

2022

# Impact Report



**MEDTRONIC LABS**

Global Health, Local Solutions

# A bold approach to last-mile healthcare delivery

Medtronic LABS is a non-profit health systems innovator. We design and implement tech-powered healthcare delivery models that strengthen and extend health systems into local communities, delivering sustainable outcomes for underserved patients worldwide.

Our Mission is to expand access to healthcare for patient, families, and communities across the world.



# What's Inside?

Reflections	→	4
Our 2022 Impact	→	6
Partnerships	→	8
Technology & Innovation	→	9
Programs	→	14
Team	→	25
What's Next	→	35



# Reflections

Dear Supporters,

2022 was all about execution, and our metrics – 34% increase in screenings, 376% increase in enrollments, and 181% increase in lives measurably improved – speak for themselves.

We worked alongside governments and health systems to revolutionize community-based care with the power of digital health and data. We launched new programs in Tanzania, Sierra Leone, Rwanda, and Bhutan, expanding our reach in Kenya, Ghana, and India.

Our goal is to build health systems that leverage data to improve patient outcomes rather than merely collecting data. We extended our clinical expertise beyond non-communicable diseases to cover the entire spectrum of community-based care, including hypertension, diabetes, mental health, malaria, TB, HIV, maternal health, and disabilities.

Our digital platform, SPICE, remains at the heart of our efforts, and in 2022, we invested in cutting-edge innovation, creating four new product lines: SPICE Core, SPICE Engage, SPICE Insights, and SPICE Connect, all aimed at achieving better health outcomes for patients and communities.

Looking forward, our focus is on delivering value for health systems through improved population health outcomes, deepening partnerships with governments and health systems, and scaling up national-level programs in multiple regions. As always, we couldn't have achieved any of this without our partners worldwide.

Thank you,

Medtronic LABS



# Reflections

## 3 Strategies That Shaped 2022

- Health system strengthening to ensure sustainable adoption of data-driven approaches to care delivery.
- Laser focus on driving better health outcomes as our programs scale.
- Expansion into new disease verticals for integrated community-based care.

## Cumulative Impact

→ **1.45M**  
Patients Screened

→ **170K**  
Patients Enrolled

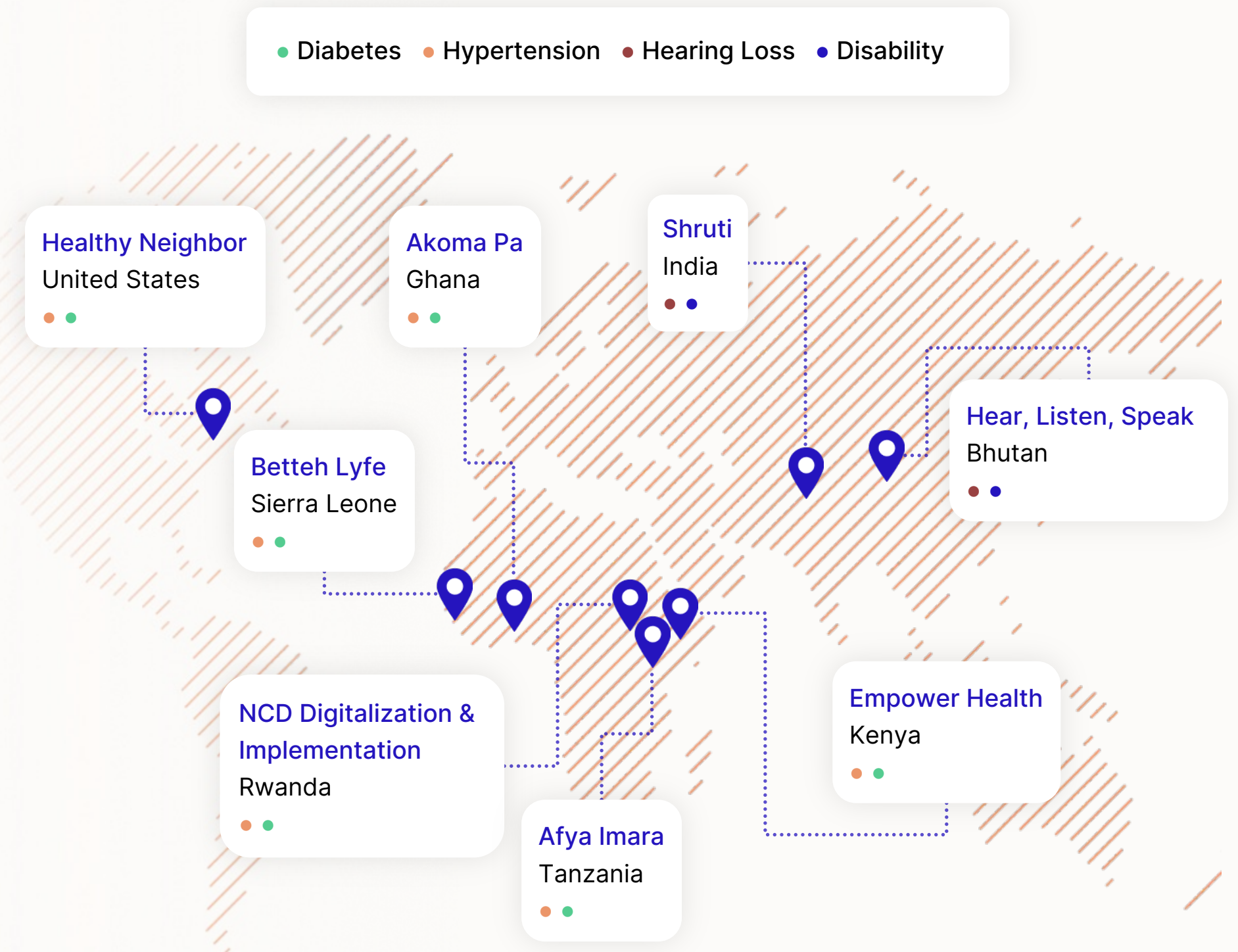
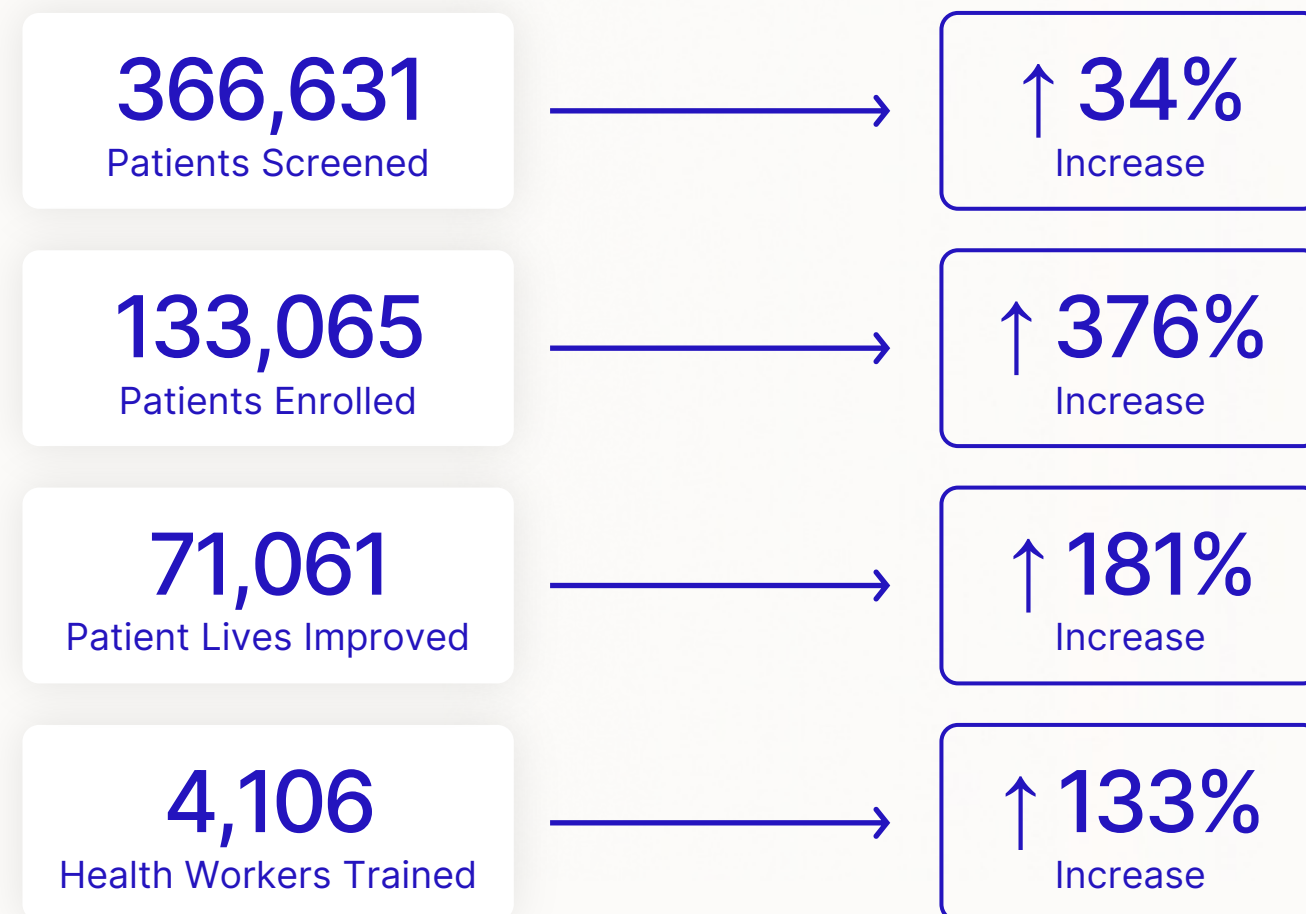
→ **110K**  
Lives Improved

→ **7,194**  
Health Workers Trained



# Our 2022 Impact

- 4 New country programs launched:  
Tanzania, Sierra Leone, Rwanda, Bhutan
- 20 New partnerships established
- 3 New digital health 'products' launched

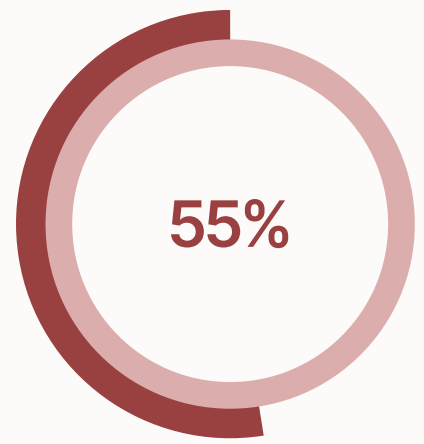
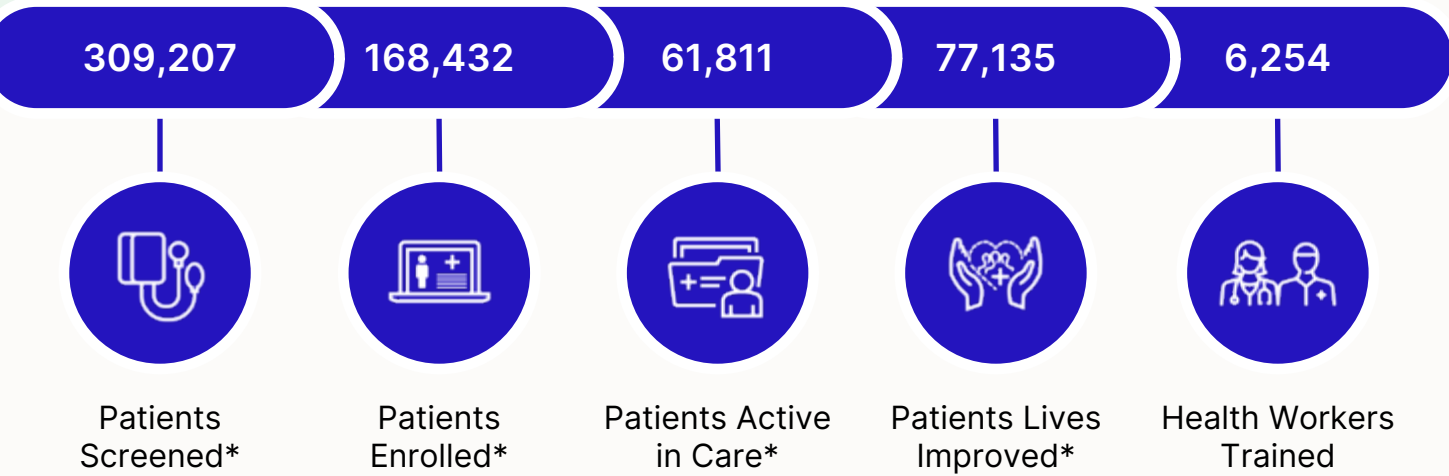




# Our Impact by Disease Area

## Hypertension & Diabetes

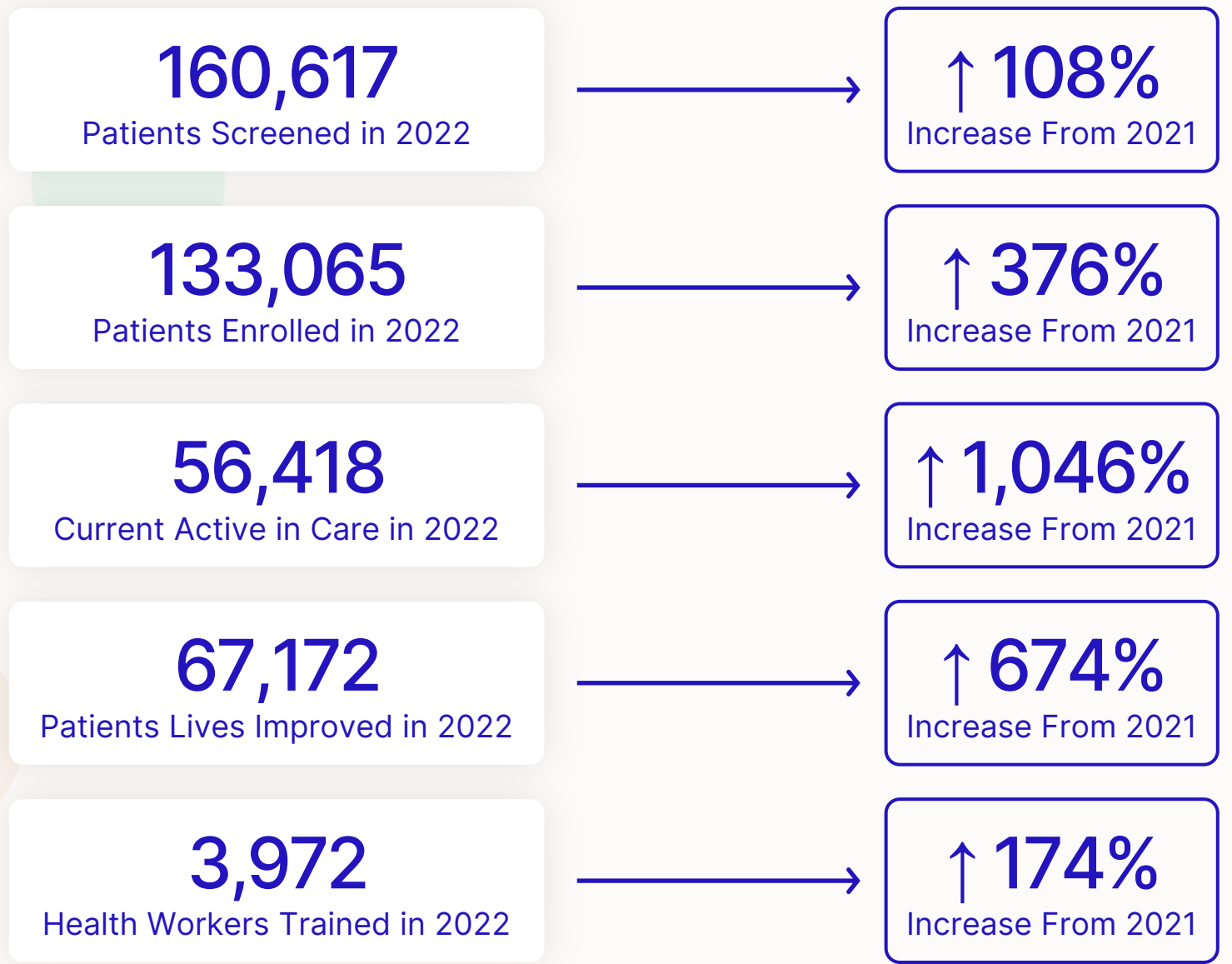
\* CUMULATIVE



55% controlled blood pressure rates in the hypertension population



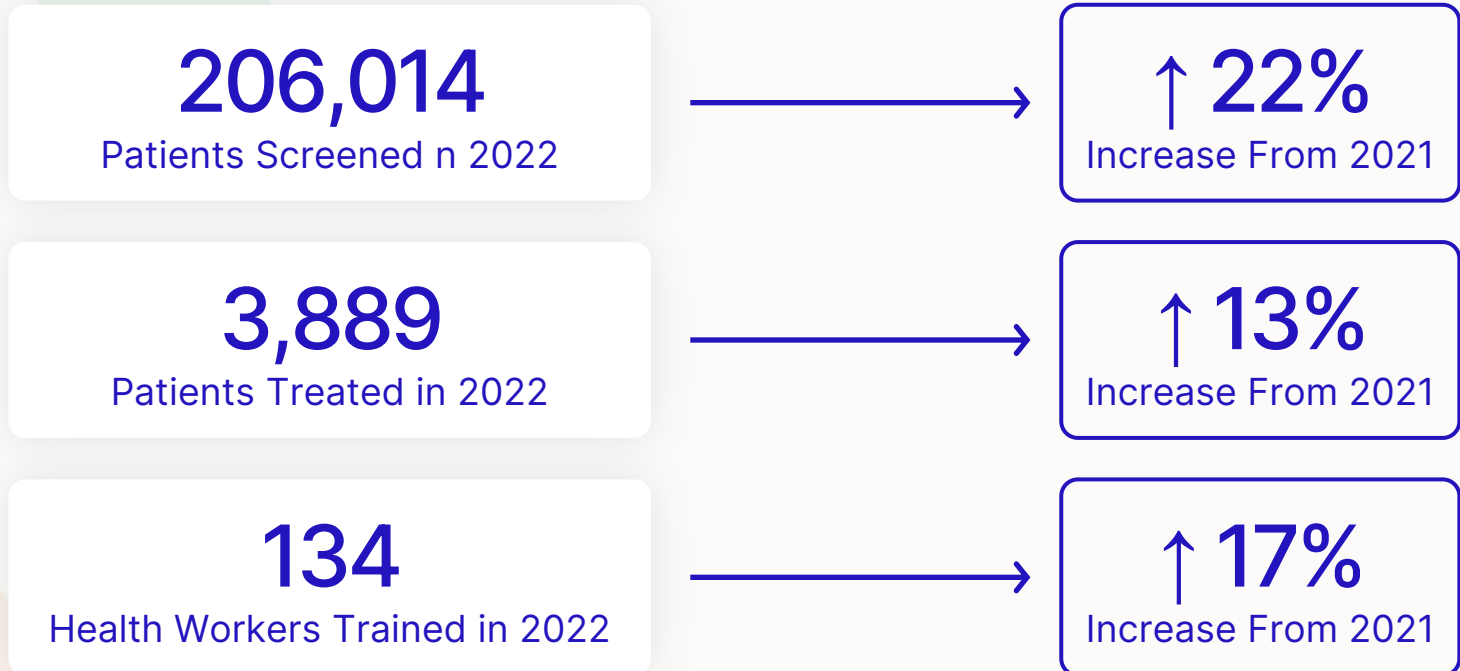
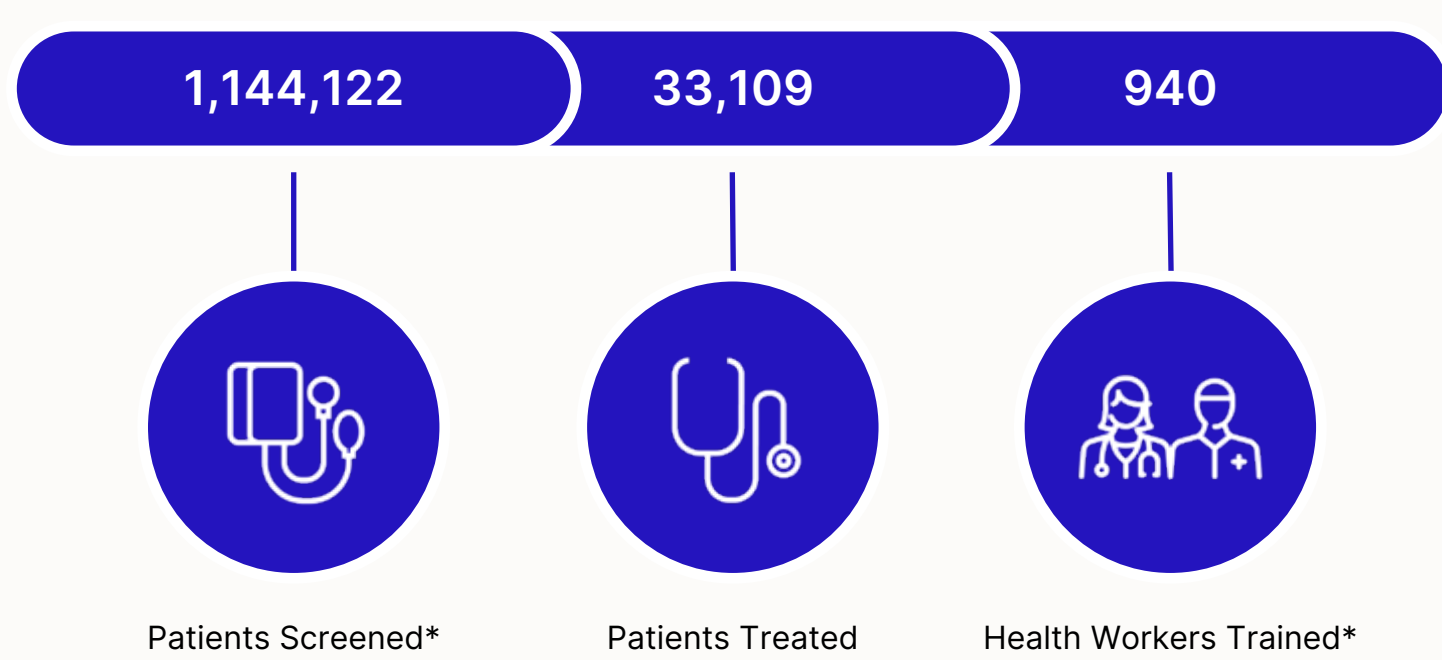
56% controlled blood glucose rates in the diabetes population



# Our Impact by Disease Area

## Ear Care & Hearing Loss

\* CUMULATIVE





# Partnerships

In 2022, Medtronic LABS formed over 15 new partnerships with diverse stakeholders to promote better population health outcomes. These partnerships ranged from working closely with local governments to aligning efforts with large multilateral institutions.

We've established new partnerships focused on NCDs, such as hypertension and diabetes, and joined the WHO Diabetes Compact. We also launched new implementation-focused programs in collaboration with Roche.

Moving beyond hypertension and diabetes, we're now focused on forming coalitions with a wider range of global health stakeholders, integrating disease verticals, and laying the foundation for data-driven, community-based models for care.

## Our Partners

### Government

- Ministry of Health, Kenya
- Ministry of Health, Rwanda
- Ministry of Health, Bhutan
- Rwanda Biomedical Center (RBC)
- Ghana Health Service

### Health Systems

- Christian Health Assoc. of Ghana
- Christian Health Assoc. of Sierra Leone
- Christian Social Services Commission, Tanzania

### NGO's & Foundations

- Patrick J. McGovern Foundation
- PATH
- World Diabetes Foundation

### Private Sector

- Novo Nordisk
- Sanofi
- Roche

### Technology Partners

- Ideas2IT
- DHIS2
- Causal Foundry
- ThinkMD

### Development & Ecosystem Partners

- GIZ
- KOICA
- The Global Fund
- Africa CDC
- UNICEF
- UN Technology Bank
- UHC2030
- UNDP Digital X
- WHO Diabetes Compact
- Community Health Impact Coalition
- NCD Alliance
- NCDI Poverty Network

# Digital Health

Introducing the new SPICE platform — the game-changing open-source digital platform that's ushering in a new era of data-driven community healthcare delivery.

Our cutting-edge platform goes above and beyond standard data collection tools, forging a bi-directional link between community-based activities and the larger health system.

By leveraging data for smarter resource allocation, we're enabling health service delivery that's more efficient, effective, and impactful than ever before.

In fact, we're proud to say that in 2023, we'll be the first-ever digital global good for precision population health.

## 2022 Highlights

- Established a partnership with Patrick J. McGovern Foundation focused on strengthening our data science capability as part of the Data to Safeguard Human Rights 2023 Accelerator.
- Formed a partnership with Causal Foundry to leverage AI/ML techniques to improve our program operations.
- Launched SPICE Engage as a patient engagement platform for community health workers and health systems staff to target outreach.
- Launched SPICE Connect to focus on interoperability, with successful DHIS2 integrations.
- Launched SPICE Insights with customer-facing dashboards to encourage data literacy and long-term adoption.



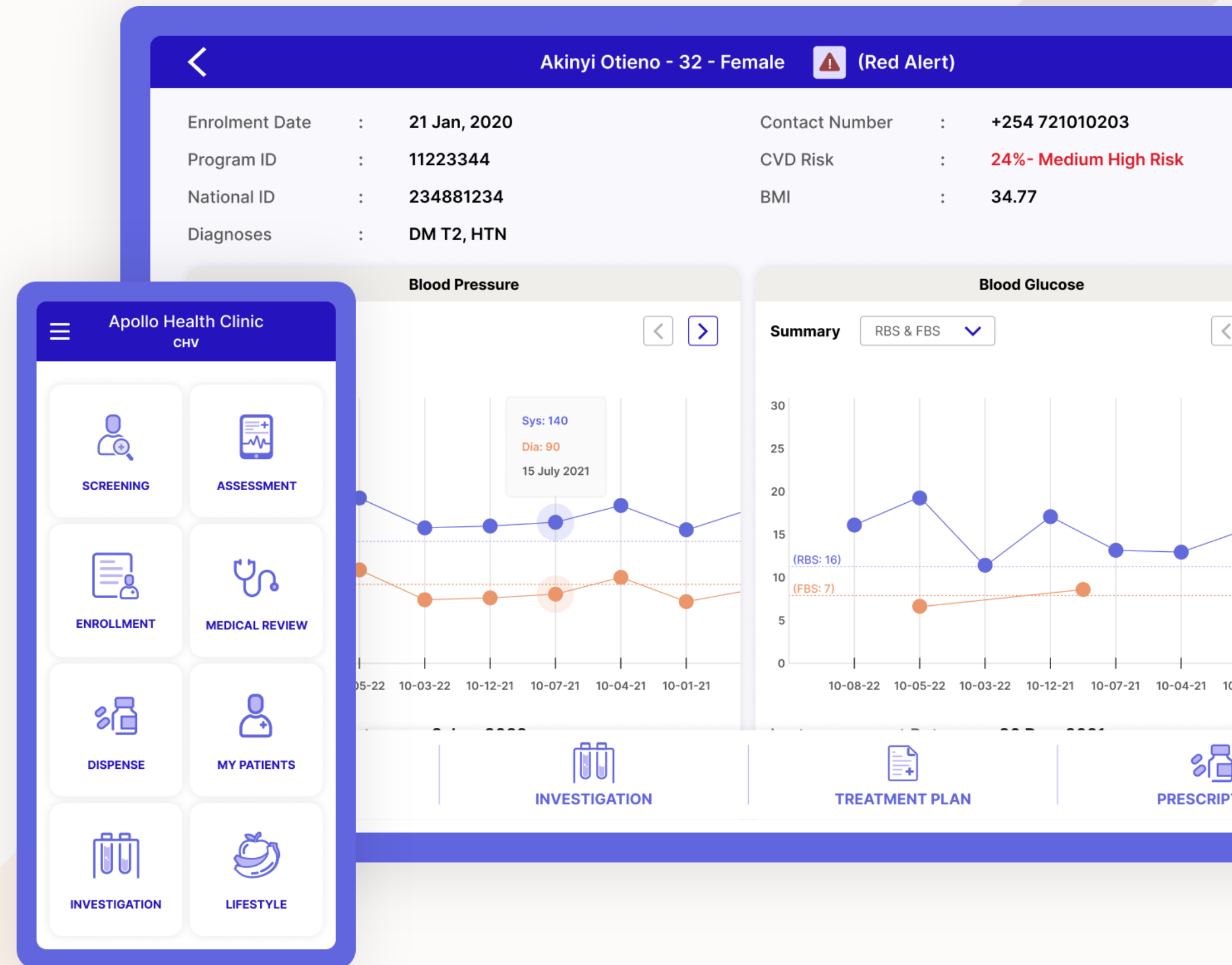
# SPICE Core


SPICE Core is our community-based platform for data-driven population health. We leverage clinical algorithms to screen, refer, and manage patients based on clinical risk, transforming care delivery from reactive to proactive. With SPICE Core, community-based work is linked bi-directionally to the health system.


**Key Features:** Regional customizability, offline first, clinical algorithms, decision support.

**Clinical Areas:** Hypertension, diabetes, mental health, maternal health, HIV, TB, vaccines.

**Health System Users:** Community health workers, nurses, doctors, pharmacists, lab technicians, nutritionists




 SPICE ENGAGE


 Enter Mobile Number


KS

Karen Sypher

Total Patients: 252

 52

 20

 20

Select Account

All

Select Operating Unit

All


Select Facility


All


Select Program


Select


APPLY












 Total Patients

 Red Alert

 Screening

 Medical Review Follow Up

 Assessment Follow Up

PATIENT NAME	FACILITY	PROGRAM	PATIENT CATEGORY	CVD RISK	DIAGNOSIS	ATTEMPTS REMAINING	LAST CALL STATUS
John Doe	Facility 1	Program 1	Screening	Low	-	1	
Manny Doe	Facility 1	Program 1	Red Alert	High	HTN, DM T2	2	
Jay Doe	Facility 1	Program 1	Medical Review Follow Up	Low	HTN, DM T2	3	
Cammeron Doe	Facility 1	Program 1	Assessment Follow Up	High	HTN, DM T2	3	
Phill Doe	Facility 1	Program 1	Screening	Low	-	2	
Sarah Doe	Facility 1	Program 1	Screening	Low	-	2	
Ariel Doe	Facility 1	Program 1	Medical Review Follow Up	High	HTN, DM T2	1	
Allen Doe	Facility 1	Program 1	Medical Review Follow Up	High	HTN, DM T2	2	
Ariel Doe	Facility 1	Program 1	Assessment Follow Up	Low	HTN, DM T2	1	
Sarah Doe	Facility 1	Program 1	Assessment Follow Up	Low	HTN, DM T2	2	
Sarah Doe	Facility 1	Program 1	Assessment Follow Up	High	HTN, DM T2	2	
Sarah Doe	Facility 1	Program 1	Assessment Follow Up	High	HTN, DM T2	2	

# SPICE Engage

SPICE Engage is our patient engagement platform designed to drive patient interactions that generate results. Designed with busy health workers in mind, it allows for targeted patient follow-up at every stage of the patient journey to ensure patients are getting the support they need for better health outcomes.

**Key Features:** Targeted telecounseling based on risk, automated SMS, 2-way SMS.

**Health System Users:** Community health workers, nurses, telecounselors, other health system staff.

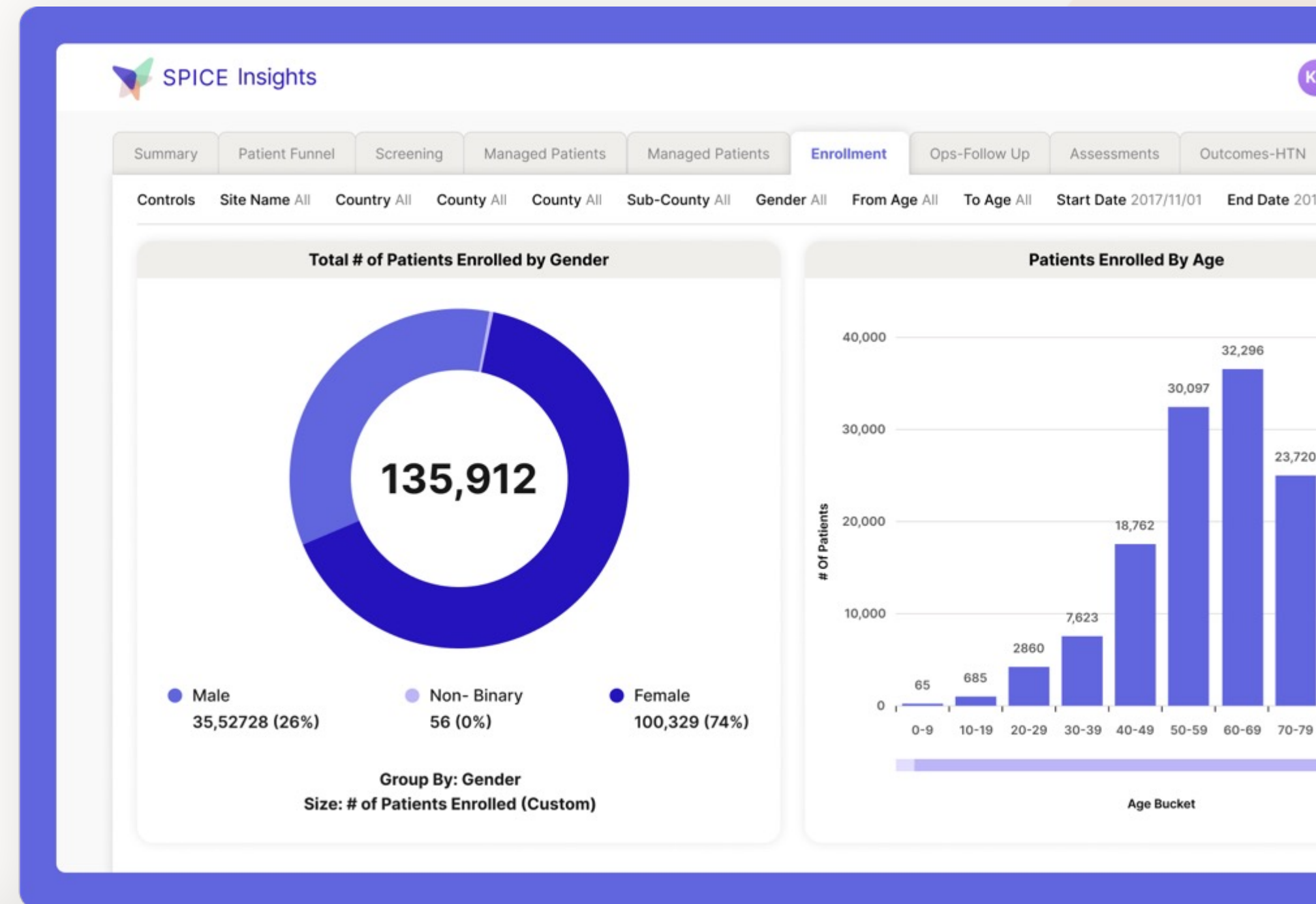


# SPICE Insights

SPICE Insights is our data analytics platform designed to deliver the right information to the right stakeholder at the right time. From clinical outcomes to operational KPIs, SPICE Insights is designed to make data useful at every level of the health system.

**Key Features:** Data visualizations and dashboards for operational and clinical KPIs, MoH report downloads, customizability for user and level of health system.

**Health System Users:** National policymakers, local government, health facility administrators.



### Permanent Register

YEAR	MONTH	ACTIONS	STATUS
2022	October	  	
2022	September	  	
2022	August	  	
2022	July	  	
2022	June	  	
2022	May	  	

## SPICE Connect

SPICE Connect is at the core of our strategy for integration and partnership within the technology ecosystem. Our ongoing work on easy-to-implement and standards-based integrations from national level reporting systems like DHIS2 and EMRs to other technology platforms sets us apart. We aim to build a collaborative tech ecosystem wherever we work.

**Focus Areas:** DHIS2 integration, FHIR, HL7, Open MRS, Medic, Open SRP.





# Our Programs



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KENYA

# Empower Health



MEDTRONIC LABS



KENYA

# Empower Health

In 2022, we took Empower Health to the next level, partnering with a broad set of funders to expand our reach to nine counties across Kenya. Through SPICE, our platform that harnesses data-driven interventions tailored to clinical need, patients receive care at all levels (II-V). As we look ahead to 2023, we're doubling down on our commitment to align with national health strategies, building capacity for long-term sustainability and ownership of the program.

## 2022 Highlights

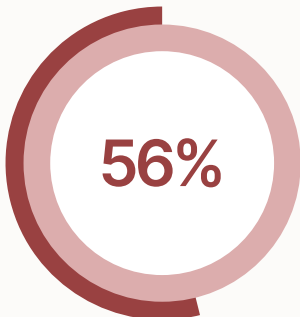
- Established a new partnership with the Ministry of Health and the Aga Khan Foundation to expand access to mental healthcare at the community level, leveraging our SPICE platform.
- Enrolled 66,647 patients across 9 of the 47 counties.
- Launched SPICE Connect in Kenya featuring custom analytics dashboards at every level of the health system and our integration with KHIS, the Kenyan instance of DHIS2.

### Health System Partners

- Ministry of Health, Kenya
- Country & Local Governments

### Funding Partners

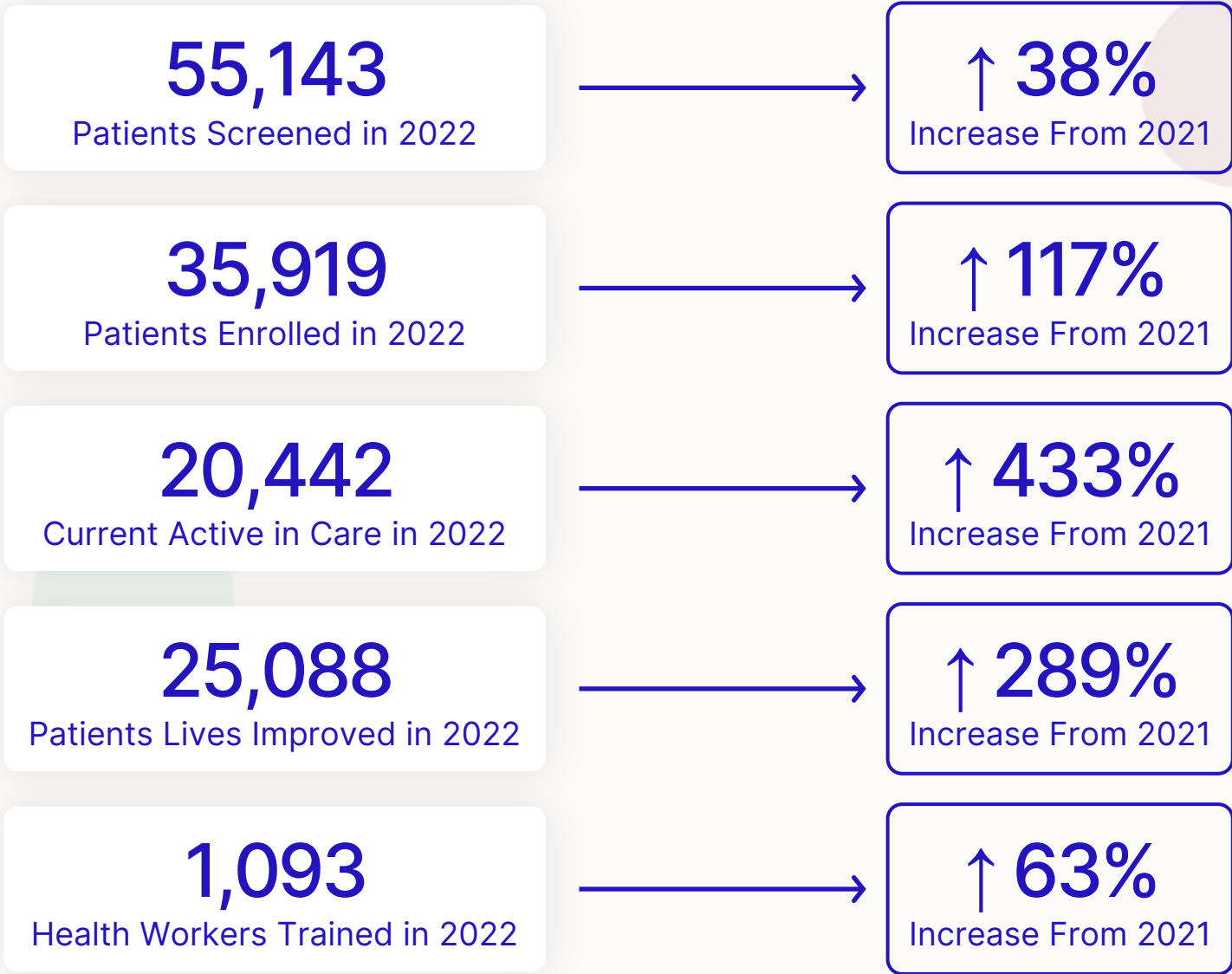
- World Diabetes Foundation
- Novo Nordisk
- PATH
- Roche



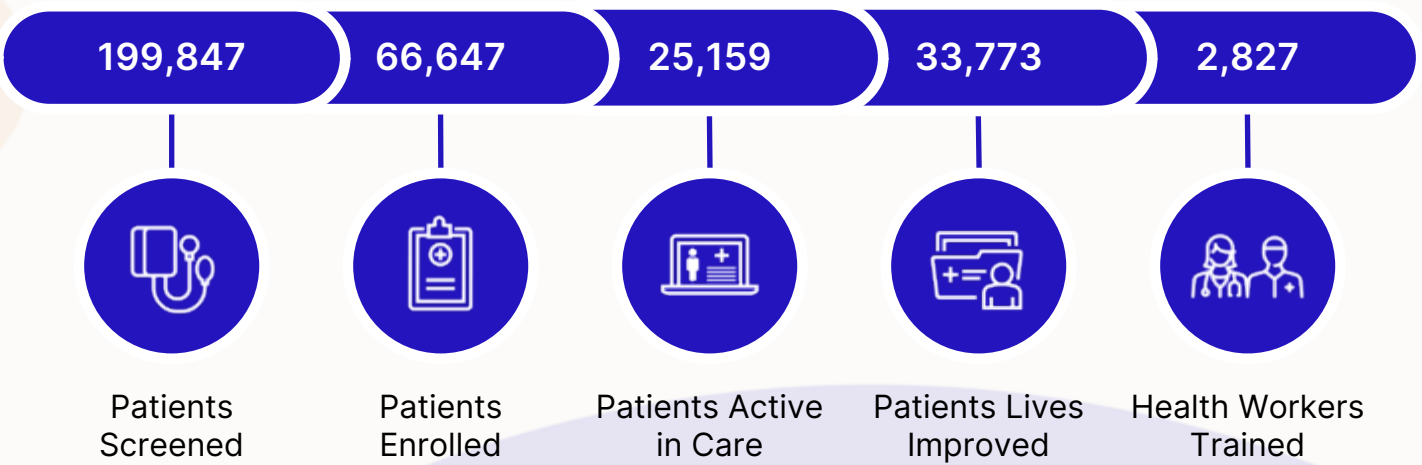
Of active hypertension patients achieved clinical outcomes (blood pressure control)



Of active diabetes patients achieved clinical outcomes (blood glucose control)



\* CUMULATIVE



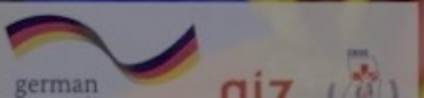


GHANA

# Akoma Pa



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GHANA

# Akoma Pa

Akoma Pa has made major strides in managing non-communicable diseases (NCDs) in Ghana. Through our partnership with Christian Health Association of Ghana (CHAG), we've enrolled over 70,000 patients in 85 facilities, focusing on providing affordable NCD screening and care to underserved communities. Thanks to a new collaboration with Novo Nordisk, we've achieved remarkable results in, enrolling over 15,000 patients and maintaining a 70% follow-up rate for diabetes and hypertension. But we're not stopping there. In Ghana's Upper East Region, we've launched a new maternal health program to identify and address pregnancy complications, as well as provide support to community members with NCDs.

## 2022 Highlights

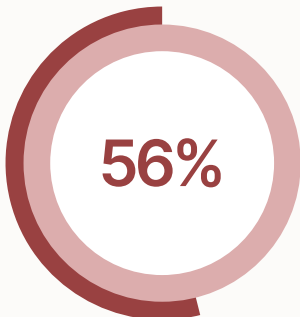
- Enrolled over 70,000 patients in partnership with CHAG and GIZ
- Launched a new partnership with Novo Nordisk
- Expanded to maternal health through a public private partnership supported by KOICA

### Health System Partners

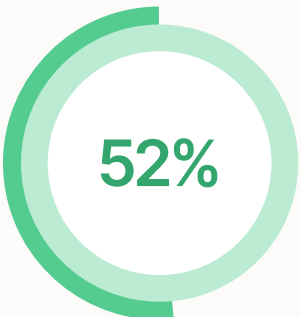
- Christian Health Association of Ghana
- Ghana Health Service

### Funding Partners

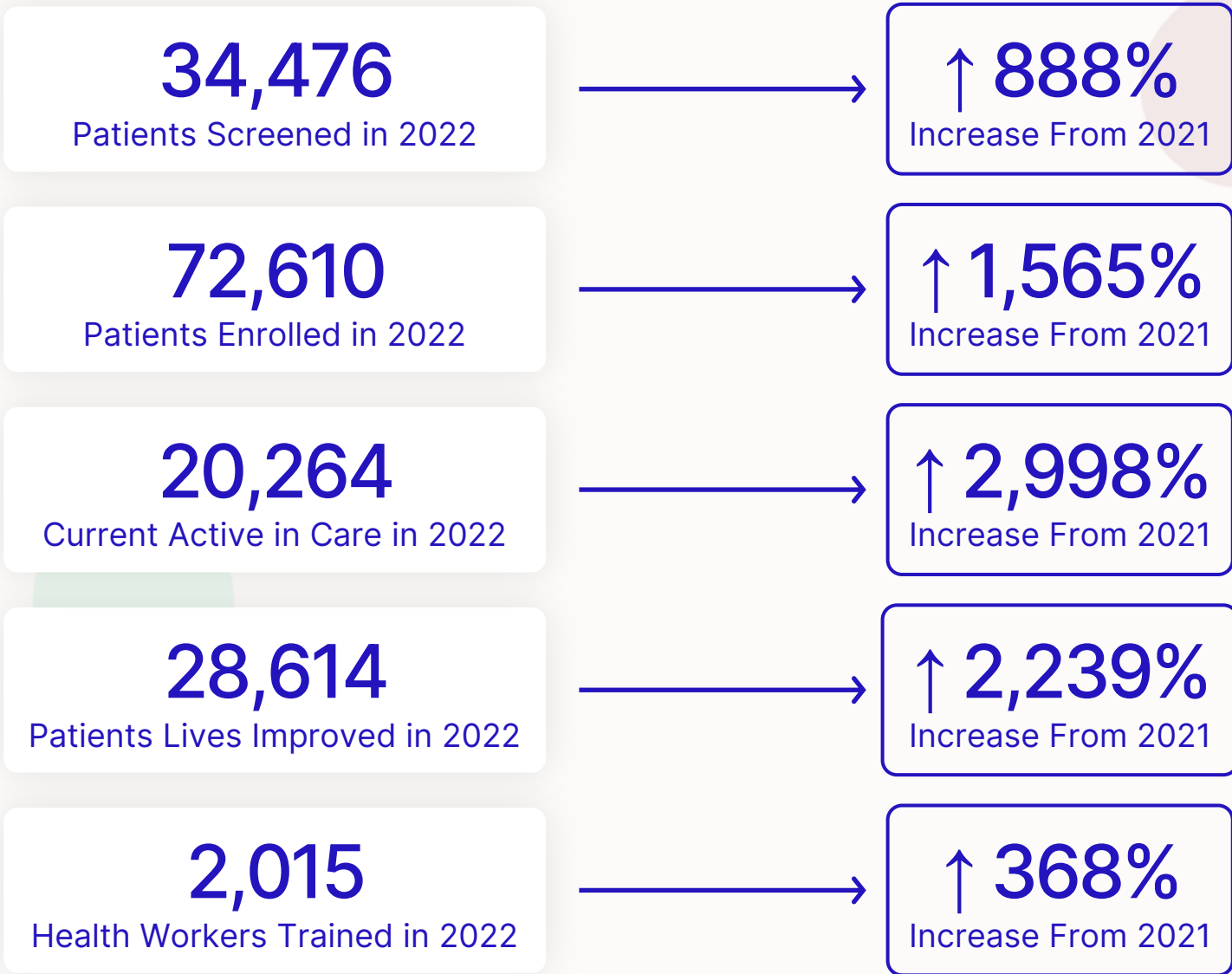
- GIZ, Federal Ministry of Economic Cooperation and Development, Germany (BMZ)
- Novo Nordisk
- KOICA



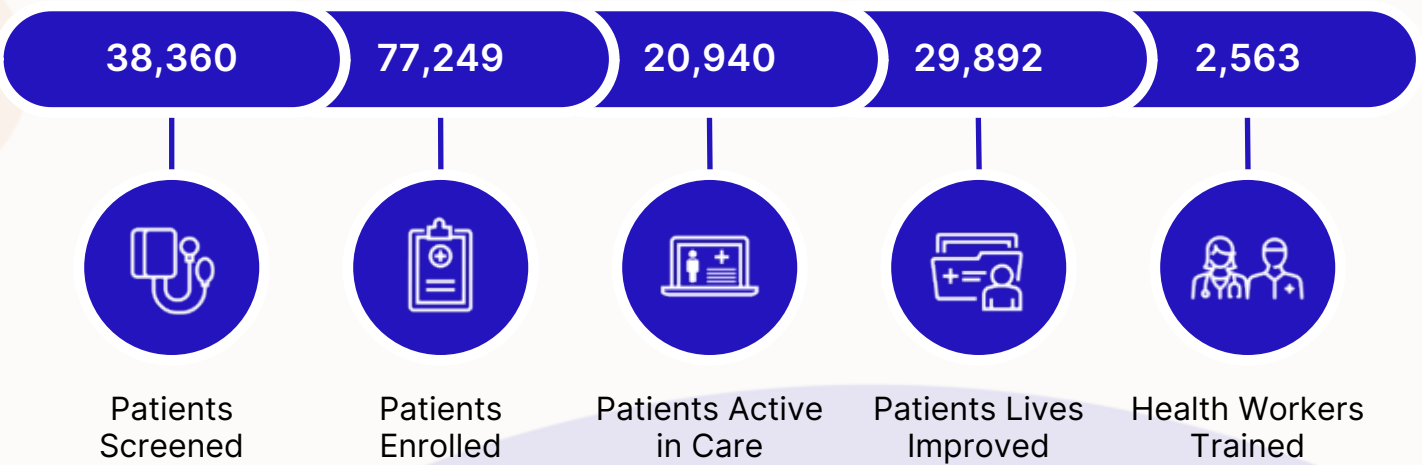
Of active hypertension patients achieved clinical outcomes (blood pressure control)



Of active diabetes patients achieved clinical outcomes (blood glucose control)



\* CUMULATIVE



\*90% of patients were enrolled in 2022



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In line with strengthening primary health care in the countries of operation, Medtronic LABS has leveraged existing community level health delivery structures and models to reach patients within the community in a scalable and sustainable manner. We have built the capacity and equipped community health workers with knowledge, skills, and technology to improve health education, screen patients, link them to nearby health facilities and support follow-up for continuous access to health care services. For example, in Rwanda, as part of digitizing and implementing the NCD strategy, Medtronic LABS will strengthen the existing community-based healthcare delivery model. In Ghana, Medtronic LABS is improving community based primary health care by strengthening CHPS through tech enabled support for screening, linkage to care and follow up of NCD patients and pregnant mothers.

**Jesse Njunguru**

HEAD OF OPERATIONS, AFRICA



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2023

20





TANZANIA

# Afya Imara



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TANZANIA

# Afya Imara

In Tanzania since February 2022, we've partnered with Christian Social Service Commission (CSSC) to implement our end-to-end NCD Program across 21 faith-based health facilities in 4 regions. We've already improved access to care for over 60,000 people, enrolling more than 17,000 hypertension and diabetes patients in quality longitudinal care. With the positive impact of our “Afya Imara” program, Medtronic LABS aims to team up with the Ministry of Health and other innovators to further enhance access to quality care for people living with NCDs in Tanzania, targeting public health facilities.

## 2022 Highlights

- Developed long-term sustainability model for value-based care in partnership with CSSC.
- Enrolled over 17,000 patients with proven clinical outcomes, presented at major academic forums in Tanzania.
- Demonstrated the potential for HIV and NCD integrated care approaches at the facility level.

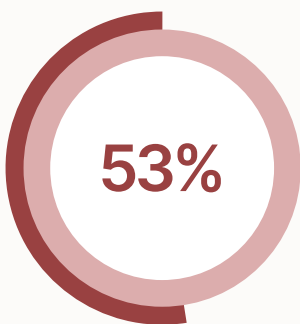


### Health System Partners

- Christian Social Services Commission (CSSC)

### Funding Partners

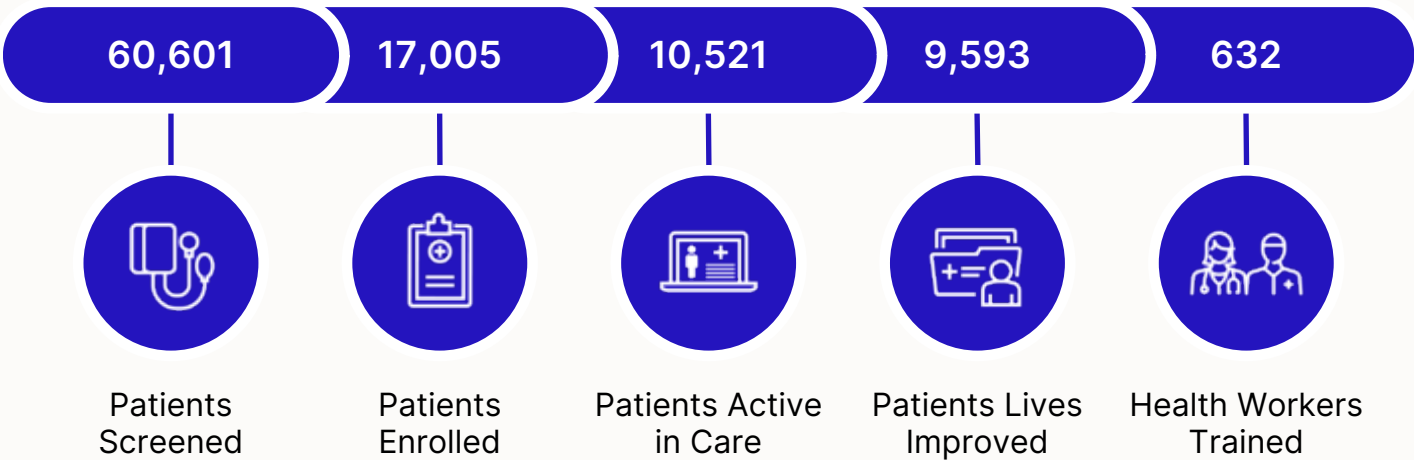
- Sanofi Global Health Unit
- Medtronic LABS



Of active hypertension patients achieved clinical outcomes (blood pressure control)



Of active diabetes patients achieved clinical outcomes (blood glucose control)



\*All patients were enrolled in 2022



SIERRA LEONE

# Betteh Lyfe



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SIERRA LEONE

Betteh Lyfe

Since 2022, Betteh Lyfe has expanded its reach to 10 facilities across four districts in Sierra Leone, thanks to our partnership with Christian Health Association of Sierra Leone (CHASL). Over 10,000 people have been screened and more than 7,700 patients have enrolled in our care program. With a remarkable 78% of those patients actively in care, over 4,000 are seeing improved clinical outcomes. We've also secured key government partnerships, including a service level agreement with the Ministry of Health and Sanitation, and are shaping Sierra Leone's National Digital Health Strategy through ongoing workshops with the Directorate of Policy, Planning and Information (DPPI).

2022 Highlights

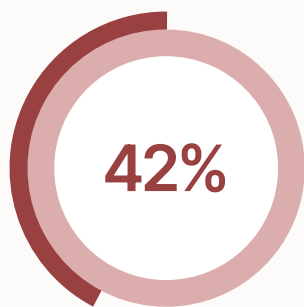
- Enrolled over 7,000 patients.
- Shaping the national digital health policy in 2023

Health System Partners

- Christian Health Association of Sierra Leone (CHASL)
- Ministry of Health and Sanitation

Funding Partners

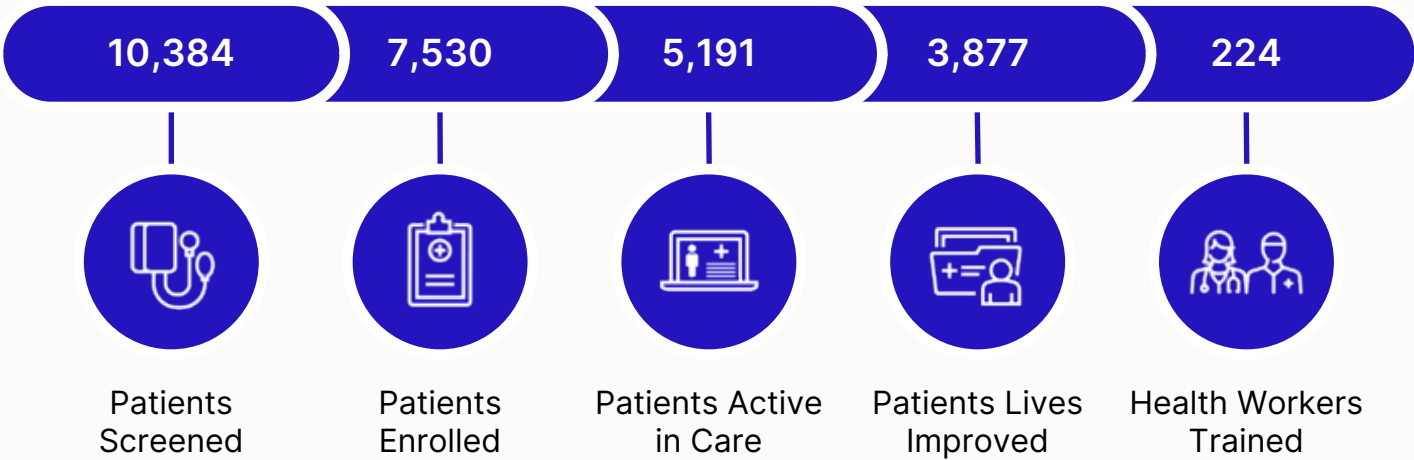
- Sanofi Global Health Unit
- Medtronic LABS



Of active hypertension patients achieved clinical outcomes (blood pressure control)



Of active diabetes patients achieved clinical outcomes (blood glucose control)



\*All patients were enrolled in 2022



RWANDA

# Turambe



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RWANDA

## Turambe

"Turambe," or "Live Longer" in Kinyarwanda, is a joint effort between the Ministry of Health, Rwanda Biomedical Center (RBC), and the McGovern Foundation to digitize and implement the National NCD Strategy. Our 2022 focus was on integrating digital tools (like Open MRS and Muzima) to improve NCD management, including the development of an NCD case management module. In 2023, we're taking it a step further, aiming to enroll 20,000 underserved hypertension and diabetes patients using a community-based healthcare delivery model. Our ambitious goal: to achieve control in 50% of those patients within a year.2022

### 2022 Highlights

- Co-created the Muzima digital application for community based NCD management with the MoH ICT department and RBC.
- Crowded in an additional \$300K in public sector funding.
- Drafted the National Community Guidelines for NCDs.

#### Health System Partners

- Rwanda Biomedical Center (RBC)
- Ministry of Health, Rwanda

#### Funding Partners

- Patrick J. McGovern Foundation





BHUTAN

# Hear, Listen, Speak



MEDTRONIC LABS



BHUTAN

## Hear, Listen, Speak

In Bhutan we launched a national multi-stakeholder program, "Hear, Listen, and Speak," to narrow the gap in ear care services for children by strengthening the ear care continuum across the country. The program aims to screen every child in Bhutan for hearing loss and related disabilities.

### Health System Partners

- Royal Government of Bhutan

### Funding Partners

- UN Technology Bank for Least Developed Countries
- Medtronic LABS
- MedEL
- GN Resound
- Hear the World Foundation (HTWF).







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At Medtronic LABS, our implementation excellence strategy complements public health care and leverages technology for data-driven decisions and efficiency to improve patient outcomes.

Garima Sahai

HEAD OF IMPLEMENTATION EXCELLENCE



MEDTRONIC LABS

2023

29



# Health Systems Strengthening

We've seen time and time again that digital health alone does not move the needle on outcomes. We need to pair technology with a strong health system. That's why Medtronic LABS works alongside health systems and governments with a unique recipe or playbook to encourage health system transformation.

In 2022, we launched a new approach to capacity building with our health system partners combining 6 key elements:

Field Operations

Tele-counseling

Policy & Advocacy

Monitoring & Evaluation

Digital Transformation

Training







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Successful public health outcomes cannot be achieved without leveraging public health systems. We leverage technology to strengthen community health. By equipping local health workers, we are ensuring universal healthcare with a unique model that closes the loop. As a result, we are helping the public health system in achieving the goal of a healthier population.

**Arun Khanal**

COUNTRY OPERATIONS MANAGER, BHUTAN



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2023

31



# Our Team

Our people are the bedrock of our impact. In 2022, we cultivated a diverse and skilled team that prioritizes cross-functional collaboration over hierarchy. Our talented and dedicated teams, spread across the globe, work in tandem to achieve our collective mission. As we look to the year ahead, our focus on our people and their expertise will be the driving force behind our growth and continued success.

**136** Total employees

**92%** Of our employees live and work in the geographies we serve

**50%** Of our leadership positions are held by women

## Leadership Team



**Ruchika Singhal**

President



**Anne Stake**

Chief Strategy & Product Officer



**Kaustubh Bhatnagar**

Chief Operating Officer



**Oren Ombiro**

Head of Research and Policy, Africa



## Leadership Team (cont.)



**Jesse Njunguru**  
Head of Program Operations, Africa



**Eric Angula**  
Head of BD and Partnerships, Africa



**Kelly Shelden**  
Head of Technology



**Megha Kumar**  
Head of Global Partnerships



**Vinay Hasija**  
Head of Design



**Garima Sahai**  
Head of Implementation Excellence



**Victoria Davis**  
Head of Finance



**Lauren Leccese**  
Head of US Programs



From the World Health Assembly  
to the United Nations General  
Assembly, Medtronic LABS  
showcased our progress at  
major events in 2022.





# What's next?

While 2022 was focused on driving execution, our main theme for 2023 will be sustainable scaling. We have proven that our technology-powered model works and is driving measurable outcomes for patients, while adding tangible value to health systems. It's time for us to scale up.

Looking ahead, we're focused on key themes. First, we're deepening our partnerships with governments with the goal of achieving full adoption of our programs and technology. We're aiming to launch SPICE as a global good and to further develop our formula for health system strengthening to drive long-term adoption. Second, we'll continue to build clinical breadth in new areas, augmented with clinical intelligence that SPICE enables. Through this effort, we aim to launch new programs focused on integrated care models. Finally, we will continue to invest in SPICE, with a focus on building interoperability standards like FHIR and applying machine learning and AI to specific use cases.

As always, our north star is the outcomes for the patients, families, and communities we serve.





# Global Health, Local Solutions