

PROJECT C.U.R.E

Needs Assessment Report

Zambia

Conducted August 21- 24, 2023 on behalf of

Chelstone Zonal Hospital, Bauleni Health Centre, Chanda Urban Health Centre, Kalingalinga Health Centre, Mtendere Urban Health Centre, George Health Centre, Chazanga Health Centre, Kanyama West Health Centre, Kanyama General Hospital, and N'gombe Health Centre

Sponsored By: Rotary Club of Nkwazi

Assessment Conducted By: Stephanie Davis

Background

Lusaka, Lusaka Province, Zambia

Zambia is a landlocked country that is sparsely populated and bordered by Angola, Botswana, Democratic Republic of the Congo, Malawi, Mozambique, Namibia, Tanzania, and Zimbabwe.¹ The country gained full independence in 1964 from Great Britain and experienced relative economic prosperity early on; however, by the 1980s the country was severely indebted after nationalization and significant increases in oil prices as well as dependence on copper mining.² Recently, Zambia has experienced rapid economic growth due in part to increases in copper demand and some diversification within the economy but poverty levels, in particular, in urban areas is still quite high.³ The population of Zambia is 20,216,029 as of 2023 and is very diverse with most spoken languages being members of the Bantu family.⁴

HIV/AIDS is a significant health concern throughout the country with roughly one-tenth of the population living with HIV/AIDS while other health concerns include malaria, schistosomiasis, sleeping sickness, tuberculosis, and diarrheal diseases.⁵ A significant amount of investment has been made into the healthcare system which is composed of general hospitals, smaller hospitals, and rural health centers. Despite the increase in healthcare facilities through the government, mines, and missions, there is still a demand for more facilities to increase the population's access to healthcare. Additionally, Zambia suffers from a lack of healthcare personnel despite in-country training programs.⁶ The facilities in-scope for the Needs Assessment are public facilities, most of which receive support from the government through consumables or biomedical technical support.

¹ The World Bank. (2023). *Zambia*. <https://www.worldbank.org/en/country/zambia/overview>.

² Roberts, A. D. , Hobson, . Richard Hamilton and Williams, . Geoffrey J. (2023, October 18). *Zambia*. Encyclopedia Britannica. <https://www.britannica.com/place/Zambia>.

³ The World Bank. *Zambia*.

⁴ Central Intelligence Agency. (October 3, 2023). *Zambia*. CIA World Factbook. <https://www.cia.gov/the-world-factbook/countries/zambia/#people-and-society>.

⁵ Roberts, et al. *Zambia*.

⁶ Ibid.

Sponsor/Host Organization

The Rotary Group Study Exchange - Rotary District 9210 (Malawi, Northern Mozambique, Zambia, and Zimbabwe) and Marc Horner Rotary District 6040 in the USA supported the plan to visit Lusaka. Mr. Marc Horner is the District Rotary Foundation Chair until 2025 and he was the Past District Rotary Foundation Governor from 2019-2020 as well as the Past President Rotary Club of Kansas City 2011-2012.

Mr. Horner and his US team were taken to see a project at Lusaka's Kalingalinga Health Centre where the Rotary Club of Nkwazi had donated a generator and shelter, drilled a borehole, and installed water tanks and a chlorinator to enhance the Centre's water system. The Centre suffered from water challenges during the then severe power outages in Zambia. The power cuts caused low municipal water pressure and there was no water during peak demand periods resulting in patients, especially those in the labor ward being asked to bring buckets of water upon admission. A temporary solution was worked out with Zambia's Center for Infectious Disease Zambia (CIDRZ) to provide water to the facility. The Rotary Club of Nkwazi explored more permanent solutions and they created a partnership with Rotary Club (D1850) in Germany to provide water and backup power. This partnership encouraged The Rotary Club of Nkwazi to explore building long-term relationships with other health centers in the Lusaka area by involving Project C.U.R.E.

Project C.U.R.E. Findings – Project Effectiveness

Strengths:

- The assessment and clinic locations were selected as part of the Rotary Club of Lusaka's mission for 2023. They are committed to raising annual funds to support the clinics and hospitals. Their core objective is to fund a container each year. There are no major obstacles to overcome.
- There is a large and committed network of volunteer community health workers.
- Government run health facilities offer a basic healthcare package free of charge or on a cost-sharing basis.
- The clinic and hospital teams were hard-working and qualified professionals.
- The Medical Equipment Officer in the Lusaka District Health Office, a part of the Ministry of Health is committed to the project, and they will accept past-dated supplies.

Weaknesses:

- There was a lack of consumable supplies and working medical equipment across all facilities.
- There is a lack of adequate staffing to meet the demand for services. The Lusaka patient catchment area is the largest in Sub-Saharan Africa per the partner.
- The lack of equipment puts a strain on the district procurement budget.
- The facilities are unable to meet the needs of all patients. Patients often must walk long distances and wait for several hours to be seen.
- There are limited on-site incineration capabilities across facilities, and they must depend on outside contractors that are not always reliable.
- There is a strain on facilities during the rainy season due to increases in cases of malaria and diarrhea.
- The quality of water is inconsistent, and sourcing of potable water is unreliable.

Opportunities:

- The relationship between The Rotary Group Study Exchange - Rotary District 9210 (Malawi, Northern Mozambique, Zambia, and Zimbabwe) and Marc Horner Rotary District 6040 in the USA is very strong. They are committed to a long-term partnership with Project C.U.R.E.

- There was a welcome dinner with Dr. Brian Chituwo, John Kanenungo, Friday Mwamba, and several members of the Rotary Club of Lusaka. Plans for the 10 assessments were discussed. The leadership team will leverage relationships and services to facilitate the needs of the communities.

Project C.U.R.E. Findings – Special Issues and Additional Information

At the time of the assessment, the facilities did not have the capacity for Helping Babies Survive or Helping Mothers Survive Trainings.



Pictured above is some of the equipment that was seen that is not currently working.

Project C.U.R.E. Findings – Customs and Logistics

The Rotary Club will facilitate the movement of consumables and equipment without tariff fees and restrictions. The shipment details were not finalized at the time of the assessment nor was the allocation strategy. The preference is for containers to be sent to the nearest seaport. The Medical Equipment Officer in the Lusaka District Health Office, a part of the Ministry of Health is committed to the project, and past-dated supplies will be accepted.



Shown above are Rotary Club of Nkwazi team members and the Needs Assessment Representative.

Project Plan

The project plan was not finalized at the time of the Needs Assessment, but it is likely that the facilities in-scope could absorb a few containers divided between the facilities. It is recommended that the project plan is discussed with the sponsor to finalize the funding available and the allocation strategy.

Institution Specific Information

Institution #1: Chelstone Zonal Hospital

Chelstone Zonal Hospital serves an urban catchment area of 560,000. The University Teaching Hospital (UTC) accepts referrals from Chelstone. The facility is located in the Chelstone neighborhood of Lusaka. It was officially opened by the former Minister of Health, Dr. Brian Chituwo in March 2008. There are several staff members including 5 doctors, 75 nurses, 16 midwives, and 1 visiting OBGYN surgeon who attends to patients on Tuesdays and for emergencies. Hypertension, Diabetes, Respiratory Infections, Diarrhea, Dental, Traffic -Related Trauma are the most treated cases. There was also an unusual outbreak of measles in June, 3023.

The facility is composed of multiple one-story buildings that house the following departments: two wards, Radiology, Maternity, ART Clinic, HIV Youth Friendly Program, Maternal and Child Health, Dental, Outpatient Department, Chest Clinic, Environmental Health, COVID Vaccination Room, Cervical Cancer Screening Room, Phlebotomy, Doctor Room, Laboratory, Pharmacy, Adherence Room, Reception, Mental Health, Reproductive Health, X-Ray, Staff Kitchen. The facility's Maternal Newborn and Child Health department was refurbished and equipped with the support of the European Union, funded by the Millennium Development Goal Initiative in December 2017. The Radiology Department was built by the community with assistance from Zamsif and equipped by the Rotary Club of Nkwazi.

Seventy-five percent of the finances are provided by the government. Electricity is reliable and there is one biomedical technician on-site when needed, he services 11 facilities. They are on a district power grid which is reliable, and they have a backup generator.

Facility	Population served: 560,000	Urban	Number of patients: Unavailable	Public	Number of births: Unavailable
Breakdown of Facility	Number of ER Beds: 2	Number of Delivery Rooms: 1			
Staff	# Doctors: 5	# Nurses: 75	# Midwives: 16	# Lab Techs: 8	# Other Providers: Biomedical Technician, 1 Dental Assistant, 1 Biomedical Technicians, 1
Bio-Tech Support	Biomed Tech on staff? Yes	Capable of repair? Yes	Capable to install? Yes	Budget to Pay Tech? Yes	

Top 3 Items Requested:

1. Equipment
2. Instruments
3. Consumables

The following summarizes the key needs identified during the site visit in each facility area.

Emergency Room / Triage: Requested items include 1 defibrillator, 1 laryngoscope, 1 vital signs monitor, 40 Chairs, 10 exam lights, 10 exam tables, 1 otoscope, 15 pulse oximeters, 4 infant scales, 4 adult scales, 4 stethoscopes, many digital thermometers, many forehead thermometers, exam gloves, sterile gloves, patient containers, and respiratory supplies, airway skits, dressings, endotracheal tubes, exam and sterile gloves, irrigation kits, 15 stapler kits, 15 suture kits.

Consultation / Exam Area: 40 chairs and stools, 10 exam lights, 10 exam tables, 1 otoscope and 1 ophthalmoscope, 15 pulse oximeters, 4 infant and adult 4 scales, 4 speculums, 4 stethoscopes, many digital and patient thermometers, exam and sterile gloves, patient containers, and respiratory supplies.

Patient Ward / Intensive Care Unit: Requested items include 20 manual beds, 5 gurneys stretcher, 12 IV poles, 5 patient monitors, 10 nebulizers, many bedside cabinets and privacy curtains, 10 pulse oximeters, 2 oxygen concentrators, many alcohol pads, swabs, bedpans, 2 casting supplies, many cleaning supplies, many skin cleaning products, many non-sterile drapes, many dressing supplies, many feeding tube bags, many exam and sterile gloves, few IV tubing and supplies, many needles, few pads and wedges, many patient containers, gowns, paper supplies, patient supplies, many sharp containers, few skin specialties, few splints/ wraps, many applicator swabs, many syringes, few urinary catheters, and few central lines.

Laboratory: Requested items include 2 autoclaves, 1 hematocrit centrifuge, 1 lab centrifuge, few culture incubators, 1 microtiter rotator, and 1 microscope, many blood drawing supplies and many lab containers and labels.

Obstetrics / Infant / Maternal Health: Requested items include 10 bassinets, 2 Billi lights, 5 delivery kits, 2 fetal monitors, 1 ultrasound, 2 infant warmers, 20 ambu gags, and many baby and birthing supplies, Kits for Kids, diapers, feminine supplies, many sterile gloves, midwife kits and many underpads, and few epidural kits.

Operating Room / Surgical Theater: No needs identified at this time.

Endoscopy: No needs identified at this time.

Ophthalmology: No needs identified at this time.

Pharmacy: No needs identified at this time.

Radiology / Diagnostics: No needs identified at this time.

Rehabilitation: No needs identified at this time.

Administration / Other Equipment: No needs identified at this time.

Dental: Dental supplies, gauze and cotton, exam and sterile gloves, and masks.

Instructional Needs: No needs identified at this time.

Additional Information

Pictures/Anecdotes



The X-Ray Department was built by the community with assistance from Zamsif and equipped by the Rotary Club of Nkwazi. It was officially opened by the former Minister of Health, Dr. Brian Chituwo in March 2008.



Pictured above are suction units and an oxygen concentrator that were nonfunctional.

Appendix

Primary Contact Person:

Name: Grace Kapitango	Title: Hospital Administrator
Organization: Chelstone Zonal Hospital	Role: Primary Facility Representative
Address: Baobab Street, Chelstone, Lusaka, Zambia	Email: gracekapitango@gmail.com
Phone: +260796751875	

Other Contact Person:

Name: Nedah Musonka	Title: Nursing Officer
Organization: Chelstone Zonal	Role: Secondary Facility Representative
Address: Baobab Street, Lusaka, Zambia	Email: mnedah@yahoo.com
Phone: +260966966078	

Other Contact Person:

Name: Fatima Yikoska	Title: Medical Superintendent
Chelstone Zonal	Role: Director of Medicine
Organization: Baobab, Lusaka, Zambia	Email: Kayfatimah@gmail.com
Phone: + 260976751875	

Institution #2: Bauleni Health Centre

Bauleni Health Centre is an Urban Health and Maternal and Child Clinic serving a catchment area of 107,706. Patients walk to clinics. The staff includes 1 primary doctor, 48 nurses, and 15 midwives. The facility is located in Bauleni which is a suburb of Lusaka and provides outpatient services as well as OBGYN services. The facility is fully funded by the government and the pharmacy is supplied by the government.

There are 5 hospitals and 3 clinics within 5km of Bauleni. 2.6% of patients are referred out for more specialized care. There are 10 beds for patient recovery but as mentioned previously there are no inpatient services. The facility is composed of multiple one-story buildings that house 1 delivery room, 1 emergency room, 2 exam rooms, and 1 laboratory. The CDC has built a prefabricated building onsite for

HIV treatment. Additionally, there is a vaccination room and mobile clinic for male circumcision. Storage is available for consumables which are typically supplied by the government on an on-going basis.

A biomedical technician is available on-site, but there is a limited budget to pay for the technician. Waste is incinerated on site. Electricity is powered to the facility through the grid, and it is reliable; however, the facility does not have a back-up generator in case of power failure.

Facility	Population served: 107,706	Urban	Number of patients: 3,215 per month	Public	Number of births: 82 per month
Breakdown of Facility	Number of ER Beds: 1	Number of Delivery Rooms: 1			
Staff	# Doctors: 1	# Nurses: 48	# Midwives: 15	# Lab Techs: 2	# Other Providers: None
Bio-Tech Support	Biomed Tech on staff? Yes	Capable of repair? Yes	Capable to install? No	Budget to Pay Tech? No	

Top 3 Items Requested:

1. Ultrasound
2. Full blood count machine
3. Chemistry analyzer

The following summarizes the key needs identified during the site visit in each facility area.

Emergency Room / Triage: Requested items include 1 defibrillator, 1 laryngoscope, 1 vital signs monitor, 10 exam lights, 5 exam tables, 1 otoscope, 12 pulse oximeters, 4 infant scales, 4 adult scales, 4 stethoscopes, many digital thermometers, many forehead thermometers, exam gloves, sterile gloves, patient containers, and respiratory supplies, airway kits, dressings, endo tubes, exam and sterile gloves, irrigation kits, 6 stapler kits, and 16 suture kits.

Consultation / Exam Area: 10 chairs and stools, 5 exam lights 5 exam tables, 1 otoscope and 1 ophthalmoscope, 10 pulse oximeters, 4 infant and adult 4 scales, 4 speculums, 4 stethoscopes, many digital and patient thermometers, exam and sterile gloves, patient containers, and respiratory supplies.

Patient Ward / Intensive Care Unit: Requested items include 15 manual beds, 6 gurneys stretcher, 15 IV poles, 5 patient monitors, 5 nebulizers, many bedside cabinets and privacy curtains, 10 pulse oximeters, 2 oxygen concentrators, alcohol pads, swabs, bedpans, 2 casting supplies, many cleaning supplies, many skin cleaning products, many non-sterile drapes, many dressing supplies, many feeding tube bags, many exam and sterile gloves, few IV tubing and supplies, many needles, few pads and wedges, many patient containers, gowns, paper supplies , patient supplies, many sharp containers, few skin specialties, few splints/ wraps, many applicator swabs, many syringes, few urinary catheters, and few central lines.

Laboratory: Requested items include 2 autoclaves, 1 hematocrit centrifuge, 1 lab centrifuge, few culture incubators, 1 microtiter rotator, and 1 microscope, many blood drawing supplies and many lab containers and labels.

Obstetrics / Infant / Maternal Health: Requested items include 10 bassinets, 2 Billi lights, 5 delivery kits, 2 fetal monitors, 1 ultrasound, 2 infant warmers, 20 ambu bags, and many baby and birthing supplies, Kits for Kids, diapers, feminine supplies, many sterile gloves, midwife kits, many underpads, and few epidural kits.

Operating Room / Surgical Theater: No needs identified at this time.

Endoscopy: No needs identified at this time.

Ophthalmology: No needs identified at this time.

Pharmacy: No needs identified at this time.

Radiology / Diagnostics: No needs identified at this time.

Rehabilitation: No needs identified at this time.

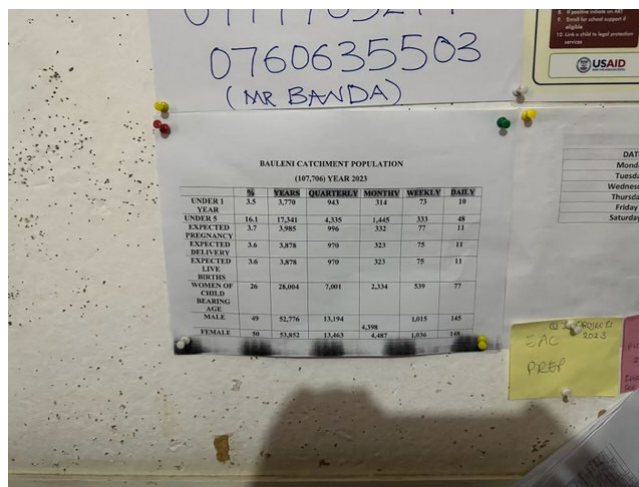
Administration / Other Equipment: No needs identified at this time.

Dental: Dental supplies, gauze and cotton, exam and sterile gloves, and masks.

Instructional Needs: No needs identified at this time.

Additional Information

Pictures/Anecdotes



Bauleni catchment area serves over 104,000 patients.



The government supplies 100% of the pharmacy supplies on a consistent basis.



Many of their 10 beds are old and they have no inpatient facilities.

Appendix

Primary Contact Person:

Name: Esnada Banda	Title: Nurse in Charge
Organization: Bauleni Health Centre	Role: Charge Nurse
Address: PO Box 50827, Lusaka, Zambia	Email: esnartmambwebanda@gmail.com
Phone: 0977627200	

Other Contact Person:

Name: Beatrice M. Bowa	Title: Zonal Environmental Health Technologist
Organization: Bauleni Health Centre	Role: Facility Representative
Address: PO Box 50827, Lusaka, Zambia	Email: beatricemulengabowa@gmail.com
Phone: 0977817183	

Other Contact Person:

Name: Memory Kabwe	Title: Environmental Health Technologist
Organization: Bauleni Health Centre	Role: Facility Representative

Address: PO Box 50827, Lusaka, Zambia	Email: musekwakabwe99@gmail.com
Phone: 0976583696	

Institution #3: Chainda Urban Health Centre

Chainda Urban Health Centre is an urban clinic serving a catchment area of 65,195. Patients walk to clinics. Staff members include 1 doctor, 60 nurses, and 34 nurse’s aides. It is located in the Chainda neighborhood of Lusaka. The facility is entirely government funded and the government provides the biomedical technician as well as consumable supplies.

The facility is composed of multiple one-story buildings holding the following departments: Nutrition, Labor Ward, Antenatal, Pharmacy, Waiting Room, TB Corner, Nurses Room, Sisters Bay, Resuscitation Room, OB Ward, TVB Clinic and TB Treated Beds, Adherence Room, Laboratory, Circumcision Room, Infant Resuscitation Room and special HIV, Diabetes and Malaria Clinics. There is a biomedical technician available, and the electricity provided by the grid is consistent.

Facility	Population served: 65,196	Urban	Number of patients: Unavailable	Public	Number of births: Unavailable
Breakdown of Facility	Number of ER Beds: 0	Number of Delivery Rooms: Unavailable			
Staff	# Doctors: 1	# Nurses: 60	# Midwives: 8	# Lab Techs: 0	# Other Providers: Nurse’s Aides, 34 Community Health Workers, 50
Bio-Tech Support	Biomed Tech on staff? No, outsourced	Capable of repair? Yes	Capable to install? Yes	Budget to Pay Tech? No	

Top 3 Items Requested:

1. X-ray
2. Laboratory equipment
3. Infant warmer

The following summarizes the key needs identified during the site visit in each facility area.

Emergency Room / Triage: No needs identified at this time.

Consultation / Exam Area: Requested items include 5 chairs and stools, 2 exam lights , 2 exam tables, and 10 pulse oximeters, 4 infant and adult 4 scales, 4 speculums, 4 stethoscopes, many digital and patient thermometers, exam and sterile gloves, patient containers, and respiratory supplies.

Patient Ward / Intensive Care Unit: Requested items include 10 manual beds, 8 gurneys stretcher, 12 IV poles, 5 patient monitors, 5 nebulizers, many bedside cabinets and privacy curtains, 10 pulse oximeters, 2 oxygen concentrators, many alcohol pads, swabs, bedpans, 2 casting supplies, many cleaning supplies, many skin cleaning products, many non-sterile drapes,

many dressing supplies, many feeding tube bags, many exam and sterile gloves, few IV tubing and supplies, many needles, few pads and wedges, many patient containers, gowns, paper supplies, patient supplies, many sharp containers, few skin specialties, few splints/ wraps, many applicator swabs, many syringes, few urinary catheters, and few central lines.

Laboratory: No needs identified at this time.

Obstetrics / Infant / Maternal Health: Requested items include 6 bassinets, 2 Billi lights, 4 delivery kits, 2 fetal monitors, 1, 12 oxygen concentrators, ultrasound, 2 infant warmers, 18 ambu bags, and many baby and birthing supplies, Kits for Kids, diapers, feminine supplies, many sterile gloves, midwife kits and many underpads, and few epidural kits.

Operating Room / Surgical Theater: No needs identified at this time.

Endoscopy: No needs identified at this time.

Ophthalmology: No needs identified at this time.

Pharmacy: No needs identified at this time.

Radiology / Diagnostics: No needs identified at this time.

Rehabilitation: No needs identified at this time.

Administration / Other Equipment: No needs identified at this time.

Dental: No needs identified at this time.

Instructional Needs: No needs identified at this time.

Additional Information

Pictures/Anecdotes



Pictured above is a patient bed. The ward needs 10 additional manual beds.



The above pictured suction unit is non-functional.



The nutritionist is pictured above and she was very enthusiastic on the number of patients coming to the clinic.

Appendix

Primary Contact Person:

Name: Bridget Mwape	Title: Facility in Charge
Organization: Chainda Health Centre	Role: Director
Address: Lusaka, Zambia	Email: mwapebridget2@gmail.com
Phone: +26097744817	

Institution #4: Kalingalinga Health Centre

Kalingalinga Health Centre opened on June 17, 1998, as a gift from the people from the United Kingdom. The Zambian government provides operational and supplies support. The staff includes 2 primary doctors, 38 nurses, and 17 midwives as well as 3 laboratory technicians. This facility provides both inpatient and outpatient services. There are high cases of COVID-19 and Typhoid as well as diarrheal disease during the rainy season. At the time of the assessment, the water pipelines were contaminated, and they were using bore holes with added chlorine instead. The Rotary Club of Nkwazi purchased a well-treated water system.

The facility consists of multiple one-story buildings holding the following departments: 2 Wards, Central Laboratory (CIDRC), Radiology, Reception, TB Clinic, Dispensary, ART Clinic, Outpatient Lab, Maternity, Maternal and Child Health, TB Corner, Mortuary, and ENT. They are equipped to provide cervical cancer screenings, antenatal services, diabetes services, as well as vaccinations.

There is a biomedical technician available from the district. Electricity is sourced through the grid, and it is consistent. A backup generator is available as it was purchased by the Rotary Club of Nkwazi but backup power is not available to all departments.

Facility	Population Served: 107,487	Urban	Number of patients: 365 – 520 per month	Public	Number of births: 15-20 per month
Breakdown of Facility	Number of ER Beds: 1	Number of Delivery Rooms: 1			
Staff	# Doctors: 2	# Nurses: 38	# Midwives: 17	# Lab Techs: 3	# Other Providers: Community Health Workers, 85
Bio-Tech Support	Biomed Tech on staff? No, outsourced	Capable of repair? No	Capable to install? No	Budget to Pay Tech? No	

Top 3 Items Requested:

1. Delivery beds
2. Incubator
3. Chemistry analyzer

The following summarizes the key needs identified during the site visit in each facility area.

Emergency Room / Triage: No needs identified at this time.

Consultation / Exam Area: No needs identified at this time.

Patient Ward / Intensive Care Unit: Requested items include suction unit, full blood count analyzer, centrifuge, 3 manual beds, 2 gurneys stretcher, 12 IV poles, 5 patient monitors, 5 nebulizers, many bedside cabinets and privacy curtains, 10 pulse oximeters, 2 oxygen concentrators, many alcohol pads, swabs, bedpans, 2 casting supplies, many cleaning supplies, many skin cleaning products, many non-sterile drapes, many dressing supplies, many feeding tube bags, many exam and sterile gloves, few IV tubing and supplies, many needles, few pads and wedges, many patient containers, gowns, paper supplies, patient supplies, many sharp containers, few skin specialties, few splints/ wraps, many applicator swabs, many syringes, few urinary catheters, and few central lines.

Laboratory: Requested items include 1 Autoclave, 1 Cultures Incubator, 1 Chemistry Analyzer, and 1 Blood Analyzer.

Obstetrics / Infant / Maternal Health: Requested items include 2 bassinets, 2 Billi lights, 2 cribs, 2 delivery kits, 2 fetal monitors, 12 oxygen concentrators 2, ultrasound, 2 infant warmers. Consumables include: 15 ambu bags, and many baby and birthing supplies, Kits for Kids, diapers, feminine supplies, many sterile gloves, midwife kits and many underpads, and few epidural kits.

Operating Room / Surgical Theater: No needs identified at this time.

Endoscopy: No needs identified at this time.

Ophthalmology: No needs identified at this time.

Pharmacy: No needs identified at this time.

Radiology / Diagnostics: Requested items include Ultrasound – Abdominal, bladder, cardiac, prostrate and vaginal.

Rehabilitation: No needs identified at this time.

Administration / Other Equipment: No needs identified at this time.

Dental: Dental supplies, gauze and cotton, exam and sterile gloves, and masks.

Instructional Needs: No needs identified at this time.

Additional Information

Pictures/Anecdotes



ART, Diabetes and Malaria Clinics are held weekly. They are requesting additional furniture to accommodate the large numbers of patients.



An infant scale is pictured above.



The above pictured centrifuge is non-functioning.



CIDRZ experts utilize innovative and collaborative approaches to develop research, health services, and training initiatives with measurable results in the following focus areas: HIV/AIDS Prevention, Care, and Treatment, Tuberculosis Prevention and Control, and Women's Health.

Appendix

Primary Contact Person:

Name: Precious Dindi	Title: Registered Nurse
Organization: Kalingalinga Health Centre	Role: Nurse
Address: Box 50827, Lusaka, Zambia	Email: preciousmalambo2@gmail.com
Phone: +0977745943	

Other Contact Person:

Name: Paitience Chanda	Title: Environmental Health Technologist
Organization: Kalingalinga Health Centre	Role: Facility Representative
Address: Box 50827, Lusaka, Zambia	Email: paitiencekchanda@gmail.com
Phone: 0977242329	

Institution #5: Mtendere Urban Health Facility

Mtendere Urban Health Facility serves an urban population of 133,000 people who are mostly street marketers, and small business owners. Most patients arrive on foot or by bus. It is located in Mtendere which is a township of Lusaka. It is a small facility in a densely populated area. The facility is primarily funded by the Zambian government.

The facility has multiple one-story buildings holding the following departments: Dental, HIV/AIDS, Lab services, OB /GYN – Antenatal and Obstetrics, TB, and Outpatient. Approximately 40% of the population is male and 60% is female. They have high caseloads for asthma, diabetes, HIV/AIDS, Respiratory Infections, violent trauma, and TB.

The government provides 90% of the funding for the facility and 10% from other sponsors – Lions, USAID, UNICEF, CIRZX, CDC and MDGE. Supplies can be sourced in the country and the electrical grid is reliable, but they do not have a back-up generator or an incinerator for the disposal of waste.

Facility	Population served: 133,000	Peri-urban	Number of patients: 800 per month	Public	Number of births: 150 per month
Breakdown of Facility	Number of ER Beds: 1	Number of Delivery Rooms: 5			
Staff	# Doctors: 2	# Nurses: 42	# Midwives: 15	# Lab Techs: 4	# Other Providers: Biomedical technicians, 4
Bio-Tech Support	Biomed Tech on staff? Yes, 4	Capable of repair? Yes	Capable to install? Yes	Budget to Pay Tech? Yes	

Top 3 Items Requested:

1. Infant warmer
2. Autoclave
3. Suction unit

The following summarizes the key needs identified during the site visit in each facility area.

Emergency Room / Triage: Requested items include 4 Suction Units, 4 Linen Carts, and 4 Medication Carts.

Consultation / Exam Area: Requested items include 100 Chair/Stools, and 15 Adult Scales.

Patient Ward / Intensive Care Unit: Requested items include 10 Manual Beds, 5 Gurney/Stretchers, 10 IV Poles, 2 Wheelchairs, 30 mattresses, and 4 Oxygen Concentrators.

Laboratory: Requested items include 2 Autoclaves, 1 Hematocrit Centrifuge, 1 Rotator, 1 Rocker, 1 Vortex Type, 1 Water Bath, 1 Chemistry Analyzer, and 1 Blood Analyzer.

Obstetrics / Infant / Maternal Health: Requested items include 10 Delivery Surgical Instrument Kits, 5 Fetal Monitors, 1 Ultrasound, 2 Infant Warmers, 1 Birthing Bed, 2 Fetal Doppler Units, 2 Fetoscopes, 1 Infant Incubator, and 1 Infant Ventilator.

Operating Room / Surgical Theater: No needs identified at this time.

Endoscopy: No needs identified at this time.

Ophthalmology: No needs identified at this time.

Pharmacy: No needs identified at this time.

Radiology / Diagnostics: Requested items include and 1 C Arm X-ray Unit.

Rehabilitation: Requested items include many Crutches, many Walkers, many Canes, 2 Bicycles, 2 Treadmills, 2 Pedal Machines, 1 Hydrocollator, 10 Standard Wheelchairs, 1 Muscle/Nerve Stimulator, and 1 Therapeutic Ultrasound.

Administration / Other Equipment: Requested items include 5 File Cabinets, 5 Storage Cabinets, 10 Miscellaneous Carts, 7 Desks, and 7 Office Chairs.

Dental: No needs identified at this time.

Instructional Needs: No needs identified at this time.

Additional Information

Pictures/Anecdotes

MTENDERE CATCHMENT POPULATION - 94,761					
YEAR 2023	%	PER YEAR	PER QUARTER	PER MONTH	PER WEEK
CHILDREN 0-11 MONTHS	4	3,791	948	316	79
CHILDREN 12-59 MONTHS	16	15,168	3,791	1,264	316
WOMEN OF CHILD BEARING AGE	22	20,847	5,212	1,737	434
POPULATION 0-15 YEARS	52	49,738	12,320	4,107	1,027
POPULATION ABOVE 15 YEARS	44	41,678	10,425	3,475	869
EXPECTED PREGNANCIES	5.4	5,118	1,280	427	107
EXPECTED DELIVERIES	5.2	4,928	1,232	411	103
EXPECTED LIVE BIRTHS	5	4,738	1,185	395	99

KEY:
 --- STREAM
 ☺ CLINIC
 + CHURCH
 ☆☆☆ MARKET

DATE: 9/4/23

Projected number of pregnancies, deliveries and births are increasing monthly.



The leadership team is enthusiastic, capable and dedicated to hard work.



A rusty hospital bed is pictured above.

Appendix

Primary Contact Person:

Name: Ireen Silvage	Title: Facility in Charge
Organization: Mtendere Urban Health Centre	Role: Director
Address: Mtendere, Lusaka, Zambia	Email: ireentsmina1@gmail.com
Phone: +260962785376	

Institution #6: George Health Centre

George Health Centre serves an urban population of 209,000 people who are mostly street marketers and small business owners. Patients primarily arrive at the facility on foot and the facility is located in Lusaka. The government provides 100% of the funding for the facility. They partner with the CDC. Supplies can be sourced in the country and the electrical grid is reliable, and they have access to fuel.

The facility is composed of seven one-story buildings holding the following departments: Cervical Cancer Screening, Male Circumcision, TB, Maternal and Child Health, Labor Ward, Dental, Antenatal, ART, Physical Therapy, and the Center for Infant Diseases and Research in Zambia. The equipment is old, and many pieces are dysfunctional, for example: a resuscitator, the full blood count analyzer, and the centrifuge all need to be replaced. There are high caseloads for diarrheal disease, malaria, HIV/AIDS, malnutrition, maternity care, and trauma/accidents. Tuberculosis patients are referred out for X-ray services. They have introduced skill-based training for alcohol and drugs for their staff.

A biomedical technician is available to be outsourced from a nearby hospital. Electricity is sourced from the grid, and it is reliable; however, the facility does not have a backup generator in case of outages. They have access to the internet and waste is picked up and taken away. Storage is available on-site for consumables.

Facility	Population served: 209,000	Urban	Number of patients 54,106 per year	Public	Number of births: 3,332 per year
Breakdown of Facility	Number of ER Beds: 1	Number of Delivery Rooms: 5			
Staff	# Doctors: 1	# Nurses:	# Midwives: 22	# Lab Techs: 2	# Other Providers:

		35			Dental Technicians, 2 Community Health Workers, 150
Bio-Tech Support	Biomed Tech on staff? No, outsourced	Capable of repair? Yes	Capable to install? Yes	Budget to Pay Tech? Unknown	

Top 3 Items Requested:

1. Chemistry Analyzer
2. Autoclave
3. Ultrasound

The following summarizes the key needs identified during the site visit in each facility area.

Emergency Room / Triage: Requested items include 1 Electrocardiogram, 1 Gurney/Stretcher, 1 Laryngoscope, 1 Vital Signs Monitor, and 1 Suction Unit.

Consultation / Exam Area: Requested items include 4 Chair/Stools, 1 Exam Light, 1 Exam Table, 1 Otoscope/Ophthalmoscope, 1 Pulse Oximeter, 1 Adult Scale, 1 Infant Scale, 1 Speculum, 1 Sphygmomanometer, 1 Stethoscope, 1 Oral & Forehead Thermometer, and 1 Vision Tester.

Patient Ward / Intensive Care Unit: No needs identified at this time.

Laboratory: Requested items include 1 Microscope, 1 Refrigerator/Freezer, and 1 Chemistry Analyzer.

Obstetrics / Infant / Maternal Health: Requested items include 3 Bassinets, 5 Cribs, 4 Delivery Surgical Instrument Kits, 4 Fetal Monitors, and 1 Ultrasound.

Operating Room / Surgical Theater: No needs identified at this time.

Endoscopy: No needs identified at this time.

Ophthalmology: No needs identified at this time.

Pharmacy: No needs identified at this time.

Radiology / Diagnostics: No needs identified at this time.

Rehabilitation: Requested items include 2 Walkers, 1 Treadmill, 1 Pedal Machine, 1 Therapy Table, and 1 TENS Unit.

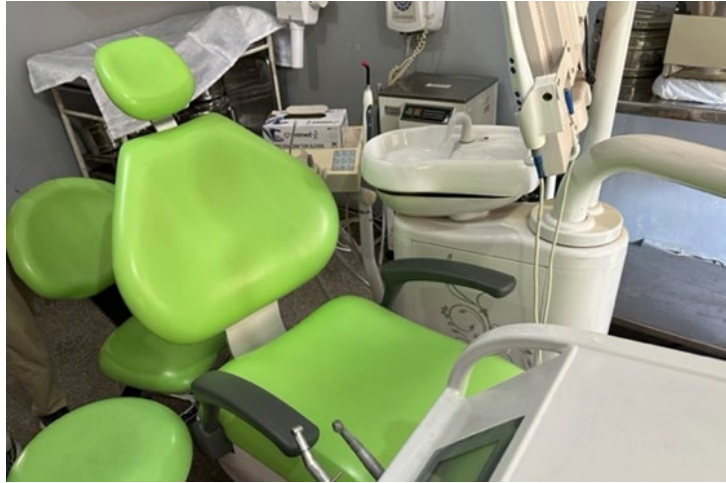
Administration / Other Equipment: No needs identified at this time.

Dental: Requested items include Dental Supplies, Gauze & Cotton Rolls, Exam Gloves, Sterile Gloves, Lead Aprons, and Masks.

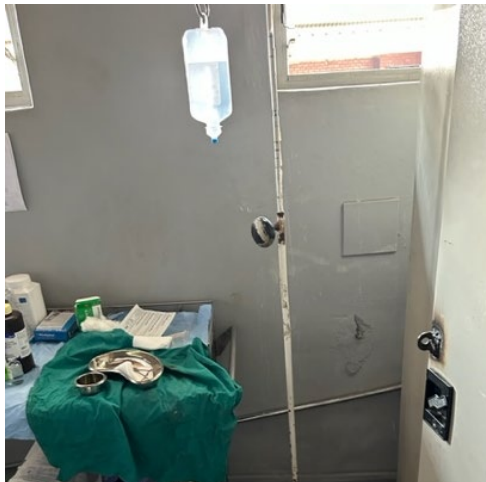
Instructional Needs: No needs identified at this time.

Additional Information

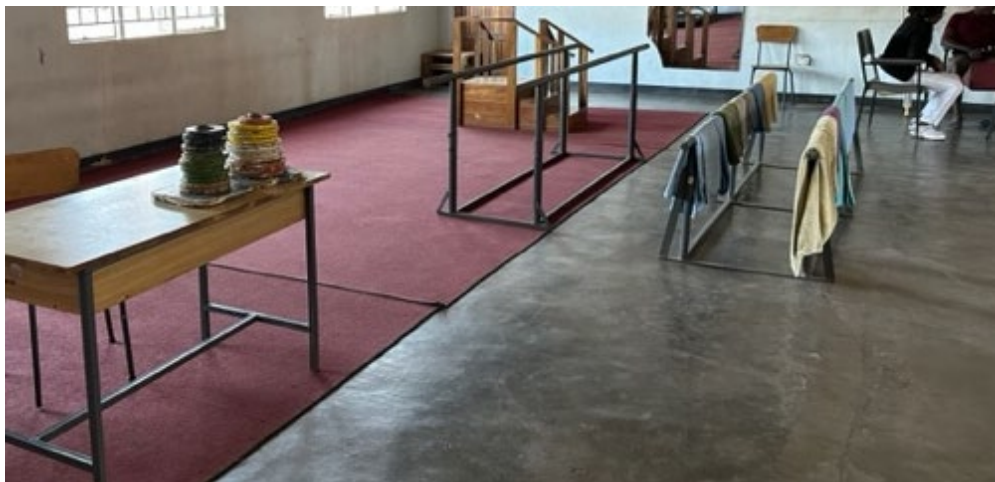
Pictures/Anecdotes



A recently donated dental unit with chair is pictured above.



An IV pole with a patient cart is picture above. Throughout the facility there was a noted lack of consumable supplies.



The new rehabilitation clinic is shown above. It is in need of additional equipment.

Appendix

Primary Contact Person:

Name: Bridget Banda	Title: Acting Nursing Officer
Organization: George Health Centre	Role: Acting Nurse Director
Address: PO Box 50827, Lusaka, Zambia	Email: georgehealthcentre@gmail.com
Phone: 0956343376/0972881428 + 260	

Other Contact Person:

Name: Dr. Alex Simwanza	Title: General Medical Doctor
Organization: George Health Centre	Role: Med Director
Address: PO Box 50827, Lusaka, Zambia	Email: Unavailable
Phone: 0962808644/097805178	

Other Contact Person:

Name: Florence Kafula	Title: Registered Midwife
Organization: George Health Centre	Role: Midwife
Address: PO Box 50827, Lusaka, Zambia	Email: kpflorence77@gmail.com
Phone: 0977528996	

Institution #7: Chazanga Health Centre

Chazanga Health Centre serves an urban population of 45,639 people who are mostly street marketers, small business owners, civil servants, and bus drivers. The facility is completely government funded. Interestingly, the community built the Health Centre and the Rotary International Fund - Zambia, Malawi, Zimbabwe, and Mozambique contributed to the construction. The labor ward was built by the Center for Infant Diseases and Research in Zambia (CIDSZRZ). The staff includes 26 nurses and 9 midwives.

The facility is composed of several one-story buildings holding the following departments and service areas: cervical cancer screening, male circumcision, TB, maternal and child health, labor ward, antenatal, ART, physical therapy, and the Center for Infant Diseases and Research in Zambia. The equipment is old, and many pieces are dysfunctional including the resuscitator, the full blood count analyzer, and the

autoclave. There are high caseloads for Diarrheal disease, HIV/AIDS, maternity, pediatrics, respiratory infections. Medium caseloads include asthma, diabetes, hypertension, malaria, and malnutrition.

Supplies can be sourced in the community and electricity is sourced through the grid. Electricity from the grid is reliable, but a backup generator is unavailable in case of emergencies. Fuel is accessible for the facility. A biomedical technician is outsourced from a nearby hospital and the technician comes to the facility once a month.

Facility	Population served: 45,639	Urban	Number of patients: 3,000 per year	Public	Number of births: 198 per month
Breakdown of Facility	Number of ER Beds: 0	Number of Delivery Rooms: 1			
Staff	# Doctors: 0	# Nurses: 26	# Midwives: 9	# Lab Techs: 0	# Other Providers: None
Bio-Tech Support	Biomed Tech on staff? No, outsourced	Capable of repair? Yes	Capable to install? Yes	Budget to Pay Tech? Yes	

Top 3 Items Requested:

1. Hematocrit machine
2. Ultrasound
3. Infant warmer

The following summarizes the key needs identified during the site visit in each facility area.

Emergency Room / Triage: Requested items include 1 Medicine Cart, Dressings, and Sutures Kits.

Consultation / Exam Area: Requested items include 5 Chair/Stools, 1 Exam Light, 4 Exam Tables, 1 Otoscope/Ophthalmoscope, 1 Pulse Oximeter, 2 Adult Scales, 2 Infant Scales, 2 Speculums, 4 Sphygmomanometers, 6 Stethoscopes, 10 Digital Patient Thermometers, and 10 Oral & Forehead Thermometers.

Patient Ward / Intensive Care Unit: Requested items include 6 Manual Beds, 2 Gurney/Stretchers, 6 IV Poles, 2 Oxygen Tanks, 9 Over Bed Tables, 6 Bedside Cabinets, 8 Privacy Curtains, and 2 Oxygen Concentrators.

Laboratory: Requested items include 1 Autoclave, 1 Hemoglobin Meter, 1 Hematocrit Centrifuge, 1 Lab Centrifuge, and 1 Refrigerator/Freezer.

Obstetrics / Infant / Maternal Health: Requested items include 3 Bassinets, 2 Bili Lights, 4 Delivery Surgical Instrument Kits, 2 Fetal Monitors, 2 Ultrasounds, 1 Infant Warmer, 4 Fetoscopes, 1 Infant Incubator, and Ambu Bags.

Operating Room / Surgical Theater: No needs identified at this time.

Endoscopy: No needs identified at this time.

Ophthalmology: No needs identified at this time.

Pharmacy: Requested items include 4 Medication Cabinets.

Radiology / Diagnostics: No needs identified at this time.

Rehabilitation: No needs identified at this time.

Administration / Other Equipment: Requested items include and 4 Linen Carts.

Dental: No needs identified at this time.

Instructional Needs: No needs identified at this time.

Additional Information

Pictures/Anecdotes



The ART Clinic is working with a local non-profit to recruit community health workers to work with patients in their villages. Pictured above are staff members.



A long-time volunteer carefully fills out each individual health record.

Appendix

Primary Contact Person:

Name: Charity Mondoloka	Title: Nurse in Charge
Organization: Chazanga Health Centre	Role: Charge Nurse
Address: PO Box 50827, Lusaka, Zambia	Email: kaongamcharity@gmail.com
Phone: +29067761363	

Institution #8: Kanyama West Health Centre

Kanyama West Health Centre serves an urban population of 79,927 people who are mostly professionals, general workers, self-employed business owners, and business marketers. The facility opened in 2005 and it is completely funded by the government. It is located in the Kanyama compound of Lusaka. The staff includes 25 nurses, 10 midwives, and 60 community health workers.

The facility is composed of four one-story buildings holding the following departments and service areas: general internal medicine, diabetes, HI/AIDS, vaccinations, and OB/GYN. It is primarily an outpatient facility. Maternal and adolescent health services are held two times a week. Overall, the equipment is old but working well with the help of the government provided biomedical technician. There are high caseloads for diarrheal disease, pediatrics, and respiratory infections. Medium caseloads include maternity, HIV/AIDS, hypertension, malaria, and TB.

Supplies can be sourced in the country and the grid is reliable, but they do not have a backup generator and fuel is not available. They have access to the internet and waste is placed in an onsite incinerator. Storage is available on-site for consumables. The biomedical technician is onsite and there is a budget to fund the position. The biomedical technician comes from the nearby Level 1 hospital which was also assessed.

Facility	Population served: 79,927	Urban	Number of patients: 7,500 per month	Public	Number of births: 150 per month
Breakdown of Facility	Number of ER Beds: 0	Number of Delivery Rooms: 1			

Staff	# Doctors:	# Nurses: 25	# Midwives: 10	# Lab Techs: 0	# Other Providers: Community Health Workers, 60 Biomedical Technician, 1
Bio-Tech Support	Biomed Tech on staff? Yes	Capable of repair? Yes	Capable to install? Yes	Budget to Pay Tech? Yes	

Top 3 Items Requested:

1. Autoclave
2. Ultrasound
3. Oxygen concentrator

The following summarizes the key needs identified during the site visit in each facility area.

Emergency Room / Triage: No needs identified at this time.

Consultation / Exam Area: No needs identified at this time.

Patient Ward / Intensive Care Unit: No needs identified at this time.

Laboratory: No needs identified at this time.

Obstetrics / Infant / Maternal Health: Requested items include 6 Bassinets, 6 Cribs, 5 Delivery Surgical Instrument Kits, 1 Fetal Monitor, 1 Ultrasound, 1 Infant Warmer, 1 Resuscitator, Ambu Bags, Baby & Birthing Supplies, many C.U.R.E. Kits for Kids, Feminine Supplies, Sterile Gloves, and Midwife Birthing C.U.R.E. Kits.

Operating Room / Surgical Theater: No needs identified at this time.

Endoscopy: No needs identified at this time.

Ophthalmology: No needs identified at this time.

Pharmacy: No needs identified at this time.

Radiology / Diagnostics: No needs identified at this time.

Rehabilitation: No needs identified at this time.

Administration / Other Equipment: No needs identified at this time.

Dental: No needs identified at this time.

Instructional Needs: No needs identified at this time.

Additional Information

Pictures/Anecdotes



Pictured above are patients waiting in line to be seen. This facility was very busy.



Pictured above is the waiting area. Male-friendly clinics are becoming more popular in Zambia.

Appendix

Primary Contact Person:

Name: Justina Chama	Title: Facility In Charge
Organization: Kanyama Health Centre	Role: Director
Address: Plot 11488 Mbasela First Road	Email: Justina.chibwe@gmail.com
Phone: +260977685942	

Other Contact Person:

Name: Violet Lungu	Title: MCH in Charge
Organization: Kanyama Health Centre	Role: Maternal Child Health
Address: Plot 11488 Mbasela First Road	Email: violetlungu73@gmail.com
Phone: +260977344262	

Other Contact Person:

Name: Virginia Katunga	Title: OPD IN charge
Organization: Kanyama Health Centre	Role: Outpatient Director
Address: Plot 11488 Mbasela First Road	Email: virginiakamanya@gmail.com
Phone: +260977947175	

Institution #9: Kanyama General Hospital

Kanyama General Hospital serves an urban population of 525,000 people, the majority of whom have low socio-economic status. It is a level 1 hospital. The female wing was built with support from the Irish government and the new labor and delivery room was built with funds from the Japanese Internal Cooperative Agency. The Japanese Internal Cooperative Agency is an implementing agency of Japanese official development (ODA) for the purpose of supporting the socioeconomic development of developing regions. The government provides about 80% of funding while the remaining 20% is supplied from patient fees. Staff members included 2 surgeons and 157 nurses.

The hospital is composed of several one-story buildings that hold the following departments: non-Invasive cardiology clinic, OB/GYN, and physical therapy. Cancer patients are referred to the University Teaching Hospital. There are high caseloads for asthma, allergies, diabetes, diarrheal disease, malnutrition, maternity, respiratory infections, trauma from accidents, and TB. There are plans for an ICU to be built in the near future.

Supplies can be sourced in the country and the grid is reliable. However, storage for consumables is off site. They have a back-up generator, and they have a back-up transformer and access to the internet. The incinerator is broken, and the waste is taken away. Three biomedical technicians are onsite, two are funded by the government and one is funded by an international donor.

Facility	Population served: 525,000	Number of Beds: 165	Number of patients: 30,000 per month	Occupancy rate: 95%	Number of births: 1000 per month
Breakdown of Facility	Emergency Room: Yes, 4	Delivery Room: Yes, 7	ICU: No	Exam Room: Yes, 7	Operating Room: Yes, 2
Staff	# Doctors: 0	# Nurses: 157	# Lab Techs: 5	# Surgeons: 2	# Other Providers: Anesthesiologists, 5 Dental Surgeons, 2 Dental Technicians, 2 Community Health Workers, 4 Biomedical Technicians, 3
Bio-Tech Support	Biomed Tech on staff? Yes	Capable of repair? Yes	Capable to install? Yes	Budget to Pay Tech? Yes	

Top 3 Items Requested:

1. Equipment
2. Instruments

3. Consumables

The following summarizes the key needs identified during the site visit in each facility area.

Emergency Room / Triage: Requested items include 1 Crash Cart, 2 Electrocardiograms, 2 Gurney/Stretchers, 2 Laryngoscopes, 2 Mayo Stands, 2 Minor Surgical Instrument Kits, 2 Vital Signs Monitors, 1 Patient Transfer System, and 2 Suction Units.

Consultation / Exam Area: No needs identified at this time.

Patient Ward / Intensive Care Unit: Requested items include 30 Electric Beds, 2 Hoyer Lifts, 20 IV Poles, 4 Patient Monitors, 2 Nebulizers, 2 Oxygen Tanks, 24 Over Bed Tables, 4 Pulse Oximeters, 4 Intravenous Fluid Pumps, 4 Wheelchairs, 2 ICU Beds, 2 Bipaps, 1 ICU Monitor, 8 Oxygen Concentrators, 4 Anti-Embolism Pumps, 4 Suction Units, Alcohol Pads & Swabs, Bedpans & Urinals, Casting Supplies, Non-Sterile Drapes, Dressings & Dressing Supplies, Feeding Tubes Bags & Supplies, Exam Gloves, Sterile Gloves, IV Tubing & Supplies, Needles, Oxygen Supplies, Pads Wedges & Positioning Pillows, Patient Containers, Patient Gowns, Patient Paper Supplies, Patient Supplies, Protectors & Restraints, Sharps Containers, Skin Specialties, Splints Ace Wraps & Extra Support Hose, Applicator Swabs, Central Vascular Percutaneous Lines, Ostomy Supplies, Suction Unit Tubing & Supplies, and Ventilator Unit Tubing.

Laboratory: Requested items include 2 Autoclaves, 3 Blood Drawing Chairs, 1 Hematocrit Centrifuge, 2 Lab Centrifuges, 1 Cultures Incubator, 2 Microtiter Rotators, 5 Microscopes, 2 Refrigerator/Freezers, 1 Water Bath, 1 Chemistry Analyzer, 1 Electrolyte Analyzer, and 1 Full Blood Count Analyzer.

Obstetrics / Infant / Maternal Health: Requested items include 7 Bassinets, 2 Bili Lights, 5 Breast Pumps, 20 Cribs, 35 Delivery Surgical Instrument Kits, 10 Fetal Monitors, 2 Ultrasounds, and 5 Infant Warmers.

Operating Room / Surgical Theater: Requested items include 5 Blanket Warmer Air Units, 2 Blood Warmers, 2 Electrosurgical Units, 4 Kick Buckets, 10 Laryngoscopes, 3 Mayo Stands, 5 Vital Signs Monitors, 10 Tourniquet Systems, 5 Abdominal Hysterectomy Instrument Kits, 10 C-Section Instrument Kits, 2 Cardiac Instrument Kits, 20 Delivery Instrument Kits, 5 Dilatation & Curettage Instrument Kits, 5 Ear Instrument Kits, 2 Esophageal Dilator Instrument Kits, 5 General Surgery Instrument Kits, 2 Laparoscopic Instrument Kits, 10 Minor Surgery Instrument Kits, 5 Orthopedic Instrument Kits, 2 SMR/Nose Instrument Kits, 10 Suture Instrument Kits, 2 Vaginal Hysterectomy Instrument Kits, 1 Major Vascular Instrument Kit, OR Airway Kits, Ambu Bags, Anesthesia Supplies, Biopsy Needles & Kits, Chest Tubes & Drainage Units, Surgical Drains, Sterile Drapes, Endotracheal Tubes, Sterile Gloves, Scalpels, Scrub Brushes & Skin Prep Kits, Stapler Kits, Surgical Caps Boots Masks & Gowns, Sutures Kits, and Ventilator Unit Tubing.

Endoscopy: No needs identified at this time.

Ophthalmology: Requested items include 1 Auto Refractor, 1 Ophthalmic Surgical Instrument Kit, 1 Tonometer, Eye Supplies & Eyeglasses, and Eye Surgery Packs & Supplies.

Pharmacy: Requested items include 4 Chairs, 4 Desks, 1 Refrigerator, 1 Table, 12 Shelving Units, and Pharmacy Supplies.

Radiology / Diagnostics: Requested items include 1 Vascular Doppler Unit, 1 EEG, 1 Stress Test Unit, 1 Abdominal/General Ultrasound, 1 Bladder Scanner Ultrasound, 1 Cardiac Ultrasound, 1 Prostate/Vaginal Ultrasound, 1 Ultrasound Gel Warmer, 1 X-ray View Box, Lead Aprons & Gloves, Ultrasound Gel, and Ultrasound Probe Covers.

Rehabilitation: Requested items include 1 Crutch, 1 Walker, 1 Cane, 1 Bicycle, 1 Treadmill, 1 Pedal Machine, 1 Hoyer Lift, 1 Hydrocollator, 1 Parallel Bar Set, 1 TENS Unit, 1 Transfer Board, 34 Standard Wheelchairs, 1 Specialty Wheelchair, and 1 Therapeutic Ultrasound.

Administration / Other Equipment: No needs identified at this time.

Dental: Requested items include 5 Hand Instrument Kits.

Instructional Needs: Requested items include 1 Adult CPR Manikin, 1 Youth CPR Manikin, 1 Infant CPR Manikin, and Instructional Supplies.

Additional Information

Pictures/Anecdotes



Jane Botha, Director of Nursing has been at the hospital for over 30 years.



Pictured above are staff members.



A robust training program fuels the facility's capacity to care for many patients.

Appendix

Primary Contact Person:

Name: Jane Botha	Title: Senior Nursing Officer
Organization: Kanyama General Hospital	Role: Director of Nursing
Address: Chikulu Kulya Road Lusaka, Zambia	Email: jkaongbotha14@gmail.com
Phone: + 260989288	

Institution #10: N'gombe Health Centre

N'gombe Health Centre serves a peri-urban population of 56,115 people and the majority of whom have low socio-economic status. The facility is located in the Ngombe neighborhood of Lusaka which is a densely populated and impoverished section of the city. The facility is maintained entirely by the government. Staff members include 1 doctor, 30 nurses, and 8 midwives.

The facility is composed of several one-story buildings that house the following departments and service areas: HIV/AIDS, immunizations/vaccinations, laboratory, nutrition, OB/GYN, pediatrics, primary and family care, and TB services. There are high caseloads of hypertension, HIV/AIDS, OBGYN, and diabetes. Medium caseloads include diarrheal disease, malnutrition, and TB.

The facility is connected to the grid, which is reliable, but they do not have a backup generator and fuel is not available. Waste is picked up each week. Storage is available on-site for consumables. The biomedical technician is outsourced from the sub-district.

Facility	Population served: 56,115	Peri-urban	Number of patients: Unavailable	Public	Number of births: 14 per month
Breakdown of Facility	Number of ER Beds: 0	Number of Delivery Rooms: 1			
Staff	# Doctors: 0	# Nurses: 30	# Midwives: 8	# Lab Techs: 4	# Other Providers: Community Health Workers, 100
Bio-Tech Support	Biomed Tech on staff? No, outsourced	Capable of repair? Yes	Capable to install? Yes	Budget to Pay Tech? Yes	

Top 3 Items Requested:

1. Ultrasound
2. Autoclave
3. Chemistry analyzer

The following summarizes the key needs identified during the site visit in each facility area.

Emergency Room / Triage: No needs identified at this time.

Consultation / Exam Area: Requested items include 4 Chair, 4 Stools, 2 Exam Lights, 2 Speculums, 4 Stethoscopes, 2 Suction Machines, 4 Beds, many Digital Patient Thermometer, and many Oral & Forehead Thermometer.

Patient Ward / Intensive Care Unit: Requested items include 10 Manual Beds, 5 Gurney/Stretchers, 20 Over Bed Tables, 4 Pulse Oximeters, 1 Oxygen Concentrator, Alcohol Pads & Swabs, Bedpans & Urinals, Disinfectants & Cleaning Supplies (Non-patient), Disinfectant & Skin Cleaning Products (Patient), Non-Sterile Drapes, Dressings & Dressing Supplies, Feeding Tubes Bags & Supplies, Exam Gloves, Sterile Gloves, IV Tubing & Supplies, Needles, Oxygen Supplies, Pads Wedges & Positioning Pillows, Patient Containers, Patient Gowns, Patient Paper Supplies, Patient Supplies, Sharps Containers, and Syringes.

Laboratory: Requested items include 1 Autoclave and 2 Microscopes.

Obstetrics / Infant / Maternal Health: Requested items include 6 Bassinets, 2 Bili Lights, 1 Breast Pump, 6 Cribs, 4 Delivery Surgical Instrument Kits, 2 Fetal Monitors, 2 Ultrasounds, 2 Infant Warmers, Midwife Birthing C.U.R.E. Kits, and Underpads.

Operating Room / Surgical Theater: No needs identified at this time.

Endoscopy: No needs identified at this time.

Ophthalmology: No needs identified at this time.

Pharmacy: No needs identified at this time.

Radiology / Diagnostics: No needs identified at this time.

Rehabilitation: No needs identified at this time.

Administration / Other Equipment: Requested items include 1 File Cabinet, 1 Storage Cabinet, and 1 Miscellaneous Cart.

Dental: No needs identified at this time.

Instructional Needs: No needs identified at this time.

Additional Information

Pictures/Anecdotes



Pictured above is a multi-purpose centrifuge which offers both ventilated and refrigerated components.



The above equipment was non-functional.



As shown above, the beside tables are rusty and need to be replaced.

Appendix

Primary Contact Person:

Name: Derry Mwaaka Pasi	Title: Nurse in Charge
Organization: Ntombe Health Centre	Role: Director of Nursing
Address: Lusaka, Zambia	Email: derrywanga@gmail.com
Phone: + 0977340455	