

Health center security guard helps an incoming visitor wash her hands at the handwashing station, which all visitors – patients, staff, accompagnateurs, etc. – must use before stepping onto the premises.



QUARTERLY IMPACT REPORT

Quarter 1, 2020 (January 1 - March 31)

Dear PIVOT community,

Following what has been a uniquely challenging first quarter for us and the rest of the world, we are proud to share with you our first Quarterly Impact Report of 2020, and hope it reaches you in good health.

While the virus indiscriminately crossed borders across the globe even before the start of the new year, Madagascar didn't confirm its first case of COVID-19 until March 20th. With extra lead time to prepare for the possibility of an outbreak, the national government was able to proactively restrict international travel, implement isolation measures for suspected cases, and limit domestic movement. As we write this letter in May, just over 400 cases have been confirmed in Madagascar. However, as access to reliable testing remains limited and therefore case detection capabilities low, we continue every effort to curtail – and also prepare for – a larger outbreak.

Working alongside the Ministry of Public Health at both the national and district levels, our teams have mobilized to staff roadside health check points, implement new infection control protocols at all levels of care, leverage partnerships to procure essential supplies, and pursue a potential opportunity to establish a regional testing laboratory with our partners at Centre ValBio. Meanwhile, our Monitoring & Evaluation and Research teams have been using our extensive data analytics capabilities to develop mathematical models and other tools to better understand and predict how COVID-19 behaves in settings like Madagascar.

Ensuring a strong and resilient public health system is our core mandate, and that includes pandemic response. So, we're rising to the challenge of combating this public health crisis using all of the means we have while carrying our regular work forward, making certain that every patient has uninterrupted access to the quality care they need today and every day.

We hope this report serves as a useful tool for you to engage with our work as we use it to foster our own transparency, accountability, and curiosity. Thank you for your ongoing partnership and, as always, we welcome your questions and feedback.

In solidarity,


Tara Loyd
Executive Director


Matt Bonds
Co-Founder & Scientific Director

IFANADIANA DISTRICT

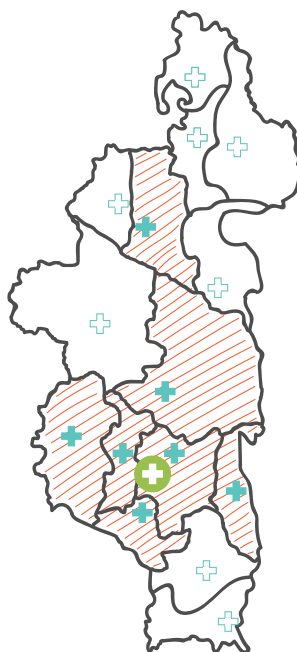
In partnership with Madagascar's Ministry of Public Health, we are transforming Ifanadiana District's public health system into an evidence-based model for universal health coverage that can be sustained, replicated, and scaled.

Total District Population: 182,640





Current Catchment Area: 80,062

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



Facilities Supported:

-  1 district referral hospital
-  7 health centers receiving PIVOT's full model support package¹
-  8 health centers receiving partial support² (to receive full support by 2022)
-  59 community health sites (located throughout shaded communes)

— Q1-2020 HIGHLIGHTS —

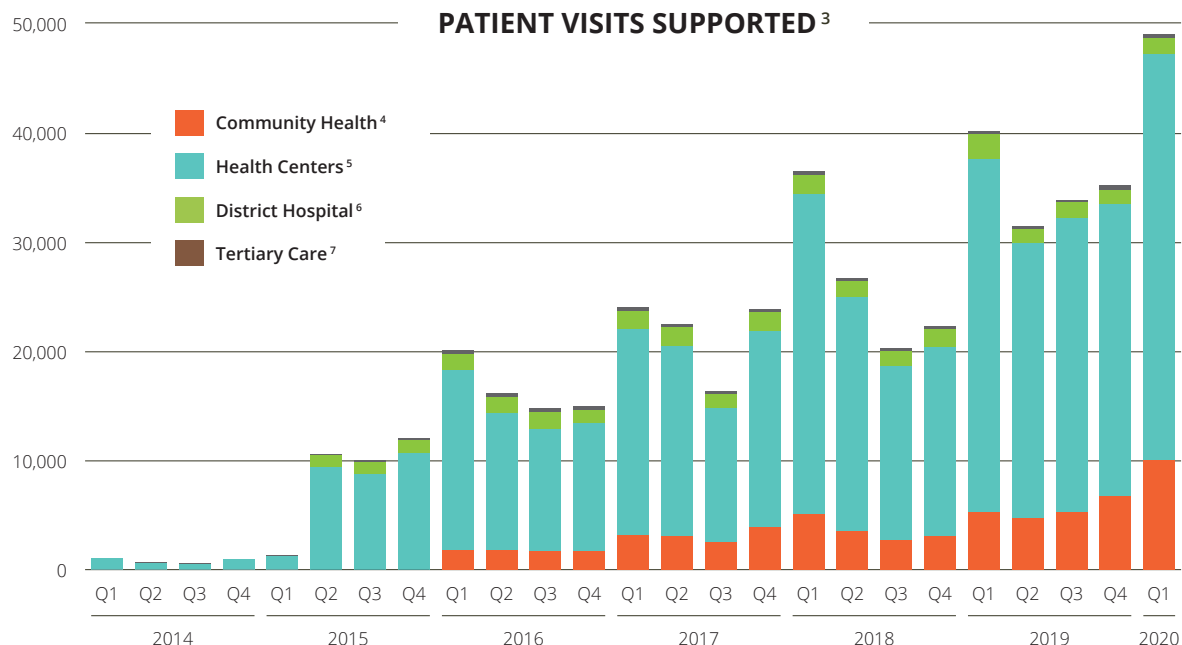
- Finalized **key agreements with the Ministry of Public Health** to move forward plans to roll out a universal health coverage government pilot.
- Completed the **second quarter of our community health pilot**, which resulted in a 285% increase in utilization rates as well as improved quality of care. (See next page for details.)
- Started **mobile antenatal care visits at the community level** in order to increase the number of antenatal care and deliveries at the health facilities.
- **Dispatched an ambulance and team** to the capital city of Antananarivo to support the government's COVID-19 response.
- Launched **preparation for a local COVID-19 outbreak** by working with partners and regional health officials to develop facility-based protocols, support public containment efforts, and raise community awareness about key prevention behaviors.
- Mobilized our team of research modelers **to better understand the epidemiological behaviors of COVID-19** and began implementing use of an app for COVID-19 case management.
- Finished filling roles necessary for a **complete Senior Management Team**, now majority Malagasy and female, to lead the 199-person site-based staff.

— Q1-2020 CHALLENGES —

- Like many countries around the world, Madagascar has been facing **shortages of essential supplies** needed to respond safely and effectively to the COVID-19 pandemic. Thanks to the partnership of various peers and funders, we are working to secure materials to be distributed to our teams and our governmental counterparts.
- Plans to **expand to more communes have been delayed** due to redeployment of clinical staff to facilities amid preparations for an outbreak, as well as travel restrictions that grounded our infrastructure teams.
- Due to restrictions around public gatherings, **the opening of several community health sites has been postponed**. We are working with local officials to ensure their use despite the inability to properly inaugurate them, which is a Malagasy custom that is considered essential before the use of any new structure.
- A drop in success rate of our malnutrition program in some health facilities has been linked to the issue of a seasonal **rise in water levels stranding some communities on the opposite side of the river from care**. We're exploring avenues for partnership with groups that can address the need for sustainable river crossings.

ALL-TIME
(SINCE 2014):
481,961

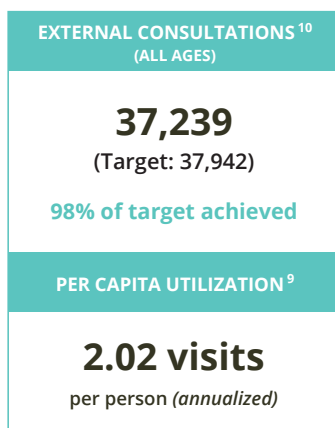
THIS QUARTER
(Q1-2020):
49,164



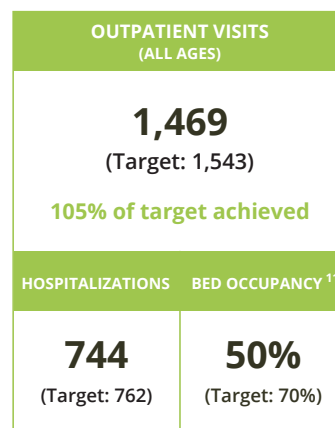
Community Health



Health Centers



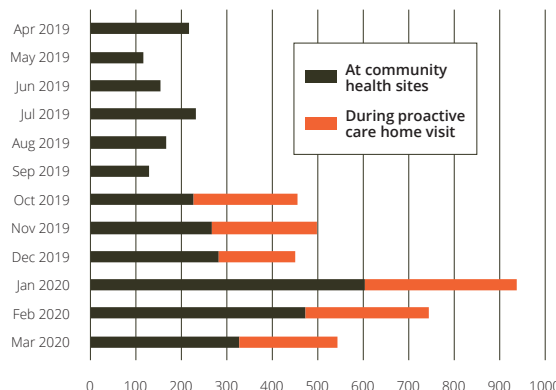
District Hospital



PROACTIVE CARE PILOT UPDATE

In Q4 of 2019, we launched a pilot in our flagship commune of Ranomafana to elevate the impact of our community health activities. It includes more CHWs per capita, improved compensation policies, and designated walking circuits for CHWs to proactively visit households seeking patients. This marks a fundamental shift toward empowering and supporting CHWs as they respond to common health needs in the most remote parts of the areas we serve. To the right are some key 6-month outcomes.

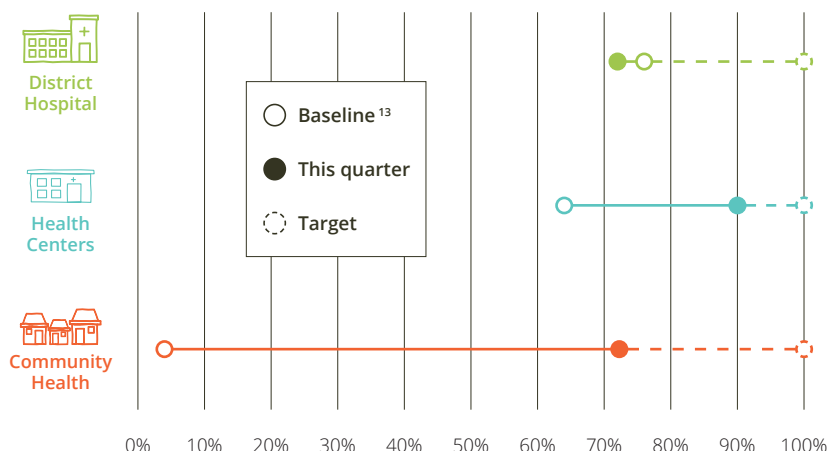
Under-5 Consultations by CHWs in Pilot Commune



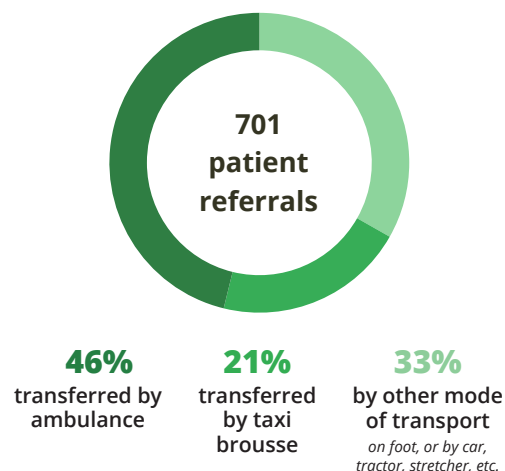
Comparison of 6-Month Community Health Outcomes, Pilot vs. Non-Pilot Communes

	Proactive Care Pilot	Non-Pilot Communes
CHW Adherence to Protocol	95%	59%
Percent of Households Visited	85%	0%
Per Capita Utilization Rate	4.13	2.74
CHW Supervision Rate	92%	62%

AVAILABILITY OF ESSENTIAL MEDS ¹²



CONTINUUM OF CARE

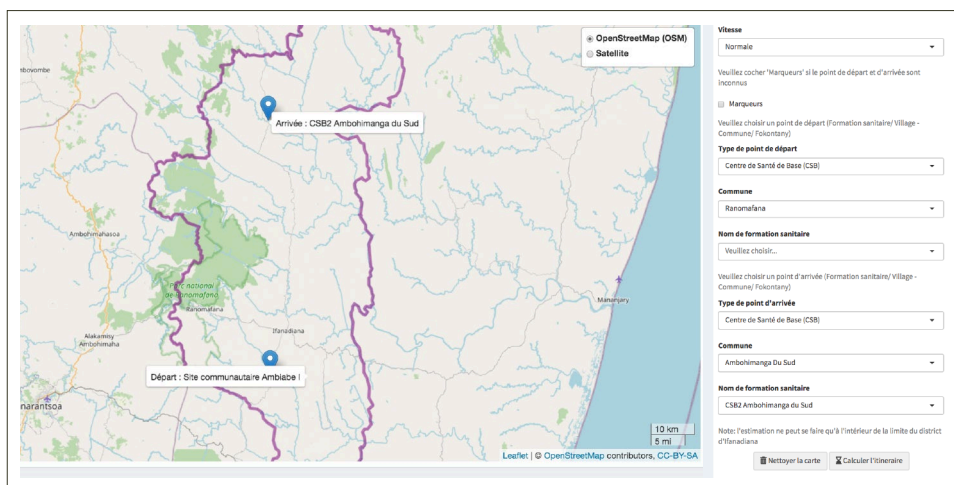


STAFF

- **210** total PIVOT employees
 - **98%** Madagascar-based
 - **95%** Malagasy
 - **70:30** female:male leadership
- **248** clinical personnel supported
 - **44** district hospital clinicians
 - **32** health center clinicians
 - **172** community health workers



INNOVATION SPOTLIGHT: "WAZE" FOR COMMUNITY HEALTH



To address geographic barriers faced by many of the people we serve, PIVOT's research team has developed a data-driven navigation tool for CHWs to reach their patients more efficiently. **LALANA** (which means "path" in Malagasy) is a mobile app that maps every walkable footpath in the Ifanadiana District, providing optimal routes, travel distance and time estimates between any two points in the region. Congratulations to PIVOT research team members Mauricianot Randriamihaja and Felana Ihantamalala for their work developing this innovative, open-source solution to overcome geographic barriers and improve the impact of community health workers in Madagascar and beyond.

MATERNAL & REPRODUCTIVE HEALTH

This quarter, we saw a
100% maternal survival rate¹⁵
at PIVOT-supported health facilities.

In addition to this, we saw:

60%
contraceptive
coverage rate¹⁶
(Target: 45%)

35%
facility-based
delivery rate¹⁷
(Target: 40%)

37%
antenatal 4-visit
completion rate¹⁸
(Target: 30%)



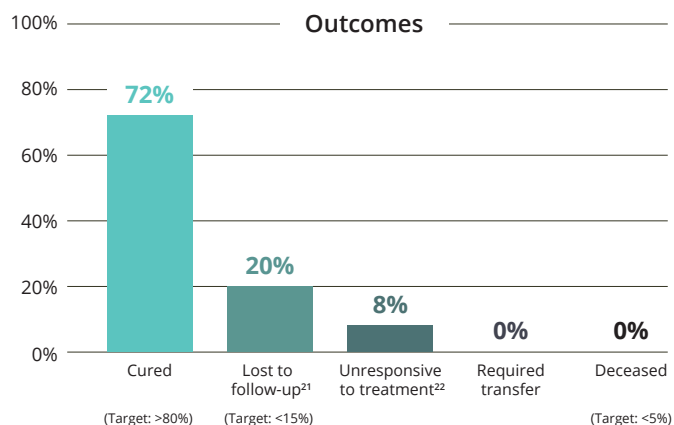
SINCE 2014, PIVOT
HAS SUPPORTED
6,692
FACILITY-BASED
DELIVERIES

MALNUTRITION



HEALTH CENTERS

- **56 children** began treatment for acute malnutrition¹⁹
- **51 children** were discharged from treatment



DISTRICT HOSPITAL

- **11 children** were treated for severe malnutrition²⁰
- **83%** were successfully discharged from intensive treatment (either cured or referred to health center for continued care)

VALUES IN ACTION

Members of the PIVOT clinical team support regional response efforts by staffing roadside health checkpoints, screening thousands of travelers weekly for COVID-19 symptoms.

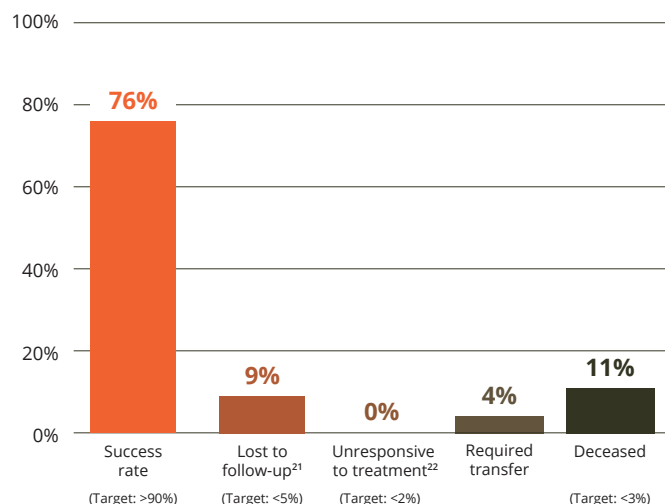
TUBERCULOSIS

This quarter, **55 patients** were enrolled for TB treatment.

- 89% smear positive
- 2% smear negative
- 9% extrapulmonary

Cohort Outcomes

for the **45 patients** who enrolled in Q1 of 2019:



SOCIAL SUPPORT

606 social kits (food and household essentials) distributed to vulnerable patients

813 psycho-social sessions provided for patients

1,661 reimbursements provided for transport to/from care

16,456 meals served to hospitalized patients and their *accompagnateurs*²³

PATIENT SPOTLIGHT: MARGUERITE & HER TRIPLETS

Last November, after five hours of labor, Marguerite gave birth naturally to three healthy kamban-telo (Malagasy for triplets) at Ifanadiana District Hospital. As of the end of this quarter, the now 5-month-old triplets Bryan, Yoan, and Rayan are gaining weight at a normal pace and – apart from a mild cough from which they all quickly recovered – remain in excellent health. Marguerite has a heart condition that prevents her from safely breastfeeding, so PIVOT provides the family with nutritional support, restocking their supply of formula during each clinic visit. Marguerite says the biggest challenge of mothering triplets so far has been bringing them to do essential errands, such as visits to the marketplace. These and other daily activities usually require that she recruit at least two people to accompany her, for which her community steps up readily, she notes gratefully. Despite the immense amount of energy required to care for her three babies (in addition to their 7 and 4-year-old siblings), Marguerite says she wouldn't change a thing.



MORE FROM THIS QUARTER:

CLICK
TO READ

The World Needs to Pivot, and Now We Know How to Start | by Dr. Dan Palazuelos

Dan Palazuelos, MD, MPH joined PIVOT's clinical advisory network in 2019, bringing expertise in community health program design. In this field note from his first visit to Madagascar, he reflects on the complexities of community health work, and the ways in which he sees PIVOT innovating for impact.

CLICK
TO READ

Impact Update: The First 3 Months Of Our Community Health Pilot | by Dr. Karen Finnegan

Adding color to the data shared in this report on our proactive care pilot, an update from PIVOT Associate Scientific Director, Karen Finnegan, PhD, MPH, discusses the first three months (Q4 of 2019) of implementing our new two-pronged approach to care delivery at the community level.

CLICK
TO READ

Staff Spotlight: Ranjato Andriambola, Manager of Infrastructure | by Amy Donahue

As he approaches his sixth anniversary of working with PIVOT, we celebrate our colleague Ranjato Andriambola, leader of our infrastructure team. His work to ensure quality, dignified facilities for our patients has been a key to our strategy to achieve health for all throughout Ifanadiana District.

For more COVID-19 resources and information on upcoming virtual panel sessions, visit www.pivotworks.org/covid-19.

DEFINITIONS

1. **PIVOT full support (for health center):** a health center that receives PIVOT's technical and financial support to ensure that: it is staffed at or above Ministry of Health standards; fees for patient visits are covered; facility infrastructure is improved; and the data system is supported through data quality assessments and feedback
2. **PIVOT partial support (for health center):** a health center that receives PIVOT's financial and technical support to hire staff, perform routine data collection, and address urgent district-wide or facility-specific issues as needed
3. **Supported patient visit:** a patient visit to community health worker, health center, or hospital for which costs of care are reimbursed by PIVOT; patients are not charged a consultation fee
4. **Community health:** disease prevention and health promotion conducted by community health workers (CHWs) outside of health facilities and within a community
5. **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 (NOTE: In Madagascar, every health center or centre de santé de base (CSB) is designated as either a CSB1 or CSB2; CSB2s are larger and staffed with at least one advanced level clinician; CSB1s are staffed by nurses and midwives; PIVOT support currently focuses on CSB2s.)
6. **District hospital:** a secondary health facility offering inpatient care and specialized clinical services (including dentistry; emergency obstetric care, including caesarean sections; laboratory and radiology; infectious disease treatment; and inpatient malnutrition for children) for the district population; to access care at the district hospital, patients are referred from the health center
7. **Tertiary care:** specialized medical care provided at regional or national health facilities outside of the district
8. **Community health worker (CHW):** an elected community member trained to provide care for common illnesses in their home communities and to refer patients in need of higher levels of care to health facilities; patients served are primarily pregnant women and children under five
9. **Per capita utilization:** annualized rate at fully-supported health centers is calculated using the total number of quarterly health center visits multiplied by four and divided by total catchment area population
10. **External consultation:** new and follow-up outpatient visits with a clinician at a fully-supported health center or hospital
11. **Bed occupancy:** percentage of total hospital beds available that are occupied by admitted patients
12. **Essential medicines:** a subset of total medicines supplied (7 medicines at the community level, 15 medicines at health centers, and 31 medicines at the district hospital) that, informed by international standards, are necessary for providing basic health care in our setting
13. **Baseline:** 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
14. **Standard referral:** a non-emergency referral from a community, health center, or hospital in which patients are counseled to seek specialized care, but are not provided transport by ambulance
15. **Maternal survival rate:** the percentage of health center births in the last quarter for which the mother was discharged alive following delivery
16. **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 for a three month period (adjusted for reporting delays)
17. **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
18. **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
19. **Acute malnutrition:** weight for height between -2 and -3 z-scores according to growth standards
20. **Severe malnutrition:** weight for height below -3 z-score according to growth standards
21. **Lost to follow-up:** a patient whose treatment has been interrupted and who has not completed a program of care
22. **Unresponsive to treatment:** a patient whose health outcomes do not improve with treatment for specified disease
23. **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