

(Left to right) Ifanadiana District Community Health Worker Fety Randrianarivelo, Director of the Centre d'Infectiologie Charles Mérieux and Pivot Board Member Prof. Luc Samison, and Pivot Director of Monitoring, Evaluation, Accountability & Learning Bénédicte Razafinjato at the ASTMH conference in New Orleans, November 2024.

2024 Annual Meeting

November 13-17

New Orleans, LA

New Orleans Ernest N. Morial Convention Center

astmh.org ajtmh.org #TropMed



QUARTERLY IMPACT REPORT

October 1 - December 31, 2024

Dear Pivot community,

At a time of so many uncertainties - from the escalating impacts of climate change to the cataclysmic shifts in international aid - resilience has become a core theme for the Pivot team. In this context, we believe that **knowledge-sharing is crucial**, guiding our approach to navigating both the rapidly evolving landscape of global funding and the climate-driven events that threaten fragile environments like those in Madagascar.

As we reflect on the October-December 2024 period, we recognize how **lessons gathered over the past year have strengthened our resilience**, fueling our ambitious goals for expansion across Vatovavy Region in 2025. If you haven't already, please check out our [2024 Impact Report](#), which details key areas of progress in our mission to save lives, transform health systems, and catalyze global change.

This quarter, we're shining a light on that third pillar: **catalyzing global change**. For Pivot, this means amplifying the voices of communities and experts in Madagascar, recognizing that our work is most impactful when connected to the broader global health community. Our approach combines strategic partnerships, transformative research, knowledge dissemination, and advocacy to contribute to collective movements addressing critical health issues worldwide.

As a key example of this, in November 2024 **Pivot Co-Founder Matthew Bonds and I led a symposium on health system resilience at this year's American Society of Tropical Medicine and Hygiene (ASTMH) conference**. The panel included experts from Madagascar, including representatives from the MoPH and the Charles Mérieux Center of Infectiology, who discussed building resilient health systems in an era of climate change. They presented on the impacts of climate on their domains, and how research provides lessons for Madagascar and similar settings to prepare for future climate events.

Notably, Fety Randrianarivelo (pictured above, left), a Community Health Worker (CHW) from Ifanadiana District, was featured on the panel, and was one of the first-ever CHWs to attend ASTMH. Reflecting on the community-level effects on and responses to the historic Cyclone Batsirai, which caused widespread destruction across Vatovavy Region in 2022, Fety's presentation highlighted the vital role of CHWs in preparing and supporting communities in an era of such threats.

Insights generated by the Pivot Science network have the potential to reshape global norms and funding priorities, ensuring that lessons learned in Madagascar can inform and improve health systems worldwide. As 2025 gets underway, we look forward to sharing more about the ways in which Pivot is leveraging science to drive solutions for sustainable impact in Madagascar and beyond.

In solidarity,

Laura Cordier
Executive Director



VATOVAVY: PROGRESS TOWARD REGIONAL EXPANSION

2023 Regional Baseline

Population: 838,803

Population living in extreme poverty: 66%

Children <2 with all essential vaccinations: 26%

Children <5 moderately or severely stunted: 68%

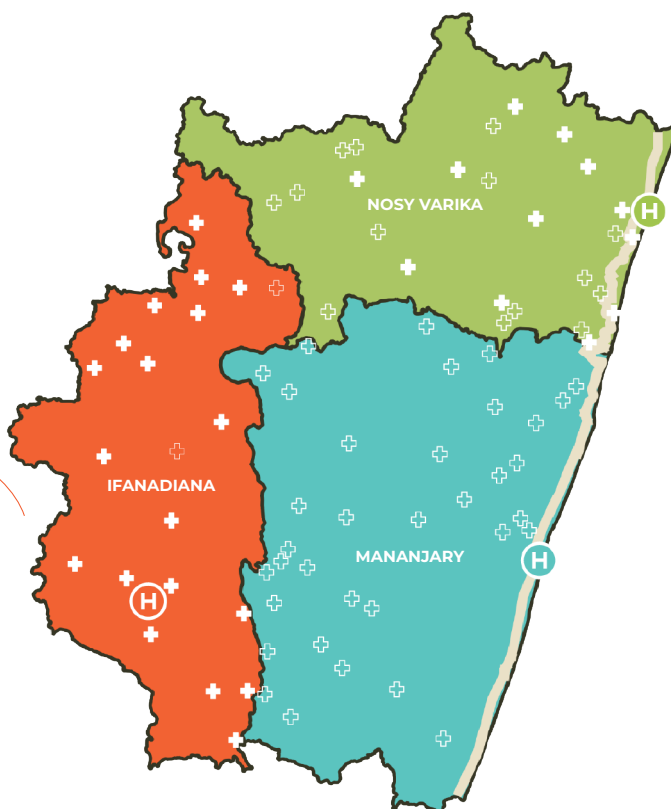
Women who delivered last baby in health facility: 16%

2014-2023:

Our first decade in Ifanadiana allowed us to test and refine interventions to maximize impact on population-level health outcomes. These lessons, combined with 2023 regional baseline data, informed our regional expansion strategy.

2024 onward:

Activities in Nosy Varika launched in 2024; the full expansion across all 3 of the region's districts will be phased over the next several years.



Pivot currently supports:

1,613	Community Health Workers
196	Community Health Posts
33	Primary Care Health Centers
2	District Hospitals

Map Legend

	Health Center
	Health Center with user fees removed
	District Hospital
	Pangalane Canal

– Q1 UPDATES –

Community Health (CH)

- Conducted **trainings for 1,613 CHWs**, including 791 new recruits. → *The logistics of such intensive training had an impact on community-level service delivery this quarter; Pivot teams are working to adapt the current approach to prepare the organization of future waves of training in order to avoid the disruption of routine activities.*
- Equipped and trained 67 new CHW peer supervisors** on the use of mobile data management application, CommCare.
- Convened regional MoPH leadership, CHWs, and technical partners to begin **co-creation of a regional community health research agenda**, with a focus on integrating participative methods as a crucial component of our overall CH strategy.

Global Engagement

Pivot delegations attended **3 international conferences**, exchanging knowledge with global development peers and partners and presenting various key aspects of our work:

- Dimagi's CommCare Government Summit - Scaling Digital Health in Africa**: shared Pivot's innovative use of mobile technology to support last mile delivery
- Climate and Health Africa Conference**: presented on health system resilience & infectious disease modeling
- American Society of Tropical Medicine and Hygiene**: in addition to leading a symposium on "what it truly takes to build health system resilience in an era of global change" ([more on page 1](#)), Pivot's delegation organized a side event to discuss supporting research "for and from Madagascar."

Removal of User Fees

- Continued the process of **adapting facility and pharmacy operations** to ensure the circuit of user fee coverage is effective at each of the 33 facilities where the initiative has launched.
- Launched support to **cover target population user fees at Mananjary Regional Hospital** in response to the increasing need to refer patients from Nosy Varika to higher levels of care.
- Advanced the **optimization of digital tools that support the fee removal initiative**; in addition to improving overall functionality and data management capacity, began developing a dedicated dashboard to capture financial protection data.
- Deployed an extensive **communication strategy to ensure community awareness and government buy-in with regard to changes in coverage in Ifanadiana District**, which is being adapted with the goal of maintaining our highest impact-interventions while applying key cost-saving measures.

Human-Centered Care

- Supported by Cartier Philanthropy, engaged in a new partnership with Applesseed to **deepen our understanding of patients' care-seeking through a behavioral change lens**, including a site visit for data collection in October
- Established community **gender-based violence monitoring committees** in 6 targeted communes, helping to identify and connect survivors to the safehouse and other legal / social resources

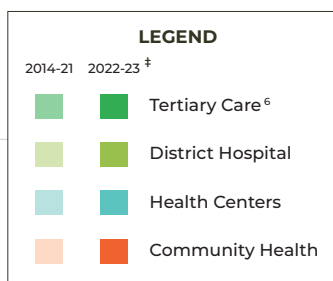
PATIENT VISITS SUPPORTED⁵

THIS QUARTER
(OCT-DEC'24)

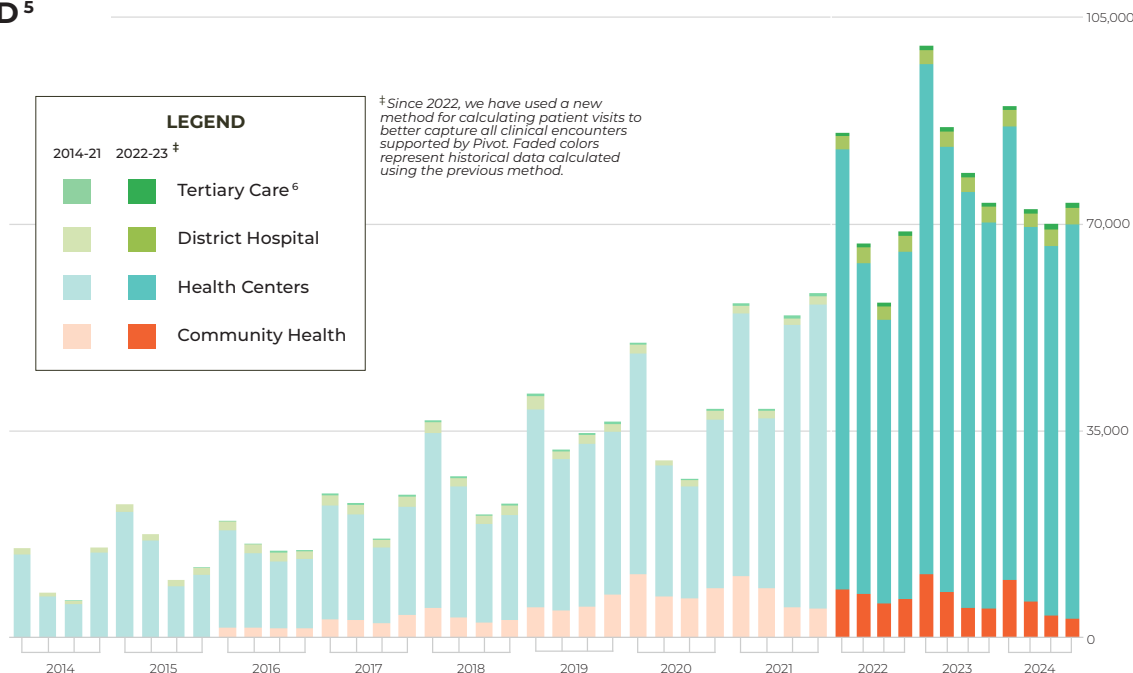
73,664

ALL-TIME
(SINCE 2014)

1,791,044



[‡]Since 2022, we have used a new method for calculating patient visits to better capture all clinical encounters supported by Pivot. Faded colors represent historical data calculated using the previous method.



Community Health



Health Centers



District Hospital

VISITS
(CHILDREN UNDER-5)

3,290

Target: 7,432

44% of target achieved

SUPERVISION

93%

of CHWs supervised

EXTERNAL CONSULTATIONS⁸
(ALL AGES)

64,400

Target: 77,812

83% of target achieved

PER CAPITA UTILIZATION

1.5 visits

per person (annualized)

VISITS
(ALL AGES)

2,561

Target: 2,858

90% of target achieved

HOSPITALIZATIONS

788

Target: 666

BED OCCUPANCY⁹

50%

Target: 65%

Results in this report represent Ifanadiana District outcomes only.

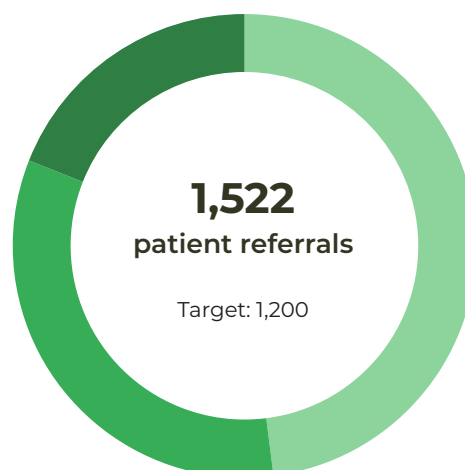
Starting in 2025, as part of our ongoing regional expansion, the Pivot QIR will shift to reflect activities underway in Nosy Varika and Mananjary districts.

PERSONNEL

- **1,811** MoPH staff supported
 - **96** district hospital staff
 - **102** health center staff
 - **1,613** community health workers

- **279** total Pivot employees
 - **98%** Madagascar-based
 - **97%** Malagasy
 - **86%** female leadership

CONTINUUM OF CARE



19%

transferred
by Pivot
ambulance

33%

transferred
by taxi bus

with transport fees
covered by Pivot

48%

by other mode
of transport

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

– MISSION HIGHLIGHTS –

SAVING LIVES



EXPLORING UNSEEN BARRIERS TO PARENTS SEEKING CARE

This year, with support from Cartier Philanthropy, Pivot **launched a new partnership with Applesed to better understand care-seeking behaviors** through qualitative research, leveraging behavior change strategies to increase utilization of community-based care.

In Ifanadiana District, access to healthcare for children under 5 remains a critical challenge. Common illnesses such as cough, fever, and diarrhea affect most children between 3 and 5 times a year. Despite proven success in improving child health outcomes, recent utilization trends show that children under 5 access care an average of 1.6 times per year. This raises the question: what unseen barriers continue preventing parents from seeking care for their sick children?

It is core to Pivot's culture to constantly question how our approach can be improved. We are capitalizing on this **opportunity to dig deeper into critical questions about how to address gaps in the health system** that have the most influence on public trust and likelihood to access care.

TRANSFORMING HEALTH SYSTEMS



COMPLETING A DECADE OF INVESTMENT IN THE TRANSFORMATION OF HOSPITAL INFRASTRUCTURE

This quarter, completing the construction of an administrative wing at Ifanadiana District Hospital **marked the culmination of a decade-long effort to strengthen hospital infrastructure**, the final piece of Pivot's investment in hospital "readiness" efforts underway since 2014. The completion of this administrative block not only enhances the hospital's operational efficiency but also symbolizes a strengthened foundation for delivering quality healthcare to the communities of Ifanadiana.

Over the course of ten years, Pivot has worked closely with district MoPH partners to make sustainable improvements to hospital infrastructure, including building space for greater laboratory capacity, pediatric care, infectious disease, and more. This landmark **prompts us to reflect on how the >\$500k of investments made over the past decade have contributed to improved utilization and outcomes, and to consider the future of hospital investments** as we expand Pivot support to the two other districts' hospitals in the region.

CATALYZING GLOBAL CHANGE



STRENGTHENING COMMUNITY-LEVEL DISEASE SURVEILLANCE FOR PANDEMIC PREPAREDNESS

Disease surveillance - the systematic collection and reporting of health-related data to identify and respond to public health threats - is an essential component of a strong public health system. Pivot's commitment to **disease surveillance took a leap forward with the training of 29 CHWs in Ranomafana Commune on a new module in the CommCare application**. This initiative, part of the AFD-funded PREZODE initiative, focuses on surveillance and spillover prevention, empowering CHWs as sentinels. This builds on Pivot's experience informing national community health policy, and our continued focus on strengthening health systems from the community level up.

Piloting this new module is a crucial step ahead of broader deployment. By digitizing surveillance, we replace traditional paper reporting with rapid, real-time data collection. **CHWs will be able to more efficiently report signs of potential disease outbreaks, strengthening early detection and response**. This initiative marks a significant advancement in community-based surveillance, enhancing public health resilience in the region.

MATERNAL & REPRODUCTIVE HEALTH



SINCE 2014, PIVOT
HAS SUPPORTED
23,644
FACILITY-BASED
DELIVERIES

This quarter, we achieved:



And maternal survival rates¹² were:



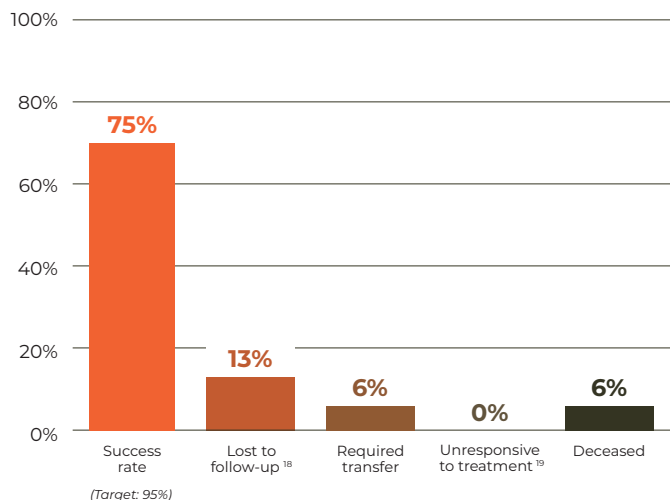
TUBERCULOSIS

This quarter, **78 patients** were enrolled for TB treatment.



Cohort Outcomes

for **53 patients** completing 1 year of treatment:

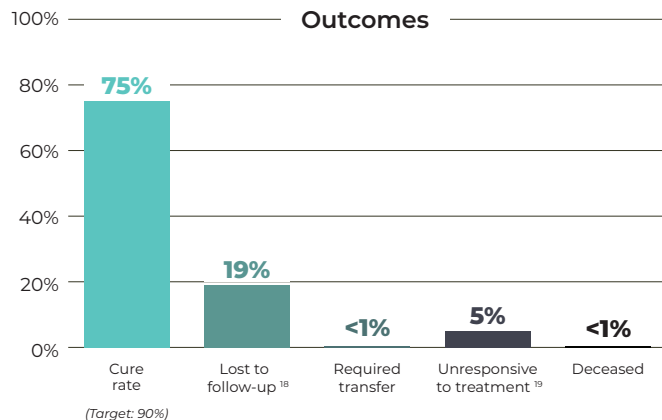


MALNUTRITION



HEALTH CENTERS

- **219 children** began treatment for acute malnutrition¹⁶
- **146 children** were discharged from treatment:



DISTRICT HOSPITAL

- **16 children** were admitted for treatment of severe acute malnutrition with complications¹⁷
- **12** were successfully discharged from intensive treatment (either cured or referred to a health center for continued care)

SOCIAL SUPPORT

506 social kits (food and household staples) distributed to vulnerable patients at the district hospital

85 psycho-social sessions provided for hospital patients

5,725 reimbursements provided for transport to / from care

35,852 meals served to hospitalized patients and their accompagnateurs²⁰

This quarter, the 70 health workers jointly recruited by the MoPH and Pivot marked one year since their deployment, which brought 85% of Vatovavy Region's health centers up to government staffing norms. Performance evaluations were carried out to assess their first year of performance - the midway point of the two-year assignment that precedes their full integration into the public workforce.



– RECENT PUBLICATIONS –

One term to transform: universal health coverage through professional community health workers

The Lancet. doi: 10.1016/S0140-6736(24) 02713-2 (2024).

Ballard M, Dahn B, O'Donovan J, Jiménez A, Kawooya P, Raghavan M, Ganjian N, Johnson AD, Boxer C, Gray K, Palazuelos D, Berry-Moorcroft C, Aranda Z, Iberico MM, **Cordier L**, Mbewe D, Kiprotich Yegon E, Ernst J, DiStefano L, Traill T, **Finnegan KE**, **Rakotonirina L**, Hofmann R, Sano ED, Johnston JS, Ward V, Westgate C, Shanmugarasa T, Alban R, Mann D, Asmara-Petersen R, Keronyai P, Settle D, Aidam J, Obbuyi A, Oladeji O, Musingo P, Cho K, Kok M.

Three members of Pivot's Executive Team co-authored a commentary in *The Lancet* in collaboration with co-authors from the Community Health Impact Coalition (CHIC) advocating for the professionalization of CHWs as a crucial step towards achieving Universal Health Coverage. This impactful piece provides a clear roadmap for ministers to achieve this goal within a single term.

Combining participatory mapping and route optimization algorithms to inform the delivery of community health interventions at the last mile

PLOS Digital Health. doi: 10.1371/journal.pdig.0000621 (2024).

Randriamihaja M, Ihantamalala FA, Rafenoarimalala FH, Finnegan KE, Rakotonirina L, Razafinjato B, Bonds MH, Evans MV, Garchitorena A.

Pivot's recent study explores how combining OpenStreetMap mapping and route optimization algorithms can enhance the efficiency of community health program delivery, ensuring that CHWs reach every household in need. We **developed a tool to optimize the routes that health workers travel to deliver key interventions** like mass sensitization campaigns and proactive community health care. This tool reduces the time and resources required for door-to-door services, with a dashboard that visualizes optimal routes and resource needs to aid health workers in activity planning. Aligned with WHO guidelines, this innovation leverages data to improve last-mile delivery, making a lasting impact in remote, underserved areas.

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