

**The Gulf Region Health Outreach Program – An integrated public health response to the Deepwater Horizon Oil Spill**

**Ayanna V. Buckner, MD, MPH**

Department of Community Health and Preventive Medicine  
Morehouse School of Medicine  
720 Westview Drive, SW  
Atlanta, Georgia 30310-1495

**Leslie M. Beitsch, MD, JD**

Center for Medicine and Public Health  
Florida State University College of Medicine  
1115 W. Call Street  
Tallahassee, FL 32306-4300

**Bernard D. Goldstein, MD**

Graduate School of Public Health  
University of Pittsburgh  
Rm A710 Crabtree Hall  
130 De Soto St  
Pittsburgh, PA 15261

**ABSTRACT 300238:**

We describe the Gulf Region Health Outreach Program (GRHOP), a series of four integrated community-based projects designed to be embedded in and to complement the existing efforts undertaken by the public health community along the Gulf Coast. Funded from the Deepwater Horizon Medical Settlement, the GRHOP target beneficiaries are residents of 17 coastal counties and parishes in Louisiana, Mississippi, Alabama, and the Florida Panhandle. The GRHOP is unique in that it integrates projects focused on primary care, mental and behavioral health, environmental and occupational medicine, and training community health workers to help residents navigate the healthcare system and access needed care. We explore the evolution of the program, integration and collaboration among GRHOP projects, sustainability, and lessons learned. We also discuss how health professionals, public health organizations, and community groups, have come together, with lawyers from both the Plaintiff's Steering Committee and BP, to integrate their efforts toward the ultimate goal of bolstering evidence-based services and community resilience by increasing sustainable access to high-quality medical and mental and behavioral healthcare, increasing health knowledge among individuals, communities, and providers, and strengthening public health research infrastructure within an integrated public health program.

**INTRODUCTION:**

Poor health and health disparities have historically plagued communities living on the U.S. Gulf Coast. (Rudowitz, Rowland, and Shartzter, 2006; Jhung, et al, 2007) States along the Gulf have consistently been at the bottom of rankings for overall health, for infant mortality, as well as measures of prevalence of chronic conditions such as tobacco addiction, diabetes, hypertension, stroke, and obesity. (America's Health Rankings, 2012)

Healthcare access across the Gulf Region has historically been limited. This has been attributed to the compromised structure of the public health system and healthcare system overall, clinician shortages, particularly in rural areas, poverty, lack of insurance, and poor access to clinicians who accept government-sponsored programs. (PricewaterhouseCoopers, 2013) These problems are long-standing, existing prior to Hurricanes Katrina and Rita and the Deepwater Horizon oil spill. However, these problems may be exacerbated and/or highlighted by disasters, whether natural or man-made. (Kaiser Family Foundation, 2013; Cope, et al, 2013)

The health status of populations is frequently not a consideration after an oil spill. However, public health was an important consideration following the Deepwater Horizon Oil Spill because the communities of the Gulf Coast already had compromised health conditions that were exacerbated by the incident. These gaps can be seen in all aspects of healthcare capacity. They relate to the scope of healthcare in that certain needed health services such as environmental health specialists and adequate numbers of behavioral and mental healthcare providers were not available in communities impacted by the spill. The gaps relate to scale in that existing providers, where the capacity exists, were overwhelmed and had limited ability to respond during an emergency. The gaps relate to quality in that there was a need to ensure that the care provided was of a consistently high quality. The gaps relate to efficiency in that existing providers and clinics needed stronger administrative skills and technology in order to provide health services efficiently and sustainably.

The Gulf Region Health Outreach Program (GRHOP) is designed to address these gaps. We will describe the program and its evolution, discuss integration and collaboration among GRHOP projects, and explore sustainability, resilience, and lessons learned in the first year of implementation.

**The GRHOP's Origins:**

The GRHOP is a public health initiative with a rather unique origin - the Deepwater Horizon oil spill. The program resulted from negotiations between lawyers representing claimants and BP over the terms of a class action settlement. The claimants' lawyers expressed concern about potential physical and mental health effects of the spill on residents of the Gulf Coast, and they believed firmly that any settlement needed to address such issues. BP questioned whether mental and physical illnesses experienced by those in the Gulf Coast region were spill related. Both sides consulted with medical and public health experts and agreed that improving healthcare capacity and access for both class members directly and potentially Gulf Coast residents indirectly would benefit this historically underserved region. The parties to the settlement agreed to focus on creating a novel solution that would benefit members of the

settlement class. The GRHOP was approved by the U.S. District Court in New Orleans on January 11, 2013 and became effective on February 12, 2014. It is supervised by the court, and is funded with \$105 million from the Medical Settlement.

### **Program Description:**

The GRHOP is a series of four integrated, five-year projects to strengthen healthcare, especially among the uninsured and medically underserved, of 17 coastal counties and parishes in Alabama (Mobile, Baldwin), Florida (Escambia, Santa Rosa, Walton, Okaloosa, Bay), Louisiana (Orleans, Jefferson, St. Bernard, Plaquemines, Lafourche, Terrebonne, Cameron) and Mississippi (Hancock, Harrison, Jackson). The program is a collaboration among the Alliance Institute, the Louisiana Public Health Institute, Louisiana State University Health Sciences Center, Tulane University, University of South Alabama, University of Southern Mississippi, and University of West Florida.

The GRHOP focuses on activities with potential benefits lasting beyond the program's five-year duration. Its goal is to inform residents of targeted communities in the Gulf Region about their own health and provide them access to skilled frontline healthcare providers. Through the GRHOP, networks of specialists knowledgeable in addressing the physical, environmental, behavioral and mental health needs support the communities' frontline healthcare providers. The GRHOP is embedded in and complements, rather than detracts from or replaces, the existing efforts being undertaken by the public health community. It also involves local communities in the targeted areas, seeks input from communities, and builds capacity tailored to their specific needs. Through these approaches, the program aims to improve the resilience of the targeted communities to future health challenges.

### **GRHOP Projects:**

The four GRHOP projects:

- build the capacity of primary care community health clinics in the region (Primary Care Capacity Project),
- increase the mental and behavioral health expertise of health professionals in the targeted communities (Mental and Behavioral Health Capacity Project),
- increase awareness by local communities of mental and behavioral health issues (Mental and Behavioral Health Capacity Project),
- increase the environmental health expertise of health professionals in the targeted communities and the environmental health literacy of local communities (Environmental Health Capacity and Literacy Project), and
- train community health workers who will help residents navigate the healthcare system and access needed care (Community Health Workers Training Project).

### Primary Care Capacity Project:

Through the Primary Care Capacity Project (PCCP), the Louisiana Public Health Institute collaborates with public health and nonprofit organizations from all four states, the other GRHOP projects, and the Alliance Institute. The Louisiana Public Health Institute (LPHI) is a

statewide, nonprofit organization that coordinates and manages public health programs and initiatives in the areas of health systems development and health promotion/disease prevention and provides an array of services to help meet the needs of local and national partner organizations. The Alliance Institute is a nonprofit, community-based organization whose mission is to provide individuals, families, and organizations with the skills and information necessary for them to fully participate in the decision making processes that affect them in their homes, neighborhoods and communities. The Alliance Institute works across the GRHOP projects in cooperation with project leaders to coordinate community involvement and outreach efforts for the GRHOP.

The project goal is to expand access to integrated, high quality, sustainable, community-based primary care by developing the capacity of, and access to, community health centers to deliver integrated healthcare services that:

- use the patient-centered medical home, whole-person approach (Arend, et al. 2012; North, et al, 2014),
- advance the community-centered health home model (LA Health Action, 2014),
- improve quality of care and business operations,
- enhance patient-referral relationships with specialty and social services providers, in particular behavioral and mental health and environmental health specialists,
- improve community disaster preparedness and resilience, and
- support and sustain local community health assessment, planning, and implementation efforts.

The Louisiana Public Health Institute began its GRHOP activities with a series of community health needs assessments to help most effectively guide its efforts. The community health centers involved in the PCCP are typically Federally Qualified Health Centers (FQHCs). FQHCs are “safety net” providers that enhance primary care services in underserved urban and rural communities. (U.S. Department of Health and Human Services, 2013)

#### Mental and Behavioral Health Capacity Project:

The Mental and Behavioral Health Capacity Project (MBHCP) is implemented by a coalition of academic institutions (Louisiana State University Health Sciences Center, the University of Southern Mississippi, the University of South Alabama and the University of West Florida) across the Gulf Region with the following aims:

- provide mental and behavioral healthcare and longer-term capacity-building resources to improve the overall well-being of individuals, families, and communities in the targeted communities,
- advance models of integrated mental and behavioral healthcare within FQHCs and coordinated care within public school systems,
- together with other GRHOP partners, enhance the ability of community clinics to develop into high-quality one-stop shops that include integrated mental and behavioral healthcare,

- provide supportive therapeutic and strength-based mental and behavioral health services for children and families (Hoagwood, et al, 2001), including services within schools and communities, and
- provide additional training opportunities to facilitate community care provider access to and ability to deliver evidence-based practices.

### **Environmental Health Capacity and Literacy Project:**

The Environmental Health Capacity and Literacy Project (EHCLP), led by Tulane University, trains primary care professionals in FQHCs, other clinics that are part of the PCCP, and other healthcare organizations to evaluate individuals who may have experienced environmental exposures, offers peer consultations with environmental health experts, and assists with referrals of individuals to occupational and environmental health specialists.

The EHCLP also trains community health workers who work in FQHCs and other healthcare settings to identify environmental health needs and to direct community members to the appropriate local health resources for services and care. In addition, the project enhances the future capacity of environmental health science by integrating this field into high school curricula and by exposing high school students to environmental health research opportunities through close interaction with Tulane University faculty and graduate students.

### **Community Health Workers Training Project:**

Through GRHOP funding, the Community Health Workers Training Institute was established at the University of South Alabama. A major role of community health workers is to serve as a bridge between community members and health professionals, helping community members get access to and navigate healthcare options. (American Public Health Association, 2009) With the assistance of the other GRHOP projects, community health workers receive training through the institute on mental and behavioral health capacity and skills, environmental health networking approaches (described in the EHCLP section above), and primary care capacity. A group of program graduates will be employed by the health clinics in their local communities, with their salary and benefits paid through the EHCLP. They will provide educational resources to community partnerships, faith-based and non-profit community organizations, healthcare providers, and community leaders. This five-year investment will develop a network of trained local residents who will help strengthen the health foundation of the community and will continue to serve as community resources in the future. The project aims to improve the resilience of the targeted communities and enhance long-term community health and sustainability.

### **Integration and Collaboration among GRHOP projects:**

The design of the GRHOP is such that integration and collaboration of the projects are inherent. Projects interact with many of the same community-based, non-profit, and FQHC partners. For example, the Primary Care Capacity Project works with multiple FQHCs across the Gulf Region. The project may work with a given FQHC to implement the patient-centered medical home and community-centered health home models. Within the same FQHC, the Mental

and Behavioral Health Capacity Project and the Environmental Health and Literacy Project may provide clinical services. The Alliance Institute may partner with a community-based organization that has a representative on the FQHC's governing board of directors. The FQHC may also employ a community health worker who has been trained and placed at the center through the collaboration between the Community Health Workers Training Project and Environmental Health and Literacy Project. In this manner, the program is designed to strengthen an underserved community's existing healthcare infrastructure by enhancing established services and creating meaningful connections with new ones.

### **Sustainability:**

Public health infrastructure includes the systems, competencies, frameworks, relationships, and resources that enable health agencies to perform their core functions and essential services. Infrastructure categories encompass human, organizational, informational, legal, policy, and fiscal resources. (National Association of County and City Health Officials, 2014). The GRHOP is designed to bridge health gaps by enhancing existing infrastructure to build a more comprehensive and sustainable network of healthcare providers across the Gulf Coast, with expertise in primary care, environmental health, and behavioral and mental health. The GRHOP unites stakeholders—academic institutions, FQHCs, community-based organizations, government entities, and private organizations—and facilitates collaborative work to bolster community systems.

While the GRHOP is not directly a research program, it does enhance the framework upon which meaningful community-based research activities can be established, and it does intend to submit evaluations of the effectiveness of its activities for publication. GRHOP evaluation and subsequent community-based research activities provide the opportunity for the healthcare, public health, and oil spill communities to understand how oil spills impact individual and population health. Such knowledge promotes the development and refinement of lasting programs to mitigate the community health impacts of oil spills.

The GRHOP's sustainability focus emphasizes building upon existing public health infrastructure. For example, the Primary Care Capacity Project increases the efficiency and effectiveness of lower performing FQHCs and helps highly effective centers to expand into neighboring communities and, if necessary, to establish new primary care centers or networks. The project's efforts include helping existing clinics qualify as FQHCs or simply improving particular aspects of healthcare delivery ranging from record-keeping, to billing and pharmaceutical services. Additional examples of GRHOP sustainability targets include incorporation of community health workers and mental, behavioral, and environmental health professionals in clinical activities such that their work with the FQHCs continues after the five-year GRHOP funding period and expanding high school science curricula in the Gulf Region to permanently include environmental health.

### **Lessons Learned and Recommendations:**

1. When individuals from academic institutions work with communities, they are sometimes perceived as outsiders. (Kerstetter K., 2012) The implementation of the GRHOP has been

facilitated by its project leaders being members of the Gulf Coast community and being well known in their fields. Their previous work experience in the Gulf Region has assisted in establishing the community-based partnerships that are essential to GRHOP's work. (Osofsky HJ, Osofsky JD, et al., 2009; Bankston III, Carl L., et al., 2010; Hagland M., 2013; Arosemena FA, Fox L, Lichtveld MY., 2013; Wells KJ, Lima DS, et al., 2013) This has been particularly helpful, given the sensitive nature of public opinion regarding large oil spills. Involving trusted, experienced community members is recommended for public health response to oil spills. The GRHOP has experienced early successes, which we believe have been promoted by each of the projects being embedded in the communities they are designed to serve. Oil spill response leaders should identify project leaders and community partners who can help build public health capacity from the ground up, using knowledge of the local communities, each of which may have very different needs.

2. Without conducting thorough community assessments, costly health programs could be implemented that fail to address the community's needs. (American Public Health Association, 2009) Oil spill response leaders should consider engaging in community outreach and community needs assessment before implementing new programs to ensure that services offered are truly responsive to community needs and concerns. Community outreach should ensure that impacted communities are actively engaged and informed about response efforts. Community health workers have been effective in the post-disaster setting. (Wennerstrom A, Vannoy SD, et al., 2011; Scheib and Lykes, 2013) It may be helpful for oil spill response leaders to utilize community health workers to assess public health concerns and help to get the message out about how to access available public health services.
3. There are many agencies, organizations and projects that promote community health. Frequently, these entities work independently, and their work is not integrated or collaborative. However, achieving successful outcomes related to public health requires "coordinated and collaborative efforts of a number of programs spread across the federal government, other levels of government, and private and nonprofit sectors". (U.S. Government Accountability Office, 2014). Similarly, no single agency, organization or project can overcome the hurdles faced by communities impacted by oil spills. Oil spill response leaders have the ability to bring an influx of resources and talent to help address emerging community needs. Oil spill response leaders should consider existing public health infrastructure within communities and build upon a model of deliberate collaboration among public, private, and community-based leaders and resources.

Funding Acknowledgement: The Gulf Region Health Outreach Program was developed jointly by BP and the Plaintiffs' Steering Committee as part of the Deepwater Horizon Medical Benefits Class Action Settlement, which was approved by the U.S. District Court in New Orleans on January 11, 2013 and became effective on February 12, 2014. The Outreach Program is supervised by the court, and is funded with \$105 million from the Medical Settlement.

**REFERENCES:**

American Public Health Association. Conduct Research to Build an Evidence-Base of Effective Community Health Assessment Practice. (Policy Statement 20066, adopted November 2006). Washington, DC: American Public Health Association, 2009.  
<http://www.apha.org/advocacy/policy/policysearch/default.htm?id=1330>. Last accessed March 13, 2014.

American Public Health Association. Support for Community Health Workers to Increase Health Access and to Reduce Health Inequities. (Policy Statement 20091, adopted November 2009). Washington, DC: American Public Health Association, 2009.  
<http://www.apha.org/advocacy/policy/policysearch/default.htm?id=1393>. Last accessed March 16, 2014.

America's Health Rankings. United States Overview: 2012.  
<http://www.americashealthrankings.org/rankings>. Last accessed November 20, 2013.

Arend, J, Tsang-Quinn, J, Levine, C & Thomas, D. The patient-centered medical home: history, components, and review of the evidence. *Mount Sinai Journal of Medicine* 79, 433-450 (2012).

Arosemena FA, Fox L, Lichtveld MY. Reproductive Health Assessment After Disasters: embedding a toolkit within the disaster management workforce to address health inequalities among Gulf-Coast women. *J Health Care Poor Underserved*. 2013 Nov;24(4 Suppl):17-28. doi: 10.1353/hpu.2014.0013.

Bankston III, Carl L., et al. The sociology of Katrina: Perspectives on a modern catastrophe. Eds. David L. Brunson, David Overfelt, and Steven J. Picou. Rowman & Littlefield Publishers, 2010.

Cope MR, Slack T, Blanchard TC, Lee MR. Does time heal all wounds? Community attachment, natural resource employment, and health impacts in the wake of the BP Deepwater Horizon disaster. *Soc Sci Res*. 2013 May;42(3):872-81. doi: 10.1016/j.ssresearch.2012.12.011. Epub 2012 Dec 26.

Hagland M. The Louisiana Public Health Institute/Crescent City Beacon Community. In New Orleans, a public health consortium takes patient-centered care metro-area wide. Healthc Inform. 2013 Feb;30(1):18, 20, 26.

Jhung MA, Shehab N, Rohr-Allegrini C, Pollock DA, Sanchez R, Guerra F, Jernigan DB. Chronic disease and disasters medication demands of Hurricane Katrina evacuees. *Am J Prev Med*. 2007 Sep;33(3):207-10.

Hoagwood K, Burns BJ, Kiser L, Ringelson H, Schoenwald SK. Evidence-based practice in child and adolescent mental health services. *Psychiatric Services* 52:1179-1189, 2001.



Kaiser Family Foundation. Addressing the Health Care Impact of Hurricane Katrina. Kaiser Commission on Medicaid and the Uninsured. <http://kaiserfamilyfoundation.files.wordpress.com/2013/01/7387-2.pdf>. Last accessed November 21, 2013.

Kerstetter K. Insider, outsider, or somewhere in between: The impact of researchers' identities on the community-based research process. *Journal of Rural Social Sciences*, 27(2), 2012, pp. 99–117.

LA Health Action. Community-Centered Health Homes: Bridging the gap between health services and community prevention. [http://www.lahealthaction.org/library/HE\\_Cmty-centered\\_health\\_homes\\_032311.pdf](http://www.lahealthaction.org/library/HE_Cmty-centered_health_homes_032311.pdf). Last accessed March 16, 2014.

National Association of County and City Health Officials. Programs and Activities. Public Health Infrastructure and Systems. <http://www.naccho.org/topics/infrastructure/>. Last accessed March 13, 2014.

North SW, McElligot J, Douglas G, Martin A. Improving access to care through the patient-centered medical home. *Pediatr Ann*. 2014 Feb 1;43(2):e33-8. doi: 10.3928/00904481-20140127-08.

Osofsky HJ, Osofsky JD, et al. Posttraumatic stress symptoms in children after Hurricane Katrina: predicting the need for mental health services. *Am J Orthopsychiatry*. 2009 Apr;79(2):212-20. doi: 10.1037/a0016179.

PricewaterhouseCoopers. Report on Louisiana Healthcare Delivery and Financing System. <http://lra.louisiana.gov/assets/docs/searchable/reports/PwChealthcarereport427061.pdf>. Last accessed November 20, 2013.

Rudowitz R, Rowland D, Shartz A. Health care in New Orleans before and after Hurricane Katrina. *Health Aff (Millwood)*. 2006 Sep–Oct;25(5):w393–406.

Scheib HA, Lykes MB. African American and Latina community health workers engage PhotoPAR as a resource in a post-disaster context: Katrina at 5 years. *J Health Psychol*. 2013 Aug;18(8):1069-84. doi: 10.1177/1359105312470127. Epub 2013 Jan 24.

U.S. Department of Health and Human Services. Federally Qualified Health Centers Fact Sheet. Centers for Medicare & Medicaid Services. <http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network MLN/MLNProducts/downloads/fqhcfactsheet.pdf>. Last accessed November 21, 2013.

U.S. Government Accountability Office. Collaboration Across Governments, Nonprofits, and the Private Sector. Last accessed March 13, 2014.

Wells KJ, Lima DS, et al. Assessing needs and assets for building a regional network infrastructure to reduce cancer related health disparities. *Eval Program Plann.* 2013 Dec 26;44C:14-25. doi: 10.1016/j.evalprogplan.2013.12.003. [Epub ahead of print] PMID: 24486917

Wennerstrom A, Vannoy SD, et al. Community-based participatory development of a community health worker mental health outreach role to extend collaborative care in post-Katrina New Orleans. *Ethn Dis.* 2011 Summer;21(3 Suppl 1):S1-45-51.