Blood Pressure Control Through Community Action

Multi Country Project implemented in Dominica, Haiti, Jamaica, St. Lucia, & St. Vincent & the Grenadines

Funded by the Australian Government Direct Aid Program (DAP)

September 2016
KEY SUCCESSES

117
Community ‘Screening Champions’ trained

7,712
individuals from vulnerable communities screened for elevated blood pressure using standardised approaches

2,422
individuals found to have elevated blood pressure and referred to local health centers for follow up

1,348
individuals (found to have elevated blood pressure and referred to local health centers for follow up) monitored for medication and lifestyle adherence

38
automated blood pressure monitors acquired by CSOs to support community screening
Development of
The Civil Society Community Blood Pressure Screening Guide
including community screening protocols based on the CDC
Barbados Pilot of the Standardised Hypertension Treatment Project (SHTP)

Capacity building
in online data entry, data collation and analysis

Partnerships
with local Ministries of Health Strengthened to improve referral and management

Capacity building
in financial management

Development of
a model for CSO led monitoring of patients to support medication and lifestyle adherence
THE HEALTHY CARIBBEAN COALITION

The Healthy Caribbean Coalition (HCC) is a registered non-governmental organization formed in 2008 in response to the Declaration of Port-of-Spain, “Uniting to Stop the Epidemic of Chronic Noncommunicable Diseases”. The HCC is the only regional network of Caribbean Health NGOs and civil society organizations with the remit to combat chronic noncommunicable diseases (NCDs), associated risk factors and determinants. Membership of the HCC presently consists of more than 60 Caribbean-based health NGOs and over 65 not-for-profit organisations. HCC also has individual and organisational members based in the Caribbean and across the globe.

The HCC 2012-2016 Strategic Plan, outlines four strategic areas: Advocacy; Enhancing Communication; Capacity Building; and Promoting mHealth and eHealth. These four strategic priority areas reflect that the HCC is a regional alliance with the expressed purpose of adding value to civil society in the Caribbean, and empowering people, specifically in the response to NCDs. It further reflects the HCC’s mandate to encourage and foster the execution of NCD projects and programmes in-country, undertaken and led by local civil society organizations.

Against the background of the need for a multisectoral response to the epidemic of NCDs, the HCC works closely with regional and international leaders in NCD prevention to leverage the power of civil society by strengthening and supporting active participation in the implementation of programmes aimed at reducing NCD associated morbidity and mortality. As an NGO in Official Relations with The Pan American Health Organisation (PAHO), the HCC and PAHO work closely on civil society engagement and mobilization around NCD prevention. The Caribbean Public Health Agency (CARPHA) is a major regional partner of the HCC working collaboratively through an MOU, to ensure that the civil society agenda is represented at the highest levels in matters of health and development.

For more information visit: www.healthycaribbean.org
The Direct Aid Program (DAP) is a small grants program funded from Australia’s aid budget. It has the flexibility to work with local communities in developing countries on projects that reduce poverty and achieve sustainable development consistent with Australia’s national interest. It sits alongside Australia’s longer-term country and multilateral development strategies and with its wide geographical reach, plays an important role in supporting local community efforts towards poverty reduction.

DAP is administered through Australia’s overseas diplomatic posts on an annual basis. In the Caribbean, DAP is administered through the Australian High Commission in Trinidad and Tobago. For more information visit: http://trinidadandtobago.embassy.gov.au/ptsp/cooperation.html.
HCC HISTORY WITH THE DIRECT AID PROGRAM

The HCC has received 3 grants from the Direct Aid Program (DAP)

The HCC was the recipient of a grant in 2013 for $112,800.00 USD in support of the Caribbean Civil Society Cervical Cancer Prevention Initiative (C4PI). Key achievements of this multi-country project include: the education and screening of 1835 vulnerable women for cervical cancer; provision of treatment vouchers to 60 uninsured Dominican women; training of 79 outreach workers in counselling and screening (Pap tests and VIA); conducting 22 community outreach sessions; the development and dissemination of 9000 cervical cancer education materials; the development of an HPV and Cervical Cancer Position statement; the production of a documentary about a survivor and a radio jingle; the production of a project documentary; and ongoing advocacy in support of the Caribbean Cervical Cancer Electronic Petition (CCCEP).

In 2015/2016 the HCC received $70,000 USD to further support cervical cancer prevention and control community programmes in Belize, Guyana and Haiti through the Caribbean Civil Society Cervical Cancer Prevention Initiative (C4PI). The project is currently underway and results will be shared upon completion at the end of 2016.

In 2014/2015 the HCC was the recipient of a grant for $110,000.00USD in support of the Blood Pressure Control Through Community Action (BPCCA). This is a report of this multi-country project aimed at strengthening the capacity of HCC member CSOs to more effectively deliver community-based, hypertension-related education, screening, referral and follow up in partnership with key stakeholders including local Ministries of Health.
Five HCC member civil society organisations were subgrantees for the project. The organisations were based in 5 Caribbean islands.

The Dominica Diabetes Association (DOMDA)

The Dominica Diabetes Association Inc. was founded in 1988 and became a member of the International Diabetes Federation (IDF) in 1994. The Association became a registered non-profit company in 2008, following a number of years of hibernation. DOMDA redefined itself as an organization committed to working collaboratively with organizations of similar orientation in the prevention and management of Chronic Non Communicable Diseases. The Association’s main focus is to promote wellness and help build self-management capacity among the population with special emphasis on people living with diabetes and related complications including hypertension.
Fondation Haitienne de Diabète et de Maladies Cardio-Vasculaires (FHADIMAC)

Created in 1987, FHADIMAC is the only specialized Institution in Haiti involved in the fight against Diabetes and Hypertension. Daily educational sessions on hypertension are provided to all members attending FHADIMAC. They are followed by meetings of patients and their parents. FHADIMAC also offers two weekly clinics for the economically challenged patients identified by its social program. FHADIMAC also conducts mobile clinics and screening sessions throughout the country. FHADIMAC is a member of the National Commission on NCDs.
The Heart Foundation of Jamaica (HFJ)

The Heart Foundation of Jamaica was established in 1971 by The Lions Club of Kingston in an effort to minimize the incidence of death from heart disease in Jamaica. As an independent, registered non-profit, non-governmental organization, The Heart Foundation of Jamaica remains committed to its aim of achieving this through its programmes of prevention. This objective is achieved by: prevention through education; early detection through screening programmes; and rehabilitation through education on healthy lifestyles. Internationally, the Heart Foundation of Jamaica is a member of The World Heart Federation and the InterAmerican Heart Foundation.
The St. Lucia Diabetes and Hypertension Association (SLDHA)

The St. Lucia Diabetes & Hypertension Association (SLDHA) was conceptualized on August 9, 1983 and nationally launched in April, 1989. It was established to attend to the welfare of diabetic and hypertensive individuals in St. Lucia, as well as to provide service to the general public. Activities are geared towards educating the public about the causes, prevention and control of diabetes and hypertension, hoping to stem the escalating number of persons afflicted and affected by these diseases.
The Lions Club of Kingstown SVG

The Lions Club of Kingstown SVG is a chartered member of Lions Clubs International. On November 2nd 2014 the organisation celebrated its fiftieth anniversary. The mandate is to improve the physiological needs of mankind. Living healthy is a priority focus of the mandate. To this end the organisation works in surrounding communities undertaking educational programmes and screening, in the areas of NCDs (including hypertension, diabetes, sight and cancer awareness).
The BPCCA – ‘Blood Pressure Control Through Community Action’ was a multi-phased project which aimed to strengthen the capacity of HCC member CSOs to more effectively deliver interventions aimed at contributing to a WHO determined set of nine voluntary global NCD targets agreed to by Caribbean Governments and including reduction in raised blood pressure by 25% by the year 2025 and a 30% reduction in salt/sodium intake by the year 2025.

The average rate of hypertension in the Caribbean is over 40% in adults. Many individuals are not only unaware of their condition but a high percentage of persons known to be hypertensive do not have their blood pressure well-controlled hence the need for screening and improved treatment in most at risk communities and referral for diagnosis and management.

The BPCCA supported civil society organisation (CSO) programmes in the area of hypertension detection. The project aimed to identify and educate those at risk for hypertension and associated complications; and routed these individuals into the health care system for disease management, leading to better control of hypertension and reduced risk of heart disease and stroke.
The Goal of the Blood Pressure Control Through Community Action was: To strengthen the capacity and community outreach of the Caribbean civil society around Hypertension detection and control initiatives. The objectives of the project were:

1. To improve the capacity of CS to provide high quality community based screening and monitoring for hypertension in support of PHC services thereby contributing to strengthened health systems.

2. To contribute to improved blood pressure control rates within the targeted communities.

3. To strengthen DAP 2 subgrantee and in-country - civil society networks and collaborations around hypertension reduction.

4. To strengthen the capacity of CS to contribute to national dialogue around national, regional and global (25*25) blood pressure related NCD targets.

5. To improve the financial management capacity of targeted CSOs.
Start Up

The project was initiated in February 2015 and officially closed in March 2016. Project implementation started with administrative management of the grant including the preparation of subgrantee Memorandums of Understanding (MOUs) containing detailed project workplans and logframes for monitoring of project progress. Two Clinical Project Advisors (medical doctors: Dr. Jamario Skeete and Dr. Addision St. John) were recruited from the Standardized Hypertension Treatment Project Pilot in Barbados – SHTP; where they serve as Clinical Fellows. The SHTP is a CDC (Centres for Disease Control) funded and PAHO/WHO supported initiative aimed at the development and implementation of a framework for standardizing the medical treatment of hypertension (central elements include a structured treatment approach with a core set of medications, treatment protocols with targets, and patient cohort monitoring). The pilot project was implemented in Barbados between 2014 and 2016 with the HCC acting as the fund managers. The Clinical Project Advisors were recruited to the BPCCA I to transfer the hypertension screening and management knowledge from the GHSTP to the community setting. In addition, the HCC is seeking to strengthen the clinician presence in grass roots health interventions through increased participation of medical practitioners within civil society organizations. The Clinical Project Advisors developed the guidance tools to support community based screening for hypertension and to administer training in the application of these tools in the field.

The HCC sent standard courtesy letters to the local Ministries of Health (MOH) through the Permanent Secretaries. The purpose of the communication was to alert local officials about the project and inform about the in-country partner (the subgrantee) as well as seek the full support and partnership of the MOH throughout the process. This was an important step in gaining the buy-in from the MOH to facilitate a smooth referral phase post the community screening. The target communities were shared with the MOH in each country to facilitate sensitisation of local Medical Officer’s of Health or District Medical Officers of the community project and the likely increased referrals to the local clinics. These individuals were invited to participate in the training.
Start-up skype meetings were held with each of the subgrantees at the outset to develop the project workplan (and associated line item budget), the logframe (for monitoring and evaluation) and to finalize the MOUs. The subgrantees were introduced to the Clinical Project Advisors.
Capacity Building

The first major activity was the **capacity building in blood pressure community screening**. A 1-day **training workshop** agenda was developed and shared with each of the subgrantees for review and input. Key discussion points included the goal, objectives and expected outcomes of the training. The subgrantees were responsible for developing their team of community screeners or ‘Screening Champions’; extending invitations to the senior staff at the local health care clinics; and purchasing of the automated blood pressure monitors. Linking with MOH was a vital step to ensure continuity of care in the primary care setting for those identified with elevated blood pressure and referred to the local clinics.

The **goal of the training workshops** was to contribute to the improvement of the capacity of the Subgrantee staff to deliver high quality standardised blood pressure screening, referral and monitoring within their target communities, and in general start the process of providing technical assistance in creation of best practice approaches to BP screening and treatment.

The **Objectives** of the training workshops were to:

1. Introduce the HCC Core Team including Clinical Advisors to the Subgrantee and other key country level stakeholders.
2. Gain Subgrantee I buy-in from key stakeholders.
3. Introduce the BPCCA I to the Subgrantee and other key stakeholders.
4. Share details of the HTN management in the region to date including the Global Standardised Hypertension Treatment Project (GSHTP).
5. Review the BPCCA I Subgrantee Country level project implementation protocols in consultation with Subgrantee and with consideration of the local context as it relates to the resources (project/ Subgrantee) and the country context (target community and local health care system).
6. Learn the correct and standardized technique of performing a blood pressure measurement and counselling (screening & education).
7. Learn how to interpret blood pressure values and indications for patient referral to relevant local health care authorities for further evaluation and monitoring.

8. Introduce the blood pressure screening data collection sheet and the corresponding screening registry.

9. Train participants in the use of the blood pressure screening registry as a tool for the monitoring and follow up of patients who are found to have elevated blood pressure values.

The **Outcomes** of the training workshops were:

1. Subgrantee Screening Champions fully competent in all steps of the community screening process as determined by practical assessments.
   
   i. Including Screening, education counselling and referral
   
   ii. Follow up/ Monitoring of referred patients for medication and lifestyle compliance

2. Local Health care authorities aware of the project and feel a sense of partnership and thus willing to work with the Subgrantee to ensure continuum of care for those patients identified as hypertensive through the Subgrantee community screening initiative.

3. All project staff including the Subgrantee and the HCC/Clinical Advisors comfortable with all aspects of the project implementation in the country.

Following the training workshops, the subgrantees refined their screening plans and initiated the screening in the target communities in partnership with the local health officials (MOH). In some countries such as St. Lucia other entities were engaged as critical partners such as the Department of Social Transformation in St. Lucia.
Community Screening, Referral & Monitoring

The Screening involved measurement of blood pressures in the community, and conducting a brief medication and lifestyle compliance educational session. Standard demographics were collected for each patient and questions asked about their current lifestyle. This information was recorded on a paper form and subsequently transferred onto an online database developed by the Clinical Fellows. Clients with elevated blood pressure were then referred onto the local health centres. Each client with elevated blood pressure was then followed up at approximately 1-month post referral to determine: if they went to the local clinic as referred; if they were prescribed medication; if they are adhering to the medication and whether or not they have made any lifestyle changes. They were asked if the education received at the screening stage had any influence on their subsequent medication and lifestyle compliance related behaviours.
KEY OUTPUTS

1. The Civil Society Community Blood Pressure Screening Guide including community screening protocols

2. Online tool for data capture at both the screening and follow up/monitoring stage

3. Training / capacity building in the target countries:
   
      • 23 Champions Trained
   
   b. Fondation Haitienne de Diabète et de Maladies Cardio-Vasculaires (FHADIMAC): April 23, 2015  
      • 23 Champions Trained
   
   c. The Heart Foundation of Jamaica (HFJ): March 20, 2015  
      • 9 Champions Trained
   
   d. The St. Lucia Diabetes and Hypertension Association (SLDHA): April 17, 2015  
      • 39 Champions Trained
   
   e. The Lions Club of Kingstown SVG: April 13, 2015  
      • 23 Champions Trained

4. The table opposite summarises the findings from the BP Screening and monitoring of individuals in the community (using the agreed upon algorithm) for each of the subgrantees:
<table>
<thead>
<tr>
<th>Organisation</th>
<th>Total Screened</th>
<th>Proportion Found with Hypertension and thus Referred to local Health Clinics</th>
<th>% of those identified with Stage 1 / Stage 2 Hypertension Successfully Followed up or monitored</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Dominica Diabetes Association (DOMDA)</td>
<td>831 831/800 or 103.8% of target (51 % F/ 49 % M)</td>
<td>56% (465/831)</td>
<td>50.1% (232/465)</td>
</tr>
<tr>
<td>Fondation Haitienne de Diabète et de Maladies Cardio-Vasculaires (FHADIMAC)</td>
<td>2,349 2,349/2000 or 117.5% of target (60 % F/ 40 % M)</td>
<td>31% (741/2349)</td>
<td>59.2% (439/741)</td>
</tr>
<tr>
<td>The Heart Foundation of Jamaica (HFJ)</td>
<td>1,901 1,901/2,500 or 76.0% of target (71 % F/ 29 % M)</td>
<td>35.0% (666/1901)</td>
<td>59.2% (448/666)</td>
</tr>
<tr>
<td>The St. Lucia Diabetes and Hypertension Association (SLDHA)</td>
<td>1,811 1,811/3,000 or 60.3% of target however target extremely ambitious (55 % F/ 45 % M)</td>
<td>21.6% (392)</td>
<td>32.1% (126/392)</td>
</tr>
<tr>
<td>The Lions Club of Kingstown SVG</td>
<td>820 820/3600 or 22.8% of target however target extremely ambitious (58 % F/ 42 % M)</td>
<td>19.3% (158)</td>
<td>65.2% (103/158)</td>
</tr>
</tbody>
</table>
The challenges encountered during the course of implementation are described below:

- **Screening uptake** challenging in some of the settings resulting in extended screening periods and in some instances non-achievement of screening targets.
  - The HFJ noted that blood pressure checks are readily available in some communities, therefore, the offering of free blood pressure checks was not attractive to some persons in the targeted communities.

- The screening was largely opportunistic and voluntary thus capturing those likely to have more positive health seeking behaviours, those interested in screening and more likely to have been screened in the past, rather than those who are typically averse to screening and may be at higher risk for elevated blood pressure. Strategies had to be adopted to identify and recruit participants who would not otherwise attend community screenings due to poor health seeking behaviour. This approach may have resulted in the capture of individuals with high blood pressure who were unaware of their condition.

- **The financial capacity building** was targeted for early in the project however the consultant earmarked to undertake the task had significant scheduling conflicts. The consultant, an accountant from the Jamaica Cancer Society, was identified in 2014/15 through the first HCC DAP grant for cervical cancer. The HCC was extremely impressed with the consultant’s financial reporting skills and committed to drawing on him as a resource for NGO financial management capacity building across the region. The training was ultimately completed in September/ October with SLDHA and the Lions Club of SVG. The consultant developed a one day practical training module and provided remote support post the on site training. The training was very positively reviewed (see successes section below).
  - The Dominica training could not be completed by the consultant due to Tropical Storm Erika. It was undertaken at a later date by a local national consultant.

- The Dominica sub project was suspended for over a month following the passage of Tropical Storm Erika. The monitoring component was affected as focus shifted to more pressing health and survival issues.
• This was a missed opportunity for **diabetes screening** for some of the participating organisations, however, the cost of diagnostic tools to detect blood sugar levels, was an added cost which was not factored into the subgrantee budgets with the exception of FHADMIAC. FHADIMAC highlighted this as a priority from the outset and integrated diabetes screening into their activities and costs.

• **Internet access** was a challenge in Haiti thus the Google form provided was not accessible. Therefore FHADIMAC developed an Epi info tool to capture the data. The HFJ found duplicate entries in the Google form, which was directly related to intermittent internet disruptions.

• **Google forms** posed a difficulty for some due to technical challenges despite training in the use of the forms during the 1 day training sessions (however this may have been insufficient). One subgrantee cited delays in analyzing the data due to significant data cleaning requirements.

• **Follow up for monitoring** although in many instances was extremely well received by the clients; was resource heavy consuming significant amounts of time and funds for follow up calls using mobile phones. This was further exacerbated by electricity challenges in Haiti rendering clients inaccessible. Often times clients had to be called repeatedly to make contact which was unrealistic on a large scale. At FHADIMAC two hundred (27%) people could not be reached due to incorrect telephone numbers (18.4%), no answer (straight to voicemail) (8.0%) or the subject not present when the call was made. One of the subgrantees had challenges entering the monitoring data into the online form and as such the responses to the follow up questions were not recorded and thus not analyzed.

• **Dissemination of project findings** was incomplete for most of the organisations but nonetheless it was initiated by most thus demonstrating an understanding of the importance of partnerships and the benefits of disseminating the project outcomes (successes/challenges/and lessons learned) to key community stakeholders.
The project has been a major success to date. Some of the key successes are highlighted below:

- **Attainment of screening targets** and in some instances targets were exceeded.

- **Successful screening** of individuals with hypertension in rural often **marginalised communities** with traditionally lower levels of health care access and availability (lower concentration of health centres; prohibitive cost of health care; poorer relative health care seeking behaviour).
  
  - For example the SLDHA felt their project was beneficial to underserved community members who otherwise would not have gone to a health care facility to monitor their blood pressure.

- **Use of innovative approaches** such as ‘Town Criers’ (FHADIMAC) and home visits (DOMDA) to increase the screening population and identify individuals with high blood pressure who were unaware of their elevated blood pressure. Often times the challenges with this type of opportunistic screening
  
  - For example at FHADIMAC 35% of referred clientele did not know that they had their blood pressure higher than the normal range.

- **Successful follow up** of screened patients identified for referral. In fact many of the CSOs regarded this as an activity they were keen to continue beyond the lifetime of the project.
  
  - FHADIMAC and HFJ in particular highlighted this as a future priority.
  
  - At DOMDA, they have piloted a ‘Buddy System’ with approximately 25 trainees. The initiative supports lifestyle changes and medication compliance as it relates to blood pressure control and control of diabetes. This is being done in partnership with the local Rotary Service Club. If successful, the pilot will be expanded in the local district and possibly into other communities.
  
  - The HFJ found that the follow up calls facilitated clarification of misconceptions and catalyzed clients into action as it related to behavior change. The HFJ also cited importantly, an indirect reduction in burden on the health care system.
as it related to patient education as professional advice was provided during the monitoring sessions by the trained screening champions (the majority of which were nurses). This underscores the valuable role that civil society can play in partnership with the public sector in relieving the burden of a severely overcommitted, strained health system.

- **Modification in lifestyle and medication compliance** as a result of the education offered at the point of screening.
  
  o For example, FHADIMAC reported that 91.4% of those interviewed at follow-up agreed that they made change in their lifestyle because of the counseling received at the time of the screening.
  
  o At DOMDA ninety two percent (92%) of respondents followed up said that they were counseled on diet and lifestyle at screening and had attempted to adopt certain features of healthy living, (84%), attributed these changes to the information received at the time of screening.
  
  o In the HFJ sample 62.7% reported that lifestyle changes were affected by counseling provided at the point of screening.
• **Diabetes Screening** was a component of the FHADIMAC project. Screening for diabetes was performed for all subjects over 30 years of age. Glycemia was performed with a glucose meter One-Touch for 1557 persons. Glycemia was greater than 200 mg/dl for 66 patients (4.46%). A total of 164 subjects (12.68%) knew they had diabetes and 42.55% of them were under treatment for diabetes.

• Significant **civil society capacity building** in the following areas:
  - Standardised blood pressure screening
  - Data collection
  - Data Entry
  - Data analysis
  - Report generation
  - Financial Management using QuickBooks including generating of financial reports
    - In Dominica five other NGOs benefited from the financial management training resulting in capacity building beyond the targeted organisation.

• Development of an **online tool** to record data at the screening and follow-up/monitoring stage which allows the Clinical Fellows to assess the progress and the data in real time.
  - Use of, manipulation and generation of Google forms

• **Built data literacy** among civil society organizations and create platform for evidence-based decision making especially among those grantees without existing data collection practices.
  - DOMDA found that the majority of respondents expressed some level of difficulty with taking medication faithfully with 48% saying they had no challenges. This data underscores the importance of medication compliance counseling as a specific activity in the Buddy System at DOMDA. Further information on the barriers to medication compliance was obtained which will inform counseling.
• Implementation of additional activities complementary to project requirements:
  o Health Fairs
  o Educating on food portions for healthy eating
  o Educating on the importance of reduction of sodium content and using practical interactive demonstrations (low salt food tasting of normal everyday food prepared with little or no salt and utilizing fresh garden herbs)
  o Educating consumers about sugar and salt content in commonly consumed processed foods (display salt and sugar content in particular processed foods)

• Strengthening of civil society/government partnerships.
  o For example the SLDHA forged alliances with the Ministry of Health and the Ministry of Social Transformation along with the National Initiative to Create Employment (NICE), and the Community Nursing Service, which will enable SLDHA to expand its outreach programmes.

• Increasing the credibility of the CSO in some settings.

• Increasing the service profile of the CSO and ultimately expanding opportunities for income generation.
  o For example the project allowed SLDHA to do a more intensive screening for hypertension in communities otherwise would not have been done.

• Drawing on regional CSO skills in the area of financial management for NGOs training thus resulting in enhanced capacity of the training organisation (Jamaica Cancer Society). The HCC has plans to further utilise the JCS in the capacity in the near future.

• Dissemination of aspects of the project were presented in poster format by DOMDA within the Global Village at the World Diabetes Congress held in Vancouver Canada from November 30 to December 4, 2015.

• The CDC funded Standardised Hypertension and Treatment Project (SHTP) Barbados Pilot project may be expanding to St. Lucia due in small part to the successful implementation of the BPCCA SLDHA project which contained elements of the SHTP standardised management protocols.
LESSONS LEARNED

Lessons Learned regarding the Role of Civil Society in the Management of Patients with Elevated Blood Pressure:

- Civil society has an important role to play in the education of individuals in the community around hypertension prevention and control.

- Civil society organisations can be trained to use standardised protocols for high quality community based blood pressure screening.

- There is a role for civil society to play in partnership with the formal public health care system in the identification and referral of individuals with elevated blood pressure.

- There may be a potential role for civil society organisations in supporting the medication and lifestyle compliance for blood pressure control. This however may be resource intensive depending upon existing capacity and infrastructure. In larger organisations where the same patient populations are routinely seen, this type of ongoing education and counselling is possible. This is less likely in smaller organisations.
The subgrantee reports contain testimonials from the screening champions and the target population as well as photographs from the screening. Some highlights are below:

- ‘Participating in the project was a richly rewarding one for me. The training session highlighted some key issues that we as health workers often disregard before starting blood pressure measurement eg. ensuring that the client had not smoked within the last 30 mins and that the bladder be emptied prior to checking’. – Screening Champion

- ‘The staff made me aware of what High Blood Pressure is. Now, I am taking it seriously.’ – Screened Individual

- ‘Yes I must say thanks to the nurses who took time out to reach people like me in my community instead of me going to them.’ – Screened Individual

- ‘The screening guide was very thorough in relation to monitoring of clients found to have elevated blood pressure readings and the requisite counseling of these clients’. – Screening Champion

- ‘Since my involvement with the project I have shared the protocol with staff members – it has been replicated and is being used as a counseling guide during community screening’. – Screening Champion
CONCLUSION

Over forty percent of the adult population in the Caribbean has hypertension (high blood pressure), and though variable in the region, on an average at least half are not adequately controlled. Uncontrolled hypertension contributes to nearly half of all cases of heart disease, while cardiovascular disease accounts for nearly half of all mortality attributed to NCDs. Hypertension is a silent killer that rarely causes symptoms. Increasing public awareness is key, as is access to early detection and effective long-term management and control.

The BPCCA project was a success for the HCC and the sub-grantee civil society organisations resulting in the screening of over 7,700 individuals across 5 Caribbean countries. The project demonstrated the value of civil society in delivering high-quality standardised blood pressure screening and follow up in the community in partnership with the public sector. The project’s greatest impact was felt by economically disadvantaged populations in both urban and rural communities. In these communities civil society organisations are often trusted information sources and service providers thus providing an excellent entry point for screening, education and referral. The partnerships developed and strengthened through this project within the communities with community members as well as with key stakeholders such as the Ministry of Health, contribute to the core capacity of these CSOs increasing their likelihood of sustaining discrete projects and general operations in the short and long term. In addition, new opportunities for income generation and organisational growth have been identified which will also bolster the long term viability of these CSOs directly impacting their ability to better serve their traditional constituents which tend to be the socially and economically vulnerable. All beneficiary subgrantees have committed to continue with various elements of the BPCCA based on the project’s success, thus underscoring the long term impact of this project.

The improved detection, enhanced treatment and long term control of hypertension requires the engagement of health care providers, ancillary health staff, civil society and the population served. A major development of this project is that CSOs in these countries are better positioned to contribute to this multidisciplinary and multisectoral approach to addressing one of the major public health issues of the Caribbean.
A lasting developmental impact of the DAP project was the demonstrating to civil society organisations in selected lower income countries in the Caribbean of international best practice in the performance and reporting on internationally funded projects. Additionally, the capacity of the subgrantee organisations was significantly enhanced in these areas as a result of the project. Finally, a lasting development of this project has been the enhancement of the ability of a regional civil society alliance, the HCC, as an implementing and coordinating civil society organisation in the execution of projects among member national organisations of varying levels of operational function, varying levels of human and financial resources, and differing levels of governance and management structures.