During the COVID-19 pandemic, PIVOT-supported health workers have been able to continue delivering regular health services without interruption thanks to a mass donation of PPE from our partners at Preston-Werner Ventures and MedShare.

# **PITOT** QUARTERLY IMPACT REPORT July 1 - September 30, 2020

#### Dear PIVOT community,

We are proud to share with you our third Quarterly Impact Report of 2020. We hope it finds you safe and well as another season comes to a close amid the ongoing pandemic.

The beginning of this quarter brought a milestone that we had anticipated but hoped not to see: the first case of COVID-19 in Ifanadiana District was confirmed in early July, followed by several more cases thereafter, for a total of 5 so far in our catchment area. Thanks to the thorough preparation and response of our clinical teams across all levels of care, these patients have received care at the district hospital, and there have been no related deaths.

As part of our continued support to the government's COVID-19 response, we have procured and distributed thousands of reusable masks across the district population, and – with a notable decrease in patient visits at health facilities – are working diligently to dispel misperceptions about the virus in order to ensure those in need of regular care are assured that they can access it safely. Needless to say, with the first known appearance of COVID-19 among the communities we serve, our ongoing collaboration to establish a local RT-PCR laboratory with our partners at Centre ValBio is more crucial than ever. The international procurement effort to supply and equip the lab has launched, and the lab is on track to open as the first of its kind outside of the nation's capital by early 2021.

It is clear that we (the global "we") need science now more than ever. That's why, this quarter, we were especially proud to announce the <u>launch</u> of <u>PIVOT Science</u>. While academic research and scientific innovation have been core to our approach since <u>PIVOT's</u> beginning, this new, formallyestablished space to facilitate the work of our team of international, multidisciplinary researchers is already proving to be of great value in the context of pandemic modeling, prevention, and response. PIVOT Science researchers published an <u>article in *BMJ Global Health*</u> this quarter, outlining how low case detection, differences in epidemiology, and policy interventions are leading to lower-than-expected COVID-19 cases in Sub-Saharan Africa.

The launch of PIVOT Science marks a new beginning for PIVOT, as we look forward to deepening the integration of scientific creativity and rigor, and maximizing our capacity to use lessons learned within our model system to help solve some of the world's most complex problems.

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. As always, we welcome your questions and feedback. Thank you for your partnership as we forge ahead together through this uniquely challenging time.

In solidarity,

Tara Sapl

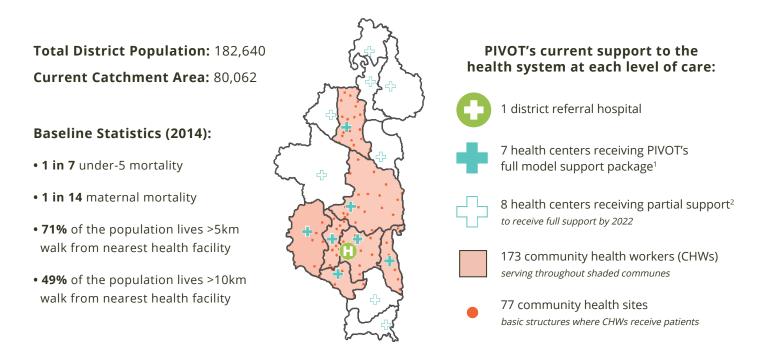
Tara Loyd Executive Director

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.



# **HIGHLIGHTS & CHALLENGES**

- To round out our 7th year, PIVOT's board of directors voted to **shift to an October 1st fiscal year to better align with the Ministry of Public Health's planning calendar**. As such, this quarter was filled with working sessions alongside local MOPH officials and facility personnel to conduct joint planning for FY2021 as teams brought FY2020 to a close.
- After months of preparation to meet the Ifanadiana District Hospital's designation by the region as a COVID-19 treatment center, the first patients in need of hospitalization were taken in for care. Thanks to the efforts of staff, there have so far been no related deaths.
- In addition to the ongoing implementation of measures for the management of COVID-19 across all levels of care, PIVOT received a donation of over 40,000 pieces of personal protective equipment and distributed them to health workers in Ifanadiana District and neighboring regions. We also made a mass donation of 3,000 antigen tests to health facilities and 20,000 reusable cloth masks to residents throughout the communities we serve.
- Both internally and externally, PIVOT has ensured the availability of psycho-social support to patients and staff facing challenges related to the COVID-19 pandemic.
- Community perceptions of COVID-19 have led to various challenges, such as decreased facility utilization rates (as reflected below by only 51% of this quarter's target being met for health center consultations) stemming from fears produced by the spread of misinformation. PIVOT's sensitization team is working to counteract utilization declines through various community-wide awareness-raising efforts about the COVID-19 pandemic.
- After the Q2 start of community health activities in the commune of Ambohimanga du Sud, **supervision of community health workers officially began in the most remote area we serve**, with 74% receiving 1 facility-based and 3 field-based observations each month one of the design principles proven effective in increasing quality of community-based care.
- Following a framework used by large global health organizations, PIVOT's **Monitoring & Evaluation team is conducting an organization-wide self-evaluation** to analyze organizational capacity and identify areas for improvement.
- Free meal service for all patients and accompagnateurs at the district hospital began this quarter. Though public hospital care in Madagascar does not include the provision of food, we believe food is medicine, and that family members supporting hospitalized loved ones need that support too.
- **PIVOT Science launch**ed as a new unit within PIVOT to enable scientific innovation and inform our work (see more on Page 4).

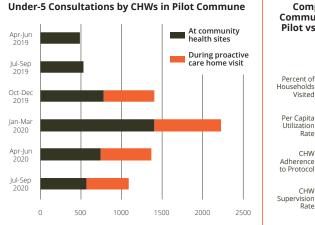
### **PATIENT VISITS SUPPORTED 3**



#### **PROACTIVE CARE PILOT UPDATE**

A year ago, in October 2019, we launched a community health proactive care pilot to optimize and expand the rollout of national policies that address the challenges caused by financial and geographic barriers to care in the district. Our overall 12-month outcomes show a 200% increase in community health visits for children under five and 84% adherence to clinical protocols, compared to 67% in other communes.

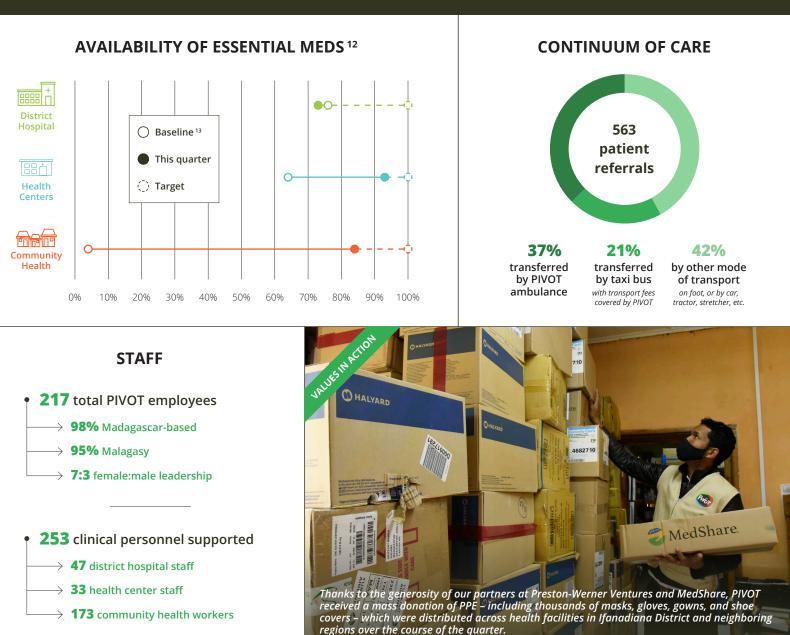
To the right are some key outcomes from Q3.



# Comparison of 15-Month<br/>Community Health Outcomes,<br/>Pilot vs. Non-Pilot CommunesProactive<br/>Care PilotNon-Pilot<br/>CommunesPercent of<br/>Households<br/>Visited93%0%Per capita<br/>Utilization<br/>Rate2.011.69CHW<br/>Adherence96%78%

100%

96%



## **INNOVATION SPOTLIGHT: LAUNCHING 'PIVOT SCIENCE'**



#### This quarter, we proudly announced the official launch of PIVOT Science!

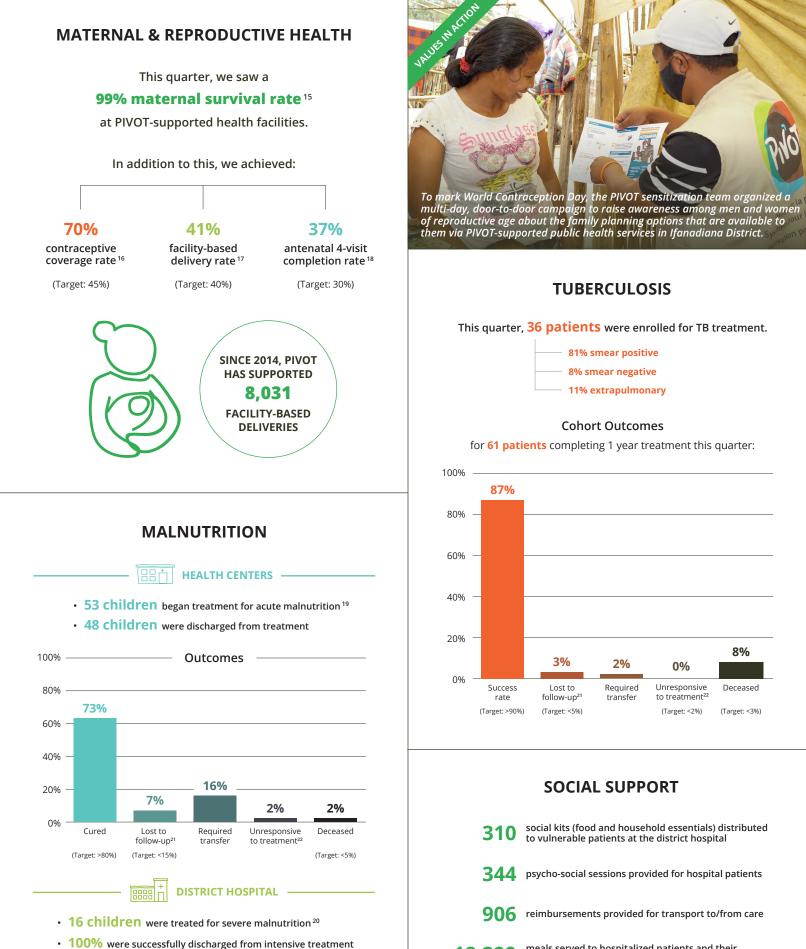
With an unwavering commitment to advancing health as a human right, PIVOT Science aims to create an enabling environment for scientific innovation that informs and advances PIVOT's model of universal health coverage. While sharing the culture and values of the rest of the organization, the new unit's management structure is designed to support scientific curiosity and allow space for creative freedom and rigor in academic research.

The PIVOT Science team is composed of PIVOT staff as well as a broader network of researchers – including ecologists, geographers, mathematicians, epidemiologists, physicists, biologists, engineers, and social scientists – from Madagascar and around the world.

To celebrate the PIVOT Science launch and to share the story behind its inception, we held a virtual version of our annual Science Expo in September, featuring some of the latest examples of how we're tackling the complex challenges that come with establishing Ifanadiana District as a model health system for replication at scale.

**Check out the recording of the live event** to hear directly from the international team of scientists and implementers who are delivering care on the frontlines and generating knowledge for rights-based health system transformation in Madagascar and beyond.

Thank you to all who donated to the event and joined us in celebrating the start of this exciting new chapter!



(either cured or referred to health center for continued care)

meals served to hospitalized patients and their 18.299 accompagnateurs 23

8%

Deceased

(Target: <3%)

0%

Unresponsive

to treatment<sup>22</sup>

(Target: <2%)



# **PATIENT SPOTLIGHT: KENITA**

Kenita, 18 months old, was at home with her family when her mother discovered that she was running a fever. When it persisted for more than a day and Kenita continued not to act like her usual energetic self, her parents decided to seek care. Kenita's parents are farmers from Ambodiaviavy, a village in Ranomafana Commune, where PIVOT's enhanced community health model has been in place since October 2019.

The family's home is situated such that any of their options for getting Kenita to care would require leaving their farm behind for an unknown period of time, risking falling behind on the work they rely on for income. Just as Kenita's mother prepared to depart to seek treatment for her daughter's fever, community health worker Chantal arrived at their door (*Photo 1*).

Chantal is one of the CHWs participating in our ongoing proactive care pilot and was walking her designated circuit for householdlevel care, which includes Kenita's home. Regardless of whether Kenita had been ill that day, Chantal's visit would have involved the full child health screening she provided. She weighed and measured Kenita, examined her for signs of malnutrition and other common childhood health threats, and – upon confirming her high temperature – administered a rapid test for malaria.

Fortunately, Kenita's malaria test came back negative. Chantal proceeded to give her parents paracetamol to administer to reduce Kenita's fever, given that even a benign febrile illness can lead to health complications like seizures if not adequately controlled. Chantal also provided guidance for dosage, and assured the family that she would return to check on Kenita's condition.

When she returned, she was met by an energetic, playful, and fever-free Kenita (*Photos 2 & 3*). A brief examination and visit inside the family's home was all Chantal needed to confirm that Kenita was symptom-free, with no further treatment required.

# **MORE FROM THIS QUARTER:**



#### Take a virtual trip to Madagascar!

During this one-hour virtual site visit, Executive Director Tara Loyd guides you through what one would normally experience over the course of one week in Ifanadiana District. Take a virtual hike (and canoe ride!) to a remote community, sit in on a patient home visit, get a physician-led tour of the facilities we support, and hear directly from the team about the work they're leading on the ground!



#### Malagasy-Led Study Advances Innovative Methods for Understanding Geographic Access to Health Care

A new study led by PIVOT researcher Dr. Felana Ihantamalala uses modern analytics and open-source mapping technology to create a new tool that can specify the most direct route between any two points in the district, creating insights about geographic barriers to care and how we can adjust our strategy to deliver services more efficiently to those who need them most.



#### A New Collaboration to Fight COVID-19 in Madagascar

Reliable testing is the foundation to a strong COVID-19 response. PIVOT is collaborating with local partner Centre ValBio to establish COVID-19 testing capacity within their existing molecular biology lab. As the first physical testing center outside of Madagascar's capital city, the lab's opening will extend vital access to testing for the country's more rural regions not only amid the pandemic, but in the long term.

# 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