

The Grady Heart Failure Program: An Implementation Guide for Public Health Practitioners

AREB 2022 Coffee Break Presentation

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Centers for Disease Control and Prevention
National Center for Chronic Disease Prevention and Health Promotion
Division for Heart Disease and Stroke Prevention



MODERATOR:

Hello and welcome to today's Coffee Break presented by the Applied Research and Evaluation Branch in the Division for Heart Disease and Stroke Prevention at the Centers for Disease Control and Prevention.

My name is Allison White. I am an ORISE Fellow, and I will be acting as today's moderator. Our presenter is Jasmin Minaya-Junca, an evaluator on the Evaluation and Program Effectiveness Team within the Division for Heart Disease and Stroke Prevention's Applied Research and Evaluation Branch.

Before we begin...

- All phones have been placed in SILENT mode.
- Any issues or questions?
 - Use Q & A box on your screen
 - Email AREBheartinfo@cdc.gov



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MODERATOR:

Before we begin, there are some housekeeping items. If you are having issues with audio or with seeing the presentation, then please message us using the chat box or send us an email at AREBheartinfo@cdc.gov. Since this is a training series on applied research and evaluation, we hope you will complete the poll at the end of the presentation and provide us with your feedback.


Disclaimer

The information presented here is for training purposes and reflects the views of the presenters. It does not necessarily represent the official position of the Centers for Disease Control and Prevention.

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MODERATOR:

As a disclaimer, the information presented here is for training purposes and reflects the views of the presenters. It does not necessarily represent the official position of the Centers for Disease Control and Prevention. So, without further delay. Let's get started. Jasmin, the floor is yours.



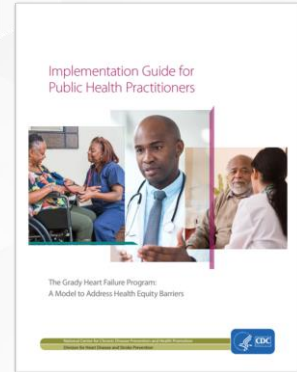
Overview
Implementation Guide Purpose
Implementation Guide Structure
Where to Locate the Implementation Guide
Additional Resources
Public Health Implications
Q & A

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Thank you, Allison! In today's Coffee Break, I will walk through the implementation guide we created with the Grady Heart Failure Program by highlighting the keyways public health and healthcare professionals can use the guide to improve health equity and eliminate barriers to health. I'll begin with an overview of how the team learned about the Grady Heart Failure Program, then discuss the guide's purpose and structure. Next, I'll go through all five sections of the guide and where to locate it on our Division's website. I'll conclude by discussing additional resources related to the guide, key considerations for implementation, and the importance of using the guide in your work.

Overview

- In 2020, Non-Hispanic Black people had the highest heart failure mortality at 26.9 per 100,000¹
- DHDSP identified the Grady Heart Failure Program (GHFP) for an effectiveness evaluation in 2017
- GHFP was established in 2011
- Implementation Guide for Public Health Practitioners
 - The Grady Heart Failure Program: A Model to Address Health Equity Barriers
 - Based on DHDSP's evaluation of the GHFP's implementation and efforts to address patient's social needs



1. NATIONAL CENTER FOR HEALTH STATISTICS. MULTIPLE CAUSE OF DEATH 1999–2020 ON CDC WONDER ONLINE DATABASE WEBSITE. . ACCESSED JANUARY 13 AND FEBRUARY 21, 2022. [HTTPS://WONDER.CDC.GOV/MCD-ICD10.HTML](https://wonder.cdc.gov/MCD-ICD10.HTML)

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Racism is a public health emergency that creates a system of health disparities for communities of color in the United States. This has resulted in poorer cardiovascular health outcomes. In 2020, Non-Hispanic Black people had the highest heart failure mortality at 26.9 per 100,000. Our division is committed to advancing health equity and, as a result, we worked with the Grady Heart Failure Program in 2017 to conduct an effectiveness evaluation to learn how the program advances health equity by addressing social needs amongst their patient population.

The intervention was implemented at the Grady Heart Failure Program at Grady Memorial Hospital, a public, safety-net hospital located in downtown Atlanta, Georgia. The program was launched in March 2011, and since then, have led to the creation of several evaluation resources. One product of the evaluation is the Grady Heart Failure Implementation Guide for Public Health Practitioners: The Grady Heart Failure Program: A Model to Address Health Equity Barriers. This guide is based on the Program's evaluation by CDC's Division for Heart Disease and Stroke Prevention (DHDSP).

Implementation Guide Purpose

- To support public health practitioners & health care professionals focused on improving health equity.
- The guide shares considerations for replication and the unique characteristics of organizational settings to enhance tailoring of the GHFP's core elements.



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The purpose of this guide is to support public health practitioners and health care professionals who are focused on improving health equity. The guide provides a detailed description of an intervention intended to address health disparities among heart failure (HF) patients. **It also outlines the considerations for replicating the implementation approach, implications for the facilitators, challenges, assets, and needs of patient populations, as well as recognizing the unique characteristics of different organizational settings to enhance tailoring of the GHFP's core elements.**

Implementation Guide Structure

- The guide is divided into five main sections
 1. Introduction
 2. Getting Started with a Health Equity-Focused Program
 3. Core Elements of the Grady Heart Failure Program
 4. Program Monitoring and Evaluation
 5. Conclusions
- Appendices and references are included at the end of the document.

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The implementation guide is divided into five main sections:

1. Introduction
 2. Getting Started with a Health Equity-Focused Program
 3. Core Elements of the Grady Heart Failure Program
 4. Program Monitoring and Evaluation
 5. Conclusions
- Appendices and references are included at the end of the document.

1. Introduction

- Divided into 3 Sub-Sections:
 - 1.1 Background
 - 1.2 Program Overview
 - 1.3 Why Consider this Model?



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The introduction is divided into three sub-sections:

- 1.1 Background
- 1.2 Program Overview, and
- 1.3 Why Consider this Model?

1.1 Background



- The Grady Heart Failure Program (GHFP) is designed to address socioeconomic barriers to care at the individual level.
- This guide is based on insights gained from an evaluation of the GHFP conducted by the Centers for Disease Control Prevention (CDC).
- The goal of the evaluation was to assess how the intervention reduced barriers to health equity, defined as **“every person has the opportunity to ‘attain his or her full health potential’”**² in cardiovascular disease (CVD).



2. CENTERS FOR DISEASE CONTROL AND PREVENTION. HEALTH EQUITY. ACCESSED DECEMBER 18, 2020.

As mentioned before, the Grady Heart Failure Program (GHFP) is located at Grady Memorial Hospital (GMH) in Atlanta, Georgia. It was designed to help address socioeconomic barriers and social needs that patients have that may impact access to quality care. This implementation guide is based on insights gained from an evaluation of the GHFP. The goal of the evaluation was to assess how the intervention reduced barriers to health equity, defined as “every person has the opportunity to ‘attain his or her full health potential’” in cardiovascular disease (CVD).

1.2 Program Overview

- Shares background information about the Grady Heart Failure Program
 - Location
 - Service area
 - Number of patients
 - Patient demographics
- Five Core Elements of the Program
- GHFP-Patient Engagement from Intake to Post-Discharge



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The Program Overview Sub-section shares information about the Grady Heart Failure Program such as its location, service area, number of patients, and patient demographics. It also introduces the five core elements of the program that address health equity. Lastly, it provides a brief description of the GHFP-patient engagement form intake to post-discharge.

1.3 Why Consider this Model?

Presents 4 reasons why the GHFP model warrants consideration:

1. Core elements targeting barriers to health equity
2. Positive cardiac-related outcomes
3. Connection to community
4. Alignment with public health goals



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This section also discusses four reasons the GHFP model should be considered for replication.

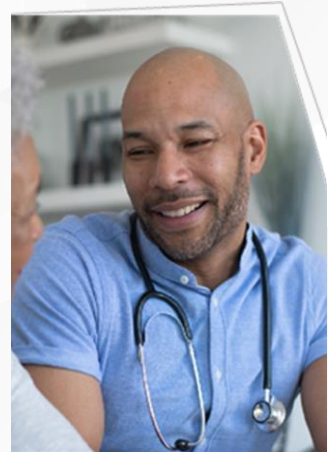
The four reasons are:

1. Core elements targeting barriers to health equity
2. Positive cardiac-related outcomes
3. Connection to community
4. Alignment with public health goals

This section is important because it explains why this model warrants consideration as a path for promoting health equity in hospital settings and underscores that the program has documented outcomes that are associated with a reduction in hospital readmissions and length of stay for participants.

2. Getting Started with the Grady Heart Failure Program

- Reviews several planning tasks in developing a cardiac care program focused on advancing health equity
- Tasks include:
 - Identify needs, assets, and barriers
 - Consider staffing structures and funding mechanisms
 - Plan for sustainability
- Contains a table that suggests questions and resources to help identify needs, assets, and barriers



The second main section of the guide explores several critical planning tasks in developing a cardiac care program focused on advancing health equity. More specifically, this section discusses the following tasks that can inform the development and tailoring of the audience's implementation strategy.

- The tasks include:
 - Identify needs, assets, and barriers
 - Consider staffing structures and funding mechanisms
 - Plan for sustainability

This section also highlights a table that suggests questions and resources that can help identify needs, assets, and barriers for consideration before tailoring the GHFP to other communities.

3. Grady Heart Failure Program Core Elements to Reduce Barriers to Health Equity

This section describes implementation of the 5 core elements of the GHFP to reduce barriers to health equity:



Core Element 1: Provide the initial 30-day medication supply.



Core Element 4: Provide mobile health visits.



Core Element 2: Assist with financial counseling.



Core Element 5: Link to community services after discharge.



Core Element 3: Assist with transportation for outpatient visits.

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The third section describes implementation of the five core elements of the GHFP to reduce barriers to health equity. The core elements are:

- 1. To provide the initial 30-day medication supply.
- 2. To assist with financial counseling.
- 3. To assist with transportation for outpatient visits.
- 4. To provide mobile health visits.
- 5. To link to community services after discharge.

This section illustrates how the core elements work together to intervene on the social needs of patients to improve health equity.

Example Core Element

**Core Element 1:
Provide the Initial 30-Day Medication Supply**

In the box below, highlights for providing the initial 30-day medication supply (Core Element 1) are summarized.

Core Element / Highlights	
Summary of Component	Partner with a hospital/health system pharmacy to provide a 30-day supply of prescribed medications, free or at a nominal cost, when HF patients are discharged.
Considerations for Implementation	<ul style="list-style-type: none"> Arrange with the pharmacy to cover the costs of the initial medication supply. Ensure that a system is in place to deliver medications to patients before they leave the hospital. Use the opportunity to discuss with patients how they can maintain access to medications once the initial supply is used.
Infrastructure Required	An in-hospital pharmacy or alternative to explore partnering with pharmacists in the neighborhood where most patients live.
Key Staff Involved	The patient's in-hospital physician, the program APF consulting with the patient's pharmacist, a patient liaison, and a CHFP.
Associated Costs	Will vary substantially depending on typical medications prescribed, health system purchasing practices, and willingness of partners to help subsidize the cost. The CHFP paid an estimated \$3,000 for medications for 430 new eligible patients for a recent year. In addition, the HF liaison spends 10% of her own time helping patients get their medicines if they did not receive it in the hospital.

Description of the Initial 30-Day Medication Supply

An important barrier to being a healthy life with HF is access to medications. Being able to afford medications is difficult for patients without insurance and with a limited income, particularly if they have been prescribed multiple medications. To assist patients in adhering to their medication schedule and to help with the cost of medication, CHFP participants are prescribed and provided a 30-day supply of their HF medications at discharge. This supply aids in the financial and logistical burden of adhering to a medication regimen.¹⁴ This precaution also ensures that many patients are guaranteed to have their necessary medications until their next follow-up appointment, especially since CHFP participants typically have this appointment within the first week of discharge. Providing participants their medication also saves them the burden of visiting a pharmacy (e.g., securing transportation).

Implementation of the Initial 30-Day Medication Supply

Patients' initial 30-day supply of medication is ordered through the hospital pharmacy before discharge and sent to the patient's room. As CHFP patients are frequently moved to a discharge lounge if they are ready to leave but their transportation has not yet arrived, if the patient is moved to the lounge and discharged before delivery of their medication, then the patient liaison may arrange to deliver the medications or to have the prescription filled at a pharmacy near the patient. About 10% of the liaison's effort is dedicated to following up on such deliveries. The APF may also provide some medication assistance. The medications are provided free or at a discounted rate, depending on the patient's need. The medication is financed by the program to ensure that each patient starts off with the ability to adhere to their prescribed regimen and has the time to find other resources to continue access to their medication.

Providing an initial medication supply to participants is not a long-term solution to medication access. In rare circumstances, such as extreme financial need or having medication stolen, a CHFP patient may be able to get a second 30-day supply of medicine, but this can happen no more than once per calendar year. However, medication adherence is a critical component to HF management. Providing the initial 30-day supply is the first step to improving medication adherence and allowing all patients the same quality of care, regardless of financial status.

Implementation Cost for Providing Initial 30-Day Medication Supply

The cost of this core element will likely vary widely, depending on health system purchasing practices, the medications commonly prescribed to HF patients within the system, and the extent to which pharmacy partners or pharmaceutical manufacturers and suppliers may assist in subsidizing the cost. Not all patients receive the benefit, which is based on need; the cost to the CHFP for the CHFP is about \$3,000 per year. An additional major cost related to medication access is that CHFP staff provide about 34 pillboxes a year to patients in need to help them organize and remember to take their medications. In addition to the patient liaison, other staff may help with arranging the medication supply and with the socioeconomic barriers to medication adherence.

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    graph TD
      A[Patient Discharge] --> B[Prescriptions sent to hospital pharmacy by physician]
      B --> C[Medication orders filled in pharmacy]
      C --> D[Prescriptions sent back to CHFP]
      D --> E[Discharge nurse gives prescriptions to patient]
      E --> F[Patient goes home with medication]
  
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Figure 2. Intended Process at Patient Discharge

Here is an example of how the core elements are laid out in the implementation guide. This example is extracted from Core Element 1: Provide the Initial 30-Day Medication Supply. Each core element section begins with a box that summarizes the core element, considerations for implementation, infrastructure required, key staff involved, and associated costs. This box is followed by a description of the core element, implementation of the core element, and implementation costs and ends with considerations for replication the core element in a different hospital-based setting.

4. Program Monitoring & Evaluation

- Discusses core concepts in program monitoring and evaluation
- Benefits for public health practitioners
- Details how GHFP implements these core concepts in its program
- Describes key evaluation steps to include when planning program monitoring and evaluation efforts of a comprehensive, health-equity focused program



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The fourth section of the guide shares general guidance and a brief overview of the core concepts in program monitoring and evaluation. It lists benefits of program monitoring and evaluation for public health practitioners. It details how the Grady Heart Failure Program implements these core concepts in its program; and describes key evaluation steps to include when planning program monitoring and evaluation efforts of a comprehensive, health-equity focused program.

5. Conclusions

The conclusions section consists of two parts:

1. Overall strengths of the Grady Heart Failure Program
2. Key considerations for Implementation



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The fifth and last section consists of two parts:

1. Overall strengths of the Grady Heart Failure Program which notes the strengths identified during the evaluation of the program.
2. Key Considerations for Implementation – this part discusses the considerations that resulted from the evaluation of the program related to the development and implementation of a program like GHFP to improve health equity by reducing disparities in cardiovascular health in health care settings.

Key Considerations for Implementation



Identify Barriers to Health Equity



Ensure Team Commitment to the Program



Establish Strong Community Partnerships



Secure Data Management & Monitoring Systems

FOOTER (optional)

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In our evaluation, we recognized four key considerations for successful implementation:

1. Identify Barriers to Health Equity
 1. Understanding the unique local barriers, as well as the individual assets of the community, is a prerequisite for developing an intervention that can focus on promoting health equity.
2. Ensure Team Commitment to the Program
 1. Program participants noted a strong sense of caring and commitment from staff as a catalyst to helping participants respond to barriers related to health equity.
3. Establish Strong Community Partnerships
 1. Working in partnership with community organizations strengthened the program's ability to address socioeconomic barriers amongst participants.
4. Secure Data Management & Monitoring Systems
 1. Reliable data management and monitoring systems are required to identify measure of health equity-related outcomes. This may be beyond standard EMR data elements to allow for additional measures to track other patient social issues.

Appendix

- Glossary
- Grady Heart Failure Program Logic Model
- Program Resource for Planning Purposes
- Resources for Health Equity
- References



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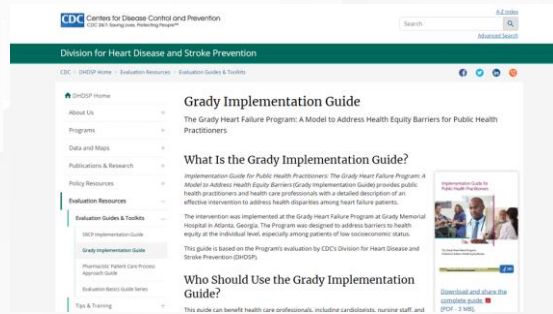
The implementation guide ends with an appendix. The appendix includes:

- Glossary to define key terms
- Grady Heart Failure Program Logic Model to provide an overview of the program
- Program Resource for Planning Purposes – a table that describes the program resources for the current program and early implementation considerations.
- Resources for health equity, and
- References

Where to Locate the Guide

The Grady Heart Failure Implementation Guide can be found at this link:

https://www.cdc.gov/dhdsp/evaluation_resources/guides/grady.htm



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The Grady Heart Failure Program can be found on our website at the link provided here, https://www.cdc.gov/dhdsp/evaluation_resources/guides/grady.htm.

Public Health Implications

- Health departments can help by developing collaborations/partnerships with their health systems.
- This implementation guide explains how a hospital-based intervention can help improve equity in a patient population disproportionately affected by cardiovascular disease.
- The guide shares tools that help address health equity and socioeconomic barriers to care among patients.



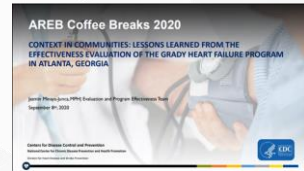
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Hospitals play a vital role in creating a more equitable society through health care, wellness, educational, and service opportunities. This presents an opportunity for health departments to help by developing collaborations or partnerships with their health systems to advance health equity in populations that carry the highest burdens of cardiovascular disease. This implementation guide is important because it explains how a hospital-based intervention can help improve equity in a patient population disproportionately affected by cardiovascular disease.

The guide shares promising tools that help address health equity and socioeconomic barriers to care among patients. This information can be used to help other public practitioners consider social needs interventions that the populations they serve.

Resources

- Field Notes
 - Grady Heart Failure Program
 - [Field Notes: Grady Heart Failure Program \(cdc.gov\)](#)
- Coffee Break
 - [September 8, 2020: Context in Communities: Lessons Learned From the Effectiveness Evaluation of the Grady Heart Failure Program in Atlanta, Georgia pdf icon](#)
- Publication
 - The implementation cost of a safety-net hospital program addressing social needs in Atlanta
 - [The implementation cost of safety-net hospital program addressing social needs in Atlanta- PubMed \(nih.gov\)](#)

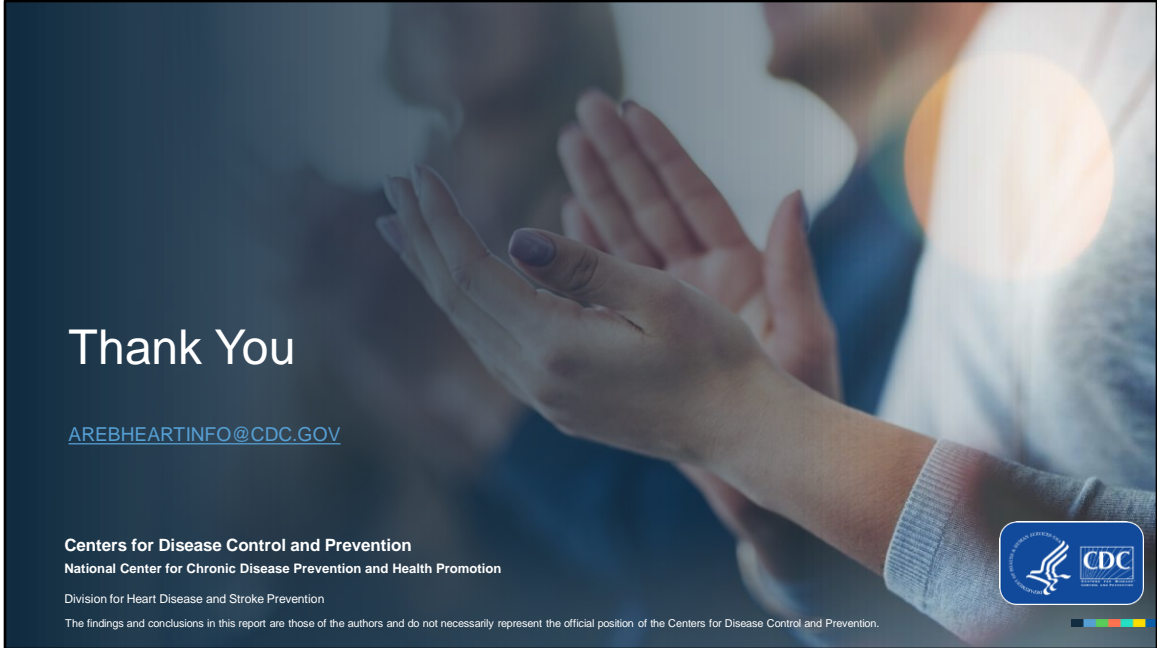


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As mentioned at the beginning of this Coffee Break, the implementation guide was only one product that came from our evaluation of the Grady Heart Failure Program. This slide lists some other products from the evaluation as resources that you may be interested in exploring further.

- We have a field note.
 - We use field notes as an opportunity to highlight promising practices across the nation.
 - The Grady Heart Failure Program is featured in one of our field notes. This field note describes the program and showcases its early outcomes from a systematic screening and assessment.
 - The link is provided on the slide.
- Coffee break
 - Two years ago, I presented another coffee break about the Grady Heart Failure Program.
 - In that coffee break I discussed our real-world evaluation of the Grady Heart Failure Program including the methodology we used and some of our key findings and considerations for evaluating health equity programs in the field.
- Publications

- We've published a manuscript in the journal of Health Services Research entitled, "The implementation cost of a safety-net hospital program addressing social needs in Atlanta."
- In this paper we described the cost of integrating social needs activities into the program to work towards health equity.



MODERATOR

Hi all. This concludes today's Coffee Break presentation. At this time, we will take questions from the audience. Please enter your question into the Q/A feature at the bottom of your screen. As we wait for questions from the audience, I'll ask Jasmin a question to get us started.

Question: Thank you for your presentation, Jasmin. The Grady Implementation Guide is a guide that focuses on a hospital-based program. How can this guide be applied to health departments and the work that we do?

Answer: That is a great question! While the Grady Heart Failure Program is a hospital-based intervention, the elements that they used to address social needs in their patient population can be readily translated to the public health arena. For example, one of the core elements of the program is to assist with transportation. Health departments can look at how transportation, or lack thereof, impacts the populations that they work with and how health departments can form community partnerships to help address transportation needs. Health departments can also include health systems in their network to create a bridge between the clinical setting and the

community setting.