

Dear Pivot community,

We are pleased to present Pivot's third Quarterly Impact Report of the fiscal year.

I am proud to share that, as of this quarter, Pivot has supported over one million patient encounters in Ifanadiana District since 2014. Having been on the ground in Ranomafana during Pivot's earliest days, I am inspired to see how the organization has gained momentum thanks to nine years of hard work by an incredibly dedicated staff and partners.

As one of the first members of Pivot's Board of Directors, this quarter marked a new chapter of governance as I accompanied my fellow Steering Committee members on our first visit to the US as a group. Normally based in Madagascar's capital, our objective was to spend this trip deepening our connections with partners and supporters in the northeastern US. Despite COVID interrupting some of these plans (including canceling Pivot's first in-person fundraiser since before the pandemic), it was an honor to experience the ways in which members of the Pivot community showed up to host our delegation in Boston and New York. Many thanks, on behalf of myself and my Malagasy colleagues, to those of you who made the time to welcome us so kindly and meaningfully.

Meanwhile, on the ground in Madagascar, as response to the aftermath of the recent cyclone season continued, our team returned to their regular programmatic priorities, which included the launch and/or expansion of a number of new services across Ifanadiana District (see details in the *Highlights & Challenges* section on the next page). Pivot also participated as a technical and financial partner in the evaluation of the Ministry of Public Health's recent UHC (universal health coverage) pilot – implemented in a commune outside of Pivot's intervention – designed to test a new system for health financing. As the study prepares the MoPH for taking steps toward national-scale UHC, it has positioned Pivot in an advisory role, able to make recommendations for the future health financing system that includes financial protections for the population.

As always, we hope the report that follows serves as a useful tool for you to engage with our work, as we use it to foster our own transparency and accountability. Thank you for your continued partnership.

In solidarity,

Benjamin Andriamihaja

Senior Technical Advisor & Member of the Board Steering and Executive Committees

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 1



Primary care health centers ²
15 receiving Pivot support



Community health ³

174 community health workers (CHWs) 4



Enhanced community health

Including case-finding and household-level care



Community health sites

79 structures where CHWs receive patients

→ 2 completely destroyed by Feb'22 cyclones



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

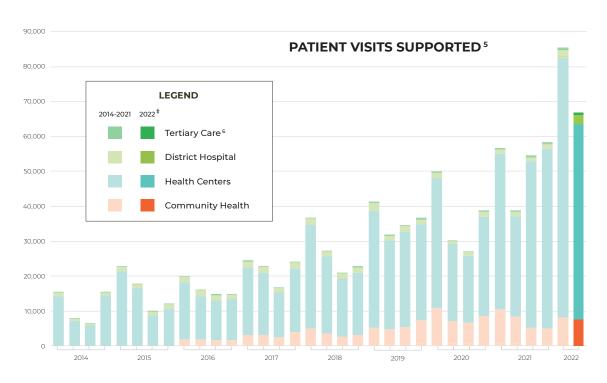
• 71% of the population lives >5km walk from nearest health facility

• **49**% of the population lives >10km walk from nearest health facility

HIGHLIGHTS & CHALLENGES

- Established a neonatal unit at Ifanadiana District Hospital, now one of the only district-level hospitals in Madagascar with the capacity to offer a higher level of care to newborns with complications
- Contributed to to the process of updating national protocols and training curricula for noncommunicable diseases including diabetes, hypertension, stroke, cancer, and chronic respiratory disease
- Installed an ultrasound machine donated by the DAK
 Foundation at the district hospital, introducing the capacity for echocardiography and facilitating a broader spectrum of cardiological care
- Reached a 53% facility-based delivery rate at primary care centers across the district, surpassing the national target of 40%; a result of targeted efforts to improve maternal and reproductive health outcomes
- Reinforced the intrahospital referral system to ensure patients are connected to psychosocial support services, including focus groups organized for patients and families affected by chronic disease
- Participated in central-level HIV conference and acquired authorization to use GenXpert for testing in Ifanadiana
- Welcomed a **central-level delegation to assess Pivot's patient reimbursement system**, leading to two key
 discussions: 1) optimizing district-level pharmacy and supply
 chain protocol, and 2) developing an improved strategy to
 ensure financial protection for patients

- Responded to an acute health crisis in Sandrasaty commune, taking targeted action to mitigate an uptick in infectious disease and child malnutrition caused by compromised water sources and food insecurity in the aftermath of the devastating cyclone season (MORE ON PAGE 6)
- Supported the MoPH's measles vaccination campaign, providing a cadre of Pivot healthcare workers to serve as vaccinators, and distributing Vitamin A, a deficiency of which is a recognized risk factor for severe measles
- Hosted Partners In Health's BRING 02 project lead, Dr.
 Paul Sonenthal, to consult with Pivot's branch of the one-year initiative to improve oxygen access across the country
- Extended malnutrition treatment services to an additional commune, launching with a mass screening to identify patients, notify the population of the service, and supervise patient intake to ensure high-quality clinical management
- Inaugurated a new maternal waiting home to promote safe deliveries in rural commune Ambohimanga du Sud
- Welcomed representatives from the Gould Family
 Foundation who, with Pivot and the MoPH, assessed
 and established a plan to meet Ifanadiana District's
 biomedical equipment needs in order to improve outcomes
- Received representatives from the MoPH and USAID ACCESS to observe and evaluate mobile technology in action, marking one year since CHWs began using the app in Ifanadiana District; their resulting assessment highlighted strong motivation, skills, and accuracy among CHWs



THIS QUARTER (APR-JUN '22)
66,694

ALL-TIME (SINCE 2014) 1,020,472

[‡]As of January 2022, we are using a new method to calculate patient visits that better reflects all clinical encounters supported by financial, technical, or human resources from Pivot. Faded colors represent 2014-2021 totals calculated using the previous method.



Community Health

VISITS (CHILDREN UNDER-5)		
7,457		
(Target: 6,761)		
110% of target achieved		
PER CAPITA UTILIZATION 7		
1.8 visits		
per child under 5 (annualized)		

Community Health Outcomes in Enhanced Care Pilot Commune vs. Non-Pilot Communes Enhanced Care Non-Pilot Pilot Commune Communes		
Percent of Households Visited	90%	0%
Per Capita Utilization Rate	2.8	1.7
CHW Adherence to Protocol	97%	94%
* CHW Supervision Rate	93%	79 %

^{*} Excludes data from May, when community health supervisors were occupied by supporting a COVID-19 vaccination campaian.

EXTERNAL CONSULTATIONS ⁸ (ALL AGES)
52,517
(Target: 69,293)
76% of target achieved
PER CAPITA UTILIZATION
1.3 visits
per person (annualized)

Health Centers



2,467
(Target: 1,300)

190% of target achieved

HOSPITALIZATIONS	BED OCCUPANCY
630	49 %
(Target: 594)	(Target: 58%)

CLINICAL SPOTLIGHT: INFORMING NATIONAL PROTOCOL FOR NONCOMMUNICABLE DISEASE

Over the course of Q3, Pivot participated in a series of central-level workshops to update national protocols and training curricula for the management of noncommunicable disease at the primary care level.

Pivot's Medical Director, Dr. Giovanna Cowley, as well as Manager of Noncommunicable Disease, Dr. Fanja Rasoanaivo, provided a voice for the rural regions of Madagascar, where health system needs are often vastly different from those of cities such as the capital (where all other workshop participants hailed from). Speaking from lived experience about the specific, complex challenges of managing NCDs in Ifanadiana District, they advocated for updates to national policy that would better support supply chain management, diagnostic capacity, and quality of care in rural districts.

This marks the first time that Pivot has contributed substantially to the development of health protocols that will be disseminated on a national scale. "It's one thing to have strong protocols, but another to ensure that they're actually implementable in all settings," explained Giovanna, adding: "This was a huge win for health systems strengthening in Madagascar."



Since the launch of Plvot support for noncommunicable disease management in Ifanadiana District, Pivot has supported MoPH screening campaigns for diabetes, hypertension, and more.

AVAILABILITY OF ESSENTIAL MEDS 10 Baseline 12 This quarter Target Target O% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

CONTINUUM OF CARE



25% transferred by Pivot ambulance **34%** transferred by taxi bus

with transport fees covered by Pivot 41% by other mode of transport

fees on foot, or by car, ivot tractor, stretcher, etc.

STAFF

254 total Pivot employees

98% Madagascar-based

ightarrow **97%** Malagasy

10:3 female:male leadership

301 MoPH personnel supported

→ 71 district hospital staff

ightarrow **56** health center staff

> 174 community health workers



SCIENCE SPOTLIGHT: MADAGASCAR RESEARCH TEAM MEMBERS VISIT HARVARD MEDICAL SCHOOL



Dr. Felana Ihantamalala (second from the left) and fellow members of the Pivot staff and board gather outside of Harvard Medical School during their visit to Boston in May.

Madagascar has formidable geographic barriers to basic health services for the majority of the population. Among Pivot's strengths are unique data systems, which combine population-based household data, health management information systems, and geospatial data, cumulatively serving a critical function in understanding the impact of our programs and how to improve health system design based on changes in access and quality of care.

Central to this data strategy is the work of Pivot Science researchers Dr. Felana Ihantamalala and Dr. Andres Garchitorena, whose detailed participatory mapping exercises and analyses have informed Pivot's approach to ensure access to care in Ifanadiana District. Felana, whose research is primarily based in the field, is co-mentored by Andres as well as Dr. Matt Bonds, who is a Pivot co-founder, Pivot Scholar, and on faculty at Harvard Medical School (HMS) Department of Global Health and Social Medicine.

This May visit marked Felana's first opportunity to visit HMS in person. Joining the delegation of Board Members visiting the US for some of their activities (detailed on page 1), Felana and Andres used their time in the US to connect with peers at HMS, Partners In Health, and Brigham & Women's Hospital, all of which were instrumental in Pivot's founding and continue to collaborate with both our operations and research teams today.

MATERNAL & REPRODUCTIVE HEALTH





And maternal survival rates 12 were:

100%

100%

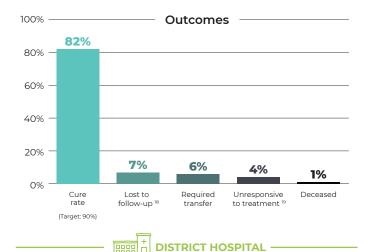
at the district hospital

across health centers

MALNUTRITION

HEALTH CENTERS

- 164 children began treatment for acute malnutrition 16
- 152 children were discharged from treatment



- 18 children were admitted for treatment of severe acute malnutrition with complications ¹⁷
- 20 were successfully discharged from intensive treatment (either cured or referred to a health center for continued care)



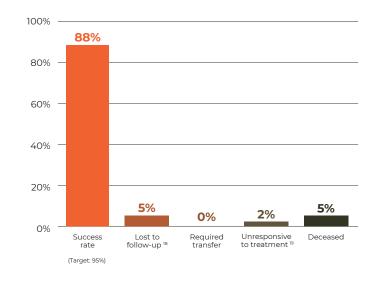
TUBERCULOSIS

This quarter, 130 patients were enrolled for TB treatment.

85% smear positive
10% smear negative
5% extrapulmonary

Cohort Outcomes

for 42 patients completing 1 year of treatment:



SOCIAL SUPPORT

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

psycho-social sessions provided for hospital patients

4.114 reimbursements provided for transport to/from care

meals served to hospitalized patients and their accompagnateurs 20



PATIENT SPOTLIGHT: ANGELINE

Following the early-2022 cyclone season, thousands of Ifanadiana District's residents faced new challenges ranging from homelessness to food insecurity and heightened risk of infectious disease. Sandrasaty, a village of about 1,500 people located about 7 kilometers from the nearest health facility, was among the communities that suffered the worst loss in both infrastructure and crops. Within a month of the strongest storms having passed, cases of malaria and diarrhea had massively increased in Sandrasaty and took the lives of ten people, with many other villagers – adults and children alike – experiencing similar symptoms as those who had died.

Community Health Worker Marcellin, who has been serving this community since 2018, alerted Pivot about the acute health crisis, and a coordinated response was launched in early April. From that first visit onward, Pivot teams were on site at least once a week to coordinate with surrounding villages around the construction of community latrines, mass testing and treatment for malaria, distribution of anti-parasitic drugs, and treatment of 13 children diagnosed with severe acute malnutrition.

Julia was among the mothers who arrived seeking support for her child on the day that Pivot arrived to respond to the crisis. Her daughter Angeline, at the age of four and measuring about 35 inches tall, weighed only 9.4kg (about 20lbs) and was one of 13 children diagnosed with severe acute malnutrition. After six weeks of treatment, she reached her target weight of 11.3kg (about 25 lbs) in early June and was discharged along with five other children who had been enrolled in treatment with her, while the others continued well on their way to recovery.

By late June, the community managed to build 3 public latrines, the diarrheal epidemic was overcome, and a collaboration with Analamarina Health Center was underway to ensure the continuity of the care for the remaining malnourished children.



MORE FROM THIS QUARTER:



Satellite Technology Launches to Strengthen Information Systems in Ifanadiana District

To address the persistent challenge of information-sharing via weak networks across most of rural Ifanadiana District, Pivot is working in partnership with the Ministry of Public Health and the Ministry of Telecommunications to implement satellite technology at Pivot-supported facilities.



Staff Spotlight: Fanja Ravaonjanahary

As a member of Pivot's HR team since 2015, Fanja has played an integral role in building and supporting our 250-person team in Madagascar. Fittingly, this "Spotlight" is the first outcome of a new process by which the entire staff (rather than just leadership) were invited to nominate a colleague to be featured.



Board Steering Committee Makes Connections in the US

As discussed by Board Member Benjamin Andriamihaja in the opening letter of this report, this May marked the first time that our Steering Committee visited the US as a group. This overview of their trip – as told through photos and reflections – illustrates their experience connecting with Pivot's US-based community of peers, partners, and supporters.



DEFINITIONS

- 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 facility births and miscarriages in the last quarter after which the mother was discharged alive
- 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