



## THE HEALTHRISE STORY

# *Improving Chronic Care for Underserved Populations*

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# The HealthRise Story

WHY HEALTHRISE?

THE HEALTHRISE MODEL

THE FUTURE



"There were so many patients who weren't doing well and were slipping, and I feel like the HealthRise program was really there to catch them." - *Clinic provider, US*

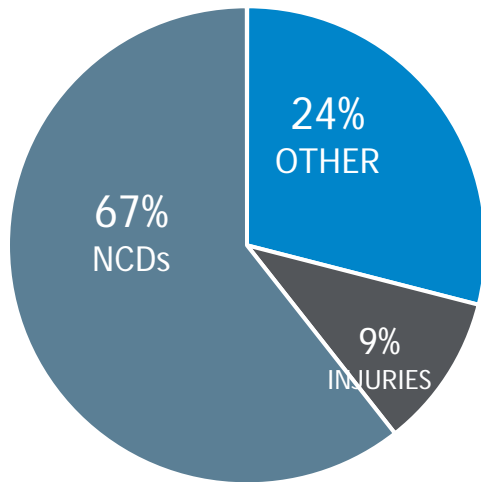
# THE GLOBAL CONTEXT WHY HEALTHRISE?



# The Global Burden

2014/2015

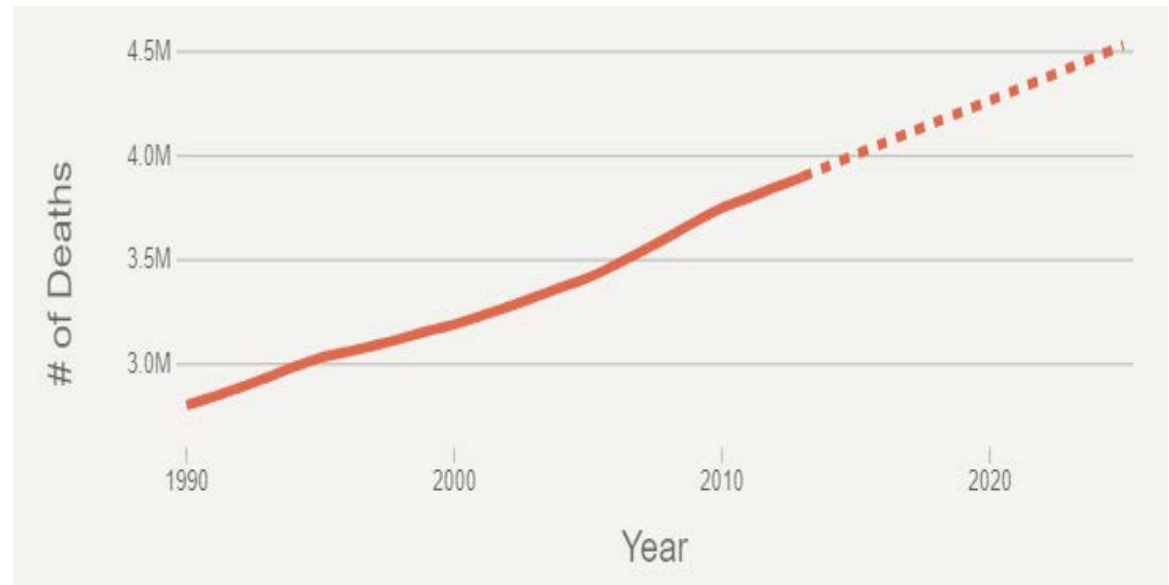
## GLOBAL DEATHS



■ NCDs ■ Injuries ■ Other

SOURCE: IHME Global Burden of Disease

## PREMATURE DEATHS CAUSED BY NCDs IN LOW/MIDDLE INCOME COUNTRIES THROUGH 2030



SOURCE: Council on Foreign Relations, powered by IHME (2015)

**40M**  
ANNUAL DEATHS FROM NCDs

**31.5M**  
ANNUAL DEATHS FROM NCDs IN LMIC

# Underserved Populations Bear the Biggest Burden

Lancet Task Force on NCDs and Economics



## KEY TAKEAWAYS

- Catastrophic health expenditure occurs >60% of some patient populations with NCDs
- Being uninsured increases the risk of catastrophic health expenditure in patients with NCDs
- Targeting of the poorest groups needs to be a primary consideration in prioritizing services that are included in insurance programs to achieve universal health coverage
- Addressing the household economic burden of NCDs is an important step in efforts to achieve global development goals

"[CHWs] They are not people from outside, but they are people among us. They did not come from foreign, they are our people." - *Patient, India*

# THE HEALTHRISE MODEL



# HealthRise: Addressing Chronic Care Access Among Underserved

## Global Demonstration Programs to Improve Hypertension and Diabetes Among Underserved Populations

### WHAT IT IS

Multi-country, multi-year initiative

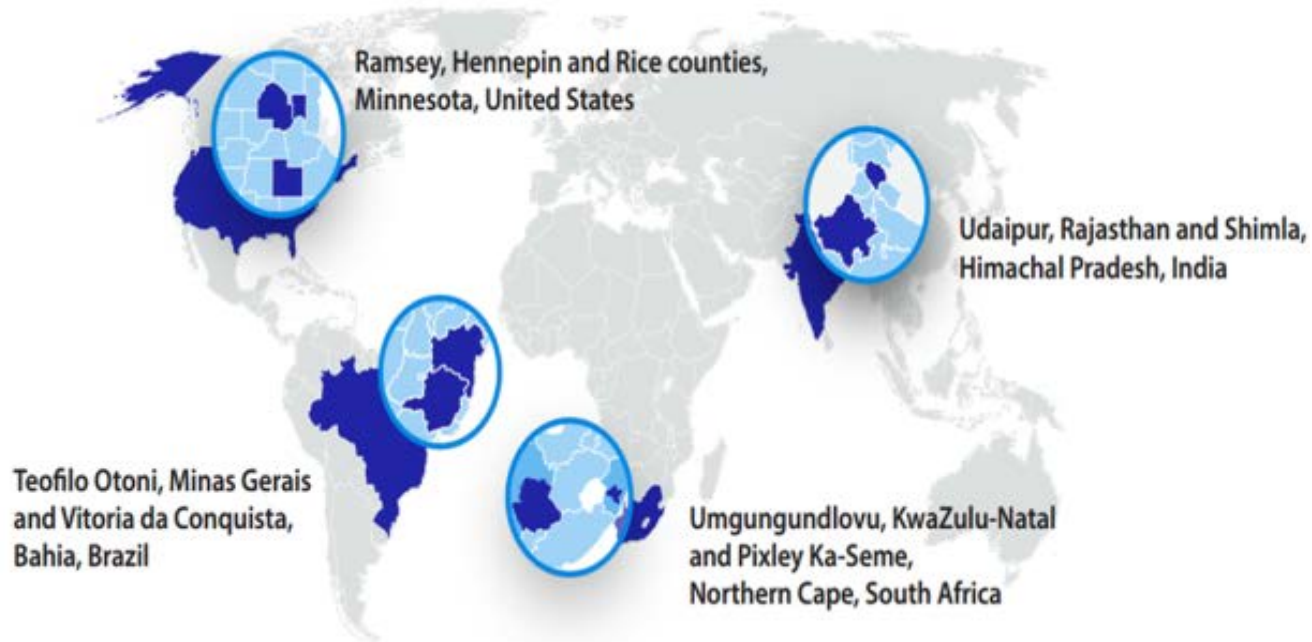
Goal: Contribute to 25% reduction in premature mortality associated with **hypertension and diabetes** among underserved populations.

#### Objectives:

1. Increase screening and diagnosis (detection)
2. Increase management and control of hypertension and diabetes (improved clinical outcomes)

#### Approaches:

1. Empower patients
2. Strengthen frontline health workers
3. Advance policy and advocacy

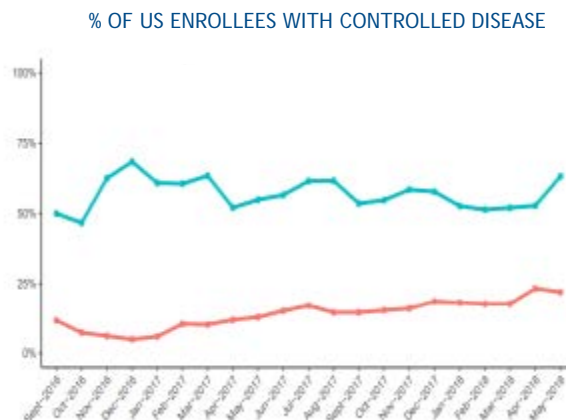
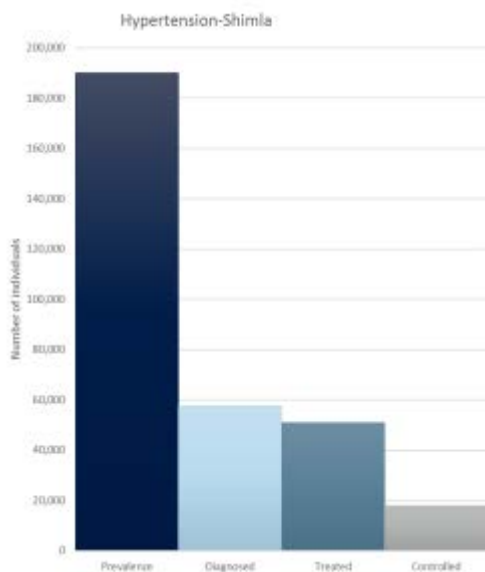


# HealthRise Lifecycle

ASSESS  
BARRIERS/OPPORTUNITIES  
FORM PARTNERSHIPS (2014-

IMPLEMENT LOCAL SOLUTIONS  
MONITOR PROGRESS (2016-2018)

EVALUATE (2018)  
DISSEMINATE (2019)



10 PUBLIC-PRIVATE PARTNERSHIPS  
>80 ADVISORY COMMITTEE MEMBERS

9 CARE MODELS TESTED  
>80K SCREENED; >10K FOLLOWED

SUSTAIN/ SCALE



# HealthRise: A Global Partnership

## Global Coordination + Implementation + Evaluation



### GLOBAL DIRECTION

1. Criteria for partner selection/ interventions
2. Thought leadership
3. Public-Private Partnerships

### IMPLEMENTATION

1. Program administration and management
2. Stakeholder engagement
3. Technical assistance

### MONITORING AND EVALUATION

1. Needs assessments/ baseline
2. Monitor progress
3. Endline evaluation



\*Management partners at country level

# Intervention Mix, Evaluation Design, Baseline and Endline Targets

Site/ Underserved	Dominant Model	Intervention Mix	Evaluation design: Mixed-method, quasi-experimental design	Baseline Control HTN DM	Target Control HTN DM
USA: Hennepin, MN Low-income Afr Amr; Latino	Integrate CP/CHWs w/ primary care teams to address social determinants of health and self- care?	Community NGO/grocery store, partnering with North Memorial health system	Patient-level data via EMR and secondary sources for intervention and comparison groups;	75%	78%
USA: Ramsey, MN Low Income Latino, Hmong, Migrant		CP/CHW integration to primary care		45%	53%
USA: Rice, MN Low-income Latino, Somali refugees		Care coordination, insurance navigation, Somali/culturally tailored services	Interviews with key-informants	63%	73%
				52%	57%
				51%	65%
				48%	65%
India: Udaipur, Raj Rural, tribal, slum dweller	Train, equip and use ASHAs/FLHW improve screening, diagnosis, and follow up rate. Create novel MIS improve patient tracking	Village saturation with ASHAs (screen, refer, follow-up); peer groups	Patient-level data for intervention groups, pre/post comparison	16%	50%
India: Shimla, HP Rural poor in public health system		MIS/HealthCard for patients/FLHW; ASHAs screen, refer, follow-up; peer groups	Health facility and patient surveys, intervention and comparison groups interviews and focus groups,	49%	55%
				9%	50%
				37%	40%
S Africa: Pixley, NC Rural poor, largely unemployed	Integrate DM and HTN screening, diagnosis and referral to HIV/TB and community/ primary care	Public CHW screen, follow up; 5- step empowerment, village savings and loans, gardens	Health facility and patient surveys, interviews and focus groups, intervention and comparison groups	11%	70%
S Africa: Umgun, KZN Low income, large HIV co-morbidity		Door-to-door Dr/CCG visits; HIV/TB cross referral and adherence		38%	80%
				10%	40%
				42%	60%
Brazil: TO, Minas Gerais Low income (HDI <.6)	Can public health system (SUS) be strengthened through FHLW training; telehealth and patient education?	CHW training; telehealth web training; patient follow-up	Patient-level data for intervention groups	25%	50%
Brazil: VC, Bahia Urban poor/low wage industrial workers		Web-based EHR; workplace screening, management; CHW trained; peer groups	Interviews and focus groups;	26%	52%
			<i>Note: IHME collected control site data, but did not match intervention sites</i>	25%	50%
				26%	52%

# HealthRise Endline

A Mixed Method Evaluation

## MIXED METHODS

### Quantitative

- Case-Control or Dose-Response
- Health records and facilities-based surveys

### Qualitative

- Process assessments
- Focus groups and interviews

Level	Mode	Assessment (Option 1)	Assessment (Option 2)
Patient	Facility-based case-control data	Enrollees, when compared to controls, will have better outcomes	Enrollees, when compared to controls, will have greater utilization of follow-up primary care; or enrollees will have better dose-response
	Qualitative	After enrolling in the program, patients have a greater sense of empowerment & knowledge of HTN and DM	Patients report changes in attitudes/practice; report observed beneficial changes in healthcare system
System	Facility survey	Intervention area facilities will have improved stocks, EMR, and equipment compared to control area facilities	Improvement in identifying high risk patients resulting in increased patient flow
	Qualitative	Healthcare workers felt more knowledgeable and prepared to provide care for HTN and DM	Improvement in capacity, provider/ FLHW empowerment and satisfaction
Policy	Qualitative	Change in policies and treatment for HTN and DM	Improved implementation of protocols, guidelines, SOPs

"They ask like family members, sit close by, with love, they explain properly." - *Patient, India*

# HEALTHRISE RESULTS



# Global Preliminary Results

## Objective 1: Screening and Diagnosis

	Hypertension	Diabetes
Individuals screened	59,342	56,642
Individuals above threshold	6,441	2,563
New diagnosed	1464	295

# Global Preliminary Results

## Objective 2: Management and Control

**Statistically significant** reductions in SBP and A1c in Brazil

### BRAZIL

		Victoria De Conquista	Teofili Odoni
Diabetes	average A1C decline	0.9 (0.5-1.4), p<0.001	0.7 (0.4-0.9), p<0.001
	% change	25 (12.2 - 37.8) p<0.001	8.5(2.9-14.2) p<0.01
Hypertension	average mmHg decline	4.2 (3.1 -5.2), p<0.01	1.9(0.7-3,1) p<0.01
	% change	10.5(7.8-13.2) p<0.001	3.8(0.5-7.2) p<0.05

**No significant** differences between HealthRise patients and comparison areas in India and South Africa

		INDIA	SOUTH AFRICA	
		Shilma	Pixley K Seme	uMgungundlovu
Diabetes	% meeting targets (A1C<8%)	H 65(56.0 - 73.9)	H 59.5 (42.4 -74.5)	H 52.6(36.3-68.4)
		C 66.(56.5 - 74.4)	C 58.1(45.2 - 69.9)	C 47.9(36.5-59.6)
Hypertension	% meeting targets (SBP<140 and DBP<90)	H 45(38.6 - 51.7)	H 55.3(38.7-70.7)	H 37.3(26.4-49.7)
		C 58.1(50.3 - 65.6)	C 41.8(31.9-52.3)	C 38.5(30.2-47.6)

H = HealthRise , C = Comparison

# Global Preliminary Outcomes

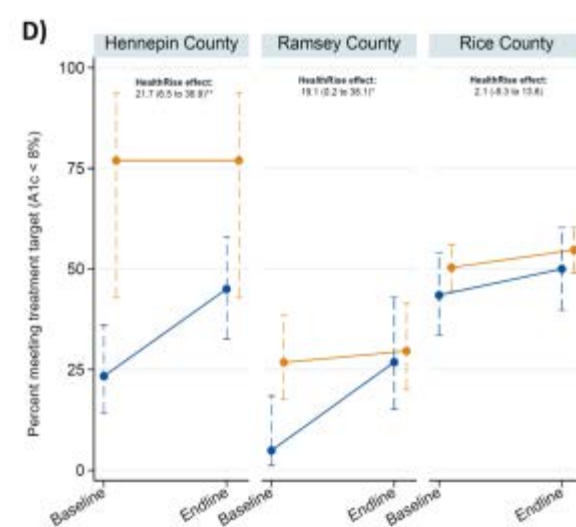
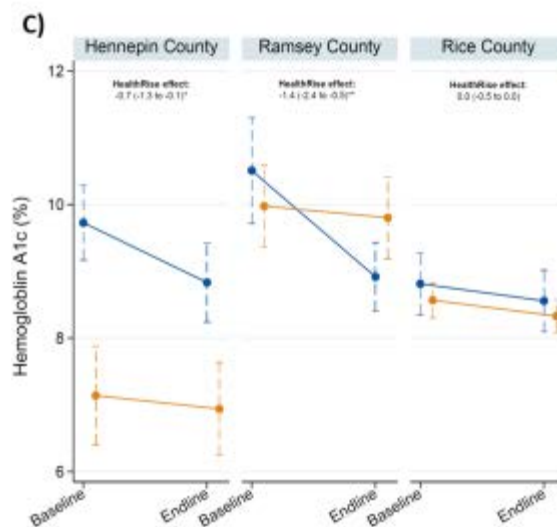
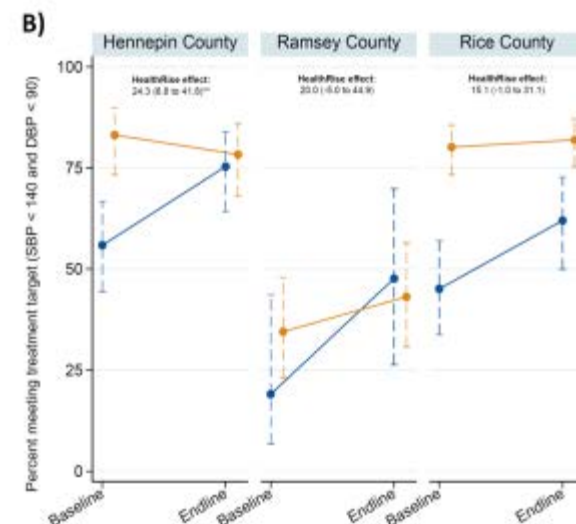
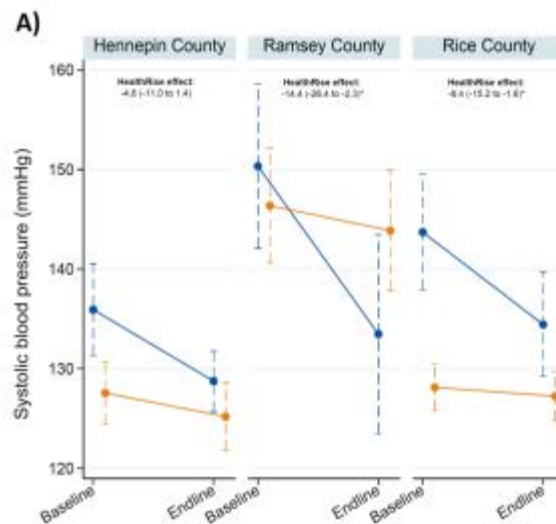
## HealthRise US

% of patients meeting treatment targets significantly higher in Hennepin county.

Better performance of diabetes patients in Hennepin and Ramsey counties compared to comparison areas.

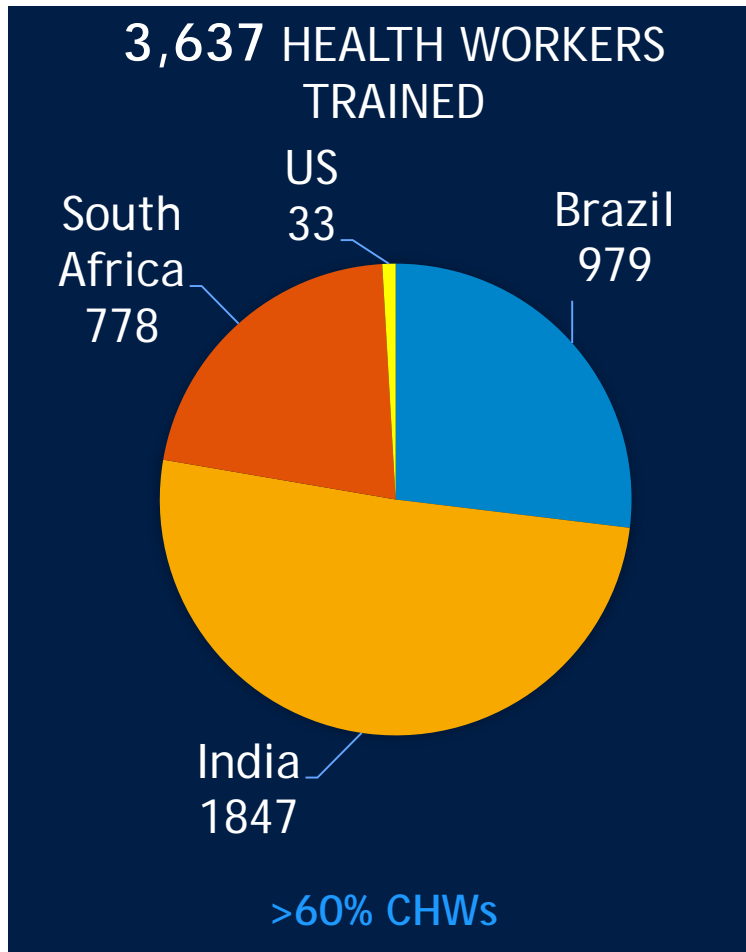
● HealthRise  
● Comparison

Statistical significance:  
\*  $p < 0.05$ ; \*\*  $p < 0.01$



# Targeting the Frontline in Community-based Interventions

Care Provision Made Possible by Community Health Workers



## SCOPE OF WORK OF CHW

- Promote awareness and screen target population for diabetes and hypertension.
- Refer patients to health facilities and provide follow up support
- Part of the care coordination teams
- Equip with appropriate technology to perform screening and record results
- Perform door to door visits and home-based care
- Expand community-based education and counseling
- Support patient empowerment activities and support groups



# HealthRise Countries: Promising Practices

## Spotlight on Scalable Local Solutions



- Community - clinic coordination via CHWs/Community Paramedics
- Grocery store wellness "spoke"



- Patient Support Groups
- Electronic Health Card



- Clinical Nurse Mentorship
- CHWs Equipped with BP Machines and Glucometers
- Patient Support Groups Tackle Social Determinants of Health



- Clinical Decision Support System
- A1C Point of Care
- Local Diabetes and Hypertension Associations

"After tests, I came to know and now I believe that even we can have a good life ahead." - *Patient, India*

# THE FUTURE



# Broader Implications

## Emerging Lessons for Future Action

### WHAT WE LEARNED

1. Frontline Health Workers offer tremendous capacity to provide follow-up, link to care, navigate social determinants, and support adherence at household level
2. Patient empowerment in self-care drives results, often aided by CHW to lifestyle support and therapy adherence and facilitate through peer groups
3. Despite large number of individuals screened, low yield of confirmed cases was observed. This reinforces the inefficiency of screening camps
4. Investing in user-friendly, integrated and interoperable health information systems to strengthen health systems is critical
5. Sustainable programs result from highly engaged, multi-stakeholder contributions

### HOW IT'S INFORMING OUR WORK

1. Honing the focus towards optimizing the health workforce at the point of care for underserved, to scale lessons, innovations and impact
2. Refining our selection methodology for new partners to incorporate what we've learned about key organizational capabilities and local stakeholder buy-in, particularly public sector
3. Listening closely to identify the best partnership for the future



# THANK YOU

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