



WORKSHOP

Belize Health Information System: Lessons Learned to Strengthen National Health Information Systems in Barbados, Eastern Caribbean Countries, Jamaica, Trinidad and Tobago

Organized by the
Pan American Health Organization/World Health Organization
in collaboration with the Ministry of Health of Belize,
the Health Metrics Network, & the
Organization of Eastern Caribbean States

*Held from August 17-19, 2009
at the Princess Hotel, Belize City, Belize*

FINAL REPORT- Executive Summary February 2010



FINAL WORKSHOP REPORT

BELIZE HEALTH INFORMATION SYSTEM: LESSONS LEARNED TO STRENGTHEN NATIONAL HEALTH INFORMATION SYSTEMS IN BARBADOS, EASTERN CARIBBEAN COUNTRIES, JAMAICA, AND TRINIDAD AND TOBAGO

EXECUTIVE SUMMARY

A comprehensive and integrated health information system provides a space to consolidating fragmented pieces or sub-systems, improving country decision-making capabilities, implementing evidence-based decision making, and providing easy access to reliable and valid data and subsequently to good quality information for better decision-making.

The Belize Health Information System (BHIS), which was inaugurated on 16 September 2008, is a fully integrated health information system that provides every citizen with an electronic health record and seamlessly supports individual and public health. In May 2008, Belize became the first country in the Americas to be granted priority technical support from Health Metrics Network. Using the HMN tools, the country completed an assessment of its BHIS and developed its BHIS strategic plan. The BHIS is not just a server designed to store health information but an adaptable system that serves many different users. The system links the Ministry of Health with the country's public and private hospitals, laboratories and clinics. It allows data to be made available to authorized users anywhere in the country almost as soon as they are entered in the system. The BHIS not only improves the efficiency of the country's health system, but also encourages a more holistic approach to diagnosis and treatment.

From August 17-19, 2009, the Pan American Health Organization/World Health Organization (PAHO/WHO) in collaboration with the Ministry of Health of Belize, the Health Metrics Network, and the Organization of Eastern Caribbean States organized the workshop "*Belize Health Information System: Lessons Learned to Strengthen National Health Information Systems in Barbados, Eastern Caribbean Countries, Jamaica, and Trinidad and Tobago*". The purpose of the workshop was to share experiences and lessons learned relative to the design and implementation of the BHIS with Barbados, Eastern Caribbean Countries, Jamaica, and Trinidad and Tobago in order to strengthen partnerships and networking among participant countries. Approximately 55 participants attended the workshop with representation from Anguilla, Antigua and Barbuda, Barbados, Dominica, Jamaica, Montserrat, Saint Lucia, St. Vincent and the Grenadines, St. Kitts-Nevis, Trinidad and Tobago, Health Metrics Network, the Organization of Eastern Caribbean States, PAHO/WHO, and Accesstec Inc. Those invited to participate in the workshop demonstrated the recognition by Governments that regional collaboration is key to effective strengthening of national health information systems.

Participants of the workshop unanimously agreed to the resolution that is presented on the following pages.

RESOLUTION

The Workshop “Belize Health Information System: Lessons Learned to Strengthen National Health Information Systems in Barbados, Eastern Caribbean Countries, Jamaica, Trinidad and Tobago” held in Belize from 17-19 August 2009 and organized by the Pan American Health Organization (PAHO) in collaboration with the Ministry of Health of Belize, Health Metrics Network (HMN), and the Organization of Eastern Caribbean States (OECS),

Having knowledge of:-

1. Resolution CPS27.R12 “Strategy for Strengthening of Vital and Health Statistics in the Countries of the Americas” approved by the 27th Pan American Sanitary Conference in 2007;
2. Resolution CD48.R6 “Regional Plan of Action for Strengthening Vital and Health Statistics” approved by PAHO’s 48th Directing Council in 2008;
3. Resolution WHA 60.27 “Strengthening of Health Information Systems” approved by the World Health Assembly in 2007;

Recognizes that a harmonized regional information system is critical for monitoring the achievements of regional and international health goals;

Agrees that an integrated national health information system is critical for and strategic to strengthening the health system, improving health outcomes, and gaining efficiencies and cost-effectiveness in the delivery of health care;

Cognizant that health information systems of the countries of the Caribbean are weak, fragmented and under-resourced, and that information and statistics produced are inadequate to support evidence-based planning and services; and now having viewed and appreciating that Belize has developed the first country-wide integrated electronic health information system in the world, which is a best practice model for the rest of the Region and was supported by PAHO, HMN, Inter-American Development Bank (IDB), Caribbean Development Bank (CDB), and others;

Convinced that other countries of the Caribbean region can benefit¹ from the outstanding achievements of the Belize Health Information System (BHIS);

Welcoming the commitment of the Ministry of Health of Belize, PAHO, and HMN to collaborate on introducing cost-efficient health information system software solutions to countries of the Caribbean region;

The following resolution was unanimously passed:

We the people of the Caribbean represented² at the Workshop “Belize Health Information System: Lessons Learned to Strengthen National Health Information Systems in Barbados, Eastern Caribbean Countries, Jamaica, Trinidad and Tobago” held from 17-19 August 2009 in Belize and attended by experts from PAHO, HMN, Belize, Accesstec Inc. (private sector solution provider), hereby endorse the Minister of Health of Belize to seek the support of the health ministers of the other English-speaking countries of the Caribbean Region to:

1. Promote improved health outcomes in the Caribbean Region through improved health information management and integrated health information systems;
2. Develop national health information systems that are harmonized across the Caribbean Region;

¹ Refer to Appendix 1

² Anguilla, Antigua & Barbuda, Barbados, Belize, British Virgin Islands, Dominica, Montserrat, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Trinidad and Tobago

3. Adopt a regional approach to resource mobilization from The Global Fund to Fight AIDS, Tuberculosis and Malaria and other international funds and partners for development of health information systems. In this context, it is important to note that HMN is committed to assisting with resource mobilization to support national assessments, strategic plan development, and resource allocation through technical assistance;
4. Create a Regional Strategic Framework to guide the creation of harmonized national health information systems capable of monitoring regional indicators, health initiatives, and international and regional commitments (e.g. Millennium Development Goals) across the Caribbean Region;
5. Endorse the framework, tools, and guides developed by HMN as standards for assessing national health information systems and guiding the health information systems strategic planning process;
6. Recognize the BHIS as a best practice of an integrated country-wide electronic information system to be used as a model for the Caribbean Region;
7. Promote acquisition of electronic health information system solutions towards achieving donor aid effectiveness (as per the Paris Declaration on Aid Effectiveness) and harmonization, as well as cost effectiveness for health interventions;
8. Encourage standardization of indicators, data measurements, and tools (for capture and analysis) across the Caribbean Region for comparability, including criteria for aggregation and disaggregation by appropriate factors such as gender, ethnicity, and other social determinants of health;
9. Encourage establishment of appropriately resourced organizational structures in the Ministries of Health for strengthening health information systems (e.g. health information units, expanded role of Planning Units, etc.);
10. Forge regional collaboration in acquisition and deployment of quality health information systems solutions to achieve economies of scale (as a regional cooperative) and price reduction, as well as to accelerate the pace at which solutions are made available at national levels;
11. Promote and support improved health information management and integrated health information systems for achievement of health-related Millennium Development Goals; and
12. Encourage a harmonized and integrated approach to resource mobilization from development partners for strengthening health information systems at national and regional levels, to prevent fragmentation and duplication.

These recommendations are made within the framework of, and acting in accordance with Resolution WHA 60.27 "Strengthening of Health Information Systems", Resolution CPS27.R12 "Strategy for Strengthening Vital and Health Statistics in the Countries of the Americas", Resolution CD48.R6 "Regional Plan of Action for Strengthening Vital and Health Statistics", and the Caribbean Cooperation in Health III (CCHIII):

To promote equity, governance in health and the achievement of donor aid and resource efficiencies, and

To improve health outcomes for the peoples of the Caribbean Region.

RECOMMENDATIONS

1. The resolution³ is to be submitted to the Chief Executive Officer of the Ministry of Health, Belize requesting him to seek the approval of the Honourable Minister of Health, Belize for the Minister to present the document at the Caribbean Community (CARICOM) Caucus of Health Ministers that will convene in Washington, D.C. in September 2009 and at other scheduled regional/sub-regional forums.
2. The PAHO/WHO Representative (PWR) for Belize is to be requested to discuss and share the consensus document with the PAHO office in Washington D.C., the PAHO/WHO Caribbean Program Coordinator, and the PWRs for other English-speaking Caribbean countries seeking their support and cooperation in disseminating the document and facilitating follow-up action.
3. The PAHO/WHO Caribbean Program Coordinator is to be requested to write to the Health Metrics Network seeking technical and financial assistance to strengthen health information systems at the regional level in the English-speaking Caribbean.
4. Workshop participants from each country are to share the consensus document with the respective Permanent Secretaries⁴ of the Ministry of Health, and seek support for the document and its dissemination.
5. Workshop participants from the Eastern Caribbean Countries are to: (a) ensure alignment between the PAHO BWP 2010-11 for Eastern Caribbean Countries and national action plans for strengthening health information systems, (b) obtain approval and support for the PAHO BWP 2010-11 from the Permanent Secretary of the Ministry of Health.
6. PAHO should (a) update the TCC⁵ proposal "Exchange of Experiences in Designing and Implementing National Health Information Systems between Belize & the Eastern Caribbean Countries", (b) include Jamaica and Trinidad and Tobago⁶ in the proposal, and (c) submit the revised proposal for funding consideration for the biennium 2010/11.
7. An electronic community of practice⁷ should be developed to share experiences, lessons learned, best practices, tools, and documents on policies, leadership, governance, and collaborative and technical solutions to common challenges pertaining to the strengthening of national health information systems.

³ Resolution on the Regional Effort to Strengthen National Integrated Health Information Systems for the English-Speaking Countries of the Caribbean

⁴ In the case of Belize, this would be the Chief Executive Officer.

⁵ Technical Cooperation Among Countries

⁶ Since the workshop, Guyana has expressed interest in participating in the TCC.

⁷ Global Health Information Network might be an appropriate vehicle for addressing this recommendation. A Caribbean HIS Community of Practice, forums and forum topics could be added, events included, and all interested parties in the community of practice could be asked to sign on as members. Workshop participants are interested in having this possibility explored.

Appendix 1

EXPECTED BENEFITS FROM A FULLY INTEGRATED NATIONAL HEALTH INFORMATION SYSTEM

Given the Belizean experience, countries in the Caribbean Region can anticipate that a fully integrated, national health information system will contribute to achievement of the following:

1. Savings in total health care expenditure

Belize's achievements

- 1-2% reduction in first 12 months of operation
- 2-3% reduction in second 12 months of operation

2. Cost savings available for allocation within the health sector or across other sectors

3. Reduction in serious adverse drug reactions

Belize's achievement

- 90% reduction in adverse reactions by the second year of operation

4. Reduction in vertical transmission of HIV (Mother to Child)

Belize's achievement

- Reduction in vertical transmission to less than 5% of deliveries to HIV+ mothers

5. Reduction in hospital admissions for hypertension

Belize's achievements

- 10-15% reduction in hospital admissions for all ages/sexes
- 25% reduction in hospital admissions for those over 65 years of age

6. Improved management of diabetes resulting in reduction in number and severity of complications and the stabilization/reduction of the incidence rate

7. Reduction in mortality:

Belize's achievement

- 1 less death per 1,000 population by the end of the second year of operation of the fully integrated national health information system