

Hillside Health Care International

# Orientation manual for Hillside Physician Volunteers





### **HILLSIDE MISSION STATEMENT:**

Hillside Health Care International (HHCI) is a faith based, non-profit organization dedicated to serving God by providing health care and disease prevention to the people of Southern Belize. HHCI is devoted to improving the Belizean quality of life through medical care, health education, and community outreach. HHCI promotes healthy global attitudes by offering a culturally-rich educational program for medical volunteers that challenges them to better understand their role in international health care.

### **HILLSIDE VISION STATEMENT:**

To ensure HHCI dynamically fulfills its mission by striving to build bridges—to the medically underserved, to the people living in our service areas, to our volunteers (medical and non-medical) who serve others through our program, to our partners, to our staff, and to long term financial sustainability.

## **HILLSIDE STATEMENT OF FAITH:**

Hillside Health Care International is a faith-based medical mission. The founding members of the clinic were inspired by God and their Faith to start this clinic and serve the poor of southern Belize. The current leaders of HHCI continue to be inspired by God and look to the Bible for inspiration and guidance as we move forward. We do not see the mission of Hillside to be evangelical in nature, rather we believe our actions speak louder than words and our service through medical care is how we live out our faith. We do not require anyone, patients or participants, to be of any particular faith but we do ask that you respect our beliefs and values and be willing to work in an environment where some may pray with patients or even gather together for reflection and worship. We truly love and respect all people and this should be reflected in the daily operations of our clinic.

### **Preparation**

- Please read through this entire document for information on Hillside's Mission, your responsibilities during your term here, overview of healthcare in Belize, services/referral areas in the Toledo district, and other important information.
- Please read thru all portions of the website [www.hillsidebelize.org](http://www.hillsidebelize.org). This site has been reviewed and approved by the Hillside Health Care International Board of directors and is utilized by visiting students to help them become familiar with Hillside.
- Read through the clinic procedure (section L), for the students will rely on the Medical Director to know Hillside's proper documentation procedures (SOAP notes), clinic flow, health protocols, referral procedures for lab tests, x-rays, and consults, etc. Quality clinical care is our top priority.
- Read through the Community Health Education responsibilities (section I) and if you are volunteering for a month or longer, come prepared to give a presentation on a topic of your choice.
- We are often in need of medications for our pharmacy here at Hillside. If you are interested in bringing medications, please let the administrator know ahead of time so we can get you a specific list of medicines we need and a copy of our formulary. Please try to bring medications listed on our formulary and **DO NOT BRING EXPIRED MEDICATIONS**. It is best to bring medications in their packaging as it is essential to have all medications labeled with an expiration date. Send the list of medications you

will be bringing to the Administrator at least 6-8 weeks (earlier if possible) before you arrive. This is to assure that the Ministry of Finance approves this import. If you declare what you bring in and do not have approval, you will be charged a 28% tax on the estimated value. With Ministry of Health approval, you may still be taxed, but only at a 2% rate (environmental tax)

- Talking to previous doctors who have served as medical director is an excellent way to get a sense of what your experience will be like, and what you need to be prepared for. Please contact the administrator for contact information for these physicians.
- ***Come prepared to work within the established system and be flexible. In order to maintain consistency amidst the frequent turnover of physicians it is paramount to work with the long-term staff while avoiding the tendency to try to change our systems. As a short-term volunteer, should you feel that any changes are necessary, please talk with the Administrator and the Executive Director first. Positive sustainable change requires the perspective that comes through months or years of experience. Many well intentioned changes have been implemented by short term volunteers to the detriment of the Hillside organization, clinic and staff.***

## **B. Mission of Hillside**

- There are three main programs through which we try to achieve our goals
  - i. CLINICAL - Direct patient care including acute illnesses, disease prevention, and referrals
  - ii. COMMUNITY - Outreach and education to communities and schools, including public health initiatives in our villages
  - iii. EDUCATION – Teach our learners how to practice in a resource challenged, culturally diverse setting.
- Hillside works in a close partnership with the Belizean Ministry of Health (MoH) and attempts to provide services that will augment those already available through the MoH.

### **C. Responsibilities for *all* Hillside volunteer physicians**

1. Oversight of medical care delivered during all of Hillside's clinical activities including mobile clinics and the home visit program.
2. Precepting medical/physician assistant students and medical residents during patient encounters for all Hillside clinical activities. Responsible for all care delivered by the same.
3. Facilitating the medical education of Hillside medical/physician assistant students and residents through patient encounters, talks, case presentations, community health program, etc.
4. Ensuring that student and resident participants adhere to established clinical policies including documentation guidelines.
5. Completion of Hillside elective participant evaluations.
6. Facilitate excellent communication between students, staff, administration, and the Ministry of Health.
7. Presenting or helping to present on certain health related topics included in the rotation curriculum of Hillside.

### **D. Responsibilities for *long term* Hillside volunteer health care providers (1 year or more)**

- Assisting the staff in the development of clinical policies and protocols when necessary.
- Assisting Hillside staff in development and implementation of the community health program.
- Assisting Hillside staff in the orientation of Hillside elective participants and volunteer healthcare providers.
- Completing weekly schedule of activities for students/residents and helping to deploy clinical personnel as needed to meet our mission.
- Pharmacy oversight and assistance with determining medication needs and ordering of medications.

## **E. Overview of Health Care delivery in Belize and Toledo District**

- The Ministry of Health (MoH) manages a country wide system of hospitals and clinics. The MoH divides Belize into 4 regions with each region possessing a lead hospital. The Southern Region includes the Toledo and Stann Creek districts. The Southern Regional Hospital is located in Dangriga, Stann Creek District, and is the main referral site within the region; the Toledo district hospital is located in Punta Gorda. Karl Heusner Hospital, located in Belize City, is the MoH tertiary hospital for the country. Patients may receive free/low cost care at MoH facilities throughout the country, or, opt for more expensive private facilities.
- Belize has a new National Health Insurance program that provides care to all registered citizens. It is new and in development. It is likely that Hillside will adjust its patient care activities to meet the needs within this new system.
- The Southern Regional Hospital in Dangriga is the main referral point for patients requiring a higher level of service of care in the Toledo district. Southern Regional Hospital provides general surgical services, and its staffing includes a general surgeon, OB/GYN and an internist. Most other specialties are only found in Belize City. The exception is orthopedic cases which are referred to Belmopan, and any high level cases, which are referred directly to Karl Huesner.
- Punta Gorda (PG) hospital provides basic inpatient services and maternity care; it is staffed by primary care physicians, the majority of whom come from Cuba. Regular surgical services are not offered; however, there are occasionally surgical teams that come from the U.S. There are occasional specialists that visit PG hospital and the PG polyclinic staff generally knows that schedule. The Medical director of the PG hospital is Dr Raju.
- Outpatient care is coordinated thru one of 2 PCPs (Primary Care Clinics) or “Polyclinics.” These are located in PG and San Antonio. Public Health (Maternal and Child Health or MCH) Nurses are responsible for immunizations, prenatal clinics, and well child exams. In PG they also have TB, hypertension and diabetes clinics, a vector control unit (malaria, dengue, etc), a public health inspector (water standards, restaurant

inspection, etc) and the district health education office (HECOPAB). There are also two psychiatric nurses who provide mental health services to the district under the supervision of a psychiatrist currently practicing in Belize. The Medical Director of the PG Polyclinic is Dr Garcia.

- Each PCP has 2 or 3 rural health clinics. These are staffed by a rural health nurse and/ or a physician. The rural health nurse acts in many ways like a family nurse practitioner (and provides a significantly higher level of service than that offered by the CNAs in the villages) These villages have “Health Centers”, which are good sized buildings equipped with living quarters for the nurse. PGs clinics are in Santa Ana and Big Falls, and San Antonio’s clinics are in Columbia, Pueblo Viejo, and Santa Teresa.
- Each village in Toledo (and elsewhere in Belize) is intended to have a Certified Nursing Assistant (CNA), also called a village health care worker. The CNAs work out of a village “Health Post”, which frequently is a small one room structure. CNAs have varying levels of training, but are generally limited to very basic medical care. They are provided with Tylenol, benadryl, chloroquine and with the ability to perform malaria smears, wound dressing, etc. CNAs are paid a small salary and usually perform unrelated work to support themselves. The CNAs provide the first line of care to the villagers; they refer patients to a higher level of care when necessary. Some villages also have volunteer Traditional Birth Attendants (TBAs).
- At present, Hillside is the only other primary care provider other than the MoH in the Toledo District. Hillside works in areas that the MoH is unable to adequately cover with the system above. We work closely with the MoH to determine our Mobile sites and schedules, and coordinate referrals and services.
- The Belize Family Life Association (BFLA) is a countrywide NGO which has an office in every district. The Toledo district office is in Punta Gorda. BFLA provides reproductive and sexual health services. It is staffed by a nurse, Paulina Cus.
- BCVI is a countrywide NGO which has an office in Punta Gorda next to the hospital. BCVI provides eye care and is staffed by an optometrist. She refers to an ophthalmologist in Belize City. The office is open M, W, F.

- “Bush Doctors” are utilized by some of the Toledo population, particularly in the rural areas. Much of the Toledo population will try home herbal remedies prior to visiting a health care provider.
- Universal Health Services and Belize Medical Associates are private clinics/hospitals in Belize City. Those able to afford to do so, often choose the private facilities over MoH facilities. Loma Luz is another such facility in Cayo District.
- Many births are performed in the home, particularly in the villages. The MoH encourages woman to have their first child at the PG Hospital; deliveries at the hospital are normally performed by midwives.
- Short term volunteer health care providers (missionary teams, US military teams, individual providers, etc) often visit the Toledo District to conduct clinics. These visits are supposed to be coordinated through the MoH. They may visit villages without our knowledge. Any concerns about these medical missionary teams should be brought to the attention of the Clinic Manager.

#### **F. Hillside’s History and Current Structure**

- Hillside opened in 1999 as a collaboration between the Jericho Road Foundation International (JFRI) based in the Chicago area, and the Medical College of Wisconsin (MCW). The Sisters of Mercy (SOM) subsequently became a third partner. The organization underwent reorganization in early 2005 and is now called Hillside Healthcare International (though the clinic continues to be best known as Jericho Road by the local population). The organization has a state-side board of directors, the president of whom is Dr. Russ Robertson of Northwestern University Feinberg School of Medicine. The Stateside CEO is Jeff Hartman DPT, MPH. The CEO and the stateside board oversee all operations of the organization.
- The Hillside Clinic team is headed by its manager, Penny Leonard and clinical directors, Dan and Maria Thibault. They report directly to the CEO and board. The remaining staff at Hillside consists of salaried local employees and volunteer health professionals.

- The clinic is supported entirely through student tuition fees, private individual and organizational donors. The clinic currently provides all services at no cost. We do ask all non-Belizeans to donate \$25 for the care received.
- Schools such as Marquette University, the University of Iowa, University of Wisconsin, and Drake University have a relationship with Hillside and send students and faculty of different medical professions to us for monthly rotations. In 2004 a partnership with Concordia Nursing School in Wisconsin was established, sending students for international experience under the tutelage of an RN.
- Medical/PA students and medical residents have been performing electives at Hillside since its inception and are an integral component of the Hillside Health care team. Participants are primarily from the US, though more recently there have been participants from several other countries, including the UK, Australia, Canada, among others.
- Vehicles. Transportation is a critical part of our mission, as our fleet of vehicles is essential to getting our staff and patients around. Become familiar with the current vehicle policy that assures that the main transport vehicles are not used for outside activities. We generally discourage any personal use of Hillside vehicles. If you have questions or concerns, they should be directed to Evert, the Facilities Manager.

## **G. Overview of Hillside Clinical Activities**

- Clinical activities currently consist of the onsite clinic, mobile clinic and the home visit program. Along with its clinical work, Hillside participates in community outreach and education. Additionally, physical and occupational therapy services have been provided by volunteers since 2004. For more information on PT/OT, see section H. For more information on community health, see section I.
- Onsite clinic is conducted Monday through Friday morning 8am-noon. The morning hours are designed to coincide with the regional market conducted in PG on Mon, Wed and Fri mornings. Villagers from throughout Toledo District bus into PG early in the morning and return to their villages on buses that depart PG at 11:30 or noon. Hillside attempts to make itself available to these villagers. Additionally, Hillside provides a shuttle service to and from PG central square Wednesday and Friday mornings. The

shuttle will depart Central Square for clinic at 9am and return to Central Square once all the patients shuttled in have been seen. Because patients from rural and urban areas attend the onsite clinic, the patient mix (and therefore the conditions encountered) tends to be diverse. For more information how the clinic is run, see Clinic Procedure (section L).

- Mobile clinics to villages are conducted Monday through Thursdays. The villages are chosen by the MOH with our consultation. Presently Hillside covers San Jose, Blue Creek, and Aguacate in the San Antonio area; Laguna, San Marcos, Big Falls, and Barranco in the Punta Gorda area. The exact villages we visit may indeed change as the needs of the district change.
- Each Wednesday afternoon students present on assigned topics pertinent to the diseases that they are seeing at the Eldridge clinic and mobiles. Along with this the preceptor may have a short presentation on a medical subject that they have prepared, or a local health professional is invited to speak to the group.
- Each Friday the students are provided lunch in conjunction with a cultural presentation. These may be an area homes, restaurants, or at the education center. The session is generally finished by 2:30 in order that the group can have a longer weekend.
- Home visits are provided for those people in the PG area who are unable to easily access a medical facility. Currently there are approximately 50 patients; these include the elderly, disabled children and adults. Home visits are generally conducted by a Hillside nurse. Visiting physicians will do joint home visits on complicated patients and do periodic chart reviews. Home visit patients are currently separated into groups based on location to better organize the visit schedule. During each month, all patients in each group are visited at least once, though frequently a patient's condition will require multiple visits. Home visits are designed to provide medical care while also providing an opportunity for social interaction for persons who are often very isolated.

## **H. Physical Therapy and Occupational Therapy program**

- Physical therapy (PT) and occupational therapy (OT) services have been provided to the entire Toledo District in the past. Presently, there is no ongoing program, although groups of PT/OT come for short visits one to two times per year. Services are provided mainly through home visits, often in conjunction with CARE Belize, an organization that provides physical therapy to disabled children under the age of 6. Common conditions treated include musculoskeletal disorders (fracture, amputation, muscle strain/sprain, deconditioning, bursitis), neurological disorders (stroke, spine injury), pediatric disorders (cerebral palsy, spina bifida, Down syndrome, developmental delays) and elderly conditions (arthritis, loss of balance, deconditioning). OT aims to attain the highest functional independence of patients so they can do the day-to-day activities that are important to their health and well-being. This includes activities of daily living or any occupation which enables the patient to sustain them or contribute to their family and community. OT treatment strategies focus on upper extremity strengthening, fine motor skills, and cognitive and communication skills. PT aims to alleviate impairment, developmental delay and functional limitation cause by the conditions listed above. An assessment is performed, therapeutic interventions are designed and implemented, and clients are taught injury prevention. In contrast to OT treatment, PT treatment focuses on strengthening the larger muscle groups to allow patients to perform skills such as rolling, transferring, sitting, standing, and walking as independently as possible. Referral forms for these services are available in the clinic.

## **I. Community Health Program**

- The Hillside Community Health Program was created with a dual role. It seeks to serve the local community by increasing knowledge about clinical and public health. It also works to provide students with an understanding of community health in Belize to complement the medical training they receive during clinic time. The program works to move students toward the following goals:

- Recognize the delivery of health in a multi-cultural region of the world and gain an understanding of the political, cultural and historical context and its impact on health and health care delivery.
- Recognize prevalent cross-cultural and underserved issues in primary care, and gain an understanding of how this knowledge can be applied to a practice in the participants' home country.
- Understand and appreciate the uniqueness of the many cultures of southern Belize including the Maya, Garifuna, East Indian and Creole cultures.
- Understand the benefits and challenges of working with communities and recognize strategies to overcome the challenges.
- Develop the knowledge, skills, and attitudes necessary to effectively work with communities and to identify and appropriately access community-based resources.
- Understand and appreciate how psychological, economic, spiritual, social and biological factors inter-relate to affect one's health.
- Demonstrate skills in cross-cultural communication including taking a patient-centered history and counseling in an effective manner.
- Community outreach and education takes many forms. Students, with oversight from the staff, develop presentations for schools, organizations and health fairs. Students attend presentations on various topics pertaining to Belizean community health. Outreach has included radio interviews of Hillside staff. Hillside has developed working partnerships with the MoH and other organizations involved in the health of the Toledo population. These organizations include HOPE (for the elderly), CARE Belize (disabled children), PLENTY (sustainable jobs, school gardens), Toledo HIV/AIDS committee. Activities in partnership with these organizations affirm another component of Hillside's community outreach. Hillside is striving to broaden its partnerships to include such organizations as UNICEF and the Pan American Health Organization (PAHO). Hillside currently employs a part-time Community Liaison who oversees the elective participants' involvement and education in community health.
- In order to screen the area children for preventable diseases and to discover children that would benefit by referral for vision correction, disability evaluations, surgical repairs, it

is the goal of Hillside to perform a screen physical exam on all children in our catchment area. Along with this Hillside will work with the MOE to help implement their health education curriculum. This curriculum has been deemed by the Hillside staff as very adequate. Teachers may only need some in-service training or help in implementing this curriculum.

- We ask that you play a role in the implementation of the community health program in order to reiterate to the students the importance of community health in regard to medical care. Continuous reinforcement by a medical professional supporting the need for linking community health and clinical medicine demonstrates to students that both are necessary in order to provide optimal healthcare. As medical director this responsibility includes participating in Wednesday afternoon conferences and presenting a monthly health topic to students.

## **J. Pharmacy**

- Any prescription written in the clinic needs to be signed by the medical preceptor/staff to verify proper dose and length of treatment. All medications coming in or out are recorded to maintain our inventory and assess needs.
- Prescriptions written in the clinic should be written so patients can understand them with no abbreviations.
- Although we try to maintain consistency in our inventory it is often necessary to substitute one medication with another from the same class, i.e. captopril for enalapril.
- Short term supplies of medications that are not available in Belize should be used with great caution. For example, if these meds are for chronic conditions such as diabetes mellitus, it is difficult to sustain the patient on the med once the donated supply runs out.
- Controlled substances are generally not kept at clinic. Those on the Belizean formulary can be obtained, if necessary, through the PG Hospital pharmacy.
- Since our supplies are limited, you must restrict the amount of medications given. Generally, a one month supply is given. Seldom more than 40-50 Tylenol or Ibuprofen

- are prescribed. This is more strictly enforced when dispensing MoH medications in the mobile clinics.
- If there is a choice in medications, prescribe the ones that will expire first. At the beginning of each month an updated formulary with expiration dates is printed and available. There are some medications available at the PG polyclinic that Hillside does not have and we are able to prescribe those and have them filled by the patient there.
  - There are 2 pharmacy students that are available for consultation with the medical providers to help in choice of the correct medication given the formulary constraints. Use their knowledge to guide you.
  - Remember that there is far less resistance to common medications here in Belize than in the U.S.

#### **K. Guidelines for student/resident oversight**

- Encourage professional behavior and appearance at all times.
- Stress confidentiality at all times.
- See all patients being cared for by medical/PA students and PA attendings.
- If a resident has obtained a temporary Belizean license, they may see patients on their own if the attending feels comfortable with this.
- All student/resident charts need to be reviewed; student and non-licensed resident charts must be cosigned. Give feedback to participants early and often.
- Prescriptions can only be signed by a practitioner with a Belizean license.
- Students will be working with the FNP and RNs seeing home visit patients, with oversight as needed by the medical director. Students are not allowed to make medication changes for these patients on their own, but should discuss these with the FNP and medical director.
- Students/Residents are encouraged to take their time with patients; however, they must also be encouraged to perform care in a timely manner. At onsite clinic, patients often have to catch a bus or the Hillside shuttle back to town. Encourage the students/residents to keep their notes concise; if clinic becomes busy, students/residents are still required to record a complete note but may work on the chart after the clinic is over.

- The medical preceptor should help the students/residents to develop their ability in thinking through and writing out an assessment and plan for every patient. Remember that a clearly documented assessment and plan on each patient is essential in providing continuity of care between rotating physicians.
- Resident physicians may act as licensed physicians if they have obtained approval. If they do not have approved licenses, they will not be able to act independently. The medical director should work closely with the resident physician to offer supervision and education as needed.
- Major learning points for students/residents will be:
  - 1) Practicing medicine with limited diagnostic and treatment options.
  - 2) Communicating and working effectively across varied cultures.

#### **L. Clinic Procedure (same as Hillside Clinic Medical Student Manual)**

- Daily clinic hours
  - Mon thru Friday 8am –noon
  - Monday thru Thurs are mobile clinics. Expect to leave by 8am.
  - Return time varies based on location.
- Intake: staff checks in patients and gets basic vitals including a malaria smear if indicated per Belize Ministry of Health Guideline (smear for any pt with fever 99.6 or higher). Charts are placed in an inbox in the order that they should be seen. Students are to pick up charts in order (sometimes families are seen together). Students are required to get any additional vitals (respiratory rate, pulse, pulse oximetry).
- Charting: all charting is done in order to provide consistent quality patient care. The left hand side of the chart holds the patient’s medical history if they have been seen at Hillside before. A current problem list should be kept on all patients. Some acceptable abbreviations, appropriate SOAP notes and examples of chart notes are listed below. All medical students are provided with this charting information via email before arriving at Hillside and in paper form upon arrival.

- References: there are reference books in the cabinets in the clinic. Internet is available via the student computer for any online resources.
- Prescriptions: students will write prescriptions, but you must sign them in order for the Hillside pharmacy to fill them. If Hillside does not have a medication, use the larger prescription forms in the clinic, the patient must have two copies to take with them and make sure you sign both of them. The patient will be able to fill the prescription at PG hospital or elsewhere in Belize. Please insure prescriptions are legible and are written in simple English so the patient can read them at home and take their medication appropriately. Please be sure to check the patient's allergies. All dispensed meds should be clearly listed in the chart with dose, instructions, and quantity. If a prescription is given to be filled elsewhere, please document this as well.
- Testing: There are a limited number of tests available to be run at the clinic. These include UA dips and Pregnancy tests. Document results in the SOAP note. A limited number of tests can be performed at the PG hospital and these are posted in the consultation room. There is a form to complete, including test requested, diagnosis, and signature. The patient can take the form to PG hospital or other testing center. Be sure to remind patients that they must bring back a paper copy of their test results when they follow up. Please call Mr. Tommy Johnson at the PG lab if you have questions about the availability of a particular test. Tests not done at PG Hospital will require a patient to travel to a testing facility and pay for the test themselves. This often makes tests impractical. If you believe a test is necessary, please discuss with your patient and or one of the staff.
- Information on our malaria protocol, oral rehydration protocol, a temperature conversion chart, clinical evaluation of diabetics on oral hypoglycemics, clinical evaluation of chronic hypertension and asthma classification and treatment can be found below.

### **Belize Malaria Protocol**

All patients with temp. 99.6 or greater automatically get a malaria smear done regardless of their chief complaint. In addition to that, they will be treated with a dose of chloroquine based on their age. The slide is evaluated in the PG hospital vector control office for a diagnosis of malaria. If the patient has

malaria, the department of vector control will send someone to the patient's home to treat the patient for malaria, and also to spray their home. **Please be sure to get the malaria smear prior to treating with chloroquine.**

*Presumptive Treatment Protocol for Vivax and Falciparum Malaria*

*All dosing is in portions of a 250mg chloroquine tablet*

<u>AGE</u>	<u>DOSE OF CHLOROQUINE</u>
3mo or less	1/8 <sup>th</sup> of a tablet
4-11mo	1/4 of a tablet
12-23mo	1/2 tablet
2-4yrs	1/2 + 1/8 <sup>th</sup> of a tablet
5-6yrs	1 tablet
7-10yrs	1 + 1/4 of a tablet
11-12yrs	2 tablets
13yrs and older	2 + 1/4 of a tablet

### **ORAL REHYDRATION SOLUTION**

1. One level teaspoon of salt
2. Eight level teaspoons of sugar
3. One liter of clean drinking or boiled water and then cooled
4. Five cupfuls (each cup about 200 ml.)

### **PREPARATION**

Stir until salt and sugar is completely dissolved.

Don't use too much salt. Taste solution, should taste no saltier than tears.

Wash hands prior to preparing.

Use clean pot.

Water should be bottled, or boiled and cooled, or other clean drinking water.

If the child still needs solution in 24 hours, must make a fresh batch.

Store in cool location. Chilling may be helpful if available.

## **DOSING**

Give ill child as much of solution as needs, in small amounts frequently.

Give to child alternately with other fluids, ex. Breast milk

Continue to give solids if child is over 4 months of age, again small amounts frequently.

**THIS WILL NOT STOP THE DIARRHEA, just protect against dehydration. THE DIARRHEA WILL GO AWAY ON ITS OWN.** If the child vomits, wait 10 minutes and then give it again. Vomiting usually resolves. Body will retain some salts it needs despite vomiting.

Continue rehydration solution for the duration of the diarrhea, usually 3-5 days.

If diarrhea or vomiting increases, see a doctor.

**Adults and large children should drink at least 3 liters of solution a day until well.**

Sip from cups, small sips frequently.

Drink some after every loose stool.

### **Children under the age of 2**

Each feeding should be between a quarter to a half a cup of a large cup – small frequent sips!

### **Older children**

Each feeding should be between a half to one large cup – frequent small sips!

**WASH CUP WELL!!!**

## **GLYCEMICS**

*Subjective:*

1. Screen for hypoglycemic episodes
2. Are they taking their medications as prescribed?
3. Screen for cardiovascular symptoms
4. Screen for wounds, especially on feet. Does the patient do daily foot exams?

5. Screen for yearly eye exam
6. Check for recent labs including BUN, Cr, fasting blood sugar, cholesterol – paperwork must be brought to clinic

*Objective:*

1. Check that BP is less than 130/80 (goal)
2. Goal is to have all blood sugars less than 150 with no hypoglycemic episodes
3. Diabetic foot exam at each visit
4. Good cardiovascular and lung exam, including peripheral pulses

## **CLINICAL EVALUATION OF CHRONIC HYPERTENSION**

*Subjective:*

1. Are they taking their medications as prescribed?
2. Screen for angina symptoms, CHF, palpitations, dizziness, syncope, SOB
3. Do they have a past medical history of coronary artery disease (CAD), diabetes, hypertension or tobacco abuse? Family history of CAD or cerebrovascular accident (CVA)?
4. Check to see when patient last had lab work done and if they have been screened for other cardiovascular risk factors. They may be due. Lab results must be brought to clinic.

*Objective:*

1. Check a pulse. If history of CHF, check weight.
2. Screen for JVD, carotid bruits, and peripheral pulses. Perform good cardiac and lung exam.
3. Goal BP is <140/90, and in diabetics it is <130/80
4. SBP >200 with symptoms or diastolic BP >110 with symptoms requires referral to the hospital now. Pulse >120 should be worked up and evaluated for cause.

## ASTHMA CLASSIFICATIONS AND THERAPY

<p><i>Mild intermittent</i></p> <p>Symptoms less than or equal to 2 times per week.            Nighttime symptoms less than or equal to 2 times per month.            Brief exacerbations, can vary in intensity.</p>	<p><i>Treatment/Step one</i></p> <p>Short acting beta 2 agonist (albuterol)</p>
<p><i>Mild persistent</i></p> <p>Symptoms &gt; twice per week, and less than once per day.            Night symptoms &gt; twice a month.            Exacerbations may affect activity.</p>	<p><i>Treatment/Step two</i></p> <p>Low dose inhaled steroid            Albuterol as needed            Alternatives: Cromolyn, leukotriene modifier, nedocromil</p>
<p><i>Moderate persistent</i></p> <p>Daily symptoms. Daily use of albuterol inhaler.            Night symptoms &gt; once a week.            Exacerbations affect activity, and occur &gt; 2 times per week.</p>	<p><i>Treatment/Step three</i></p> <p>Low to medium dose inhaled steroid plus long acting beta 2 agonist            Alternatives: low to med dose inhaled steroid plus leukotriene inhibitor or theophylline</p>
<p><i>Severe persistent</i></p> <p>Continual symptoms            Physical activity limited, and frequent exacerbations.            Frequent night symptoms.</p>	<p><i>Treatment/Step four</i></p> <p>High dose inhaled steroid plus long acting beta 2 agonists</p>

## Security

Please be mindful of your security at all times. Although Toledo is a relatively safe environment, it is easy to fall into a relaxed mode and allow for unfortunate things to happen to you and your belongs. We have a night watchman on duty from 6 PM to 6 AM. Please check in with him when leaving and returning to the grounds. No one is allowed on the grounds except students, volunteers and staff, other than patients during clinical hours. Keep your room locked when you are out and secure your belongs. When on clinical or touring, be sure to keep your belongings safe.

**Absolutely no alcohol is allowed on campus.** Drinking moderately off campus is entirely acceptable. **The use of street drugs in any form will not be tolerated and will mean immediate dismissal from Hillside. This means if it is observed on or off campus. Any inappropriate behavior that indicates drug use or overuse of alcohol will be evaluated and the person will be subject to removal from the program.**

## Housekeeping

Bedding and towels are supplied and are laundered every Friday. Please keep your rooms tidy. Amelia cleans the rooms once/week. Keep the kitchen area clean. Any food or scraps will immediately draw ants and flies. Keep the refrigerator clean as well. Leftovers are encouraged, but should be thrown out after 3-4 days if not used. All wet garbage/food stuffs should be thrown into the compost pile in the southwest corner of the compound. If mixed with thrash it will give a rotten smell within a day.

There is a washing machine in the dorm. Clothes hanging areas are under the tree house and under the dorm. No drying of clothes inside or on furniture, please. Amelia will launder the linens and towels.

Early Monday and Wednesday mornings are scheduled times for marketing. We encourage you to work together to figure out a cooking and cleaning routine. Drinking water is provided. If the container is low, please advise one of the staff.

Certain meals are provided by Hillside. Otherwise you and your group are on their own. Check on the weekly schedule to find which meals are provided.

## Off-site Clinical Experiences

During this rotation at Hillside, the students will be assigned to other health care facilities. This is to give them a better idea of health care in the Toledo District. Some of these facilities include Belize Council for the Visually Impaired, which does eye exams and provides corrective lenses; Belize Family Life Association, which provides women's health care and contraceptives; the Punta Gorda Polyclinic, that serves the entire Toledo District with primary health care. They may have the opportunity to go on home visits with the RN in charge of home care, as well. Encourage them to make the most of these by interacting with the staff and asking appropriate questions when there are slow times. They can learn much about the health system in Belize by these exposures.

## **Weekend Activities**

There are many interesting places to visit and things to do in the Toledo District. It is encouraged that you work with your group to plan these, since it is a good time to get to know each other and the group rates for tourist activities is generally cheaper. It is generally better to try to make your plans early in your rotation, since some activities need prior notice and planning to make them happen. Be mindful of your safety at all times and if you are questioning the reputation of your guide or the agency ask one of the staff. Occasionally the schedule will ask you to participate in a weekend fair or activity, and in that event, compensatory time off will be allowed at a future weekend.

## **Cultural Awareness**

It is important to remember that you are spending time in a foreign cultural environment. Just because most people here speak English does not mean that they have the same values, the same ways at looking at the world, or the same ways of dealing with the problems of life. There are also differences between the various ethnic groups within Belize as well. Please do not make judgments or comments that only reflect your world outlook. It is much better to observe and process what you see and then discuss these in our evaluation times. If you are not certain what is appropriate, ask one of our Belizean staff members. They are used to foreigners and better understand your confusion.

Dress appropriately when out in public. You reflect Hillside whether on or off campus. If you are in a professional setting, long pants and sleeved shirts are necessary. In church or school settings, this is also true. When working in clinic or mobile, most students wear scrubs, which are available from Amelia if you did not bring any.

## **Phones and Internet**

We do have satellite internet at Hillside. It is rather unreliable at times. We also have limited access, so that once a certain amount of time has been used, the system slows to a snail's pace. So use the system wisely and be aware that if you use Skype or other such program for even a short period, you may be robbing the group of access. The phone system here is also very expensive. Even local calls are .25/minute. If you want to make calls, buy a phone card in PG and follow the directions.

## **Team Work**

You will work as a team in almost all activities. This means that you can ask and give advice to the students and staff. You should never feel that you are not practicing safely! Most patients get to be seen by 2-3 providers at each visit and this makes for good learning and care. If you have an interesting patient that everyone can learn from, be sure to notify not only other medical providers, but the pharmacy students as well.

## **Student Presentations and Student Lead Activities**

As part of your experience, you will be expected to give presentations along with the students on certain health related subjects. This may be to students, to an organization in the Toledo area, or in one of the

schools. It is important to express yourself in terms appropriate to the group and be aware that certain items are not found here. (eg. Recommending that diabetics eat more of a certain vegetable that is not available locally or get exercise at the gym)

## **Curriculum**

To round out your learning, the Hillside Board has put together some core learning objectives for the month and the resources to reach those objectives. These are directly related to the student's experiences here in Belize and will be found along with this manual. The students will be expected to read and study these during their "down" time in their rotation. We are still considering whether a proficiency test is appropriate.

## **Health Care Resources**

You will quickly find that you do not have all the resources that you are used to. That means you will have to be resourceful and innovative with your care. Generally speaking we have the basic equipment necessary for most exams. If you do not find something, ask one of the staff. If you need lab tests or diagnostic procedure, refer to the staff for what is available in PG or elsewhere. Remember that the patient may have to pay for these and may not be able to afford it.

As part of the new National Health Care Plan, each patient needs to have a Social Security card and number. They will need this to access any care outside Hillside and be covered by the government. The intake personnel will usually take care of this for you.

## **Cultural and Other Local Presentations**

Wednesday and Friday afternoons are reserved for presentations on the local culture, local health care system, and local development projects and programs. They are scheduled to help you get some insight into where you are working and who you are working with. This is a good time to ask questions about what you see in clinic and outside that may be confusing to you. As part of this, we have a weekly evaluation and look at the week's schedule ahead. It is very important that you stay **FLEXIBLE**, since schedules change daily due to circumstances out of our control. Weekly schedules are also posted in the dorm library area and in the clinic office area.

**Be flexible, learn from those around you, ask questions, and thoroughly enjoy your Hillside experience!!**