

2024

A YEAR IN REVIEW

BETTER CARE JOURNEYS FOR ALL



"Afya-Tek streamlines access to healthcare by ensuring that referrals from community health workers allow patients to access health facilities quickly and receive prompt care when they need it. With the digital system, the process is more efficient and seamless for both patients and providers."

BATULI MAERO, COMMUNITY HEALTH WORKER CHAIRPERSON, TANZANIA



A community health worker in Kibaha, Tanzania, together with people from the community.

A Message From Our CEO

Dear partners and friends,

In 2024, D-tree celebrated its 20th anniversary. For over two decades, we have been leveraging innovative digital technologies to strengthen primary healthcare systems, save lives and improve health and well-being in some of the world's most underserved communities – always focusing on those usually left the furthest behind. Last year alone, more than half a million children, women and their families received quality health services, including life-saving interventions.

As international aid – and in particular health funding – contracts at an alarming pace, the demand for affordable integrated interventions that maximize impact has never been greater. After 20 years of work, we have been forced to ask ourselves: is our model still the best investment to improve health for all?

The evidence says yes. In Zanzibar, a recent evaluation of our work shows positive changes in child health and development as children's cognitive, linguistic and motor development have significantly improved, laying a strong foundation for a healthy future for all children (Bhojani et. al, 2025,

under review). In Zanzibar, our work has supported the **reduction of child stunting from 30% to 18%** and directly contributed to **93% of newborns receiving timely urgent care** – all at just **USD 0.86 per person, reaching nearly 2 million people**. In mainland Tanzania, we've nearly **doubled the correct use of antibiotics for children with pneumonia symptoms**. And most importantly, our impact is **consistent across all social and economic groups, ensuring no one is left behind**.

Yet, this is just the beginning. Strengthening community health is only the first step – we must now improve the entire patient journey. Ensuring timely referrals by community

health workers lead to quality care at facilities is our next frontier. And we're doing it the only way that works: through strong partnerships, national leadership, and continuous innovation.

Together, let's keep building a healthier future. Thank you for being part of the journey,




Riccardo



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The Change: Better Care Journeys for All

Health is a fundamental right, but many health systems in Africa struggle to deliver timely, high-quality and continuous care.

At D-tree, we address these barriers through three interconnected pillars:



Underpinning these pillars is a rigorous use of data and innovative digital tools to strengthen health systems holistically and improve how people experience care. We ensure that the vast amount of data generated through our programs is used for better decision-making and we explore new technologies to unlock pathways to provide efficient, responsive and people-centred care.

Reach and Results at a Glance

3,500

HEALTH WORKERS
SUPPORTED

50% of caregivers can now recognize health danger signs in their children

560,000

PEOPLE SERVED

The proportion of children with pneumonia symptoms who received the correct antibiotics doubled

900,400

HEALTH VISITS
CONDUCTED

97% of referrals from community health workers to health facilities were successfully completed

Improved Access and Agency for Better Health Decisions

Good health begins in people's homes. At D-tree we are improving access to healthcare and supporting people in adopting healthier lifestyles such as good hygiene, proper nutrition, engaging in active play with children and making choices that promote long-term well-being.

IMPROVED ACCESS

Through **Afya-Tek**, our flagship program in Tanzania, we deliver quality, coordinated healthcare to people wherever they start their health journey—whether that's a public or private health facility, a private community drug shop or a community health worker. By creating a seamless, digital referral network between these providers, we ensure that every person is guided to the appropriate care when and where they need it. In 2024, Afya-Tek achieved remarkable results:

- **Children with pneumonia symptoms who received the correct antibiotics doubled**
- **Children with diarrhea receiving ORS and zinc doubled**



A community health worker in Zanzibar, Tanzania, is providing essential child care and development services to a mother.

- **Over 65,000 people served**
- **185,000 health visits conducted**
- **95% of referred clients completed their care journeys**

By bridging gaps in the healthcare systems and removing barriers to access, Afya-Tek is not only improving the health and well-being of people, but is also building trust in the healthcare system so that people continue to seek care for themselves and their loved ones. Last year, Afya-Tek was formally integrated into the government's national health system and is now set to scale across the country, reaching more people than ever.

"You can draw pictures on a piece of cardboard - like a fish, an orange or a mango - and ask the child to pick the one you name. If they choose the wrong one, you correct them and try again later. When they start recognizing the right pictures, you see their learning and development. Before, we never did these activities; our parents thought they were pointless. But now, thankfully, I understand their value."

MOTHER, ZANZIBAR.

ENHANCED AGENCY AND HEALTHIER BEHAVIORS

Community health workers are essential in delivering clear, reliable health guidance to people and ultimately turning this knowledge into action. In Tanzania, D-tree has long collaborated with these frontline workers to provide communities with essential health information—from prenatal and postpartum care to counseling families on early childhood development practices. By leveraging digital tools, community health workers close knowledge gaps and build parental skills to enable better growth, learning and development for their children.

In Zanzibar, our flagship program **Jamii ni Afya** – the national community health program – has transformed home environments and caregiver behaviors. In 2024, a study (Bhojani et. al, 2025, under review) revealed significant improvements in children’s language, movement and thinking skills. Key results of Jamii ni Afya work between 2019 and 2023 include:

- More caregivers can now identify key child health danger signs, jumping from 24% to 50%
- Caregivers are 2.5 times more likely to know the basics of good nutrition for children
- Families are now nearly four times more likely to have at least one book in the home.
- Fathers are now over 11 times more likely to engage in at least one play activity and nearly 50 times more likely to engage in four or more play activities.

“Before I leave the house in the morning, I check how my children are doing. If I sense any unusual condition in my children, I take immediate action and send them to the hospital. After returning from the hospital, I will leave them at home with their mother, while keeping in touch all the time with my wife to know the progress.”

FATHER, ZANZIBAR.



WHAT IS NEXT TO IMPROVE INDIVIDUAL HEALTH DECISIONS?

Equipping people with health information and the ability to connect to care, whether through personal health records, community health worker visits or decision-support systems, are key to advancing health equity and autonomy. For example, to bridge gaps in maternal health, we plan to introduce a direct-to-client channel, such as a WhatsApp chatbot and other AI solutions, to complement the services community and facility health workers provide, and with more women accessing phones than ever before, this provides an opportunity to give women health information and care on-demand. This will optimize resources by allowing community health workers to focus on high-need cases and give more health agency.



Exploring Innovative Tools to Support Better Care

In 2024, we continued to experiment, observe and explore innovations. All our innovations present exciting opportunities for scale thanks to our deep relationships with government partners. We are building on what we know is working through our established programs, to extend our reach and accelerate impact. These tools improve decision-making, speed up health responses and ultimately improve the health and well-being of whole communities.

IN 2024, WE ASKED OURSELVES WHAT IF...



Community health workers and their supervisors could resolve technical issues with their digital tools independently?

We are currently working on a chatbot that will provide this essential support, keeping services running smoothly.



Overworked supervisors could be better supported in managing their community health workers?

We are exploring an AI assistant that can track and manage performance of community health workers.



Young people could directly provide feedback on the health services they are receiving so that health facilities can make informed decisions for improvements?

We have developed a **WhatsApp chatbot co-designed with and for young people**, collecting feedback on public health services and driving improvements in care quality.



Nurses and midwives could be better supported to provide quality care, even in life-threatening situations?

Through MAM* AI, a Swahili-language tool for nurses and midwives will offer instant life-saving guidance for maternal and child health.

Improving Care Quality for Better Health

When people trust the health system and are well-informed, they're more likely to seek care, but the trust must be met with quality care. By strengthening connections among community health workers, health facilities and government systems, we promote smarter data use, foster innovative solutions and support better decision-making – ensuring that quality care keeps pace with growing demand.

In 2024, our programs advanced these goals by deploying digital tools to care providers across the primary healthcare systems in the countries where we work – and always aligned with national health priorities.



Health facility workers in Tanzania.

MALAWI

In Malawi, we bolstered the nationwide expansion of iCHIS, the national digital health platform that guides community health workers to deliver quality, integrated care and facilitate timely patient referrals and follow-up. Building on our 2023 successes, we expanded iCHIS to support family planning and maternal and child health services. We registered 200,000 new clients into the system and enabled over 350 health workers to provide timely, informed and life-changing support.

We also contributed to comprehensive, digitally enabled HIV service delivery. By launching an innovative digital tool in nine health facilities we enabled long-term patient support, new case identification and quick treatment. With nearly **10% of adults aged 15 to 49 affected by HIV** in Malawi, long-term support is critical. In 2024, health workers under the program conducted nearly 18,000 health visits for more than 10,000 people – ensuring HIV-positive mothers remain healthy and their children receive the care needed for HIV-free futures.



“D-tree has been an invaluable partner to the Ministry of Health in Malawi, particularly through their support to strengthen our national community health system, iCHIS. By leveraging digital technologies and innovation, D-tree is playing a crucial role in strengthening the connection between the community, health facilities and the Ministry, helping to ensure that essential health services are accessible to all.”

ALINAFE MBEWE, MINISTRY OF HEALTH, MALAWI

ZANZIBAR

In 2024, we achieved a major milestone in connecting **Jamii ni Afya**'s digital system with higher levels of care—such as hospitals—setting the stage for integrated, patient-centered care across primary health providers. By linking providers, crucial patient information is shared, leading to more efficient and informed treatment decisions. In addition, real-time alerts were introduced for community health workers when hospitals diagnose children with pneumonia or low birth weight babies. These alerts enable targeted home visits that help women follow treatment plans, reducing health risks and improving the health and well-being of mothers and babies.

"I believe that the people in healthcare are like our hands and fingers. If you take away one finger, the hand can't function properly. We all have to work together for the system to work efficiently and find ways to connect better with the community."

COMMUNITY HEALTH WORKER, ZANZIBAR

"After experiencing miscarriages, I attended all eight antenatal care visits and ensured my baby received all necessary vaccines. My community health worker provided guidance, and I leaned on my family for support."

MOTHER, ZANZIBAR

Finally, **we were proud to publish new evidence of the impact of Jamii ni Afya** last year, showing that we leave no one behind – income, education and other social factors do not determine whether a mother enrolled in Jamii ni Afya receives care.

When the quality of care is improved, coordination works seamlessly and we expand reach, we can truly change how people access and experience care. By integrating our solutions into national systems, we're not just treating diseases, but we're creating a sustainable path toward healthier communities and stronger health systems.



WHAT IS NEXT TO IMPROVE QUALITY OF CARE?

In 2025 and beyond, we will expand our impact by increasingly focusing on strengthening care quality at the facility level, broadening our scope across more health areas and deepening collaboration across multiple levels of care. For example, in Tanzania, using the Afya-Tek model, we will build on our learnings and successes and expand to address non-communicable diseases like hypertension and diabetes. **Non-communicable diseases account for over a third of all deaths** in Tanzania and coordinated care across all levels of the health system is essential to respond to this health challenge.



Drug shops are an important point of care for many communities in Tanzania. Through Afya-Tek, we connect them to other parts of the health system so that people receive coordinated care, ensuring nobody falls through the cracks.

Government Partnerships for Lasting Impact

D-tree partners with governments to scale and sustain digital health solutions, co-designing and integrating them into national systems. We also collaborate with global and local innovators to enhance health system quality, efficiency, and performance.

TANZANIA

In 2024, we played a pivotal role in enhancing the government's digital primary healthcare system—the Unified Community System. With over 1 million Tanzanians registered in the system, we worked with the government and global and national partners to upgrade the technology and build the capacity of over 1,000 healthcare and community health workers across 300 facilities. We also fully integrated two D-tree innovations into the system—the Afya-Tek model and community-based early childhood development services, putting them on track to scale nationally as part of the primary health system.



Girls jumping rope in Kibaha, Tanzania.

ZANZIBAR

In Zanzibar, we continued to build government ownership of community health through Jamii ni Afya. Following the **Government of Zanzibar's commitment to professionalize community health workers in 2023**, 2024 saw a significant increase in the government's operational and financial support. Zanzibar's dedicated national budget for community health more than doubled from USD 200,000 to USD 550,000, reinforcing commitment and signaling sustainable service delivery.

We have also ensured that health data is used responsibly and effectively to improve care quality. In 2024, we collaborated with the Ministry of Health to develop comprehensive data governance guidelines and today, over 95% of the staff who participated in the training on the guidelines feel better equipped to handle and share data securely - paving the way for informed decision-making in 2025 and beyond.



Zanzibar's President, H.E. Dr. Hussein Mwinyi, together with D-tree's Eden Mathew at the 2024 Tanzania Health Summit.

"D-tree has done a wonderful since starting to work with the Ministry of Health in Zanzibar. Their main contribution has been around community health workers. In Zanzibar, 2,300 community health workers have been well trained, can collect data, share information and help the community. D-tree is creating bridges between the community, health centres and ministry."

HON. NASSOR AHMED MAZRUI, MINISTER OF HEALTH ZANZIBAR

ZAMBIA

In Zambia, we supported the government in planning to deploy its new integrated community healthcare model alongside a supportive digital tool for community health workers. This initiative is expected to scale nationally to inform and strengthen training for over 40,000 community health workers over the next two years, strengthening the health system and enabling healthcare providers to deliver comprehensive care that addresses both immediate and long-term health needs.

"Before my work used to be related to malaria screening and testing, but now with the coming of the revised Community Health Service Package, I have been trained to provide other services such as health promotion and education, adult HIV, and maternal and child health."

MORRIS SIMWANZA, COMMUNITY HEALTH WORKER, ZAMBIA

All of these strategic partnerships are central to ensuring that our innovations are scaled and sustained for lasting impact.

"D-tree has been a valuable partner in planning the digitization of our national integrated community health program in Zambia. We truly appreciate their close collaboration with our teams and their key role in supporting the government to test, evaluate, and roll out the Community Health Information Platform (CHIP). This digital tool will empower our community health workers and improve health outcomes for the communities they serve."

**INNOCENT CHIBOMA, SENIOR ICT OFFICER
AT THE ZAMBIA MINISTRY OF HEALTH, ICT UNIT**

Morris Simwanza, a community health worker in Livingstone, Zambia.



WHAT IS NEXT FOR STRONGER GOVERNMENT PARTNERSHIPS?

In 2025, we will continue partnering with governments to upgrade their primary healthcare systems, always aiming to put them in the driver's seat in managing and financing these improvements long-term.

For example, in Zanzibar, we will continue to serve as the primary partner to the Ministry of Health as they expand and strengthen their community health worker program, ensuring they are equipped to lead and sustain a larger and more comprehensive program. In Malawi, we are working with the Ministry of Health to realize its vision of a fully integrated, digitally enabled community health system. Across D-tree geographies, we will continue to support strong community health programs and supportive digital systems that better connect families to needed services and facilitate accessible, high-quality care for all.



Moments To Remember

Last year was full of memorable moments – from celebrating our 20th anniversary to connecting with colleagues and others in person at conferences and having our work spotlighted by BBC.

Celebrating 20 Years of Improving Health for All

D-tree's story began in 2004 rooted in the simple idea that better decisions save lives. Together with our partners we have ever since spearheaded health impact through technology, fought for the right of access to care and supported health workers with innovative and digital tools. To celebrate our 20th anniversary, we took a moment to reflect on the impact we have witnessed since we started our work; honor the people who have been instrumental to our achievements; and pay tribute to our founder, Dr. Marc Mitchell, who sadly passed away in 2019.

You can still join us as we celebrate two decades of changing how people experience care.

[READ MORE](#)



Marc Mitchell, D-tree's founder, with a community health worker in Zanzibar.

The Marc Mitchell Award for Leadership & Innovation

The Marc Mitchell Award, initiated by the Global Digital Health Network, and in 2024 for the first time financially supported by D-tree, recognizes leaders transforming healthcare through innovative digital solutions. Award recipients receive financial support to attend the Global Digital Health Forum in Nairobi this year and benefit from a year of mentorship provided by the Global Digital Health Network Advisory Council.

In 2024, **we were excited to award two African women for their innovative work.** Dr. Marlene Joannie Bewa for her initiative on the first telemedicine platform in Benin, and Joie Sophia Umuhoza for tackling the stressors of climate change through a mix of digital innovation and in-person education.

[READ MORE](#)



D-tree's CEO, Riccardo Lamapariello, with the 2024 March Mitchell Award winners.

Sharing Our Learnings With The Field

From the Tanzania Health Summit to the Global Digital Health Forum, we have been driving collaboration and action toward stronger health systems at several conferences in 2024. As always, it was valuable to connect with partners, learn from others and explore new partnerships to accelerate health impact for those who need it the most.

World Health Assembly | Tanzania Health Forum | Global Digital Health Forum

Afya-Tek in the Spotlight: A BBC StoryWorks Production

Presented by the **WHO Foundation** and produced for them by **BBC StoryWorks** Commercial Productions, the **Healthier Together** series shed a spotlight on Afya-Tek. The video spotlights the journey of Amuko, a community health worker in Tanzania, who shows the real-world benefits of Afya-Tek and the profound difference it is making in communities.

[WATCH HERE](#)



Photo from the Afya-Tek Documentary recorded in 2024.

Published Evidence

At D-tree, we're laser-focused on creating a real difference – and that means being driven by tangible, meaningful impact on people's lives. With over 20 years of delivering impactful programs, we have the evidence that backs this up. Here are our publications from 2024.

- ▶ Are populations of postpartum women differentially served by community health worker programs: an observational cohort study from Zanzibar, Tanzania.
- ▶ Using digital technology as a platform to strengthen the continuum of care at community level for maternal, child and adolescent health in Tanzania: introducing the Afya-Tek program.
- ▶ Kizazi Kijacho: A Randomised Controlled Trial of Parenting and Unconditional Cash Transfers in Tanzania.
- ▶ Operationalizing health data governance for AI innovation in low-resource government health systems: a practical implementation perspective Zanzibar.
- ▶ One term to transform: universal health coverage through professional community health workers.

Don't miss this blog about this research!

A health facility worker in a hospital in Tanzania.



Looking Back and Moving Forward

2024 was a year of learning, growth and refining our approach to health system transformation. Through our work, one challenge became increasingly clear: healthcare systems in low- and middle-income countries are fragmented and too often operate without a people-centered approach that connects and supports people throughout their entire care journeys.

To address this gap, our 2025-2027 strategy will focus on improving the linkages between communities, health workers and governments to deliver an integrated approach to primary healthcare where people can access timely, coordinated and equitable care and where they can stay informed, engaged and supported throughout. Technology and innovation will continue to strengthen decision-making at every level. Our focus will be on three core areas with government partnerships continuing to be central, ensuring that ministries not only adopt but lead in sustaining and expanding health system improvements.

1

Improving people's agency with better access to health information and services so that individuals can make informed decisions, adopt healthy behaviors for themselves and their families and engage with the health system with confidence.

2

Improving care quality at every level of the primary healthcare system by equipping health workers with the tools, training and systems they need to provide high-quality, data-driven care.

3

Coordinating care across all levels of primary healthcare to ensure seamless referrals, continuity of care and stronger links between community-based providers, facilities and government systems.

We will continue to focus on our geographies Zambia, Zanzibar, mainland Tanzania and Malawi, drawing from lessons learned in each context to refine and scale the people-centered care model. With strong momentum and growing government commitment, we are well-positioned to drive sustainable health system transformation and advance toward a future where primary healthcare is truly people-centered - delivering timely, coordinated and accessible healthcare for all.

Donors

We are deeply grateful to our partners and donors whose generosity and commitment make our mission possible. Their partnership empowers us to strengthen health systems, expand access to quality care, and drive lasting, people-centered change in the communities we serve.

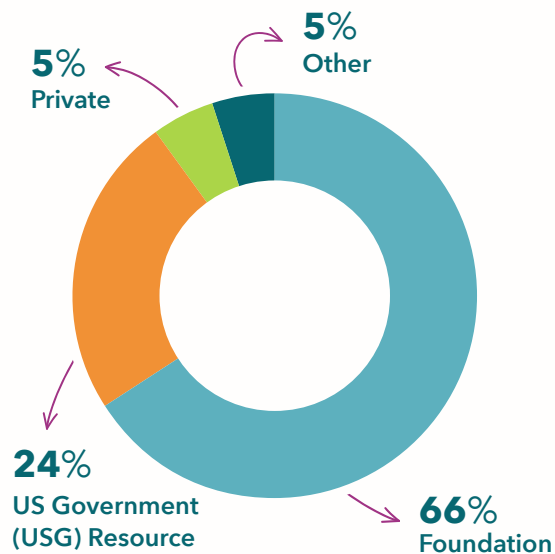
Amref Africa (via USAID Malawi MOMENTUM, Tikweze Umoyo Project), Bayer Cares Foundation, Baylor College of Medicine Children's Foundation Malawi (via USAID-Malawi, Client-Oriented Response for HIV Epidemic Control (CORE)), Jhpiego Corporation: USAID Afya Yangu - Mama na Mtoto (My Health - Mother and Child), Elizabeth Glaser Pediatric AIDS Foundation (under the USAID Afya Yangu Northern Project Contract No.: 72062122C00001), Conrad N. Hilton Foundation, Copper Rose, Crown Family Philanthropies, Dovetail Foundation, Fondation Botnar, Gates Foundation, Patrick J. McGovern Foundation, Rippleworks, Stockholm University (with funding from the Swedish Research Council and UKAID), Swiss Federal Institute of Technology in Lausanne ("EPFL") - Tech4Dev.



Community health workers during a training in Malawi.

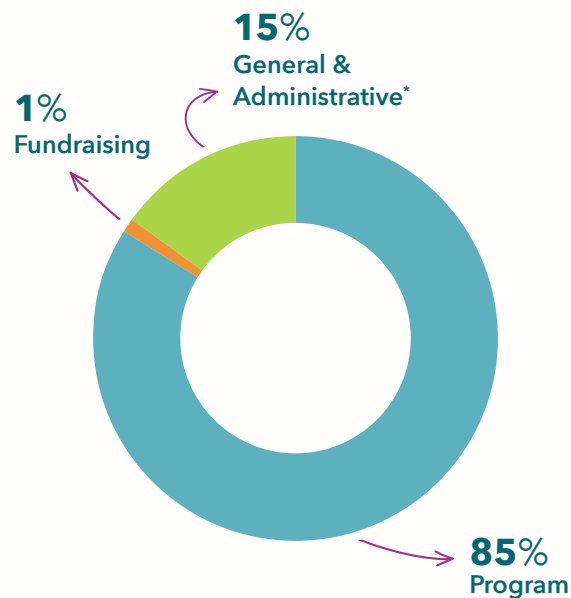
Financials

REVENUE BY SOURCE 2024



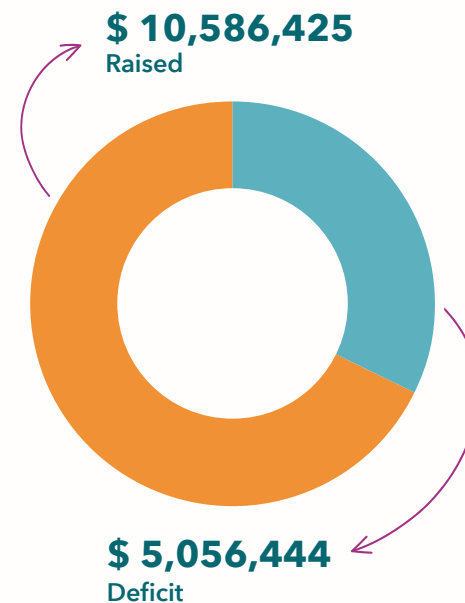
Foundation	3,480,350
US Government Resource	1,275,472
Private	271,973
Other	262,807
TOTAL REVENUE	\$ 5,290,602

EXPENSES 2024



Program	\$ 4,381,447
Fundraising	\$ 36,941
General and Administrative*	\$ 759,255
TOTAL EXPENSE	\$ 5,177,644

TOTAL 3-YEAR BUDGET (FY24-FY26)



* General and administrative (or overhead) funding allows D-tree to be financially resilient and ensure robust financial, human resource and grants management systems and structures are in place that enable high quality programming. Help us break the myth that funds not going to 'programs' are not well spent. Unrestricted funds and overhead are essential to health of a well-run non-profits.



D-tree
167 Washington Street
Suite 5
Norwell, MA02061, USA

Join us to improve care journeys for all

www.d-tree.org

