

Opportunity for Change:
An Evaluation of the Healthcare Structure in the
Toledo District of Belize

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Executive Summary

The Toledo District of Belize is a very poor, rural area with a struggling healthcare system. To remedy substandard access to healthcare, the government instituted a health reform project that included a National Health Insurance program. The residents of the district became outraged with the system when a local infant died needlessly during a delivery inside the walls of a regional hospital, while following the rigid protocols the government enforced. This tragedy brought about many questions regarding the structure of the healthcare system and has led various stakeholders within the district to come together to evaluate the greatest needs of the people. The Toledo District Health Steering Committee (TDHSC) has met with the healthcare community and formed sub-committees that are charged with carrying out initiatives believed to be the cure for a failing system. International organizations are actively engaging the local community to aid enhancement initiatives. The TDHSC's recommendations have an underlying theme of lacking resources and point primarily to a human capital shortage. Given the extreme rural setting of the Toledo District, it is expected to remain a difficult task of recruiting healthcare workers to serve in this area. However, creative investing in the region has the potential to bring a substantial influx of clinicians to serve the population. These organizations that have an existing presence within the country are positioned to play a critical role as the people of Belize seek a brighter future for their nation as a whole.

Hypothesis

An evaluation of the healthcare delivery system provides insight into what resources are needed to further develop the services in the Toledo District of Belize.

Analysis

Belize is a Central American country bordering Mexico and Guatemala (Appendix A). It has a rich history filled with struggles and triumphs by a determined and culturally diverse population seeking independence and growth. Once known as British Honduras, Belize established its independence on September 21, 1981¹. As a member of the United Nations, the Belize government functions as a Parliamentary Democracy. An Executive Branch consists of a Prime Minister and a Cabinet and the legislature is made up of a House of Representatives as well as Senators. The Governor-General, a Belizean, represents Queen Elizabeth. There are two political parties, the United Democratic Party and the People's United Party and there are six administrative districts which are made up of towns with locally elected Town Councils². According to the CIA Fact Book, Belize is slightly smaller than the state of Massachusetts with an estimated current population of 300,000³. The country is subject to harsh geographic conditions such as devastating hurricanes, water pollution, sewage contamination, tropical climates and swampy terrain. There is an average of 23.07 infant deaths per 1,000 live births each year (compared to the 2009 US average of 6.22)³. The national GDP growth rate is an estimated -1.5%, which is causing extreme concern for the economic viability of the country. The labor force is barely more than one-third of the total population causing a shortage of laborers. The economy is based primary around agricultural exports and tourism. Poverty ranges drastically by region and can be as low as 30%

and as high as 80% in the southern district of Toledo. The communication infrastructure is poor along with lacking roadways and air strips.

There is a much needed focus on the healthcare structure in Belize. Historically, a substantial portion of the spending on healthcare was out-of-pocket for an already financially burdened population. Some circumstances caused citizens to have to have to leave the country to receive treatment. In an effort to remedy the situation, the government instituted a National Health Insurance (NHI) initiative to formalize the delivery system, which was legally established in 2001. The stated intent of the NHI is “changing the way that health funding is spent (value for money / equity) through the principle of an ‘informed purchaser’ from a ‘choice of providers’”⁴. The Ministry of Health divided the country into four Health Regions with seven district hospitals and one national referral hospital⁵. This was all part of the larger Health Sector Reform Program with the goals of strengthening and improving the quality and access to healthcare. The Government remains the largest provider of health insurance; however, private insurance is becoming more rapidly available primarily through international organizations. The following is a description of the organization of healthcare services according to the Pan American Health Organization:

“At the Primary Care Level, services are provided through Health Centers and Health Posts in the rural areas. At the Secondary Level the health services are provided through Community and Regional Hospitals with services including emergency, surgery, X-Ray, laboratory, pharmacy and specialized services (only at Regional Hospitals). There is one National Referral Hospital located in Belize City, which provides Tertiary Level Care with some specialized services.

Emergency response services are limited to urban areas. A referral and counter-

referral system was instituted at all levels in the public sector and between private and public sector. The system is being continuously monitored by a National Committee.⁶”

The Southern Health Region contains two districts, Toledo and Stann Creek. This region, as with all four of the Health Regions, maintains its own management structure and is responsible for the delivery of healthcare to the local people. There are two hospitals, fourteen Health Centers and twelve Health Posts in this Region which serves approximately 61,000 people (Appendix B). The Southern Regional Hospital, a 52-bed hospital in the Stann Creek District, offers gynecology, surgery, pediatrics, internal medicine and mental health services. Punta Gorda Hospital, a 30-bed hospital in the Toledo district, offers general medicine and maternity services. The Belize Government has now downgraded Punta Gorda Hospital to a Polyclinic (which translates into less resources)⁷. The remainder of the analysis will focus exclusively on the Toledo District which is south of Stann Creek. The Toledo District is broken down even further into zones, as defined by the Health Reform Project (Appendix C). The zone system was designed to encourage residents to utilize their local health clinic. Prior to the establishment of the National Health Insurance program, the Toledo district relied heavily on midwives traveling out into the villages to delivery babies. However, during the healthcare reform program, the government worked to establish rigid referral protocols. At this time, midwives were restricted to the care they could offer in the villages. A nurse that was interviewed by the Belize News stated, “midwives have been advised at a government workshop that in certain circumstances, they should not help women who choose traditional birthing methods in their village and run into problems,” and that they should, “send her to the hospital.” The nurse went on to explain that she

was even informed that if she went to a village for a delivery and the mother or child died, she could go to jail⁸. Mothers were forced to come into town to deliver, despite the long and sometimes impossible driving conditions. In the spring of 2009, an incident occurred at Punta Gorda Hospital/Polyclinic that has now become known as the Baby Jones Tragedy. An expectant mother, along with her family, planned for a seamless delivery of her baby, despite the many obstacles of simply getting to the hospital. However, she was alone during the time of her delivery even though she was a patient at the hospital. Her son was born with his umbilical cord around his neck and was not breathing by the time she was able to walk out of her room to notify the physician and nurses. After several days of fragmented care, the baby was transported twice before dying. This event brought immediate attention to an apparent dire situation for the residents of the rural Toledo District. The healthcare state for the residents of Toledo is described well in a Letter to the Editor written by Gregory Ch'oc, Executive Director of the Sarstoon Temash Institute for Indigenous Management, where he points out that millions of dollars have been invested in infrastructure while there are still basic needs for "equipment, medicine, technicians, doctors and nurses⁹." Mr. Ch'oc also states that at the Punta Gorda facility there is only one physician per shift which could explain why the delivering mother of Baby Jones was alone.

After the Baby Jones Tragedy, a Toledo District Health Steering Committee (TDHSC) was formed and includes members such as government officials, health workers and community representatives. The Committee met in November of 2009 and heard presentations from Punta Gorda Hospital/Polyclinic as well as the Primary Care Providers in the District that included recommendations for improvement. The Committee then divided into four sub-committees that cover communication, education,

infrastructure and advocacy. The sub-committees will oversee a total of 15 objectives based upon the presentations heard in November 2009. Highlights from the objectives deemed a high priority are below (please see Appendix D for a full list of objectives contained in the TDHSC Operational Plan):

- Sub-Committee Communications:
 - Review patient services at PG Hospital and make recommendations re diet, visiting hours, security, and communications from staff to patients
 - Improve collaboration between PG Hospital and PCP

- Sub-Committee Education:
 - Build capacity in staff, particularly
 - 2 RNs for midwife training
 - Client communications and management
 - Extensive orientation and English language for foreign staff
 - Technical training in Ob/Neonatal.
 - Facilitate program to improve chart documentation by MDs, RNs by June 2010.
 - Facilitate public education re water, sanitation, and personal hygiene, especially in rural communities.

- Sub-Committee Infrastructure:
 - Facilitate design and implementation of waste management system in PG Hospital including waste water treatment by June 2010.

- Sub-Committee Advocacy:
 - Obtain resources for PCPs and hospitals, particularly
 - Vehicle for PCP San Antonio
 - Renovation of 8 health posts
 - Solar systems and storage at Santa Teresa and Pueblo Viejo
 - Mammograms for rural women.
 - Lobby NHI Commission for common list of drugs for satellites and for assistance with BHIS/NHI record-keeping.

The obvious goal of the committee is to accurately represent the needs of the various stakeholders in the district without bias.

Recommendation

Much attention has been brought to this area surrounding the event in 2009; however, Belize has always been a country of interest for international organizations ranging from non-government and non-profits to mission-driven groups. For example, Rivers of the World (ROW) is a non-profit organization that has had a presence in Belize since the mid-80's. ROW works with the local residents of various communities to find out what their greatest needs are and then pulls in resources to remedy the needs. The International Health Services Group (IHSG) is another organization that specifically targets countries with needs in developing their healthcare structure. IHSG matches resources with needs varying from assisting in developing services, providing equipment and supplies, to training local management to run healthcare facilities. Kardia Life Ministries is another group that works hand in hand with the residents of the Toledo District and has done so since the 1980's as well. It is organizations like these that bring awareness to others across the globe of the critical needs for remote villages in developing countries. According to the reading, *The Future of the Transnational*, these organizations would be categorized as transformative because they are truly leading broad change by attacking the health needs of some of the world's poorest populations¹⁰. While these organizations focus on the needs of the local community, an emphasis must remain on compliance to local, regional and federal government expectations. As described in *Understanding the International Context*, a foreign organization runs the risk of having conflicts with the government bodies that may hinder their efforts, regardless of how innocent their intentions may be¹¹. An opportunity exists for global organizations of all types to invest resources into the

communities and villages of the Toledo District. As the Steering Committee illustrates, the needs are grave.

It is my recommendation to invest available resources directly into the continued development of the district with an emphasis on the construction of a new maternity annex located in Punta Gorda. The annex has the potential to ensure deliveries are performed routinely and as safely as possible. A financial investment opportunity also exists for training programs to be established in or near Punta Gorda to train and educate the local population to serve in healthcare. Further evaluation should be considered to construct a satellite campus for universities in surrounding areas to give residents more access to clinicians. By only focusing only on new structures, a human capital shortage remains. A training facility has the potential to draw more professionals to the area and would relieve capacity constraints. As stated above, the people of Belize are strong and determined to enhance their surroundings for generations to come while protecting the culture they are so deeply passionate about. This is an opportunity for investors from around the globe to come together to significantly impact a gracious population.

References:

- 1: My Government: The Belize Government Official Portal – History:
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- 2: My Government: The Belize Government Official Portal – Politics:
<http://www.belize.gov.bz/ct.asp?xItem=440&CtNode=540&mp=27>
- 3: CIA – The World Factbook – Belize:
<https://www.cia.gov/library/publications/the-world-factbook/geos/bh.html>
- 4: The Ministry of Health, Belize, C.A. – National Health Insurance:
<http://www.health.gov.bz/www/index.php/health-projects/national-health-insurance>
- 5: My Government: The Belize Government Official Portal – Social Services:
<http://www.belize.gov.bz/ct.asp?xItem=617&CtNode=541&mp=27>
- 6: Pan American Health Organization: A Regional Office of the World Health Organization – Belize: http://www.paho.org/English/DD/AIS/cp_084.htm
- 7: Southern Health Region: <http://shr.health.gov.bz/>
- 8: Belize News: “Stop Killing Our Babies” by Wil Maheia and Adele Ramos. April 6, 2009. <http://www.amandala.com.bz/index.php?id=8713>
- 9: Belize News: Letter to the Editor – “Gregory Ch’oc writes on Punta Gorda’s health care system.” June 4, 2009.
<http://www.amandala.com.bz/index.php?id=8695>
- 10: Transnational Management (2008: 5th Ed.). Bartless, Ghoshal & Beamish. McGraw-Hill Irwin. Page 739.
- 11: Transnational Management (2008: 5th Ed.). Bartless, Ghoshal & Beamish. McGraw-Hill Irwin. Page 93.

Appendix A

Maps of Belize



Source: https://www.cia.gov/library/publications/the-world-factbook/maps/maptemplate_bh.html



Source: https://www.cia.gov/library/publications/the-world-factbook/maps/bh_largelocator_template.html

Appendix B

Photographs of Satellite Clinics

San Pedro Columbia Satellite Clinic



Pueblo Viejo Satellite Clinic

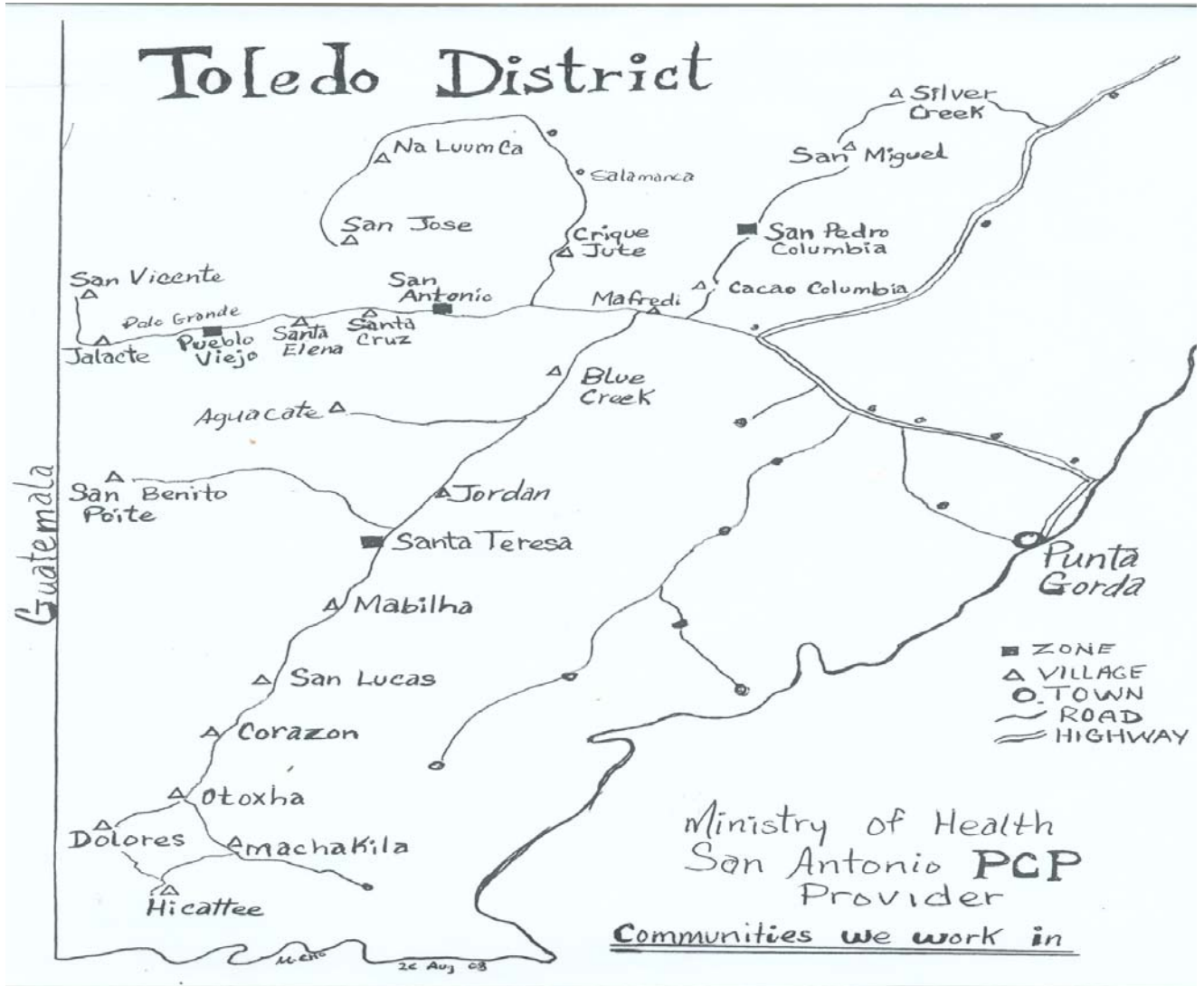


Source: San Antonio Primary Care Provider Power Point Presentation
(Copy available upon request)

Appendix C

Toledo District Service Area Map

The Ministry of Health San Antonio PCP Service Area



Source: San Antonio Primary Care Provider Power Point Presentation
(Copy available upon request)

Appendix D

Toledo District Health Steering Committee
2010 Operational Plan

Operational Plan

2010

Toledo District Health Steering Committee

December 2009

Background

In the wake of the scandal surrounding the Baby Jones incident at Punta Gorda Community Hospital, a cadre of officials came to Toledo and developed an action plan to improve health care in the District. It included selection of a Toledo District Health Steering Committee which was formed and has met regularly. TDHSC has developed a Terms of Reference and now wants to produce an Action Plan for 2010.

The Committee met on 25 November and heard presentations from PG Community Hospital and from both PCP's in Toledo - Punta Gorda and San Antonio. All speakers listed recommendations to improve health care in Toledo. To make up a Workplan for TDHSC, a set of 15 potential Objectives was generated, and on 2 December the Committee prioritized the Objectives. In addition, members assigned themselves to four different Sub-committees each of which will implement some of the Objectives.

Some important issues arose that depend on a new contractual arrangement between the PCPs and NHI which will be finalized in January 2010. The Committee wants to advocate that all employees paid through the contract be considered as full-time employees with full benefits and not as contract workers. The Committee is also concerned that the formula for cost-of-care be revised in light of the obvious staffing and infrastructural deficits in the current system. These positions will be articulated in a letter that the entire Committee will sign and forward to NHI.

In addition, one of the satellite clinics in San Pedro Columbia is about to be renovated by the Social Investment Fund. The other two satellites were recently renovated and many problems in the building design have surfaced. The Committee wants to ensure that medical staff have input into design of renovations to avoid similar problems. The Committee will contact SIF and MoH to ensure good communications between them.

Toledo District Health Steering Committee

Sub-committee Communications

(Mr. Nicasio, Ms. Mahung)

- (H) Review patient services at PG Hospital and make recommendations re diet, visiting hours, security, and communications from staff to patients by April 2010
- (H) Improve collaboration between PG Hospital and PCP
- (M) Develop communications plan/policy for the Committee for 2010.
- (M) Evaluate TBA program and develop action plan by June 2010.
- (L) Liaise with Cuban medical administration to improve effectiveness of communication.

High Priority

Medium Priority

Low Priority

Sub-committee Education

(Sister Josefina, Ms. Aleman)

Mr. Wagner?

- (H) Build capacity in staff, particularly
 - 2 RNs for midwife training
 - Client communications and management
 - Extensive orientation and English language for foreign staff
 - Technical training in Ob/Neonatal
- (H) Facilitate program to improve chart documentation by MDs, RNs by June 2010.
- (H) Facilitate public education re water, sanitation, and personal hygiene, especially in rural communities.
- (M) Establish scholarships for local citizens to study nursing, medicine, hospital tech, and hospital administration under contract to return.
- (L) Design educational outreach program for implementation 2011-2015

Sub-committee Infrastructure

(Mr. Vernon, Ms. Lara)

- (H) Facilitate design and implementation of waste management system in PG Hospital including waste water treatment by June 2010
- (M) Complete training center behind hospital.
- (L) Establish committee to facilitate design of new hospital building by [date]

Sub-committee Advocacy (Senator Teul, Mayor Lino)

- (H) Obtain resources for PCPs and hospitals, particularly
 - Vehicle for PCP San Antonio
 - Renovation of 8 health posts
 - Solar systems and storage at Santa Teresa and Pueblo Viejo
 - Mammograms for rural women
- (H) Lobby NHI Commission for common list of drugs for satellites and for assistance with BHIS/NHI record-keeping.

Timelines:

These timelines are generalized frameworks intended only to get the process started. They include only High-priority Objectives. Sub-committees should review them carefully and make modification as needed. At the achievement of an objective, the Sub-committee should submit a short 1-2 pp summary report. Progress will be reviewed formally at the end of the year.

If resources are needed, the Advocacy Sub-committee can be consulted.

Timelines for High-Priority Objectives

Sub-Committee Education		Priority: High											
<p>➤ Objective: Build capacity in staff, particularly</p> <ul style="list-style-type: none"> a. 2 RNs for midwife training b. Client communications and management c. Extensive orientation and English language for foreign staff d. Technical training in Ob/Neonatal 													
Activity	Month												
	1	2	3	4	5	6	7	8	9	10	11	12	
a. Send 2 RNs for midwife training:													
Find midwife training for RNs	X												
Find Resources for training		X											
b. Improve Client Communications and Management													
Review standards for client communications and management - both MoH and NHI - and QA reports	X	X											
Define deficits for attention.		X											
Develop training program in consultation with regional QA office.			X	X	X								
Implement training for all staff						X	X	X					
c. Orientation & English for Foreign Staff													
Liaise with Cuban, Nigerian, & Venezuelan offices	X	X											
Review current training		X	X										
Propose modifications				X	X								
Implement new program						X	X	X	X	X			
d. Technical Training in OG/Neonatal													
Find technical resources in MoH	X	X	X										
Train at RN, Technical, MD levels.				X	X	X							
Liaise with outside med teams for expertise							X	X					
Schedule trainings									X	X			

Sub-Committee Education		Priority: High											
Objective: Facilitate program to improve chart documentation by MDs, RNs by June 2010.													
Activity	Month												
	1	2	3	4	5	6	7	8	9	10	11	12	
1. Review Current Situation:													
Interview stakeholders	X												
Review QA standards	X												
Liaise with MoH re charting standards	X												
Liaise with MoH re training	X	X											
2. Establish Training													
RN Capacity Building			X	X	X								
MD Capacity Building				X	X	X							
Data Entry Capacity Building					X	X							
Monitor implementation								X		X		X	

Sub-Committee Infrastructure		Priority: High											
➤ Objective: Facilitate design and implementation of waste management system in PG Hospital including waste water treatment by June 2010													
Activity	Month												
	1	2	3	4	5	6	7	8	9	10	11	12	
1. Conduct review of Current Situation:													
Solid Waste Management Policy	X												
Liquid Waste Management Policy	X												
Toxic Waste Management Policy	X												
Interview Public Health Officers		X											
Interview Rick Mallory			X										
2. Recommend Changes													
Formulate modifications				X	X								
Present recommendations						X							
Follow up implementation								X		X		X	

Sub-Committee Advocacy		Priority: High											
<p>➤ Objective: Obtain resources for PCPs and hospital, particularly</p> <ul style="list-style-type: none"> ○ Vehicle for PCP San Antonio ○ Renovation of 8 health posts ○ Solar systems and storage at Santa Teresa and Pueblo Viejo ○ Mammograms for rural women 													
Activity	Month												
	1	2	3	4	5	6	7	8	9	10	11	12	
1. Conduct review of current situation:													
Transportation needs of PCPs	X												
Renovations needed at health posts	X	X											
Specifications for Solar systems	X												
Mammography needs	X	X											
2. Obtain resources													
Liaise with Ministry of Health		X	X										
Liaise with foreign donors		X	X										
Liaise with proposal writers		X	X										
Receive resources							X	X	X	X	X	X	X

Sub-Committee Advocacy		Priority: High											
<p>➤ Objective: Lobby NHI Commission for common list of drugs for satellites and for assistance with BHIS/NHI record-keeping.</p>													
Activity	Month												
	1	2	3	4	5	6	7	8	9	10	11	12	
1. Conduct review of Issues:													
Interview PCP admin re drugs & records	X												
Interview data entry clerks	X												
Interview Pharmacist	X												
2. Carry out Advocacy													
Formulate Lobbying strategy		X											
Liaise with NHI Committee		X	X										
Develop Program to improve record keeping				X	X								
Implement improved records system						X	X	X					