

Nov 13th-15th 2023

Globalization Toward Quality & Patient Safety
A Future Perspective

الجودة من منظور عالمي - تطلعات مستقبلية

Managing Projects to Achieve Results: Using real-time data to improve care and address health inequities

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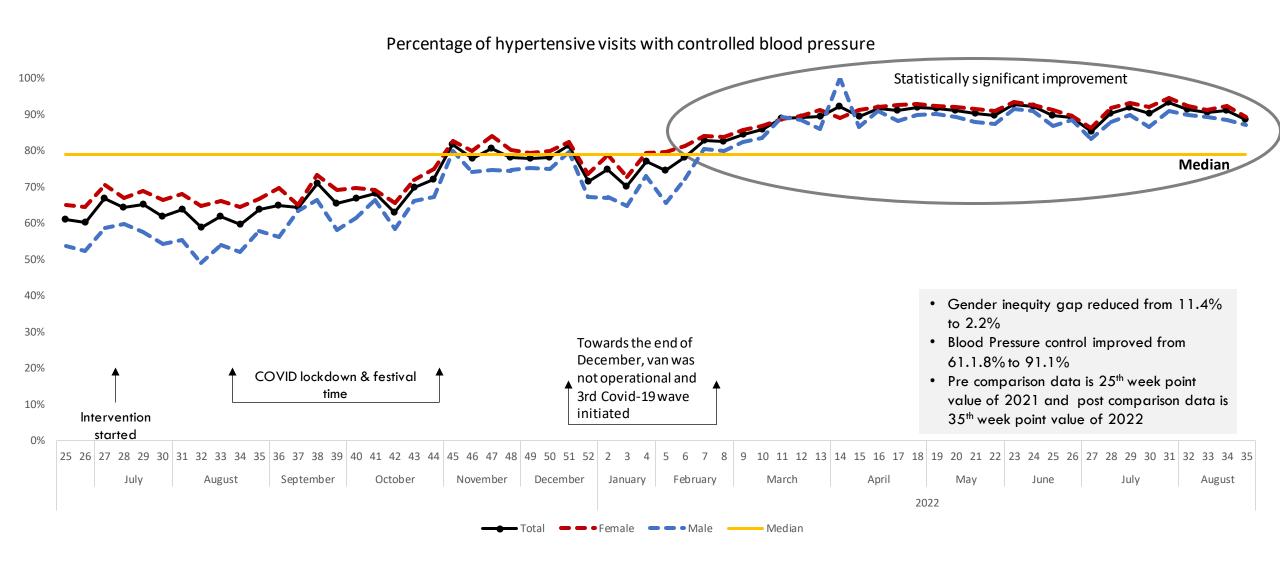




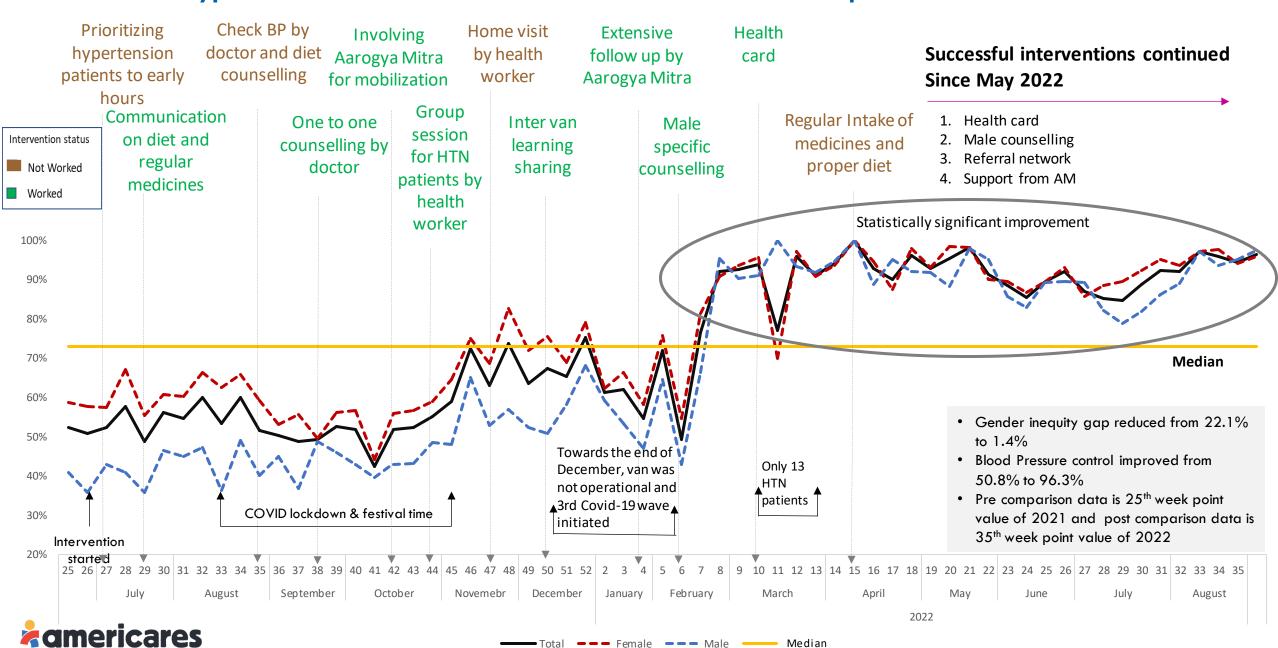
#### **Workshop Objectives:**

- Use real-time data to improve healthcare and address health equity.
- Articulate a framework to uncover health inequities.
- Develop a plan for engaging with patients to understand the causes of inequity and codevelop changes to address it.
- Apply Plan-Do-Study-Act (PDSA) Cycles to test the proposed changes.
- Develop time series charts to monitor the changes and demonstrate bridging the equity gap.

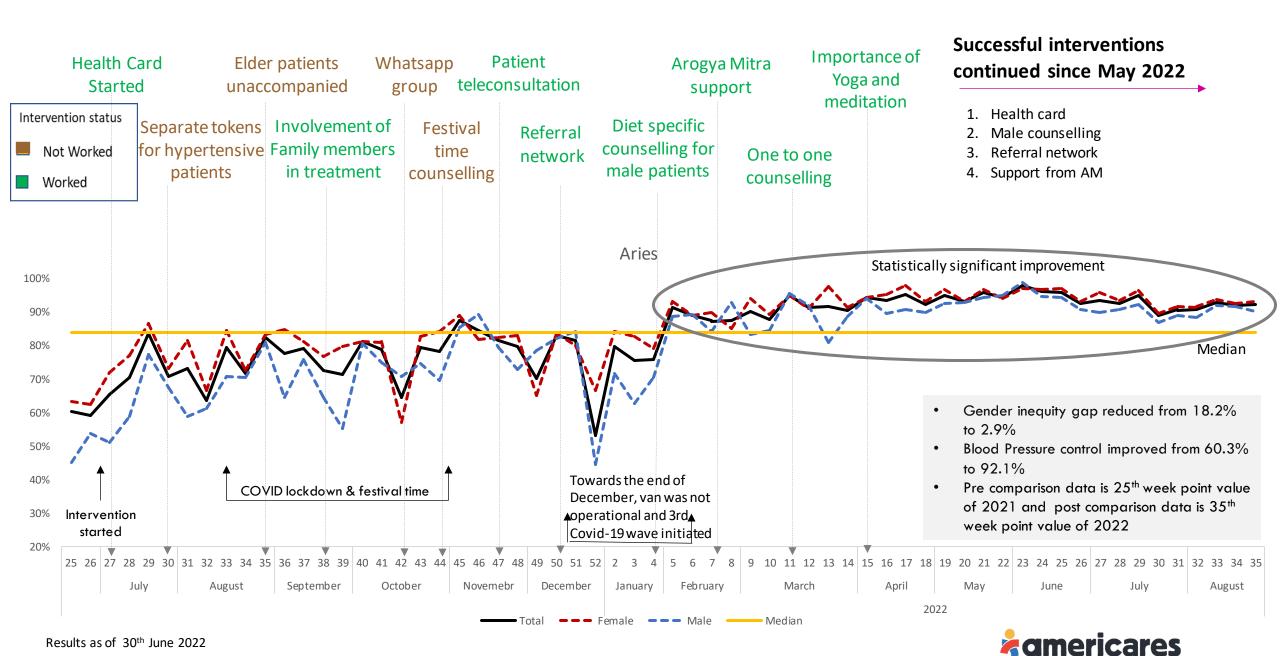
#### Percent Hypertension Patients with Normal Blood Pressure - All Mobile Health Center



#### Percent Hypertension Patients with Normal Blood Pressure - Aquarius Mobile Health Center



#### Percent Hypertension Patients with Normal Blood Pressure - Aries Mobile Health Center



#### **Results of Changes Tested in Different Mobile Health Centers**

#### Green = Worked Red = Did not work

Changes Tested	Aries	Aquarius	Virgo	Pisces	Sagittarius	Gemini	Capricorn	Libra
Telephone reminder	٧	×	×	٧	×	٧	٧	×
Follow up and appointment reminder	×	×	×	×	×	٧	٧	×
Community Health Volunteer support	٧	٧	٧	×	٧	٧	٧	٧
General group discussion	×	V	×	٧	٧	×	٧	٧
One on one counselling	٧	×	×	×	√	×	V	×
Health card	٧	V	٧	V	V	٧	√	٧
One on one male counselling	×	V	×	٧	V	٧	V	×
Referral network assistance	×	×	V	V	V	٧	√	٧
Counselling on treatment adherence	×	V	×	×	×	٧	√	٧
Identifier chit for hypertensive patients	٧	×	٧	V	V	×	√	٧
Family member involvement in treatment process	٧	V	×	×	×	×	×	×
WhatsApp group	٧	×	<b>V</b>	×	×	٧	×	٧
Diet specific counselling	٧	V	V	×	٧	×	×	٧
Messaging on importance of yoga and meditation	٧	×	٧	×	×	×	×	×
Home visit	×	V	×	٧	V	٧	×	٧
Medicine delivery to home through health	.,		.,			-1	.,	.,
volunteer	×	×	×	٧	×	٧	×	×
Post-referral follow-up & guidance	×	×	٧	٧	×	×	×	٧
Inter-MHC learning sharing	×	V	×	×	√	×	×	×



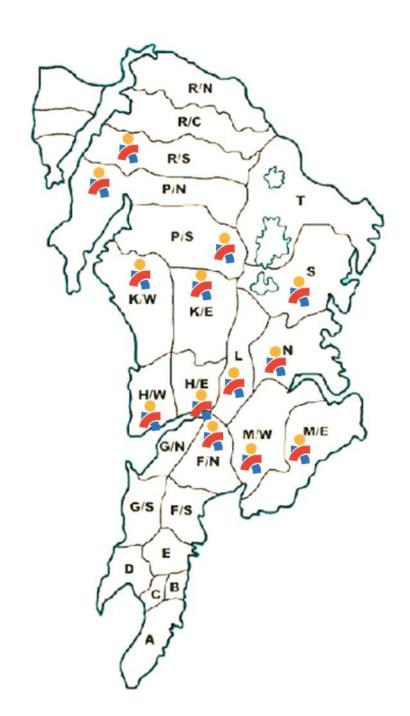
### How did we get these results?



Health Equity:
Mobile Health
Centers in India







# Mobile Health Centers Program Overview

Americares India Mobile Health Centres were initiated in 2011 and serve 13 wards of Mumbai.

#### **Each 8 Mobile Health Vans:**

- Is staffed with a Doctor, Health Educator, Data Assistant and Dispensing Assistant (driver)
- Provides free services and medicine
- Serves the same 20 communities every two weeks: two sites per day, 5 days per week.
- Uses cloud-based electronic medical record at point of care
- Provides referrals to government and subsidized services.
- Provides health education and community engagement



#### **Mobile Health Centers in Action**











### **Our Approach**

#### **Uncovering Health Equity:**

- Look for potential causes of inequity
- Stratify health outcomes by potential causes of inequity
- India identified 4 potential causes of inequity:



Age



Gender

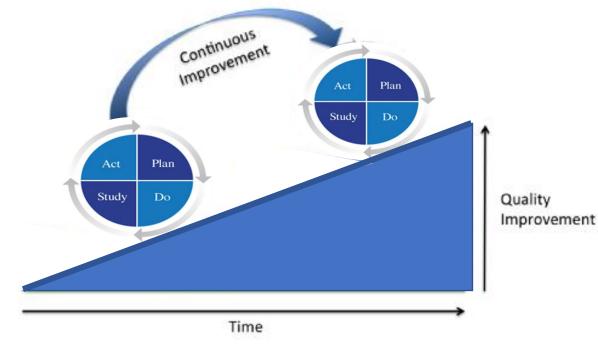




Geography

#### **Addressing Health Equity:**

Our objective is to work with people affected by inequity to understand root causes, develop, test, and implement solutions to close the inequity gap.





## Elements of the cycle for learning and improvement: Plan-Do-Study-Act (PDSA) Cycle

#### Act

- What changes are to be made?
- What will be the next cycle?

#### Plan

- State objective of the cycle.
- Make predictions.
- Develop plan to carry out cycle...
   (who, what, where, when)

#### Study

- Complete the analysis of the data.
- Compare data to predictions.
- Summarize what was learned.

#### Do

- Carry out the test.
- Document problems and unexpected outcomes.
- Begin analysis of the data.

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Exercise: Design your own project to improve healthcare, uncover, and bridge health inequity gaps

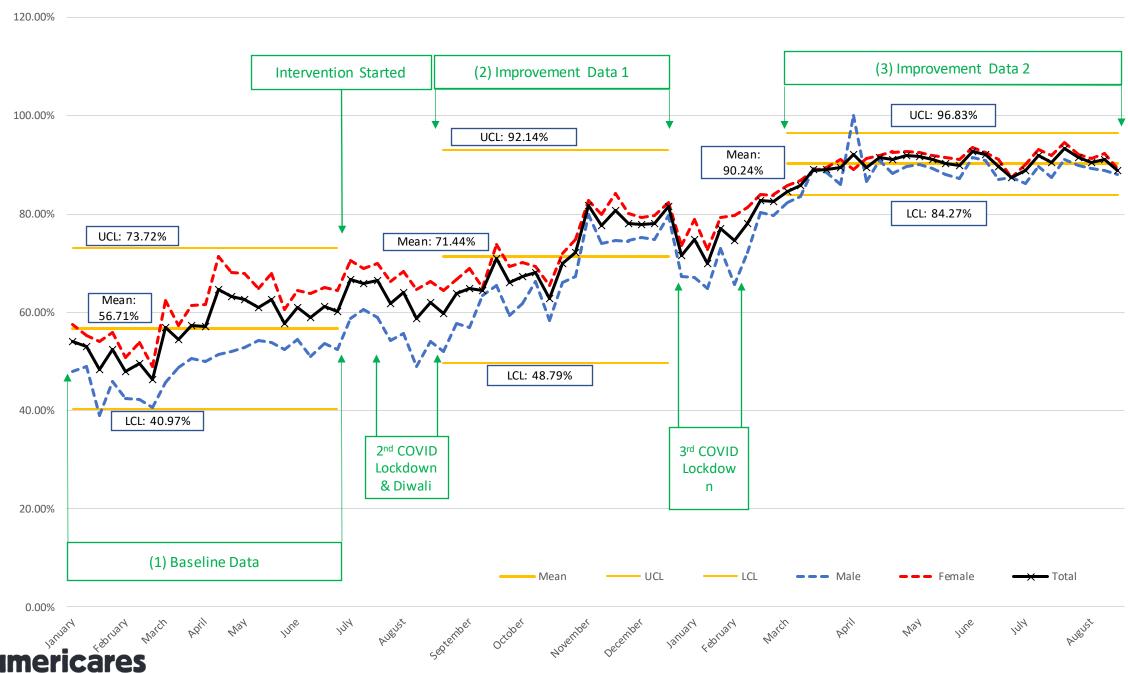




## **Concluding Remarks**



#### Normal Blood Pressure - All 8 Mobile Health Centers



## t-test results

t-Test: Two-Sample Assuming Unequal Variances		
	Baseline	Improvement 1
Mean	0.56709466	0.714369006
Variance	0.002979056	0.005219538
Observations	21	18
Hypothesized Mean Difference	0	
df	31	
t Stat	-7.087100843	
P(T<=t) one-tail	<0.000	
t Critical one-tail	1.695518783	
P(T<=t) two-tail	<0.000	
t Critical two-tail	2.039513446	

t-Test: Two-Sample Assuming Unequal Variances		
	Baseline	Improvement 2
Mean	0.56709466	0.902412197
Variance	0.002979056	0.000428816
Observations	21	26
Hypothesized Mean Difference	0	
df	25	
t Stat	-26.64670419	
P(T<=t) one-tail	<0.000	
t Critical one-tail	1.708140761	
P(T<=t) two-tail	<0.000	
t Critical two-tail	2.059538553	

t-Test: Two-Sample Assuming Unequal Variances		
	Improvement 1	Improvement 2
Mean	0.714369006	0.902412197
Variance	0.005219538	0.000428816
Observations	18	26
Hypothesized Mean Difference	0	
df	19	
t Stat	-10.74151561	
P(T<=t) one-tail	<0.000	
t Critical one-tail	1.729132812	
P(T<=t) two-tail	<0.000	
t Critical two-tail	2.093024054	





## THANK YOU

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