



IMPACT REPORT

2023



Pivot's mission is to **save lives,** **transform health systems,** and **catalyze global change.**

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Top cover photo by Barbara Kinney

A DECADE OF HEALTHCARE...

As Pivot crosses the milestone of 10 years in existence, I have been reflecting on why I was so compelled to join this team back in 2014 – what was it about this brand new organization that drew me in?

I was first attracted to the bold idea of making universal health coverage a reality in the diverse and uniquely fragile environment of Madagascar. Alongside this ambitious central goal, I found the fundamental commitment to transparency inspiring, and was excited by the idea that the project would generate learnings to be shared with the international community. Most importantly, the conviction that this could only be done through meaningful collaboration with the government indicated a true dedication to effecting long-term, sustainable impact.

The past year has been transformative in many ways: promising new collaborations and partnerships, strengthening systems across all domains of our work, leading research that saves lives, and supporting the most-ever patient visits in a single year. Through this period of major progress and change, **we are deepening our commitment to bridge the gap between science and service delivery** such that our work in Madagascar can inform rights-based healthcare worldwide.

The process of preparing for expansion across Vatovavy Region has been a brilliant forcing function to undertake deep reflections about our approach and the initiatives we plan to replicate and scale. As we expand Pivot's core activities across one of the most climate-vulnerable regions of Madagascar to support a population that is still reeling from the devastating effects of back to back cyclones, our added value is clear: **we can and must ensure resilience to sustain growth.**

The theme of health system resilience is the foundation of our strategy and is truly cross-cutting, finding its place in all of our initiatives. Seeing and living our work through that lens has created a new sense of focus and shed light on which aspects of our model are most central to our strategy as we endeavor to deliver on the promise of a healthier future for the people of Vatovavy Region.

As we step into the new fiscal year, the lessons of FY23 (and of the past decade) echo loudly. We are poised for expansion, equipped with strategic and operational plans, a dynamic network of collaborators, and the unwavering support of our community. We are so grateful for your partnership, which has been the bedrock of our progress and continue to guide our path forward.

Ny firaisan-kina no hery! (Our strength lies in our united efforts!)

In solidarity,

Laura Cordier
Executive Director



...FOR A MORE RESILIENT FUTURE

A few weeks ago, Pivot was recognized as a key partner institution during the World AIDS Day celebration led by the National Committee for the Fight Against AIDS. As I observed the trophy being handed over to Pivot leadership, I took a moment to reflect on how much Pivot has grown and evolved since I had the pleasure of becoming a part of this special organization.

When I was invited to join Pivot's board back in 2020, I immediately recognized the opportunity to offer my years of experience and expertise to help Pivot in its trajectory. For those who may not know me, I have had the privilege in my career to wear many hats that, together, permit me to see the beautiful complexity of Pivot's ambitious vision to guarantee equitable access to quality care for all.

From where I stand as a practicing doctor, I can see the many lives that have been saved. As the chair of Madagascar's Country Coordinating Mechanism, I can appreciate the strides in transforming the health system and the evolving partnership with the Ministry of Public Health (MoPH). As the former dean of the Medical School of Antananarivo, I admire the dedication towards constantly improving quality care. As the Director of the Centre d'Infectiologie Charles Mérieux, I recognize the breadth of knowledge produced through rigorous research and revolutionary science. And as a proud Malagasy, **I am honored and humbled by the impact Pivot is having in Ifanadiana and the promise that it holds for Madagascar.**

During my last touchpoint with the team (*pictured above on the right*), as we shared our personal visions of what expansion will mean for Pivot, I reflected that this momentous point in our history is also, inevitably, one of change. And we must not fear change! This iterative process of replication will not happen quickly, but must lead to a shift in approach, and we mustn't hesitate to lean into the challenge.

Through my training and life's experience I have come to believe that healthcare is an endless story of love and compassion – the relentless dedication to help those who need it most. I believe in Pivot's vision and am so looking forward to seeing the team double down on its efforts to raise the standard for healthcare in my country, and continue to tangibly change people's lives.

Because, as we know: **ny fahasalamana no voalohan-karena** (health is the first wealth).

With sincere gratitude,

Dr. Luc Samison
Pivot Board Member & Steering Committee Chair

EXPANDING OUR HORIZONS

“It’s great working with [Pivot] because they know, as we do, that **health is life**. Without health, there is no development. So we ask that they take their success in Ifanadiana to the seaside of Mananjary and to the countryside of Nosy Varika – **the people of Vatovavy are ready for you.**”

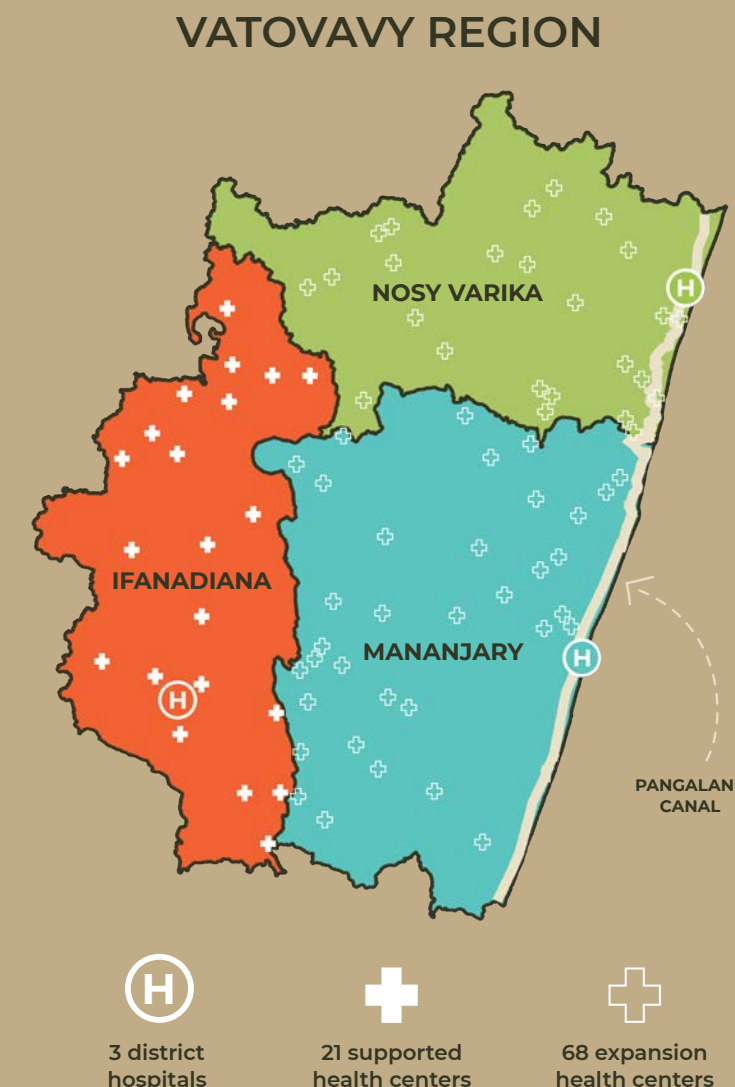
- Dr. Lucien Maurice Randriarison
Governor of Vatovavy Region

ANSWERING THE CALL

The beginnings of our path to expansion took shape with the creation of the new Vatovavy Region, which officially separated from the region of Vatovavy-Fitovinany in November 2021. Already working in **Ifanadiana**, one of Vatovavy’s three districts, the government invited Pivot to expand activities across the two other districts that comprise the newly-formed region: **Mananjary** and **Nosy Varika**.

This regional expansion is a **momentous shift for Pivot, as we move from intervening in 1 of 114 districts to 1 of 23 regions**. We will be tripling our geographic reach and quintupling the population we serve from approximately 200,000 to nearly 1 million people over the next five years.

Our goal for Vatovavy Region, as it has been for Ifanadiana District since 2014, is to create a robust and responsive health system that can effectively address healthcare challenges, improve population health outcomes, and promote health equity.



REFINING OUR STRATEGY FOR GROWTH

Following the government’s invitation to expand, Pivot **conducted an intensive organization-wide evaluation** of our strategy, approach, research, and impact to date. We **shared major findings from this exercise with our MoPH partners** with a focus on how lessons learned from our first decade of work could inform our strategy for replication and, eventually, scale.

Guided by these insights and by the MoPH’s national priorities, we **carried out a series of collaborative workshops with government partners** to evolve our implementation approach. Analyzing which activities could be replicated and which must be adapted for maximum impact, we **co-designed a plan for regional rollout** to kick off in FY24.

SHIFTING POWER FOR MEANINGFUL PARTNERSHIP

“As Pivot’s Director of Engagement, I **have had the privilege to lead the effort to rethink our approach with a greater emphasis on meaningful partnerships**. We have learned that this does not happen by chance – it requires intentional shifts in the rules of engagement such that partnerships are fostered and nurtured. The key is re-centering our approach to focus on people.

We are proud of our unique position as power shifters, and of the learnings we can share with the global community. It starts with asking the simple questions – like ‘what do you think?’ and ‘what do you need?’ – and continues by cultivating an open, two-way conversation to ensure meaningful mutual support.”

- Dr. Barbara Vololonarivelo
Director of Engagement



LAUNCHING OUR 2023-2028 STRATEGIC PLAN



At the start of 2023, Pivot entered a transformative new phase with the launch of our 2023-2028 Strategic Plan, a comprehensive roadmap outlining our objectives for replication at a regional level.

The plan is grounded in six strategic objectives that, combined, will advance our mission to save lives, transform health systems, and catalyze global change:

1. **Strengthen pillars of the health system** at all levels of care
2. **Improve quality of services** across medical programs and clinical specialties
3. **Integrate social protection** to ensure equitable access to care
4. **Advance partnerships** to scale impact
5. **Strengthen organizational capacity** to aid in replication and sustain growth
6. **Revolutionize global health science** to rapidly generate a new kind of evidence base



Patients have the right to quality care no matter where they interact with the public health system, which is why **it is our priority to move these objectives forward at every level: in communities, at health centers, and at the district hospital.** The integration of these six domains across the continuum of care is the key to saving more lives in both the short and long term.

RENEWING OUR PRIMARY PARTNERSHIP

The fiscal year ended with a visit to Vatovavy Region by a delegation of central-level MoPH officials who led an evaluation of Pivot's work and analyzed our proposed multi-year strategy. **The visit culminated in the renewal of our partnership convention, outlining the terms of our collaboration with the MoPH over the next five years.**



Navigating on foot for up to three days between communities, INSTAT's team of data collectors faced the same geographical barriers that those living in rural areas regularly face, highlighting the reality and severity of health access inequities across the region.

ILLUMINATING OUR PATH FORWARD WITH DATA

Every two years since 2014, we have revisited 1,600 households across Ifanadiana District to administer the Ifanadiana Health Outcomes and Prosperity Longitudinal Evaluation (IHOPE) survey, tracking the impact of Pivot's work on population health and well-being. This study has been instrumental in shaping our collaboration with the MoPH to strengthen the public health system in Ifanadiana District.

The fifth wave of IHOPE data collection was completed this year in partnership with Madagascar's National Institute of Statistics (INSTAT), which we anticipate will provide critical insights into the transformative effects – as well as areas for improvement – of our initiatives over the past decade.

Building on our IHOPE experience, we also **conducted baseline data collection for Vatovavy Region.** Carried out over three months, this survey reached the doorsteps of 4,800 households across the region, with questions designed to establish a comprehensive understanding of the health of Vatovavy's population prior to intervention.

These data are fundamental to the measurement of our impact on population health and a core component of the Pivot model. **In collaboration with our government partners, we will use these data to set priorities for programs as we expand,** and as a baseline to measure our progress in improving population health across the region. With the analysis of survey data ongoing, we look forward to sharing key insights from the study in 2024.

STRENGTHENING PILLARS OF THE HEALTH SYSTEM

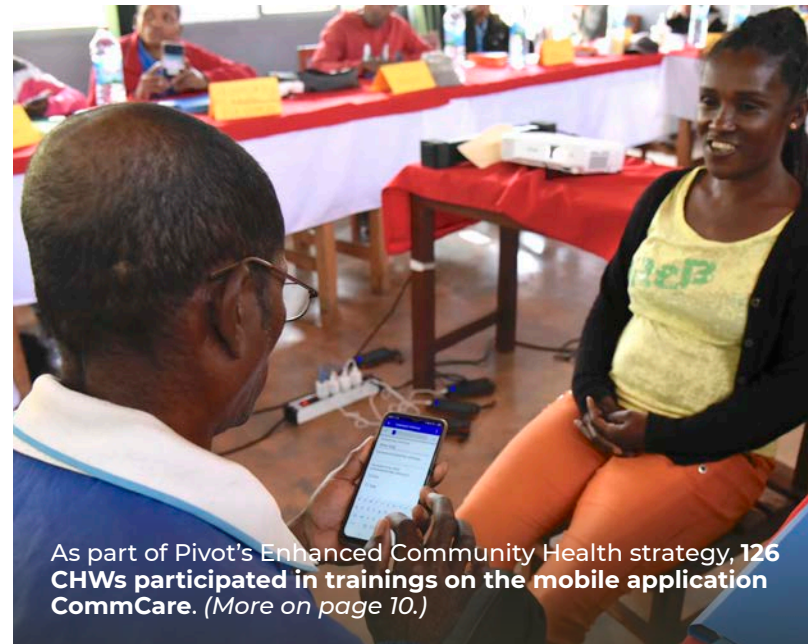
A well-functioning health system is essential for a healthy population. Achieving system-level change while maintaining quality service delivery requires the coordinated integration of initiatives that support key pillars of the health system.

PRIORITY PILLARS INCLUDE:

- Human Resources for Health
- Infrastructure
- Health Financing
- Information Systems
- Biomedical & Supply Chain
- Governance



Key advancements to strengthen each health system pillar led to **334,039** patient visits supported by Pivot in 2023



As part of Pivot's Enhanced Community Health strategy, 126 CHWs participated in trainings on the mobile application CommCare. (More on page 10.)

INVESTING IN HUMAN RESOURCES FOR HEALTH (HRH)

A robust health workforce is the backbone of any health system, essential for achieving universal health coverage, responding to emerging health challenges, and promoting a community's overall health and wellbeing.

In partnership with the MoPH, we carried out a **fifth wave of joint recruitment this year, onboarding 29 new government health workers across 17 health facilities.**

The key to this HRH effort is sustainability through ensuring full integration of staff, jointly-recruited with the MoPH, within the public health workforce. In 2023, the MoPH fully integrated 11 healthcare practitioners to their workforce from the previous wave.

HRH is often a neglected and underfunded issue. We have formally joined the government of Madagascar's HRH working group, to support policy development related to issues of staff recruitment and retention as well as the scaling of performance based financing initiatives.

Pivot is proud to be a leading government partner for HRH support in Madagascar, actively **supporting 443 clinical personnel** across all levels of care:

71

hospital physicians

173

primary care providers

199

community health workers



Our latest wave of work to strengthen health system infrastructure culminated in 2023 with a series of ribbon-cutting ceremonies to open the newly-upgraded facilities to the public. (More on page 11.)



Prioritizing staff retention and wellbeing, we **installed solar suitcases at 4 health centers** in 2023. Additionally, thanks to **Direct Relief, 3 solar generators** were put in place at the District Hospital.

With increased access to reliable electricity, providers are able to focus on caring and healing.



FORTIFYING INFORMATION SYSTEMS

Information systems form the scaffolding of Health Systems Strengthening, providing crucial data and analytics that enable informed decision-making, efficient resource allocation, and the continuous enhancement of healthcare delivery.

Guided by the government of Madagascar's leadership and with an eye for interoperability and sustainability, Pivot made a leap forward in building efficient health information infrastructure this year, a cornerstone of our strategic vision:

- **Mobile Technology:** The deployment of CommCare, a smartphone based application which enables electronic data collection, empowered 126 community health workers across 6 communes to enhance their management of patient care, protocol adherence, and reporting.
- **Reporting:** We participated in a joint evaluation of the monthly government electronic reporting system for health facilities. This is a key step toward the national scale-up of this tool. Timely, high quality health systems data are essential for program management, resource allocation, and research.
- **DHIS-2 Platform:** We supported the national informatics team and organized a 3-week advanced training with HISP-Rwanda on the deployment and management of the District Health Information System (DHIS-2) tool, the health information system database formally adopted by the government.

Data is core to Pivot's work, and our dashboard has been a central resource for both program managers and MoPH partners since the beginning. **In 2023, we transitioned our Monitoring and Evaluation databases to DHIS-2** to enable full integration with government data systems.

By aligning with national systems we minimize unnecessary spending on system development and can instead focus on data quality and use. Analysis and reporting tools that we develop will be built to be interoperable with DHIS-2, enabling national scale-up and adoption beyond Vatovavy Region.

ELEVATING HEALTH INFRASTRUCTURE

It was a banner year for improving infrastructure in Ifanadiana District. Following a number of challenges that delayed progress from 2021-2023 (caused by everything from cyclones to contract negotiations), we **completed four major health center construction projects** resulting in safe, welcoming spaces for patients to receive care.



Analamarina Health Center



Androrangavola Health Center

In Ifanadiana District, **87%** of the population (approx. 177,000 people) receive care at a health center that has been renovated or built with Pivot support.

CONFRONTING OUR OWN BARRIERS

True to our value of accountability, we embrace the complexity of transforming a health system and don't shy away from the challenges inherent in that mission. In the face of setbacks we encountered during 2023, we remain committed to creatively seeking solutions that support government goals and advance our strategy toward UHC.

PROCUREMENT & SUPPLY CHAIN

Since the beginning, the MoPH has held us accountable to our commitment to strengthening the government supply chain; while a parallel system may solve issues in the short term, it is not a sustainable solution. To that end, in 2023 we handed back the management of the community and hospital supply chain to district representatives. As a result, this year we have seen continued stockouts of essential medicine from the central to the community level.

This has been a genuine challenge; **working as closely as we do to the communities we serve, we know that access to basic medicines can often be a matter of life and death.**

No longer being able to actively procure medicine required us to look at this pillar through a new lens, focusing on some of the more complex, long-term questions about sustainably supporting supply chains. In doing so, we made headway on resolving ongoing supply challenges in the following ways:

- **Policy:** joined the technical working group, and financially supported the WHO-led central-level review of the national essential medicine list
- **Advocacy:** advocated for SALAMA (the national procurement center) to add critical medicines to their purchasing and distribution list while creating a safety net for supply and demand
- **Accompaniment:** engaged in close collaboration with district and regional working groups and shifted our collaboration with third parties that manage hospital and district pharmacies
- **Science:** leveraged in-house expertise to advance modeling and disease prediction, providing better estimates of essential medicine needs to inform ordering



GOVERNANCE

Strong governing entities for system oversight are central to strong and resilient health systems. This year was one of exploration to identify opportunities for growth and new initiatives, such as:

- **Data Transparency:** deployment of mobile technology will allow for real-time reporting and public data-informed decision-making
- **Leadership:** supporting the development of a leadership training curriculum for primary care practitioners
- **Financial Autonomy:** in recognition of the power that we hold as technical and financial partners, we are working toward a grantmaking model for district- and region-level entities, to facilitate independent management with appropriate reporting mechanisms





ENHANCING COMMUNITY-BASED CARE

Community-based healthcare is the foundation of a resilient health system. Since 2019, Pivot's enhanced community health (ECH) pilot has evolved into a launchpad for addressing population health challenges within the specific context of Madagascar, with an emphasis on overcoming geographic disparities and bolstering community resilience.

More than ever before, **this year brought significant opportunities for Pivot to advocate for Community Health Workers** and community-level care as part of an accessible, integrated, resilient health system. To tackle the multifaceted challenge of ensuring reliable access to quality care for all in Madagascar, our ECH model combines:

- **Professionalized CHW network:** increasing the number of CHWs per commune, ensuring continuous training and field-based supervision, increased compensation
- **Dual case-finding approach:** incorporating proactive household visits in addition to receiving patients at fixed community health sites (built by the community)
- **Mobile technology:** supporting adherence to protocol for patient encounters and improving the quality and availability of data
- **Integrated continuum of care:** enabling a referral and counter-referral system linking community-level care to primary and secondary care
- **Financial protection:** removing user fees for targeted populations including pregnant women and children under 5
- **Responsive embedded research:** using data from the community health program to better understand implementation and aid in program design

As of 2022, per MoPH recommendations, we have slowed the rollout of the ECH model throughout the rest of Ifanadiana District, in order to focus our attention on an invitation to bring forth our experience at the central level, joining efforts to update the community health national strategy.

KEY OUTCOMES

30,379

under-5 consultations provided by CHWs

expanded community health support to an additional

13,000

residents in Ifanadiana District

92%

of households visited by CHWs during routine proactive care visits

94%

of CHWs supervised in the field on a quarterly basis

92%

adherence to protocol by CHWs conducting child health consultations



126

CHWs equipped and trained with mobile technology

70

new community health posts constructed

VOICES FROM THE FIELD



EUGÉNIE

A Community Health Worker is a role model in the community. Without them, the health situation would be grim, because people wouldn't know what to do without guidance in case of illness, and they would be missed by the healthcare system.

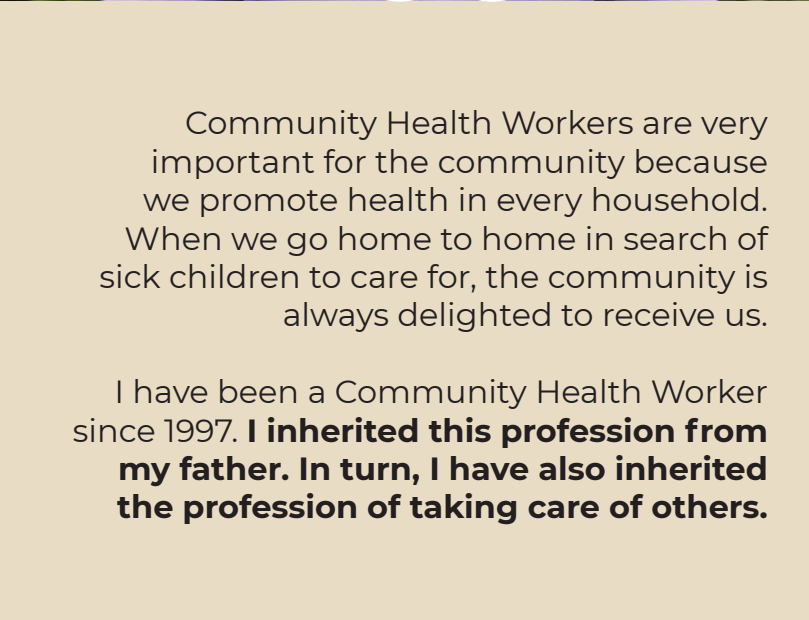
I have been a Community Health Worker for almost 26 years, and I love my job because I get to use my skills to do good for the people around me.



SANDRA

I have been a Community Health Worker for 3 years, and I love this profession because I enjoy seeing healthy children and [accompanying] pregnant women monitoring their pregnancy.

We, as Community Health Workers, have a huge responsibility, because **the development of our country starts at the grassroots level.** We must do our job well and always remain honest because the health of the population depends on us.



ROSAH

Community Health Workers are very important for the community because we promote health in every household. When we go home to home in search of sick children to care for, the community is always delighted to receive us.

I have been a Community Health Worker since 1997. **I inherited this profession from my father. In turn, I have also inherited the profession of taking care of others.**

I have been a Community Health Worker since 2019, and **I love this profession because it strengthens the bond with the community.**

[Without Community Health Workers], the health situation in Madagascar would be concerning for those living far from health centers or afraid to visit hospitals. But since we already interact with them daily, they don't fear approaching us, and no longer fear seeking healthcare.



FETY



YVONNE

One of the most important roles of the Community Health Worker is to encourage the community to seek care when they are sick. [We] reduce the mortality rate in our communities, as people no longer stay at home when they are ill.

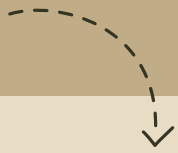
A Community Health Worker must be a good communicator, sociable, persuasive, and well-mannered. I have been a Community Health Worker for over 11 years, and **I love my work because this profession saves lives.**



MARIETTE

A Community Health Worker is a health awareness advocate. We are close to and respected by the communities we serve, not hesitating to provide guidance when action must be taken.

I have been a Community Health Worker for about 25 years, and I love my work because **the knowledge I have is used for the benefit of families in my community.**



SUPPORTING CHW PROFESSIONALIZATION

A BRIGHT FUTURE OF COLLABORATION AND ADVOCACY

To date, **Pivot has been the sole NGO representative invited to work with Madagascar's central working group on community health.** Our on-the-ground perspectives and representation of community health implementation in rural settings allowed us to effectively advocate for and influence a critical policy shift.

After months of active participation in central-level working groups, the MoPH finalized the new national guidelines for community health, having adopted the majority of Pivot's evidence-based recommendations. **Major wins included:**



As technical partners, Pivot is poised to **accompany the government's journey toward the professionalization of Community Health Workers (CHWs)**, bringing a patient- and data-informed perspective and a multisectoral approach to the national conversation.



ADDRESSING GEOGRAPHIC INEQUITIES

OUR ONGOING INVESTIGATION INTO BARRIERS TO CARE

In one of our earliest and most significant findings, the work of Pivot's research team revealed that, despite major improvements to the quality and reliability of facility-based care and the removal of user fees, there was minimal improvement to utilization rates among individuals residing over 5km from the nearest health center. This revelation guided our subsequent research and implementation efforts, directing our focus towards designing programs that account for geographic barriers to healthcare access.

Despite traditional strategies, like embedding frontline health workers to deliver care in their home communities, **we found that geographic barriers to care persist even at the community level**, as illustrated by a Pivot study published in PLoS Global Health this past year. The study, led by Pivot researchers Tanjona Andréambelason and Michelle Evans, reveals **a 28% decrease in community health utilization for each additional kilometer people live from their local community health site.**

Andréambelason and Evans illustrated how existing community health sites, typically staffed by at least two CHWs, are strategically placed to minimize travel time for most residents. However, **distance remains a significant hurdle, suggesting the need for innovative approaches like proactive case-finding and household-level care delivery to serve the most remote communities.**

Our findings emphasize the importance of continued community engagement in identifying and addressing disparities in care, and will inform our community health strategy moving forward.

[ACCESS THE FULL STUDY HERE](#)



Associate Medical Director Luc Rakotonirina attended the CHW23 conference with members of Madagascar's delegation (left) and convened with CHIC's Director, Dr. Madeleine Ballard (right).



In the international space, **Pivot was nominated to join the Malagasy delegation attending the 3rd International Community Health Symposium in Monrovia, Liberia.** We also continued engaging in advocacy efforts led by the Community Health Impact Coalition (CHIC), contributing to critical conversations around the meaningful inclusion of CHWs on the path to achieving Universal Health Coverage.

Through expansion, we will continue to boldly advocate for the needs of CHWs such that they, the lifeblood of the public health system in rural settings in Madagascar and around the world, may thrive in their work to serve their communities.

IMPROVING SERVICE QUALITY AT ALL LEVELS OF CARE

The integration of various health services – including preventive, promotive, curative, and rehabilitative services – creates a **holistic approach that centers the patient experience and enhances the continuum of care.**

PRIORITY PROGRAMS INCLUDE:

- Child Health & Nutrition
- Maternal, Neonatal & Reproductive Health
- Infectious Disease Prevention
- Noncommunicable Disease Management
- Cross-Cutting Initiatives (e.g., ambulance & referral network)



International Maternal Newborn Health Conference

Pivot National Director Sarah-Anne Barriault joined Malagasy delegates from the MoPH and Vatovavy Regional Health Office at the INMH Conference in Cape Town, South Africa.

Pivot teams marked National Breast-feeding Week with a series of awareness-raising campaigns on the importance of healthy nursing practices, including the normalization of breastfeeding in the workplace.

Continuing the effort to promote safe labor and delivery, two additional maternal waiting homes were constructed to provide lodging for expectant mothers, particularly those traveling from remote communities to access care.



MATERNAL, NEONATAL & REPRODUCTIVE HEALTH

Vatovavy Region has among the highest maternal mortality rates in Madagascar, with limited access to essential maternal care and pervasive gaps in reproductive health services. Addressing these challenges is imperative, as the well-being of mothers directly influences the health of communities. By **strategically prioritizing interventions that enhance access to quality maternal care**, our aim is for women to have full agency over their healthcare – from contraception, to pregnancy and delivery, to newborn and postpartum care.

This year, we are proud to announce the launch of the SAFER project. With support from the IZUMI Foundation, **the initiative leverages the power of layered networks of care to increase facility-based delivery rates and ensure the timely identification, referral, and management of high-risk pregnancies.**

In 2023, we saw our best maternal health outcomes to date thanks to the continued integration of targeted initiatives to promote maternal health:

- Dignified Spaces:** working closely with the district and regional maternal health representatives to ensure every health facility meets basic standards of care
- Capacity-Building:** supporting trainings led by the chief doctor of Ifanadiana District Hospital and our maternal health mentor (both OBGYNs) to build skills in emergency obstetrical care for facility-based practitioners, with a focus on identification and management of high-risk pregnancies and neonatal emergencies
- Maternal Waiting Homes:** enabling pregnant women and their families to stay in a dedicated space for expectant mothers for up to two weeks before their due date
- Traditional Birth Attendants (matrones):** recognizing the key role that matrones play in the community, this initiative bridges the gap in coordination between midwives and matrones, facilitating productive collaborations by identifying simple common objectives, such as ensuring safe deliveries
- Networks of Care:** building a network of healthcare providers focused on obstetric and neonatal care, including traditional birth attendants, primary care midwives, hospital-based obstetricians, specialists in university hospitals, and public health administrators at the central level

KEY OUTCOMES

supported
>4,000
facility-based deliveries

maternal survival rates:
100% across health centers
99% at the hospital

facility-based delivery rate of

56%

representing a **72% increase** in women opting for safer deliveries since 2015

built **2** new maternal waiting homes

for a total of **8** in the district

38%

of women delivering at facilities accompanied to care by a traditional birth attendant

97%

coverage of first antenatal care consults among pregnant women

CHILD HEALTH & NUTRITION

Supporting the integrated management of childhood illnesses has always been one of the cornerstones of Pivot's work. Since 2014, we have been ensuring that children have timely access to quality essential and integrated services.

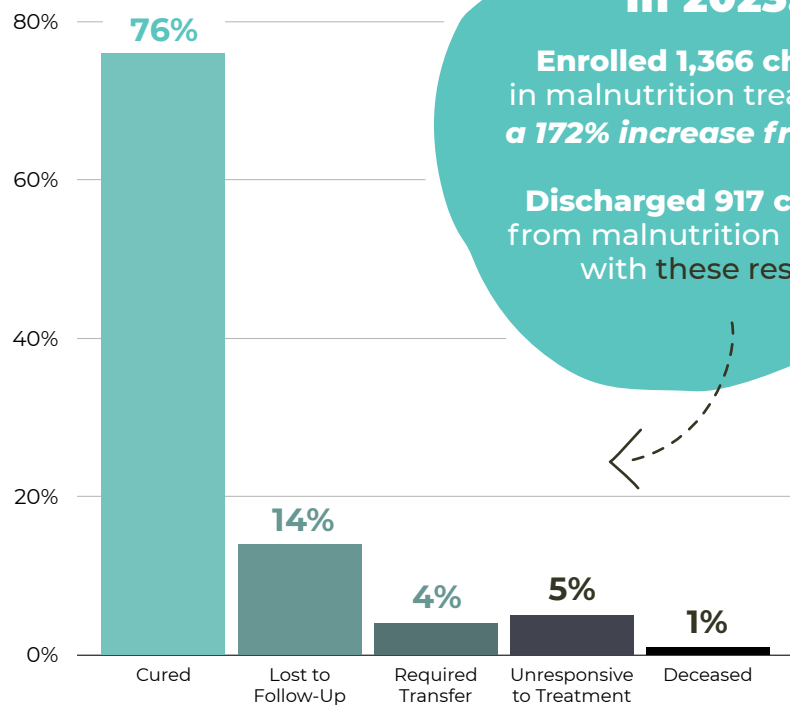
This year, however, was not the norm. **The communities we serve have been facing the burden of extreme weather events that disrupt access to care** as well as commerce, creating extra financial hardship and exacerbating food scarcity issues. **With access to care being harder than ever, it was our priority to ensure that no child was overlooked.**

With a mission to support humanitarian response to "silent" crises, Stavros Niarchos Foundation (SNF) looks for opportunities to provide resources to those facing the aftermath of the disasters that go under the radar. Following Cyclone Freddy, one of the strongest and longest-lasting cyclones in the Indian Ocean this past year, **SNF granted six months of support to our post-cyclone malnutrition response.**

This new partnership has already proven critical in **allowing us to go beyond just integrated management of severe acute malnutrition and address the rising numbers of moderate acute malnutrition cases in the region.**

In 2023, our malnutrition program advanced in key areas of work:

- **Emergency Program for Moderate Acute Malnutrition:** supported the procurement of therapeutic foods and training of health workers in the detection and management of acute malnutrition cases, targeting 9 communes facing a rise in malnutrition
- **Leveraging Partnerships:** worked in close collaboration with UNICEF in the national and regional nutrition clusters, as well the National Office of Nutrition, Catholic Relief Services, and the World Food Program
- **Integrated Malnutrition Care:** extended the Severe Acute Malnutrition program to 6 additional communes, reaching 100% coverage in the district
- **Capacity-Building:** provided regular refresher trainings in Severe Acute Malnutrition for primary care providers
- **Mass Screenings:** organized community-wide mass malnutrition screenings in collaboration health centers and CHWs



In 2023:
Enrolled 1,366 children
 in malnutrition treatment –
a 172% increase from 2022
Discharged 917 children
 from malnutrition program
 with these results



A CALL TO ACTION

BUILDING CLIMATE RESILIENCE

Madagascar being among the countries most vulnerable to the effects of climate change means that resilience is much more than a trending concept or a funding opportunity – it is our daily reality. Back-to-back cyclone seasons in 2022 and 2023 had devastating effects on Ifanadiana District and the whole of Vatovavy Region, forcing Pivot to **reevaluate our model through the lens of climate resilience.**

Over the past two years, thousands of displaced families have faced **heightened risk of infectious disease and acute malnutrition** as a direct result of intensifying cyclones. Severe damage to health infrastructure (not to mention roads and footpaths) exacerbate these issues, impeding the health system's capacity to meet the urgent needs of the population.

Confronted by the realities of climate change in an ecologically fragile setting, we're met with challenging questions: **How do we disrupt the pattern of constantly needing to rebuild a collapsing system? And, in such a setting, how do we sustain resilience and growth?**

It is time to redefine Health Systems Strengthening for the realities of the local and global context. The journey to health system resilience will not be a simple one, as we must address numerous interconnected issues: changing disease burden, infrastructure in the face of destructive storms, an increased need for human resources, and the financial and emotional toll on communities. **Pivot is uniquely positioned to meet this moment with compassionate, community-centered programs and cutting-edge science.**

In the coming year, we will continue to review our operating model to hone in on the essentials of our work and ensure that our programs are designed to provide care in the most remote settings, and even more so in those most susceptible to the impacts of climate change.



INFECTIOUS DISEASE PREVENTION & TREATMENT

Preventable and curable infectious diseases persist as formidable threats to public health in Madagascar. Their prevalence, exacerbated by various socio-economic factors, underscores the importance of the targeted interventions Pivot has supported over the past decade.

This year, we continued supporting **TUBERCULOSIS (TB)** patients with the implementation of the National Tuberculosis Program through our INTEGRATE TB initiative. Supported by the IZUMI Foundation since 2021, the program is designed to improve case detection and ensure comprehensive TB care for all.

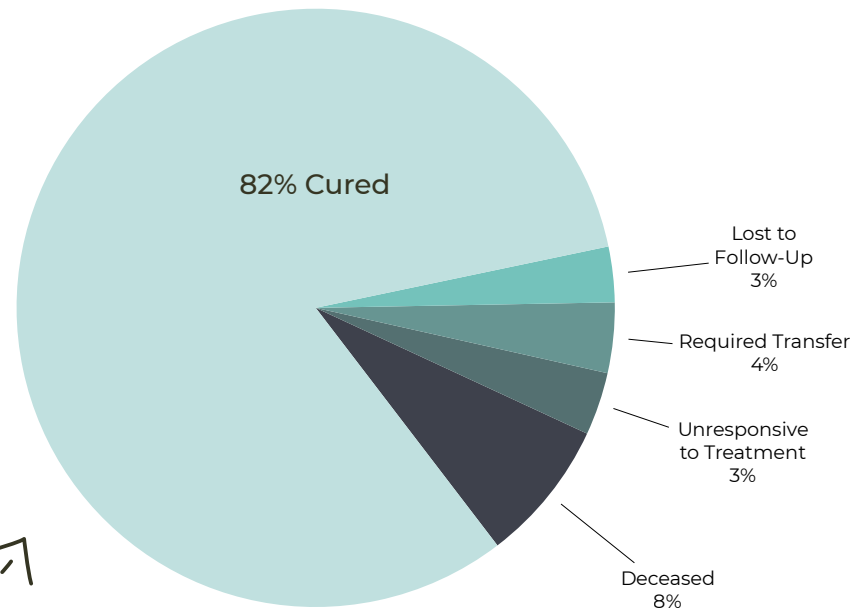
In 2023:

343

TB patients detected, diagnosed, and enrolled to begin treatment

234

TB patients discharged from treatment with **these outcomes**



Diagnosis and treatment of **MALARIA** is an organizational priority that requires the integration of clinical programs, partnership teams, and research to meet the needs of our communities.

Although district residents report high rates of malaria prevention activities – 74% of children under five and 70% of adult women reported sleeping under a bed net – Pivot’s infectious disease team found high rates of malaria during mass screenings, with reported **test positivity rates as high as 73%**.

In 2023:

14,700

children diagnosed at health centers during 2023

9,900

children diagnosed with malaria by CHWs

a 45% increase from 2022

With the procurement of malaria medication a persistent challenge, Pivot’s research team is **working to improve malaria forecasting to inform the supply chain**, ensuring that necessary medications reach health centers on time.

Addressing the malaria burden will remain a priority for Pivot in 2024 and will require outreach, behavior change, listening to communities to better understand effective disease prevention and treatment strategies, and research.



CARE FOR THE WHOLE FAMILY

Méline resides in the village of Antonkazo with her teenage son, Derick, and infant daughter, Verosoa. It became evident to Méline that her health was compromised when she had to take two days to recover from a single day of work. However, **with the nearest health center a two-hour walk from home, the long journey to care was more than she could afford, both physically and financially.**

During a visit to her home, Pivot’s community health team found that all three members of the household exhibited signs of malnutrition and TB. Méline and her children were visibly underweight and often breathless from severe bouts of coughing. **After assuring Méline that she and her children would receive the needed treatment at no cost, their local CHW referred and accompanied them to Tsaratanana Health Center.**

Nine-month-old Verosoa was diagnosed with severe acute malnutrition and tested positive for malaria. She was enrolled in the health center’s malnutrition treatment program and, over two months, reached her target weight, recovered from malaria, and successfully completed the program.

Presenting more severe symptoms, Méline and Derick were referred to Ifanadiana District Hospital, where they were both diagnosed with TB, and Derick with severe malnutrition. Upon discharge from the hospital and referral back to their health center in Tsaratanana, both enrolled in the local TB treatment program and Derick followed his prescribed therapeutic nutrition regimen.

Together, with support from their local CHWs and the Pivot social work team, **Méline and Derick completed a full year of treatment and were discharged in full recovery.** Back at home with Verosoa, the family has resumed work and life with renewed health and hope.





NONCOMMUNICABLE DISEASE MANAGEMENT

Over the past two years, we have actively contributed to and navigated implementation of various revisions in national policies for noncommunicable disease management, reinforcing our commitment to comprehensive healthcare advancement.

Most notably, we **advocated for the decentralization of diabetes care from the hospital level to health centers, resulting in policy change that increased access to diabetes management services** across Madagascar. We joined the high-level technical working group and obtained approval from different specialized professors and clinical associations. We were also able to organize a training-of-trainers for the primary care providers of Vatovavy Region.

In addition, we **expanded our diabetes management program to 15 health centers in 2023, reaching full coverage across Ifanadiana District**. This rollout included mass screenings (*pictured below and to the left*) and one-to-one training and accompaniment of health practitioners in some of the most remote areas of the district.



SUPPORT FOR THE WHOLE PATIENT

This year, our NCD program went **beyond advocacy and medical interventions**. Looking at the needs of our patients more broadly, members of Pivot's clinical and social work teams joined forces to create space for providing emotional support, breaking down stigmas, and fostering a sense of community for both individuals with diabetes and their families.

Through patient counseling sessions, we **established a safe space where individuals with diabetes could discuss their experiences, challenges, and concerns**. These sessions addressed not only medical aspects of living with diabetes, but also delved into the emotional and psychological dimensions that can accompany chronic illness. By providing an atmosphere of openness and understanding, we aim to dispel misconceptions and reduce societal stigmas – including those held by patients themselves.

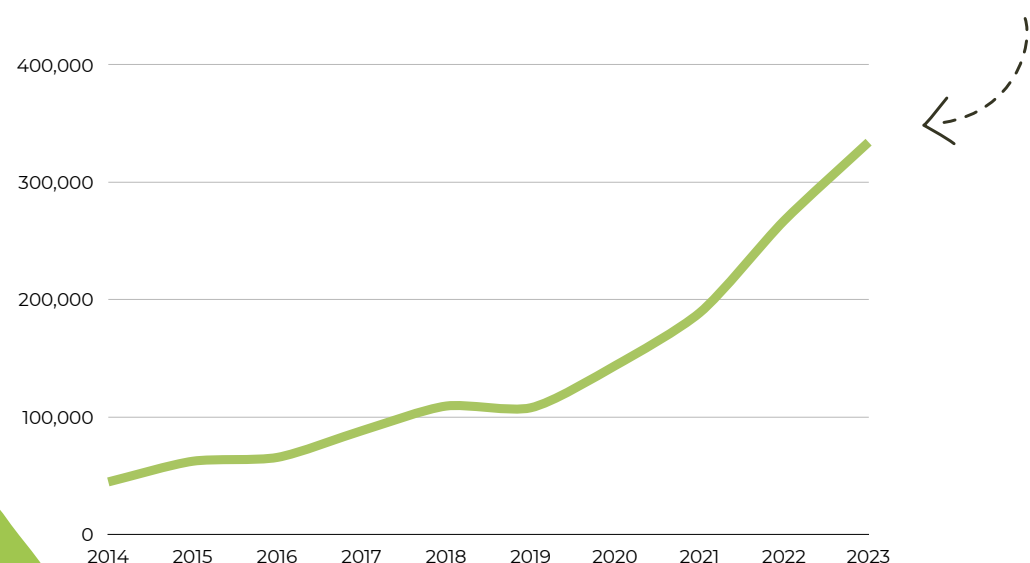
Recognizing the impact of diabetes on the entire family, we also **initiated support groups tailored to the family members of those affected by diabetes**. These sessions aim to address the diverse aspects of living with diabetes and create a supportive ecosystem that extends from the sessions into the participants' homes.

ENSURING ACCESS TO CARE THROUGH SOCIAL PROTECTION

REMOVING FINANCIAL BARRIERS

With 90% of the population in Vatovavy Region living below the poverty line, a critical component of our approach is the removal of out of pocket user fees to address socioeconomic disparities in access to care. Since 2021, Pivot's CARE project is now implemented in all of Ifanadiana District.

The success of these efforts contributed to our **highest-ever number of patient visits supported in a single year: 334,039**



>1.4M
patient visits supported since 2014

This year, with an eye toward expansion, we have been working to **refine our financial protection strategy in collaboration with the MoPH's Universal Health Coverage department** to align with the government's vision and ensure sustainable policy change that puts patients first.

The new program design tackles big issues such as optimizing prescribing practices as well as **ensuring the rollout of a new data platform that allows individual patient and financial tracking.** This offers unprecedented research opportunities into improving care through patient-level analysis, allowing us to continue to inform the future UHC policy.

Strong, coordinated governance will be required for the plan to be successful, but the outcome could mean critical change for public healthcare in Madagascar.

244
psycho-social sessions provided

1,607
social kits distributed

14,920
rides to/from care reimbursed

115,288
meals served to patients



ADVANCING WOMEN'S HEALTH

With our model rooted in a rights-based approach to care, we are constantly holding ourselves accountable to those whose needs are not being met by the public health system.

Committed to reducing health disparities and gender barriers to healthcare, we made this a top priority starting in 2022. **Faced with a growing number of cases of gender-based violence presenting on the front lines, in 2023 our social team launched the SURVIVOR project.**

This initiative allowed us to formalize a collaborative partnership with the Ministry of Population, Social Protection & Promotion of Women, and has been a stepping stone to engage with a whole new cadre of social workers, providing new perspectives that are informing our approach to social protection as we expand and move toward scale.

Milestones from the inaugural year of the SURVIVOR project included:

- **Establishing a Network:** created a cadre of local actors including healthcare providers, social workers, CHWs, as well as the police force; all actors participated a training to understand their role as the first point of entry to care for a survivor
- **Capacity-Building:** organized a three-part advanced training for 35 Ministry of Population social workers and 15 Pivot staff; sessions carried out over the course of 2023 focused on the identification, counseling, and timely referral of survivors
- **Listening Centers:** supported the rehabilitation of two centers dedicated to providing resources for survivors of GBV

"This year, I had the honor of being invited to join the Ministry of Population, Social Protection and Promotion of Women in Ifanadiana District in recognition of International Women's Day.

The event was themed around celebrating the power of women in Malagasy society and promoting a culture of positive masculinity for Madagascar. Discussions underscored how engaging men in the fight against GBV can provide a powerful lever for **disrupting the vestiges of oppressive patriarchal social structures and fostering a more just and equitable society.**

It was also an opportunity to present updates on Pivot's launch of our new SURVIVOR program and key components of our vision for joining the ongoing fight to eradicate GBV in Madagascar. "

- **Niavo Randrianantenaina**
Pivot Social Worker & Manager of Women's Health Promotion

4

ADVANCING STRATEGIC PARTNERSHIPS

As we reflect on FY23 and look ahead to the coming year, we find ourselves at the intersection of transformative growth through strategic partnerships. In order to advance our work sustainably, we know that fostering multi-sectoral partnerships spanning from the local to the international level is essential.

NURTURING COMMUNITY RELATIONS

Our foremost partners in the pursuit of UHC are the communities we serve. As such, this year we **launched a series of community dialogues** to enable conversations on specific topics and further our understanding of practices, understandings and challenges as they engage with the health system.

In the spirit of holding ourselves accountable to the community, we also **supported Professor Julio Rakotonirina from Antananarivo Faculty of Medicine to lead a patient and healthcare worker satisfaction study**. The feedback from users of the health system, and those who are reluctant to seek care, provide important lessons for Pivot on continuing to strengthen patient-centered services and the role of community outreach.

Key findings from patient survey responses included:

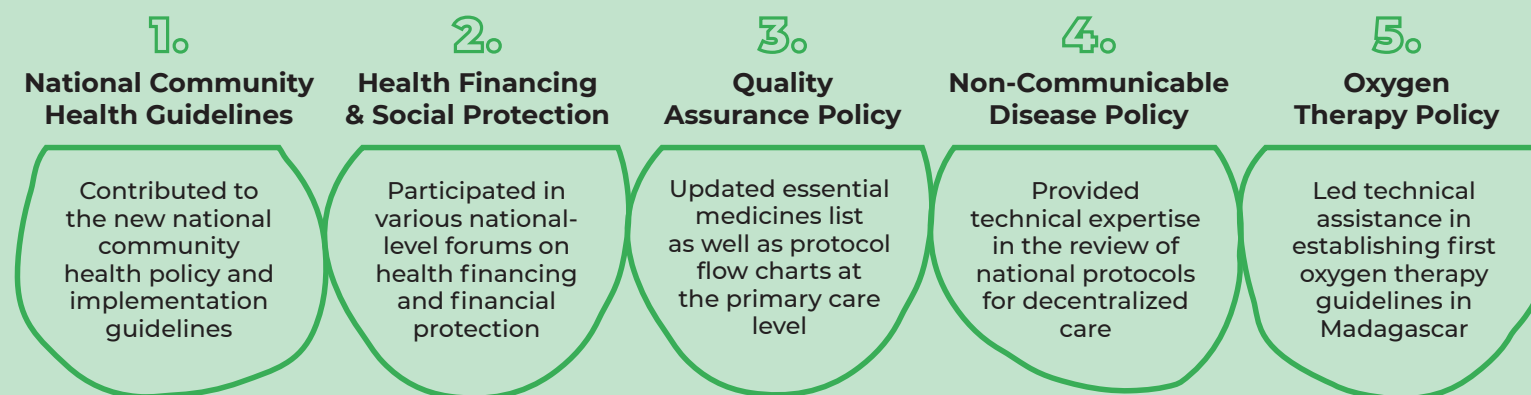


EXPANDING GOVERNMENT COLLABORATIONS FOR NATIONWIDE IMPACT

Achieving our vision of equitable access to quality care for all can only be made possible through strong partnerships with the government.

In 2023, we **consolidated our collaborations with district and regional representatives to build and co-design a multiyear health strategy for Vatovavy Region**. We also worked closely in the supervision of baseline data collection – an essential step as we work towards establishing common objectives.

This year was also transformative for Pivot thanks to **invitations from the government to collaborate in various central-level working groups, which included the following milestones:**



JOINING GLOBAL CONVERSATIONS

Pivot leaders added global dimensions to our pursuits in 2023, actively participating in high-level conversations with peers and partners, from the Skoll World Forum in Oxford, to Innovations in Healthcare in D.C., (**Engagement Director Dr. Barbara Vololonarivelo pictured right**) as well as the **UN General Assembly** in New York City (**Executive Director Laura Cordier with CHIC peers pictured left**). Additionally, for the first time, Pivot was formally invited to join the government delegations as technical partners at the **International Community Health Worker Symposium** in Liberia, and the **International Maternal Newborn Health Conference** in South Africa.

Members of our team also shared results from Pivot's scientific work around the globe, with poster presentations and talks at the **American Society of Tropical Medicine and Hygiene** conference in Seattle, WA, at the **Ecology and Evolution of Infectious Diseases 2023** conference at State College, PA, and at the **Indian Ocean Health Research Conference** on Réunion Island. We are also proud to have attended and presented our work at two conferences held in Madagascar.

These engagements are critical to our mission of catalyzing global change, allowing us to not only share our findings and provide valuable new programmatic insights, but also engage in opportunities to fortify our network of allies and partners.



MPIARA-MIASA (PARTNERS)



We are committed to upholding the vision of the **Ministry of Public Health of Madagascar**, Pivot's primary partner since day one. To sustainably advance both government strategy and population health objectives, we had the honor of collaborating with the following institutions over the course of 2023:

- | | |
|---|---|
| Amadia | Institut National de la Statistique de Madagascar |
| Ariadne Labs | Institut Pasteur de Madagascar |
| California Academy of Sciences | La Vita per Te |
| Catholic Relief Services | Médecins du Monde |
| Centre d'infectiologie Charles Mérieux | Médecins sans Frontières |
| Centre ValBio | Ministry of Digital Development, Digital Transformation, and Telecommunications |
| Chaîne de l'Espoir | Ministry of Population, Social Protection & Promotion of Women
<i>(top photo)</i> |
| Community Health Impact Coalition | Ny Tanintsika |
| Dimagi | Partners In Health |
| Direct Relief | United Nations Population Fund |
| Harvard Medical School | Wellcome Trust |
| HISP-Rwanda
<i>(bottom photo)</i> | World Food Program |
| Institut de Recherche pour le Développement | |



Together with social workers from the Ministry of Population, Social Protection & Promotion of Women, Pivot practitioners were **trained in supporting survivors of gender-based violence**.



In collaboration with HISP-Rwanda Pivot teams **completed a DHIS-2 advanced training** to improve data management through migration to the government-adopted dashboard platform.

“Ny asa rehetra ambin’ny fitoviana”

“All work is eased by collaboration”

- Malagasy Proverb -

HELPING PATIENTS BREATHE

Since March 2022, Pivot has been working within the Unitaid-funded initiative Building Reliable Integrated and New Generation Oxygen Services known as BRING O2. Implemented under the leadership of Partners In Health and in close collaboration with the MoPH, Pivot's BRING O2 team made **significant headway toward the project's goal of improving oxygen access for patients and providers** over the course of 2023.

In collaboration with technical partners from Build Health International, we were able to support the assessment of 7 government oxygen plants. Based on needs and prioritization determined by the MoPH, two plants were specifically targeted by the project:

The University Hospital of Andrainjato in Fianarantsoa:

- rehabilitation of oxygen plant
- installation of an oxygen bottle filling system
- extension of oxygen piping network to support 11 additional outlets in the pediatric ward

The Joseph Raseta Befelatanana University Hospital in Antananarivo:

- rehabilitation of the oxygen plant
- major extension of oxygen piping network to support 425 outlets covering 8 service wards including the emergency and infectious disease units



Technicians inspect hospital oxygen infrastructure in preparation for rehabilitation and maintenance work.



Pivot Executive Director meets with leaders of Antananarivo's University Hospital to launch work on oxygen system improvements.

Key equipment was provided to tertiary and secondary hospitals across the country to support oxygen therapy, including 100 oxygen cylinders, 10 trolleys, 11 oxygen analyzers, 10 oxygen concentrators, and 50 pulse oximeters. Moreover, the project will provide both hospitals with ongoing maintenance support for an additional year after installation.

In addition to all of these health system strengthening efforts, the BRING O2 initiative provided a stepping stone for Pivot to operate at another level of partnership with the MoPH. At a strategic and policy level, we provided technical assistance for the development of the country's first national oxygen therapy protocol. We subsequently supported and led the training of 172 doctors across 37 districts of Madagascar, as well as the specialized technical training for 25 plant technicians.

We are proud to have been part of this bold initiative to advance health equity and help patients breathe!

This project is made possible thanks to Unitaid's funding and support. Unitaid accelerates access to innovative health products and lays the foundations for their scale-up by countries and partners.



STRENGTHENING OUR ORGANIZATIONAL CAPACITY

SUPPORTING PROFESSIONAL DEVELOPMENT

In 2022, Rippleworks invested in Pivot's growth with an inflection gift of \$2M, with 25% of the funding allocated to "talent top-up" initiatives that support our staff's professional development with an eye toward growth. Since then, our team has had the privilege of participating in an array of Rippleworks' results-driven courses with topics ranging from HR management and data ownership to theories of scale – all designed to elevate teams and leaders who are working to bring social ventures to scale.

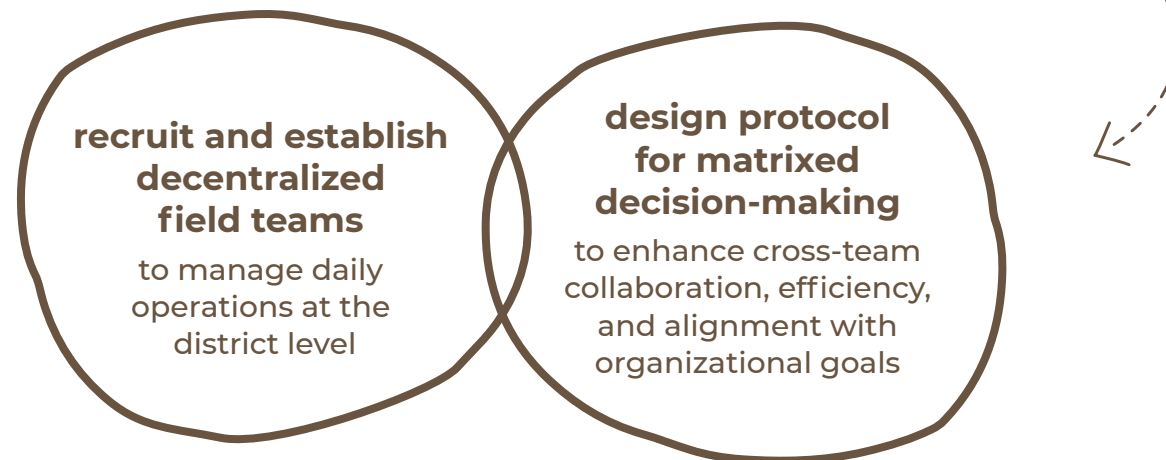
Additionally, a cadre of **more than 50 Pivot supervisory and managerial staff completed a year-long management training program** with the Unlock Impact course. Combining learning and practice, the course aimed to build skills central and peripheral to project management including organization, communication, collaboration, and leadership.



RESTRUCTURING FOR EXPANSION

As we prepare for expansion, we are **focused on maximizing our existing team's capacity and identifying key gaps in our organizational structure** that must be filled in order to effectively manage operating at a regional level. The main objective around this restructuring is to establish a more effective division of responsibilities and functions between those conceptualizing and managing our programs, and those implementing them in the day-to-day.

Also supported by Rippleworks, **Pivot's HR team engaged with an expert coach** over the course of 2023 to assess and strategize for this new stage of growth. Key findings have informed the following structural goals, which we will continue to prioritize during the preparation and rollout of regional activities:



With an all-star team of directors in place, we are ready to serve as an example of streamlined expansion for maximum impact.

Meet our Executive Leadership Team, the ones who are leading the charge:



Laura Cordier, MSc
Executive Director



Dr. Barbara Vololonarivelo, MPH
Director of Engagement & Partnerships



Luc Rakotonirina, MSc
Associate Medical Director



Bénédicte Razafinjato, MSc
Director of M&E, Accountability & Learning



Eliane Solo Hery, MSc
Director of Administrative Support



Natacha Rajaona, MSc
Director of Programmatic Support



Sarah-Anne Barriault, MPH
National Director



Dr. André Andriamanday, MPH
Director of HSS & Health Policy



Karen Finnegan, PhD, MPH
Managing Director of Pivot Science

REVOLUTIONIZING GLOBAL HEALTH SCIENCE

Pivot's research team is pioneering a new era of innovation. Guided by the idea that **the best, most useful science is done in close collaboration with implementers**, we focused this year on the monitoring and evaluation of healthcare interventions, unraveling the intricate web of geographic barriers that hinder access to care, mixed methods clinical studies, and operational research on UHC. Through rigorous population impact assessments, and cutting-edge eco-epidemiology and surveillance efforts, Pivot's commitment to transformative research has set **a new standard in the study of rights-based care**.

KEY AREAS OF WORK:

- Monitoring and Evaluation • Population Impact • Community Health
- Geographic Analysis of Barriers to Care • Operations Research on UHC
- Eco-Epidemiology and Surveillance • Research Training

ECO-EPIDEMIOLOGY AND SURVEILLANCE

Better understanding of disease dynamics inform health system priorities. Our work on eco-epidemiology and surveillance seeks to increase our knowledge of how social, environmental, and systems factors shape local disease burden.

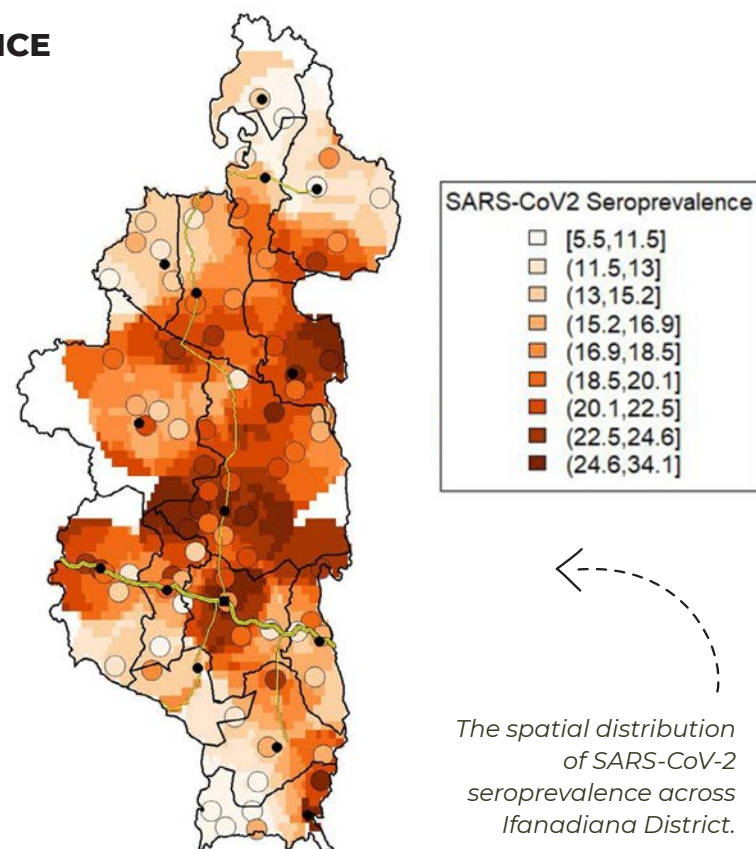
COVID-19 Modeling

We quantified the effects on COVID-19 in Ifanadiana District, contributing to the global understanding of the impact of the disease in sub-Saharan Africa. Research led by Dr. Andres Garchitorea **estimated that 18% of people had been infected with COVID-19 by April-June 2021**. Adult mortality increased in 2020.

The study provides evidence that COVID-19 affected rural communities and deepens our understanding of the factors associated with early infection.

PRIDE-C Project

Funded by Wellcome Trust and led by Dr. Michelle Evans, Pivot launched the PRIDE-C project this year. Using participatory methods to develop **models to forecast the incidence of climate-sensitive infectious diseases**, this five-year project aims to improve disease estimation, inform resource allocation, and guide prevention activities.



GEOGRAPHIC ANALYSIS OF BARRIERS TO CARE

Understanding how geography impacts access to healthcare has been a key component of Pivot's research and has shaped program implementation.

Ongoing research by Dr. Felana Ihantamalala and her team are **exploring geographic barriers to maternal healthcare**. The study team found that rates of facility-based delivery and postnatal care were highest among women who lived within a one-hour walk of a health facility; women living closest to health centers accessed care nearly twice as often as those who lived 1-2 hours away and at a rate three times higher than those who lived more than 2 hours away. The impact of distance to care was less stark when considering attendance at the first antenatal care appointment. Our research shows that women's travel time from a health facility is the strongest determinant of maternal care service utilization.

Pivot researchers have partnered with institutions in Madagascar to bring these analytic methods to other districts, expanding the understanding of how geography impacts coverage and health outcomes.

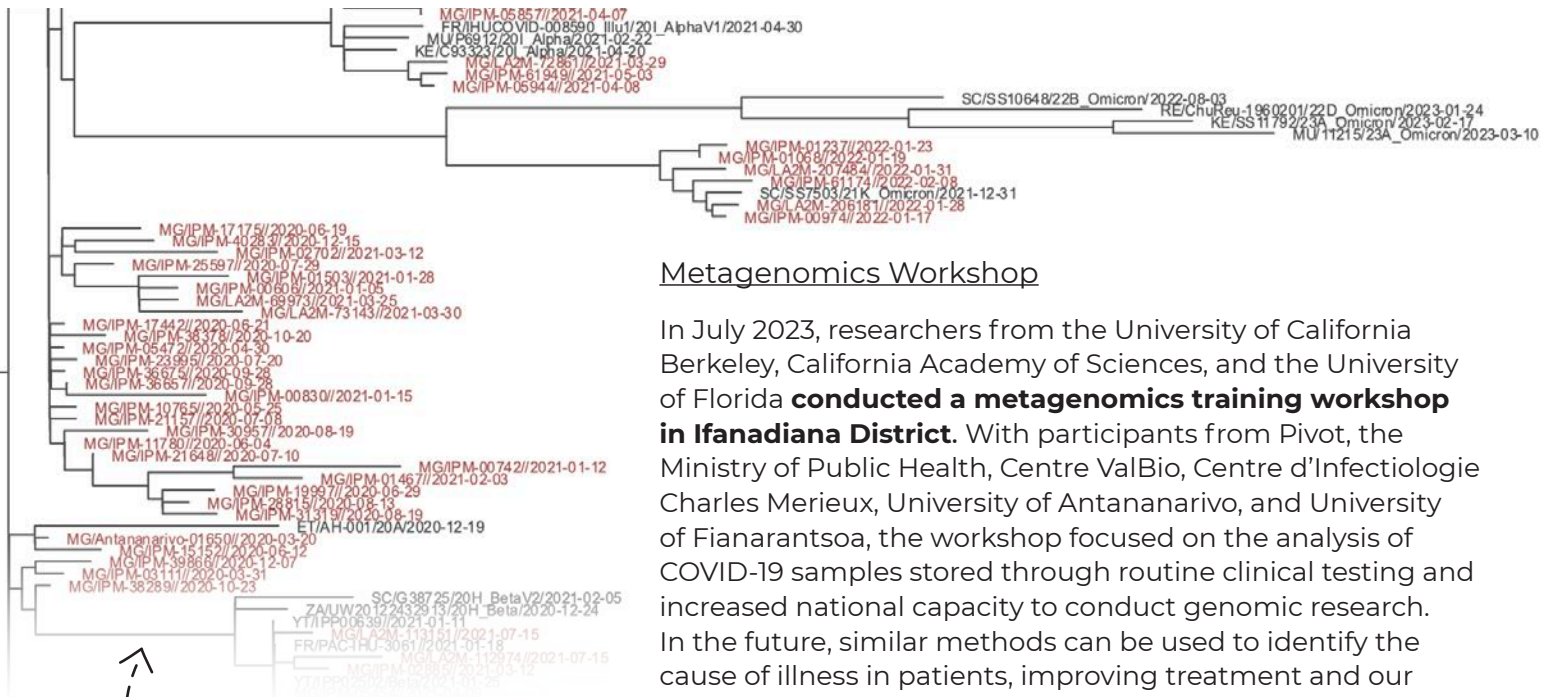


"We are guided by the idea that collaborative research, integrated with service delivery, can revolutionize global health. As Pivot expands its footprint, we seek to answer questions about how to best deliver programs in order to have the most meaningful impact on population health. A major part of finding solutions to these challenges lies in innovation – from combining routine and novel data sources, to employing unique scientific methods, asking difficult questions, and taking risks on projects. **Building on the important findings that emerged in 2023, we are boldly forging ahead to expand the bounds of our scientific agenda to support Pivot's strategic vision for growth.**"

- Dr. Karen Finnegan
Managing Director of Pivot Science

RESEARCH TRAINING

Research training took many forms in 2023. We **supported implementers with applied research methods training, engaged with Malagasy academic institutions, provided mentorship for national and international graduate students**, provided a site for student internships, and continued to foster a culture of learning.



Metagenomics Workshop

In July 2023, researchers from the University of California Berkeley, California Academy of Sciences, and the University of Florida **conducted a metagenomics training workshop in Ifanadiana District**. With participants from Pivot, the Ministry of Public Health, Centre ValBio, Centre d'Infectiologie Charles Merieux, University of Antananarivo, and University of Fianarantsoa, the workshop focused on the analysis of COVID-19 samples stored through routine clinical testing and increased national capacity to conduct genomic research. In the future, similar methods can be used to identify the cause of illness in patients, improving treatment and our understanding of disease burden.

Using maximum likelihood estimation methods and a global genomics database, researchers are able to identify the genomic sequence of COVID-19 samples. Global samples (black) and national samples (dark red) demonstrate the evolution of the disease in Madagascar.

In-House Research Training for Pivot Implementers

Building capacity for scientific research in Madagascar is an important component of Pivot's strategy. This year, we **launched a series of workshops for clinical managers to build their understanding of and engagement with research**. The ongoing year-long training program includes didactic sessions and applying methods through mentored research projects. Participants are guided through all phases of conducting a rigorous study, from conceptualization through analysis, review, and dissemination, with the goal of producing peer-reviewed research studies authored by Pivot clinical staff. With 20 staff having participated in the first round of training, additional workshops are scheduled for the coming year.



Award-Winning Malagasy-Led Research

Pivot is proud to be part of a flourishing network of research institutions across Madagascar, which includes universities, medical facilities, and nongovernmental organizations. In 2023, the University of Fianarantsoa hosted a "Research Days" event where researchers from the university and other affiliates came together to showcase their work and discuss how to support Malagasy research. **Pivot scientists who showcased their work received the following accolades:**

Toky Randrianjatovo presented *Monitoring the Spatio-Temporal Dynamics of Rice Field Flooding for Enhanced Malaria Control*, and was awarded the **first prize** for the most exceptional presentation overall.

Mauriciannot Randriamihaja, a doctoral student and Pivot's GIS & informatics technician, took **second place** for his oral presentation: *Development of Geomatic Tools to Enhance Community Health Programs in a Rural District of Madagascar*.



SHARING WHAT WE'RE LEARNING

PUBLICATIONS

Evans M.V., Ihantamalala F.A., Randriamihaja M., Aina A.T., Bonds M.H., Finnegan K.E., Rakotonanahary R.J.L., Raza-Fanomezananahary M., Razafinjato B., Raobela O., Raholiarimanana S.H., Randrianaivalona T.H., Garchitorena A. (2023). [Applying a zero-corrected, gravity model estimator reduces bias due to heterogeneity in healthcare utilization in community-scale, passive surveillance datasets of endemic diseases](#). *Scientific Reports*. doi: 10.1038/s41598-023-48390-0. PMID: 38042891; PMCID: PMC10693580.

Ihantamalala, F.A., Randriamihaja, M., Miller, A.C., Rakotonanahary, R.J.L., Raza-Fanomezananahary, M., Kotchofa, J.A., Randriamanambintsoa, M., Ramarson, H., Razafinjato, B., Rasoanandrasana, V., Bonds, M.H., Finnegan, K.E., Garchitorena, A. (2023). [Persistence of geographic barriers to maternal care services following a health system strengthening initiative in rural Madagascar](#). *medRxiv preprint*.

Garchitorena, A., Rasoloharimanana, L.T., Rakotonanahary, R.J.L., Evans, M.V., Miller, A.C., Finnegan, K.E., Cordier, L.F., Cowley, G., Razafinjato, B., Randriamanambintsoa, M., Andrianambinina, S., Popper, S., Hotahiene, R., Bonds, M.H., Schoenhals, M. (2023). [Morbidity and mortality burden of COVID-19 in rural Madagascar: results from a longitudinal cohort and nested seroprevalence study](#). *International Journal of Epidemiology*. doi: 10.1093/ije/dyad135. PMID: 37793001.

Vora, N.M., Hannah, L., Walzer, C., Vale, M.M., Lieberman, S., Emerson, A., Jennings, J., Alders, R., Bonds, M.H., Evans, J., Chilukuri, B., Cook, S., Sizer, N.C., Epstein, J.H. (2023). [Interventions to Reduce Risk for Pathogen Spillover and Early Disease Spread to Prevent Outbreaks, Epidemics, and Pandemics](#). *CDC Emerging Infectious Diseases*; 29(3), 1-9.

Pourtois, J.D., Tallam, K., Jones, I., Hyde, E., Chamberlin, A.J., Evans, M.V., Ihantamalala, F., Cordier, L.F., Razafinjato, B.R., Rakotonanahary, R.J.L., Aina, A.T., Soloniaina, P., Raholiarimanana, S.H., Razafinjato, C., Bonds, M.H., De Leo, G.A., Sokolow, S.H., Garchitorena, A. (2023). [Climatic, land-use and socio-economic factors can predict malaria dynamics at fine spatial scales relevant to local health actors: Evidence from rural Madagascar](#). *PLOS Global Public Health*; 3(2): e0001607.

Evans, M.V., Andreambeloson, T., Ihantamalala, F., Cordier, L., Cowley, G., Finnegan, K., Hanitriniaina, F., Miller, A.C., Ralantomalala, L.M., Randriamahaso, A., Razafinjato, B., Razanahanitriniaina, E., Rakotonanahary, R.J.L., Andriamiandra, I.J., Bonds, M.H., Garchitorena, A. (2022). [Geographic barriers to care persist at the community healthcare level: evidence from rural Madagascar](#). *PLOS Global Public Health*; 2(12): e0001028.

Sokolow, S.H., Nova, N., Jones, I.J., Wood, C.L., Lafferty, K.D., Garchitorena, A., Hopkins, S.R., Lund, A.J., MacDonald, A.J., LeBoa, C., Peel, A.J., Mordecai, E.A., Howard, M.E., Buck, J.C., Lopez-Carr, D., Barry, M., Bonds, M.H., De Leo, G.A. (2022). [Ecological and socioeconomic factors associated with the human burden of environmentally mediated pathogens: a global analysis](#). *Lancet Planetary Health*; 6: e870-79.

Cancedda, C., Bonds, M.H., Nkomazana, O., Abimbola, S., Binagwaho, A. (2022). [Sustainability in global health: a low ceiling, a star in the sky, or the mountaintop?](#) *BMJ Global Health*; 7:e011132.

PRESENTATIONS

American Society of Tropical Medicine and Hygiene Conference (Seattle, WA)

Establishing RT-PCR Testing Capacity for COVID-19 and Other Diseases in a Rural District in Madagascar by Rado Rakotonanahary, PhD, Pivot Research Manager

Ecology and Evolution of Infectious Diseases Conference (State College, PA)

Allocating Resources Via Targeted Insecticide Spraying to Reduce Malaria Burdens in Isolated Regions by Michelle Evans, PhD, Pivot Research Associate

Research Conference hosted by University of Fianarantsoa (Fianarantsoa, Madagascar)

Development of Geomatic Tools to Enhance Community Health Programs in a Rural District of Madagascar by Mauriciannot Randriamihaja, MS, Research Engineer in Geomatics and Remote Sensing

Monitoring the Spatio-Temporal Dynamics of Rice Field Flooding for Enhanced Malaria Control by Toky Randrianjatovo, MS, Research Engineer in Geomatics and Remote Sensing

Maternal and Child Health Consortium (Antananarivo, Madagascar)

Surveying Community Behaviors Regarding Waiting Homes for Pregnant Women in the Municipalities in a Rural District of Madagascar by Dr. Mbloatiana Raza-Fanomezananahary, Deputy Director of Primary Care

Impact of a Health System Strengthening Intervention in the Ifanadiana District: Results from a Longitudinal Cohort Study 2014-2018 by Dr. Andres Garchitorena, Associate Director of Pivot Science

Indian Ocean Health Research Congress (Réunion Island)

Geographic Barriers to Universal Health Coverage in Madagascar by Dr. Andres Garchitorena, Associate Director of Pivot Science

Modeling the Geographic Accessibility of Urgent Care in Madagascar by Dr. Felana Ihantamalala, Research Manager

Impact of Health Systems Strengthening on Vaccination Strategies in Madagascar by Elinambinina Rajaonarifara, Graduate Student

**“Fianarana no antoko,
ny rano no harena.”**

*“Education is the wealth, and
knowledge is the treasure”*

- Malagasy Proverb -

WITH GRATITUDE TO OUR SUPPORTERS

The following reflects cumulative FY23 giving totals of all who donated to Pivot between October 1, 2022 and September 30, 2023.

\$100,000 and up

Anonymous (2)
Cartier Philanthropy
Crown Family Philanthropies
Vincent Della Pietra and
Barbara Amonson
Miki and David Donoho
Dovetail Impact Foundation
Herrnstein Family Foundation
Kevin and Deborah Bartz
Foundation
Colin and Leslie Masson
Mulago Foundation
Polymath Fund
Ray and Tye Noorda Foundation
Ripple Foundation
Sall Family Foundation
Sanguinity Foundation
Jim and Marilyn Simons
Wagner Foundation

\$25,000-\$99,999

Anonymous (1)
Peter Barrer and Judy Nichols
Burke Family Foundation
Robert and Mary Grace Heine
Bob and Kira Hower
IZUMI Foundation
Dan and Sara Koranyi
Tomislav and Vesna Kundic
Night Heron Foundation
Ed Norton
Kathryn and Steven Puopolo
Stavros Niarchos Foundation

\$5,000-\$24,999

Allen & Eve Foundation
Margaret Allen and Philip Perkins
Stanko and Nicole Barle
Betsy Barton and Robert Beals
Valerie Briston and Marko
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Alan Deckelbaum and Beth Zweig
Stacey and Michael Gargiulo
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Lara, Patrick, Eli and Micah Hall
Max Herrnstein and Danielle Curi
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Yanklowitz
M.R. Metzger Family Foundation
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Myles Perkins and Christina
Lindgren
Rouse Family Foundation
Ted Rouse
Francesco Scattone and
Judith Gibbons
Thomas Simonet
Svrcek Foundation

\$1,000-\$4,999

Ron Basu, on behalf of
Morgan Stanley
Wealth Management
Matt Bonds and
Molly Norton
Elizabeth and Michael
Boonin
William Brick
Sergey Butkevich and
Irina Gulina
Chris and Sharon Chrisman
Paul and Larisa Cuff
Kathleen de Riesthal

Michael and Nina Douglas
Jason and Casey Ellin
James Houghton and
Connie Coburn
Lolita and Steven Keck
Josh and Ariya Lapan
Jared Lettieri
Regina Malhotra and Miguel
Catalina-Gallego
James and Mini Mammen
Annie Michaelis and Ira
Nichols-Barrer
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Henry Zenzie
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Up to \$1,000

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Norma and George
Andreadis
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Shey Nessralla
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Yuliya Dovzhenko
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Kaylee Engellenner
Triantafillos Fillos
Ellen and Richard Finnegan
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Todd O'Connell
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Vasily Pestun
Alicia Peterson
Todd Petraco

Johnny Pohlman
Brittany Powell
Manu Prakash
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Seheno Randriamanantena
Tahiry Raveloson
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Cassia van der Hoof Holstein
and Peter Albers

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Jeff Vacirca
Danielle Volpicella
Andrew Walsh
Rita Weiss
Susan Wheeler
Merywen Wigley and
Kevin Magill
Edward Winstead and
Ann-Barron Carneal
Lynn Kay Winters
Brian Woods
Stuart Woody
Patricia Wright
LJ Yoder Gallagher

IN-KIND SUPPORT

Direct Relief
Barbara Kinney

IN YOUR MEMORY

Marjorie Shedd

IN YOUR HONOR

Matt Bonds
Michael Boonin
Robin and Jim Herrnstein
Tara Loyd
Brittany Powell & Lukas Lukoschek
Molly Norton
Miriam Silman
Cassia van der Hoof Holstein
Susan Wheeler

Special thanks for skillfully capturing Pivot's work and Madagascar's beauty, as seen in many of the photos found throughout this report!



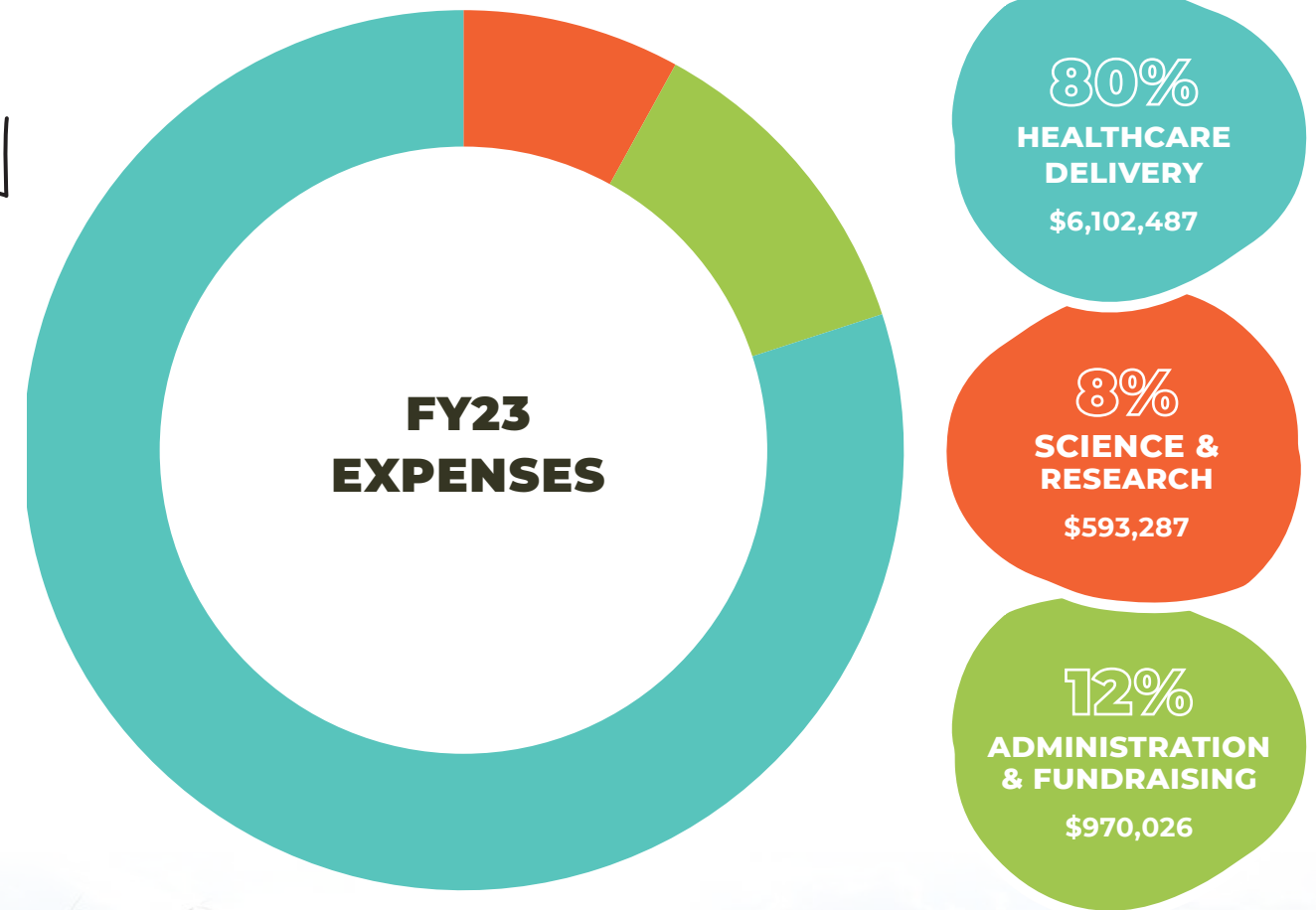
FINANCIALS

EXPENSES	FY23	FY22
Healthcare Delivery Programs	\$6,102,487	\$4,922,070
Science & Research	\$593,287	\$501,350
Administration & Fundraising	\$970,026	\$759,143
TOTAL	\$7,665,800	\$6,182,563

REVENUE	FY23	FY22
Grants & Contributions	\$6,504,517	\$7,559,890
<i>Foundations</i>	\$2,979,903	\$6,235,637
<i>Individuals</i>	\$3,524,614	\$1,324,253
Donations In-Kind	\$36,648	\$0
Other Income	\$53,444	\$18,596
TOTAL	\$6,557,961	\$7,566,491
NET REVENUE	-\$1,107,839	\$1,383,928

ASSETS	FY23	FY22
Cash and Cash Equivalent	\$4,406,480	\$5,278,741
Pledges Receivable	\$200,426	\$441,883
Prepays & Other Current Assets	\$664,282	\$604,657
Fixed Assets, Net	\$238,210	\$168,004
Other Assets	\$7,565	\$2,703
TOTAL ASSETS	\$5,516,962	\$6,495,988

NET LIABILITIES & ASSETS	FY23	FY22
Accounts Payable	\$426,643	\$273,789
Accrued Expenses	\$203,543	\$278,076
TOTAL LIABILITIES	\$633,186	\$551,865
Net Assets, Unrestricted	\$4,728,168	\$5,427,652
Net Assets, Restricted	\$155,608	\$516,471
<i>Child Malnutrition</i>	\$63,077	\$0
<i>Community Health</i>	\$0	\$279,088
<i>Construction</i>	\$0	\$5,804
<i>Emergency Response</i>	\$79,906	\$92,518
<i>Infectious Disease</i>	\$2,793	\$47,184
<i>Maternal & Reproductive Health</i>	\$9,832	\$0
<i>Research Activities</i>	\$0	\$56,567
<i>Staff Support & Development</i>	\$0	\$35,310
TOTAL NET ASSETS	\$4,883,776	\$5,944,123
TOTAL LIABILITIES & NET ASSETS	\$5,516,962	\$6,495,988



A delegation of Pivot leaders and MoPH partners traverse the waterways of Vatovavy Region during an exploratory visit to prepare for expansion.

IN LOVING MEMORY



ANTONIO
AVOTRAINAINA



SAHOLY JULIETTE
ARILALA

Mandria am-piadanana. Am-ponay mandrakizay!

Rest in peace, friends. You are forever in our hearts!



THANK YOU
MISAOTRA!
THANK YOU
MISAOTRA!
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