World Hypertension Action Group (Whag)

Smart Hypertension Hubs -Website: www.whag4all.org

Overview

Health is fundamental to human development, and healthy people are critical to sustaining societies. Starting with hypertension as the most impactful Non Communicable Disease (NCD) , if we are to ever realize the 2030 UN Sustainable Development Goals (SDG), specifically related to goal 3- Good Health and Well-Being, we will need a "no potential resource left behind" integrated approach that extends well beyond the status quo. Specifically[i]

- About one third of adults in most communities in the developed and developing world have hypertension.
- Hypertension is the most common chronic condition dealt with by primary care physicians and other health practitioners.
- The success of treating hypertension has been limited, and despite well-established approaches to diagnosis and treatment, in many communities fewer than half of all hypertensive patients have adequately controlled blood pressure.

The World Hypertension Action Group (WHAG) specific promise is that of bringing together a group of knowledgeable and dedicated individuals and organizations who are able to effectively and efficiently bridge the gap between knowledge and action. The WHAG philosophy is that of being at the state of the art level of knowledge, but not limited by existing large scale international hypertension programmatic conventional wisdom. The WHAG purpose is to focus on inter-connectivity in novel cross-linkages in order to develop model programs that are both scalable and sustainable.

The Whag Site (www.whag4all.org) -- in collaboration with WHL, Colleagues in Care, IBM and the UN ICT4SIDS and Infopoevrty Initiatives -- is intended to support a large number of Hypertension Clinics (hubs) by using a Telemedicine model. Figure1 shows a conceptual view of the Whag Site – a set of Telemedicine Clinics (Clients) that may be located at rural, regional, and national levels around the globe to serve the remotely located patients. The World Hypertension Hub at the Whag HQ provides the following capabilities:

- *A Global Hypertension Database* that will focus on the developing countries and underserved populations (our goal is to capture 10 million blood pressure entries)
- *Advising services* by hypertension specialists, doctors, nurses and other medical professionals who diagnose the hypertension illness and advise the patients.
- *Reporting and Business Intelligence services* by analysts who will use decision support and business intelligence tools for visualization of the patient data stored on the Global Hypertension Database.
- *Education and Training Services* for educating nurses, patients and other healthcare students.
- *Research Investigations* on a wide range of topics that span medical and business issues of value to underserved populations.

- *Collaboration and Partnership Opportunities* between different players (POCs, medical professionals, NGOs, educational institutions, data scientists, and medical researchers) involved in the World Hypertension Action Group (Whag).
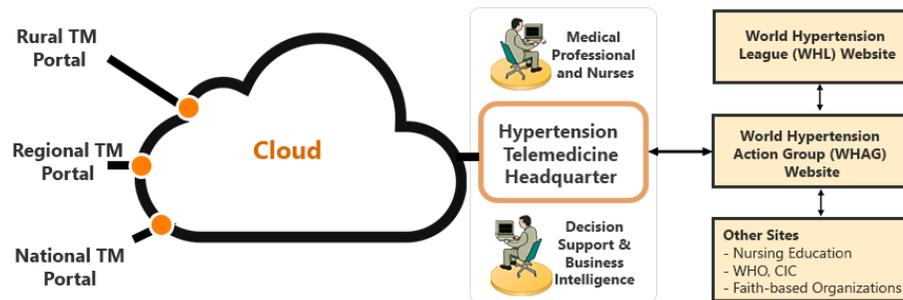

Figure1: Conceptual View of Whag Site and Telemedicine Center

Invitation to Lead a UN-Whag Pilot Project

We are inviting you to lead a UN-Whag Pilot Project by becoming the Point of Contact (POC) for Hypertension Hubs in your area. The objective of this 3-6 month Pilot Project is to accelerate the adoption of UN 2030 Agenda for Sustainable Development by focusing on high impact healthcare services such as hypertension for underserved populations.

Main Benefits of Joining the Pilot Project
- Join a United Nations Partnership that is focused primarily on the underserved population
- An opportunity to present your views, ideas and results to a global audience
- Work with world class medical, business, government and ICT professionals interested in combatting hypertension in the underserved populations
- Participate in and benefit from education, training research opportunities for human and technology capacity building
- Collaborate with, and learn from, other POCs who are facing similar issues
- Based on the results produced, explore funding opportunities to expand your hub capabilities

Main Responsibilities of the Point of Contact (POC)
- Serve as the leader of your area in providing hypertension telemedicine services
- Develop, in collaboration with Whag staff, a plan of action for the duration of the Pilot Project with results, etc
- Upload hypertension patient data daily from your Hub to the Whag HQ site
- Exchange emails with Whag staff at least once a week and attend once a month conference call to discuss progress
- Collaborate with other POCs and Whag staff to provide best possible services to your patients
- Help us improve the hypertension telemedicine services in your area
- Work with us to explore funding opportunities

Quick Tour of the Whag Site (*www.whag4all.org*)

The Whag Site is intended to support a large number of Hypertension Clinics (hubs) by using a Telemedicine model. A Sample Whag Website was generated by the ICT4SIDS staff to illustrate the main concepts of Whag and a World Hypertension Center that could support many Hypertension Clinics located around the globe. Main features of the website are displayed through screenshots of

- the Whag Home Page
- the World Hypertention Telemed Center
- A Patient Entry Screen
- Reporting system and a Dashboard

Suggestion: Please go to the Whag site (www.whag4all.org) and test the initial capabilities available. Please use the ID = whag and PW = whag for testing purposes.

Figure 2: Whag Home Page

Figure 3: Hypertension HQ Center Home Page

Figure 4: Patient Data Entry Form

Haiti Hypertension Dashboard and Report Generator

Quick Facts From Haiti Database		

Quick Stats

Hypertension Categories	Count	% age of Total
Patients having Stage 1 Hypertension	40	34.19
Patients having Stage 2 Hypertension	23	19.66
Patients with Hypertensive Crisis	14	11.97

Reports

List Patients with stage1 HTN	Get Report
List Patients with stage2 HTN	Get Report
List Patients with stage3 HTN (Hypertensive Crisis)	Get Report
List Pregnant Women with HTN	Get Report
List Young Patients (<40 y) with HTN	Get Report

Customized Reports

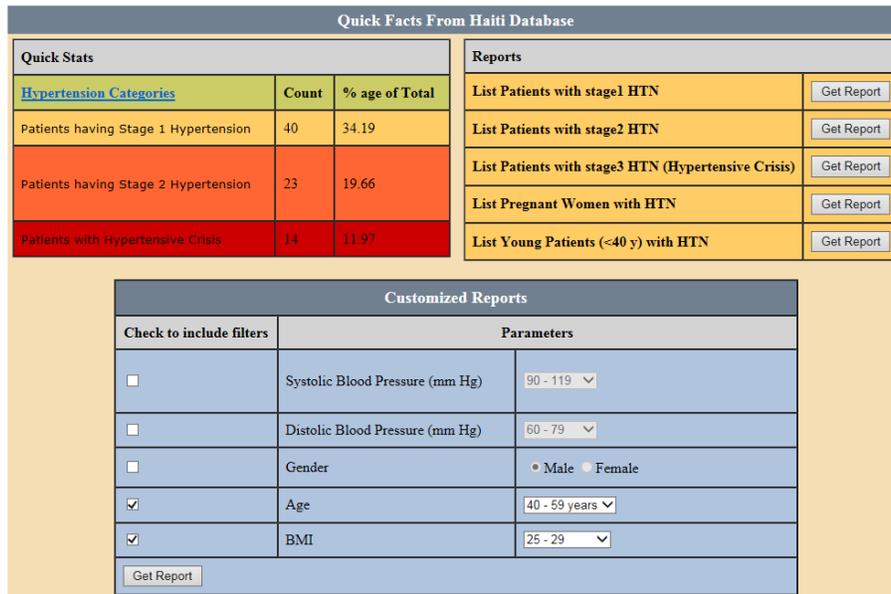| Check to include filters	Parameters	
☐	Systolic Blood Pressure (mm Hg)	90 - 119 ▾
☐	Distolic Blood Pressure (mm Hg)	60 - 79 ▾
☐	Gender	⦿ Male ◯ Female
☑	Age	40 - 59 years ▾
☑	BMI	25 - 29 ▾
Get Report		

Figure 5: Report Generator

WHAG Officials

John G. Kenerson, MD. Director of Whag and Colleagues In Care

Advisory Board
- Michael Weber, MD, Professor of Medicine, State University of New York,
- Dan Lackland, Ph.D, Professor of Medicine, Medical University of South Carolina
- Amjad Umar, Ph.D., UN ICT4SIDS Partnership and Harrisburg University
- Abraham Joseph, Ph.D., United Nations
- John Steffens, Ph.D., Oklahoma University and UN Infopoverty Institute
- Robert St. Thomas, IBM
- Lisa N Smith, IBM and Colleagues in Care
- Peter Koneleria, United Nations

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[i] Weber et al, "Clinical Practice Guidelines for the Management of Hypertension in the Community: A Statement by the American Society of Hypertension and the International Society of Hypertension", The Journal of Clinical Hypertension Vol 16 | No 1, January 2014, pp. 14-26