



Mercy
Ships

CAMEROON

NARRATIVE REPORT
2017-2018





CMA170901_COM552_ALL_CREW_PHOTO_DOCK_SL001

Mercy Ships and Cameroon

Partnership for Health

Mercy Ships is committed to bringing hope and healing to the world's forgotten poor by offering free specialized surgeries and medical training.

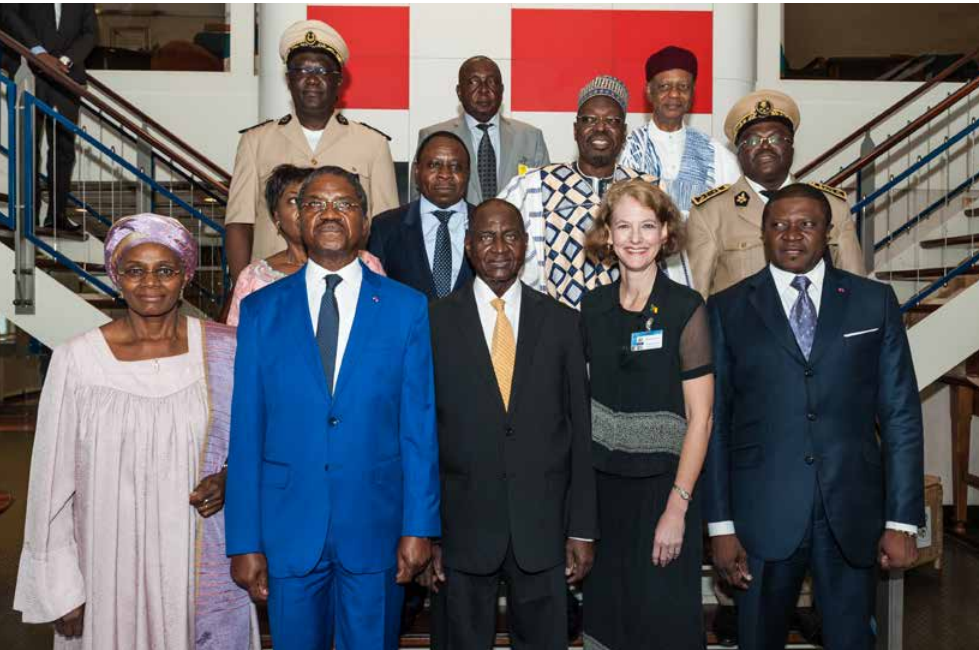
The *Africa Mercy* arrived in the Port of Douala on 16 August 2017. During the ten-month field service, Mercy Ships offered direct medical services and medical capacity building programs, as well as trainings and renovations. Services not only benefited thousands of individuals directly, but also boosted national healthcare development for the entire nation.

Summary

- 4** Message from Mercy Ships CEO
- 6** Hospital | Surgical Medical Services
- 14** Hospital | Non-Surgical Medical Services
- 18** Medical Capacity Building – Mentoring
- 27** Medical Capacity Building – Courses
- 38** Medical Capacity Building – Infrastructure

Delegation Representing the Prime Minister's Visit to the Ship

CMA180419_CAMEROON_MINISTERS_VISIT_SL039



His Excellency,
President of Cameroon
National Day
Cameroon 2018



Mercy Ships Delegation – Left to Right – Captain John Borrow, Dr. Gary Parker, Dr. Pierre M'Pele and Mrs. Warrie Blackburn

CGA140509_DONOVAN_PALMER_MD_RP0003



Managing Director of the *Africa Mercy*, Mrs. Warrie Blackburn

CGA140509_DONOVAN_PALMER_MD_RP0003



Donovan Palmer in front of the *Africa Mercy*
CGA140509_DONOVAN_PALMER_MD_RP0003



September 2015 – Signing of the Partnership Protocol
CMA180724_DONOVAN_PALMER_GOVERNMENT_001

Message from Mercy Ships CEO

The first-ever visit of the *Africa Mercy* to Cameroon has been successfully completed, and I am very pleased with the results.

I would like to thank the Mercy Ships International Board of Directors, our generous partners, dedicated staff, volunteer crew and our excellent hosts in the nation of Cameroon. The personal invitation from His Excellency the President Paul Biya, the high patronage of the First Lady Chantal Biya, the assistance of the Prime Minister and the partnerships within the Ministry of Public Health opened the door to the service of Mercy Ships in Cameroon. The vessel's ten-month stay in the port of Douala would not have been possible without the dedicated support of so many people.

This final report highlights just some of the results we see thus far: hope and healing has come to thousands in the form of life-changing surgeries,

clubfoot treatments, dental care, and nutritional agriculture training provided during the visit of the *Africa Mercy*. The capacity of the nation to provide healthcare services has been strengthened for the future through medical professionals who have been trained and equipped in many forms of service. The pictures in this report illustrate a few of the impacts already visible in the lives of men, women and children in every region of the country - whose lives have been changed forever through our partnership. We look forward to even more to come as the investment made in hundreds of Cameroonians continues to bear fruit long into the future.

Thank you for your partnership.

Donovan Palmer
Chief Executive Officer

Mission Statement

We follow the 2000-year-old model of Jesus, bringing hope and healing to the forgotten poor.

Vision Statement

Mercy Ships uses hospital ships to transform lives and serve nations, one at a time.

Core Values

1. We love God.
2. We love and serve others.
3. We are people of integrity.
4. We strive for excellence in all we say and do.



Day Crew celebrate as the *Africa Mercy* arrives in Cameroon

CMA170816_ARRIVAL_DAY_CREW_CELEBRATING_ST002

Important Dates

2015 September, 21	Signing of the Partnership Protocol
2016 February	First Assessment
2016 February, 26	Arrangement Accord signed
2016 July	Second Assessment
2017 February, 27	Advance Team arrived in Yaoundé
2017 April-May	Patient Selection in all 10 regions by 30 Cameroonian Doctors
2017 August, 17	Arrival Ceremony – Port of Douala
2017 September, 05	First Day of Surgeries
2018 February, 06	Visit by the Minister of Public Health and other Government Leaders
2018 April, 19	Hosted a delegation representing His Excellency, the Prime Minister, Head of Government
2018 May, 09	Partner's Thank You
2018 May, 17	Last Day for Surgery
2018 May, 20	Unification Day Celebration in Yaoundé – Director, Captain and Chief Medical Officer, with His Excellency Paul Biya
2018 May, 25	Last Day for Medical Training
2018 May, 28	Presentation of medals by the Minister of Public Health for Warrie Blackburn, Dr. Gary Parker, Dr. Glenn Strauss, and Pierre Christ
2018 June, 03	<i>Africa Mercy</i> sailed out of Cameroon
2018 - 2019	Post-Ship Activities including Follow-Up Training
Evaluation tentatively planned for 2020	



Before and After photos of Kaltoumi with Chaplain, Carys Parker (USA)

CMA170910_KALTOUMI_PAT13098_BEFORE_ST003

CMA180129_KALTOUMI_PAT13098_AFTER_DOCCK_SL003

Hospital | Surgical Medical Services

Maxillofacial, Head & Neck Surgical Project

Maxillofacial, Head and Neck surgeries took place almost every week of the field service. During 34 Operating Room (OR) Specialty Weeks, volunteer surgeons performed **442** maxillofacial **surgeries**, including 108 cleft lip and/or palate repairs, for a total of **334 patients** (193 adults and 141 children - 173 men and 161 women).

Twelve-year-old Kaltoumi wore her signature scarf to hide her facial tumor from the eyes of the harsh world she faced every day. When she first arrived on the Africa Mercy, she likely had three months, or less, to live. Look at that smile! Kaltoumi's story is all about the journey: her physical journey from a life-threatening tumor to restorative healing, and her internal journey from a past filled with pain, to a brighter future with big dreams of her own. Kaltoumi's transformation shines through her beaming eyes and joyful personality. "She has the potential to be a world-changer because she has the determination to never give up," said Dr. Gary Parker.



Before and After photos of Fanta
CMA171107_FANTA_PAT13160_BEFORE_DOCK_SL001
CMA171129_FANTA_PAT13160_AFTER_DOCK_SL003

Reconstructive Plastics Surgical Project

During 15 OR Specialty Weeks of surgery (separated into two surgical blocks), **165** specialized reconstructive plastic **surgeries** were provided for **134 patients** (68 adults and 66 children – 72 men and 62 women). Bent limbs became straight, soft tissue tumors were removed and congenital abnormalities were corrected. The onboard dressing's team were a crucial part of the success of this reconstructive plastic surgery project. Physical, Occupational, and Hand therapy helped patients regain function – over 2,800 treatment sessions.

44-year-old nurse, Fanta, was afraid to undergo surgery to remove the 10-pound (4.54 kilogram) tumor that had been growing under her right arm for a decade. "The nurses at the ship are so compassionate and loving," Fanta said. "They kept reassuring me that everything was going to be more than okay—and something in me trusted them!" Her lighter arm and brighter smile made her wonder why she'd waited so long. "I can now lift my arms with ease!" said Fanta.



Before and After photos of Djenabou

CMA180109_DJENABOU_PAT13362_BEFORE_DOCK_SL009

CMA180115_DJENABOU_PAT13362_MID_WARD_SL004

General Surgical Project

The hospital teams provided **237** general **surgeries** for **219 patients** (166 adults and 53 children – 157 men and 62 women), during 15 OR Specialty Weeks. Hernia repairs for adults and children, thyroidectomies (toxic goiters) and soft tissue mass/tumor removal made up the majority of these surgeries. Three weeks were focused on highly specialized pediatric cases.

Underneath the swirling pattern and bright dye of Djenabou's scarf is a heavy goiter that's been growing for over 18 years. For more than half her life, she's carried its weight. The goiter began as a small lump on her neck and slowly progressed to a large mass constricting her airways. She said it made breathing difficult and caused regular bouts of painful coughing. Djenabou's smile is dazzling! After her surgery, her biggest dream is simple: to find love. After living most of her life with the weight of the goiter, her fresh start finally means a possibility of finding her own "happily ever after."



Monique, eye patient, during her first day back at school after surgery

CMA180117_MONIQUE_PAT40302_BEFORE_HOME_VISIT_ST009
CMA180216_MONIQUE_PAT40302_HOME_VISIT_SCHOOL_ST032

Ophthalmic Surgical Project

There were **1,542 eye surgeries** (primarily cataracts or pterygium), performed for 1,494 adults, teenagers and children, in the operating room on the *Africa Mercy*.

The pediatric patients' surgeries were done under general anesthesia and they stayed with their caregivers in the hospital wards for an average of three days before discharge.

There was great joy and dancing during the "Celebrations of Sight" provided for all patients on the date of their final appointment, which was six weeks after their surgery.

This result was less than projected due to unsuccessful initial screening for eyes and lack of suitable bilateral cataract patients. In response, Mercy Ships adjusted the surgical selection criteria and additional screening events were conducted.

However, the slower pace of surgery allowed for greater opportunities for training of two Cameroonian ophthalmic surgeons and two ophthalmic nurses who will continue to offer surgeries and eye care to the population long into the future.

Now 10 years old, Monique's clouded vision caused her to become shy and timid, spending her days homeschooling with her grandmother. At just six years old, her sight deteriorated. But because she never disclosed that she couldn't see, her teachers just thought she wasn't paying attention in class. "Since she has had the surgery, everything is possible," said Monique's grandmother. "She has been given the gift of hope, which is a huge blessing to our lives."



Inside the Operating Room for Women's Health Surgery
CMA171130_OR_TRAINING_MENTORING_MCB_MS002



Jacqueline at her Dress Ceremony
CMA170918_JACQUELINE_PAT13437_DRESS_CEREMONY_SL005

Women's Health Surgical Project

During 24 OR Specialty Weeks, **278** life changing **surgeries** were provided to **246** women suffering with obstetric fistulas (these included vesico-vaginal fistulas – 165 surgeries for 145 women), and other gynecological problems (113 surgeries for 101 women).

All of the obstetric fistula patients participated by sharing part of their story at the 'Dress Ceremonies', in their new dresses prior to their discharge.

This result was less than projected due to the lack of suitable obstetric fistula patients found, despite multiple campaigns coordinated in conjunction with the Ministry for the Advancement of Women and the Family and UNFPA; in response additional campaigns were conducted to find patients and adjusted the schedule in January and February 2018.

After her free surgery, Jacqueline's sorrow has turned into joy! At her Dress Ceremony, she celebrates the start of her new life after surgery. "When I get home, I want to move out of my village with Jean and start a new life – a better life! I'm tired of living how I've been living, but now I am stronger and will have more opportunities," smiled Jacqueline.



Before and After photos of Justine

CMA170904_JUSTINE_PAT13861B_SL004

CMA171108_JUSTINE_PAT13861_AFTER_DOCK_SL002-2

Orthopedics Surgical Project

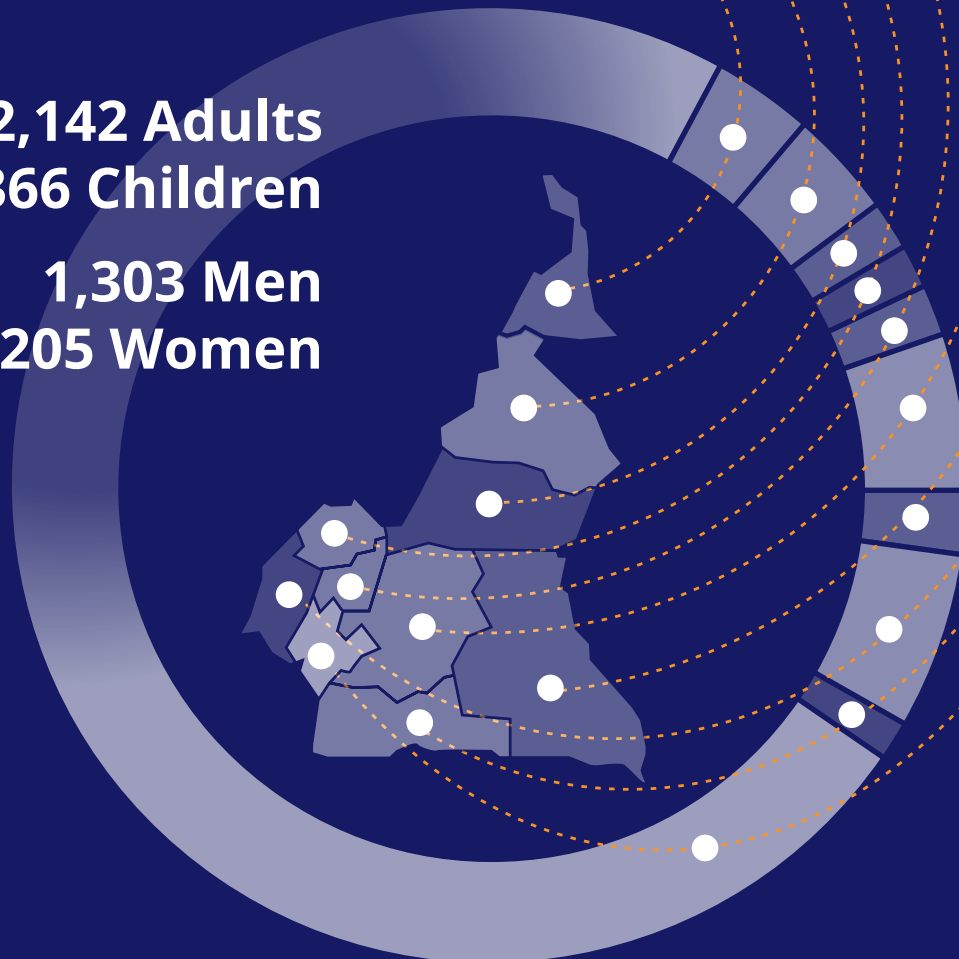
During six OR Specialty Weeks, 82 life changing surgeries were provided to 81 pediatric patients (all less than 18 years old – 41 boys and 40 girls), suffering conditions such as windswept deformities, ‘knocked-knees’, and bowed legs. All patients received appropriate physical therapy – 1,525 treatment sessions.

Justine’s grandfather spent years worrying about the health and safety of his little girl. He’s so proud of her! “It leaves me speechless to see her walking around like this. It’s a miracle.” Justine is walking home with more than just straight legs—she’s going home with a future full of potential for a brave, confident girl. “There’s nothing I can’t do!” she said.

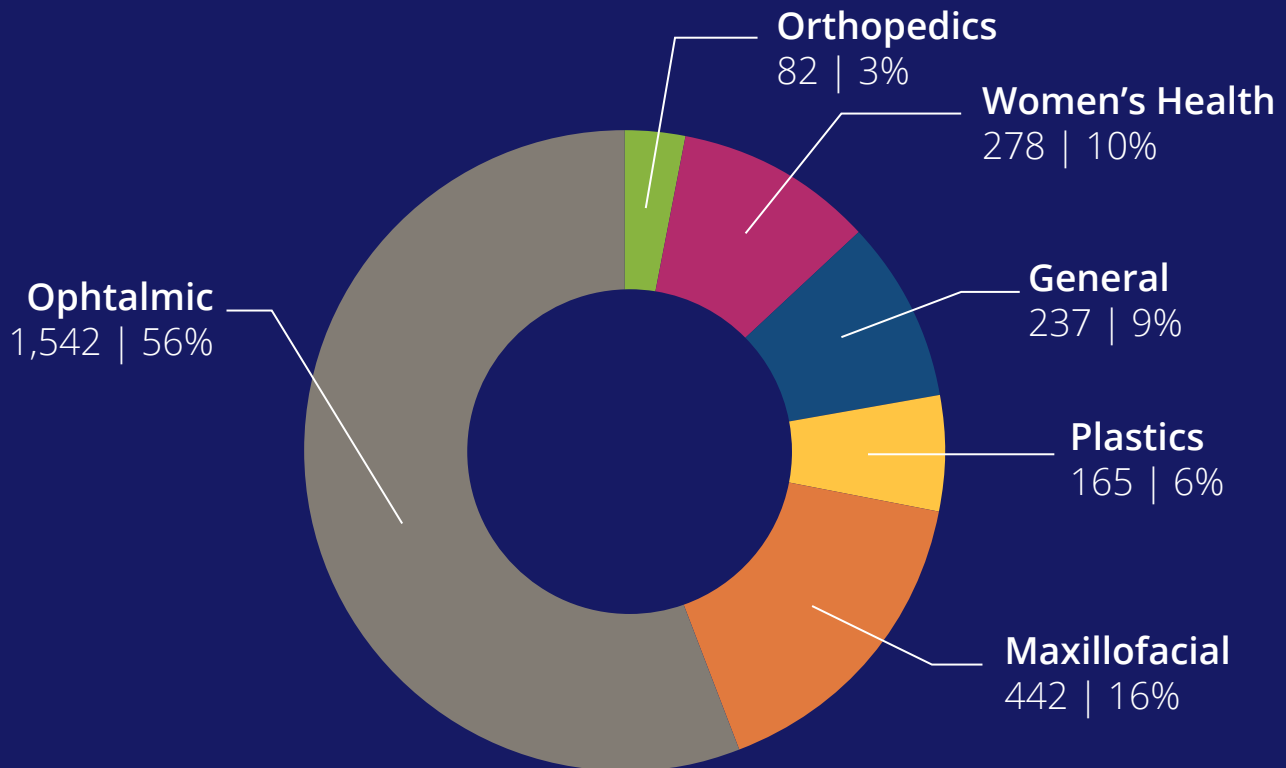
TOTAL 2,746 SURGERIES FOR 2,508 UNIQUE SURGICAL PATIENTS

Littoral Region	1,548 / 62 %
South Region	62 / 2 %
Southwest Region	53 / 2 %
East Region	78 / 3 %
Centre Region	217 / 9 %
West Region	191 / 8 %
Northwest Region	60 / 2 %
Adamawa Region	48 / 2 %
North Region	122 / 5 %
Far North Region	129 / 5 %

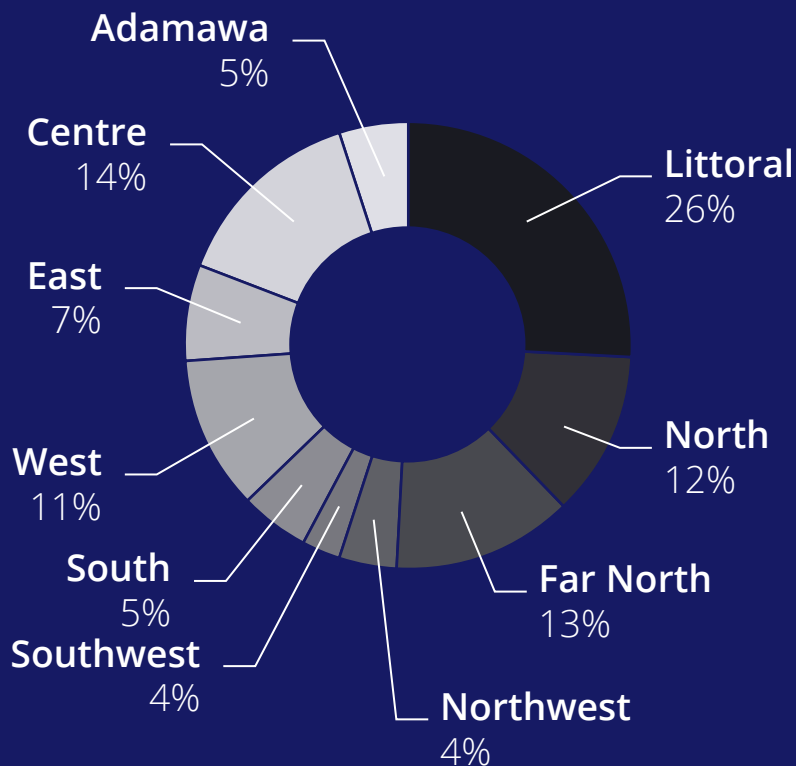
2,142 Adults
366 Children
1,303 Men
1,205 Women



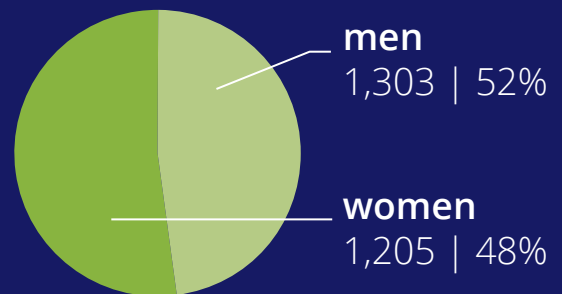
2,746 SURGERIES BY SPECIALTIES



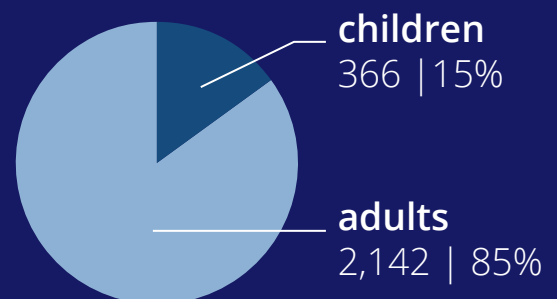
Surgical Patients without Ophthalmic by Region



Patients by Gender



Unique Patients



Adult = 18 years and above / Child = 17 years and below

Surgeries - counting each visit to the operating room as a surgery during which multiple surgical procedures may occur.

Unique Patients - counting each unique patient only once and not counting them more than once even if they receive more than one surgery.



Dental treatment room with Dr. David Ugai (USA) treating a patient
CMA170905_DENTAL_CLINIC_UGAI_SL003

Hospital | Non-Surgical Medical Services

Dental Project

The Dental Team conducted over **10,700 dental patient encounters**, performing over **20,800 procedures**. Extractions took precedence, making up 88% of all procedures. The average number of procedures per patient encounter was 1.94. In addition, **1,156** patients received dental prophylaxis. Dentures, which improve patients' eating ability and their smiles, were provided to **155** patients post extraction. While waiting for dental services, all patients and caregivers (13,235) received basic oral health instruction. The team also engaged in providing 1,069 local school students with basic oral health instruction. Eleven Day Crew were mentored in

assisting, sterilizing and teaching oral hygiene. They were of great assistance.



Hospital Chaplain, Koffi Govi-Dankpo (BN) reading from the Bible at the request of the patient in D Ward
CMA180516_HOSPITAL_CHAPLAINCY_GOVI_SL015

Hospital Chaplaincy

In this field service, the Hospital Chaplaincy Team provided prayer, counsel, and comfort to hundreds of patients in the ship's wards and at the HOPE Center. Sunday morning services provided spiritual and emotional support to ward patients and caregivers. The Team provided one-on-one chaplaincy (**1,641 sessions**), group activities, and fulfilled **685** requests for **Bibles** in the French language. Twelve Hospital Chaplaincy Day Crew received instruction in counseling and a program called 'Simply the Story'¹.

¹The definition of Simply The Story (STS) is "Listening and Responding." When people learn how to carefully listen to God's Word and they discover how to respond to what God says—lives are changed.



The Mercy Ships Palliative Care Team listens intently as Olivier shares how the team's visits and medications have increased his quality of life

CMA180423_PALLIATIVE_CARE_VAN_DER_ZANDE_NELSON_OLIVIER_SL002

Palliative Care

The Mercy Ships Palliative Care program works according to the WHO definition to meet patients and their families' needs for end-of-life care. The program employs a holistic approach, considering the physical, psychological, spiritual, and social needs of the whole person. Due to the change of screening strategy for Cameroon, there were minimal referrals of patients to our Palliative Care Team. The team conducted 83 home visits to three adults in the Douala area. As time allowed, the Team joined with other palliative care organizations for visits with their patients and families. The Mercy Ships team conducted four round table discussions related to palliative

care, opportunities to share knowledge and experiences. They also attended the Palliative Care Conference in Yaoundé in October 2017.

Medical Capacity Building

Mercy Ships has partnered with the Ministry of Public Health in Cameroon to provide a variety of capacity building programs aimed at strengthening the surgical capacity and improving access to safe, affordable and timely surgery. Surgery is an integral, indivisible component of a properly functioning health system, and all people should have access to safe, high quality surgical and anesthesia care, with financial protection when needed. ⁱ Globally, surgery continues to be a neglected component of primary care, long overlooked as a health need for the world's poorest people. As a result, untreated surgical conditions have exerted substantial, but largely unrecognized negative effects, on human health, welfare, and economic development. ⁱⁱ ⁱⁱⁱ Globally, an estimated five billion people do not have access to safe, affordable surgical and anesthesia care when needed. ^{iv} Capacity building of health professionals has been one of the strong pillars of the Mercy Ships mission in Cameroon. In this regard, the personnel from the health facilities of the Ministry of Public Health, as well as the Ministry of Defense and some denominational hospitals, have benefited from short-term training aimed at strengthening surgical capacity and improving access to safe, affordable and timely surgery.

We note not only the support of the Ministry of Public Health and hospital leadership, but also the quality and engagement of those who participated in the capacity building projects. Undoubtedly, the projects delivered represent a solid base on which the Ministry of Public Health can now rely on to develop a strategy for the implementation of a national plan for essential surgical, obstetric and anesthetic care.

Kirstie Randall,
Medical Capacity Building Director

ⁱ Meara, J.G. et al. (2015). Global Surgery 2030: evidence and solutions for achieving health, welfare, and economic development. *The Lancet* (386)9993. 569-624.

ⁱⁱ Mahler, H. (1980). Surgery and Health for all. XXII Biennial World Congress of the International College of Surgeons. World Health Organization. Mexico City. 29 June 1980.

ⁱⁱⁱ Meara, J.G. et al. (2015). Global Surgery 2030: evidence and solutions for achieving health, welfare, and economic development. *The Lancet* (386)9993. 569-624.

^{iv} Ibid.



Mentoring in maxillofacial surgery for a local surgeon from Douala General Hospital
CMA180416_MAXFAX_MENTORING_MCB_PARKER_MS001

Medical Capacity Building – Mentoring

Maxillofacial Surgery Partner Unit Mentoring Program (PUMP)

The Maxillofacial Surgical Partner Unit Mentoring Program (PUMP)¹ was based at Douala General Hospital. A total of four male and six female health care providers were mentored, including:

- **two** maxillofacial surgeons (mentored in the operating rooms on the *Africa Mercy*)
- **two** anesthesia providers
- **four** nurses

Feedback from Anesthesia Provider: ***“I want to try and implement some things I saw during mentoring. Specifically I want to encourage collaboration between the surgical and anesthetic team, as well as punctuality and rigor in the care of patients.”***

Surgeon participant was able to operate on large tumors during her first week of mentoring. She demonstrated to herself that she could do this type of procedure with the right equipment, and this was really heartening for her. Without the expertise of her mentors, she simply would not be in a position to likely ever do this at Douala General Hospital.

¹ Partner Unit Mentoring Program – utilizes a team approach and includes those involved in patient care from the nurses through to the operating surgical team.



Bethany Brown (USA) assisting in a dressing change at Douala General Hospital
CMA180328_MCB_NURSESMENTORING_TRAINING_BROWN_MS001

Burns PUMP

The Burns Surgery Partner Unit Mentoring Program was based at Douala General Hospital. A total of **eight** providers were mentored (of which six were female and two were males). This included:

- **one** orthopedic surgeon – mentoring in the operating rooms of the *Africa Mercy* for specialized training in burns and plastics
- **two** anesthesia providers - mentored in the operating rooms of the *Africa Mercy*
- **five** ward nurses from the Burns Unit

The surgeon shared, “Yes I learned a lot notably in performing skin grafts, muscle flaps, tendon transfer and removal of complicated tumors.”

One nurse shared, *“During my time with Mercy Ships, I saw how the healthcare team could function with respect for each team member no matter their station. I noted that the team was always eager to share their knowledge with us. I also saw how patient care can be personalized. These are all things I would like to implement in my own workplace.”*



Nurse Jonas Kaufmann (DEU) teaching on monitors at Douala General Hospital
CMA180418_HOSPITAL_KAUFMANN_JK001

Intensive Care Unit PUMP

The Intensive Care Partner Unit Mentoring Program was based at Douala General Hospital. A total of **15** health providers were mentored (of which six were female and nine were male). These included:

- **two** anesthesia providers - mentored in the operating rooms of the *Africa Mercy*
- **eight** nurses from the ICU Unit

Added additional participants:

- **four** physical therapists – ICU related
- **one** dietician – ICU related

An anesthesia doctor commended: ***“The team spirit, the management of difficult airways and peripheral nerve blocks guided by ultrasound, were all things I saw that changed my perspective on patient care.”***

A nurse major shared: ***“I saw collaboration between the healthcare team. I want to place into practice, the idea of putting the medical and nursing notes together in the same chart.”***



A Gynecologist Physician was part of the OBF Mentoring Project for 12 weeks
CMA171215_OR_TRAINING_SURGEON_MENTORING_MCB_MS001

Obstetric Fistula Mentoring

The Obstetric Fistula Mentoring focused on surgeons and nurses. In discussion with the Ministry of Public Health, and with the changes in the Women's Health Surgical Project, Mercy Ships mentored one gynecologist, in obstetric fistula surgery, for over 300 hours in the operating rooms of the *Africa Mercy*. She shared three points she will implement in her workspace: WHO Surgical Safety Checklist, staff discussions pre-operative and collaboration between all hospital personnel.

Nine nurses received mentoring – average of over 300 hours each. Mentoring was provided by Mercy Ship nurses in our hospital wards and at our Obstetric Fistula

Clinic (at HGOPED). Our nurses were always available to answer questions, address concerns and provided any additional information related to the care of obstetric fistula patients.



A local ophthalmologist providing YAG laser treatment to a patient at their six week appointment
CMA171117_COM641_NIDEK_YAG_LASER_STRAUSS_EYE_CLINIC_SL001

Ophthalmic Mentoring

The manual small incision cataract surgery (MSICS) training took place on the *Africa Mercy* in two blocks of 12 weeks. During the fellowship period, Mercy Ships Ophthalmic Surgeon Consultant mentored the participants in MSICS, and both completed the training and have met the International Council of Ophthalmology (ICO) standards. It included mentoring of two ophthalmologists – assigned to Garoua Regional Hospital and Douala General Hospital. All of this training has contributed to the Cameroonian Eliminate Blindness Campaign. Our consultant noted about one of the ophthalmologists: ***“Within six weeks of doing her first surgery, she was confident and well on her way to becoming an excellent surgeon. At the***

completion of her training, her skills assessment and outcomes indicate a high likelihood that she will be one of the highest performing cataract surgeons in Cameroon. She commented that she felt it was a dream come true.”



Dr. Guy Chevalley (CH) with local ophthalmologist in our ophthalmic operating room
CMA180327_COM720_CHEVALLEY_OR_ST004

Ophthalmic Training

At the request of the Ministry of Public Health, two training courses were added for Ophthalmic Technicians and Ophthalmic Nurses:

- Ophthalmic Technicians – 9 participants – most from Littoral Region – November 2017
- Ophthalmic Nurses – 8 participants – all from North Region – Held at Garoua Regional Hospital - April 2018

Ophthalmic Donations

Following the completion of the project and as assistance for the Cameroonian Eliminate Blindness Campaign, Mercy Ships gifted to the Ministry of Public Health, to assist with their ophthalmic care, the following:

- **One** Nidek Yag Laser, one autorefractometer/keratometer, one A-Scan ophthalmic ultrasound - for Garoua Regional Hospital desktop slit lamp
- **One** Zeiss Surgical Ophthalmic Training Microscope and Accessories – for Douala General Hospital
- **One** Opmi 1 Microscope Optics – Yaoundé

Both Cameroonian ophthalmologists received two sets of cataract surgical instruments each.



Nick Veltjens (AUS), Clubfoot Program Manager, mentors participants
CMA180116_PONSETI_MENTORING_MCB_VELTJENS_MS001

Ponseti Method

This project is unique in that it includes direct medical services and medical capacity building using both courses and mentoring. Most of the project took place at the Ponseti Clinic set up at the same location as the HOPE Center at Nylon Hospital. The Ponseti Method was used to treat **24** unique patients aged 0 to 3, with 38 individual clubfeet needing repair. This took place in two blocks. In total, the children had 447 Ponseti appointments including casting, tenotomy and physical therapy. At the same time of direct medical care, mentoring was provided to **five** physical therapists.

Three doctors participated in the mentoring over various weeks and were trained as tenotomists. The mentoring prepared them

to be excellent practitioners, as well as future leaders. **Two** Ponseti Courses were held – the first in September 2017 with **11** participants. The second course in February/March 2018 had **five** new participants and five who attended the September course. Various Clubfoot Awareness Raising Campaigns took place in partnership with Cameroon Clubfoot Care (CCC). Mercy Ships and Cameroon Clubfoot Care Project have been working together with the Ministry of Public Health towards creating a government-led National Clubfoot Program based at the Ponseti Clinic at Nylon District Hospital.



A local surgeon receiving mentoring in pediatric general surgery from Dr. Sherif Emil (US/CDN)
CMA180316_COM707_EMIL_MCB_MENTORING_OR_ST001

Surgeon Mentoring

In addition to the PUMP, Obstetric Fistula and Ophthalmic mentoring projects, 13 surgeons (12 men and one woman), received mentoring in the *Africa Mercy* operating rooms or in the surgeon's operating room at their own hospital. These included:

- **Five** general surgeons
- **One** neurosurgeon
- **Two** orthopedic surgeons
- **Five** maxillofacial surgeons

Their mentoring hours ranged from 8 to 431 hours each. All participants reported positive feedback on the mentoring project and stated that their knowledge and skills in patient safety and care have increased immensely.



Mentoring in one of the operating rooms on board the *Africa Mercy*
CMA171024_OR_CHERIAN_ANESTHESIA_MCB_ST004

Anesthesia Providers Mentoring

In addition to the PUMP, Obstetric Fistula and Ophthalmic mentoring projects, **22** anesthesia providers (11 men and 11 women), received mentoring on the *Africa Mercy* and/or at the participant's hospital. They represented **six** hospitals. Their mentoring hours ranged from two to 123 hours each. The training was provided by our long-term Anesthesia Supervisor and other volunteer doctor anesthetists. According to one of the anesthesia nurses who were trained on board for two weeks: The hospital supported her undertaking this project. She feels she is bringing a better level of care to her patients, specifically in terms of her technical skills and the way she manages

patients during surgery. When she returned from her training, she organized meetings to provide feedback to her colleagues about her experience, where they could receive all her thoughts and information gained on board. So others are benefitting too.

One anesthesia nurse expressed: "I want to thank the Mercy Ships' team for this opportunity and experience because it helped me to increase my professional knowledge which will help me improve my anesthesia practices".



Dr Mamitiana Andrianirina (Madagascar) conducting the Pre-eclampsia and Eclampsia station
CMA171130_SAFE Obstetric Anesthesia Course_ST012

Medical Capacity Building – Courses

‘SAFE’ Obstetrics Anesthesia Courses

The SAFE (Safer Anesthesia from Education) Obstetrics Anesthesia course was offered three times in Douala. **Seventy-four** anesthetists and **18** obstetricians and midwives participated (25 men and 67 women). Three training-of-trainers courses also took place in December 2017, February and May 2018, for **31** participants. Seven Cameroonians who went through the training-of-trainers, assisted with the February and May courses, under continued mentoring by our international facilitators. Two healthcare professionals (anesthetist and anesthesia nurse), have been recommended to the Ministry of Public Health, to be specialists related to this course. Mercy Ships donated training

equipment training equipment to be used for ongoing to be used for ongoing training of this course, SAFE Pediatric Anesthesia and Primary Trauma Care courses in Cameroon.



An Anesthetist from Douala General Hospital at the second course – he also attended the Training of Trainers
CMA180116_SAFE_PEDIATRIC_ANESTHESIA_COURSE_ST011

'SAFE' Pediatric Anesthesia Courses

Three, three-day courses were held on SAFE (Safer Anesthesia From Education) Pediatric Anesthesia with a total of 82 anesthetists participating: One in Yaoundé, October 2017, and two in Douala, January and April 2018. During the same weeks, 27 participants were selected and completed the training-of-trainers component. Two from the October course helped to facilitate the January course for their colleagues. Five from the January course helped to facilitate the final course in April. Two healthcare professionals (anesthetist and anesthesia nurse) have been recommended to the Ministry of Public Health to be specialists related to this course.



Primary Trauma Care Course Practical Instruction
CMA171211_PTC_COURSE_MCB_TRAINING_MS001

Primary Trauma Care Courses

Primary Trauma Care (PTC)-approved facilitators came to conduct Primary Trauma Care, consisting of six, two-day courses during three blocks of time - October in Yaoundé, and December 2017 and March 2018 in Douala. **Twenty-eight** participants were selected and completed training-of-trainers and helped to facilitate the other courses for their colleagues. They have already formed a Primary Trauma Care committee and four trainers were involved in the last course in March under the supervision of our international facilitators. With the committee and training donations provided to the Ministry of Public Health, Mercy Ships hopes this project will benefit many people long after

the ship has left. A total of **104** participants (48 men and 56 women), attended from hospitals in every region except the South region. Two healthcare professionals (anesthetist and ortho-trauma surgeon) have been recommended to the Ministry of Public Health to be specialists related to this course. From the follow-up calls conducted several weeks after the course, one participant shared *“My hospital director requested that I teach other staff members after the training. We are having so much more interaction since I attended this training.”*



Practical Training in Essential Surgical Skills
CMA171114_MCB_SURGICAL_SKILLS_COURSE_SL020

Essential Surgical Skills Courses

Six Essential Surgical Skill Courses were offered with the goal of imparting knowledge and skills in surgeons in the principles of safety, open surgery, trauma and orthopedics. This course is in partnership with the Association of Surgeons of Great Britain and Ireland. A total of 62 healthcare providers participated (35 men and 28 women). Mercy Ships volunteer international facilitators monitored the performance of the participants throughout the course, addressing the participants' strengths and weaknesses, while helping them build upon the skills they already possessed. Two healthcare professionals (general surgeon and trauma surgeon), have been recommended to the Ministry of Public Health to be specialists

related to this course. Here are some of the comments we received during the follow-up calls, several weeks after the course finished:

- *"Yes at first, I was scared of surgery, now I am more involved and I practice surgery a lot."*
- *"As I know different suture techniques, I am suturing according to the type of wounds now."*
- *"I am capable of removing cysts using the technique I have learned."*
- *"I am more confident with my surgery techniques." and "I feel more comfortable in the operating room/theater."*



Facilitator Sean Ryder (UK) from Medical Aid International assist with practical sessions and teaching
CMA171101_COM586_MCB_BIOMED_TRAINING_LAQUINTINI_SL025

Biomedical Technician Training Courses

In partnership with Medical Aid International UK, two biomedical technician training courses were offered in partnership with six different hospitals, including our PUMP site – the Douala General Hospital. The first course started with 11 but finished with 10 participants, from four hospitals. All 13 participants from nine hospitals completed the second course. “From my perspective, if I’m asking biomed technicians to do the same job I do, but don’t provide them with the same equipment that I have, then there’s a problem. Everything I have access to, I want them to have access to, as well as two years of support connection with us to help them if they need it,” said Sean

Ryder, Head of Biomedical Engineering for Medical Aid International. **Donations** – for Laquintinie Hospital, Douala General Hospital and the Baptist Hospital Group – equipment and tools. Ongoing expert support will continue including technical support, sourcing of tools and equipment, and continuous professional development.



The Checklist in use at Limbe Regional Hospital
CMA180109_MCB_TRAINING_LIMBE_WHO_CHECKLIST_OR_ST016

WHO Surgical Safety Checklist Training

The WHO Surgical Safety Checklist Training impacted the entire nation of Cameroon. These simple, low-resource tools, and training, can help address issues to make surgery safer through skills improvements and enhanced teamwork amongst medical professionals. Courses in the WHO Surgical Safety Checklist were delivered to 37 hospitals throughout the nation. A total of 764 participants (398 men and 366 women, from the hospitals, participated in the two or three-day training. Seventy-four Lifebox pulse oximeters were distributed to their hospitals. Follow-up visits were made to most of the hospitals involved. A few quotes gathered at WHO Surgical Safety Checklist Follow-up Visits - *"Checklist has given us trace-ability and verification of all our task-related steps."* - Kribi District Hospital - *"Using the checklist has increased*

communication between all of us. We now understand we are complementary."

- Limbe Regional Hospital- *"Using the checklist has boosted the confidence we have in our work."* - Buea Regional Hospital Annex. Exceeded by 48% the initial estimate of 15 – 25 hospitals. During follow-up visits, Mercy Ships learned that the majority of the partnering hospitals have implemented the Checklist. Recommendations have been made to the Ministry of Public Health for the Checklist to be mandatory in all hospitals. In addition, the Ministry of Public Health hopes to continue the training to increase knowledge and support for successful implementation after the ship has left Cameroon.



Sterile Processing Course at Local Hotel Venue
CMA171017_STERILE_PROCESSING_COURSE_MS023

Sterile Processing

In this project, SPECT, a Canadian partner, and Mercy Ships, sought to improve the sterile processing practices used by technicians in Cameroon's hospitals and clinics, including our PUMP site, Douala General Hospital. By providing training courses and mentoring, this project sought to increase health care workers' knowledge and skills, thereby creating safer working environments for staff, patients, and visitors, and decreasing patients' risks of developing surgical site infections.

Twenty participants attended the Sterile Processing Course in Douala. Following the course, **ten** were selected for additional training-of-trainers in order to be better equipped to train others. During follow-

up, the facilitator was able to get a glimpse of the direct results of the training. The course facilitator was invited by the General Secretary to attend a quarterly meeting for all head nurses from each department. During this meeting, she watched while three training-of-trainers participants from the course presented on the proper methods of cleaning surgical instruments. It was one of her proudest moments: only four months before, these individuals were hesitant to embrace these new methods, and now they were teaching their colleagues with confidence and flawlessly answering questions - the same questions they once asked.



Participant practicing ventilation on a NeoNatalie Newborn Simulator
CMA180125_MCB_NEONATAL_RESUSCITATION_COURSE_SL024

Neonatal Resuscitation Courses

Four one-day courses were held in Neonatal Resuscitation for participants in Douala. A total of 61 participants, primarily nurses, midwives, and birth attendants, participated. Infant resuscitators, bulb suction, oxygen connectors, flow charts and cleaning instructions were donated to each hospital at the end of the training. "This Neonatal Resuscitation education is what will continue to save lives in Cameroon for generations to come."

Course Participant, Physician

"Even if one person from one of our courses uses the resuscitation algorithm and saves one baby, it's worth it. We can only imagine who that baby will grow up to be."

Kirsty, Course Facilitator

Ultrasound Course

In partnership with the US-based International Foundation for Sonography Education and Research, one four-day course was held in Douala in Ultrasound for 18 participants (11 men and 7 women), from four regions representing 11 hospitals. The participants ranged from surgeons, anesthetists, and physicians. Twenty-seven hours of training was provided.

Glaucoma Course

In partnership with the Vision for All Foundation, Mercy Ships facilitated a one and half day Glaucoma Course for **28** participants (10 men and 18 women), from four regions, at a venue in Yaoundé organized by the Ministry of Public Health. The goal was for Cameroonian ophthalmic surgeons to improve their skills and abilities in providing glaucoma treatment.



Dr. Brian Barki, Anesthesia Supervisor, (USA) and Participants from Baptist Hospital Mutengene
CMA180601_MCB_MUTGENE_TR001

Regional Anesthesia Course

Over two days in November 2017, **eight** participants attended the Regional Anesthesia Course. Further mentoring took place later by the Mercy Ships Anesthesia Supervisor. Some surgeries that were previously only possible under general anesthesia, are now being performed under regional anesthesia. Post-operative pain control has been improved.

Donation: Three ultrasound machines – **one** to Douala General Hospital and **one** to Baptist Hospital Mutengene, and **one** to Douala Military Hospital.

Essential Pain Management Courses

Mercy Ships partnered with Essential Pain Management (EPM) facilitators from the United Kingdom, to offer three, one-day courses in surgical related pain management. **Thirty-six** professionals (13 men and 23 women) participated; each course was seven hours of training.

Four participants were selected and received a half day of “training to be a trainer” of this course. They each helped with instruction of the other courses later in the week. Two general practitioners have been recommended to the Ministry of Public Health to be specialists related to this course.



Mercy Ships Managing Director, Medical Capacity Building Director, Programs Administration Manager and many crew celebrated the Participants' Graduation after the 22 week course

CMA180316_AGRICULTURE_FOODFORLIFE_GRADUATION_MCB_GROUP_MS001

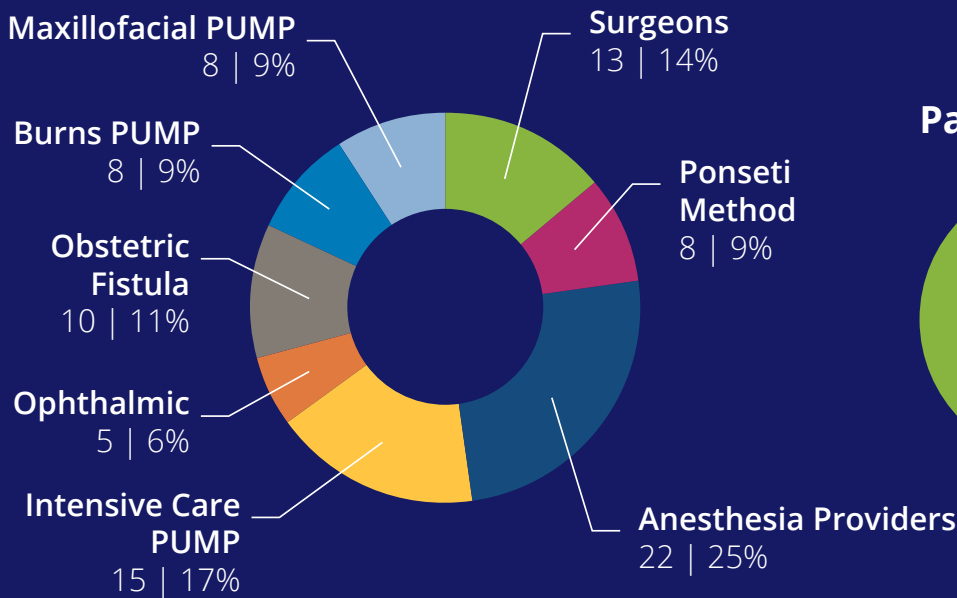
Nutritional Agriculture Course

34 participants (22 men and 12 women), from **nine** non-government organizations from five regions: Littoral, Centre, North, Southwest and Northwest. They received training-of-trainer instruction in nutritionally based, biologically and ecologically sustainable agriculture at our host partner CODAS Caritas' site in Edea. All participants completed the training. The course included both classroom and hands-on instruction. This project also included training in food transformation and measures to respond effectively to climate change impacts on agricultural practice and output. After the 22 weeks of training, the new trainers returned home to set up their own agriculture training project with their respective organizations. Follow-up visits, training, and reporting are

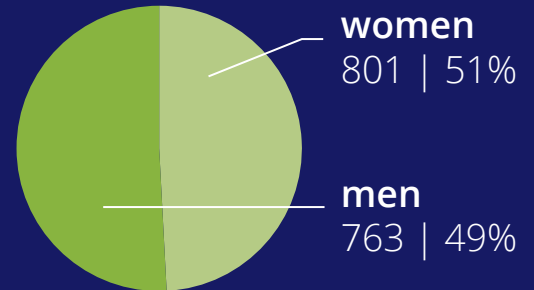
being handled by a local representative for Mercy Ships. The Agriculture Program Manager will return in one year for follow-up.

Medical Capacity Building - 1,564 participants

Mentoring - 89 Participants



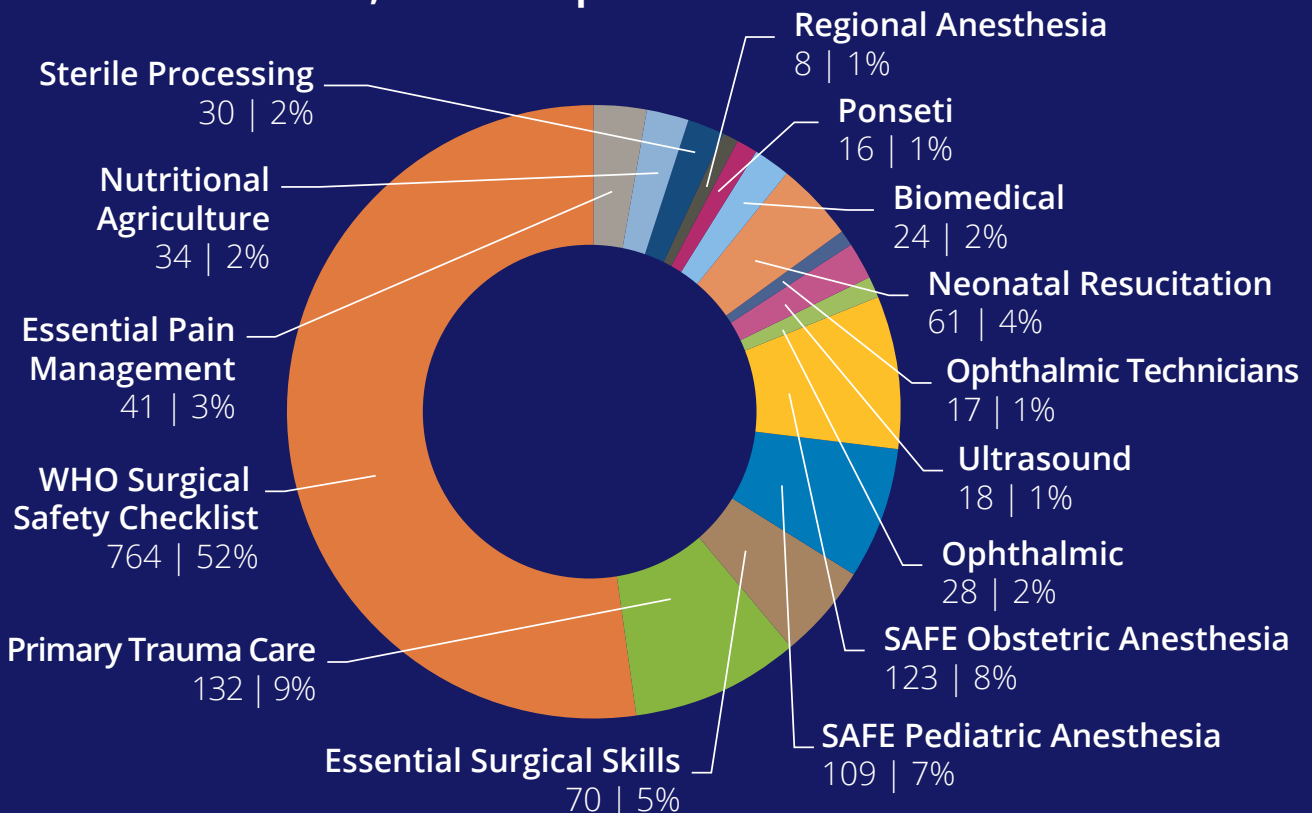
Participants by Gender



Participants - Region



Courses - 1,475 Participants





HOPE Center shortly after the renovations were completed – also the site for the Ponseti Clinic
CMA171205_HOPE_CENTER_SL007

Medical Capacity Building – Infrastructure

HOPE Center – Ponseti Clinic

The Ministry of Public Health and Mercy Ships jointly decided to renovate buildings at the Nylon District Hospital for use as the HOPE (Hospital Out Patient Extension) Center. This center served as a temporary residence for patients and caregivers from far away. This was the largest HOPE Center renovation in Mercy Ships history, since these projects began in 2009. Utilizing an outside contractor with oversight by Mercy Ships experts, the necessary renovations were conducted. The Ponseti Team used a section of the building for their treatment and training site. The facilities were returned to Nylon District Hospital so they can expand their operations and service to the local population.

Dental and Eye Clinic

In order to establish a safe, secure and hygienic facilities for both the Dental and Eye Clinics,

Mercy Ships implemented major renovations and built a new structure at the Laquintinie Hospital. These renovations ranged from the roofing, walls, ceiling, painting, windows, doors, electrical system, water supply system, toilet facilities, and tiling. Towards the end of the field service, the facility was officially returned to the hospital for their purpose as an epidemic treatment center.

Biomedical Workshop

The training site at Laquintinie Hospital was renovated by Mercy Ships with a vision to create a National Centre of Excellence for Biomedical training in the country. Mercy Ships used a local contractor for the renovations and refurbishments of the biomedical storage facility for use as biomedical workshop and offices. Both of Mercy Ships' biomedical technician courses took place at this site.



Group Photo at St. Arnille Marie Handicap Center
CMA180310_ST_ARNILLE_MARIE_HANDICAP_CENTER_001

Mercy Ministries

Hundreds of crew members were regularly involved with ten local partners, participating in over 200 site visits, over nine months. Mercy Ships crew often pursued additional ministry opportunities during their off-duty hours in the mornings, afternoons, and Saturdays. Crew members routinely visited: Remar Orphanage, a School for the Deaf, St. Arnille – Marie Handicap Center, New Destiny Orphanage, a School for the Blind, and Mercy Ships' HOPE Center.

The Mercy Ministries team most often used 'Simply the Story', music, crafts and games in their work. The Jesus Film, in local languages, was shared outdoors in the Douala area on Saturday evenings in partnership with

local churches, and for the hundreds who expressed a commitment, the local church took care of the follow-up. All activities were done in partnership with local organizations in the greater Douala area.



mercyships.org