

COMMUNITY SPOTLIGHT

CHP PARTICIPANT COMMUNITY VANDERBILT UNIVERSITY DEPARTMENT OF HEALTH POLICY

Nashville, TN



“Despite many programs and resources dedicated to this problem, no coordinated solution has been identified to date to address the full scale of the infant mortality challenge in Nashville.”

COMMUNITY OVERVIEW

The Vanderbilt University Department of Health Policy is committed to bringing together a broad group of scholars devoted to developing health policy solutions. Through the Community Health Peer Learning (CHP) Program, they aim to decrease infant mortality rates by developing a data-sharing network to study predictors of infant mortality and identify at-risk mothers and infants. With shared data from various sectors, the organization will be able to aggregate and analyze disparate data that will allow real-time identification of at-risk pregnant women and referral to specific and appropriate interventions. By engaging new community partners and including additional data, they anticipate improving their predictive model until they can correctly place 95 percent of prior years' infant deaths into the highest tercile of risk.

PROJECT APPROACH

In order to identify high-risk pregnant women and families for referral to community-specific and culturally appropriate interventions, the project will:

- Gather data on health status and social, economic, and environmental conditions that may affect a woman during pregnancy or both a post-partum woman and infant;
- Aggregate and analyze disparate data types to formulate recommendations for development of the predictive model and implementation strategy;
- Assess and incorporate new data sources as needed in an iterative process;
- Build upon existing models, interventions, and programs; and
- Host community engagement studios in order to facilitate novel relationships and data sharing processes between partners.

ANTICIPATED IMPACT

The development of an effective predictive model will allow community partners to improve the efficacy of their intervention strategies and decrease infant mortality in Nashville. The community and key partners are committed to using their work to develop concrete policy recommendations that can be implemented in Nashville and other communities nationwide.

PROJECT SNAPSHOT

Site Type	Not-for-profit
Health Category	Maternal/child health
Health Objective	Decrease infant mortality rates Interim goal: better identify and target interventions
Geographic Scale	County
Sectors	Lead: Research Institutes/Academia Partners: Public Health, Community-based Organizations Data contribution: Public Health, Social Services, Housing, Health Care, Criminal Justice Other stakeholders: Environment
Data Types	Public records, survey data, public health data, insurance claims
Data Integration	Develop a data-sharing network to study predictors of infant mortality and identify at-risk mothers and infants

PROJECT TIMELINE

MONTHS 1-6	MONTHS 7-12	MONTHS 13-17
<ul style="list-style-type: none"> • Meet with partners to discuss data and sharing strategies • Share data electronically for risk prediction model • Create model to identify high-risk mothers/infants • Test predictive model using previous infant mortality data • Engage new partners to fill data gaps and new data collection 	<ul style="list-style-type: none"> • Test predictive model using previous infant mortality data, as needed • Engage new partners to fill data gaps and new data collection, as needed • Develop Community Action Plan (CAP) 	<ul style="list-style-type: none"> • Develop CAP and vet externally • Host community engagement studios • Consult with CBOs to tailor interventions • Begin using algorithm to target interventions • Collect ongoing feedback and monitor data sharing

LEAD AGENCY

- **Vanderbilt University Department of Health Policy** (<https://medschool.vanderbilt.edu/health-policy/>) brings together a broad group of health policy scholars devoted to developing health policy solutions that can have a profound impact. The faculty and staff have experience collecting, exchanging, and using health data, as well as expertise in translating research into policy actions. As a part of the Vanderbilt University School of Medicine, the department is committed to improving health outcomes in Nashville, as well as nationally.

PARTNERS/COLLABORATORS

- **Metro Public Health Department (MPHD) of Nashville and Davidson County:** As the health department for Nashville and Davidson County, MPHD leads public health initiatives across the area and has implemented several programs aimed at promoting healthy pregnancies and safe environments for infants. MPHD currently collects vital records data and detailed information on infant deaths to target infant mortality interventions.
- **Tennessee Department of Health, Division of Family Health and Wellness:** Tennessee's Department of Health is responsible for implementing public health policy on the state level and for aggregating data from county health departments. As part of the Division of Family Health and Wellness, the Maternal and Child Health section's mission is: "To maximize the potential of Tennessee children and families."
- **NashvilleHealth:** A program of the Community Foundation of Middle Tennessee, NashvilleHealth is a non-profit, neutral convener that works towards the goal of improving the health of Nashville's residents. It aims to enhance dialogue, align resources, and build strategic partnerships to facilitate the development and scaling of health promotion solutions.

MEET THE PROJECT TEAM!



Melinda Buntin, Ph.D.

Professor & Chair, Department of Health Policy
 CHP Role: Principal Investigator
 Contact: melinda.buntin@vanderbilt.edu

Ask her about:

- Modeling a risk prediction algorithm
- Health care financing and reimbursement
- Insurance coverage



Kim Unertl, Ph.D.

Assistant Professor, Biomedical Informatics
 CHP Role: Investigator
 Contact: kim.unertl@vanderbilt.edu

Ask her about:

- Applying community-based participatory research principles to health information technology projects
- Understanding components of a regional health information ecology and their interactions
- Identifying facilitators and barriers to incorporating health information exchange into clinical workflow



Carrie Fry, M.Ed.

Data Analyst, Health Policy
 CHP Role: Health Policy Data Analyst
 Contact: carrie.e.fry@vanderbilt.edu

Ask her about:

- Engaging community-based organizations
- Managing multiple sources of data
- Maintaining communication with partner organizations



Christine Whitmore, Ph.D.

Research Assistant Professor, Health Policy
 CHP Role: Project Manager
 Contact: christine.whitmore@vanderbilt.edu

Ask her about:

- Conducting focus groups
- Developing survey instruments
- Gathering and using qualitative data