



Welcome/Introduction

Shao-Chee Sim, Episcopal Health Foundation

HEROES (Health care Rewards to Achieve Improved Outcomes) Program Overview

Darshak Sanghavi, Federal Office of

ARPA-H

Presentations by Texas HEROES Applicants

Sarah Churchill Lames, Central Texas

Cam Combs, Dallas Fort-Worth

Shreela Sharma, Harris County

Brief Remarks by Rohan Subramanian,

MayComb Capital

HEROES

<u>HEalth care Rewards to Achieve</u> Improved <u>OutcomES</u>

April 1, 2024

Darshak Sanghavi, M.D. Program Manager Resilient Systems Mission Office

Resilient systems mission offic

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What if... we moved from a sick care system to a system that truly rewards better health?





HEROES Draft Program Solicitation (PS)

- Concise description of the program: Under the HEROES program, public health entities and collaborators will have the opportunity
 to improve the health status of their communities for specific patient populations as the program evaluates a new payment model that
 incentivizes community-based interventions to improve health outcomes across a fixed geography. These solutions will investigate a
 new regionally focused outcomes-based financing approach for the healthcare industry, which rewards only positive health outcomes
 and reduces the health care burden on patients, providers, and the economy.
- Draft Program Solicitation (PS): Posted to <u>https://sam.gov</u> on January 9, 2024, and is available for comments and feedback through February 20, 2024.
- Health Outcomes included:
 - 1. Maternal Health: Reduction in rate of intrapartum and postpartum severe obstetric complications.
 - 2. Heart Attack and Stroke Risk: Reduction in aggregate 10-year risk of heart attack and stroke for people aged 40-70 years.
 - 3. Opioid Overdose: Reduction in the number of emergency medical service calls for fatal and non-fatal opioid overdoses.
 - 4. Alcohol-Related Health Harms: Reduction in the number of emergency medical services calls for alcohol-related emergencies.

Refer to the full draft solicitation (ARPA-H-SN-24-04) posted to <u>https://sam.gov</u> for full HEROES Program details to include key dates.



Preventive Health Care is Not Working for Many Americans

American life expectancy has been flat for decades and is declining, trailing other nations.



Source: United Nations, Department of Economic and Social Affairs, Population Division.

Despite massive spending, a high burden of preventable morbidity and mortality drives poor outcomes.

	Significantly lower than mean		Statistically Indistinguishable from mean			Significantly higher than mean				
	lschemic heart disease	Lung cancer	Road injuries	Self-harm	COPD	Cerebrovasci disease	llaAlzheimer disease	Drug use disorders	Diabetes	Congenital anomalies
United States	1,696.6	781.7	614.5	511.7	471.8	456.5	422.1	359.3	310.0	299.6
Comparison group average	1,181.8	845.1	317.4	420.1	299.3	555.5	300.2	131.3	151.3	232.4

Years of Life Lost Per 100,000, All Ages, Age-Adjusted, from Global Burden of Disease, <u>http://www.healthdata.org/united-states</u>



Health Care Outcomes: Current vs. Future State

<u>Current State</u>: Health care organizations don't have strong financial incentives to fix early signs – and most people aren't lucky enough to get the right care at the right time.



Future State: HEROES rewards fixing early warning signs to deliver better outcomes for <u>all people</u>, <u>not just the lucky few</u>, incentivized via pre-negotiated payments.

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HEROES: Changing the System to Create a Market for Prevention



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How HEROES Aligns Incentives with Geographies



Health Accelerators will propose a high-need geographic region in <u>one of four</u> possible health outcomes.

Each Health Accelerator will need to meet a population-specific goal that has been projected to generate at least \$60M value to society (across health care, productivity, and social service costs) over 3 years.

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Maternal Health Outcomes

> Heart Attack and Stroke

Opioid Overdose

Alcohol-Related Health Harms **Significance:** The U.S. experiences higher rates of Severe Obstetric Complications (SOC) than most other developed countries, and rates continue to rise.

Goal: Within a population of 5M (or an entire state if less than 5M), reduce the rate of SOC during delivery hospitalization and 60 days after delivery by 20%.

Significance: Heart disease (#1) and Stroke (#5) are among the leading causes of death in the U.S. Annually, there are about 805,000 Heart Attacks and 795,000 Strokes.

Goal: Within a population of 700,000 (or an entire state if less than 700,000), reduce 10-year aggregate risk of Heart Attack and Stroke for people aged 40-70 years by 1% point.

Significance: Opioid Use Disorder (OUD) affects over 2.1 million individuals and causes over 100,000 deaths annually in the U.S. Fewer than 10% of patients with diagnosed OUD receive medication-assisted treatment (MAT).

Goal: Within a population of 500,000, reduce the number of emergency medical service calls for opioid overdoses by 10%.

Significance: An estimated 1 in 5 deaths of people ages 20 - 49 result from excessive alcohol use. There are more than 140,000 alcohol-related deaths per year in the U.S.; excessive drinking, including binge drinking, costs the U.S. \$249B annually.

Goal: Within a population of 500,000, reduce the number of emergency medical service calls for alcohol-related emergencies by 10%.

HEROES Outcome Toolkit



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How HEROES Creates Incentives

Pick Targets	Identify Outcome Buyers	Raise Funding	Help People	Get Rewarded
Health Accelerator selects an outcome and target geographic area.	Health Accelerator secures promise of <i>future</i> payment for successful health outcomes from ARPA-H and Outcome Buyers (e.g., employers, health plans).	Health Accelerator raises money to be used in prevention- oriented care to fund new technologies and operations.	Health Accelerator deploys innovative, evidence-based technologies at scale to improve health outcomes in the specified geographic area.	If outcome achieved, ARPA-H and Outcome Buyers reward Health Accelerator.
Population Benefit Over Three Years: At least \$60M of value	Possible Incentive: Outcome buyers contribute \$45M (\$15M ARPA-H plus 2:1 match)	Build Capacity: Create tech and a community that is engaged in preventive care	Public Health Win: Outcomes, like heart attack risk or opioid overdoses, improve	Fiscal Win-Win: Outcome buyers create \$60M value for \$45M



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HEROES: How the rewards flow

Health Accelerator (+ investors) receive



<u>Hypothetical</u> Reward Example for Maternal Health

Step 1: Agree to "rate card" at the start

Example at 24 months:

Change Relative to Comparison Group	Outcome Payment
0% or worse	None
5%	\$1.875M
10%	\$3.75M
15%	\$5.6M
20% or better	\$7.5M

Calculation going into contract:

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- Performance period 36 months, paid every 6 months.
- Total Outcome Buyer Commitment = \$45M (\$15M from ARPA-H + \$30M from partners).
- Target Outcome = 20 percentage point improvement proportioned over 3y based on incremental improvement targets.

Step 2: Every 6 months, review metrics



- In Comparison Group, rate worsens from start time by 5% (from its baseline).
- In Health Accelerator Group, rate <u>improves</u> from start time by 10% (from its baseline).
- Thus, Health Accelerator showed 15% improvement relative to Comparison.

Step 3: Pay Health Accelerator per rate card



- ARPA-H / Outcome Buyers disburse \$5.6M reward payment to Health Accelerator.
- ► 6-month cycle restarts.

Hypothetical Reward Example (more details)

	6 months	12 months	18 months	24 Months*	30 months	36 months	Total payout (\$) and average outcome reduction (%) over entire 3- year program*
Hypothetical maximum outcome-based payout (assuming \$45M total reward pool)	\$3.75M	\$3.75M	\$7.5M	\$7.5M	\$11.25M	\$11.25M	\$45M
Expected reduction of severe obstetric complications (% relative to comparator)	10%	10%	20%	20%	30%	30%	20%

Scenario 1: Slow start with moderate sustained progress but does not achieve the expected 3-year average
outcome reduction.Relative reduction
achieved by the Health0%0%17%15%24%30%14.3%

Accelerator							
Reward earned by Health	\$2M	ŚOM	¢6.38M	\$5.63M	¢οм	\$11 25M	\$24 25M
Accelerator	ΫΖΙΫΙ	ŞUİVİ	20.30ivi	\$ 5. 05101	JUI	Ş11.25IVI	\$54.25IVI

Scenario 2: Strong performance but does not hit all milestones during the program. At end of the program, the 3-year average outcome reduction exceeds the expected amount. The HA is eligible to receive the balance of the reward pool via a post-program "true-up"

	••••••			- p 0			
Health Accelerator's relative reduction	10%	15%	15%	20%	25%	35%	20%
Health Accelerator Reward Payment	\$2.5M	\$3.75M	\$5.63	\$7.5M	\$11.25	\$11.25M	\$41.8M earned and trued-up to \$45M

*The actual value of the outcome-based reward pool is dependent on additional advanced commitments from Outcomes Buyers secured by the AHA.

<u>Scenario 1:</u>

- The AHA does not earn the full reward amount available every 6 months except for the last where it performed at the target improvement rate.
- In each 6-month payout period, the AHA earns a reward value proportional to the improvement, except in the first 6-month payout period in which it earned the minimum floor payout of \$2M despite showing no improvement.

Scenario 2:

- The AHA receives the full reward amount of \$45M.
- Every 6 months, the AHA earns a payout proportional to its improvement performance (e.g., in the first 6-month payout period, a 10% reduction relative to a 15% target rate reduction earns two-thirds of the maximum payout of \$3.75M,or \$2.5M).
- Towards the end of the 3-year performance period, the AHA starts to perform better than the targets. However, the reward pools are capped regardless of the AHA over-performing.
- As a result, at the end of the implementation period, ARPA-H reviews the overall improvement and determines that the AHA met its overall improvement target of 20%.
- Therefore, the AHA will be trued up to earn the full \$45M reward to encourage the catch-up improvements that were made.



Today's Financing Models

Key organizational attributes	Traditional Payers (Medicare, Medicaid, Commercial)	Public Health Departments and Agencies	Venture Capital and Private Equity-Backed Companies	HEROES
Payment for prevention	C <i>Limitations:</i> Churn, provider focus	Strengths: Prevention focus	Limitations: Focused on high acuity patients	Strengths: Upstream outcomes
Geographic accountability	C <i>Limitations:</i> Small fraction of the population	<i>Limitations:</i> Geographic scope, but no accountability	Limitations: Narrow population focus	Strengths: Population-wide accountability
Population-level outcomes measurement	C <i>Limitations:</i> Primarily hospital-based	Limitations: Long lags in surveillance data	Limitations: Primarily hospital-based	<i>Strengths:</i> Near real-time population measurement
Sustainable business model that integrates private capital	<i>Strengths:</i> Established contracting approaches	Limitations: Largely grant- funded, unstable	Limitations: Unproven	Strengths: Meaningful business case

Key

- Minimal alignment with program requirement
- Moderate alignment with program requirement

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• Complete alignment with program requirement



How HEROES Could Transform Care in Communities: <u>Current State</u> Example Maternal Health Patient Journey

Engagement: Disparities are invisible until it's too late

Natalia lives in a community with limited access to care and doesn't have her first prenatal care visit until her 7th month of pregnancy.

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Clinical Interventions: Mothers with newborns suffer through intense and reactive treatment plans only after experiencing a poor outcome

Natalia experiences significant blood loss and develops an infection, both of which are preventable with improved hospital protocols. Technology Advancements: Promising technologies go to select few

Natalia develops dangerously high blood pressure after returning home with her infant, resulting in a rehospitalization that could have been prevented with home blood pressure monitoring technology.

Evaluating Effectiveness of Interventions and Progress Towards Financial Sustainability

Health Outcomes

HEROES will evaluate if Health Accelerators achieve health outcome milestones.

Tools to Monitor Success and Estimate Payout



HEROES will use metrics to:

- Track progress toward health outcome goals at 6-month intervals for ARPA-H funded Health Accelerators.
- Determine the expected payout based on changes in the outcome relative to the adjusted national average.



Interventions

HEROES learns and shares what works and what doesn't to drive impact.

Evaluation to Understand Intervention Effectiveness



HEROES will work with Health Accelerators to:

- Understand which interventions were delivered to whom to understand how population-level improvements were achieved, or why they weren't achieved.
- Evaluate the impact of interventions

 subgroups to learn what strategies were (and weren't) effective in different demographic groups, and which strategies were effective in closing equity gaps.
- Convene workshops for learning and diffusion among Health Accelerators to build infrastructure for collaboration and trust.

Sustainability

HEROES supports a path to sustainability for the program performers.

Drivers of Financial Sustainability



Through data collected from Health Accelerators and key stakeholders, HEROES will:

- Track Outcome Buyer and Investor activity to determine whether the financial incentives are operating as intended.
- Monitor financial outcomes for all stakeholders to determine whether each Outcome Buyer and Investor met financial goals.
- Identify which Health Accelerators successfully scaled to long-term contracts or new geographies through renewed or expanded contracts (with Outcome Buyers and Investors) by the end of the HEROES period.



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APPENDIX: OUTCOMES



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Severe Obstetric Complications

Goal: Improve Care During the Postpartum Period to Reduce Rates of Severe Obstetric Complications (SOC)

Severe Obstetric Complications (SOC)

- Has been increasing due to change s in the overall health of the population of women giving birth (e.g., increases in maternal age, pre-pregnancy obesity, preexisting chronic medical conditions, cesarean delivery).
- Research and prevention efforts historically have been focused on the delivery hospitalization; less is known about SOC diagnosed after delivery discharge.

• Scope of the Problem

- Affects approximately 65,000 women each year (or 1.8 percent of women giving birth in 2021).
- Up to 17% of cases first developed a SOC after the delivery discharge (e.g., one in seven among commercially insured women, and almost one in six among Medicaidinsured women).
- Predominantly occurs within the first two weeks after delivery (75% of SOC cases) and could be avoided with timely, appropriate care in most instances.
- Estimated total maternal morbidity costs for all US births in 2019 were \$32.3 billion from conception through the child's fifth birthday, amounting to \$8,624 in additional costs to society for each maternal–child pair and \$500,000 for each SOC case.





Timely identification of at-risk postpartum women can improve outcomes.

- If more at-risk women are identified early enough, appropriate care can be initiated, improving outcomes.
- The CDC has identified 21 indicators (16 diagnoses and five procedures) for measuring SOC. Monitoring for precursors can help identify women at risk.

Key Outcome Metric

- Severe Obstetric Complications measure was developed by The Joint Commission, CMS, and Yale New Haven Health Service Corporation/ Center for Outcomes Research and Evaluation.
- It identifies patients with severe obstetric complications that occur during the inpatient delivery hospitalization.
- The measure may be modified to capture SOCs during the delivery hospitalization and 60 days after discharge using claims data.

Prospective approach to generate >\$60M economic value (>30% ROI) from the Severe Obstetric Complications (SOC) program



successfully rolled out across the US

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Total annual economic savings

1) Claims-based prevalence of severe obstetric complications based on US-wide averages

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2) Excludes costs associated with reduced quality of life and therefore represents a minimum societal cost estimate

Severe Obstetric Complications: US-wide Economic Costs

- Total Estimated US-wide Economic Costs = \$7B
 - \$2.5B in Acute Healthcare Costs (36%)
 - Extended intrapartum hospitalization.
 - Readmissions for Severe Maternal Morbidity as identified by the Centers for Disease Control and Prevention through a list of 21 indicators and corresponding ICD codes.
 - \$4.1B in Productivity Losses (58%)
 - Presenteeism (reduced productivity and accuracy at work)
 - Absenteeism (regularly missing work)
 - Unemployment

- \$423M in Social Service Use (6%)

 Mental health support services and other assistance, such as the Supplemental Nutrition Assistance Program (SNAP), Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), Medicaid, Temporary Assistance for Needy Families (TANF).





Heart Attack and Stroke Risk

Goal: Reduce the Rates of Heart Attack and Stroke, the Leading Causes of Death and Disability

Scope of the Problem



Nationally, heart disease is the leading cause of death. About 695,000 people in the United States died from heart disease in 2021 (this equates to 1 in every 5 deaths).

In 2021, **1 in 6 deaths** from cardiovascular disease was **due to stroke**.

1.6M annual total heart attack and strokes deaths and 1.2M first time heart attack and strokes per year.

Stroke Death Rates, 2018 - 2020 Adults, Ages 35+, by County



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Health Outcomes & Costs

- Heart disease and stroke totals \$254.2B in annual direct and indirect costs.
- With 123 million adults between the ages 40-70 living in the United States, the approximate cost per case in this age group is \$101,000.
- A 1%-point reduction in 10-year Heart Attack and Stroke risk would result in a total cost savings of \$20.3M per year, or \$61M over 3 years.

Heart Disease Facts | cdc.gov Know Your Risk for Heart Disease | cdc.gov Stats of the States - Stroke Mortality (cdc.gov) Evaluation of the Million Hearts® Cardiovascular Disease Risk Reduction Model: Third Annual Report (cms.gov) Heart Disease and Stroke Statistics—2018 Update: A Report From the American Heart Association

Opportunity for Change

- Patients are unaware of their Heart Attack and Stroke risk (as there is no requirement for screening in the clinical setting).
- The Million Hearts Cardiovascular Risk Reduction Model resulted in several hundred thousand Medicare age members having significant improvement in Heart Attack and Stroke risk, use of preventive medications, and 6% relative reduction in death, in a randomized design.



Key Outcome Metric & Reporting

- Reduce the aggregate 10-year Heart Attack and Stroke risk for people aged 40-70 years at the population-wide level in specific geographically attributed populations.
- Partner with hospitals and primary care providers in the identified geographies to report Heart Attack and Stroke data. Partner with Health Information Exchange Networks or Organizations within the identified geographies to obtain Heart Attack and Stroke-related data to calculate risk.

Prospective approach to generate >\$60M economic value (>30% ROI) from the Heart Attack and Stroke program



Heart Attack and Stroke: US-wide Economic Costs

- Total Estimated Economic Costs = \$123B
 - \$73.2B in Direct Costs (60%)
 - Physician Office-based Visits
 - Hospital
 - Inpatient
 - Outpatient
 - Emergency Room
 - Prescriptions
 - Home Health
 - \circ Other
 - Vision
 - Medical Supplies
 - Dental

- \$49.8B in Indirect Costs (40%)

• Productivity loss from morbidity and mortality.

Direct and Indirect Cost of First Time Heart Attack and Stroke in the United States





Opioid Overdose

Goal: Decrease the Rate Opioid Overdoses

Scope of the Problem

 Opioid Use Disorder (OUD) is the chronic use of opioids that causes clinically significant distress or impairment. OUD consists of an overpowering desire to use opioids, increased opioid tolerance, and withdrawal syndrome when discontinued. OUD includes dependence and addiction.

Health Outcomes & Costs

• OUD is a life-threatening condition associated with a 20-fold greater risk of early death due to overdose, infectious diseases, trauma, and suicide.



Ref: JAMA, 2020

Opportunity for Change

- Fewer than 10 percent of US patients with diagnosed OUD receive medication-assisted treatment (MAT).
- Behavioral therapies, when delivered alone, have limited efficacy in addressing the complex symptomatology and physical aspects of OUD.

Key Outcome Metric & Reporting

- Decrease the rate of fatal and non-fatal opioid overdoses/100,000 population/rolling 28-day period.
- National Emergency Medical Services Information System (NEMSIS) is a county-level database updated semi-monthly which includes fatal and non-fatal opioid overdoses. It is a collaboration of the Office of National Drug Control Policy, the National Highway Traffic Safety Administration, and the Department of Health and Human Services.



Prospective approach to generate >\$60M economic value (>30% ROI) from the Opioid Overdose program



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Total annual

economic savings

2.OUD cases correlate with absolute prevalence of Fatal and Non-fatal Opioid Overdoses in the National Emergency Medical Services Information System (NEMSIS) Opioid Overdose Tracker, which will be used to track intervention efficacy.

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Opioid Overdose: US-wide Economic Costs

- Total Estimated US-wide Economic Costs = \$182B
 - \$40B in Healthcare Costs (22%)
 - Emergency Department Visits
 - Emergency Medical Services Activations
 - Hospitalizations and Rehabilitation Services
 - General Medical Care
 - \$124B in Productivity Losses (68%)
 - Presenteeism (reduced productivity and accuracy at work)
 - Absenteeism (regularly missing work)
 - On-the-job injuries
 - Unemployment
 - \$18.6B in Criminal Justice System (10%)





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Alcohol-Related Health Harms (ARHH)

Reduce the number of alcohol-related Emergency Medical Services (EMS) activations

• Binge Drinking

- Binge drinking is defined as consuming 5 or more drinks on an occasion for men or 4 or more drinks on an occasion for women.
- Drinking too much alcohol can cause serious health problems including stroke, cancer, and cirrhosis.
- People with alcohol use disorders, including binge drinking, are also more likely to get sick and are less able to fight off infections.

• Scope of the Problem

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- Binge drinking is the most common and costly pattern of <u>excessive alcohol use</u> in the United States.
- Binge drinking is a serious but <u>preventable</u> public health problem.
- Every day, about 37 people in the United States die in drunk-driving crashes —that's one person every 39 minutes. In 2021, 13,384 people died in alcohol-impaired driving traffic deaths —a 14% increase from 2020. These deaths were all preventable.



% of residents with prior DUI arrest (Source: MPR, 2010)



- Opportunity for Change
 - 18% of Americans have engaged in binge drinking in the past month.
 - A 2019 government survey found less than 1 in 10 people with an alcohol use disorder received any treatment, and less than 2% of those individuals said they had been offered medication.
 - In every state, it is illegal to operate a motor vehicle with a blood alcohol content of 0.08% or higher. Yet for every 88 instances of driving, someone is arrested for operating a motor vehicle above the legal limit.

Key Outcome Metric

- Metric: Number of alcohol-related emergencies reported by EMS services/100,000 population.
- The National Emergency Medical Services Information System (NEMSIS) dataset is a repository for emergency medical technician provision of services nationally. It is funded primarily by the National Highway Traffic Safety Administration.

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Prospective approach to generate >\$60M economic value (>30% ROI) from the Alcohol-Related Health Harms (ARHH) program



successfully rolled out across the US

~\$23.8B

Total annual economic savings

1. Excludes costs associated with reduced quality of life and therefore represents a minimum societal cost estimate.

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 ARHH cases correlate with the prevalence of alcohol-related EMS calls reported via National Emergency Medical Services Information System (NEMSIS), which will be used to track intervention efficacy.

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Alcohol-Related Health Harms: US-wide Economic Costs

- Total Estimated US-wide Economic Costs = \$237.6B
 \$20.2B in Healthcare Costs (9%)
 - Emergency Department Visits
 - Emergency Medical Services Activations
 - Hospitalizations and Rehabilitation Services
 - General Medical Care

- \$166.6B in Productivity Losses (70%)

- Presenteeism (reduced productivity and accuracy at work)
- Absenteeism (regularly missing work)
- On-the-job injuries
- Unemployment

- \$50.7B in Other (21%)

- Criminal Justice
- Motor Vehicle Crashes
- Fire Losses

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A R P A C HEROES Program

Strategy considerations for DFW-based maternal health application

April 2024



Coalition comprises leading institutions across the region's health ecosystem, including academic medical centers, health systems, public hospitals, payers, community partners, and philanthropic organizations

Together, we are collaborating to **drive innovation** and **dramatically improve maternal health outcomes in Dallas and Tarrant counties**

Preliminary HEROES strategy development and coalition building has been driven by several convening entities:









Our North Star | Messages we have used to mobilize the coalition

Details follow

Texas must be part of any solution that moves the needle on maternal health nationally

>10% Country's births that occur in Texas¹



#1

Increase in maternal mortality rate since 1999, across demographics²

State in number of maternal deaths³

DFW has the patients, the players, and the assets to drive scalable system change

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Maternal deaths per 100K live births,⁴ one of the state's highest rates

25+ Major birthing hospitals in the area, many with key assets and initiatives that may enable HEROES proposal

60K Safer and more dignified births with reduced disparities from TeamBirth implementation across DFW hospitals⁵

- 1. Assuming ~3.6M US births (CDC, 2021) and ~360K births in Texas (HHSC, 2020)
- 2. From an average 18 in 1999-2009 to 40 deaths in 2010-2019 per 100K for white mothers, 43 to 83 for Black mothers, and 13 to 25 for Hispanic mothers (Dallas Morning News reporting on a study from Institute for Health Metrics and Evaluation, 2023)
- 3. 421 from 2018-21, of a total 3,478 in the US (KFF)
- 4. Regional Analysis of Maternal and Infant Health in Texas: Public Health Region 2/3 (Texas DSHS)
- 5. Target implementation in 16 hospitals with 60K births over a 3-year period







Patient population | Dallas-Fort Worth mothers face significant challenges

Total PHR geographic population, M





Takeaway | DFW is large, diverse, and has high unmet patient need for maternal and infant health







Strategy development | Initial approach to Health Accelerator interventions



Clinical care

Tailored set of condition-specific, evidence-backed clinical interventions that comprehensively address DFW's specific drivers of SMM throughout the care continuum



Clinical and community coordination

Programs that address SDoH and other non-clinical factors, launched (or scaled) to enhance and/or enable clinical interventions



Role of health plans

Final intervention mix will depend highly on Outcome Buyer input

We are eager to involve potential Outcome Buyers as early in the process as possible to inform the Health Accelerator strategy

New technologies enabling transformative initiatives that enable the Health Accelerator to proactively deploy clinical and non-clinical interventions

UTSouthwesterr

Medical Center







Assets | Highlights of regional asset inventory

NOT EXHAUSTIVE

A first step to abstract development is inventorying the region's **robust asset landscape**, particularly in-flight initiatives that leverage systemwide coalitions



Clinical care

UTSW and Parkland Extending Maternal Care After Pregnancy (eMCAP) program

Post-partum home visits

Alliance for Innovation for Maternal Health (AIM)



Clinical and community coordination

Closed Loop Community Resource Referrals (Help Me Grow) with patient navigators

United Way of Tarrant County Community-based Doula program

Fort Worth Parent Pass app

New technologies enabling transformative initiatives DFW Hospital Council Health Equity Dashboard "Know Thy Patient" AI/ML clustering and whole person insights Community Vulnerability Compass with integrated clinical, mental, and SDoH data Pre-term birth risk AI/ML model for providers and payers







Details follow

Assets | Deep dive on DFWHC Health Equity Dashboard

Infant/maternal health rank 3rd highest on opportunities for disparity improvement across North Texas



Aggregated Health Disparity Index for 13 Clinical Areas







Assets | Deep dive on DFWHC Health Equity Dashboard

DFWHCF Health Equity Analytics Dashboard

Clinical Ar

Disparity race

PLACES M



	Glossary Summary	Disparity	PLACES
ilth 🔻	Summary Statistic	S	
	Selected Clinical Are	a I	nfant/Maternal Health
	Ranking	3	
-	Aggregated Health Di	sparity Index 1	6.94
	Disparity Metric	1	.0.17
	Clinical Impact Metric	2	6.62
	Geography Spread Me	etric 1	9.35
		Aggre	gated Health Disparity Index
	Diab	Aggre	gated Health Disparity Index
	Diab Pulmonary Condit	Aggre	gated Health Disparity Index
	Diab Pulmonary Condit Infant/Maternal He	Aggre	gated Health Disparity Index
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	Diab Pulmonary Condit Infant/Maternal He MBH - Sui Heart Dise	Aggre	gated Health Disparity Index 1 15 53 15 35
	Diab Pulmonary Condit Infant/Maternal He MBH - Sui Heart Disc Dementia/F	Aggre	gated Health Disparity Index 15 15 15 13 87
	Diab Pulmonary Condit Infant/Maternal He MBH - Sui Heart Disc Dementiaf Sepsis on Arrival, HAIs, H	Aggre	gated Health Disparity Index 15,53 15,35 13,87 13,54 13,26
	Diab Pulmonary Condit Infant/Maternal He MBH - Sui Heart Dise Sepsis on Arrival, HAIs, H Ob MBH - Substance Use Disc	Aggre etes files f	gated Health Disparity Index 15 5 15 35 13 87 13 54 13 36 11 89
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Detailed Metric & Ranking for Selected Clinical Area

			Health	1151
Clinical Subarea	Domain	Subdomain	Disparity index (HDI)	HDI Ranking
4.3 Hemorrhage during pregnancy; abruptio placenta; placenta previa	clinical	non-emergent ED2	100.00	
4.7 Other pregnancy and delivery including normal	clinical	non-emergent ED2	100.00	
4.3 Hemorrhage during pregnancy; abruptio placenta; placenta previa	clinical	non-emergent ED1	90.10	5
4.6 Other complications of pregnancy	clinical	CCS1	79.40	6
4.5 Other complications of birth; puerperium affecting management of mother	clinical	CCS1	76.40	9
4.5 Other complications of birth; puerperium affecting management of mother	clinical	hospitalization1	76.10	10
4.5 Other complications of birth; puerperium affecting management of mother	clinical	hospitalization2	75.70	12
4.5 Other complications of birth; puerperium affecting management of mother	clinical	CCS2	75.00	14
4.6 Other complications of pregnancy	clinical	CCS2	74.90	15
4.3 Hemorrhage during pregnancy; abruptio placenta; placenta previa	clinical	CCS1	74.10	16









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Assets | Deep dive on DFWHC Health Equity Dashboard





DFWHCF Health Equit	y Analytics Dashboard ≡				
Clinical Area:	Glossary Summary Disparity	PLACES			
Infant/Maternal Health 🔻	Top Zips with Greastest Disparity	 ipcode: 76228 ggregated clinical metric: 0.027 linical metric quintile: 3 	Clinical Metric Quintiles	Most Vulnerable Z Selected Subdom	ips for ain
Disparity Subdomain:	Zip Aggregated Clinical Code Metric	Income level with worst disparity ratio: \$50-100k	Medium	Zip Subdomai Code Breakdow	n Disparity n Ratio
ethnicity -	75243 0.22	Race with worst disparity ratio: Others	Very High		189.00
	75217 0.21	Worst race disparity ratio: 2.3125	The states of th	78046 Hispanic	134.00
PLACES Measure:	75216 0.19	Ethnicity with worst disparity ratio: Hispanic Worst ethnicity disparity ratio: 36.2	A Contraction	78130 Non- Hispanic	131.49
Diagnosed diabetes among	75001 0.18			77630 Hispanic	123.00
adults aged >=18 years	75228 0.18			79512 Non- Hispanic	117.00
	75211 0.17 75227 0.17		a the start of the		115.00
	75067 0.16		Leaflet C OpenStreetMap contributors, CC-BY-SA	70607 Non- Hispanic	111.00
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	75040 0.14	1000	the state of the s	70605 Non- Hispanic	94.00
	76179 0.14	the the states have a state to be a state of the states of	B Star Str. W.		













We would love to hear from you!

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ARPA-H HEROES Central Texas Update

Factor Health Real. Life. Health. The University of Texas at Austin Dell Medical School

PAustin Healthcare Council



Contral Texas' HIE

Central Texas: A "not-so-sleeping giant of (health) innovation and collaboration"*

Fast growth in medical facilities matching explosive growth in the region

> By 2030, seven new and expansion at nine existing hospitals

Long-time tech hub, amplified by arrival UT Medical School

> Since 2016, more medical specialists, researchers, tech companies have been drawn to Central Texas

Vibrant collaborations in the health eco-system with a focus on equity

> Long-existing relationships among FQHCs, hospitals, non-profits working in Non-Medical Drivers of Health (or SDOH) with on data, evaluation and outcomes already exist

* Austin American Statesman, Nov. 26, 2023

A Tetrad Partnership in Central Texas

Early interest to collaborate on the challenge of maternal morbidity and explore the ARPA-H HEROES opportunity for our Central Texas region is significant.

To date there have been dozens conversations within and among organizations, as elicited through a smaller working group of the **United Way for Greater Austin**, the **Austin Healthcare Council** (a non-profit organization created to establish Austin's position as a global healthcare innovation center) with a membership of over 60 organizations with an interest in improving health in our community, **Factor Health at Dell Medical School**, and **Connxus**, the Health Information Exchange for Central Texas.

Experience within the Tetrad

Each partner brings unique and deep experience in efforts to improve health outcomes:

United Way	Connxus	Austin Healthcare Council	Factor Health at Dell Med
Trusted backbone of coalitions focusing on collective impact with long experience in navigating community members to services addressing SDOH/NMDOH	The established, trusted data hub serving Central Texas health and social service organizations.	Neutral and expert facilitator of collaborations that enable change that improves the health of our community.	Rigorously measures health outcomes of interest to payers generated by programs addressing NMDOH outside the walls of the clinic.

Our collaboration with HHSC and advocacy at the state and local level, given our capital city location, leverages unique opportunities

Alignment with Federal Vision Already Exists (US Playbook to Address SDOH)









Playbook Pillars

- 1. Expand Data Gathering and Sharing: Advance data collection and interoperability among health care, public health, social care services, and other data systems to better address SDOH with federal, state, local, tribal, and territorial support.
- 2. Support Flexible Funding to Address Social Needs: Identify how flexible use of funds could align investments across sectors to finance community infrastructure, offer grants to empower communities to address HRSNs, and encourage coordinated use of resources to improve health outcomes.
- 3. Support Backbone Organizations: Support the development of community backbone organizations and other infrastructure to link <u>health care systems</u> to <u>community-based organizations</u>.

Planned Strategy:

Elevate our strengths in data utilization, collaboration building, and prioritizing technological innovations to establish a payment system in Central Texas that incentivizes outcomes, starting with a focus on improving Maternal Health.

Central Texas survey results affirm commitment to transformation in the region

24 responses – from small direct service non-profits to businesses to major hospital systems to community organizations – illustrate the depth of interest and engagement

Winstead PC Upstream Thinking, LLC The Cook's Nook Lone Star Circle of Care Healing Hands Community Doula Project Central health Pathways Community HUB Institute (PCHI) The Network of Behavioral Health Providers Unity Partners dba Project Unity Ascension Seton American Youth Works Austin Area Urban League Pathways HUB

findhelp

On-Point Re-Entry Consortium, Inc The Health Collaborative- Grow Healthy Pathways HUB The Community Coalition for Health Mama Sana Vibrant Woman Health Management Associates Dell Medical School ClearCam Studio Bahia HealthCode Addressing Cancer Together MedTech Reactor

Geography of survey partners is rural & urban; Represents a mix of outcome buyers, accelerators and investors

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Assets in place for Maternal Health focus

As Texas has the highest maternal mortality rate within the United States, there is both great momentum and urgency to address this health challenge.

Exemplar: Central Texas has long experience with Care Coordination Technology



Of note: Current maternal health initiatives undergirds plan for ARPA-H HEROES



Empowering Moms-to-Be: A Community's Journey Towards Health

At the TACHI site in **Williamson County**, a coalition of organizations is working with pregnant women in underserved areas to help women receive comprehensive health care along with other important non-medical services like housing navigation, child care, food assistance, and more.



Food is Medicine

Farmshare Austin, along with The University of Texas School of Public Health, helps birthing mothers at Ascension Seton Medical Center Austin who identify as food insecure. These mothers will enroll in the program, where they'll receive nutritious meals and fresh foods over the critical 8-week postpartum period.



Boldly B.L.U.E. Birthing, Learning, Understanding, Empowering

Boldly B.L.U.E. is a collaborative initiative to increase the number of culturallyaligned doulas, midwives, and certified lactation consultants in Central Texas while building a maternal health research network that leverages the insights of connected and empowered birth workers and their clients to derive best practices and policy insights.

Factor Health Real. Life. Health. The University of Texas at Austin Dell Medical School

Nurture/Nutrir

Flexible resources to purchase groceries & nutritional consults to see if at-risk pregnant women on Medicaid have better health outcomes

Next Steps for Central Texas

- Convene partners
- Determine geography
- Adopt strategy
- Create workgroups and project leaders
 - By role, e.g., "Accelerator, Outcome Buyer, Investors"
 - Identify geographic anchors
 - Create actuarially-based outcome measures
- Establish timeline and milestones
- Draft abstract

Thank you

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HEALTH EQUITY COLLECTIVE

Driving Better Health Together

ARPA-H HEalth care Rewards to Achieve Improved OutcomES (HEROES) in Harris **County**, **Texas**

Health Equity Collective

- Established in Dec 2018
- Currently >200 organizations, and a coalition including >50 coalitions in the Greater Houston region, including Harris County.
- Multi-sector action-oriented, collective impact effort
- Connecting, broad, systemic social determinants of health approach
- Comprehensive solutions for technology & human capacity of care coordination
- The Health Equity Collective is a core infrastructure initiative of the UTHealth Houston Center for Health Equity. UTHealth Houston serves as the backbone organization for the Collective.
- UTHealth Houston also houses the All Payors Claims Database for the state of Texas.



Establish an impactful, collective, sustainable, data-driven system to promote health equity.



John JC, Kaleemullah T, McPherson H, Mahata K, Morrow RB, Bujnowski D, Johnston A, Danho M, Siddiqui N, Haley SA, Sirajuddin AM, Schauer T, Wu MJ, Rechis R, Galvan E, Correa N, Browning N, Ganelin D, Walsh Jr MT, Lofton S, Banerjee D, Sharma SV. "Building and advancing coalition capacity to promote health equity: Insights from Greater Houston Coalition's collective impact approach to addressing social determinants of health". Health Equity. 27 Dec 2021; https://doi.org/10.1089/heq.2021.0012

Health Equity Collective Steering Committee Member Organizations

- UTHealth Houston
- Houston Recovery Center
- Humana
- Center for Civic and Public Policy Improvement
- Legacy Community Health
- Prevention Institute
- Rice University Kinder Institute of Urban Research
- Houston Housing Collaborative
- Memorial Hermann Health System

- Harris Health System
- Houston Food Bank
- City of Houston Health Dept
- MD Anderson Cancer Center
- Texas Children's Hospital
- The Harris Center
- Network of Behavioral Health Providers

Why ARPA-H Heroes?

Harris County - 4.7 million+ people as of July 1, 2023
25% of the population is 18y and younger
44% Hispanic; 20% Black; 27% White, non-Hispanic; 7% Asian.
26% foreign-born with 121 languages spoken

Home to the largest medical center in the world – Texas Medical Center

16% in poverty; 25% children in poverty; 24% uninsured 24 per 1000 teen births; 9% low birthweight; 37% obesity; 20% excessive drinking – worse than the national average



We are a region of high need with large disparities.

We are also a region where each of our organizations have invested in addressing these issues in technology and human capacity of care coordination to address these needs

Our proposed strategy

- To leverage existing investments in technology and human capacity of care coordination to build a coordinated, equitycentered, population-wide ecosystem of care using an outcomes-based incentivized payment model in Harris County, Texas.
- Improve outcomes in maternal health, heart attack and stroke risk.
- Improve outcomes for all Harris County residents





Connecting Data & Systems Across Texas

Houston can connect, integrate, & collaborate around data w/ other regions to enhance & scale impact

- Connecting to other regional initiatives enables scaling of programs & impact
- Integrating data creates more comprehensive & robust datasets for research, evaluation, & collective impact
- Regional collaborations build broader trust and understanding
- "State-focus" can improve outcomes for more people & diverse populations
- Statewide collaboration further reduces burden & improves efficiencies





HEALTH EQUITY COLLECTIVE

Driving Better Health Together

#UTHealth Houston

School of Public Health Center for Health Equity <u>https://sph.uth.edu/research/centers/che/</u>

THANK YOU

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