Fistula Care *Plus*: Mozambique Strengthening Health Systems to Prevent and Treat Fistula

WHAT IS FISTULA?

A genital fistula is an abnormal opening in the upper or lower female genital tract that causes uncontrollable, constant leakage of urine and/or feces. Obstetric fistula is usually caused by several days of obstructed labor without timely medical intervention. latrogenic fistula is caused by surgical error, most often during cesarean section. Traumatic fistula is caused by injury— for instance, through sexual violence, female genital mutilation, or accidents.

At a Glance: FC+ Mozambique

- 336 surgical fistula repairs completed; 99% closed at discharge
- 54 fistula surgeons and surgical technicians and 546 other healthcare workers trained in fistula prevention and treatment
- 1,357 individuals reached through in-person community outreach

www.fistulacare.org

Dates of support: December 2017 to January 2021

Supported fistula treatment facilities: Beira Central Hospital, Chicuque Rural Hospital, Clinica Cruz Azul, Inhambane Provincial Hospital, Lichinga Provincial Hospital, Maputo Central Hospital, Nampula Central Hospital, Vilanculos Rural Hospital, Xai Xai Provincial Hospital

Population: 31,255,000¹

Lifetime prevalence of fistula: n/a

Estimated number of current fistula cases: n/a

Maternal mortality ratio: 289/100,000 live births²

Contraceptive prevalence rate (all methods, married women ages 15 to 49): 27%³

Fistula Care *Plus* (FC+) is a global project initiated in 2013 by the United States Agency for International Development (USAID) and implemented by EngenderHealth. FC+ builds on and enhances the work undertaken by USAID's previous Fistula Care project (2007–2013), also led by EngenderHealth. EngenderHealth's USAID-supported fistula prevention and repair efforts in Mozambique began in December 2017 and continued until January 2021.

Fistula is a devastating morbidity, with profound social consequences for those affected. In Mozambique, FC+ supported fistula repairs and fistula prevention through organizational and clinical capacity building as well as community outreach and education. The project strengthened systems for providing safe surgery including building capacity for routine fistula repair, increasing community awareness, integrating family planning (FP) services within fistula and maternal healthcare, and training clinicians. FC+ provided support to nine health facilities for fistula prevention and treatment services.

ENABLING ENVIRONMENT

In Mozambique, FC+ worked to institutionalize fistula prevention and treatment in the public and private sectors by developing critical national and facility policies and guidelines and supporting allocation of resources for fistula prevention and treatment.

³ UNICEF's State of the World's Children and Child info, United Nations Population Division's World Contraceptive Use, household surveys including Demographic and Health Surveys and Multiple Indicator Cluster Surveys. n.d. *Contraceptive Prevalence, Any Methods (% of Women ages 15–59)*. https://data.worldbank.org/indicator/SP.DYN.CONU.ZS?view=chart.







¹ United Nations (UN), Department of Economic and Social Affairs. 2019. World Population Prospects 2019. New York: UN. https://population.un.org/wpp.

² World Health Organization (WHO), United Nations Children's Fund (UNICEF), United Nations Population Fund (UNFPA), World Bank Group, and the United Nations Population Division. 2019. Trends in Maternal Mortality: 2000 to 2017. Geneva: WHO. https://data.worldbank.org/indicator/SH.STA.MMRT.

In December 2017, FC+ began its partnership with Focus Fistula, a Mozambican nongovernmental organization (NGO). Thanks to USAID support, FC+ has become Focus Fistula's largest donor. Led by Dr. Igor Vaz, an internationally renowned general surgeon, urologist, and gynecological specialist who heads the Surgery Department of the Hospital Central de Maputo, Focus Fistula aims to end obstetric fistula by providing treatment to women with fistula; developing institutional and treatment capacity; mobilizing resources; facilitating international and national partnerships; and coordinating fistula activities within Mozambique. The goal of FC+'s partnership with Focus Fistula was to build the clinical capacity of selected public and private facilities and staff to provide accessible, quality obstetric, iatrogenic, and traumatic fistula surgical and nonsurgical treatment services. FC+ also sought to build the organizational capacity of Focus Fistula to contribute effectively to the sustained inclusion of services to women with fistula as part of the Mozambican health system, through technical assistance to strengthen Focus Fistula's financial and reporting systems.

National Policy and Government Partnerships

The Mozambique Ministry of Health, known locally as Ministério da Saúde (MISAU), together with United Nations Population Fund (UNFPA) and Focus Fistula have been working to develop a national strategy for the prevention,

treatment, and reintegration of women with fistula. Focus Fistula has established partnerships with MISAU's National Directorate for Medical Assistance (Fistula Program) and UNFPA, as well as other local NGOs. These partnerships resulted in MISAU's decision that Focus Fistula would work with public health units, provincial health directorates, and medical and paramedical staff—as well as housing, infection prevention, and waste management resources—to advance the fistula program. MISAU and Focus Fistula coordinate and support transportation of clients to and from treatment facilities. UNFPA provides disposable fistula repair supplies and consults with Focus Fistula on the national program.

A backlog of clients with complex fistula requiring more advanced surgeries continues to grow in Mozambique. To advance MISAU's fistula prevention and treatment efforts, FC+ supported Focus Fistula to create a patient coordinator position to record newly diagnosed fistula cases and those receiving surgery and postoperative follow-up care. The ministry also tasked Focus Fistula with repairs of complex cases, while allowing surgical technicians (assistant medical officers who have completed three years of training followed by several years of supervision) at hospitals to repair simple cases under Dr. Vaz's supervision. MISAU, UNFPA, and Focus Fistula are also exploring the idea of a national database for registering fistula clients.



The Fistula Technical Working Group meeting virtually with provincial directorates. @Focus Fistula







In 2018, FC+ and Focus Fistula supported UNFPA and MISAU to organize the annual national workshop on obstetric fistula. This meeting provides an opportunity to reflect on achievements as well as evaluate the implementation status of activities. Participants included representatives from all provincial directorates as well as healthcare providers engaged in maternal and child health, fistula surgeons and nurses, and representatives from various government ministries, NGOs, and other MISAU partners. The 2018 meeting covered clinical directives (e.g., use of the partograph for fistula prevention and use of catheterization during labor), FP provision and logistics, the current fistula landscape in Mozambique, development of a national obstetric fistula implementation strategy, obstetric fistula advocacy, the need for social reintegration of fistula clients, organization of obstetric fistula treatment campaigns, and best practices for fistula care.

Immediately following this meeting, Focus Fistula hosted the Urology Congress in Maputo (UROMAP) with support from FC+. The congress brought together physicians from Portuguese-speaking countries including Mozambique, as well as Angola, Guinea Bissau, and Portugal. With the theme of improving women's health, the congress covered a range of topics, including urology challenges in member states, the relationship between urology and gynecology, and common challenges experienced in both urology and gynecology. The program included live skills sessions conducted by senior fistula surgeons. UROMAP will continue to be a key training opportunity for African Lusophone fistula surgeons and clinicians in the future.

To commemorate the annual International Day to End Obstetric Fistula (IDEOF), Focus Fistula planned various activities each year to raise awareness. Celebrations included an event cosponsored with a local bank featuring speeches from fistula survivors and surgeons, mass media outreach efforts, press conferences, and meetings of the Fistula Technical Working Group. During the COVID-19 pandemic, 2020 IDEOF celebrations emphasized virtual and mass media activities. MISAU's Fistula Technical Working Group organized a virtual meeting with all the provincial directorates to design radio and television interviews throughout the provinces and the Minister of Health marked the day with a press conference with Dr. Vaz, attended by all major media outlets in Maputo and focused on fistula.

Focus Fistula is the lead organizer of the next conference of the International Society of Obstetric Fistula Surgeons (ISOFS),

scheduled in Maputo in November 2021 (postponed due to COVID-19). As chair of the local organizing committee, Focus Fistula is guiding ISOFS in developing the program and managing the logistics. Focus Fistula is also managing the ISOFS local organizing committee website, on behalf of ISOFS. FC+ and UNFPA have provided financial and technical support for these efforts, which have served to increase Focus Fistula's leadership experience and increased their visibility within the global fistula care community.

FC+ facilitated conversations between Focus Fistula and the Fistula Foundation, a nonprofit global leader in supporting fistula repairs throughout Africa and Asia. These conversations have resulted in a commitment for an initial six-month period of continued funding and support to enable Focus Fistula to continue support for provision of fistula repairs and surgical once FC+ support ends.

Safe Surgery

MISAU, Focus Fistula, and UNFPA, with FC+ technical support, collaborated to develop a national strategy for a formal fistula training program for surgery technicians and fistula surgeons in Mozambique. Focus Fistula will present this program to the technical working group soon to formally request adoption within the National Fistula Program.

In support of this training program, Focus Fistula drafted three training and procedures manuals in Portuguese related to fistula treatment and submitted them to the MISAU for review and adoption. The first manual, "Bladder Catheterization and Obstetric Fistula: Guidelines for Early Treatment of Fistulas," adapted guidelines on indwelling bladder catheterization for the prevention and treatment of fistula that were originally developed by FC+ and the prior Fistula Care project in collaboration with the Federal Ministry of Health in Nigeria. The second manual, "Training Manual for Fistula Surgeons" was developed specifically for the Mozambican context, building from fistula training manual content developed by the International Federation of Gynaecology and Obstetrics (FIGO). The third is a nursing manual, which incorporates material from FIGO, Hamlin Hospital, UNFPA, and the urology department of the Central Hospital of Maputo. While still awaiting formal approval, these manuals are already in use in several hospitals providing surgical fistula care. Once approved, these manuals will be available for adaptation and adoption in other African Lusophone countries.









Surgeon training at Inhambane District Hospital. @S. Lenny

FC+ also supported Focus Fistula to conduct quality improvement assessments at supported treatment facilities and to share findings from facility assessments with hospital leadership and MISAU's National Directorate of Medical Assistance. These assessments explored the successes of maternal and child health and fistula programs implemented thus far as well as challenges related to infection prevention, waste management, provision of disposable and reusable clothing and equipment in the operating theater, patient flow and overcrowding, and drug management systems. Findings led Focus Fistula to implement targeted trainings on specific topics (e.g., infection prevention), implement supportive supervision, and procure surgical disposable materials with FC+ support. Findings also emphasized the importance of training staff on fistula surgical treatment and on the use of catheterization for obstetric fistula prevention, as well as the importance of employing both an obstetrician and a surgeon in hospitals providing fistula care.

COMMUNITY OUTREACH AND ADVOCACY

The community plays an essential role in fistula prevention, treatment, and reintegration. FC+ supported Focus Fistula to enhance community understanding and practices to prevent fistula, improve access to treatment, and reduce stigma.



Newspaper coverage of the fistula campaign at Beira Hospital.







Community Education

With FC+ support, Focus Fistula conducted in-person community outreach efforts to increase awareness about the causes of fistula, prevention approaches, and the availability of treatment. Prior to the COVID-19 pandemic, awareness raising campaigns occurred within the communities surrounding supported facilities, in conjunction with scheduled fistula repair events. These outreach campaigns reached 1,357 people, including women and their families, community leaders, local government officials, and local organizations. Awareness-raising activities included workshops at which fistula clients who have been trained as "ambassadors" shared testimonies discussing what their lives were like before and after their fistula repairs and reinforcing key messages about voluntary FP, quality maternity care, and fistula treatment.

Focus Fistula also held a master class in partnership with the University Rovuma–Nampula Extension on the theme of obstetric fistula prevention and social reintegration, which more than 200 professors, health professionals, members of the Mozambican Women Organization, local press, and local community and civil society members and leaders attended. Presentations centered on the causes, prevention, and treatment of obstetric fistula and the primary role communities play in prevention through encouraging careseeking behaviors and delaying early marriage. Presenters emphasized stigma reduction, including the importance of male involvement in supporting women with fistula, and the difficulties experienced by women with fistula at the community level.

Focus Fistula also collaborated with mass media outlets to reach urban and rural populations with maternal health and fistula prevention information. Media collaboration became especially important once the COVID-19 pandemic began and in-person events were restricted. Focus Fistula and FC+ created content for community and national radio programs, including recorded programs and live interviews with representatives from government agencies and treatment facilities, covering both broader sexual and reproductive health issues and the availability of fistula services. Programs also included interviews with fistula clients who discussed their experiences, including experiences with stigma and social exclusion, and their expectations for their lives after surgery. The project timed broadcasts to air on important dates, such as IDEOF, and to mobilize women with fistula symptoms to seek treatment during scheduled outreach repair events at local hospitals.

Focus Fistula partnered with SEKELEKANI, an independent nonprofit Mozambican institution that promotes communication between policy makers and stakeholders, to enhance the ability of communities to participate in and contribute to the formulation of the development agenda. SEKELEKANI documented fistula campaigns and collected information about women's lived experiences with fistula and published that information in a magazine distributed to community groups, NGOs, media outlets, government institutions, and private sector firms.

FC+ assisted Focus Fistula to strengthen their social media outreach and disseminate messages about their mission and activities more widely via a new website⁴ and a short promotional video. The video provided information about Focus Fistula's mission, objectives, and program activities and highlighted the experiences of founding members, doctors, nurses, and fistula clients.

REDUCING TRANSPORTATION, COMMUNICATION, AND FINANCIAL BARRIERS TO CARE

FC+ and Focus Fistula provided fuel subsidies for ambulances and other vehicles to transport fistula clients to facilities providing repairs, and covered the costs of meals during their hospital stay. This helped ensure clients from remote areas who otherwise might be refused transport because of their condition were able to access care. The project is also exploring partnerships with telecom companies to provide airtime to guarantee consistent communication for clients traveling long distances for treatment.

"With the imposition by the government of confinement rules in order to prevent the spread of the virus, Focus Fistula and EngenderHealth reformulated the strategy for treating fistulas in public health units for treatment in private units. This change, although entailing some additional costs, allows us to continue the treatment of fistulas and personnel training in COVID-19 time."

— Dr. Igor Vaz, Focus Fistula







⁴ http://www.focusfistula.org.mz/

Travel and service provision restrictions resulting from the COVID-19 pandemic altered the landscape for providing surgical treatment. To address some of the challenges, Focus Fistula partnered with Clinica Privada Médicos Associados (the Association of Private Medical Clinics) to enable them to conduct consultations, testing, and postoperative medical follow-up care with no cost to the client. Focus Fistula also implemented a memorandum of understanding with Clinica Cruz Azul, a private medical clinic in Maputo, which allowed Focus Fistula to complete diagnostic consultations and perform fistula repair surgeries at the clinic until services resume at public health facilities, enabling fistula clients placed on public hospital waiting lists to access care. The agreement also allowed for cost reductions for some items utilized during surgery. FC+ and Focus Fistula established COVID-19 prevention measures to protect clients and healthcare workers at the clinic.

HEALTH PROVIDER, FACILITY, AND SYSTEM CAPACITY BUILDING

FC+ strengthened health provider, facility, and system capacities to deliver sustainable, quality fistula services by providing direct support for surgical repairs; training facility clinicians and staff, including fistula surgeons and surgical technicians; and developing and implementing tools and approaches to improve clinical quality, surgical safety, and facility preparedness. FC+ supported 336 surgical fistula repairs and 1 nonsurgical repair (using catheterization) at nine health facilities across the country. Most repairs occurred during concentrated repair events (81%), with (19%) conducted through routine repairs. Nearly all (99%) of repairs were closed at the time of client discharge (91% closed and continent, 8% closed and incontinent). The majority (62%) of fistula clients were undergoing their first fistula repair attempt, with 27% receiving their second repair and 10% their third or more (1% had no data available). Where fistula etiology was available (97% of diagnosed cases), nearly all fistula were obstetric (91%) or iatrogenic (6%), with a small number caused by trauma, cancer, or congenital abnormality (3%).



Women awaiting fistula screening. © P. Celestino

FC+ also supported five complete perineal tear repairs, as the symptoms of this maternal injury are identical to fistula.

Focus Fistula, utilizing knowledge gained from its experience training clinicians and surgery technicians at provincial hospitals and at Clinica Cruz Azul, is leading the national training program for surgery technicians and fistula surgeons. The objective of the training program is to prepare clinicians within the national system to reach competency









for performing simple surgical repairs autonomously, with a focus on surgical capacity and clinical skills for provision of general care and treatment services. The program combines online theory classes, distance learning with video recordings of surgery, and in-person practical sessions for surgery technicians for one to two months, depending on trainee skill levels. Dr. Vaz and other Focus Fistula surgeons at Clinical Cruz Azul are conducting the online and video components of the training, in preparation for in-person trainings planned for when the COVID-19 situation allows. In late 2020, Focus Fistula piloted the training program with three resident doctors (gynecologists and urologists from the national health system).

Due to shortages of surgeons, Mozambique has long relied on surgical technicians to carry out maternal health, pediatric, and general surgery in rural areas. Focus Fistula's surgical training approach applied a similar task-shifting model. While senior surgeons perform the most complex and labor-intensive surgeries, other clinicians complete fistula surgeries commensurate with their individual skill levels. Each concentrated repair effort provides opportunities for surgical and nonsurgical skill building and mentorship, as the teams complete client observations and screenings, facilitate daily debriefings, perform surgeries, and conduct clinical rounds. In-service trainings for urologists, gynecologists, surgical

technicians, and maternal and child health technicians covered fistula prevention, treatment, and pre- and postoperative care as well as the importance of appropriate fistula classification to identify cases requiring surgery by an advanced fistula surgeon. Training also includes use of catheterization during labor as a simple technique to prevent fistula.

To strengthen clinical capacity and cultivate a safe surgery ecosystem, FC+ and Focus Fistula trained 546 health personnel-including nurses, midwives, doctors, and medical officers-over the life of project. These trainings addressed infection prevention and control, fistula counseling and treatment, FP counseling, safe cesarean section, and advanced urogynecology and complex fistula-related reconstructive surgery. Focus Fistula also trained 54 surgeons and surgical technicians in fistula surgical repair, with support from FC+.

FC+ introduced Focus Fistula to Direct Relief International, another FC+ partner, to facilitate deliveries of materials and medicines. Direct Relief International shipped free dignity kits, providing Focus Fistula with hygiene and health supplies for fistula clients. At the end of March 2019, in response to urgent needs associated with Cyclone Idai relief efforts, Focus Fistula and Direct Relief International donated 150 dignity kits to facilities in Beira treating clients affected by the cyclone.



Surgical technicians and fistula surgeons participating in training at Beira hospital. ©I. Vaz







EVIDENCE BASE

FC+ worked with Focus Fistula to ensure monitoring and evaluation systems are adequate for collecting project data, tracking clients, and providing quality services. This includes site assessment protocols to monitor the surgical ecosystem (as requested by MISAU) and documentation of both simple fistula repairs completed by surgical technician trainees and complex cases performed by Dr. Vaz.

The Focus Fistula team conducts daily meetings with facility staff during concentrated repair efforts to review and discuss data. These discussions provide opportunities for clinical mentoring and identification of challenges related to service delivery and data management.

The Focus Fistula patient coordinator conducts ongoing monitoring and follow up with repaired clients—calling each client, their family, or local doctors on a weekly basis. Focus Fistula also maintains communication with physicians, focal points, and coordinators at the district level and clients involved in previous campaigns at the provincial level, to monitor clients' postoperative situations, particularly those living far from health centers.

In 2019, Focus Fistula's Dr. Igor Vaz was invited to attend the International Consultation on the Regional Strategy for Obstetric Fistula Elimination in West and Central Africa in Dakar, Senegal. The consultation—sponsored by regional partners including FC+/EngenderHealth, the West African Health Organization, UNFPA, and UroDak (a multidisciplinary, advanced urologic and gynecologic workshop held in Senegal every two years)—aimed to share the approved Banjul Call to Action resolution,⁵ signed and adopted by the health ministers of 15 members of the Economic Community of West African States. The outcome of this meeting was a resolution to strengthen fistula services across the region—including through partnerships with academic institutions, professional associations, and NGOs for identification and referral of cases, surgical and nonsurgical treatments, and reintegration of women with fistula.

ELIMINATING FISTULA IN MOZAMBIQUE

The Government of Mozambique continues its efforts to eliminate fistula by 2030, the global goal adopted by the Campaign to End Obstetric Fistula.⁶ Through its support to a new Mozambican organization, Focus Fistula, FC+ is proud of its support to advance this goal and facilitate expanded, sustainable local capacity for fistula prevention, diagnosis, treatment, and comprehensive support for women who live with this condition.

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The USAID-funded Fistula Care *Plus* project at EngenderHealth works to prevent fistula from occurring, treats and cares for clients with fistula, and assists in their rehabilitation and reintegration. Fistula Care *Plus* partners with ministries of health, faith- and community-based organizations, NGOs, UN agencies, and other stakeholders, including hospitals providing surgical and nonsurgical fistula repair in South Asia and Sub-Saharan Africa. For more information about fistula and the Fistula Care *Plus* project, visit *www.fistulacare.org*.

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⁵ https://wcaro.unfpa.org/en/publications/ecowas-member-states-resolution-fistula-elimination

⁶ http://www.endfistula.org