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!
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.
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.
**CONTINUUM OF CARE**

- **1,121** patient referrals
  (Target: 590)
- **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.

**AVAILABILITY OF ESSENTIAL MDS**

- Baseline
- This quarter
- Target

**STAFF**

- **263** total Pivot employees
  - **99%** Madagascar-based
  - **98%** Malagasy
  - **3:1** female: male leadership

- **297** MoPH personnel supported
  - **71** district hospital staff
  - **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.
Since 2014, Pivot has supported 13,246 facility-based deliveries.

This quarter, we achieved:

- **36%** contraceptive coverage rate\(^{13}\) (Target: 45%)
- **55%** facility-based delivery rate\(^{14}\) (Target: 40%)
- **58%** antenatal 4-visit completion rate\(^{15}\) (Target: 50%)

And maternal survival rates\(^{12}\) were:

- **99%** at the district hospital
- **100%** across health centers

Malnutrition

- **88 children** began treatment for acute malnutrition\(^{16}\)
- **94 children** were discharged from treatment

Outcomes

- **76%** cure rate (Target: 90%)
- **9%** lost to follow-up\(^{16}\)
- **7%** required transfer
- **8%** unresponsive to treatment\(^{16}\)
- **0%** deceased

Values in Action

- **September marked the deployment of the application CommCare in five additional communities of Ifanadiana District. Over the course of an intensive two-week training, 110 community health workers learned how to leverage mobile technology to support community-level delivery of care and patient data management.**

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:

- **92%** success rate (Target: 95%)
- **0%** lost to follow-up\(^{16}\)
- **2%** required transfer
- **2%** unresponsive to treatment\(^{16}\)
- **4%** deceased

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
- **817** reimbursements provided for transport to/from care
- **19,088** 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 Kellialina 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 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 say that, after carefully treating Mirella in our new neonatal unit, we no longer fear for Mirella’s life.”

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