

Dear Pivot community,

We are pleased to present Pivot's final Quarterly Impact Report of Fiscal Year 2022.

This quarter represents the start of a new chapter for Pivot following our Board of Directors' July vote in favor of two significant transitions. First, after months of exploration (both in terms of physical expeditions as well as extensive conversations and workshops across our team and Ministry of Public Health [MoPH] partners), the Board gave their unanimous approval to accept the MoPH's invitation and expand our work from a district to a regional level. As we work closely with the MoPH to define our joint strategy for regional expansion, we are preparing to cover 1 million patients across Vatovavy Region's 3 districts (tripling our geographic coverage and quintupling our current catchment population). With nearly a decade of on-the-ground experience testing and honing a replicable model for public healthcare in Ifanadiana District, we are looking forward to the new challenges and opportunities that a regional-level intervention will bring.

To guide Pivot through this period of growth, the Board – of which Pivot's first employee and longstanding leader Tara Loyd is a member – voted to name Laura Cordier as Pivot's next Executive Director so that expansion is driven by leadership on the ground. Laura has been an integral part of the Pivot team since our first month of operations in Ranomafana in 2014. As the architect of our Monitoring & Evaluation department from 2014-2019, and our National Director, engaging with central government partners from 2019-2022, Laura's nearly nine years of experience have equipped her with a comprehensive knowledge of our work, a vision for generating sustainable local and global healthcare solutions, and a deep integration with the local community, making her uniquely qualified to carry the organization forward.

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,

Robin Herrnstein

Co-Founder & Board Chair

P.S. The photo above includes my oldest son, Michael, who took his first solo trip to Madagascar to join Immersion Week over the summer. If you and your family are interested in experiencing Madagascar and Pivot in person, save the dates for next year's Immersion Week: July 24-28, 2023 (plus travel on the weekends). All are welcome!



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 21 receiving Pivot support



Community health ³

175 community health workers (CHWs) 4



Enhanced community health

Including case-finding and household-level care



Community health sites

79 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

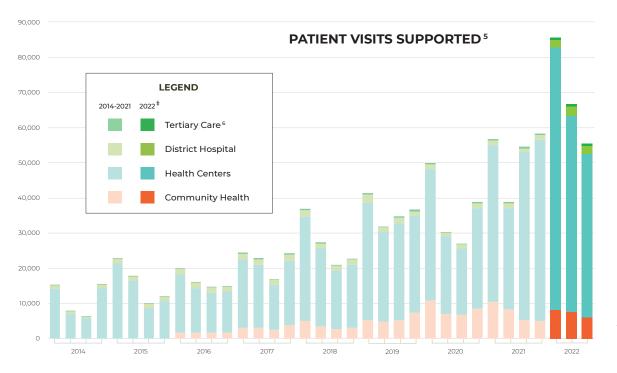
• 71% of the population lives >5km walk from nearest health facility

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

HIGHLIGHTS & CHALLENGES

- Pivot's Board of Directors voted in favor of regional expansion!
- In collaboration with USAID ACCESS, extended communitylevel mobile technology to five additional communes; trained 110 CHWs in the use of CommCare for managing patient data and facilitating care delivery protocols
- Supported the MoPH's "100 Days Against COVID-19" campaign; distributed COVID-19 vaccines and supplies to all health centers with the aim to increase vaccination rates
- Collaborated with the WHO and the National Directorate for Noncommunicable Disease to update national primary care protocols and training curricula for diabetes, hypertension, stroke, and more
- Completed trainings and validated new protocols related to the BRING O2 project, bringing us one step closer to strengthened oxygen access on a national scale
- Faced with a nationwide shortage of pediatric tuberculosis medicines, collaborated with district officials to advocate for patients' needs at the central level, resulting in the redeployment and distribution of necessary supplies by the national program
- With support from our pediatric clinical mentor, continued strengthening quality of care across rural health centers, with a focus on acute illness such as malnutrition, malaria, respiratory infections, and more
- Supported regional coordination meetings to establish a clear plan for improving neonatal and obstetric care in the coming years
- Hosted two emergency care physicians who visited on a volunteer basis to conduct a week of ultrasound training for all clinical personal at the District Hospital, strengthening diagnostic capacity for urgent care and beyond

- Expanded malnutrition management activities to an additional rural health center, Ambohimiera, starting with a week-long mass screening to identify cases in the community and launch the program with supervised practice in diagnosis and case management
- Partnered with local organization Ny Tanintsika to mobilize remote communities around daily health practices related to water, sanitation and hygiene (WASH); supported communityled implementation of safe public water sources in five villages (MORE ON PAGE 3)
- Launched the fifth wave of our "HR for Health" project, through which we recruited 3 hospital doctors, 5 hospital nurses, 10 health center nurses, 10 midwives, and 2 lab technicians for deployment by the MoPH in early 2023
- Recognized annual World Hepatitis Day with a vaccination campaign in collaboration with the MoPH, and through spreading key prevention messages in the district and via social media
- Reached the end of the pilot project cycle for molecular biology laboratory housed by local partner CentreValBio; planning underway with the MoPH to identify the best regional or university hospital to permanently install the lab
- Overcame the breakdown of hospital laboratory diagnostic equipment by collaborating with the university hospital in a neighboring district, transporting samples to ensure no interruption to diagnostic service capacity while a new spectrophotometer machine was procured
- Carried out **capacity-building workshops for newborn resuscitation** among Pivot primary care and field teams to serve as mentors to strengthen these techniques among health center personnel



THIS QUARTER (JUL-SEP '22)
55,107

ALL-TIME (SINCE 2014) 1,075,579

[‡]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)

5,886
(Target: 6,761)

87% of target achieved

PER CAPITA UTILIZATION 7

1.4 Visits
per child under 5 (annualized)

Community Health Outcomes in Enhanced Care Commune vs. Non-Enhanced Communes Enhanced Care Non-Pilot Pilot Commune Communes		
Percent of Households Visited	91%	0%
Per Capita Utilization Rate	1.5	1.4
CHW Adherence to Protocol	99%	87%
CHW Supervision Rate	100%	99%

EXTERNAL CONSULTATIONS 8 (ALL AGES) 43,389 (Target: 50,706) 89% of target achieved PER CAPITA UTILIZATION 1.1 visits per person (annualized)

Health Centers



PROGRAM SPOTLIGHT: ESTABLISHING SAFE, SUSTAINABLE WATER SOURCES THROUGH LOCAL PARTNERSHIPS

Population health is the core of Pivot's mission and environmental health has always been an innate part of our identity, starting with the simple fact of our headquarters' proximity to Ranomafana National Park, a UNESCO World Heritage Site that protects thousands of acres of ancient rainforest. The interdependent nature of human and environment is highly tangible in rural Madagascar, where the majority of the population relies on the land for their livelihoods.

As we expand, we are proud to maintain that focus. Over the course of 2022, Pivot's Population, Health & Environment team has been partnering with local nonprofit Ny Tanintsika to build safe communal water sources in Ifanadiana District's remote communities. Focused on leveraging the principles of WASH (water, sanitation and hygiene), the initiative aims to enhance community resiliency with solutions developed around both environmental and social sustainability.

So far, the pilot project has been carried out in the commune of Ambohimiera, which is approximately 40 kilometers from the nearest paved road, and can take up to 8 hours to get to depending on weather conditions. Community members have been active participants in establishing both water pumps (pictured on the right) and public toilets in five of the commune's villages. Pivot's sensitization team has supported spreading awareness among the population not only about the use of these new resources, but also the role of these new resources in mitigating a variety of health risks.



AVAILABILITY OF ESSENTIAL MEDS 10 Baseline 12 This quarter Target Community Health Community Health

CONTINUUM OF CARE



22% transferred by Pivot ambulance 31% transferred by taxi bus

with transport fees covered by Pivot **47%** by other mode

of transport
on foot, or by car,
tractor, stretcher, etc.

STAFF

263 total Pivot employees

ightarrow **99%** Madagascar-based

ightarrow **98%** Malagasy

> **3:1** female:male leadership

297 MoPH personnel supported

> 71 district hospital staff

 \rightarrow **56** health center staff

> 170 community health workers



SCIENCE SPOTLIGHT: PARTNERING WITH ARIADNE LABS TO IMPROVE COMMUNITY HEALTH SUPERVISION



As Pivot prepares for regional expansion, community health will continue to be a critical piece of our strategy to ensure access to care for the most remote communities in the Vatovavy region. **Strong and effective supervision of Community Health Workers (CHWs) is a programmatic priority**; responsive, data-informed supervision improves CHW motivation and quality of care, resulting in better population health outcomes.

In September, Pivot Science rounded out its first year of partnership with Ariadne Labs thanks to support from the Ariadne Labs Spark Innovation grant through Harvard Medical School. With the goal of strengthening supervisor-CHW relationships, our collaboration with Ariadne Labs aims to develop new tools and protocols for data-informed supervision (or "coaching") that directly address the challenges that CHWs confront during delivery of care.

Over the course of the first year of funding, we completed background research, user profile development, and the development of a data dashboard. In the project's second year, the Pivot Science team will continue meeting with stakeholders and partners, participate in the development of a curriculum on human-centered design for NGO staff, field test the tools, solicit and synthesize stakeholder feedback, and ultimately prepare a manuscript on the initiative's impact on CHW motivation and quality of care.

Especially in highly rural settings like Vatovavy Region, supporting CHWs through high-quality supervision is key to improving population health. We look forward to contributing to the field through our research, which – based on the principles of human-centered design – will include a study of the impact of supervision on CHW performance and motivation.

MATERNAL & REPRODUCTIVE HEALTH





And maternal survival rates 12 were:

99%

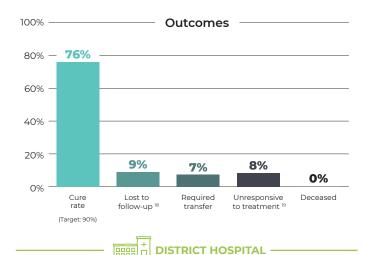
at the district hospital 100%

across health centers

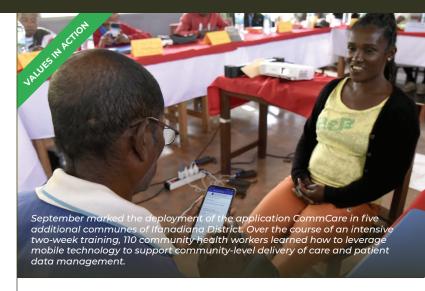
MALNUTRITION

HEALTH CENTERS

- 88 children began treatment for acute malnutrition 16
- 94 children were discharged from treatment



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



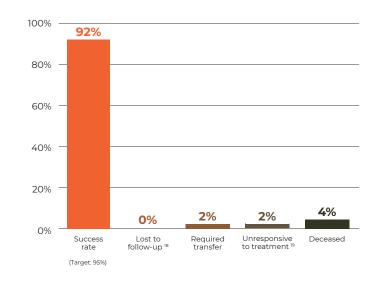
TUBERCULOSIS

This quarter, 56 patients were enrolled for TB treatment.

77% smear positive
13% smear negative
11% extrapulmonary

Cohort Outcomes

for 49 patients completing 1 year of treatment:



SOCIAL SUPPORT

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

63 psycho-social sessions provided for hospital patients

reimbursements provided for transport to/from care

meals served to hospitalized patients and their accompagnateurs 20



PATIENT SPOTLIGHT: MIRELLA

As a soon-to-be first-time mom, Florine did everything right during her pregnancy. She diligently attended all of her prenatal consultations, made a birth plan, and thankfully had no serious health issues arise while carrying. When she went into labor, Florine was under the care of the staff at Kelilalina Health Center. After many hours of difficult labor, it was determined that Florine had a ruptured uterus, which was causing obstructed labor. Despite this, baby girl Mirella was safely delivered, but the clinicians immediately noted that they heard no cry, nor could they produce any reflexes in the infant.

When it became clear that the newborn was losing consciousness due to asphyxiation caused by the obstructed labor, the health center team requested an urgent transfer of both she and Florine to the District Hospital about 15 minutes away by Pivot ambulance. Upon admission, Mirella was conscious but lethargic and incapable of latching onto her mother's breast. The hospital team quickly diagnosed her with a neonatal infection and obstetrical trauma, and admitted her to the newly-opened neonatal unit to initiate advanced protocol to support the baby's recovery.

Mirella was hospitalized for the first 15 days of her life as the first patient to receive care in the neonatal unit (which are rare among district hospitals in Madagascar). After receiving two weeks of lifesaving care through essential medicines and close observation, Mirella had gained weight and strength, was able to breastfeed and cry vigorously, and was lively and reactive. Before returning to their home village of Andranofolahina, Pivot hospital physician Dr. Haingo – who oversaw the baby's treatment – made arrangements to have Florine return on a monthly basis to monitor Mirella's development in case of any psychomotor delays, saying "I'm proud to



MORE FROM THIS QUARTER:



Immersion Week 2022 Recap

Every July, all Pivot supporters are invited to join us for a week on the ground in Ifanadiana District to get a closer look at our work in context. This year's participants ranged from foundation representatives to staff family members and more. The week is filled with opportunities for adults and kids (of all ages!) to experience life in Ranomafana, learn about public health in Madagascar, and deepen their connection with our staff and fellow Pivot community members. Interested in joining us on the ground for the week of July 24-28, 2023? Read on for more about what awaits you in Madagascar!



Introducing Our New Engagement Director

We are thrilled to welcome Dr. Barbara Vololonarivelo to our Executive Leadership Team as the head of our Engagement Department, overseeing partnerships, development, and communications. As a Malagasy physician, public health researcher, and a mother of two, Barbara's unique combination of technical knowledge and practical experience position her to be an outstanding advocate for the communities Pivot serves. Barbara's hire completes the evolution of our engagement team to be Madagascar-based so that those representing our work externally are the same people leading it internally. Join us in welcoming Barbara to the Pivot family!



Voices From The Field: Ready for Expansion

In this recording of our August virtual panel session, our Executive Leadership Team – opening with Tara Loyd and Laura Cordier passing the Executive Director baton – presents the momentous news of our Board's unanimous vote to accept the MoPH's invitation to expand across Vatovavy Region. They share preliminary plans for how expansion will roll out in close collaboration with the MoPH and insights about how this new phase of growth will look for the Pivot team.



DEFINITIONS

- 1. **District hospital:** a secondary health facility offering inpatient care and specialized clinical services (e.g., 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 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