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**TONGA SOA!**

Welcome!
In 2012, Pivot’s co-founders made their first visit to a health center in Ranomafana, Madagascar. They found a girl suffering from cerebral malaria, yet not receiving treatment. While responding to save her life, it became clear that this was not an isolated case. Similar situations were playing out on a regular basis across much of the island nation, and little international effort was effectively working to solve the problem.

Even in countries with broad multinational global health support, the incidence of diseases like malaria has been on the rise for much of the past decade. The evidence for programs that work at scale is shockingly scant. Many of the world’s most pressing challenges – poverty, disease, environmental degradation – are especially acute in Madagascar, where the majority of the 27 million people live below the poverty line, and which has among the lowest investment in healthcare in the world.

Why, despite the existence of modern technologies, domestic policies, and international standards of care, do millions of people die annually from such preventable and treatable illnesses? The answer is, in part, that even simple solutions require complex delivery systems that must align at the point of care.

Critically, the reported measures of illnesses and deaths are not what they seem. Those are rough estimates from crude data taken at spatial and temporal scales that are useless to healthcare providers in a relevant time frame. The shortfalls of the modern global health movement, in other words, are due to both general breakdowns in the systems of care, as well as failures in the science necessary to inform that care.

Pivot was created in 2014 to address these failures by establishing a model system of healthcare based on the integration of science and service delivery at a district level. Then, the local under-five and maternal mortality rates in Ifanadiana District were among the highest in the country. We have since worked alongside Madagascar’s Ministry of Public Health (MoPH) to sustain rapid and lasting change in health outcomes. We have seen a 20% reduction in under-five mortality alongside a 200% increase in utilization of essential services and changes in quality of care. With unprecedented data systems and the most rigorous analyses of local health system change that we are aware of, we have shown that transformation is possible by being closest to the patient, while also serving as a true partner to the government.

Pivot is now in an inflection moment. At the invitation of the government, we are expanding across the region of Vatovavy, quintupling the catchment population. We will continue our work with the government to support their vision for Universal Health Coverage (UHC). Combined with truly novel data systems, we aim to lead in the next era of modern analytics integrated with rights-based, patient-centered, quality care for the most vulnerable.

This strategic plan presents our successes, challenges, and vision for Pivot’s next five years, based on the following strategic objectives:

1. Strengthen pillars of the health system
2. Improve quality of services
3. Integrate social protection
4. Advance partnerships
5. Strengthen organizational capacity
6. Revolutionize global health science

This strategy presents our successes, challenges, and vision for Pivot’s next five years, based on the following strategic objectives:

- Prioritize proximity to patients
- Adapt to each community we serve
- Guarantee high quality care
- Cultivate meaningful partnerships
- Inform public health policy
- Drive population level impact
- Build unprecedented data systems
- Generate a model for health equity
- Revolutionize global health science

Our values:

- Health as a human right
- Solidarity
- Bias towards action
- Sustainability
- Humility
- Accountability
- Curiosity
- Embracing complexity

Our guiding principle:

“Health is the first wealth.” – Malagasy Proverb
OPPORTUNITY FOR IMPACT

Madagascar faces some of the lowest health outcomes in the world with people dying regularly from preventable and treatable illnesses. Pivot is committed to creating measurable and lasting impact by identifying limitations in design, resources, delivery, and science to address these most basic problems. Our aim is to transform the local health system and provide a model for how science can be integrated with service delivery to meet the needs of vulnerable populations, from the communities of Ifanadiana District and Vatovavy Region to the entire nation of Madagascar, and beyond.

Founded by scientists and clinicians with a common vision, Pivot believes that the combination of data, clinical care, and partnerships can substantially change health outcomes. Created as a mission partner to Partners In Health, Pivot expanded on their health systems strengthening (HSS) model and adapted it to Madagascar's context. With science at the core of our identity, our first activities included a true baseline study from which we would build our model to advance change in Ifanadiana District and for Madagascar.

Starting in Ifanadiana District

Starting in Ifanadiana District with an invitation from the MoPH in 2014, we aimed to transform the health system at a scale of particular relevance to Madagascar's government. We set out with the goal to create a model health district – to understand how the complexities of a whole system amount to more than the sum of their parts and how this influences service provision and impact – which can be adapted for national scale-up. Over the last 10 years, we have implemented a number of clinical initiatives and led groundbreaking scientific investigation that allowed us to refine solutions.

Expanding to a Region

Our path to expansion materialized with the creation of the new Vatovavy region in November 2021. Already working in one of its three districts, Ifanadiana, Pivot was invited to support the newly formed region. 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 quintupling the population we serve from 200,000 to 1 million people, and tripling our geographic reach. This expansion offers the opportunity to understand the replicability and scalability of our collaboration with the MoPH.

STRATEGIC OVERVIEW

In 2014, Madagascar health expenditure was $20 per capita, one of the lowest in the world – stagnating around 4.6% of the GDP since 2000. Health indicators in Ifanadiana District were worse than the national average, with 1 in 7 children dying before the age of 5 and, for women, a 1 in 14 lifetime risk of maternal death. Only 18% of deliveries occurred in a health facility, fewer than one-third of children under five sought care when ill, and just 35% of children received all recommended vaccines.

2014 BASELINE FINDINGS

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<th>People:</th>
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<td>Hospitals:</td>
<td>1 + 3</td>
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<td>Community health posts:</td>
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QUESTIONS WE SEEK TO ANSWER

Our work over the past decade has continuously focused on refining answers to the following questions that are important for Madagascar and beyond.

• What model of UHC is effective at ensuring access to health care for all, while remaining financially sustainable for the government and individuals across a region? How much does it cost and what are the essential components?

• What programs are necessary to increase equitable access to care in a rural region? How can these simultaneously overcome geographic, social, and financial barriers to health care?

• How do we durably and efficiently improve the quality of care and patient satisfaction at different levels of the health system?

• How do we combine health system strengthening interventions with innovation to optimize the delivery of quality care in rural, resource-poor settings?

• How can the integration of science and program implementation help build a resilient health system that is responsive to current and future threats, such as extreme weather events, environmental degradation, epidemics, and emerging diseases?

These questions continue to guide our work as we engage in regional expansion.

AN EVOLVING STRATEGY

In order to support this expansion, we must necessarily adapt our strategy. We have led an organization-wide review of research findings, policies, procedures, and strategy, from program implementation to organizational capacity. Based on evidence of successes in key strategic objectives including increased utilization, greater coverage of essential services, higher performance and improved quality of care and ability to address geographic and financial barriers to care, we plan to adapt our implementation approach to support operations at a regional level.

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 engagement and 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

“Let’s work together for the good of the people of Vatovavy Region.”

- Dr. Jocelin Mbimbisoa, Vatovavy Regional Health Director
A DECADE OF DATA

Transforming the health system requires transforming how data are generated and used. Our health care activities are integrated with an unprecedented array of data sources from all levels of care within and beyond the health system. Together, this forms both a model of care delivery and a revolution in global health science. Our data measure impact on population health and intervention coverage, health system functioning and utilization, and the intersection of various components – environmental, biological, economic, health system – to deepen our understanding of problems and generate solutions.

POPULATION HEALTH

Since 2014, the Ifanadiana Health Outcomes and Prosperity longitudinal Evaluation (IHOPE) has measured population health and intervention coverage in a cohort of approximately 8,000 individuals in 1,600 households. The first round of data collection established a true baseline for the intervention and comparison areas allowing for the unique quasi-experimental ability to measure the impact of Pivot’s work across Ifanadiana District.

Coverage of essential interventions has remained above 60% in the Pivot intervention area since 2016.

Use of skilled birth attendants increased by 85% in Pivot’s intervention area from 2014 to 2021.

Vaccination rates were twice as high in Pivot’s catchment than in comparison areas in 2021.

Care-seeking fell by 11% from 2018 to 2021 in the Pivot intervention area, but showed an overall increase of 25% compared to 2014.

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Coverage of essential interventions has remained above 60% in the Pivot intervention area since 2016.
HEALTH SYSTEM CAPACITY

Data from the MoPH’s health information system, combined with Pivot’s routine programmatic data, provide continuous monitoring of health system operational capacity, utilization, and quality of care.

Outpatient visits supported by Pivot increased by more than 350% from 2014 to 2021.

Availability of Essential Medicines

With Pivot’s support, availability of medicines has improved across all levels of care. However, availability continues to remain below the target of 100%.

Community health workers provide high quality care close to home for sick children, preventing severe illness and decreasing deaths.

Utilization Rate by Distance from Health Center Following a Health Systems Strengthening Intervention

Primary care utilization rates remained at less than 1 visit per capita per year in communities more than 5km from a health facility.

Health Facility Readiness Assessment (2020)

Hospital and health centers score highly on essential supplies, but more support is needed to meet MoPH standards for equipment and service quality.
DATA INTEGRATION FOR DEEPER INSIGHT

By combining multi-modal data we explore the complex relationships that underlie the health system in Madagascar and around the world.

Socio-ecological variables mapped across Ifanadiana district explore the relationship between climate, environment, demographics and disease burden


Seroprevalence of COVID-19 in Ifanadiana District was estimated at 27.4% in 2021 using K-means clustering of seven antibodies against SARS-CoV2. The principal components analysis explains 70% of the variance in these antibodies.


Vaccination Coverage

Households within the Pivot intervention area are more likely to reach vaccination coverage targets. J2 Ethics: Proceeding of the Royal Society B, 2022.
KEY SUCCESSES

Over the last decade, we have celebrated a number of successes across medical programs leading to significant increases in access to services, quality of care, and most importantly, changes in health outcomes.

INCREASED ACCESS TO CARE

When Pivot first started, health facility utilization was extraordinarily low. In 2022, we reached the major milestone of financially supporting more than 1 million unique patient visits across all levels of care since 2014. Annual utilization rates have increased by more than 200% across much of the district. Mothers, children, adolescents, and whole communities are now accessing care when they need it.

“[Pivot’s] actions have greatly encouraged the community to go to the health center when they are sick, and have truly relieved difficulties within the community both socially and in terms of health.”

- Henry De Gonzag Rakontondrasoa Fokontany Chief, Ranomafana Commune

A STRENGTHENED HEALTH SYSTEM

Investing in the Health Workforce

In 2014, a number of health facilities in Ifanadiana District were not functional, and there was often a sole healthcare provider serving the entire community. Investing in human resources was a key priority. Our Human Resources for Health project has been a pillar of our model – jointly hiring clinicians with the MoPH, paying for their salaries for 2 years and supporting their integration into the government health workforce. This has been recognized by the Malagasy government as a sustainable approach to the human resource crisis. Overall, more than 100 clinicians and technical staff have been recruited through this initiative.

Dignified Spaces

We have supported significant improvements in infrastructure, ensuring people have access to health facilities with basic medical equipment, solar power, latrines, and potable water. We do not let distance and geographic barriers slow such efforts – rather we treat this as an opportunity for substantial changes in health equity and access. Over 90 community health posts were constructed in collaboration with the community and 15 health centers have been renovated or completely rebuilt (example pictured below). We aim for the district hospital to become a center of excellence and have contributed to the transformation of the hospital campus with the creation of three new buildings and extended services, including a center for infectious diseases, a new maternal and pediatric wing, and an area for accompanying family members.

Expanded District Hospital campus
IMPROVED QUALITY OF CARE

Capacity-Building
In addition to increasing the number of healthcare providers, we actively increased the availability of basic services and quality of care being provided to patients. We have led varied quality improvement activities and organized many capacity-building initiatives, from government-organized health trainings, to bedside learning and ongoing clinician mentorship. For the last decade, our efforts have focused on maternal and child health, alongside critical emergency care and infectious diseases.

Supporting National Programs
Pivot has supported the implementation of key national programs, including malnutrition, maternal health, under 5 child care, tuberculosis (TB) and malaria. For example, Ifanadiana District went from having no programmatic activity in malnutrition detection and treatment to malnutrition services in all primary care centers, including an inpatient ward for severe complicated malnutrition. The TB control program has become one of our most successful projects. We supported the creation of 11 TB treatment centers and improved the diagnostic capacity of the two diagnostic centers; with treatment success rates evolving from 55% (2017) to 92% (2022). Increased social support and proactive deployment of community health workers (CHWs) have resulted in significant improvements in access to care and patient outcomes. Pivot has also built a district-wide ambulance system for individual patient transfer, which has supported nearly 7,000 emergency patient transports since 2014.

Adaptability to Respond to Emergencies
Although Pivot is not an emergency response organization, Madagascar has faced a number of epidemics and natural disasters which forced us to adapt our programming. Strong health systems are essential for responding to disasters. We successfully supported the MoPH in their response to pulmonary plague (2017, 2018), measles (2019), and COVID-19 (beginning in 2020), as well as increasingly severe cyclone seasons. Our interventions focused on strengthening prevention measures, operational capacity, increasing laboratory capacity, and readiness to build resilience as well as technical and clinical support.

INTEGRATED DATA SYSTEMS

Deployment of Mobile Technology
Pivot strongly believes in the power of data and e-health solutions to improve health outcomes. We prioritized support of the health information system to promote data availability, quality, timeliness, and ultimately to improve quality of care. Pivot led the roll-out of mobile technology for CHWs, using the government preferred platform CommCare, for more than 138 CHWs. We also collaborated with the MoPH and WHO on national deployment of digital monthly reporting. Pivot is actively involved in development of the National E-Health Strategy for Madagascar and is about to launch a new One-Health surveillance module.

Rigorous Evaluation of Population Impact
We are driven by the belief that the best intervention must be built on the backbone of scientific rigor and have, from the beginning, embedded research and evaluation in our work. Through our longitudinal cohort, we demonstrated some of the most rigorous population-level impacts of local health system change in Sub Saharan Africa.

Understanding and Overcoming Geographic Barriers to Care
Our work did not begin by seeking to answer questions about geography and access to care, however a preliminary analysis of the impact of health system strengthening activities on per capita utilization showed a marked relationship between distance and health system access: a facility-based HSS intervention had little to no impact on per capita utilization rates of people living more than 5km from a health facility. This finding has shaped our research and implementation. Facility- and community-based programs are designed with geographic barriers in mind. We seek to implement solutions to bring care to those unable to access it under more traditional HSS models. Since our initial work to quantify the distance decay in accessing primary care, we have also explored geographic barriers to community and hospital-based services.
ORGANIZATIONAL CAPACITY

Pivot's organizational culture has evolved over the last decade. We are true believers of inverted hierarchy – reporting to the community we serve and strive to apply our core values in our day-to-day and program implementation. We reached key milestones by prioritizing the professional development of our management cadre through mentorship, technical training, and leadership workshops. As a result, our senior leadership team has been more than 75% Malagasy since 2021 (90% in 2022). Furthermore, by actively creating a work environment that supports gender equity, we have seen many women take on greater responsibility in the organization, with at least 50% of our leadership team being female since 2019 (80% in 2022).

SUPPORTERS

Institutional & Individual Funders

• Partners & Coalitions

BOARD OF DIRECTORS

PIVOT LEADERSHIP

Executive Leadership Team

• Senior Management Team

PIVOT STAFF

Clinical Program Teams

• Operations, M&E, and Engagement Departments

GOVERNMENT

Ministry of Public Health

(District, regional, and national levels)

HEALTH WORKERS

Community Health Workers

• Frontline MoPH personnel

• Pivot field teams

POPULATION SERVED

Patients • Communities

“The culture at Pivot is something special. There is an air of mutual support and respect across the entire staff and leadership team, toppling the limitations of hierarchy in a way that feels full of hope and possibility.”

- Dr. Barbara Vololonarivelo
Pivot Director of Partnerships
PATIENT-CENTERED APPROACH

We strive to apply the Malagasy ethos that "the patient is king." Much remains to be done to support the evolution of quality of care and systematize a patient-centered approach. We aim to create a platform that considers the patient's experiences and gives voice to beneficiaries as part of quality assurance initiatives.

GEOGRAPHY

We are committed to the full coverage of our interventions across the entirety of the areas we serve and to go "the last mile" even in the most remote communes. Nevertheless, the incredibly dispersed population poses logistical challenges. The data show that the majority of patients cannot access health care due to geographic barriers. As patient distance from health centers increases, utilization decreases exponentially.

3 Geographical barriers impact the timely referral of patients, the systematic transport of medicine and consumables, and limit human resources retention. As we expand to Nosy Varika district, where 40% of health facilities are accessible only by foot, we must continue to adapt our approach to overcome these obstacles.

REMAINING CHALLENGES

Ten years of successful program implementation in partnership with the MoPH have produced a body of evidence of what has worked, what needs to improve, and which questions remain unanswered. The following challenges remain key focal areas for implementation and research.

1. RESPONSIVE, MOTIVATED, WELL-TRAINED HEALTH WORKFORCE

Removing geographical and financial barriers to healthcare have resulted in a multifold increase in utilization of services at facilities. Even with the success of our HR for Health project, the substantial rise in utilization can overwhelm a health facility or community health post. Systems of performance-based financing (adding financial motivation for the health workforce for high performing facilities and individuals) were implemented in a pilot phase in late 2021. We recognize that this is only the first pilot of financial motivations and will need to undergo multiple revisions with the MoPH to be able to lead to a successful, replicable, and sustainable system.

2. PHARMACY SUPPLY CHAIN

Stockout rates have persisted at around 50% and have not adequately improved since 2021. The central challenge is the unavailability of certain tracer medicine at the central level, combined with the financial capacity of the district pharmacy. We tried a number of different approaches to improve this pillar of the health system – from direct donations to outsourced management of pharmacies. Yet, over time we found these measures were not as replicable or sustainable as intended. Moreover, we are conscious of the extra burden of the increased utilization of care on an already weak supply chain, following the roll-out of our financial protection scheme. Finding an approach that will effectively support procurement links between the national and district pharmacy units is crucial as the availability of essential medicine is a basic prerequisite for a well-functioning health system. Our solution is to engage new conversations with the MoPH to develop a new strategy for zero stockouts of essential medicines in the region.

3. GOVERNANCE

Good governance is at the heart of strong and effective health systems. There is scope to further strengthen this pillar of the health system. We are committed to dedicating more funds to support external governing structures and further invest in MoPH leadership to strengthen management practices. Transparent systems and community accountability will be important cornerstones going forward. Moreover we must engage and empower civil society around the right to health.

4. SUSTAINABILITY

We must continue to find a balance between finding immediate solutions for the patients and community we serve, while also strengthening the system in the long term. Our programs need to be built for continuity with clear transition plans. Madagascar spends approximately $21 per capita on healthcare (2018, IHME). This is roughly equivalent to the average Sub-Saharan African country spending in the year 2000, whereas today spending in most of Sub-Saharan Africa spends about $80. Despite low current spending, Madagascar is committed to the Sustainable Development Goals and aims for a health expenditure of $86 per capita by 2030. A key step will be to collaborate with the MoPH to identify a target for regional health spending and ensure our implementation feeds into that model.
Strategic Objectives

Following an organization-wide review of research findings, policies, procedures, and strategy, we set out to adapt our implementation approach. We took the opportunity to analyze what could be replicated and what would have to be adapted.

#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 engagement and 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

OBJECTIVE #1

STRENGTHEN PILLARS OF THE HEALTH SYSTEM

For clinical programs to thrive and our health care strategy to be successful – the health system must be functional. We support the pillars of the health system to enable and foster quality service delivery.

KEY AREAS OF WORK

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IMPROVE QUALITY OF SERVICES

Pivot is committed to the delivery of high-quality health care for all. At the center of our values is health as a human right: patients should have access to care, no matter the complexity or burden of disease. Pivot's programs span clinical specialties to improve the availability and quality of all services across all levels of care – from community health posts, to primary care facilities, up to secondary and tertiary hospitals.

KEY AREAS OF WORK

Child health and nutrition:
- Support the systematic diagnosis and treatment of predominant illnesses for children under five
- Expand the availability of malnutrition services to every health facility to combat severe acute and moderate acute malnutrition.
- Increase our engagement to battle the global downward trend of childhood vaccination rates

Maternal, neonatal, and reproductive health:
- Diversify our efforts to increase the number of safe and timely deliveries with skilled birth attendants
- Expand the network of neonatal & obstetrical emergency care centers
- Collaborate with traditional birth attendants to refer and accompany patients for antenatal care and delivery
- Launch new initiatives to improve postpartum care

Infectious diseases:
- Respond to the growing incidence of HIV/AIDS in Madagascar through education, screening, and treatment
- Expand comprehensive tuberculosis services to every health facility
- Support implementation of the national malaria program to ensure no stockouts of key malarial consumables and medicines

Non-communicable diseases:
- Support systematic, timely, decentralized screening and care of common non-communicable diseases including hypertension, diabetes, epilepsy, asthma, and others
- Collaborate with tertiary level hospitals to improve the timely diagnosis and care for cardiovascular disease and stroke

Cross-cutting initiatives:
- Support implementation of quality improvement projects
- Promote patient-centered health care delivery and build capacity on humanized care
- Collaborate on continuous improvement of clinical protocols
- Continue to support critical care and strengthen referral networks in the most remote areas
- Increase focus of interventions on disease prevention

“Improving quality of care means raising the standard of care and broadening the availability of services beyond vertically-funded programs, even in the most rural districts of Madagascar. True to our values, it also means being there for our patients, going above and beyond so that the communities we serve have full access to their right to health – whether they require basic primary services or more complex care.”

- Laura Cordier
  Pivot Executive Director
BUILDING A RESILIENT HEALTH SYSTEM: COMMUNITY-BASED CARE

Community-based care is a foundational element of a resilient health system. With thousands of miles of footpaths separating rural communities from the formal healthcare system, a network of professionalized, proactive CHWs is the key to connecting people to the care they need. In Madagascar, CHWs provide essential health services for sick children and pregnant women close to home. They accompany patients in accessing key health services and support the health of communities.

KEY AREAS OF WORK

• Human resources:
  Grow the CHW network to increase proportion of population with access

• Infrastructure:
  Collaborate with the community to build community health posts

• Governance:
  Engage with local authorities and associations to better coordinate community-based activities

• Health information:
  Deploy mobile technology for all CHWs

• Quality of care:
  Launch peer CHW supervisors and continuously improve supervision methods; integrate household visits as part of routine care

• Research:
  Integrate program delivery and research to answer questions about implementation and geography of health care access

Supporting the Deployment of the New National Community Health Strategy

Over the course of 2022, Pivot collaborated with the MoPH and financial and technical partners to update the national community health strategy. Key components of our Community Health Pilot Project were adopted as part of the new strategy, including our efforts toward increasing the number of CHWs per commune, building community health sites, and use of mobile technology and proactive care to reach the most remote communities.

The financial compensation of CHWs was at the forefront of the conversation, which is a momentous milestone in and of itself. Though the Malagasy government is not yet ready to formally compensate CHWs, as nurses and doctors remain in volunteer capacity at health centers throughout the country, they have committed to harmonizing their financial motivation across partners through performance-based financing. In light of this, Pivot will adapt its CHW financial motivation and actively support roll-out of the new strategy.

Continuing Advocacy

As a member of the Community Health Impact Coalition (CHIC) we are committed to “making professional community health workers a norm worldwide.” We will continue to engage in this discourse both locally and internationally, through advocacy, implementation, and research.

Design Principles for Optimizing Community-Led Health Systems

In order to achieve Health for All, CHWs must be:

• Accredited
• Accessible
• Proactive
• Continuously Trained
• Supported by a Dedicated Supervisor
• Paid
• Part of a Strong Health System
• Part of Data Feedback Loops
OBJECTIVE #3

INTEGRATE SOCIAL PROTECTION

A new and promising collaboration: Pivot has engaged with the Malagasy government on questions of social protection in the context of UHC2030. Pivot is launching a new collaboration with the Malagasy government on social protection, which allows us to balance being closest to the community that we serve and to the ministry that is responsible for its management.

KEY AREAS OF WORK

- Financial protection: Launch a new financial protection scheme that combines the elimination of user fees for vulnerable and targeted populations including pregnant women, adolescents, and children, with the roll-out of pre-payment mechanisms to cover indirect costs for care.
- Social protection: Continue to provide financial and material support to patients and their families to cover indirect costs for care.
- Accompaniment: Expand psycho-social support and grow social worker networks.

ADVANCE ENGAGEMENT & PARTNERSHIP

OBJECTIVE #4

ADVANCE ENGAGEMENT & PARTNERSHIP

A stronger engagement towards health promotion and disease prevention: Pivot’s focus over the past decade has been on health, non-communicable disease management and environmental interventions designed to promote health behaviors and protect personal and environmental health.

KEY AREAS OF WORK

- Community engagement: Pivot aims to increase its community engagement and grassroots activities with a greater focus on listening and the amplification of community voices. We will launch a new “dream fund” that will allow each municipality to pave the way for the development of their health.
- Government collaboration: We have established a shared understanding of the importance of collaboration with all partners to achieve common objectives. We will continue to establish shared objectives and encourage joint evaluation of our initiatives and agency in determining the future of their health.
- Institutions: Pivot partners with local and international institutions and organizations including close collaborations with additional ministries and government entities, such as the Ministry of Population, Ministry of Telecommunication, and Ministry of Water and Sanitation.

A stronger engagement towards health promotion and disease prevention: Pivot’s focus over the past decade has been on health, non-communicable disease management and environmental interventions designed to promote health behaviors and protect personal and environmental health.

OBJECTIVE #4

ADVANCE ENGAGEMENT & PARTNERSHIP

A stronger engagement towards health promotion and disease prevention: Pivot’s focus over the past decade has been on health, non-communicable disease management and environmental interventions designed to promote health behaviors and protect personal and environmental health.

KEY AREAS OF WORK

- Community engagement: Pivot aims to increase its community engagement and grassroots activities with a greater focus on listening and the amplification of community voices. We will launch a new “dream fund” that will allow each municipality to pave the way for the development of their health.
- Government collaboration: We have established a shared understanding of the importance of collaboration with all partners to achieve common objectives. We will continue to establish shared objectives and encourage joint evaluation of our initiatives and agency in determining the future of their health.
- Institutions: Pivot partners with local and international institutions and organizations including close collaborations with additional ministries and government entities, such as the Ministry of Population, Ministry of Telecommunication, and Ministry of Water and Sanitation.

A delegation of Pivot and MoPH leaders (including the Secretary General) gathered in July 2022 to reflect on key lessons learned from the last decade of work in Ifanadiana District and discuss strategies for expansion across Vatovavy Region.
STRENGTHEN ORGANIZATIONAL CAPACITY

OBJECTIVE #5

KEY AREAS OF WORK

Organization and site structure
• Madagascar-based Executive Leadership and Senior Management Team, with our headquarters closest to the community
• Support the transition of decentralizing day-to-day management of programs from district to site teams (district coordination teams with multiple sites supporting 4 to 5 communes)
• Expansion of offices to new locations, with a small team in Tana and district coordination teams working in the closest proximity possible to local health representatives

Fiscal performance and compliance
• Strengthen our internal operating procedures with a special focus on compliance for complex funding
• Continue our detailed budgeting & planning process in collaboration with the MoPH
• Increase the size of our HR, finance, grants compliance teams proportionally to needs
• Leverage a more powerful financial software and increase investment in strategic finance initiatives to pursue greater precision in revenue and expense tracking, allowing for stronger management and strategic insights
• Continue to strongly implement a zero-corruption and harassment-free policy in the workplace

Professional development
• Continue to promote our values in all of our programs, operating procedures, and throughout the employee experience
• Actively address principles of diversity, equity, inclusion, and justice in our programs, management, and structure
• Strengthen our performance management and evaluation system
• Continue internal capacity building and development of management and leadership cadre
• Develop and maintain a talent pipeline for our emerging leaders by investing in education and exchange opportunities

OBJECTIVE #6

REVOLUTIONIZE GLOBAL HEALTH SCIENCE

STRENGTHEN ORGANIZATIONAL CAPACITY

Evolving, effective, and efficient internal procedures and operations systems are key to our growth and long-term success as we transition from operating in one to three districts, including a regional capital.

"When programs addressing complex problems are supported by rigorous data and science, good things happen."

- Dr. Matt Bonds,
  Associate Professor, Harvard Medical School
  Department of Global Health and Social Medicine,
  Pivot Science Scholar and Co-Founder
KEY AREAS OF WORK

- **Monitoring and evaluation**
  Our integrated approach to M&E is the backbone of Pivot and links continuous monitoring and routine evaluation with program implementation. Our M&E program uses existing data whenever possible, provides timely feedback of results, and supports implementers in interpreting using data for programmatic change.

- **Population impact**
  Our quasi-experimental study design measures the impact of our intervention on population health, including changes in mortality and intervention coverage.

- **Geographic analysis of barriers to care**
  From granular open source mapping data we identify and quantify the impact of geography on care-seeking, informing where and how healthcare is delivered.

- **Community health**
  We investigate how best to operationalize global best practices for community health, the geography of care delivery, and improvements in quality of care.

- **Eco-epidemiology and surveillance**
  Combining environmental information (remote sensing, environmental surveillance) with spatially-granular HMIS and population survey data, we have developed models of disease transmission. This allows us to understand and forecast local disease dynamics. We have begun incorporating lab-based molecular diagnostic research to complement existing MoPH efforts and modernize and strengthen diagnostic capacity of clinical laboratories.

- **Operations research on UHC**
  We use operations research and program evaluation to inform UHC implementation in partnership with the MoPH. Operations research answers questions about how programs are functioning, their reach, quality of care, and their impact on health outcomes. We are developing a health financing research agenda in partnership with the UHC department of the MoPH to understand and optimize the costs of health care delivery from a societal perspective and determine the cost-benefit of key clinical programs.

- **Research training**
  Through workshops and mentored research projects we engage Pivot staff and MoPH collaborators in research projects, building local expertise and research capacity.

EXPANDING THE RESEARCH AGENDA

Pivot is committed to deepening our understanding of the communities in which we work in the coming years, exploring the growth and integration of new methods and areas of focus into our research.

- **Qualitative research and medical anthropology**
  We will increase our emphasis on qualitative research and mixed methods. An area of focus for Pivot is the integration of medical anthropology into our research agenda, exploring the intersection of individuals, systems, and the environment to create health and illness outcomes.

- **Clinical research**
  Investigating the safety and effectiveness of clinical programs on individual patient outcomes and developing and implementing evaluation and impact research.

**Household Survey to Assess Population Impact: 2023 Data Collection Plan**

**VATOVAVY REGION**

- 2nd wave: H/J/H/H: 180 households

**IFANADIANA DISTRICT**

- 2nd wave: H/J/H/H: 180 households

- **Qualitative data collection**
  - Households
  - 2nd wave: interviews with key informants, focus groups, etc.

- **Quantitative analysis**
  - Households
  - 2nd wave: population surveys, etc.

**IFANADIANA DISTRICT**

- 2nd wave: H/J/H/H: 180 households
BUILDING A RESILIENT HEALTH SYSTEM: POPULATION, HEALTH & ENVIRONMENT

KEY AREAS OF WORK

- Climate change adaptation in the form of investing in a climate-resilient health system
- Preventive and curative programs which respond to a changing disease burden including a water and sanitation program
- Stewardship of resources through deliberate operations practices of eco-responsibility
- Collaboration across different disciplines (environment, human, and animal health) for research and implementation
- Pandemic response through HSS integrated with scientific inquiry

BUILDING A RESILIENT HEALTH SYSTEM: POPULATION, HEALTH & ENVIRONMENT

Madagascar is one of the countries most vulnerable to the impacts of climate change due to its geography and chronic poverty. Increasing temperatures and changing precipitation patterns are expected to increase the risk of vector-borne diseases, particularly malaria. At the same time, extreme climate events, such as cyclones and drought, are predicted to increase in their frequency and strength. It is also a country rich in biodiversity, with 90% of species endemic to the island. Our work presents an opportunity to transform the health system to better meet the needs of the people and the environment in a time of global change.

In the Vatovavy Region, health is closely tied to the surrounding environment and climate. The region is home to the UNESCO World Heritage Site - Ranomafana National Park. The majority of people live in extreme poverty, rely on subsistence agriculture and are exposed to environmental pathogens due to precarious living conditions (e.g. lack of safe drinking water, sanitation, etc.). Malaria, diarrheal disease, respiratory infections, and neglected tropical diseases are all endemic in the region. In the aftermath of Cyclone Batsirai in 2022, we witnessed the devastating effects that cyclones have on peoples’ lives and the ease with which it can bring the health system to a halt. The impact of the environment on population health is only expected to increase in future years.

At Pivot, we have spent the past several years combining program implementation with a research program to respond to these threats and better understand and predict the impact of the environment on population health, with the ultimate goal of building a resilient health system for a changing world.

“Climate change is the single biggest health threat facing humanity.”
- World Health Organization

Pandemic response:

In response to the COVID-19 pandemic, Pivot collaborated with the MoPH and Centre ValBio to establish a molecular laboratory with RT-PCR capacity in Ifanadiana District. The laboratory supported the MoPH’s efforts to decentralize testing services from the capital – essential work as the disease burden shifts and pandemics increase in frequency. Through COVID-19 sample collection, the partnership was able to create a bank of biological samples which will provide specimens for metagenomic sequencing. Initially envisioned as a research project, the training on sequencing and analysis of samples will institutionalize the technical capacity among the partners and make future work – to improve patient diagnosis, estimate disease burden, identify emerging pathogens, and more – possible.

Environmental determinants of health:

Building upon work that explored drivers of localized diarrhea incidence, we are developing methods to understand the climate’s impact on infectious diseases. We combine field measurements with satellite imagery, contributing to an ever-growing collection of environmental data available at spatio-temporal scales relevant to local health programs. We are using these data to build geo-statistical models to better understand and predict the effect of the environment on infectious disease dynamics of malaria, diarrhea, and acute respiratory infection to forecast disease in Ifanadiana District. We will measure the impact of this disease forecasting system on health system readiness and health outcomes in real-time, a first of its kind. The research results will support health systems to better respond to changing disease burden and improve preparation for climate impact.

Climate accountability and eco-responsibility:

In 2021, Pivot became one of the four founding members of Climate Accountability in Development, a group of international development organizations committed to charting a new path forward for climate accountability in the development sector. After calculating our baseline CO₂ emissions, we are committed to continuing to measure and better understand our carbon footprint. We have assembled a dedicated team that is responsible for building and implementing a plan to reduce Pivot’s emissions. In 2022, we invested in mitigation strategies at a value of $50 / tCO₂e in order to fully offset our measured output. We are committed to mitigating 100% of our measured CO₂ emissions annually.

"Climate change is the single biggest health threat facing humanity."
- World Health Organization
# KEY PERFORMANCE INDICATORS

## IMPLEMENTATION AND COVERAGE

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## POPULATION OUTCOMES

- % of children aged 12-23 months who received all basic immunizations
- % of antenatal care coverage: at least one visit
- % of births attended by skilled birth attendant
- % of health facilities with electronic medical record system
- % of health facilities with electronic monthly reporting system
- Mean out-of-pocket expenditure on health care
- Per capita cost of health system model
- Essential medicine availability rate
- Hospital beds (per 10,000 population)
- # of health facilities renovated / built
- Health facility operational capacity rate
- CHW density (per 10,000 population)
- Physicians density (per 10,000 population)
- % of health workforce with access to a financial motivation scheme
- % of health facilities meeting basic HR norms

## OBJECTIVE | PROGRAM | KEY PERFORMANCE INDICATOR

### #2 CONTINUED

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### #3 - INTEGRATE SOCIAL PROTECTION

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### #4 - ADVANCE PARTNERSHIPS

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### #5 - STRENGTHEN ORGANIZATIONAL CAPACITY

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### #6 - REVOLUTIONIZE GLOBAL HEALTH SCIENCE

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In 2022, Pivot made a commitment to the MoPH to invest a minimum of $35M in Vatovavy Region's public health system over the course of 2023-2028 – a direct reflection of our confidence in a strong and productive partnership with the government. While maintaining a $7M annual budget from FY23-FY27 would fulfill this commitment, the Strategic Plan outlined in this document represents a more ambitious program, aimed at maximizing impact on population health at a regional level. We are confident that the objectives laid out by this plan are not only attainable, but represent the best approach to replicating our district-level model to serve all one million residents of Vatovavy.

Based on the current global economic landscape, we estimate that $42.5M will be needed to reach the objectives set out by this 2023-2028 Strategic Plan.

At the time of publication, our approximate 5-year projection for allocation of funds is as follows:

- **Health Systems Strengthening:** $2,000,000
- **Quality Services:** $4,000,000
- **Community Health:** $6,000,000
- **Building Health Systems:** $8,000,000
- **Community Health:** $10,000,000

Precise annual budget-setting over the next five years will be done in partnership with the MoPH and will be guided by a multi-year internal Operational Plan (available upon request).
ACKNOWLEDGEMENTS

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Direct Relief  
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Stephen Della Pietra and  
Alan Deckelbaum and  
DAK Foundation  
Crown Family  
CRI Foundation  
Conservation, Food &  
Scott and Yilin Chen  
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Meredith Nachbahr  
Night Heron Foundation  
Ed Norton  
Norton Family Foundation  
Partners For Equity  
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Christina Lindgren  
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Jonathan and Linda Rich  
Michael Rich  
Walter and Judy Rich  
Ripple Foundation  
Rippleworks  
Richard and Delphine Roth  
Rouse Family Foundation  
Ted Rouse  
Sall Family Foundation  
Francesco Scattone and  
J Judith Gibbons  
Simonet Family Foundation  
Tom Simonet  
J Im and Marilyn Simons  
Storehouse Foundation  
Sveck Foundation  
TJG Meyer Family  
Foundation  
Cassia van der Hoof Hoelstein  
and Peter Albers  
Wagner Foundation  
Welcome Trust  
Bill Wiberg and Lynda  
Sperry  
Wyss Foundation  
Thomas Young  

KEY PUBLICATIONS

>

Top scientific journals. Below are a few highlights


Health, 6:e007145.  


A Prescription for Madagascar’s Broken Health System: Data and Attention to Details. Science Magazine.  


Geographic Barriers to Establishing a Successful Hospital Referral System in Rural Madagascar.  


A Prescription for Madagascar’s Broken Health System: Data and Attention to Details. Science Magazine.
A coastal community in Vatovavy Region as seen from a boat on the Pangalane Canal - a common mode of transport for the local population.
This indicator is a weighted average of the coverage of essential maternal and child health services. Globally, subnational estimation of maternal mortality without comprehensive vital events registration is challenging given the relatively rare occurrence of maternal deaths. Maternal mortality rate will be estimated at the regional level; the sample size will not be sufficient to see a statistically significant change in the maternal mortality rate from 2023 to 2028, but we will be able to provide a cross-sectional estimate of maternal mortality.

Of children under-five who were reported to have cough/difficulty breathing, fever, or diarrhea in the two weeks preceding the survey, the percentage who sought care.

Average annual relative change.

REFERENCES


FOOTNOTES


Global Health Action. doi:10.1136/bmjgh-2021-007145.