Request for Applications

National Association of Chronic Disease Directors (NACDD)

Enhancing Capacity to Use GIS for a Multisector Approach to Reducing the Burden of Heart Disease and Stroke and Increasing Cardiovascular Health Equity

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Key Dates
Application Open: Monday, February 4, 2019
Application Q&A Session: Monday, February 11, 2019, 1:00-2:00 p.m. Eastern Time
Register for the session here:
https://attendee.gotowebinar.com/register/4165989481020680193
This session will be recorded and posted on the NACDD GIS Webpage within 2 days following the webinar, along with Frequently Asked Questions.
Application Due Date: Friday, March 8, 2019
Notification Date: Monday, March 18, 2019

Eligibility: All REACH Grantees are eligible to apply.

Acronyms/terms used in this RFA

CDC:	Centers for Disease Control and Prevention
CEHI:	Children's Environmental Health Initiative at Rice University
NACDD:	National Association of Chronic Disease Directors
Guidance Team:	Project leads from CDC, NACDD, and CEHI
REACH:	Racial and Ethnic Approaches to Community Health

Executive Summary

The goal of this project is to increase the capacity of local health departments or other organizations participating in CDC's Racial and Ethnic Approaches to Community Health (REACH) cooperative agreement (CDC-RFA-DP18-1813) to use GIS for a multisector approach to reducing the burden of heart disease and stroke and improving cardiovascular health equity, with a focus on high blood pressure and high blood cholesterol. Heart disease and stroke are leading causes of death in the United States and approximately 1.5 million heart attacks and strokes occur each year. High blood pressure and high blood cholesterol are among the key risk factors for heart disease and stroke, and prevention and management strategies for both are most effective with a community-clinical linkage approach that involves multiple sectors of society.

Multisector approaches are essential to reducing the burden of heart disease and stroke because there is a wide range of influential community-level conditions including: 1) aspects of the built environment (e.g. access to and quality of opportunities for physical activity, healthy food environments, medical care, and living conditions); 2) prevalence of biomedical and behavioral risk factors, particularly high blood pressure, high cholesterol, and tobacco use; and 3) social determinants of health, such as poverty, education, social isolation, etc. Consequently, many sectors (e.g. public health, housing,

transportation, education, health care, urban planning, etc.) play a role in reducing the cardiovascular burden and improving cardiovascular health equity. Overall, multisector approaches are demonstrated to have greater positive impacts on health outcomes than single sector approaches and are a key component of Public Health 3.0. (DeSalvo, Karen B., et al.,2016; see also Erickson, Jane, et al, 2017; Towe, Vivian L., et al., 2016)

GIS are a powerful set of tools that can inform effective and efficient multisector approaches to heart disease and stroke prevention and management at the community level. GIS training that is tailored for local organizations and their multisector partners is highly valuable for identifying a) high burden populations, b) opportunities to enhance community-clinical linkages at the patient and/or community level, and c) shared goals and objectives for improving community-wide cardiovascular health. For example, GIS in a multisector approach can be used to identify where additional community and/or clinical services are needed and to inform how sectors could work collaboratively to provide those community and/or clinical services.

REACH grantees interested in learning GIS to enhance their multisector activities that address cardiovascular health equity are invited to submit an application. Potential areas of alignment with the community-clinical linkage strategies and activities of the REACH funding include, but are definitely not limited to:

- Promoting the use of appropriate and locally available programs for individuals in priority population(s) (e.g., Diabetes Prevention Program, Chronic Disease Self-Management Program, tobacco cessation services, Food Nutrition Education Programs, Special Supplemental Nutrition Program for Women, Infants, and Children, access to food banks, and assistance with housing or job training).
- Expanding the use of health professionals such as Community Health Workers, patient navigators, and pharmacists, to increase referral of individuals in the priority population(s) to appropriate and locally available health and preventive care programs.

This Multisector GIS Capacity Building project is funded by the Centers for Disease Control and Prevention (CDC) and provided in collaboration with the National Association of Chronic Disease Directors (NACDD) and the Children's Environmental Health Initiative (CEHI) at Rice University.

Terms of the RFA

Criteria for Selecting a Community

REACH grantees that demonstrate the following qualities will be eligible for selection:

- Focus on linking community and clinical efforts to increase access to health care and prevention for heart disease and stroke at the community level.
- Actively working on public health strategies to prevent and manage heart disease and stroke and other chronic diseases, with opportunities to address high blood pressure and/or high cholesterol, in a high burden population.
- Leadership that is committed to developing and/or enhancing GIS capacity within the applicant organization and inviting partner organizations to participate in the training.

- Access to geo-coded local-level datasets (e.g. census tract, zip code, point level) within the agency and/or partnerships with other sectors that have access to local level datasets for use in the proposed projects. Ideally, the applicant will have access (either directly or via partnerships, data sharing agreements, etc.) to local level clinical data for heart disease and stroke (e.g. electronic health record data, hospital data, survey data, Medicare data, etc.).
- Access to a local computer lab with enough computers for all members of the Core GIS Team (comprised of members from the awardee organization and partners) for a 2 ½ day workshop that will take place by July 31, 2019 (dates to be decided after the awardee is selected).
- Licensed ArcGIS (Desktop and/or Pro) software for lab machines and participant workstations, or IT support to install educational GIS licenses in a timely fashion prior to start of the GIS training.
- The level of GIS experience among the participants is flexible; training will be tailored to the existing levels of GIS experience.

Awardees will Receive

- **Pre-workshop assessments:** These assessments will be used to gather additional information about the awardee, the proposed projects, and multisector partners in order to tailor the contents of the training to the needs of the awardee.
- **Educational license authorization for ArcGIS Pro** software, eligible for 1 year.
- **Access to geo-coded processed, cleaned, and documented sub county datasets** from: the 2017 American Community Survey 5 Year Estimates; the National Provider Plan and Enumeration System (NPPES); and the US Centers for Disease Control and Prevention.
- **Pre-workshop interactive webinars:** Members of the awardee organization and multisector partners will attend a pre-workshop webinar about the use of GIS in a multisector setting. All proposed Core GIS Team members must attend this webinar. Webinars for each awardee and their multisector partners will take place in April 2019.
- **2.5 day in-person GIS Multisector workshop:** The Guidance Team (representatives from NACDD, CDC and CEHI) will collaborate with each awardee to plan and implement an in-person GIS training with staff from the awardee organization and multisector partners. The training will take place at the locale of each awardee in June 2019.
- **Ongoing access to telephone- and web-based expert GIS consultation through the end of the project period (July 31, 2019).**

Expectations of Awardee

- **Identify heart disease and stroke prevention and/or management activity(ies)** involving a multisector approach with existing partnerships that would benefit from the use of GIS. Applicants are encouraged to identify existing multisector projects that advance the prevention and management of heart disease and stroke, with a focus on hypertension and/or high blood cholesterol in their local area. Selected activities should align with the activities and strategies implemented by the REACH grantee through REACH funding.
- **Engage local partners and community coalitions** in a multisector approach to preventing and managing heart disease and stroke that uses GIS to identify
    - High burden populations

    - Opportunities to enhance community-clinical linkages at the patient level and/or the organizational level (with a focus on high blood pressure or high blood cholesterol)
    - Opportunities for supporting a comprehensive approach to cardiovascular health equity.
- **Collaborate with CDC, NACDD and CEHI** via conference calls and emails to identify GIS needs and focus for the GIS training.
- **Identify a Core GIS Team** consisting of at least 10 members, with no less than 1/3 from the applicant organization. Other members may be drawn from multisector partner organizations. The Core GIS Team should include at least one person currently working on cardiovascular disease prevention in the applicant organization. The Core GIS Team will participate in a 2 ½ day GIS training in June 2019 (dates to be determined after applicant is selected). GIS training content will include basic to intermediate level GIS skills in the following areas: data display; management and processing; and communication of results.
- **Establish an Extended GIS Team that will support and provide guidance to the Core GIS Team members.** The establishment of a strong and supportive GIS team is important for the long-term success of using GIS with a multisector focus. The Extended GIS Team should include members from key partner organizations across multiple sectors (including the REACH community coalition) and represent a diverse set of skills (e.g. data collection, analysis and database management; community assessment; community planning; outreach; partnerships; grant writing and reporting; epidemiology, program management, information technology, health department/organizational leadership, statistics, cardiovascular disease content expertise, and content expertise for other chronic diseases).
- **Identify a GIS Team Lead.** This person will serve as the primary point of contact for CDC, NACDD and CEHI and will serve on the Core Team, attend all GIS trainings, coordinate training participation and team assignments for this project, and coordinate involvement of members from the Extended Team. This person must be a REACH recipient and will be expected to lead the project activities for this application. Ideally, this person has experience working with cardiovascular disease prevention.
- **Participate in regular conference calls** with CDC, NACDD and CEHI**.**
- **Create maps** that inform and support a multisector approach to prevention and/or management of heart disease and stroke and incorporate feedback received from CDC, NACDD, and CEHI.
- **Share copies of maps produced during the course of the training** with the Guidance Team (unless sharing of particular maps is not approved by the applicant organization and/or its Core GIS Team partners), and with the larger public health community by posting maps to the CDC's web-based Chronic Disease GIS Exchange: http://www.cdc.gov/dhdsp/maps/gisx/; and CDC's Highlights Report: https://www.cdc.gov/dhdsp/programs/gis_training/gis_highlights.htm, and other venues.

References

DeSalvo, Karen B., et al. "Public health 3.0: time for an upgrade." *American journal of public health* 106.4 (2016): 621.

Erickson, Jane, et al. "A Pulse Check on Multi-Sector Partnerships." (2017).

Towe, Vivian L., et al. "Cross-sector collaborations and partnerships: essential ingredients to help shape health and well-being." *Health Affairs* 35.11 (2016): 1964-1969.

Evaluation Criteria:

Applicants will be competitively selected based on the following components:

- Knowledge of current activities, priorities and resources within the applicant agency that support a multisector approach to the prevention and management of heart disease and stroke, including work towards improvement of blood pressure and cholesterol management through community-clinical linkages. (20%)
- Vision and capacity for using GIS to support a multisector project/effort that addresses heart disease and stroke prevention, including blood pressure and/or cholesterol. (30%)
- Commitment to collaboration with internal and external partners to provide the infrastructure and organizational support for the Core GIS Team and Extended GIS Team. (30%)
- Access to georeferenced data for health outcomes and locations of community/clinical services. (20%)

Application:

1. Team Lead

   a. Name

   b. Contact information

      Email Phone

   c. Position

   d. Unit within Health Department or Organization

   e. GIS Training and Experience

   f. Role and experience with community-clinical linkages, especially related to high blood pressure and/or high blood cholesterol

2. Please describe current or planned efforts within your organization to enhance community-clinical linkages for the prevention of heart disease and stroke, including (but not limited to) the prevention and management of high blood pressure, high cholesterol, and other health risk factors. In this description, please describe any existing efforts to use GIS to inform these efforts.

3. Please propose up to three projects that use GIS in a multisector approach to address community-clinical linkages for heart disease and stroke prevention and cardiovascular health equity, including (but not limited to) the prevention and management of high blood pressure and/or high cholesterol. For each proposed project, please provide a project name and brief description; list of data sources that will be used and which Core Team members have access to and experience with the data sources; and whether data use agreements (DUA) needed to complete the proposed project are in place.

Project 1.

<table>
<tr><td colspan="3">Project Name (e.g. Access to Primary Care):</td></tr>
<tr><td colspan="3">Brief Description:</td></tr>
<tr><td colspan="3">How the Core GIS Team will work across their organizations and roles to complete the proposed mapping projects:</td></tr>
<tr><td colspan="2">Data Source #1</td><td>Core Team Member(s) with Access</td></tr>
<tr><td>DUA Needed? (Yes/No)</td><td>DUA In Place? (Yes/No)</td><td>DUA End Date</td></tr>
<tr><td colspan="2">Data Source #2</td><td>Core Team Member(s) with Access</td></tr>
<tr><td>DUA Needed? (Yes/No)</td><td>DUA In Place? (Yes/No)</td><td>DUA End Date</td></tr>
<tr><td colspan="2">Data Source #3</td><td>Core Team Member(s) with Access</td></tr>
<tr><td>DUA Needed? (Yes/No)</td><td>DUA In Place? (Yes/No)</td><td>DUA End Date</td></tr>
</table>

Project 2.

Project Name (e.g. Access to Primary Care):		
Brief Description:		
How the Core GIS Team will work across their organizations and roles to complete the proposed mapping projects:		
Data Source #1	Core Team Member(s) with Access	
DUA Needed? (Yes/No)	DUA In Place? (Yes/No)	DUA End Date
Data Source #2	Core Team Member(s) with Access	
DUA Needed? (Yes/No)	DUA In Place? (Yes/No)	DUA End Date
Data Source #3	Core Team Member(s) with Access	
DUA Needed? (Yes/No)	DUA In Place? (Yes/No)	DUA End Date

Project 3.

Project Name (e.g. Access to Primary Care):		
Brief Description:		
How the Core GIS Team will work across their organizations and roles to complete the proposed mapping projects:		
Data Source #1	Core Team Member(s) with Access	
DUA Needed? (Yes/No)	DUA In Place? (Yes/No)	DUA End Date
Data Source #2	Core Team Member(s) with Access	
DUA Needed? (Yes/No)	DUA In Place? (Yes/No)	DUA End Date
Data Source #3	Core Team Member(s) with Access	
DUA Needed? (Yes/No)	DUA In Place? (Yes/No)	DUA End Date

4. Please complete the tables below for the staff from your organization and partner organizations that will comprise the Core GIS Team.

Core Team Member Name	Position/Title
Organization Name	Sector (i.e, public health, education, housing, etc.)
Individual's role for this project (i.e. experience with the target community, assessment skills, GIS skills, etc)	

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5. Please list at least three (3) specific ways that the Team Lead for this project will support the efforts of the members of the Core GIS Team, promote the work of the Core GIS Team within the organization(s) involved in this project, and facilitate active participation with the members of the Extended GIS Team.

6. Please summarize why your organization would like to participate in this opportunity to incorporate the use of GIS into multisector approaches for cardiovascular health equity.

7. Please list the members of the Extended GIS Team.

Extended Team Member Name	Position/Title
Organization Name	Sector (i.e, public health, education, housing, etc.)
Individual's role for this project (i.e. experience with the target community, assessment skills, GIS skills, etc)	

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Individual's role for this project (i.e. experience with the target community, assessment skills, GIS skills, etc)	

8. Available computer lab facilities. Please describe to the best of your ability the computer lab facilities within your health department that could host web-based GIS training events and group work sessions.
    a. Number of workstations
    b. Hardware type
    c. Installed software
    d. Network and printing
    e. Please include contact information (name, position, e-mail, and phone number) for the appropriate technology staff for these computing resources.
9. Please include a statement that describes how leadership within the REACH grantee organization will provide support for this project. Identify 2-3 opportunities for building and sustaining support for project activities.
10. Please attach letter(s) of approval from the supervisor(s) of the Core GIS Team members, indicating approval for each team member's participation in this project.