in being able to report back to the group in evening meeting/debrief on how the day unfolded. Also preparing charts for next day at this leaves more people free to count pills in evening.
- ✓ Each day a logistics person was set to manage the testing table – doing urine dips and providing results to meds team. This proved very helpful to med team.

OPPORTUNITIES FOR CHANGE

- ✓ Having a standardized guideline/protocol for blood pressure threshold over which the logistics team could send a patient directly to medicine would be helpful ongoing.
- ✓ We were reminded in the 2nd week of the importance of having the team leader and some logistics people leaving on the first truck. This allowed for the immediate set-up and organization of caravan stations with our Tanzanian partners. Also having med and pharmacy teams wait outside while the logistics lead determined the most efficient layout each morning helped keep confusion in setting up to a minimum.

- ➢ The pens sent from warehouse are very poor quality. Suggestion to purchase better quality pens as they are a necessary component for all team members.
- ➢ Calling the numbers of the charts helps to keep people in order, even if they choose not to stay in line.
- ➢ Language Barrier. Solution: Ask one of the translators to teach main greetings and phrases to the team so that they can communicate main sentences / directions etc. This is true for all teams; medicine, pharmacy, surgery and logistics. The suggestion that we use our time travelling in the truck to learn Swahili phrases is a great idea and good use of our time.

SURGICAL TEAM

Dr. Mark Hardy has been leading the fall surgical team in Ukerewe for 6 years working with a team of local hospital staff. This caravan Dr. Hardy was joined by surgeon Dr. Chantal Beaulieu and surgical nurse Krista Wilton. In the Nansio Hospital operating room, with the fantastic cooperation of the theatre staff, 61 surgeries were performed. These ranged from Orthopaedic sequestrectomies, Gynaecological hysterectomies and oophorectomies to general surgical hernia repairs, breast and bowel surgery. Surgical referrals are made from the caravan medical team. Drs. Michael and Kaniki were there to help and the supplies necessary were all purchased prior to the caravan by our Tanzanian Coordinator Irene. Patients who were unable to be operated on due to limited time and/or coming to Nansio Hospital at end of caravan, were referred to the next caravan as appropriate.

REFERRALS

- 81 surgical referrals to Canadian surgical team
- 4 referrals for OB/GYN consult
- 174 referrals for further testing (some of these are also included in the surgery numbers)
- 24 referrals for TB testing
- 2 referrals to Bugando Hospital in Mwanza

These numbers are approximate as they are based on calculations within 2 different sets of data: the sheets kept by the medical team and the stats from all patient charts.

Cathy Cleary, team lead, shares a story:

We were met by 500 people lined up for health care when we arrived in Muriti. We set up and had things running smoothly despite the broken down truck and the bin jumping off on the land rover mid journey. In short order we were tarping for sun – for sure, and for rain – just in case. The pharmacy team had everything set up and ready to roll when I asked them to move – yep the whole team – and they were quick to accommodate, redirecting the flow of hundreds of people.

Mid-day, Elizabeth came to tell me about a very sick little girl who was 4.5 months old and weighed 1 kilogram – at least that is what they estimated because when they weighed her, she barely moved the scale. This is my 8th medical caravan and I have seen a lot of hard things. I had not yet met this little one and yet my heart was pierced in a way I cannot put into words and I had to walk away from Elizabeth, tears streaming down my face. The contrast to the happiness and joy I experienced when I attended the birth of my sister's baby who weighed 10 lbs. 2 ozs. just weeks before coming to Tanzania was heartbreaking.

Little Neema has big eyes that follow you everywhere. She is a fighter and where she finds the strength I'll never know. Neema's mother died leaving her in the care of her aunt, who agreed to accompany her to the hospital, leaving behind her own 1 year old with relatives. Once at the local hospital we realized that they could not offer Neema the special formula, F75, needed by malnourished babies, and so once again we pleaded with her aunt to bring her to the big hospital in Mwanza. I can't imagine how difficult it was for her to leave her own child behind, yet she agreed and Dr. Michael helped us get them to the mainland by ferry and taxi and then finally admitted to Bugando Hospital. When I left to come back to Canada, Neema was actively trying to eat/drink the formula and it felt like a miracle, a sight to behold. I am keeping tabs on this little one, keeping the team updated on her progress and I hope when I return to Ukerewe Island, I can visit a healthy little girl with a great big life ahead of her.

OVERALL LESSONS LEARNED, PRIORITIES AND NEXT STEPS

1. ***Irene and Cathy, together with Dr. Nyanda, planned a full team meeting with Canadian and Tanzanian team members the day after we arrived. For the 2nd year, the Canadian Team arrived 1 day early. The goal of the meeting was team building, information sharing, and education. The meeting was followed by the Welcoming celebration hosted by Ukerewe District Council.***

Dr. Nyanda took a lead role in facilitating the meeting. Medical leads presented on Hypertension and on Diabetes and led a discussion with questions and answers afterward. The meeting time is an excellent opportunity for team members to get to know one another and to begin to work together. Some suggestions for future meetings might be:

- An update as to what is happening in the community in general and health related specific on the island both before we arrive and while we are there. E.g. Immunization program the first week of caravan operating at the same time and sometimes in the same dispensaries.
- Reviewing the chart together and ensuring that all members of all teams understand how the chart will function and what each piece of information means.
- Review a typical day on caravan and remind everyone about early morning departures in order to get an early start at each village.
- Breaking into teams and working through caravan scenarios together (e.g. medical team, pharmacy team, surgical team and logistics team)

2. ***In line with our mandate we were able to bring 2 very sick little girls to Nansio Hospital and have them referred to Bugando Hospital in Mwanza for critical treatment.***

Neema was first seen in Muriti. She is 4.5 months old and weighed about 1 kilogram. Her mother had died and she was being cared for by her maternal aunt. Neema was admitted to Bugando Hospital and given the special F75 formula along with multi vitamin, folic acid, vitamin A and the antibiotics which she desperately needed. When I last saw her she was actively eating/drinking the formula – it was an amazing sight to see!! One of our Canadian doctors continues to offer support to Neema and her family in the hopes of seeing this little one grow up healthy and happy.

Asteria is an 11 year old girl who was admitted to Bugando Hospital, having travelled there with her sister and Dr. Michael. Both her parents are dead. She was very swollen throughout her body and in a lot of pain – nephritic syndrome with possible infection.

The difference after she began medication is evident by the first smile we saw. Her swelling has decreased and she is now back home in her village being followed by the staff at Nansio Hospital.

3. ***A final meeting was held with Dr. Missana, District Medical Officer; Dr. Nyanda, Nansio Hospital caravan coordinator; Irene Abusheikh, CACHA Tanzanian Coordinator; Cathy Cleary, CACHA team lead; and Elizabeth Good, experienced CACHA participant. The opportunity for a final meeting after caravan details have been completed offers time for discussion, reflection and occasion to make changes to upcoming caravan processes.***

The final meeting was held at Nansio Hospital in the DMO's office. The successes and challenges of the caravan were discussed including:

1. Negotiations reflecting pharmaceutical medicines which had been ordered for Nansio Hospital and were paid for by CACHA, in error. The costs of these medicines were compensated for by a reduction in the amount CACHA paid to Nansio Hospital for agreed upon services including registration fees, and ultra sounds/x-ray. This was considered by everyone in attendance to be a fair consideration.
2. The MOU which has been signed between Ukerewe District Council and CACHA was referred to during the discussion and it was agreed that having the MOU was helpful in sorting through the details for the caravan in preparation, during caravan and in the conclusion of caravan activities.
3. It was pointed out that the MOU states that the CACHA caravan report will be shared with our local partners within one month after caravan. It must be noted here that this report is being submitted as a draft 7 weeks after the end of 2014 fall caravan. As CACHA team lead, I would suggest that there may need to be more discussion on this timeline. While we do not want to disappoint our local partners, the team lead may not return to Canada for 1-2 weeks after caravan and completing the statistical data input requires a number of weeks upon return from Tanzania. I suggest this is discussed at the next meeting with our local partners on caravan of Spring 2015.

4. ***Transportation of Supplies: The transportation of bins from Canada through to Ukerewe Island offers some challenges and this year was no exception. Opportunities for clearer communication with airlines should be sought and policies and protocols developed to enhance smooth transport of supplies.***

- Pre-mission – A copy of the bin manifest was sent to Shirin at Uniglobe Travel to be forwarded to KLM staff. In this way the hope was that the CACHA team would pass through baggage checks with no complications. As it was in Montreal the computers were down at KLM so by the time they came back up we were quickly moved through with no complications. Those travelling through Toronto had some difficulty with bins and weight. Suggest the team lead ensure that those travelling from other airports with bins are well versed in any protocols and have needed contact numbers for KLM and Shirin.
- Having to take the bins from Kili into Moshi and back the next morning is onerous and cumbersome. Some process whereby we could leave the bins at the airport would prove more convenient. We did research nearby accommodations (KIA Lodge) where we might also store the bins, however the cost was prohibitive.
- Once we were at the airport the in country flight was coming from elsewhere and it was a smaller than usual plane. We had to leave all bins at the airport and work with our local contact, Goodluck, to negotiate getting the bins on another plane. This proved too difficult for a variety of reasons and Goodluck was forced to take the bins to the bus station for transport. The bins then left the bus station on separate buses. We received the bins in Ukerewe on Monday. Fortunately we had enough supplies on the island to begin without the bins.
    - Recommendation: We let Precision Air know ahead of time that we will be flying with them and exactly how many bins we will have. Similar to KLM we should provide them with a bin manifest and have approval before reaching the airport the day we are flying out.

MISSION IMPACTS/HIGHLIGHTS

- The Learning/Sharing Day was a success and the entire team agreed it was well worthwhile to travel one day early to provide this opportunity to bring Tanzanians and Canadians together to build the team and share information. Each time we meet we take the opportunity to offer leadership roles to our Tanzanian partners in terms of setting agenda, presenting and leading discussion.
- Our Nansio Hospital staff increasingly provide a leadership role and guide the Canadian team in all aspects of mission. Dr. Nyanda is our local contact and provides us with strong support before, during and after mission. We are grateful for his guidance.
- There was an Immunization Clinic held for the entire first week of medical caravan. While this is wonderful and so helpful for the population, it did impact the mission in terms of logistics and access to hospital staff.
- The medication remaining after caravan 2013 has been divided into 10 groups with 1 box designated for Nansio Hospital and the other 9 boxes for the 9 dispensaries we had visited. All medication and supplies were inventoried and a list was provided to the District Medical Officer's office (DMO). Unfortunately only 1 box was delivered. The process for dispersing left over medications needs to be determined with our Nansio Hospital partners and followed through on a consistent basis.

- The pharmacy team took it upon themselves to prepare enough labeled medicine bags for the first 2 days of Spring 2015 caravan. This will allow the team leads for that mission to focus on counting the required product.
- Each member of the Canadian team was provided an opportunity to spend some time within another team. This is always appreciated by all team members and offers some perspective on the activities of other teams. For example:
    - medical team members spent a day in surgery or logistics
    - pharmacy team members spent time in surgery or logistics or medicine
    - surgical team members spent time in medicine or logistics
- Last year our first attempt at group health promotion with the presentation of SODIS was well received. This year we had hoped to have the IMIC staff provide health promotion learning topics to those waiting in line. We were unable to make the connection with the IMIC coordinator and missed the opportunity for health promotion this year.
- The challenge of storing the medical bins at the Nansio Hospital was resolved with the bins being stored in the Dental area of the hospital under the supervision of Dr. Nyanda.

- Warren organized the team for a musical flash-mob on our final day of caravan in Muluseni. We sang 2 songs to the groups of patients waiting. Their reaction was one of surprise. Afterwards the Tanzanians suggested to us that we might want to sing a song the patients would recognize as this would elicit their participation and understanding.
- The balance between quality of care and quantity of patients is an ongoing challenge and we continue to discuss and strategize around this issue. While we saw fewer patients this mission, the patients we did see were provided additional time and attention in their level of care. The question is always the concern for the patients we were unable to see. However we did take the temperature of each person who showed up and triaged anyone over the threshold into the medical line. This also allowed us to have eyes on any critical cases such as open wounds, infections or other noticeable health problems.
- The decision by the CACHA Board of Directors to no longer store medications after caravan impacted both this caravan and the upcoming spring caravan in terms of not having access to previously counted and packaged medications.
- Some tourist activities were arranged for CACHA participants staying on Ukerewe Island on the middle weekend with the local Ukerewe tourism group. A bike tour of part of the island and a bush fire / dance party by the lake. Both activities were enjoyed by all. Some feedback will be provided to the Ukerewe tourism group in terms of logistics to consider e.g. access to drinking water.

MEDICAL MISSION STATISTICS

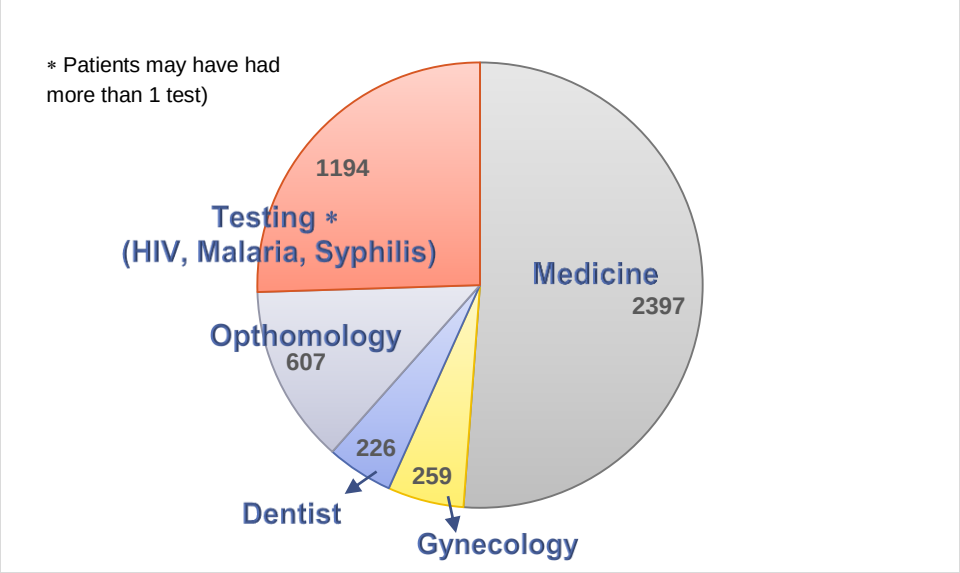
DATA ENTRY and STATISTICAL ANALYSIS

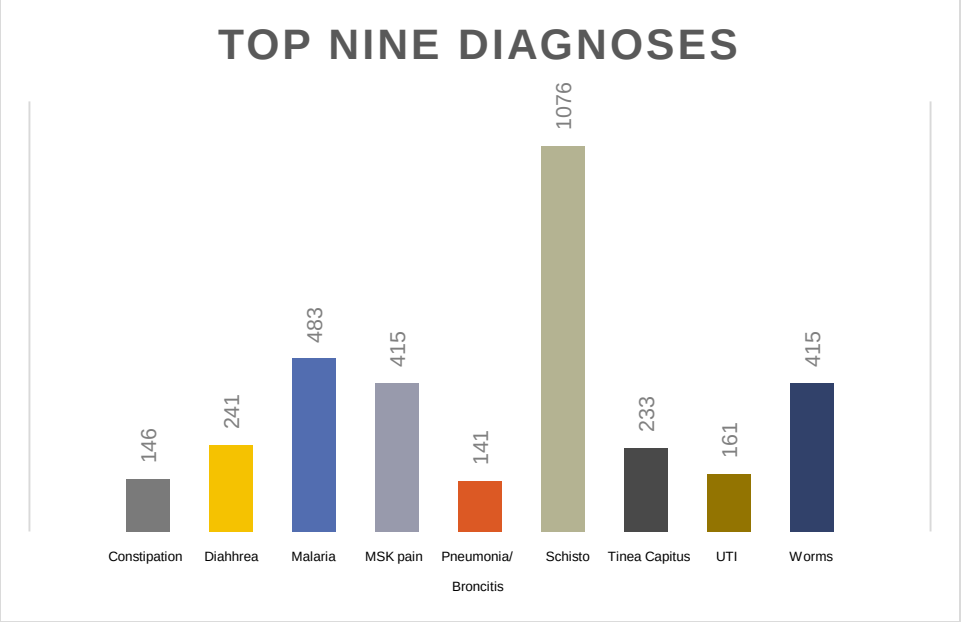
All patient charts were entered into an excel spreadsheet upon our return to Canada. While tedious and time consuming, we now have the information from 2013 and 2014 fall medical missions to be used to compare to other years moving forward. Some discussion on how to ensure this happens during caravan or afterwards in Tanzania without having to carry 3000+ charts back to Canada would be helpful. Board member, David Beking, is leading a group looking into standardizing stats reporting.

AGE GROUPINGS

Age Range	# of Patients Seen 2014	# of Patients Seen 2013	40% of the patients we saw were children under the age of 15 in both years
Under 15	1065	1262	
15 – 21	185	200	
22 – 59	1091	1293	
60+	355	442	
TOTAL	2696	3196	

of Patients seen at each Station





	2014	2013
New HIV Diagnosis	12/558 tested [2.0%]	15/744 [2.0%]
Malaria Test Positive	219/505 tested [43.4%]	99/506 tested [19.6%]
Syphilis Test Positive	3/131 tested	1/45 tested

It is noted that the number of positive malaria tests increased dramatically from last year. Although we are uncertain as to why this was it is speculated that it may be a result of the timing of the rains, taking of every patients temperature in triage and testing more people who presented with fever, or perhaps pre-selection for testing was more accurate.

	2014		2013 for comparison	
Patients	Total: 2697		Total: 3207	
Adults	Male: 1075	Female: 1622	Male: 1307	Female: 1900
Prescriptions	13754		13052	
Consultations	3490		4074	

Although you will notice the Rx per patient was higher than last year:

1. **We used far less eye drops with the new clinician**
2. **Dispensed almost 900 more Vitamin Rx due to positive supply and positive pharmacy staff who were very keen on dispensing vitamins**
3. **Dispensed almost 500 more antibiotic Rx, primarily due to more STI and more partners. Last year was the lowest Rx count I would have seen for this condition.**

Participant Evaluations

The results of the participant survey are from Canadian team members only. At the time of this report only six responses had been received.

It would be very interesting to have our Tanzanian team members complete a survey as well (some questions would differ). Working with our local partners we could draft questions and have them available in paper copy for both Canadian and Tanzanians. That way everyone would complete the survey at the end of mission and we would have responses for all participants.

FINAL INVENTORY LIST (BY SIN #) – UKEREWE NOVEMBER 2014

Bin Manifest				
MEDICAL SUPPLIES				
Description	**SIN**	**Standard Quantity**	**Unit of Measure**	**Field Inventory**
0.5% Marcaine with epinephrine	1291			**0**
Alcohol swabs and pads	3280	800	200/box	**200**
BP Cuff regular	3890	2		**2**
BP Cuff manual Pediatric	3900	1	indiv	**2**
Ear specula Adult (4mm)	1040	1	pack	**3400**
Ear specula Pediatric (2.5mm)	1050	1	pack	**4250**
gloves non-sterile large	1320	200	individual pairs	**175**
gloves non-sterile medium	1330	1000	individual pairs	**275**
gloves non-sterile small	1340	200	individual pairs	
Otoscopes	1090	6	indv	**7**
Stethoscopes	1115	4	indiv	**10**
Thermometer sleeves	1160	16	box/100	**1400**
Thermometers	1170	20	indv	**10**
Tongue depressors Non Sterile	1190	1	box/500	**1300**
Ear thermometer covers				**700**
SURGICAL SUPPLIES				

Description	SIN	Standard Quantity	Unit of Measure	Field Inventory
Dressing Tray (sterile)			100	6
Primary IV Tubing	1610	10	1 bag of 10	**3**
Secondary IV Tubing	1620	10	1 bag of 10	**1**
5 cc				
10 cc				**200**
18-19 G -Needle 1.0" need 1 1/4 "	2190			**80**
20 G need 1 1/4 " needle				**75**
Medical tape	2610	40	1 bag of 40	**5**
Sterile Water	3540	2	bottles	
Wound Cleanser Spray Bottle	3600	1	Spray bottle	**5**

GYNECOLOGY SUPPLIES

Description	SIN	Standard Quantity	Unit of Measure	Field Inventory
condoms	6620	30	200/bag	
Head Lamp	4060	1	Indiv.	**1**
Kidney bowl	3685	1	Indiv.	**1**
Lubricant gel envelopes	1080	n/a	envelopes	
Lubricant gel (Tubes)	1080		10/box	**15**
Masks (surgical and other)	3670	50	masks and visors	**30**
Purel - large	4170	1	1L	**1**
Purel - small	4190	4	250 ml	**6**
Special	3680			
Vaginal Specula - Large	1250		case of 100	
Vaginal Specula - Medium	1260	6	case of 100	**300**
Vaginal Specula - Small	1270	2	case of 100	**450**
Table cloths				**4**
Syphilis Tests (expire May 2016)				**100**

LOGISTICS SUPPLIES

Description	SIN	Standard Quantity	Unit of Measure	Field Inventory
AA batteries	3780	20	indv	
AAA batteries	3790		indv	
Baby wipes	3820	1	pack/100	**6**
BP cuffs automatic (purchased in TZ 2014)				**3**
Bungee cords	3920	12	indiv	**12**
Cable ties	3940	2	60/pack	
Calculator	3930	1	indiv	
Clipboards	3950	24	indiv	**20**
Elastics	4020	1	bag	**50**
Fanny packs	4030	40	indiv	
Flashlights	4040	3	indiv	
Gown		n/a	indiv	
Kitchen catchers (white garbage bags)	4070	100	(1 roll)	**30**
Large black garbage bags	4080	40	(1 roll)	**5**
Large Cuff	3880	1	indiv	**4**
Large water cooler	4440	1	cooler	
Magic Markers	4110	2	indv	
Packs of charts	4120	15	/pack of 400	**10**
Paper Towels			1 roll	**8**
Pens	4150	100	65/box	
Plastic bags small				
Rolls of duct tape	3990	4	rolls	**2**
Rope (25 feet or so each)	4210	4	indv	**5**
Scales	4250	2	indiv	**2**
Scissors	4260	2	indiv	**1**
Tarp large	4370			**2**
Tarp medium	4380			**4**
Tarp small	4375			**3**
Utility knives	4410	4	indiv	**8**
PHARMACY SUPPLIES				

Description	SIN	Standard Quantity	Unit of Measure	Field Inventory
Calculators	3930			**1**
Pill counters	4510			**4**
Pill cutting tools	4520			**1**
Plastic bags - small	4470			**Misc.**
Preprinted and blank med labels	4500		sheet/15	**some**
Spatulas	4530			
Ziploc bags from Gamma DynaCare	4490		box/100	
Ziploc freezer bags (large)	4480		40/box	

DENTAL SUPPLIES				
Description	**SIN**	**Standard Quantity**	**Unit of Measure**	**Field Inventory**
Gauze pads 2x2	2560	1	indiv	
Syringes				
3cc Syringe 25 G X 1"	1940	100	(2 bag 50	**174**
3cc Syringe	2020	100	(2 bag 50)	
Needles				
25 G X 1"	2400	100	(2 bag 50)	
gauze 4x4				**200**
lidocaine injection 21.3mg 50ml				**34**

OPHTHAMOLOGY SUPPLIES				
Description	**SIN**	**Standard Quantity**	**Unit of Measure**	**Field Inventory (how many left in field)**
Eye chart	4600	1	indiv	**1**
Reading glasses				
1	4610		box/24	**11**
1.5	4670		box/24	**5**

2.0	4700		box/24	**4**
2.25	4750		box/24	**3**
2.5	4730		box/24	**2**
3.0	4790		box/24	
3.25	4820		box/24	
3.5	4850		box/24	
Eye Stream Eyewash	4890	3	bottles	**3**

LAB SUPPLIES

Description	SIN	Standard Quantity	Unit of Measure	Field Inventory (how many left in field)
Bandaids	2760	1100	indiv	**480**
Butterfly needles	2460	20	indiv	**30**
Chemstrips	1010	5	bottle/100	**500**
Cidex disinfectant	1020	2	3.81L/bottles	
Clocks (timers)	3960	2	indiv	
Cotton Balls (30x30)	5010	3	Bags	**50**
Glucometer Strips (one touch)	1130	400	box/100	**650**
Glucometers One Touch	1060	3	indv	**5**
Instructions	N/A	1	handout	
Lancets	1140	400	lancets	**200**

Thank you to everyone, Canadian and Tanzanian, who made this caravan both possible and successful. A special thank you to the staff of the Canadian CACHA office, especially Karen, without whom we would never have left Canadian soil.