A REVIEW OF MEDECINS SANS FRONTIERES' HUMANITARIAN AID OPERATIONS
On my recent visit to Haiti, the devastation caused by the earthquake that hit one year ago in January was still very visible. I was shocked by the magnitude of the catastrophe and at the same time very impressed with the extraordinary resilience demonstrated by the Haitian people.

This has been the largest emergency response in the 40-year history of Médecins Sans Frontières/Doctors Without Borders (MSF). We have been stretched to the limits by the urgency and extent of medical needs in the immediate aftermath of the quake and beyond. But the work done by the MSF teams has been outstanding. Thanks to the generosity of MSF donors worldwide, we were able to quickly react to the medical and humanitarian needs of Haitians following the earthquake and, more recently, during the fast-moving cholera outbreak that has now killed more than 3,000 people.

One year after the catastrophe, it’s important to look back on what has been done and achieved and to review the choices that were made. We must also be ready to tackle remaining challenges, formulate necessary strategies, and learn lessons that will improve our emergency responses in the future.

International agencies must live up to the commitments they have made to the Haitian people and to their donors. As humanitarian actors, we have to be accountable for our operational choices and transparent about our expenditures. MSF has documented its experience in Haiti last year in a critical way, and I invite you to read this report.

More than one million people remain homeless in Haiti today. Even before the earthquake, hundreds of thousands of Haitians lived in precarious conditions, particularly in the capital’s historically marginalised slums, where few aid organizations are providing assistance. Their immediate needs must remain at the forefront of the humanitarian action in Haiti.

Lastly, I would like to thank the more than 8,000 MSF personnel who have worked tirelessly to respond to the needs of the Haitian people. We are also grateful to the Haitian people for welcoming us and supporting our actions. And, one year on, we remember and miss the MSF staff, patients and family members who lost their lives in the earthquake.

Dr. Unni Karunakara
International President
Médecins Sans Frontières
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Thousands upon thousands of people lived in shanty-filled slums that were regularly rendered all but inaccessible by mud flows that followed heavy rains. Economic opportunities were few, unemployment was widespread, and residents were well accustomed to spasms of organised violence and political upheaval. It was due to the striking lack of access to health care and the intermittent outbreaks of violence that MSF had come to work in the country in the first place nearly 20 years ago.

For most Haitians, even basic health care was out of reach, as fees charged by the public and private health facilities made them unaffordable. Public hospitals and clinics were often plagued by management problems and strikes, or shortages of staff, drugs, and medical supplies. Patients could be turned away because the hospitals were full, or they would have to abandon treatment when they ran out of money. Giving birth was itself a risk; Haiti’s maternal mortality rate was 630 deaths per 100,000, the highest in the hemisphere, and 50 times the rate in the United States next door.

In Port-au-Prince, many of the poor were highly dependent on MSF’s free emergency services. As a major medical and humanitarian organization that’s been present in Haiti since 1991, MSF saw firsthand how Haiti’s people are exposed to life-threatening suffering and neglect even when violence was muted. The country could hardly have been less well-placed to deal with the huge additional demands that a natural catastrophe would place on its medical resources.

It was against this backdrop that the January 12 earthquake hit with more than enough power to throw Haiti into a period of turmoil that went beyond anything even its most beleaguered residents had known.
The toll was staggering. Hundreds of thousands lay dead and injured. Millions were suddenly homeless. The headquarters of Haiti’s few functioning institutions were strewn with debris and rendered nearly inoperable. The organisations that would ostensibly coordinate a disaster response—the Haitian government, the United Nations—were themselves badly hit as well. There was, therefore, no staging ground for the response and no one present in Haiti who could provide any real coordination of the massive amounts of emergency aid entering the country.

At the time of the earthquake, MSF, which had been operating three hospitals in Port-au-Prince, responded as quickly and comprehensively as possible to the medical and humanitarian needs of the victims of the disaster.

Thousands of Haitians, most of whom were themselves directly affected by the disaster, mobilised along with hundreds of international staff to help MSF provide assistance. MSF’s regular deployment of 800 field staff in Port-au-Prince quickly expanded to 3,400 people working in 26 hospitals and 4 mobile clinics. Within weeks, hundreds of thousands of individuals around the world generously donated to MSF. Donors would eventually pledge more than €104 million ($138 million), making possible the largest emergency operation ever undertaken by MSF.

The near complete destruction of an already inadequate health sector and the unfulfilled commitments of the humanitarian relief system to meet some non-medical needs of the affected population would ultimately shape MSF’s response to the disaster in the days, weeks, and months that followed.

This report intends to share with the general public, the people of Haiti, and our supporters a detailed breakdown of how the funds donated to MSF for the earthquake emergency relief effort have been used to meet the needs of the Haitian people in the year since the earthquake hit. It attempts to outline the choices made by MSF in deploying its operations, the challenges we faced, the lessons we learned, and our plans and perspectives for the future.

The report is broken into three sections. The first covers MSF’s operations in Haiti from January 12, 2010 to October 31, 2010 in three phases: the emergency (January 12 through April 30); the post-emergency (May 1 through October 21); and the cholera emergency (October 22 through the present). The second section provides a breakdown of the financial resources spent by MSF in the first year of the emergency. The final section discusses the current challenges and MSF’s future plans.
Figures at a Glance

The figures below indicate the various activities undertaken by MSF in the 10 months after the earthquake struck Haiti. The second column accounts for the entire scope of activities carried out by MSF from January 12 through October 31, the latest date for which cumulative figures are available (aside from the number of patients treated for cholera, which stood at 91,000 on January 2, 2011).

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<td>Cholera Treatment Centers built (Oct. 22 – Dec. 12)</td>
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<td>Showers built</td>
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February March April May October
June July August September November
December

January 12 2010

HAITI ONE YEAR AFTER

At the time of the earthquake, MSF was running three secondary level health care structures in Port-au-Prince: an emergency health centre in the Martissant slum; an emergency hospital for trauma and orthopedic surgery which also had an intensive care unit for burns and a rehabilitation centre, in the Pacot neighborhood; and an emergency obstetric care hospital with antenatal care clinics in the Delmas area. These facilities were designed to address the medical needs of populations living in very poor, violence-plagued urban communities.

MSF structures and staff were hit hard by the quake. It took days to account for everyone. Sadly, 12 Haitian MSF staff members were killed in the earthquake, as were some patients and caretakers who were inside buildings that collapsed. Other MSF staff members were injured or lost family members and friends, while still others lost everything they owned and were rendered homeless.

Despite the tremendous personal losses sustained by many national staff members, and despite the chaos that followed the earthquake, the majority of MSF’s surviving Haitian staff immediately set to work helping their countrymen and continued to do so throughout this difficult period.

The MSF obstetrical and trauma hospitals were destroyed by the earthquake. Only the Martissant emergency facility was still operational, but it was quickly overwhelmed by the injured and dying people who filled the hospital grounds. Martissant had the capacity to receive a maximum of 50 casualties. But in the hours

“I have to come to work because this is a disaster and it is my business. If people from other countries can risk their lives and come here to cure people, me, as a Haitian, I must do the same.”

MSF social worker Charles Joseph, who lost his home in the earthquake.
after the earthquake, staff there had to care for more than 400 critically injured and dying patients who arrived almost all at once.

Patients arrived at other MSF medical facilities and administrative offices with multiple and open fractures, crushed limbs, skull fractures, spinal cord injuries, and life-threatening burns. Teams concentrated on wound cleaning, debridement and dressing, and fracture stabilisation. In the first days, the immediate and highest priority for MSF was to stabilise and manage care for the wounded, to organise triage, and to provide immediate lifesaving surgery and end-of-life-care.

Although much of its health care infrastructure was destroyed, MSF still had the trained staff and the supplies—stocks of medicines, medical material, surgical equipment and logistical material—to respond. MSF staff adapted to the immediate conditions on the ground while logistical personnel quickly organised themselves to improve the environment for treating and caring for patients.

Teams working at the Martissant health centre focused primarily on minor wound dressings of injured persons. At the MSF rehabilitation centre in Pacot, only one operating table was available for minor operations. In and around the collapsed La Trinité Hospital, surgery was provided in makeshift tents and, after a few days, in a shipping container that was converted into an operating theater. La Trinité Hospital had eight specialised Haitian surgeons, who, together with the rest of the staff, and despite their own losses, provided care with the limited resources available to them.

MSF logistical staff transformed La Trinité Hospital’s pharmacy into a surgical operating room as well. Furthermore, within approximately 48 hours, MSF identified available rooms and a dressing station at the Ministry of Health’s Choscal Hospital and managed to start surgical activities there in two operating theaters. Other patients were tended to at an MSF office. By January 15, major surgery was also being provided in tents around the MSF-supported Carrefour Hospital.

“Five minutes after the quake, people were banging on our door in need of help. Within a few hours, there were hundreds of people in need of surgery.”

Dr. Jeanne Cabeza, medical coordinator for MSF’s operations in Haiti, who was at MSF’s rehabilitation centre in the Pacot neighbourhood and had, like some of her colleagues, sustained minor injuries.
Triaging the Wounded

Triage is the process by which medical staff determines which patients are in the most severe condition and which treatments should be prioritised. Effective triage ensures that available resources are used to save the maximum number of lives and to reduce morbidity. In the best of circumstances, triage can involve difficult choices. In the immediate aftermath of the earthquake in Haiti, however, it was not possible for MSF teams in some locations to carry out systematic triage due to the massive numbers of wounded people flooding hospital grounds. The exceptional circumstances and enormous workload required very difficult decisions to be made. The triage strategy staff adopted was to prioritise patients with the highest chance of survival.

Ultimately, MSF was one of the major actors in emergency surgical care among the 30 foreign field hospitals deployed during this first three-month emergency phase. MSF surgeons performed 5,707 major surgical procedures, 150 of which involved amputations.

An emergency surgical strategy must be adapted to available resources and needs; it needs to be developed and continuously re-assessed by the most experienced surgeons in collaboration with other colleagues. This was not systematically done during the first days following the earthquake due to the massive influx of wounded; there was no let up in the work and thus no time for reflection and planning, only responding. One of the lessons learned for MSF is to further strengthen its expertise with more experienced surgical coordinators to fill this gap in the future.

“ These were brutal wounds. They were deeply infected after three or four days, when people were still being brought out. The surgery isn’t very complex, but it’s an almost primitive and brutal surgery of removing dead and damaged tissue and amputating limbs. The decision you have to take surgically is whether you can preserve that limb or whether it must be removed. It can be a very difficult decision at times and amputation is clearly the last resort you want to turn to. But when a person has been crushed for days in a building, the tissues have been severely damaged, and the great dangers are overwhelming infection and septic shock setting in. ”

MSF Surgeon Dr. Paul McMaster who reached Haiti less than a week after the earthquake struck.
This also underlines the need to outline an approach for response to mass casualty events through triage, stabilisation, referral systems, and end-of-life care. Lessons learned are enabling MSF to improve its capacity and expertise to organise triage, emergency services and intensive care units in precarious emergency conditions.

“It’s true that the doctors did everything possible to help me and save my two legs. After more than ten days, with infection setting in, there was no other option but to amputate my leg. They asked me and they gave me the medical reasons. I did not sign anything, but I agreed for it to be done.”

23-year-old woman who was treated by MSF after the earthquake.
Dwindling Medical Supplies

As medical teams got to work, logistical teams searched damaged MSF hospitals for equipment, material, and drugs. Contingency stocks were kept specifically for emergency preparedness scenarios such as floods, landslides, and epidemics. Residual emergency supplies from MSF’s intervention following the 2008 floods in Gonaïves were still in the country, as were buffer stocks of supplies to maintain ongoing trauma, orthopedic, and burn treatment, and obstetrical care programs.

Fortunately the six-month supply order of the Martissant emergency centre had just arrived and could be used for the emergency response in Martissant. MSF teams redistributed existing supplies among the various hospitals, but the intense pressure and the lack of mobility in those early days prevented the establishment of a tightly coordinated supply chain for the medical supplies that were already in the country. Incoming supplies and donations made through the Central Medical Stores PROMESS, which was supported by the World Health Organization (WHO) and its regional arm, the Pan American Health Organization (PAHO), helped overcome critical early shortages.

MSF maintains an emergency supply base in Panama, which allowed us to get supplies into Port-au-Prince before the airport runway was jammed with incoming relief and diplomatic flights. The main gaps in major surgical material, however, could not be filled by these mainly non-medical relief supplies.

MSF therefore expended significant effort to secure direct landing access for essential medical and non-medical supplies in Port-au-Prince. This included establishing contact with officials from the Haitian government, the UN, and the United States who were directing incoming air traffic in order to secure landing slots for MSF cargo flights. However, many flights carrying supplies and disaster experts were diverted to the Dominican Republic because the Haitian capital’s small airport was damaged, overloaded with flights competing to land, and beset by unclear air traffic priorities.

Between January 14 and January 18, five supply-laden MSF planes were diverted from Port-au-Prince to the Dominican Republic. These planes carried a total of 85 tons of medical and relief supplies, including the material to build a 100-bed inflatable tent hospital to replace the destroyed Trinité Hospital. MSF spoke out about the lack of prioritisation of medical supplies through old and new media outlets.

In the end, most MSF supplies were routed through the Dominican Republic, and MSF established a supply base in Santo Domingo. Even though this meant taking a longer route into Haiti, it provided a more stable and reliable option for the initial months, as Haiti’s airport and seaport, while open, remained overburdened.

Several organisations offered their services to support MSF’s work following the earthquake. For example, the environmental organisation Greenpeace generously donated the use of its ship, Esperanza, to assist MSF with its emergency response in Haiti. This donation enabled MSF to transport its most urgent lifesaving medical supplies as quickly as possible by air, while Esperanza made the slower journey to Port-au-Prince carrying less urgent, though essential, supplies such as blankets, buckets, and soap. The ship also carried a freight of thousands of litres of fuel, a commodity in short supply in Haiti in the immediate aftermath of the earthquake.

“It is like working in a war situation. We don’t have any more morphine to manage pain for our patients. We cannot accept that planes carrying lifesaving medical supplies and equipment continue to be turned away while our patients die. Priority must be given to medica supplies entering the country.”

Rosa Crestani, MSF medical coordinator.
Establishing Field Hospitals

The MSF logistic teams mobilised quickly to set up temporary infrastructure and to repair and expand existing infrastructure. Supplies of water and electricity were established, sanitation procedures put into place, and, later on, medical facilities were installed.

Yet in the weeks after the quake, staff and the population alike were unnerved by frequent aftershocks, including a particularly powerful one on January 20. Even in hospitals and buildings that had withstood the earthquake, the Haitian staff and patients refused to stay inside concrete structures out of fear that they would eventually collapse, as so many others had. In some instances, therefore, patients were hospitalized, and some operations were conducted, under tents.

Emergency field hospitals were set up using existing Ministry of Health structures, MSF structures, or other private structures—a dentist clinic at Bicentenaire, a school in Carrefour, semi-permanent buildings in Léogane, and the inflatable hospital, which, once it arrived, was erected on a football field in the Delmas 30 district.

The inflatable hospital was employed to replace the destroyed La Trinité Hospital, which provided trauma and orthopedic surgical care, and to quickly establish the capacity to provide high-quality emergency medical care to compliment activities at other field hospitals already established by MSF medical teams. Despite the fact that the planes carrying it were diverted to the Dominican Republic, the inflatable hospital—which came to be known as Saint Louis Hospital—was functional and receiving patients just 10 days after the earthquake.
The Challenge of Rebuilding Hospital Capacity

To ensure proper conditions for emergency surgical activities following the initial emergency phase, MSF used buildings that were deemed sanitary and safe—i.e. not structurally compromised by the earthquake—and also erected hospitals made of pre-fabricated container modules. A complicating factor was that many patients still refused to be hospitalised inside any concrete structure and preferred to convalesce in tents.

From the outset, the organisation focused on restoring and strengthening secondary level hospital capacity for emergency care. For example, MSF fashioned a dedicated post-operative care program, complete with a full surgical unit, in a former warehouse. MSF also chose to use local know-how and readily available materials—concrete foundations, timber wood for the frame and the walls, iron sheeting for the roof—to build semi-permanent structures that could later be made permanent.

MSF needed to get its surgical units operational as soon as possible in order to guarantee aseptic conditions and to replace the improvised open-air set ups. Supporting surgical activities in existing facilities offered the best aseptic conditions, but many of these structures were not functional or structurally sound, or else they had been overwhelmed with patients after the earthquake. Alternatives included transforming non-sanitary buildings such as schools, a soda factory, and a child care centre into field hospitals with surgical units inside. The technical solutions applied by the teams were sufficient to prevent any major outbreaks of infections during the first months of the intervention.

Treating “Crush Syndrome”

An MSF-facilitated Renal Disaster Relief Task Force that regularly works with MSF in earthquake emergencies managed to restart the kidney dialysis in the University Hospital to treat crush syndrome\(^1\) patients with acute kidney injuries (as well as patients with pre-existing chronic kidney disease) in less than a week.

The whole intervention at University Hospital lasted exactly two months and required considerable resources. Twenty nephrologists, nurses, and haemodialysis technicians were dispatched to Haiti from various countries. This team performed the equivalent of 316 dialysis treatment days. But the coverage and output can be considered limited given the low number of patients who received this specialised care set against the more than 300,000 injured people, many of whom were likely “crushed” by collapsing buildings and walls.

This is largely due to a lack of detection of patients with crush syndrome. The intervention benefitted from the successful introduction of an MSF-supplied point-of-care device that allowed for immediate determination of the most critical biochemical tests and faster decision-making on the management of crush syndrome patients. The main lesson learned is the need for more emphasis on early detection of crush syndrome patients at the field hospital level to prevent acute renal failure and facilitate their timely transfer for kidney dialysis.

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\(^1\) Crush syndrome is a condition in which muscle tissues damaged by severe internal injury release massive quantities of toxins into the blood, leading to kidney failure. Left untreated, crush syndrome can be fatal.
Chart: Number of major surgical operations involving anaesthesia by MSF surgeons in Haiti during first three months after the earthquake. The figures are conservative given the lack of available medical data for the first two days of emergency operations, when tracking such information could not be prioritised given the high-level of pressure on MSF staff to meet the immediate lifesaving needs of patients arriving to medical structures.
Medical Challenges: Managing a Massive Surgical Caseload

Due to the enormous caseload of surgical patients admitted to MSF facilities, referrals from other health-care facilities, and patients left behind by temporary intervention teams from governments or smaller scale organisations, MSF quickly increased its initial post-operative and rehabilitative care capacity. Most MSF facilities had the capacity for surgery and integrated physiotherapy and mental health care.

In one MSF facility, 807 cases were reported during the first three days, but, since data collection was not a priority in these early moments, the type and severity of injuries remains unknown. By the end of the first week, though, MSF estimated it had treated more than 3,000 wounded people in the Haitian capital and performed more than 400 surgeries.

This natural disaster differed from others in two significant ways. Firstly, it directly affected the infrastructure of an urban capital and, consequently, the capacities of all governmental, UN, nongovernmental, and private agencies to respond. Secondly, the scale of the immediate medical need among those injured was further augmented because the earthquake impacted densely populated areas of poorly planned and unregulated settlements within the capital. These factors combined both to create a huge need and also to hinder the ability of organizations to respond to that need.

Each MSF hospital was confronted with special cases, such as neurological trauma injuries, which they did not have the capacity to treat. Referrals, however, were difficult to provide due to a lack of awareness and communication about what other capacities were available in Haiti, including at other MSF facilities. There was no central hub that had an overview of available services. Different strategies were gradually developed to deal with referrals. Some patients were referred to Santo Domingo for advanced treatment. Some severe burn injuries were referred to the USS Comfort ship docked off the main port. But this required extensive logistics. It was not until late in February that MSF managed to create a more advanced, centralised care for burn injuries.

Bolstering Post-Operative Care

Being confronted with such a huge caseload of surgical patients and having learned from previous earthquake interventions, MSF developed a significant inpatient and outpatient post-operative care capacity. In addition to post-operative care facilities attached to or integrated within the hospitals, by the end of January, MSF opened specific post-operative care centres to deal with the overload of patients requiring prolonged inpatient and ambulatory post-operative care.

Many of these cases were referred from MSF-managed or supported health care structures. Others were from military or civilian emergency actors who departed after the first weeks of the intervention, leaving behind many patients who still had dressings, casts, or external fixation that needed attention. Almost all of the post-operative care centres had to integrate major surgical services in order to provide necessary follow-up wound care and orthopedic surgery (debridement, infections, internal and external fixation) and reconstructive surgery.

From January 12 through the end of April, MSF organised inpatient post-operative care for 2,604 patients and ambulatory post-operative care for an undocumented caseload of patients.

In February, MSF opened a post-operative care centre in a converted soft drink factory in the Sarthe neighborhood of the capital. With a capacity of up to 300 beds, patients could receive wound care and more specialised orthopedic or reconstructive surgery. Handicap International physiotherapists worked alongside MSF to help patients rehabilitate and adapt to prosthetics.
In total, MSF established some 2,000 post-operative care beds in Port-au-Prince within five weeks of the earthquake. While it is better to have too much capacity than not enough, MSF did create more post-operative care capacity than it ultimately utilised in the emergency phase. MSF surgical specialists and emergency managers are currently evaluating means to ensure the greater coordination and more precise projections of needs in order to prevent, to the degree that is possible, an overuse of human and financial resources around establishment of post-operative care capacity in mass-casualty natural and man-made disasters.

### Providing Physiotherapy

Given the high proportion of surgical cases, many of which involved orthopaedic injuries, MSF enhanced its ability to provide physiotherapy. These services were either integrated into MSF’s emergency hospitals or offered through post-operative care facilities. The workload for MSF teams was very high. In one MSF hospital, at the peak of physiotherapy activities in February and March, an average of 200 patients were receiving care in approximately 1,000 sessions per week. MSF partnered with Handicap International in several facilities and displaced persons camps to improve the quality and availability of prostheses and physical rehabilitative care.

“They have been through so much but have a great attitude. I saw a 30-year-old man who had been amputated from his right arm and when he woke up, he was at a complete loss. The following morning he told me, ‘I’m going to make it.’”

Nicole Dennis, an MSF nurse, who worked earthquake injuries.
1.1 Emergency phase

Emergency Psychosocial Care

From the start of the emergency response, MSF mobilised new mental health care teams, or reinforced existing ones, with international staff and newly-recruited national staff. These teams focused on the national staff, many of whom had lost relatives and homes but nonetheless continued to work despite anxieties about the present and uncertainties about the future. They also provided consultations for severely injured patients and their family members in post-operative care. As of early February, mental health care activities—psycho-educative group sessions, individual consultations, and mutual support groups—expanded to outpatient services and later into the communities of Cité Soleil, Carrefour Feuille, and Tapis Rouge; the internally displaced persons camps around Jacmel and Léogâne; and the Grace, Pétionville Golf Club, and Aviation IDP camps as well.

Psychiatric Care

Psychiatric care was organised at Saint Louis Hospital and its attached outpatient department for all those patients who required the services and who could be referred from other MSF programs or other actors.

All told, more than 40,000 people received psychosocial or psychiatric support from MSF staff during the initial emergency phase.

Basic Healthcare for Displaced Persons

By the end of the first month, in order to respond to the pressing needs for basic health care for displaced people in Port-au-Prince who had found some type of shelter near MSF surgical facilities, MSF teams set up outpatient services linked to or integrated within the emergency hospitals and postoperative care centres. The outpatient departments of the hospitals of Choscal and Jacmel, however, remained under the management of the Ministry of Health, with the assistance of other organisations.

Soon afterwards, MSF also set up fixed or mobile OPD services in several IDP camps and supported existing clinics at other camps in Port-au-Prince—Delmas 24/Fort National, Champs de Mars, Grace Camp, Shikina clinic, Pétionville Golf Club, Aviation camps, Carrefour Feuille and Tapis Rouge—and outside the capital in Jacmel and Léogâne.

Depending on the location and the evident needs, these outpatient services provided consultations, ambulatory dressings and postoperative care, mental health services, antenatal and postnatal consultations, care for victims of sexual violence, and vaccinations (initially against tetanus, and later to include vaccinations covering the full scope of the Expanded Programme of Immunisations services).
Chronic and Acute Medical Conditions

MSF has developed a great deal of treatment experience for infectious diseases such as HIV/AIDS and tuberculosis. However in Haiti, MSF largely relied on other organizations that were already providing treatment for these conditions to continue the work. Given the incredible volume of patients under its care, MSF teams were not able to adequately assess whether these organisations—both Haitian and international NGOs—were actually able to meet the needs of patients requiring HIV/AIDS or TB treatment.

Furthermore, MSF did not have the appropriate medicines on hand in the emergency phase to care for patients suffering from non-communicable conditions such as hypertension, diabetes, and epilepsy. Of 850 patients treated in one location between March and September, there were 72 cases of hypertension. Recognising this shortfall in the package of available care in some MSF medical structures, the organisation is already evaluating the feasibility of including chronic disease kits in the emergency preparedness stocks it maintains in different countries.

Emergency Obstetrical Care

With the destruction of MSF’s emergency obstetric hospital, MSF started offering human resources, drugs, and obstetrics expertise to support to the Ministry of Health maternity hospital, Isaïe Jeanty, which had not been damaged in the earthquake. The hospital treats pregnant women with medical complications such as eclampsia and malaria and provides neo-natal and post-natal services and a blood bank.

“... We’ve delivered so many premature babies as a result of trauma. Women are coming to us with pre-eclampsia or eclampsia -- serious conditions exacerbated by stress. Though Haiti had an extremely high rate of eclampsia before the earthquake, the massive toll of this disaster has probably further aggravated the condition. “

Eva de Plecker, an MSF midwife at Isaïe Jeanty maternity hospital.
Burn Care

When La Trinité Hospital was destroyed, Haiti lost its only specialised treatment unit for severe burns. Re-establishing this unit became a priority, especially given the dangerous living conditions faced by earthquake survivors.

By late March, a new dedicated unit had been set up under canvas within the Saint Louis Hospital compound. The unit provided three tents and 30 beds for severe burn patients, both children and adults.

“Burns are increasingly frequent and severe now because lots of people are living in even more dangerous conditions. All aspects of family life take place in just one, often very cramped space: family members sleep, play and cook in the same area. Women and children are often burned because a pot of boiling water or oil tips over, or a candle sets fire to a blanket. Men are mostly burned when handling flammable products, primarily fuel containers. For victims of severe burns, the 24 hours following the accident are crucial. Emergency surgery must be performed within six hours of the accident happening and they require very regular care for three weeks to a month.”

Dr. Rémy Zilliox, an MSF plastic surgeon and burn specialist.
Non-Medical Assistance

Just days after the earthquake, MSF teams carried out assessments of the needs outside Port-au-Prince and initiated mobile clinics in communities such as Petit Goave, Grand Goave and Léogâne, all of which are situated very near the epicentre of the earthquake, and in Jacmel to the south. By the end of the month, MSF was endeavoring to further aid these and other hard-hit communities by establishing fixed and mobile clinics and organising supplies of water and the construction of hygiene and sanitation facilities.

Quickly, it became clear that hundreds of thousands of people needed shelter—and that the lack of shelter was having medical consequences—but were not receiving much assistance in that regard. In late January, MSF began distributing plastic sheeting, tents, and other relief items, scaling up these efforts the following month once it became clear that few of the organisations expected to address these needs were actually doing so.

Several groups expressed concerns over security, which were not entirely unfounded. Anxiety and desperation was pervasive after the earthquake, which in some instances created unrest and at times anger amongst people awaiting assistance. MSF’s first distributions in the rural areas outside of Port-au-Prince ten days after the earthquake were hampered by crowd control issues. MSF thus decided to minimize security risks by executing quick, large-scale early morning distributions, using buses to transport beneficiaries in small groups to moving distribution points, and distributing items through churches and other community organizations.

By the end of June, MSF had distributed close to 85,000 relief supply kits made up of items such as cooking utensils, hygiene items and blankets, approximately 2,800 rolls of plastic sheeting and more than 28,640 tents. In Léogâne, for example, MSF made distributions to 3,000 families. MSF eventually spent €11.7 million (US$15 million) in shelter and non-food item distribution.

“The immense needs in terms of shelter, hygiene, and basic living conditions are not being met. For this reason, we have started to distribute 26,000 tents which will provide shelter to around 100,000 people. About 7,000 have already been distributed and distributions are still going on at the moment. MSF is also distributing cooking utensils, hygiene kits—soap, basin, towel, etc.—blankets and mosquito nets for the same number of people. However, these distributions will not be enough. Humanitarian organisations must do a whole lot more, and right away.”

Christopher Stokes, General Director of MSF-Belgium
At the very beginning, we have to recognise that we received tents and hygiene equipment. It was January, and the weather was clement, with no rain. We thought we’d be there for just a couple of months. My house had been completely destroyed. I came with my family of four here to this camp because it was the nearest one to my previous home. We received a big tent, blankets, hygiene and kitchen equipment, and even some food. We were very happy. But now it’s more than seven months since the earthquake happened. The tents are not good enough – this one has already broken in some places – and we fear for the hurricane period. If you have time, I invite you to come and sleep inside. You will see.

34-year-old Haitian man, leaving in IDP camp in Port-au-Prince
Water and Sanitation

Much of MSF’s water and sanitation work focused on creating the appropriate hygiene conditions to carry out medical and surgical programs and to stem the spread of disease. MSF teams provided safe water, constructed or rehabilitated latrines and ensured the evacuation of waste water and solid and medical waste at the 26 facilities operated during this emergency phase.

Water provision activities were also established for populations sheltering near MSF medical facilities, and water-and-sanitation teams started hygiene programs in the camps where MSF had medical activities and where needs were still not covered by other actors. This included trying to ensure access to latrines, showers, and laundry zones, as well as hygiene promotion campaigns.

Almost all of the informal displacement camps relied on drinking water that was trucked in and treated onsite. Most sites had insufficient water or space for bathing privately, which amounted to a hygiene issue as well as a security issue, particularly for women. Latrines were badly and widely needed. Due to lack of space, a relatively high water table in some locations, and the nature of the soil in the city, however, it was difficult to achieve the acceptable standards of latrines in some camps.

“Here in this camp, we don’t have enough latrines, and we still need to go out to get water due to the lack of distribution points. At the very beginning, it was easier, because there were not a lot of people, but now it’s like a village within the city.”

A 22-year-old woman, in the Carrefour Feuille IDP camp.
Considering how many people had been displaced, MSF’s overall water and sanitation effort was quite modest. This was largely a function of the decision to prioritise medical issues, the presence of other actors working in this area, and practical constraints.

An additional issue for MSF’s operations, in terms of sanitation, was the lack of a safe disposal site for medical waste in Port-au-Prince, which continued to pose a problem later on in the year with regards to the massive cholera outbreak. In the absence, MSF has installed incinerators to process the waste from its facilities.

**Human Resources**

A common feature of disasters is that organisations quickly come to rely heavily on their most experienced and qualified locally-hired staff—but then must quickly hire and train additional local staff.

MSF managed to mobilise an unprecedented number of staff from around the world but struggled after the initial stage of the emergency to supply the necessary international aid workers with the expertise for a disaster of this kind. Senior managers and coordinators tend to turn-over at a high rate in the early months of emergencies, and its necessary to rotate people in both to keep staff members fresh and effective and also to allow them time to rest after what is inevitably an extremely intense, extremely taxing experience. The high demand for staff in Haiti after the earthquake—and, later in the year, in Pakistan during the historic floods—placed severe pressure on MSF in some locations to maintain staffing levels in field projects.

Another key lesson learned is the critical importance of certain roles in this day and age. These include Internet and telecommunications experts; biomedical equipment technicians to install and maintain radiology and radioscopy equipments, horizontal sterilisation units, and blood-bank, cold-chain, and special anesthesia equipment; electricians; and structural and construction engineers to assess the safety of medical buildings, offices, staff houses, and warehouses.
By May, even as health care needs directly linked to the earthquake had diminished, Haitians still faced a devastating lack of access to secondary level health care and few prospects of the situation improving in the foreseeable future. The Interim Haiti Recovery Commission was established to oversee a coordinated approach to the earthquake recovery process, but, five months on, it had taken few concrete steps and had made little visible progress. The Haitian government’s Action Plan, the basis for a government and institutional donor’s conference for Haiti last March, provided very little detail about the actual health priorities or specific plans for the reconstruction process.

Other than some passages in the Action Plan referring to vulnerable groups and stating that the reconstruction “requires efforts to be concentrated on the improvement in access to and quality of primary healthcare, with an emphasis on high-impact, low-cost actions targeting maternal and infant health,” there was very little information about what steps and investments the government or other NGOs were going to make in health service provision beyond the primary care level. Furthermore, there was no substantive discussion of longer-term planning, particularly emergency preparedness, despite the unfortunate fact that Haiti has proven to be prone to emergencies.

Reorganisation of Medical Activities

With no real national progress towards the provision of free-of-charge secondary emergency trauma, obstetric, pediatric, orthopedic, or burns care, it was clear that MSF would not only have to replace the medical services it provided before the earthquake, but also maintain a scaled-up level of assistance for years to come.

MSF had reduced its total number of operational sites from 26 to 20 by the beginning of May, reorganising its emer-
1.2 Post-emergency phase

emergency medical operations, closing some medical care facilities, and reducing activities in several displaced persons camps in the capital, which were by then being well served by other nongovernmental organisations. As it happened, in fact, the historically marginalised slums, which were less secure but were not by and large seen by institutional donors as having been hit hard by the earthquake, received far less adequate assistance than did the camps. MSF therefore chose to maintain its medical facilities in communities such as Cité Soleil and Martissant.

Additionally, MSF agreed to build a general hospital in Léogâne, an emergency obstetric hospital in Delmas 33 of Port-au-Prince, a specialised trauma hospital in Tabarre, on the north-eastern outskirts of Port-au-Prince, and a general hospital in Drouillard, on the capital’s periphery, just outside the Cité Soleil slum.

MSF did face some difficulties during this longer-term planning phase. Restrictions on the amount of available land complicated the process of initiating new construction when it was necessary. And the planning for the hospital in Delmas 33 was hampered by insufficient communication between MSF and the Haitian Ministry of Health and other regulatory obstacles. This lead to a substantial delay in the project, and thus a substantial delay in the provision of timely treatment to the people of the community, particularly pregnant women in need of emergency obstetrical care. (Construction was eventually completed, however, and the facility proved especially valuable last fall, when it was used as a cholera treatment centre after the cholera outbreak spread to the capital.)

Additionally, in October MSF opened a 120-bed hospital in Léogâne designed to focus on obstetric, trauma, and pediatric emergencies and intended to allow MSF to phase out the tented hospital it established on the grounds of the Ministry of Health hospital in the city just after the earthquake.
Tents and Drinking Water

By May, MSF had completed its distributions of tents, but the organisation continued to distribute basic necessities such as kitchen utensils and hygiene kits in a host of locations both inside and outside of the capital. At this point more than 28,000 tents had been distributed. Tents and basic necessities were also distributed to about 200 families in remote villages of Léogâne region.

During this second phase, the organisation reduced the amount of water it was distributing from a high of 870,000 liters per day during the emergency phase to 713,000 liters of water per day, roughly enough for 71,000 people.

Hurricane Season

The hurricane season was a major preoccupation over the summer because so many people were (and still are) living in precarious conditions and because many MSF patients, fearing another earthquake, were still wary of staying indoors for any extended period of time. For this reason, many MSF facilities still used massive tents to enclose hospital wards.

Fortunately, the rains and winds were not as devastating as so many had feared they would be. MSF did provide an emergency supply of tents to newly resettled families following a July storm that affected the Coraille camp and ran a shelter repair program in the Petionville Golf Club and other camps.

From January 12 to October 31, MSF treated more than 358,000 people, performed more than 16,570 surgeries, and delivered more than 15,100 babies. MSF also uses mobile and fixed-point clinics to provide primary medical care and relief supplies to displaced persons living in various camps in Port-au-Prince. The organisation carried out water-and-sanitation services to displaced persons in the Cité Soleil slum and Carrefour.

MSF was operating seven private, free-of-charge, secondary-level care hospitals and supporting two Ministry of Health structures in Port-au-Prince, accounting for nearly 1,000 hospital beds in the capital by the middle of October. These facilities provided emergency, trauma, obstetrical, pediatric, maternal, and orthopedic care services. Mental health care and treatment and counseling for victims of sexual violence are also provided by MSF. Outside the capital, MSF supported Ministry of Health hospitals in Jacmel with nearly 100 beds of patient capacity and runs a private, 120-bed container hospital in Léogâne that opened in October.
In the immediate aftermath of last January’s earthquake, when hundreds of thousands of people were forced to find whatever shelter they could in ad hoc displacement camps with dangerously substandard hygiene facilities and little or no services, the potential of an outbreak of disease was a major concern. Fortunately, months went by without it happening.

In the middle of October, however, word came from the Artibonite region in central Haiti north of the capital that patients were presenting with cholera-like symptoms. Cholera had not been seen in Haiti in many decades, but nonetheless, the signs—rapid and severe dehydration caused by excessive vomiting and diarrhea—were all too apparent.

On October 21, the day after MSF received word of cholera-like symptoms, a medical coordinator and other staff quickly traveled to St. Marc and Petite Rivière, in the Artibonite region, to work with local health staff and authorities to start treating patients. An extra team of emergency staff arrived that same day from Panama to reinforce the team in St. Marc. Between October 22 and December 15, MSF teams would end up treating more than 23,000 people with cholera symptoms in the Artibonite region.

Days after the initial foray to St. Marc, 10 beds were set aside for cholera treatment at St. Louis Hospital and 25 beds at Tabarre in Port-au-Prince. Cholera treatment capacity was also added to Bicentenaire Hospital, and the MSF orthopedic hospital in Carrefour was converted into a 60-bed cholera treatment centre (CTC) in case the bacteria made its way to the capital. MSF also immediately ordered extra supplies to be brought into the country and sent for experienced emergency specialists and epidemiologists to be on hand in Port-au-Prince to respond as needed.

As it happened, though, more cases were presenting in St. Marc, as well as nearby Petite Rivière, and soon in Gonaïves, and teams had to quickly scale up their capacity in the region. The next area to experience the outbreak was the North—the cities of Cap Haitien, Port de Paix, and Gros Morne—beginning on October 29.
At this point, it was clear to MSF’s field managers that the cholera outbreak was going to be a huge issue that required a large-scale response across several sectors. On October 31, large numbers of patients began coming to MSF-supported hospitals in the Port-au-Prince’s Cité Soleil slum with the symptoms of cholera. It’s a really worrying situation for us at the moment. All of the hospitals in Port-au-Prince are overflowing with patients and we’re seeing seven times the total amount of cases we had three days ago."

Stefano Zannini, MSF’s head of mission in Haiti, commenting on the outbreak of cholera in the capital.

Consensus was that cholera was very likely to spread widely in a country where most people lacked access to clean drinking water or sanitation, where the population was unfamiliar with the necessary prevention measures, and where national health staff, too, had no experience with the disease upon which to draw. But the transmission dynamics were difficult to predict, because the only precedents were several decades old.

The population’s anxiety was heightened by the PAHO epidemic projections. At no point did PAHO’s epidemic modeling lead to an effective aid deployment. On the contrary: huge amounts of aid were concentrated in Port-au-Prince while insufficient support was provided to the inexperienced health workers battling the disease’s aggressive spread in rural areas. MSF teams found some health centres facing shortages of lifesaving oral rehydration solution and others that had simply been shuttered.

The number of sick patients was growing. In the capital, the number of people seeking treatment at MSF-run and supported medical structures jumped from 350 for the week ending November 7 to 2,250 cases the week ending November 14. In the North, MSF teams logged 280 cases during the week ending November 7, but that number jumped to 1,200 for the week ending November 14. They continued to grow after that.

MSF was able to continue working throughout several bouts of violence in the country. During riots in the northern city of Cap Haitien, MSF teams still managed to open new CTCs and travel throughout the city to provide treatment services. In early December, following the country’s elections, MSF was still able to provide treatment in its network of CTCs in the capital when rioting hit Port-au-Prince.

Despite the huge presence of international organisations in Haiti, the cholera response had been inadequate in meeting the needs of the population. MSF issued repeated public statements pointing out that critical shortfalls in the deployment of well-established measures to contain cholera epidemics are undermining efforts to stem the ongoing outbreak in Haiti. On November 18, MSF issued a press release calling on other aid actors to do more, to scale up their responses and to do it quickly.

MSF outlined a series of measures that needed to be taken immediately to try to get the epidemic under control. These needs were shared with government officials, the UN leadership and humanitarian relief coordinator, and other NGOs.

"Cholera is an easily preventable disease. It may be new to Haiti, but the ways to prevent and treat it are long established. Without an immediate scale-up of necessary measures by international agencies and the government of Haiti, we alone cannot contain this outbreak."

Caroline Seguin, MSF emergency medical coordinator.
Current situation

At present, MSF is still scaling up activities, focusing on making more beds available and on case management, while making sure that non-cholera activities continue normally. By late December, the cases in the North, Northwest, and the Southeast departments, the Artibonite region, and the area just west of Port-au-Prince were all seeing cases decrease. However, MSF admitted 8,450 new cases in its CTCs nationwide in the week ending December 26. There seems to be a widespread belief that the cholera response in the capital will have to last several more months, through early 2011, at the very least.

In a smaller outbreak, MSF would be as focused on trying to break transmission as it is on treatment, carrying out community awareness and education efforts, distributing water, and so forth. In this situation, though, it has been necessary to decide how the organisation can be most effective given the resources it has. The organisation has done some of the aforementioned prevention activities, but it mainly has focused on serving the most severe cases, on saving lives, essentially, while hoping and pushing other actors will fill in the gaps elsewhere.

Besides MSF, Cuban medical brigades have been the most active actor in the area of treatment of cholera cases. More than 3,300 people had died from this largely preventable and treatable condition by December 26.
MSF has now mobilised a cholera emergency response across every administrative department of Haiti. By December 26, the Ministry of Health had reported 150,000 cases and more than 3,300 deaths across the country. At the same time, as of January 2, 2011 more than 91,000 cholera cases had been treated by MSF medical teams in 47 cholera treatment centres throughout the country. (This accounts for approximately 60 percent of all cases treated in the entire country.) MSF has established over 4,000 beds of hospitalisation capacity for the cholera outbreak and has been able to maintain the case fatality rate of less than 2 percent in these facilities.

More than 1,000 tons of medical and logistical supplies have been brought into the country, and MSF has more than 5,500 Haitian and international staff dedicated to cholera treatment.

MSF estimates it will spend approximately €10.8 million ($14.2 million) on cholera emergency programs in 2010. Another €7.5 million ($9.9 million) is projected to be required to continue cholera-related activities in Haiti in 2011.
MSF received massive financial support for the Haiti emergency from hundreds of thousands of donors around the world. By the end of 2010, MSF has estimated it will have spent all of the €104 million² ($138 million) donated by private supporters for Haiti.

MSF estimates that it will have spent a total of €94 million ($124 million) on the earthquake relief effort in 2010. The remaining private restricted funds raised for Haiti (approximately €10 million or $13.2 million) will have been used to mobilise MSF’s cholera response.

As of October 31, MSF had spent 76 percent—some €79 million ($104 million)—of these restricted funds in the first 10 months following the disaster.

### Major Operational Spending Categories

*January 12 to October 31, 2010*

<table>
<thead>
<tr>
<th>Category</th>
<th>Euros</th>
<th>US Dollars</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Staff</td>
<td>18,571,604</td>
<td>24,514,517</td>
<td>23%</td>
</tr>
<tr>
<td>International staff</td>
<td>12,622,519</td>
<td>16,661,725</td>
<td>16%</td>
</tr>
<tr>
<td>Medical</td>
<td>12,271,641</td>
<td>16,198,567</td>
<td>15%</td>
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<tr>
<td>Logistics</td>
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<td>23%</td>
</tr>
<tr>
<td>Transport &amp; Freight</td>
<td>14,964,735</td>
<td>19,753,450</td>
<td>19%</td>
</tr>
<tr>
<td>Running costs</td>
<td>2,114,144</td>
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<td>Training</td>
<td>102,269</td>
<td>134,995</td>
<td>0.13%</td>
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<tr>
<td>Consultants</td>
<td>305,999</td>
<td>403,919</td>
<td>0.38%</td>
</tr>
<tr>
<td>Other</td>
<td>180,674</td>
<td>238,490</td>
<td>0.23%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>79,528,620</strong></td>
<td><strong>104,977,779</strong></td>
<td></td>
</tr>
</tbody>
</table>

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2. The amounts donated have been converted into Euro using the average monthly rate for currencies in which the funds were originally donated. All US dollar figures in this report have been calculated based on a Euro to US Dollar average exchange rate from January 1, 2010 to October 31, 2010 (1.32 USD to 1 Euro)
Operating such large-scale emergency health programs requires a range of investments. Given the devastation in Port-au-Prince and beyond, including the near-total destruction of many health centres and hospitals, over 20 percent of MSF’s expenditures as of October 31 were devoted to logistics, such as the rehabilitation or construction of medical facilities as well as the distribution of shelter materials and the building of latrines. Without this investment, medical staff would not be able to operate and patients would not receive the scope and quality of treatment MSF offers.

A further 15 percent of MSF’s expenditures were attributed to the medical category. This includes medical supplies and equipment such as drugs, vaccines, surgical kits, hospital equipment and maternity health supplies.

Given the medical nature of the intervention and the unprecedented level of deployment of national and international staff, both staff categories account for a significant amount of the expenditure (almost €32 million). They include all the related expenses for the more than 8,000 (mainly medical and logistics) staff that have participated in the intervention.

Because vast amounts of relief goods had to be brought into Haiti, transport and freight accounted for 19 percent of the total spending through October 31. Running costs includes expenses related to all MSF offices in Haiti.

All these expenditure lines contributed to achieve a number of emergency assistance activities. To give some examples, the amount dedicated to surgical and post-operative care amounted to €17.2 million ($22.7 million) through October 31, while €10.1 million ($13.3 million) were dedicated to maternal health and €11.7 million ($15.4 million) to the distribution of shelter and non-food items.
Looking Ahead

Before the catastrophe, 70 to 80 percent of Haitians could not afford healthcare. More than 70 percent of them were reported to be living on less than US$2 per day. Haiti’s healthcare system before the earthquake did not address the basic medical needs of the population in Port-au-Prince. Healthcare services are structured in three levels: a first level with over 600 health centres with and without beds and 45 community hospitals; a second level consisting of 10 departmental hospitals; and a third level made up of six university hospitals, five of them in Port-au-Prince.

These health-care structures are provided or supported by a multitude of actors from the public sector, the private for-profit sector, and the mixed and private non-profit sector. Although annual governmental expenditures on health per capita is more than US$60, and although a multitude of international, bilateral, and nongovernmental organisations are directly involved in supporting health-care provision and prevention, close to three quarters of the population still has insufficient or almost no access to health care services because they cannot afford the user fees applied in private for-profit, public, and private not-for profit health care services.

The effects of the earthquake on this already deficient health-care system were devastating. In the affected regions, more than 60 percent of the medical facilities were either severely damaged or totally destroyed. The main offices of the Ministry of Health and much of its material resources were also completely wiped out.

In the 12 months that have passed since the disaster, major gaps in health care provision remain throughout the capital. MSF’s operational budget projection for Haiti for 2011 is €46 million ($60.7 million) to maintain a network of 6 private hospitals with a total capacity of up to 1,000 beds in Port-au-Prince and to continue its support of two Ministry of Health hospitals.

Outside the capital, MSF continues to run its 120-bed private container hospital in Léogâne, focusing on secondary level care with trauma, pediatric, obstetric, maternal, orthopedic, and burn treatment services. Additionally, MSF is working to establish a foundation that
would create a public-private hospital in the capital in the years ahead. Another €7.5 million ($9.9 million) is projected to be required to continue cholera-related activities in Haiti in 2011. Beyond these projected activities, MSF will remain ready to respond to new emergencies in the country—as it does in all of the nearly 70 countries it operates in today.

MSF had already been present and active in the country for the past 19 years. It was therefore ready to respond when the disaster struck. And it is now prepared to do the work that will remain in the days, months, and years to come.

**Planned Projects**

MSF will focus its resources on the continued provision of emergency care for trauma, orthopedic and visceral surgery, as well as pediatric emergencies:

Land is being purchased for the construction of a new hospital in the industrial area of Tabarre. It will have 110-bed capacity and will act as a referral structure for emergency cases in the Cité Soleil and Martissant slums, providing pediatric, orthopedic, rehabilitation, and mental healthcare services as well.

The current medical facilities in Martissant, Choscal, and Bicentenaire are to provide treatment, stabilisation, and transfer of emergency cases.

The MSF container hospital in Léogâne will continue its focus on obstetric, trauma, and paediatric emergencies. As other NGOs move in with primary health care activities, the hospital’s outpatient department will close down or concentrate on specialised consultations. The goal is to find a solid partner who can take over the hospital in due time.

By January 2011, the inflatable hospital at Saint-Louis will be deflated, and the medical program—rebuilt with containers—can move to a more permanent structure of 120 beds in Drouillard.

MSF will turn over full responsibility for the Jacmel hospital to the Ministry of Health in January 2011.

Bicentenaire Hospital, an 80-bed facility in a stone structure, will continue its activities with a focus on emergency and pediatric care until at least the end of 2011.

**Emergency Obstetrics**

Emergency obstetrics and neonatal care will restart in the newly constructed container hospital in Delmas 33 that replaced the collapsed Hôpital Maternité Solidarité. This 135-bed maternity hospital now meets earthquake and hurricane resistance standards. The new facility will provide access 24/7 to free and high-quality emergency obstetric care for complicated pregnancies and deliveries.

MSF will provide access to prenatal consultations and follow-ups to patients with problems related to pregnancy, such as eclampsia, pre-eclampsia, pregnancy-related hypertension, and pre-existing hypertension. There will be post-natal consultations and follow-ups for patients who delivered in the maternity hospital.

MSF will offer voluntary counseling and testing for HIV to all women admitted to the Delmas 33 Hospital on the basis of their serologic and immune status, while establishing a referral system for those who test positive. All newborns who are ill and/or born premature at the Delmas 33 Hospital will receive neonatal care. MSF will hire more than 155 Haitian staff to run the hospital and extend training opportunities for medical residents from in Port-au-Prince.

**La Fondation Sant Se Afe Pam**

MSF is also working on a new proposal for a general hospital with a capacity of 212 beds, a training program for medical students and specialist doctors, and a long-term transition plan. With this in mind, MSF has set up a foundation which will involve partners from Haitian civil society, universities, and other sponsors.

Medical specialties will include orthopedics, general surgery, burn care, management of chronic pathologies in the acute phase—asthma, diabetes and hypertension, in particular—and functional rehabilitation. Most of the staff working in the hospital will be recruited in Haiti according to the skills and qualities necessary for the proper functioning of medical activities.
The management steering committee will be gradually appointed from staff recruited at the beginning of the project. To do this, they will receive appropriate training supported by MSF in collaboration with other partners. MSF will guide and financially support the start-up phase of this stand-alone Haitian foundation with the aim of leaving it to local management once it is sustainable.

**Tabarre Container Hospital**

Following the January 2010 earthquake, the response by various actors often (and understandably) focused on primary rather than secondary health care. However, trauma injuries are one of the major causes of morbidity and mortality in Haiti.

Surgery capabilities are needed, as are permanent structures in which to carry them out. MSF thus decided to create a container hospital that would bridge the gap between the emergency response and the longer-term response and would provide a variety of essential surgery services in a site that could be used by the city.

In second half of 2011, MSF will open a 110-bed container hospital in Tabarre, Port-au-Prince, with the aim of turning it into a trauma surgical centre for the city able to carry out 150 surgeries a month. Traumatology, orthopedic, and visceral surgery will be provided, along with emergency pediatric surgery and patient rehabilitation.

This will allow a rapid response to the needs existing in the time interval between emergency response and long-term answer. (Until the new structure opens, Sarthe Hospital is being used as a reference trauma centre.)
SF wishes to acknowledge the suffering of the Haitian people, who have endured so much during and after the earthquake. However, much of the affected Haitian population continues to live in very precarious circumstances. With the continued support of our donors and staff, MSF remains committed to addressing the needs in Haiti to the best of our ability in the coming years.

The earthquake in Haiti was an unprecedented disaster for the Haitian people and created enormous medical and non-medical needs. The aid response has been unable to fully meet these needs; throughout the year the assistance provided, whether for shelter, clean drinking water or cholera treatment, was not enough.

There is much about the international aid system that can be improved, and MSF also recognises that there are areas in which we ourselves can improve in terms of deploying our own resources, especially regarding shelter and preparing for mass casualties, as well as in voicing our concerns and engaging with others to improve the aid response. With the ongoing generous support of our donors and commitment of our staff, MSF is dedicated to using our experience in Haiti to prepare our actions in future emergencies.

Over the past year, MSF attempted to meet the most critical medical needs in Haiti. As in every context, we had to make choices on how we could best employ our expertise and resources, keeping in mind other critical needs and emergencies elsewhere in the world in 2010.

In the first phase, this was through trauma surgery and other emergency medical activities, along with shelter and water and sanitation activities. In the second phase, this was through post-operative, mental health, and primary and secondary health care services. When cholera broke out in October, we reoriented our activities to respond as robustly as possible to treat those affected, while keeping up our other programs as well.

In 2011, we will focus on running six hospitals and supporting two Ministry of Health hospitals. Unfortunately, more than one million people remain homeless in Haiti today. The shelter and water and sanitation services still do not meet the needs of the people and continue to create the conditions for future outbreaks of disease. Cholera is now expected to remain in the country for years to come. MSF will continue its response to cholera and stay vigilant in the face of other emergencies that unfold in the year ahead.