

Pivot staff distributes food essentials to one of thousands displaced by Ifanadiana District's most devastating cyclone season on record.



## QUARTERLY IMPACT REPORT

January 1 - March 31, 2022

Dear Pivot community,

As leaders of the data and research side of Pivot's work, we are pleased to present our second Quarterly Impact Report of the fiscal year.

In 2014, an initial round of data collection established a baseline from which we measure the impact of our work in Ifanadiana District over time. By returning to the same cohort of 1,600 households regularly, we track population-level change in health, wellbeing, and access to care. Our eagerly-awaited preliminary analysis of the 2021 data completed last month revealed improvements in under-5 and infant mortality rates in Pivot's catchment area, as well as in the coverage of essential interventions including prenatal care, facility delivery, and access to healthcare for ill adults. Join us for a virtual discussion on May 4th as we bring the recent longitudinal cohort analysis to life in our quarterly *Voices From the Field* panel.

As you followed, the quarter also entailed one of Madagascar's most intense cyclone seasons in recorded history. In less than a month, Cyclones Ana, Batsirai, and Emnati collectively displaced 3,000 people in Ifanadiana District, causing catastrophic damage to six health facilities, and destroying over 90% of the crops on which the majority of the rural population subsists. The destruction in Ifanadiana and surrounding districts drew national and international attention. In the process of providing round-the-clock response efforts, we deepened partnerships with organizations such as UNICEF, Médecins Sans Frontières (Doctors Without Borders), and the United Nations Development Programme, and were grateful for the extra support from you. We will revisit our interactive dashboard on the impact of the cyclones and Pivot's response during this week's panel.

We look forward to seeing you on [Wednesday May 4th at 12pm ET for Voices From the Field](#), as we join Executive Director Tara Loyd in discussion and answer your questions about the quarter.

In solidarity,

Bénédicte Razafinjato  
Director of Monitoring, Evaluation, Research & Learning

Andres Garchitorena  
Associate Scientific Director

## IFANADIANA DISTRICT

*In partnership with Madagascar's Ministry of Public Health, we are transforming Ifanadiana District's public health system into an evidence-based model for universal health coverage that can be sustained, replicated, and scaled.*

### Pivot's current support to the health system at each level of care:



District referral hospital<sup>1</sup>



Primary care health centers<sup>2</sup>

*15 receiving Pivot support*



Community health<sup>3</sup>

*175 community health workers (CHWs)<sup>4</sup>*



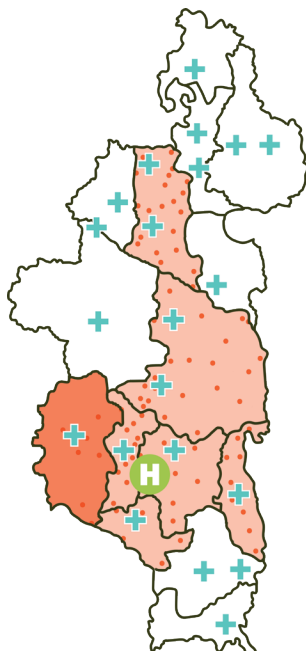
Enhanced community health

*Including case-finding and household-level care*



Community health sites

*80 structures where CHWs receive patients*



### Total District Population: 191,175

- Hospital catchment: 191,175
- Health center catchment: 160,219
- Community health catchment: 95,456  
– which includes –
- Proactive care catchment: 12,522

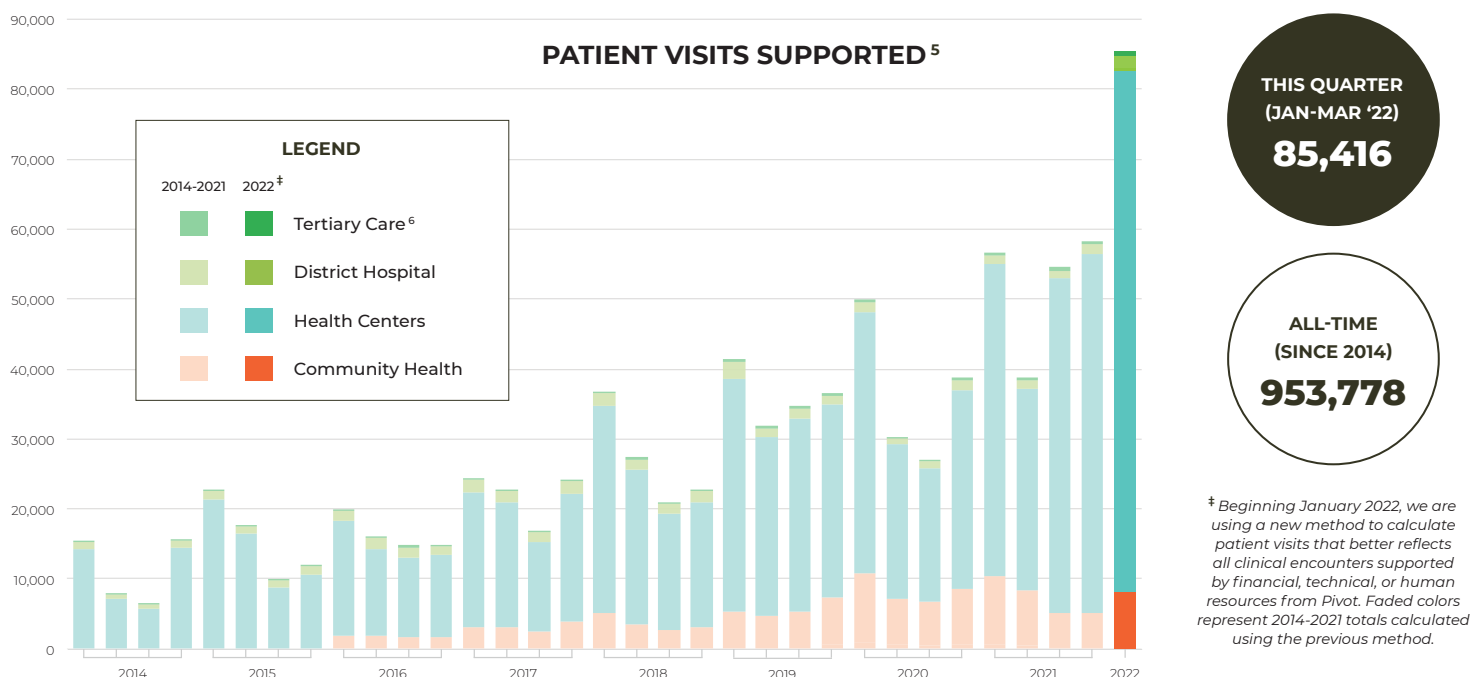
### Baseline Statistics (2014):

- 1 in 7 under-5 mortality
- 1 in 14 maternal mortality
- 71% of the population lives >5km walk from nearest health facility
- 49% of the population lives >10km walk from nearest health facility

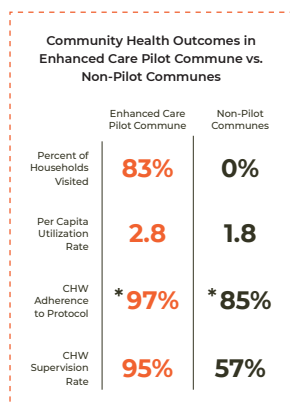
## HIGHLIGHTS & CHALLENGES

- Responded to the most intense cyclone season in Madagascar's recent history; **dispatched clinicians and essential medical supplies to shelters, provided logistical support and movement across the region, rapidly procured and distributed food and hygiene staples to victims of the storms, and raised awareness of increased infectious disease risk and prevention** among those displaced
- Delayed some Q2 plans in order to accommodate cyclone response, leading to an **earlier-than normal organization-wide FY22 planning reset** (typically done at the 6-month mark but done early this year to get back on track)
- Launched trainings for new "amis des jeunes" ("friends of youth") project to be piloted at 3 health centers with the aim of **empowering teens to access healthcare services**, with a focus on sexual and mental health
- Continued **development of maternal health protocol to improve quality of care** at the health center level with the guidance of a clinical mentor specialized in obstetrics
- **Established system for electronic referrals for specialized care**; began piloting the new system for urgent pediatric care and neurosurgery patients
- Joined national workshop to update and validate the **country-wide curriculum for training and protocol in the management of hypertension**
- In response to a **continued rise in HIV cases in six of Ifanadiana District's communes**, launched discussions to develop a mitigation plan coordinated across other infectious disease-focused efforts in the region
- Continued **high-level engagement in national community health workshops**, working with partners to revise the national strategy that will shape the future of community health nationwide; prepared to host national delegation to see our proactive care model in action (delayed twice so far in 2022 due to circumstances related to COVID and cyclones)
- **Carried out district-wide assessment of health facility infrastructure following cyclone season**, finding most sustained some amount of damage; launched rehabilitation work in conjunction with community efforts
- Initiated **psychosocial support groups for patients with diabetes** and their families aimed at managing the implications of chronic disease
- In preparation for the opening of a neonatal unit at the district hospital, **held twice-weekly protocol trainings for all relevant hospital clinicians; trained primary care providers in emergency obstetrics** to ensure capacity at the health center level for provision of care and referral
- Participated in **national-level malaria and malnutrition management meetings**
- Conducted **evaluation of human ambulance project** to understand the challenges and evolve the initiative
- **Met with USAID's ACCESS program team to discuss plans for continuing mobile technology support** after their five-year grant term comes to an end in 2023
- Thanks to collaboration with Partners In Health, received subaward from Unitaid for the "BRING O2" project, aimed at improving oxygen access in health facilities across Madagascar; this marks **Pivot's first programmatic activity to be carried out on a national scale**

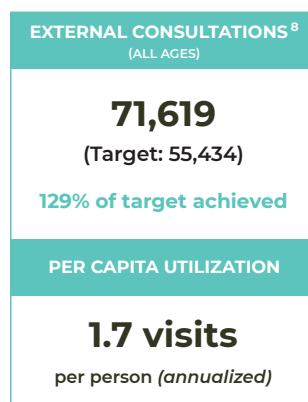




#### Community Health



#### Health Centers



#### District Hospital



\* Data reporting partially interrupted by cyclone recovery efforts; outcomes indicated include all available data at the time of publication, but are missing data for at least one month of the review quarter.

## CLINICAL SPOTLIGHT: MOBILIZING CLINICIANS IN SUPPORT OF CYCLONE VICTIMS

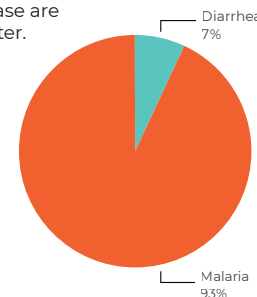


Following a destructive cyclone, spikes in communicable disease are common due to compromised access to clean water and shelter.

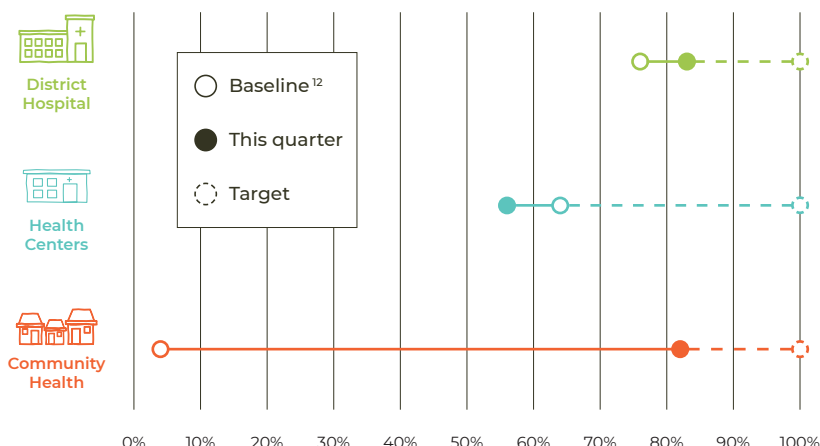
In the weeks following the storms that passed through Ifanadiana District this quarter, **Pivot collaborated with the district health office to organize mobile clinics, visiting each emergency shelter site** to assess victims' health, make referrals to healthcare facilities, sensitize the population about heightened health risks, and conduct surveillance for infectious disease outbreaks. In one instance, of the 125 people seen just after the passage of Cyclone Batsirai (the most severe storm of the season), 93% tested positive for malaria, while all the rest of the patients consulted presented various illnesses such as simple diarrhea and cough, as seen in the chart to the right.

In addition to our clinical response, Pivot took action alongside local partners to procure and distribute more than 2,300 food kits (rice, beans, oil, salt) and over 440 prevention kits (soap, mosquito nets, blankets) across nine of the district's communes to support the needs of hundreds of displaced families.

For more on the aftermath of Cyclone Batsirai and Pivot's response, be sure to check out this [interactive dashboard](#), built by Bénédicte Razafinjato and our M&E team.



## AVAILABILITY OF ESSENTIAL MEDS<sup>10</sup>



## CONTINUUM OF CARE



**29%**  
transferred  
by Pivot  
ambulance

**30%**  
transferred  
by taxi bus  
with transport fees  
covered by Pivot

**41%**  
by other mode  
of transport  
on foot, or by car,  
tractor, stretcher, etc.

## STAFF

- **248** total Pivot employees
  - **98%** Madagascar-based
  - **97%** Malagasy
  - **10:3** female:male leadership
- **299** MOPH personnel supported
  - **65** district hospital staff
  - **59** health center staff
  - **175** community health workers



## SCIENCE SPOTLIGHT: PAUL FARMER'S RADICAL INTELLECTUAL VISION

**It's not an overstatement to say that, without Paul Farmer, Pivot wouldn't exist.** In his unexpected passing this February, we lost a hero, a mentor, a founding Pivot Board member, a dear friend, and a member of our family.

"He was beloved as a medical doctor who cared for the poor and influenced countless others to do the same," writes Matt Bonds, Pivot Co-Founder & Scholar, who reported to Paul in his role at Harvard Medical School's Department of Global Health & Social Medicine. In a reflection published on the *Science Magazine* blog in March, Matt continues saying, **"His moral vision was tied to a quietly radical intellectual one: Through service, scientists can help make a fragmented world more whole."**

"Paul had an intellectual fearlessness [...] and as a result was also one of the great and improbable complex systems thinkers of his time. Rather than reducing problems to smaller parts, he was constructive, integrative, and radically inclusive," Matt writes. **Paul created a movement, and brought it to life through deep and meaningful relationships.** From patients in Haiti, to taxi drivers in Boston, to physicians in Madagascar, he recognized the humanity in everyone, and made you feel it.

You can read Matt's full reflection on ["Paul Farmer's radical intellectual vision"](#) on the *Science Magazine* blog.



Katie Kralievits, Paul's Chief of Staff, shared the following anecdote (and the photo to the left) with a circle of colleagues from the final days of Paul's life, which he spent in Butaro, Rwanda. It not only echoes the sentiment of Matt's reflection on Dr. Farmer's legacy, but also the unshakable optimism and generosity of spirit that Paul brought to his work for four decades:

"He was running late for a commitment [...] and I was tasked with going to find him and accompany him to where he needed to be. When I turned the corner to where I knew Paul was, I saw him climbing up the hill, with the view of the Muhabura volcano in the background, and he had his arms outstretched wide. [...] In that moment, I congratulated him on all he had done to make his dream of a medical school in rural Rwanda a reality. I told him, 'You did it!' He quickly replied, 'No, we all did it. And it's just the beginning!'"

## MATERNAL & REPRODUCTIVE HEALTH

This quarter, we saw a **99% maternal survival rate**<sup>12</sup> at Pivot-supported health facilities.

In addition to this, we achieved:



SINCE 2014, PIVOT HAS SUPPORTED **11,307** FACILITY-BASED DELIVERIES

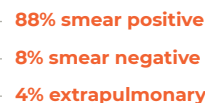
\* Due to delays in field data collection, this quarter's maternal survival rate reflects hospital-level data only



Associate Medical Director Luc Rakotonirina facilitates conversation between a family receiving Pivot support and Academy Award winner Juliette Binoche during production of UNESCO-supported film "Making Pandemics." Coordinated by founding conservation partner Centre ValBio, Pivot's involvement in the film is an opportunity to illustrate the link between human and planetary health.

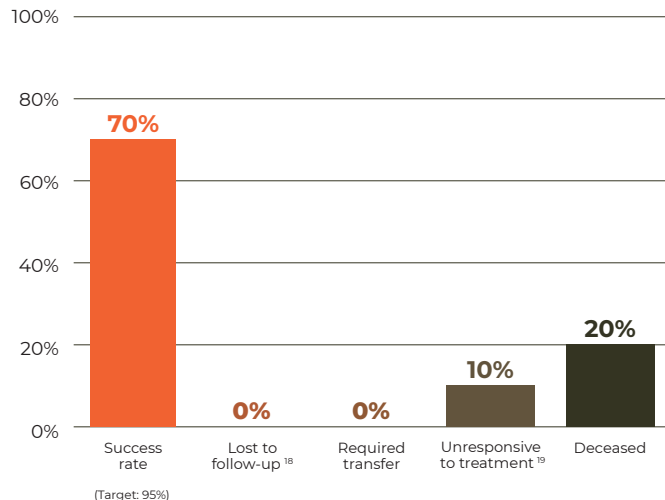
## TUBERCULOSIS

This quarter, **82 patients** were enrolled for TB treatment.



### Cohort Outcomes

for **109 patients** completing 1 year of treatment:

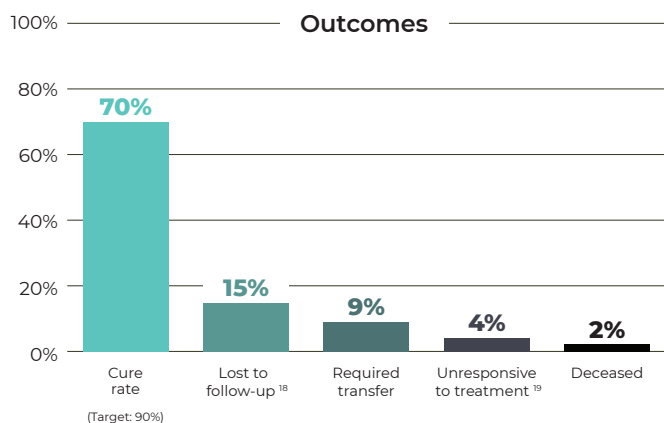


## MALNUTRITION



### HEALTH CENTERS

- 96 children** began treatment for acute malnutrition<sup>16</sup>
- 66 children** were discharged from treatment



### DISTRICT HOSPITAL

- 24 children** were admitted for treatment of severe acute malnutrition with complications<sup>17</sup>
- 23** were successfully discharged from intensive treatment (either cured or referred to a health center for continued care)

## SOCIAL SUPPORT

**504** social kits (food and household essentials) distributed to vulnerable patients at the district hospital

**89** psycho-social sessions provided for hospital patients

**2,311** reimbursements provided for transport to/from care

**34,454** meals served to hospitalized patients and their *accompagnateurs*<sup>20</sup>





## PATIENT SPOTLIGHT: TSARASOA

Tsarasoa lives with her husband and two young children in the fokontany (village cluster) of Ambetaninena. During Cyclone Batsirai, which made its way over Ifanadiana District in early February, the family's house was completely destroyed: category 3 winds blew the roof off, heavy rains knocked down the walls, and they were only able to salvage a handful of personal belongings, including a few of their chickens. Fortunately, the family was able to weather the storm with neighbors, and sustained no personal injuries.

After the storm, fellow community members advised them about the emergency accommodation site made available for those whose homes had been lost or damaged overnight. Not long after arriving, Tsarasoa began to experience dizziness and the onset of a headache. Though these were symptoms of an illness that she had most likely contracted before arriving at the shelter, it meant she was at risk of spreading infection to others sharing the emergency lodging quarters.

When the mobile clinic of Pivot's primary care clinicians arrived, Tsarasoa joined the queue to receive a health consultation, where she was observed to have fever, chills, dehydration, pallid skin, and unstable blood pressure – all symptoms of malaria, which was confirmed on the spot thanks to a rapid diagnostic test.

The severity of Tsarasoa's condition required urgent care and monitoring, so she was referred to the district hospital where she was admitted for treatment of severe malaria. She was discharged within 24 hours. Tsarasoa and her family have since returned to their fokontany, joining community-driven efforts to rebuild and rehabilitate the homes, including theirs, damaged by Batsirai.

## MORE FROM THIS QUARTER:

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### Marking One Year of Mobile Technology for Community Health Workers

In March 2021, partnering with the Ministry of Public Health, Pivot launched implementation of mobile application CommCare for patient management and data collection at the community level. One year in, Karen Finnegan (Managing Director of Pivot Science) and Mariot Rasolonjatovoarinoro (Information Systems Manager) share reflections on the impact of mobile technology.

CLICK TO  
READ

### Staff Spotlight: Jeannot Andriamanantena

With a background in education and seminary training, Jeannot brings a unique energy to his role as driver. Now six years into his time with Pivot, his inspiring dedication to the organization exhibits his belief not only in our mission, but also that everyone has a part to play in advancing it.

CLICK TO  
ACCESS THE  
STUDY

### New Malagasy-led study on child immunization coverage and inequalities in Ifanadiana District

In this timely study about vaccination published in *BMJ Global Health*, Elinambinina Rajaonarifara et al. find that “investment in stronger primary care systems can improve vaccination coverage, reduce inequalities, and improve the timeliness of vaccination via increases in routine immunisations.”

**Register to join us May 4, 2022 at 12pm ET for *Voices From the Field*, a live panel aimed at bringing each QIR to life, featuring members of our Madagascar-based staff.**

## DEFINITIONS

**Pivot full support (for health center):** a health center that receives Pivot technical and financial support to ensure that: it is staffed at or above Ministry of Public Health standards; fees for patient visits are covered; facility infrastructure is improved; and the data system is supported through data quality assessments and feedback

**Pivot partial support (for health center):** a health center that receives Pivot financial and technical support to hire staff, perform routine data collection, and address urgent district-wide or facility-specific issues as needed

1. **District hospital:** a secondary health facility offering inpatient care and specialized clinical services (including dentistry; emergency obstetric care, including cesarean sections; laboratory and radiology; infectious disease treatment; and inpatient malnutrition for children) for the full district population
2. **Health center:** a health facility offering primary care services for the population of a geographically-defined commune, ranging from 4,500 to 20,800 people
3. **Community health:** disease prevention and health promotion conducted by community health workers (CHWs) outside of health facilities and within a community
4. **Community health worker (CHW):** a community member trained to provide care for common illnesses in their communities and to refer patients in need of higher levels of care to health centers; patients served are primarily pregnant women and children under five
5. **Supported patient visit:** a patient visit to community health worker, health center, or hospital for which costs of care are reimbursed by Pivot
6. **Tertiary care:** specialized medical care provided at regional or national health facilities outside of the district
7. **Per capita utilization:** an annualized rate of utilization calculated using the total number of quarterly community or health center visits multiplied by four and divided by the total catchment area population; only fully supported health centers are included in the calculation
8. **External consultation:** new and follow-up outpatient visits with a clinician at a fully-supported health center or hospital
9. **Bed occupancy:** percentage of total hospital beds available that are occupied by admitted patients
10. **Essential medicines:** a subset of total medicines supplied (7 at the community level, 15 at health centers, and 31 at the district hospital) that, informed by international standards, are necessary for providing basic health care
11. **Baseline [availability of medicines]:** the assessment of the availability of essential medicines before Pivot intervention, which was 2018 at the district hospital, 2014 at health centers, and 2015 at the community level
12. **Maternal survival rate:** the percentage of health center births in the last quarter for which the mother was discharged alive following delivery
13. **Contraceptive coverage rate:** the percentage of women between the ages of 15-49 in Pivot's catchment area who use any method of birth control as documented at the health center
14. **Facility-based delivery rate:** the percentage of the estimated number of infants expected to be born in the review period who were born at a fully-supported health center
15. **Antenatal 4-visit completion rate:** the percentage of women who gave birth at a fully-supported health center who attended at least four antenatal care visits prior to delivery
16. **Acute malnutrition:** weight for height that falls between -2 and -3 standard deviations below the mean weight for height according to international growth standards
17. **Severe malnutrition:** weight for height below -3 standard deviations below the mean weight for height according to international growth standards
18. **Lost to follow-up:** a patient whose treatment has been interrupted and who has not completed a program of care
19. **Unresponsive to treatment:** a patient whose health outcomes do not improve with treatment for specified disease
20. **Accompagnateur:** a family member, friend, or community member who accompanies a patient to seek care; often to cook, clothe, or otherwise provide necessary day-to-day support for the patient