

Mariette (left), a PIVOT-supported community health worker in Ambatolahy, Ranomafana distributes masks and discusses methods for preventing the spread of COVID-19 with Jeanne (right) as part of a door-to-door awareness-raising campaign across Ifanadiana District.



QUARTERLY IMPACT REPORT

Quarter 2, 2020 (April 1 - June 30)

Dear PIVOT community,

We are proud to share with you our second Quarterly Impact Report of 2020. We hope it finds you and your loved ones safe and well.

This quarter marked the clearest spotlight on global health in our living memories. As global health implementers, we find our conversations now have much in common with our personal ones; empathy and awareness is high among our non-public health peers, many of whom are more attuned than ever before to what high-income nations have collectively taken for granted in terms of personal health and the reliability of strong health systems. As scientists, we have applied the full scope of our expertise – from molecular biology, disease surveillance, quantitative epidemiology, technical innovation and mathematical modeling on time scales rapid enough to shape decisions – to inform policy and, hopefully, save lives in Madagascar.

In April, the COVID-19 pandemic brought the US – where many of PIVOT's supporters and board members are based – to its knees. In May, George Floyd's murder catapulted a long overdue resurgence of US civil rights action to the forefront. And in June, Madagascar honored the 60th anniversary of independence from the oppression of colonial rule. At PIVOT, we connect these dots through an all-encompassing recognition of global inequity and our responsibility to dismantle systems of oppression by continuing to advance health as a human right the world over. In some ways our jobs have never been more clear, and in other ways they have never been more complex.

In Ifanadiana District, the Q2 focus was on readying the hospital for a local coronavirus outbreak, supporting the government with mass PPE donations, the loan of an ambulance with a team of first responders in the capital, and staffing a roadside checkpoint to perform tens of thousands of COVID-19 screenings. Like many of you, our 206-person team in Madagascar closed the office and went remote, but without the commonality of strong internet, home offices, and the virtual school offerings that many of us in the US have. Through shared action with our founding partners at Centre ValBio, we've created the opportunity to transform their existing laboratory space into a regional RT-PCR testing center, which will improve the district's diagnostic capacity far beyond the pandemic.

All of the while, crucially, we've remained committed to keeping our regular clinical services running effectively for patients in need of both preventive medicine and primary care, and staying focused on our overall mission to strengthen the public health system – the very work that ensures resiliency in the face of crises like the one we're facing now.

As restrictions prohibit the kind of travel that is elemental to this work, recently much of our energy is spent grappling with what it means to lead an organization like ours through times like these. More than ever, we are grateful to be in this with all of you. Thank you for your support.

In solidarity,


Tara Loyd
Executive Director


Matt Bonds
Co-Founder & Scientific Director

IFANADIANA DISTRICT

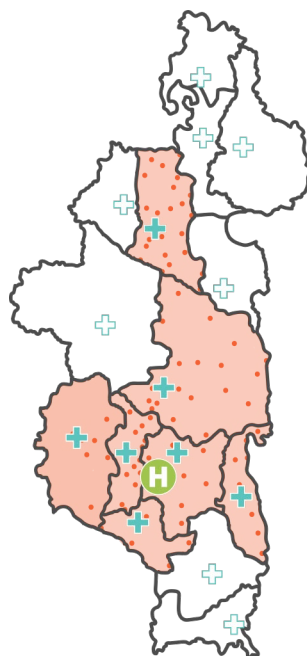
In partnership with Madagascar's Ministry of Public Health, we are transforming Ifanadiana District's public health system into an evidence-based model for universal health coverage that can be sustained, replicated, and scaled.

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



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

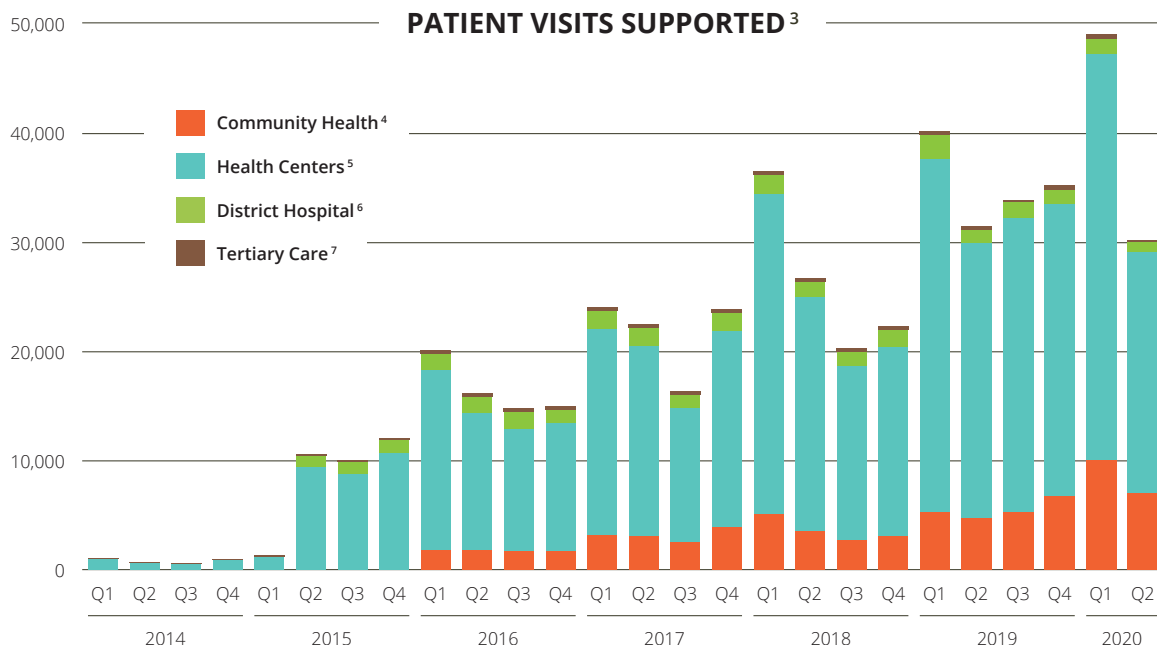
-  1 district referral hospital
-  7 health centers receiving PIVOT's full model support package¹
-  8 health centers receiving partial support² to receive full support by 2022
-  173 community health workers (CHWs) serving throughout shaded communes
-  77 community health sites basic structures where CHWs receive patients

Q2-2020 HIGHLIGHTS & CHALLENGES

- Supporting the government response to COVID-19 was a priority throughout the quarter. This has included procurement and donation of PPE, essential supplies, and equipment to MOPH colleagues and the communities we serve. See our [COVID-19 landing page](#) for the latest on our response and to hear directly from clinical staff via recordings of our spring panel series, *Voices From The Field*.
- With government authorization to waive the traditional inauguration ceremony typically required prior to use, 18 additional community health sites have been opened.
- Achieved 100% cure rate among childhood malnutrition patients in three different communes for the first time since the program launched in 2015.
- With the arrival of a new clinical mentor the day before national borders closed, our teams developed critical new protocols for managing cases of hypertension, epilepsy, and viral hepatitis at the District Hospital.
- With 91% cured, the cohort of tuberculosis patients who completed their first year of treatment during this quarter had the best outcomes since the start of the program.
- Ifanadiana District Hospital officially established a canteen to prepare free meals to hospitalized patients and their accompagnateurs, who previously had to handle their own provisions.
- An abnormally long malaria season was coupled with unusual stockouts of malaria medications. We are working with local partners, district officials, and the central ministry toward a solution to prevent future supply chain issues from occurring again.
- Due to COVID-19 travel bans, our field-based staff faced unprecedented reductions in in-person engagement, affecting many domains of our work, from construction, to trainings, to key internal and external meetings, and more.

ALL-TIME
(SINCE 2014):
512,233

THIS QUARTER
(Q2-2020):
30,275



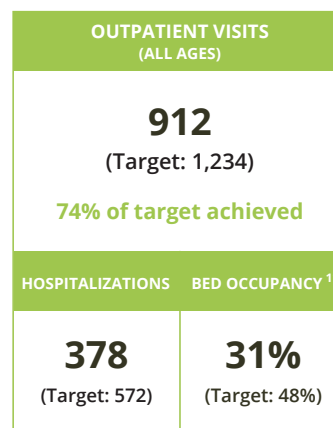
Community Health



Health Centers



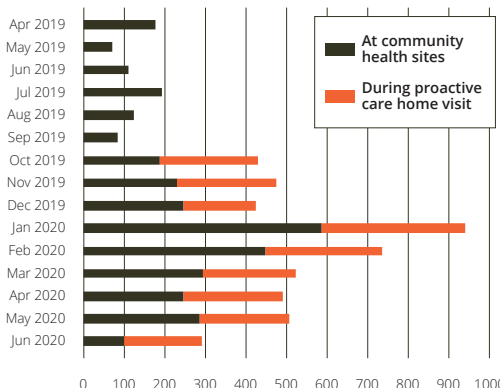
District Hospital



PROACTIVE CARE PILOT UPDATE

Launched in October 2019, our community health proactive care pilot aims to optimize and expand the rollout of national policies that address the challenges caused by financial and geographic barriers in the district. Results from the 6-month evaluation of the project showed that utilization of care improving at nearly quadruple the rate in the pilot commune compared with other communes, and that the quality of care provided in the pilot is also better, with CHWs correctly following protocols for integrated management of childhood illness at a higher rate than the others. To the right are some key 9-month outcomes.

Under-5 Consultations by CHWs in Pilot Commune

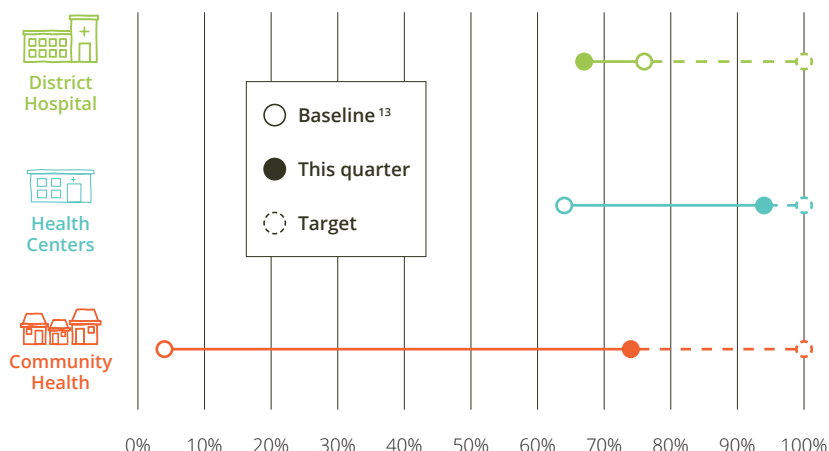


Comparison of 9-Month Community Health Outcomes, Pilot vs. Non-Pilot Communes

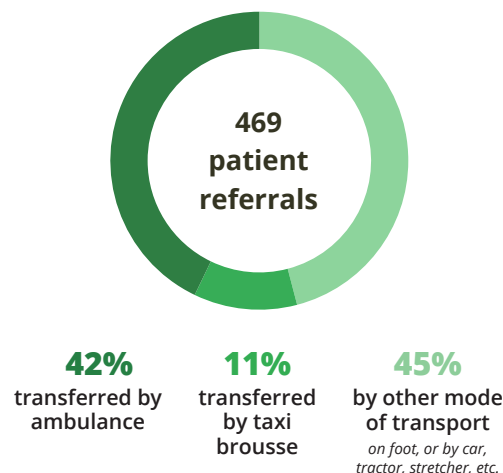
	Proactive Care Pilot	Non-Pilot Communes
Percent of Households Visited	91%	0%
Per Capita Utilization Rate	2.53	1.67
CHW Supervision Rate		
CHW Adherence to Protocol		

CHW supervision activities were curtailed during Q2 to minimize risk of COVID-19 transmission.

AVAILABILITY OF ESSENTIAL MEDS ¹²



CONTINUUM OF CARE



STAFF

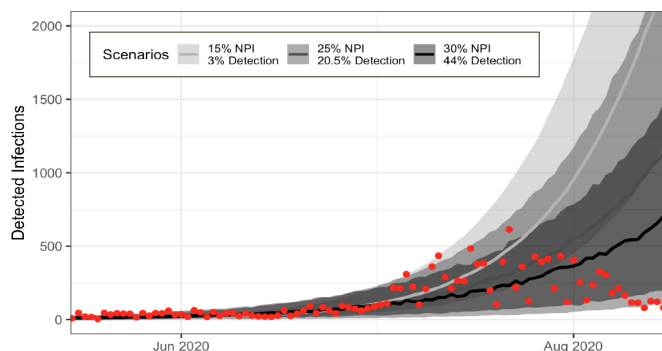
- **218** total PIVOT employees
 - **97%** Madagascar-based
 - **95%** Malagasy
 - **70:30** female:male leadership
- **251** clinical personnel supported
 - **46** district hospital clinicians
 - **32** health center clinicians
 - **173** community health workers



INNOVATION SPOTLIGHT: INCREASING REGIONAL CAPACITY FOR COVID-19 TESTING

PIVOT was founded with the support of Centre ValBio (CVB), which shares a vision of applying scientific expertise to improve regional health conditions and protect fragile ecosystems. The COVID-19 pandemic has created a critical urgency to leverage our collective expertise in response. In Q2, we launched a new partnership agreement to establish RT-PCR testing capacity in CVB's existing molecular biology laboratory. This marks an unprecedented collaboration with the common objective of supporting the government's efforts to mitigate COVID-19 in the region.

Extending vital access to testing will enhance the ability of the public health system to adapt to the spread of cases. We are proud to be part of this enhancement to Madagascar's COVID-19 response, which will not only address direct needs of the population now, but will serve as a long-term foundation for innovation in infectious disease diagnostics for humans and wildlife.



Expanded testing is key to response. Red dots represent cases of COVID-19 in Madagascar as reported by the government. Uncertainty of testing rates creates challenges in interpreting the data. Our recent modeling study explores the implications on COVID-19 impacts based on different rates of effectiveness of policy interventions and case detection. If detection is high, then the forecasted impact on the population is low; if detection is low, then the models predict higher disease incidence and mortality. Integrated COVID surveillance, testing, modeling, and clinical strategy is thus key to a resilient health system response.

For details, see: Evans, et al, 2020, 'Reconciling model predictions with low reported cases of COVID-19 in Sub-Saharan Africa: Insights from Madagascar,' Global Health Action, in press (pre-print available at [medRxiv 2020.07.15.20149195](https://doi.org/10.21955.20149195)).

MATERNAL & REPRODUCTIVE HEALTH

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

In addition to this, we achieved:

67%*
contraceptive
coverage rate¹⁶
(Target: 45%)

34%
facility-based
delivery rate¹⁷
(Target: 40%)

42%
antenatal 4-visit
completion rate¹⁸
(Target: 30%)



SINCE 2014, PIVOT
HAS SUPPORTED
7,352
FACILITY-BASED
DELIVERIES

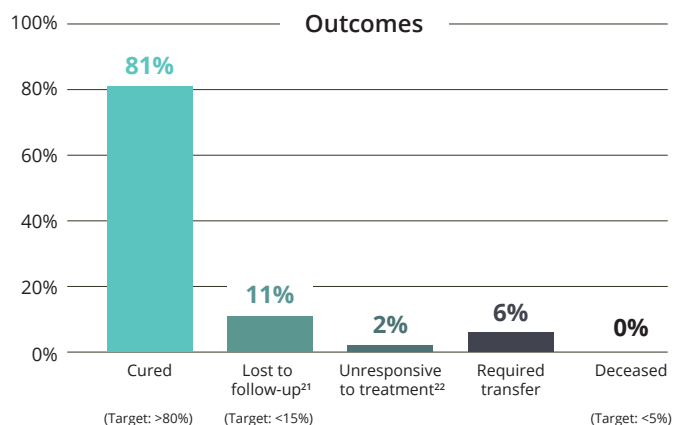
*Due to a delay in data availability, this outcome reflects data from April 2020 only.

MALNUTRITION



HEALTH CENTERS

- **32 children** began treatment for acute malnutrition¹⁹
- **43 children** were discharged from treatment



DISTRICT HOSPITAL

- **7 children** were treated for severe malnutrition²⁰
- **85%** were successfully discharged from intensive treatment (either cured or referred to health center for continued care)

VALUES IN ACTION

PIVOT Grants Manager Safidy is checked in by PIVOT and government colleagues at the World Blood Donor Day drive organized to supply the District Hospital's blood bank in June.

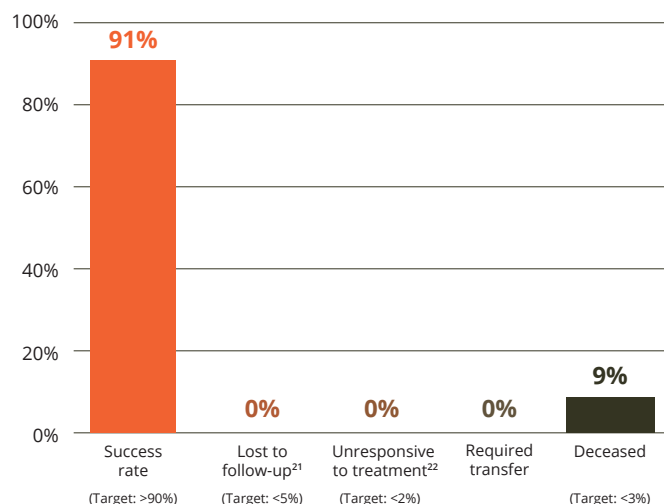
TUBERCULOSIS

This quarter, **26 patients** were enrolled for TB treatment.

- 100% smear positive
- 0% smear negative
- 0% extrapulmonary

Cohort Outcomes

for the **35 patients** who enrolled in Q2 of 2019:



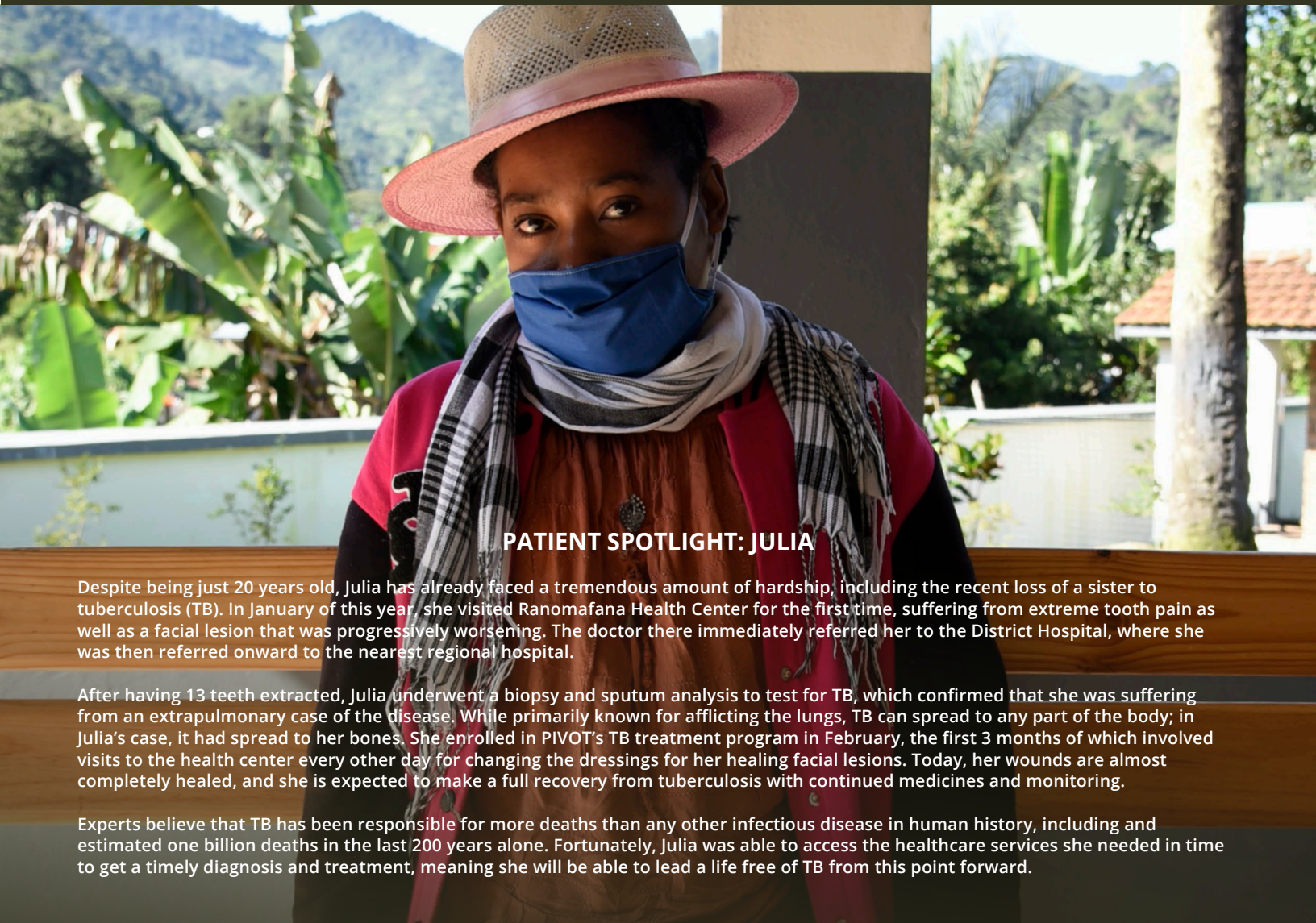
SOCIAL SUPPORT

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

629 psycho-social sessions provided for patients

660 reimbursements provided for transport to/from care

14,678 meals served to hospitalized patients and their *accompagnateurs*²³



PATIENT SPOTLIGHT: JULIA

Despite being just 20 years old, Julia has already faced a tremendous amount of hardship, including the recent loss of a sister to tuberculosis (TB). In January of this year, she visited Ranomafana Health Center for the first time, suffering from extreme tooth pain as well as a facial lesion that was progressively worsening. The doctor there immediately referred her to the District Hospital, where she was then referred onward to the nearest regional hospital.

After having 13 teeth extracted, Julia underwent a biopsy and sputum analysis to test for TB, which confirmed that she was suffering from an extrapulmonary case of the disease. While primarily known for afflicting the lungs, TB can spread to any part of the body; in Julia's case, it had spread to her bones. She enrolled in PIVOT's TB treatment program in February, the first 3 months of which involved visits to the health center every other day for changing the dressings for her healing facial lesions. Today, her wounds are almost completely healed, and she is expected to make a full recovery from tuberculosis with continued medicines and monitoring.

Experts believe that TB has been responsible for more deaths than any other infectious disease in human history, including and estimated one billion deaths in the last 200 years alone. Fortunately, Julia was able to access the healthcare services she needed in time to get a timely diagnosis and treatment, meaning she will be able to lead a life free of TB from this point forward.

MORE FROM THIS QUARTER:

CLICK
TO WATCH

"Voices From The Field" Virtual Panel Series

When Madagascar closed its national borders in March to prevent the spread of COVID-19, we sought ways to keep our international community and our field staff connected. Check out the recordings of this 10-part virtual panel series, in which PIVOT team members convene to discuss a broad range of topics surrounding our work.

CLICK
TO READ

Staff Spotlight: Dr. Lova Ratsimbazafy

When Dr. Lova applied to work for PIVOT as an attending physician, she was eager to put her recently-completed medical training to use. What she did not anticipate was how humanitarian work would come to shape her career, or that she would soon become a key leader as PIVOT's first Deputy Director of Primary Care.

CLICK
TO READ

A Message of Solidarity from the PIVOT Team

As a US-based organization with a rights-based approach to delivering healthcare abroad, we are called to examine how our actions might perpetuate structural inequality. In case you missed it, check out this initial statement of solidarity from our leadership team, and stay tuned for more.

For more COVID-19 resources and information on upcoming virtual events, 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