

# The Role of Evaluation in NMDOH Program Implementation



Presented by :

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- Full-service health care system comprised of over 50 locations in the Texas Gulf Coast.
- For over 40 years, we've been innovating how comprehensive, quality health care is delivered to underserved communities.
- Offer primary and specialty care, as well as supportive and pharmacy services.
- Largest Federally Qualified Health Center (FQHC) in Texas and a United Way affiliated agency since 1990.
- Ensure services and programs are open to all, regardless of the ability to pay—without judgment or exception.

# Bike Rx Origins

## Infrastructure

2020

Station install discussions w/ Legacy  
+ Houston Bike Share  
+ Add'l Stakeholders

## Coordination

Sum '20

Ideation phase Legacy Health Connect  
+ American Heart Assoc.

## Collaboration

Sum '21

Community-led initiative launched: Story Time Bike Line by Circle Coalition/ Our Afrikan Family

## Engagement

Fall '21

Legacy hosted community & physician focus groups to refine program design

## Launch

Spring '22



# Bike Rx Program Overview

## Enrollment Criteria:

- 18+ y/o
- BP  $\geq$  120/80 or A1c  $\geq$  5.7
- Receive "Rx" from Legacy PCP
- "Rx" consisted of physical card and/or e-referral via EHR

## Enrollment Process

- Patient redeems "Rx" at Health Advocate help desk
- Must attest to having basic bike riding skill
- Must have a valid phone number
- Advocate orients patient to bike station
  - Provides key fob
  - Helmet & safety guides

## Evaluation Points:

- Enrollments
- Provider Referrals
- Universalization



## Adjustments:

- Provider engagement
  - Feedback - Provider perception of patients' interest
- Referral "button"
- Considered Adjustments to population
  - Yet age restrictions
- Patient Engagement
  - Feedback - Heat Concerns
- Mass enrollment event - Schedules

# Bike Rx Outcomes

## What Went Well

- Successfully advocated for well-placed station
- Supported community-led resilience
- Created infrastructure for doctors to "prescribe" NMDOH intervention to address specific conditions
- Collaboration with local politicians, community-based organizations, and national organization
- Established a Brain Trust

## What Could Have Gone Better

- Formalized/written agreements with community partners
- Sustained funding/personnel of backbone organization (Houston Bike Share)
- Legacy & B-Cycle payment process
- Rider enrollment (n< 20)
- Increased physician support (operational capacity)

# Health Connect Program Overview & Goals

Established in 2018

Fiscal Year:

- July 1, 2024 - June 30, 2025

Staffing:

- 2 Program Managers
- 1 Program Specialist
- 3 Community Health Workers (CHWs)\*
- 30 AmeriCorps Members
- 25 Health Advocate Student Interns

Goals:

- Universally Screen for NMDOH/SDOH related to food, housing, and transportation
- Intervene within 30 days of “positive” screening
- Build data infrastructure for regional measurement and evaluation
- Coordinate services and align existing pathways
- Develop policies and programs that encourage collaboration to address health-related social needs while containing costs.
- Foster opportunities for collaboration with key partners

# Food Rx



## Collaboration with the Houston Food Bank

- The target population for referrals will include:
- Pediatric patients with a BMI at the 85th percentile or higher
- Adult patients with an A1c of 5.7 or higher
- OB patients with a BMI greater than or equal to 30 at the IM visit in the first trimester, hypertension, or gestational diabetes
- The goal is to see a stabilization or reduction in these metrics over the course of 12 months.





# EPIC Transition

- New EMR System
- Program level data
- NMDOH Universal System
- Narrow Scope of Work
- Quality Assurance
- Data Transparency

## Embrace the Changes

- Changes in mobile market distributions
- New goal of 75 % utilization
- 1 visit a month

## Evaluation Points:

- Enrollments
- Clinician Referrals
- Universalization



## Adjustments:

- Mobile Market Patient Experience
  - Drive Thru
  - Orderly
- Clinician Engagement
  - Developed a "How to guide.."
    - Z Codes
  - Same Day Enrollments
- Expanded target population
  - Hypertension
  - At-Risk Pregnancy
- Data Transparency

Visits & Clients Between July 1, 2023 and December 31, 2023



Date range: 07-01-2023 ~ 12-31-2023

Total Visits

**204**

Total Clients with Visits (Unique)

**52**

Total Enrolled and Active Clients in the selected date range

**109**

New Clients (Unique)

**34**

Individuals Served (Not Unique)

**285**

Avg. Visits per Client (having at least one visit)

**3.92**

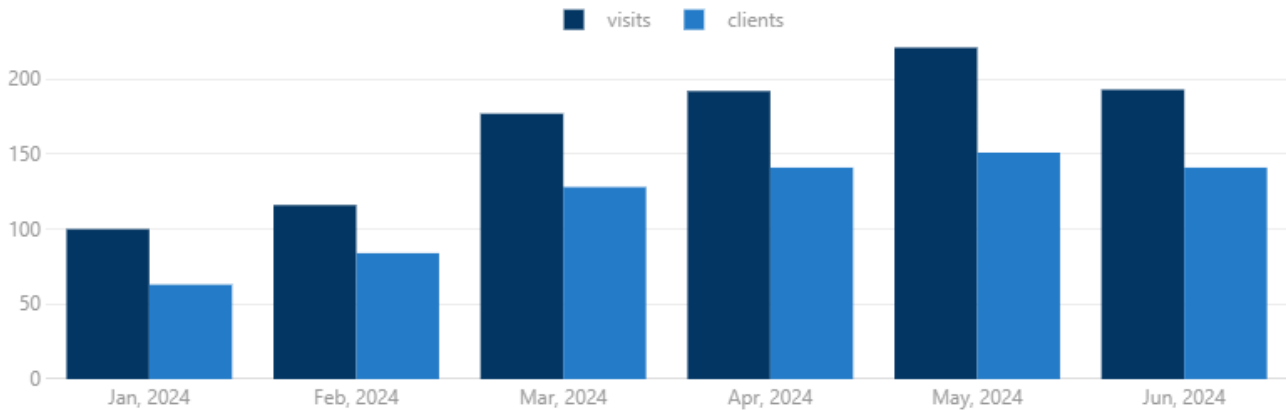
Clients enrolled who have been active at some point in the date range(might be inactive now)

**109**

Avg. Age

**40 years old**

Visits & Clients Between January 1, 2024 and June 30, 2024



Date range: 01-01-2024 ~ 06-30-2024

Total Visits

**999**

Total Clients with Visits (Unique)

**300**

Total Enrolled and Active Clients in the selected date range

**440**

New Clients (Unique)

**262**

Individuals Served (Not Unique)

**1,412**

Avg. Visits per Client (having at least one visit)

**3.33**

Clients enrolled who have been active at some point in the date range(might be inactive now)

**440**

Avg. Age

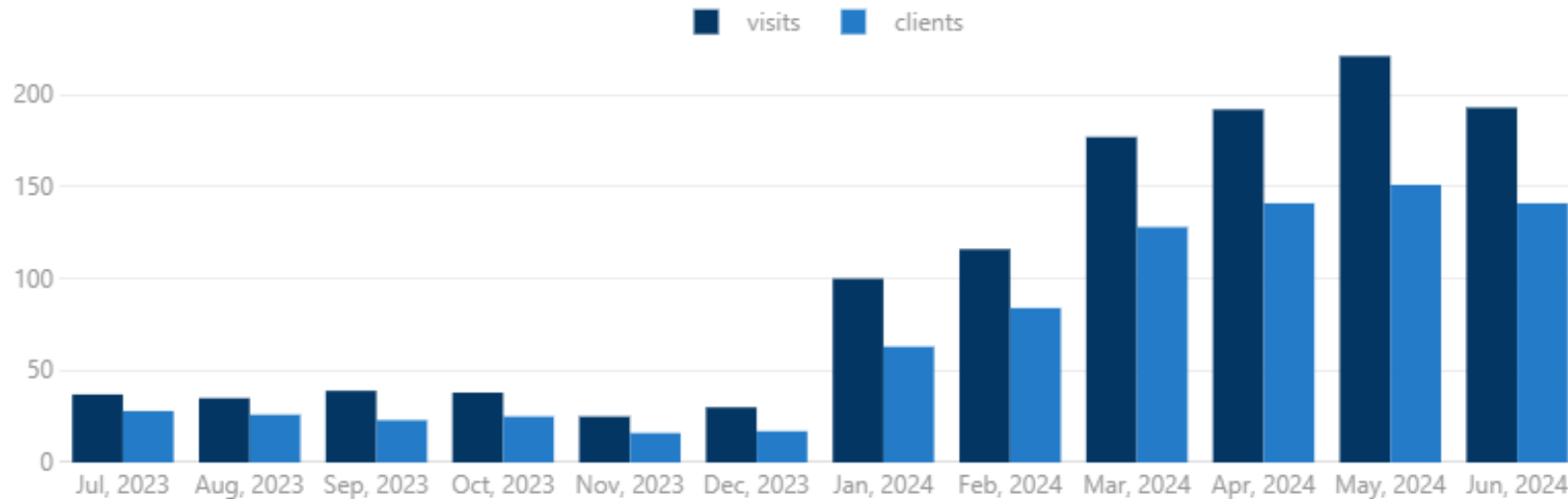
**49 years old**

# Current Data Trends

## Food Rx Enrollments 2024



Visits & Clients Between July 1, 2023 and June 30, 2024



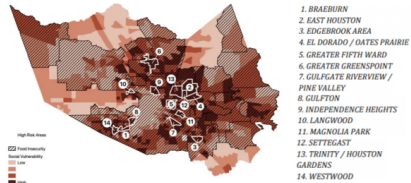
Date range: 07-01-2023 ~ 06-30-2024

Total Visits	1,203	Individuals Served (Not Unique)	1,697
Total Clients with Visits (Unique)	322	Avg. Visits per Client (having at least one visit)	3.74
Total Enrolled and Active Clients in the selected date range	549	Clients enrolled who have been active at some point in the date range(might be inactive now)	549
New Clients (Unique)	296	Avg. Age	47 years old

# Investigating the Effectiveness of FoodRx in Improving Patient Health Outcomes

## Literature Review

Food insecurity is defined as a household-level economic and social condition of limited or uncertain access to adequate food.<sup>1</sup> There were an estimated **724,750 food insecure** individuals in Greater Houston in 2018, and the estimated food insecurity rate was about **16.6%**.<sup>2</sup>



Adequate access to nutritious food is **inextricably linked** with patient **health outcomes**.<sup>3</sup>

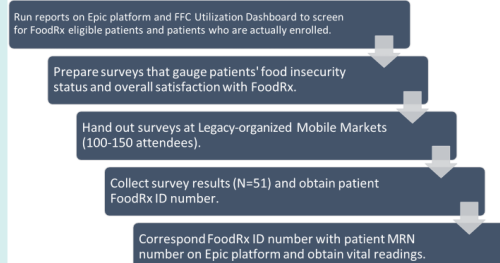
- Food insecurity is associated with **increased risk** for a variety of chronic health conditions including high blood pressure, diabetes, obesity, and heart disease.<sup>3,4</sup>

Food prescription programs, such as **FoodRx**, aim to **increase access** to healthy foods, improve dietary behaviors, and reduce health risk factors.<sup>5</sup>

- The **FoodRx** program is a collaboration between the Houston Food Bank and healthcare centers like Legacy Community Health. It allows participants to redeem 30 pounds of free **fruits and vegetables** twice a month<sup>6</sup>.
- However...** the effectiveness of the FoodRx program in targeting food-insecure Legacy patients is **unknown**, as is the specific effects on patient health outcomes.



## Workflow



## Research Questions

- 1** To what extent are food-insecure and program-eligible patients being adequately targeted by the FoodRx screening process?
- 2** What is the impact of FoodRx on patient health, as measured by vitals for SBP/DBP, HbA1c levels, and BMI?
- 3** How has enrolling in the FoodRx program affected patient's self-reported level of food insecurity and general wellness?

**HYPOTHESIS: FoodRx has gaps in targeting all food-insecure individuals, but does push vital readings towards normal levels and improve perceived food insecurity.**

## Key Findings

### 1 Patient Enrollment in the FoodRx Program

Hypertension Registry	3400 patients
Diabetes Registry	803 patients
Food Insecure Patients	~500 patients
# of patients enrolled in FoodRx in 2023	282 patients

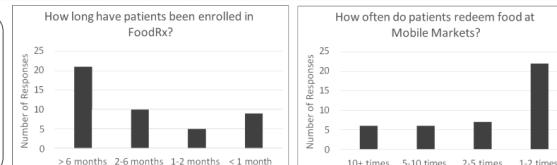
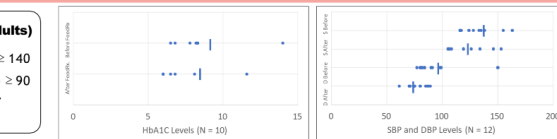


Figure 1. Duration of FoodRx enrollment (N = 51). Figure 2. Usage of FoodRx program (N = 50)

### 2 Average Changes in Patient Vitals

#### Criteria for FoodRx Eligibility (Adults)

- ✓ Systolic Blood Pressure (SBP)  $\geq 140$
- ✓ Diastolic Blood Pressure (DBP)  $\geq 90$
- ✓ Hemoglobin A1C (HbA1c)  $\geq 5.7$



### 3 Self-Reported Levels of Food Insecurity



Figure 3. Reported effect of FoodRx on patients' ability to access nutritious food (N = 44). Figure 4. Reported degree to which FoodRx meets patients' dietary needs (N = 42). Figure 5. Reported effect of FoodRx on overall patient well-being and health (N = 44).

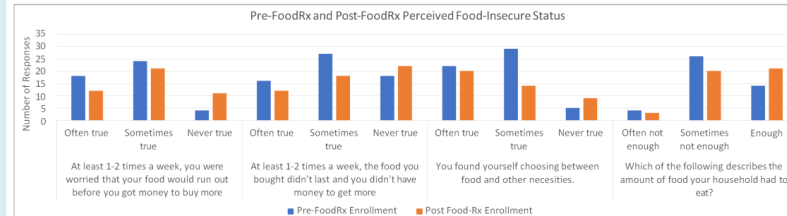


Figure 6. Patients enrolled in the FoodRx program saw overall improvements in their food-insecurity status. For the "Post Food-Rx Enrollment" section of the survey, participants marked "Never true" and "Enough" more frequently than in the "Pre Food-Rx Enrollment" section (N = 51).

## Implications

Not all food-insecure patients at Legacy have been targeted and enrolled in FoodRx, however the enrollment rates have **significantly increased** over the years. Patients have seen marginal **improvements in their health outcomes**, in particular those who have been redeeming food for over 6 months. Patients have also reported experiencing **greater overall food security** and improved wellbeing/health following their FoodRx enrollment.

### Recommendations for the Future

- Data Collection Expansion**
  - Measure vital changes over the long term.
  - Focus specially on adolescent BMI changes.
- Focus Group Initiation**
  - Interview patients about their experience with FoodRx and food insecurity.
- Enrollment Increase**
  - Station HASIs at more Legacy clinics.
- Workflow Development**
  - Check in with patients at regular intervals to determine if they need additional support.
- Provider Education**
  - Highlight the importance of food assistance programs in improving health outcomes
  - Encourage usage of Epic reports to target food-insecure patients

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# Future Directions

- New Program - ActiveRx
- Develop pathways for close loop referrals & data sharing
- Increase access to care
- Increase navigation
- Reduce barriers



Reduce harm of institutional processes involving bias and stigma which affects individuals through health-damaging self-perceptions and stereotype threat

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