



## Grand Challenges Canada: Integrated Innovations in Global Mental Health

### Project Title: Mental Health Beyond Facilities (mhBeF) Project

**Liberia Recipient of Grand Challenges Canada Award:** In September 2012 Liberia was awarded a prestigious Grand Challenges Canada grant as part of a three-country project entitled Mental Health Beyond Facilities Project (mhBeF) led by Makerere University School of Public Health, and the Carter Center Liberia. The three year initiative involves the Carter Center Mental Health Program, the JFK/ E.S. Grant Mental Health Hospital, the Ministry of Health, and the Liberia Center on Outcomes Research in Mental Health (LiCORMH).

**About Grand Challenges Canada:** Grand Challenges Canada is non-for-profit Canadian organization which serves as the conduit for delivering the Government of Canada 2008 federal “Development Innovation Fund” that seeks to “support the best minds in the world as they search for breakthrough in global health and other areas that have the potential to bring about enduring changes in the lives of millions of people in poor countries.”

Grand Challenges Canada funding innovative solutions, encompassing scientific, long term impact, and sustainable measures to address one or more of the following sub-challenges under the priority area “**improve treatment and expand access to care in low and middle income countries (LAMICS)**”. The sub challenges are

- Integrate screening and core packages of services into routine health care
- Reduce the cost and improve the supply of effective medications
- Provide effective and affordable community based care and rehabilitation
- Improve children’s access to evidence-based care by training health providers
- Develop effective treatments for use by non-specialists, including lay health workers with minimal training
- Incorporate functional impairment and disability into assessment, and
- Development mobile and IT technologies (such as telemedicine) to increase access to evidence-based care

**About the project:** The *Mental Health Beyond Facilities* (mhBeF) project is intended to develop an evidence-based Comprehensive Community Mental Health Services (CCMHS) package for *Persons With Severe Mental Disorders and Epilepsy* (PWSMDE) in *Low and Middle Income Countries* (LAMIC). mhBeF through the CCMHS will reduce the treatment gap between need and interventions, promote individual and family livelihood, and reduce stigma while enhancing effective psychosocial functioning of PWSMDE and their families.

**Project goal:** The Carter Center is instituting a community-based mental project in Sinoe that bridges the gap between clinical care and the community while strengthening livelihoods and reducing stigma toward PWSMDE.

**Project Assumptions:** Provision of multi-sectoral services to PWSMDE, that include quality, accessible and evidence based interventions, livelihood support and anti-stigma programming leads to reduction of symptoms and stigma, and improved functioning and productivity for PWSMDE and their families.

#### Project objectives:

- To define and develop the CCMHS package with an integral culturally specific mental health component
- To train health care workers, Community Resource Persons (CoRPs), and Patients Support Groups (PSGs) for the delivery of the CCMHS package
- To implement the CCMHS package in Liberia, Uganda and Nepal
- To evaluate the CCMHS package using a quasi-experimental research design

**Decisions Support and Outcomes Management (Mobile health):** This includes provision of android smartphones to trained health care workers to assist in collecting and managing patients’ clinical and demographic data. The application allows HCWs to input patient’s general information, and clinical data including visit, symptoms, diagnosis and prescription as well as identify health facilities. The mobile phones supports follow up of patients and also serve as a communication tool between the health care workers, their supervisors, and patients. Mental Health clinicians are also provided laptops for data collection through patients’ encounter form (PEF), software which feeds data into a central database.

**Collaborating countries:** The countries involved in the project are Liberia, Uganda and Nepal.

**Project strategy:** The CCMHS uses the existing structures and efforts in the three participating countries mentioned above. All activities in the project are integrated in the primary health care system in conformity with the Mental Health Global Action Program (mhGAP) guidelines. The lead agency in Liberia is the Carter Center Liberia Mental Health Program (MHP); and in Uganda and Nepal are Transcultural Psychosocial Organization (TPO Uganda and TPO Nepal).

**Project Implementation Site:** Sinoe County is the direct beneficiary of the project as the project site, however; much of the elements of this project will benefit the entire nation of Liberia.

Sinoe is one of Liberia’s 15 counties and it has 17 administrative districts. It is located in the southeast and has Greenville city as its capital. Sinoe has a population of 111,267 inhabitants. Its health infrastructures consist of 33 health facilities including one hospital F. J. Grante Hospital and 32 clinics. 39% of the population lives within distance of about 15km (3-4 hour walk) to access health services thereby causing facility based delivery in Sinoe County to remain one of the least compared to other counties around Liberia. While all health facilities have at least one health professional, Sinoe has significant health human resource capacity gaps. Sinoe has the third highest maternal mortality rate in the country ([Ministry of Planning & Economic Affairs., 2010](#)). According to the 2011 Accreditation Report, Sinoe ranked last in the national assessment of health care facilities and was the poorest performing county in health care production ([Ministry of Health and Social Welfare., 2011](#)).

Six of the County’s ten (10) health districts are involved in the project. The total population of the six districts is 49,321. The table below shows the six districts involved in the project with selected health facilities where services are provided:

| District    | Population | Facility         | Facility Catchment pop size | Network Availability |
|-------------|------------|------------------|-----------------------------|----------------------|
| Greenville  | 2385       | Lexington Clinic | 2,360                       | Good                 |
| Butaw       | 3,773      | Butaw Clinic     | 2,000                       | Good                 |
| Tarsue      | 7,326      | BOPC Clinic      | 7,326                       | Limited              |
| Dugbe River | 12,192     | Juaryen Clinic   | 2,387                       | No                   |
|             |            | Menwah Walker    | 3,625                       | No                   |
|             |            | Karquekpo        | 4,438                       | Limited              |
| Kpanyan     | 12,666     | Kabada Clinic    | 1,032                       | Limited              |
|             |            | Kilo Town        | 4,325                       | Good                 |
| Jeadea      | 10,976     | Government Camp  | 5,403                       | Good                 |
|             |            | Diyankpo Clinic  | 2,502                       | Limited              |

**Project Control Site:** For testing the benefits and effectiveness of the entire package, current services provided in Grand Kru, and River Gee Counties deemed treatment as usual (TAU) will be tested against the CCMHS package. Four health facilities under the supervision of Mental Health Clinicians (MHCs) in Grand Kru, and five facilities in River Gee where MHCs are placed will be used as controls. Grand Kru and River Gee share similar geographies with Sinoe and face similar health care conditions. As recorded by the 2008 National Population and Housing Census, Grand Kru County has a population of approximately 58,000 and River Gee has 66,789. Gran Kru has six districts while River Gee has 10 districts, interestingly they all share similar characteristics as Sinoe. The two counties are bordered on the west by Sinoe County.

The major components of the project are:

- Strengthening clinical, recognition, referral, assessment and management of PWSMDE in 10 clinics in Sinoe by health care workers and community resource persons (CORPs).
- promoting psychosocial and socio-economic support services for PWSMD through Patient Support Groups (PSGs), and
- Reducing stigma toward PWSMD and epileptics by targeting health providers, families, and PWSMD.

**Achievements:** Formative research has been conducted and a comprehensive community-based mental health service package training manual has been developed. Ten Health Care Workers, ten Community Health Volunteers and three Social Workers have been trained to implement the CCHMS package in Sinoe. Eleven Mental Health Clinicians (MHCs) already trained to provide

support supervision in Sinoe while 10 MHCs are providing services in the control (River Gee and Grand Kru Counties). MHCs in control counties were also trained in clinical symptoms scale assessment and data collection. Health care workers and mental health clinicians were trained on application of mhealth software on mobile phone to capture patients' clinical and demographic data. Anti-stigma training conducted for 160 persons including 10 MHCs, 100 health facility workers, 7 MH service consumers and family members, 23 religious leaders and traditional leaders and 20 law enforcement officers from Sinoe to lead community awareness. One hundred and fifty one PWSMD&E are enrolled into the study for treatment (80 in intervention arm and 71 in control arm) with the following conditions: 109-epilepsy, 15-psychosis, 4-bipolar and 23-depression. Initial data collection (T0-b) completed and follow-up data collection (T1) is ongoing. Two patients' support groups have been formed in two communities in Sinoe. One PSG have been trained in soap making and given support to establish enterprise. **Ongoing:** mhGAP training currently ongoing (November 23 – December 1, 2015) for OICs of additional 17 clinic in Sinoe. Additional 21 community health volunteers being trained in identification, referral, follow-up and anti-stigma support. By December 1, 2015 twenty seven midlevel health workers, thirty one community health volunteers and three social workers will be providing service in Sinoe. Ten midlevel health workers and 10 community health volunteers will be trained in Grand Kru in December 2015.

#### **Roles of Liberian Stakeholders/Partners in the project:**

- **The Carter Center & MoHSW:** Training of mid-level health professionals (nurses and physician assistants) in mhGAP-IG and other aspects of mental health care; and conducting small vocational rehabilitation program with consumers.
- Train community health volunteers in identification and referral of mental health cases. Train social workers in formation and management of patients support groups. Mental Health Clinicians (N=11 in Sinoe) provide supervision support as well as manage complex cases. Use mhealth component for clinical decision making
- **LiCORMH:** Refining and implementing family psycho-education manual using General Community Health Volunteers (gCHVs) and consumers groups, and conducting anti-stigma campaign.
- **Ministry of Health:** The MOH, the County Health Teams of Sinoe, River Gee and Grand Kru Counties and the Division of Preventive Services including the Mental Health Unit and Community Health Department are the major representatives of the Government of Liberia on this initiative. Provide the policy and practice framework for the implementation of the project.

#### **Project Coordinator**

Wilfred S. Gwaikolo, responsible for coordinating the daily activities of the project under the supervision of the Project Lead

#### **Liberia's Investigators:**

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