



EVIDENCE-BASED COMMUNITY HEALTH SCREENING & EDUCATION GUIDELINES

INTRODUCTION

Community Health Screening & Education (CHS&E) aims to assist communities, both urban and rural, in the US and other developed, as well as developing countries, in their efforts to resolve their most important healthcare problems. It is based on international (World Health Organization [WHO]) and national (U.S. Department of Health & Human Services [HSS]) evidence-based standards and practice guidelines. Although primarily focused on the 70% of the disease burden that is preventable, it facilitates high quality assistance in curative care areas as well.

All of the materials referenced are available free for downloading through www.hepfdc.info and related links, and nearly all are available in multiple languages. So although these preventable healthcare problems remain **the leading causes** of premature death and unnecessary suffering in nearly **every** community in **every** country; it is emphasized that most organizations and communities already have the resources to implement these WHO and HSS based guidelines.

1. Evidence-based National & International Standards and Guidelines

a. When providing services in the US: Our reference sources for the best available evidence-based **U.S. Standards and Practice Guidelines** are the [US Department of Health & Human Services](http://www.hhs.gov) (HHS) and its numerous divisions and collaborating partners: HHS divisions include the National Institutes of Health (NIH), Centers for Disease Control & Prevention (CDC), Agency for Healthcare Research and Quality (AHRQ) etc. Collaborating partners include numerous professional organizations such as the Institute of Medicine (IOM), American Public Health Association (APHA), and American Medical Association (AMA).

b. When providing services in other countries: Our reference sources for evidence-based **International Standards and Practice Guidelines** are the [World Health Organization](http://www.who.int) (WHO) and its numerous divisions and over 900 collaborating partners (These also include many HHS organizations)

The importance of meeting in-country standards and guidelines, as well as legal requirements, can be found at [International Standards & Practice Guidelines and Health Missions](#)

The number of international health care standards and practice guidelines published by the WHO and posted on its website number in the hundreds, and finding the current applicable guidelines can be difficult. Links especially relevant to health missions are published in the middle column of the [Best Practices Documents](#) page of the Best Practices in Global Health

Missions website.

c. Identical Guidelines: As guidelines have become increasingly evidence based, HHS and WHO standards and guidelines have become essentially the same. The most important causes of preventable morbidity and mortality have also become increasingly similar in developing and developed countries (Heart Disease, Cancer, Stroke, etc.).

The [Health Education Program For Developing Countries \(HEPFDC\)](http://www.hepfdc.info) is therefore being used in both rural and urban communities, in the US and other developed, as well as developing countries, throughout the world. It was created to provide the most important evidence-based health care information to the people who need it most. Additional information and free downloading of the program in English, French, Khmer, Mandarin and Spanish is available at: www.hepfdc.info

Note: We attempt to use and reinforce WHO and HHS evidence-based education materials that are already being used locally whenever possible. However in nearly all communities we have worked, these resources continue to be lacking.

2. Saving the Most Lives and Preventing the Most Suffering--Why is Evidence-based Health Education so Critically Important?

Curative care is needed for approximately 30% of our patient's healthcare problems and we always collaborate closely with a local health clinic for those patients who may need to be referred for curative-care follow-up. However, if we wish to provide quality, evidence-based care for the remaining 70%, integration of community health into primary care in accordance with HHS and WHO standards is essential.

For example, the [World Health Report 2008](#) emphasizes the following as one of the most important problems in both developed and developing countries world-wide:

"Misdirected care. Resource allocation clusters around curative services at great cost, neglecting the potential of **primary prevention and health promotion to prevent up to 70% of the disease burden**"

See the above report and the following for further information and examples: [Saving the Most Lives and Preventing the Most Suffering-Why is Evidence-Based Health Education so Critically Important?](#)

3. The Importance of the Holistic (Mind, Body, Spirit) Approach

A second major problem emphasized by the [World Health Report 2008](#) is

"Fragmented and fragmenting care. The excessive specialization of health-care providers and the narrow focus of many disease control programmes discourage a **holistic approach** to the individuals and the families they deal with and do not appreciate the need for continuity in care. Health services for poor and marginalized groups are often highly fragmented and severely under-resourced, while development aid often adds to the fragmentation"

In contrast, Community Health Screening & Education (CHS&E) and similar approaches have been strongly endorsed by the very best evidence-based guidelines, both internationally through the WHO; and nationally through the HHS and other organizations promoting high

quality, evidence-based care.

For example, the [*Seventh report of the Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure \(JNC7\)*](#) reports the following:

"Healthy People 2010 has identified the community as a significant partner and **vital point of intervention** for attaining healthy goals and outcomes. Partnerships with community groups such as civic, philanthropic, religious, and senior citizen organizations provide locally focused orientation to the health needs of diverse populations.

The probability of success increases as interventional strategies more aptly address the diversity of racial, ethnic, cultural, linguistic, religious, and social factors in the delivery of medical services. Community service organizations can promote the prevention of hypertension by providing culturally sensitive educational messages and lifestyle support services and by establishing cardiovascular risk factor screening and referral programs."

The importance of the holistic (Mind, Body Spirit) approach is even more strongly emphasized by the WHO, and numerous international guidelines address the needs in this area. For example, see: [*WHO Quality Of Life Spirituality, Religiousness and Personal Beliefs \(SRPB\) Field-Test Instrument*](#)

For the above reasons, as well as the availability of the necessary facilities and resources, it is usually a local church* that partners with the local health clinic to sponsor the CHS&E event. Churches can offer invaluable community resources for enabling compliance with the above National and WHO International standards and guidelines.

For children's screening and/or children's health fairs, partnerships with local schools are also required.

It is the establishment of the ongoing collaboration of the local clinics, churches, schools and other service organizations that is essential. Our team's purpose is to assist the above in **their** collaborative, long-term, sustainable efforts to enable their communities to resolve their own health problems.

This is not at all a new concept. For example, it is only recently that religious organizations have not closely collaborated with the medical community in providing healthcare. Until very recently most hospitals were even named after the various religious communities providing those services; and most religious communities had, in fact, been providing those services for hundreds of years.

*As we most often work with churches, we will use the term "church" to encompass all religious organizations.

COMMUNITY HEALTH SCREENING & EDUCATION **(CHS&E) GUIDELINES**

A number of general guidelines for short-term missions are available elsewhere (See paragraph II-1 for references). We will therefore address only those areas that are important for implementation of the Community Health Screening & Education approach, by either short-term missions or long-term in-country organizations. As the guidelines are evidence-based,

comprehensive, and go on for 15 pages, the following outline is provided. (To better facilitate understanding, **you may wish to make a paper copy of the [CHS&E Flow Chart](#)** which delineates the following, as well as the participatory learning stations in Section III.)

I. VISION/PLANNING

- 1. Vision/ Planning Meetings & Trips**
- 2. Community Direction and Sponsorship**
- 3. Services & Site Selection**

II TEAM PREPARATION & TRAINING

- 1. Critical Need for Qualified Physicians & Pharmacists**
- 2. Short-Term Missions Guidelines**
- 3. Patient-Centered Holistic Care**
- 4. Participatory Health Education**
- 5. Provider Guidelines & Patient Counseling Materials**

III SCREENING & EDUCATION EVENT

- 1. Advertising & Engaging the Community**
- 2. Registration for Event.**
- 3. Height & Weight Station for BMI determination.**
- 4. Patient Waiting & Participatory Learning Station.**
- 5. Provider-Patient Evaluation and Counseling Stations.**
- 6. Health Fair and/or Other Participatory Learning Activities.**
- 7. Patient Follow-up with Local Sponsors (Onsite and/or Referral)**

IV. ADDITIONAL COLLABORATIVE ACTIVITIES

- 1. Integration of Community Health into Primary Care Practice**
- 2. Other Clinic and Hospital (Pharmacy/Medical/Dental/Surgical/Nursing/Etc.) Collaborative Continuing Medical Education (CME)**
- 3. Other Pharmacy/Medical/Dental/Surgical/Nursing/Etc. Collaborative Activities**

V. EXIT EVALUATION/SUSTAINABILITY/MULTIPLICATION & PLANNING

- 1. Process Evaluation**
- 2. Community Health Indicators Form Results**
- 3. Sustainability/Multiplication & Planning**

I. VISION/PLANNING

1. VISION/PLANNING MEETINGS & TRIPS It is not possible to overemphasize the importance of these. Short-term efforts cannot hope to achieve the community health and development goals of long-term in-country efforts. And it is very important that we do not invest our resources in short-term missions at the expense of long-term, ongoing work for true community transformation.

However, even for organizations with long-term in-country relationships that have existed for decades, these planning meetings are absolutely essential. Numerous WHO guidelines emphasize that any efforts to truly improve the health and well being of a community must be **community** directed. (This has also been emphasized by the NIH and is true for healthcare services in the US and other developed countries as well.).

For example, [Effective Health Care-The Role of the Government, Markets and Civil Society](#) reports: "...programmes, policies and projects carried out without the active participation of the

people they are intended to benefit remain unsupported and unassimilated. It is only through participation of the beneficiaries that sustainable long-term changes are brought about."

Short-term mission partnering with a highly qualified long-term in-country host organization is necessary to meet these requirements. With the assistance of our in-country host, we attempt to establish relationships and partnerships with at least the following:

a. Ministry of Health (MOH) representatives: We attempt to meet with as many MOH officials and representatives as possible, from national and regional levels, as well as, the local clinic and community health level. This is critically important for a number of reasons.

-Integration of community health into primary care practice is necessary at all levels of the health care pyramid. Although emphasized by the WHO and nearly all MOH representatives at the upper levels, it is important that officials and providers at all levels, including the local community clinics, understand this approach.

-There are innumerable health education programs available, however most are not in compliance with WHO and other evidence based international and national standards and guidelines, and may actually cause more harm than good. It is therefore important that the education materials be approved at the highest possible level of the MOH; and that those used in the local community and throughout the health care pyramid be in compliance with the above standards. This is also necessary to reduce the harm due to patient confusion from conflicting and inappropriate advice.

b. Local community leaders

c. Education leaders, local principals, teachers and school health professionals.

d. Church leaders, and local pastors and members in the healthcare, teaching and other service professions.

e. Physician and other healthcare provider and community services representatives

The purpose of establishing the above relationships is to seek in-country, local community direction to the maximum extent possible. Local community organizations must be willing to sponsor (take ownership of) the event and work alongside other community sponsoring organizations.

2. AN APPROACH TO SEEKING COMMUNITY DIRECTION & SPONSORSHIP

Our meetings with local community leaders and potential sponsors in other countries usually include variations of the following (Our approach in the US is similar except we reference HHS guidelines-- though as noted above, as guidelines have become increasingly evidence based, HHS and WHO standards and guidelines have become essentially the same).

--We attempt to determine the following:

a. Whether local community leaders, clinics, churches, schools and/or other service organizations are willing to collaborate and invest in efforts to improve the health of their community.

b. Whether they feel their communities have a need for health screening and education services.

c. Whether they feel the *Health Education Program For Developing Countries (HEPFDC)* materials could assist them in meeting those needs for their communities.

d. Whether they feel our team could assist them, working together, side by side, in meeting those needs through WHO-based health screening and education services. (As noted above, **it is the establishment of the ongoing collaboration of the local clinics, churches, schools and**

other service organizations that is essential. Our team's purpose is to assist the above in **their** collaborative, long-term, sustainable efforts to enable their communities to resolve their own health problems.)

--We provide a brief description of the services we can assist their organizations in providing. If the following have not been previously distributed by our in-country host, or downloaded free from the website, we provide copies of:

- a. These *Community Health Screening & Education Guidelines*
- b. *Health Education Program For Developing Countries (HEPFDC)* in local language.
- c. *Saving the Most Lives and Preventing the Most Suffering*
- d. *Provider Guidelines & Patient Counseling Folder* in local language.
- e. *Patient Education/Counseling Folder* in local language.
- f. *Patient Health Screening & Education Record* in local language.
- g. *Community Health Indicators Forms*

(All of the above are also available free for downloading at www.hepfdc.info)

--Areas addressed usually include following:

a. Our goal is to assist (clinics, churches, schools, and other service organizations) such as yours in your efforts to resolve the most important health care problems ("save the most lives and prevent the most unnecessary suffering") in your community.

b. The WHO reports that the **very best** way of accomplishing this is by assisting you with your primary prevention and health promotion efforts. The WHO reports that this can **prevent up to 70%** of the disease burden in your community.

c. It was for that purpose that the *Health Education Program For Developing Countries(HEPFDC)* was created: To provide the most important evidence-based health care information to the people who need it most. The program:

-is based on the most critical global health care needs as specified in the latest WHO World Health Reports.

-emphasizes the top 10 leading risk factors globally that cause the most deaths and suffering.

-describes WHO guidelines for prevention of these as well as other common diseases through "reducing risk and promoting healthy life."

d. As the WHO is made up of healthcare representatives of all countries, yours as well as ours, the information we use does not come from, or belong, to us. The program is available in 5 languages, is available free for downloading, and is used by numerous organizations all over the world.

e. Most of the patients we see in developing countries are suffering from diseases that are preventable. Of all their medical needs, the greatest by far is for reliable health care information. Although life-saving information is available from the best evidence-based sources, it seldom reaches our patients or even their health care providers.

f. This program enables the **integration of primary care and community health** at the hospital, clinic/health center, and family/community (Includes church & school) levels of care. The critical importance of this integration to the effectiveness and sustainability of all health care systems in both developed and developing countries has been repeatedly emphasized by the

WHO (as well as the HHS and AMA in the US).

g. We limit our health screening to those areas that we can provide safely and effectively in the short-term setting and are most important to the health and wellbeing of the local community. In the past, we had always carried medicines and attempted to provide curative care services as well. However, we found we were actually causing communities more harm than good with that approach. We were, in fact, unintentionally reinforcing our patients' inappropriate use of drugs, even when they were not indicated and would cause harm. (For further information see Best Practices in Global Health Missions: [Why Patients are at Much Greater Risk of Serious Harm from Drugs in the Short-term Missions Setting](#))

h. We continue to always collaborate very closely with local hospitals and health clinics, for the local doctors and nurses always know what is most needed, and we very much need their direction. In addition, we also need a local clinic/hospital for referral of our patients with the 30% of health problems that may need medicines or surgery or other curative care follow-up.

i. When requested, we also attempt to assist hospitals and clinics in their provision of high quality curative care services. However, this is only possible in those areas where we have the team expertise and resources to do so in accordance with international and national standards and practice guidelines. For example:

--We may have highly qualified, board certified specialists on the team who could provide training or consultation in certain areas requested by local hospital and clinic providers.

--Many MOH and local clinics have inadequate supplies of even WHO "priority medicines", as well as other essential medicines and supplies. As noted above, our attempts to provide those services ourselves in the short-term setting place patients at great risk of serious harm.

However, our available resources are very much needed, and can be much better invested in assisting local healthcare facilities in their appropriate use. This also applies to some services we previously provided in the "health screening and health fair" settings (See for example, [Health Screening & Blood Glucose Monitoring](#)).

See also Section IV. ADDITIONAL COLLABORATIVE ACTIVITIES

j. However, to truly assist communities, our primary focus must remain on the 70% of the disease burden that is preventable. Our health screening and health fair services utilize and reinforce WHO guidelines in those critical areas. Our purpose is to **support local physicians, providers, pharmacists, schools, churches and other service organizations in their efforts to enable their communities to prevent and resolve their most important healthcare problems.**

k. However, this is your community and you are the experts here. And unless you appropriately direct us, our efforts are unlikely to result in any significant sustainable changes. We therefore very much need community representatives, especially from clinics, churches and schools to direct our mutual efforts.

l. As all communities are different, we also need to know the very best way we could assist you in your efforts. What areas of health services are working well in your community? Who is responsible for those services? Why do you think they are succeeding?

m. What areas do you wish you could change? How do you think they could best be changed? Do you think demonstration of our health screening and education services could

assist you in those areas?

n. The Health Fair Setting. Community health screening and education may often best be accomplished in the health fair setting. This adds a more festive atmosphere to the learning process, and can assist in establishing community collaborative efforts. (See Paragraph III-7 below for additional information, as well as links to WHO/HSS based participatory learning materials often used in the Health Fair setting.)

o. Sustainability & Multiplication. It is also important that our mutual efforts be sustainable. We will leave you with the Health Screening and Education materials. Once we demonstrate their use, the process can easily be duplicated by you, providing similar demonstrations in surrounding areas of your community, and so on. The program will remain available free for downloading. And will continue to be updated to comply with changes in WHO international and national standards and guidelines.

3. SERVICES & SITES SELECTED are determined by the community. The overall goal is to assist the community in its ongoing, collaborative, sustainable efforts to resolve its most important healthcare problems.

Services selected must be restricted to those that the sending team can provide in a safe and effective manner, and should demonstrate the highest possible quality care in accordance with international and national standards and guidelines.

However, **by concentrating on those services that evidence-based guidelines have determined to be most important in "saving the most lives and preventing the most suffering", our team training requirements are greatly simplified.** By following these evidence-based guidelines, we can, in fact, demonstrate very high quality care for the community's most critical health care needs with comparatively little additional training. This is in sharp contrast to the often overwhelming efforts necessary to provide even limited, inadequate quality, drug-based primary care in the typical short-term missions setting.

For example, Body Mass Index (BMI), BP, Tobacco Use, Exercise, and Diabetes Screening and Counseling can be safely and effectively provided by most teams. These services are of essential evidence-based importance in managing the most common causes of premature death and unnecessary suffering in developed and developing countries world-wide.

There are, in fact, very few services that can match the tremendous community and individual value provided with primary prevention and health promotion in these areas alone. Evaluation and counseling concerning BMI has become of critical importance world-wide:

The HHS reports that 68% of US adults, and over one third of our children, are now overweight or obese. Both national and international guidelines report that the higher the Body Mass Index (BMI), the higher the risk for heart disease, high blood pressure, type 2 diabetes, breathing problems, gallstones, osteoarthritis, and certain cancers.

These BMI related diseases have now increased to **epidemic levels in developing as well as developed countries.** For example, the *Lancet* recently (June,2011) reported that **nearly 10%** of adults **world-wide** now have **diabetes**, and the prevalence of the disease is rising rapidly.

Others report "It is estimated that by the year 2015 non-communicable diseases associated

with over-nutrition will surpass under-nutrition as the **leading causes of death in low-income communities.**" See WHO's [Integrating Poverty and Gender into Health Programmes-Module on Nutrition](#) and ["The 3 Things" Guidelines](#) for further information.

a. Provider Health Screening Exam-Adults:

For the above reasons, in developing countries, as well as the US, this now nearly always includes:

- Review of BMI values
- Review of exercise history
- Review of tobacco use history
- Review of history of symptoms of diabetes.
- BP and pulse measurement,

Usually this is all that time permits. Other areas may be substituted as determined by the local community and MOH, however this is unusual.

b. Provider Health Screening Exam-Children:

In contrast to older children, adolescents, and adults; screening of younger children in developing countries may be significantly different from developed countries. This is due to differences in mortality causes and rates. Preventable deaths from respiratory infections and gastroenteritis lead the list in developing countries. *Integrated Management of Childhood Illness* and other evidence-based WHO child health guidelines for developing countries can be found at the following Best Practices in Global health Missions link [Child Health](#) and have been incorporated into the *Health Education Program For Developing Countries*.

Also in developing countries, under-nutrition remains a very important contributor to unnecessary mortality, especially in those less than 5 years of age. However, in older children and adolescents, paradoxical over-nutrition has become an increasingly important problem in developing countries as well. (In developed countries such as the US, over-nutrition is now responsible for 1 of 3 of our children and teenagers being overweight or obese; with associated dramatic increased rates of type-2 diabetes and other diseases, even by adolescence.)

The [WHO Policy Brief: Preventing chronic diseases, designing and implementing effective policy](#) therefore emphasizes the importance of the above approach for children as well as adults:

"The growing epidemic of chronic disease is due to tobacco use, unhealthy diet, physical inactivity and other risk factors...Chronic disease risk accumulates throughout the life course, and risk factors are often established in childhood and adolescence. Consequently, chronic disease prevention must focus on promoting healthy diet, physical activity, and tobacco abstinence from an early age...

Skills-based chronic disease education should include participatory learning experiences that address nutrition, the benefits of physical activity, and the health consequences of tobacco use. Such programmes can be implemented with limited resources, and may be highly beneficial in reducing chronic disease risk factors among young people."

c. Provider-Patient Health Counseling/Education. Evidence-based WHO and HSS guidelines and illustrations are used to provide individual patient counseling based on the above

screening and evaluation results. Copies are distributed to all In-country and US Team providers. In-country providers are given copies of the counseling materials in their preferred language (English, French, Khmer, Mandarin or Spanish). (See Paragraph II-4 re: *Provider Guidelines & Patient Counseling Folder*)

d. "The 3 Things" approach based on WHO/HSS guidelines meets all of the above requirements. It addresses the most important causes of preventable morbidity and mortality in nearly all communities, urban or rural, developed or developing, world-wide, and is essential for children as well as adults. We will therefore use "The 3 Things" approach as the example for the remainder of this document. (See ["The 3 Things" Guidelines](#) for further information.)

e. Site Selection is determined by the community. Most important is availability of patient privacy. The provider/patient area for exam and patient counseling should be set up with as much privacy as possible. It is best to use individual rooms providing both visual and auditory privacy whenever possible.

There should also be adequate space to accommodate relatively large numbers of people (indoors if inclement weather is a possibility). In accordance with WHO and HSS guidelines, tobacco use should not be permitted. There should be adequate restroom facilities. Adequate seating for Patient Waiting/Participatory Learning Areas. Adequate space to set up additional participatory health education tables or booths. For Health Fairs, adequate open space for additional festive Health Fair functions as determined by the community.

For the above reasons, local churches and schools are the sites usually chosen by community organizers and sponsors.

II. TEAM PREPARATION & TRAINING

1. CRITICAL NEED FOR QUALIFIED PHYSICIANS AND PHARMCISTS (See also INTRODUCTION paragraphs 1, 2 & 3).

Although we carry no drugs, there are no professionals more important to the success of our missions than qualified physicians and pharmacists. This is true for all stages of the process, from I. VISION/PLANNING to V. EXIT EVALUATION/SUSTAINABILITY/MULTIPLICATION & PLANNING.

This is also emphasized by the WHO: "Adverse drug reactions are among the leading causes of death in many countries." *WHO The Safety of Medicines-Oct 2008*

This is true for patients in the U.S. as well. The FDA website reports that drug adverse events are: "the 4th leading cause of death; ahead of pulmonary disease, diabetes, AIDS, pneumonia, accidents and automobile deaths." *U.S. Food and Drug Administration. Center for Drug Evaluation and Research. "ADRs: Prevalence and Incidence." Cited 15 April 2009.*

The WHO reports: "Irrational use of medicines is a major problem worldwide. It is estimated that half of all medicines are inappropriately prescribed, dispensed or sold, and that half of all patients fail to take their medicine properly." *WHO Medicines Strategy-Oct,2004*

It is true that our patients have no need for STMs to bring in yet even more of our US medicines to add to these ongoing, life-threatening problems, especially in the STM setting (See [Why Patients are at Much Greater Risk of Serious Harm from Drugs in the Short-term Missions Setting](#)).

However, it is also true that at least half of all patients world-wide (and even more in

developing countries) desperately need assistance in using their current medications appropriately. (This is easily confirmed with simple follow-up home visits, asking to see all their medicines and how they use them.)

Pharmacists can also provide critically needed services by working alongside local pharmacists and providers in offering participatory education to groups of patients re drug safety, appropriate use, etc. For example see ["Taking Medication" Mandarin version](#).

In addition, their expertise is also critically needed for local clinic/hospital pharmacist and provider CME, as well as other areas, such as pharmacy management. See Section IV. ADDITIONAL COLLABORATIVE ACTIVITIES.

2. SHORT-TERM MISSIONS GUIDELINES Numerous sources of information exist related to short-term missions and medical team preparation (See especially [US Standards of Excellence in Short-term Mission](#) , [Center for the Study of Health In Mission](#) and [Best Practices in Global Health Missions](#)). The importance of a thorough study of the community's culture cannot be overemphasized.

We also wish to especially emphasize the importance of compliance with country-specific [CDC Traveler's Health](#) guidelines for all team members.

Healthcare providers need to be aware of the in-country National and International Standards and Guidelines related to the care they wish to provide. Contact information for healthcare provider permission to practice for all countries may be found at [International Association of Medical Regulatory Authorities](#) (See also "When providing services in other countries" in INTRODUCTION paragraph 1)

Contact information for nurses may be found at [International Council of Nurses](#)

(Also, as noted previously, it is very important that we do not invest our resources in short-term missions at the expense of long-term, ongoing work for true community transformation, an approach that may take 3-4 years or more for implementation. Many US churches and other organizations may instead choose to support the long-term assignment of critically needed qualified professionals to meet those goals.)

3. PATIENT-CENTERED HOLISTIC CARE The importance of this approach has been stressed by numerous WHO and HSS guidelines. See also INTRODUCTION paragraphs 1,2&3.

All team members, both US and In-country, regardless of their duties, serve very important functions as members of the healthcare team. Patients, even in the US, are often anxious when entering a health care setting. And as noted above, the importance of a thorough study of the community's culture cannot be overemphasized.

A caring, friendly, respectful, professional approach is essential. A smile, a gentle and quiet manner; and efforts to greet the patient in his/her own language (with an apology for not speaking more or better, if applicable) can do much to relieve the patient's anxiety and concern. How well staff members do this work will also affect the ability of the provider to do hers/his. For example, blood pressure readings can be very much affected by patient anxiety.

Our attitude and performance will also reflect on the clinic, church and school sponsoring organizations. And it may well determine whether our patients seek follow-up holistic health care services with those organizations. As documented by numerous national and international evidence-based guidelines, such follow-up is **absolutely essential** for nearly all of our patient's

most important healthcare problems. It is, therefore, one of the **most important indicators** we evaluate concerning the **success/failure of our healthcare mission efforts** (See paragraph V-2)

Concerning the provider-patient consultation: One of the great joys of our profession is the privilege of getting to know our patients. Providers who have been on drug-based short-term missions will notice a remarkable change in their patient consultations.

As our drugs are so over-valued, and are often considered "magic pills" especially by the poor; patients seen at drug-based clinics are very highly motivated to present in a manner that will result in the most pills being dispensed, especially when they are free or subsidized.

With the CHS&E approach, the patient is no longer preoccupied with this drug-seeking goal. Instead, physicians and pharmacists can focus on prevention of unnecessary deaths and the critical need for appropriate use of locally available medicines(See paragraph II-1 above).

So with the substitution of drug-centered care with patient-centered care, we actually have a bit of time to get to know our patients. And with that process comes the ability to demonstrate true compassion. As noted above, the importance of this caring, patient-centered approach to the patient's healing response and wellbeing has been emphasized by both WHO and HSS reports.

4. PARTICIPATORY HEALTH EDUCATION The importance of the participatory approach to teaching for all age groups has also been emphasized by numerous international and national guidelines (See [Evidence-based Participatory Health Education Guidelines](#)). For Health Screening events, this usually begins with distribution of the advertising flyers (See paragraph III-1) and continues onsite as patients are waiting in line to register.

For example, using "The 3 Things" approach, the [Flyers](#) lead people to ask "What are these 3 things that WE can do that would prevent 80% of heart disease, 80% of stroke, etc?" As patients are waiting in line to register, a health educator can use the [11x17 posters](#) to draw out the answers from the people. The lesson (with the WHO answers) is also included in the [Patient Health Screening and Education Record](#) which is given to the patient for further reinforcement and multiplication of the lesson to the patient's family and friends.

5. PROVIDER GUIDELINES & PATIENT COUNSELING MATERIALS The *Provider Guidelines & Patient Counseling Folder* (See **Section IV** on the HEPFDC [Health Screening](#) page) is distributed to all In-country and US Team providers. In-country providers are given copies of the counseling materials in their preferred language (English, French, Khmer, Mandarin or Spanish). All folder contents can be downloaded free from the HEPFDC Health Screening page.

For "The 3 Things" approach, the **folder includes** International and National standards and guidelines and health education/counseling materials on the following **(a-c)**:

a. Body Mass Index (BMI). BMI standards, guidelines and charts from the CDC (For US) and WHO (For other countries) are included. Although the BMI number is calculated the same way for children and adults, the criteria used to interpret the meaning of the BMI number for children and teens are different from those used for adults. For children and teens, BMI age- and sex-specific standards are included. For ages up to 2 years, the CDC has adopted WHO

growth standards for children in the US. For ages 2-20, the CDC BMI standards are different for use in US children. See Body Mass Index Guidelines (**Section VI** on the HEPFDC [Health Screening](#) page)

b. Blood Pressure Evaluation. Elevated blood pressure is one of the most common and important conditions we treat as health care providers. We believe it is important for the provider who is responsible for doing the counseling to take the measurement. This also reinforces its importance. As noted in paragraph II-2, a provider's caring touch can also be very important to the patient's healing response.

However, many blood pressure readings, even those in most physicians' offices and hospitals, are not taken in accordance with evidence-based guidelines. This can significantly affect the accuracy of the readings, and lead to unnecessary patient worry, as well as, unnecessary treatment. For this reason the following are also included:

The Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure (JNC7) (**Section VI** on the HEPFDC [Health Screening](#) page) provides additional evidence based guidelines for evaluating patients. Sections on "Classification of Blood Pressure" "Accurate Blood Pressure Measurement in the Office" and "Patient Evaluation" are included in each Provider Folder

c. Provider-Patient Health Counseling/Education:

- Evidence-based WHO and NIH guidelines are included in the folder to provide individual patient counseling based on the above screening results.

- The guidelines addressing BMI, Exercise, BP, Tobacco Use and Diabetes Screening are provided from HEPFDC sections 38 and 41. The accompanying Illustrations are used by providers to assist with their counseling.

- They are available in English, French, Khmer, Mandarin and Spanish for use by In-country as well as US Team providers and can be downloaded free from **Section IV** of the HEPFDC [Health Screening](#) page.

- The materials are the same as those previously provided (by our in-country host or during the planning trips) to the local clinics, schools, and churches. As US healthcare providers are nearly always very highly respected by patients from developing countries, this process strongly supports and reinforces the MOH and local community physicians, nurses, teachers and other educators in their attempts to implement WHO guidelines after we leave.

- The folder illustrations assist the provider in meeting international standards and guidelines for quality care. However, provider time may not be sufficient for completion of the above. And after an introduction to the guidelines, referral to Team and Local Health Educators and/or local follow-up is usually necessary.

d. Patient Health Screening & Education Record ("The 3 Things" Version) was also specifically developed to assist providers in meeting International and National Standards and Guidelines in the above areas (See **Section III** on the HEPFDC [Health Screening](#) page).

e. Additional Evaluation and exam may be performed depending on the patient's needs and requests, available time, available privacy, and provider's competency, license, and approval of in-country regulating authorities.

f. Community Health Screening Indicators Forms (See Paragraph V-2 Community Health Indicators Form Results)

III. HEALTH SCREENING & EDUCATION EVENT

1. ADVERTISING & ENGAGING THE COMMUNITY A "Flyer" can be used that includes time and location of health screening and education event. This can also include "The 3 Things" or other approaches to begin to engage the community in the participatory learning process. For example, the information on the flyer can lead the reader to ask, "What are these '3 Things' that WE can do that will prevent 80% of our heart disease, 80% of our strokes, etc?" See **Section II** on the HEPFDC [Health Screening](#) page for Flyer Templates in English and Spanish.

2. REGISTRATION FOR THE EVENT

a. Participatory Learning. A health educator facilitates this as patients are waiting in line to register. Patients "discover" the answer to the "The 3 Things" question.

b. The *Patient Health Screening & Education Record* is given to the patient at the time of registration. This provides the answers to, and enables reinforcement and multiplication of "The 3 Things" lesson, and serves several very important additional functions (See [Patient Health Screening & Education Record-How it Can be Used](#))

c. Registration Numbers are recorded on the *Patient Health Screening & Education Record* and the Community Health Indicators & Follow-up Forms (See Below) to facilitate follow-up. "Health related door prizes" based on registration number drawings are often included as another way of calling attention to important community health needs and solutions --Examples could include a soccer ball for exercise for children, locally available lockable medicine box for adults, etc.

c. Community Health Indicators and Follow-up Forms. Completion of these forms begins at registration. Content can include whatever information the local community determines is most important for evaluating and improving community health status. Registration numbers are used to facilitate evaluation of **health screening indicators** as well as **patient follow-up**. (See paragraph V-2)

e. Patient Instructions. In accordance with JNC7 guidelines, if patients wish to have their BP measured, they are requested to avoid caffeine, exercise and smoking for at least half an hour prior to the measurement (Smoking is not permitted by communities in most health screening settings).

3. HEIGHT & WEIGHT STATION for BODY MASS INDEX (BMI)

a. Equipment. To provide highest possible quality services, it is important that our measurements be accurate. *Consumer Reports Health* and others report the results of testing and ratings of weight scales. The Taylor 7506 scale was top rated for accuracy and consistency and has been available on sale for about \$25 on line. High quality portable stadiometers are also available on-line and can be packed in a large suitcase. (We have used the portable Seca 213 available for about \$170 on-line).

b. Safety and Respect. For safety reasons, it is often necessary to touch the patients while assisting them on and off the scales. It is very important that all touching, in all countries, be done with proper respect. It must also be done in accordance with local custom-- In some countries it is essential that women patients be assisted by women, and men patients by men team members.

c. Privacy. This is always essential. A separate room should be provided whenever possible. The area should be kept clear of non-essential personnel. The "head of the line" should be maintained far enough away to ensure as much patient privacy as possible.

d. Infection Control. The stadiometer and scale should be wiped down with a disinfectant wipe before each patient. Those portions in contact with the patient's head and feet are especially important. The staff member's hands should also be cleansed before each patient.

e. Quality of Care. With the high quality digital scales and stadiometers, these measurements can be accurately recorded by non-healthcare personnel. All measurements should be taken without shoes (A chair should be provided). Coats and heavy outer clothing should be removed when possible. Stadiometer instructions can include: "Look straight ahead, keep your heels flat on the floor, and stand with your back against the stand, as straight as you can, like a soldier." and/or demonstration of same. Calculation and recording of the BMI can also be performed here. However, values should not be discussed with the patient at this station. Patients should be advised that a team healthcare provider will review the results with them.

4. PATIENT WAITING & PARTICIPATORY LEARNING AREA There should be seating available so patients can relax for a time before seeing a provider for the blood pressure determination and additional evaluation. Participatory learning is provided while patients are waiting. Other participatory learning booths/tables may also be provided at the event (See paragraph III-7).

5. PROVIDER-PATIENT EVALUATION AND COUNSELING STATION (See also Section II) Team providers work alongside local providers in providing these services. The importance of the WHO holistic (body, mind, spirit) approach to healing is emphasized. WHO (and HHS) guidelines also emphasize the importance of the quality of the provider-patient relationship and a "caring" patient-centered approach for patient healing. (See Paragraph II-2)

a. Equipment: Blood Pressure Measurement--Consumer Reports Health and others report the results of testing and ratings of self-inflating blood pressure monitors. The available unit that was rated the highest for accuracy was the Omron Premium HEM-780 for around \$110. Although we have found the above to be accurate, we also use high quality aneroid BP cuffs to confirm high readings. (ADC aneroid BP cuffs are also guaranteed to be accurate when new.)

A stethoscope, a small table, a couple chairs, hand sanitizer and disinfectant wipes are the only other essential equipment requirements. Additional diagnostic equipment is used as described in paragraph II-4-e.

b. Privacy: As with all physician-patient encounters, there should be as much privacy as possible. (See also Paragraph I-3-e)

c. Infection Control: The blood pressure cuff, stethoscope and any other diagnostic equipment used should be wiped down with a disinfectant wipe before each patient. The provider's hands should be cleansed before each patient.

d. Quality of Care is the focus of the CHS&E approach and is enabled through numerous evidence-based mechanisms described throughout this document. (See especially INTRODUCTION and Section II)

Additional specific guidelines are contained in the *Provider Guidelines & Patient Counseling Folder* which is given to each In-country and US Team provider during team training sessions. (See paragraph II-4)

6. HEALTH FAIR and/or OTHER PARTICIPATORY LEARNING ACTIVITIES Health Fairs provide a wonderful opportunity for additional participatory learning in a festive setting. It also facilitates relationships and collaboration among the various community sponsors/organizers. Learning in such settings can be truly enjoyable, and memorable as well. Care must be taken to ensure the lessons demonstrate evidence-based guidelines. They should also address the most important health related conditions in the community.

For example, the "**Just One Soda**" lesson is based on a number of national and international reports and guidelines (See also paragraph I-3 re over-nutrition and BMI related morbidity and mortality). The CDC reports: "There is too much sugar in our diet. Six out of 10 adults drink at least 1 sugary drink per day...Sugar-sweetened beverages (SSBs) are the **largest source** of added sugars in the diet of U.S. youths...Among adolescents specifically, SSB consumption can contribute to weight gain, type 2 diabetes, and metabolic syndrome."

The WHO reports: "The high and increasing consumption of sugars-sweetened drinks by children in many countries is of serious concern. It has been estimated that each additional can or glass of sugars-sweetened drink that they consume every day increases the risk of becoming obese by 60%."

Additional information and "Just One Soda" posters and others most commonly used in the health fair setting are available free from the HEPFDC [Participatory Approaches](#) page.

7. PATIENT FOLLOW-UP WITH LOCAL SPONSORS (ONSITE AND/OR REFERRAL)

a. Page 4 of the *Patient Health Screening & Education Record* is dedicated to this very important follow-up function. The page lists local sponsoring organizations of the event (Clinic, Church, School, and other Community Service Organizations). It includes contact information and holistic health services provided. Each organization sponsoring the CHS&E event is asked what specific information they wish to include. For example:

i. Sponsoring Local Church Follow-up Information concerning Holistic (Mind, Body, Spirit) services could include: Contact Info; Church Services; Sunday & Bible Schools; Men's Groups; Women's Groups; Married Life Groups; Teenage Groups; Groups for Weight Control & Physical Fitness; Heart Disease, Stroke and Diabetes Prevention; Stress Reduction Groups; Alcohol & Drug Dependency Groups; Healing Prayer Groups; and additional groups or services for other conditions that cause the most unnecessary deaths and suffering locally.

ii. Sponsoring Local Medical Clinic Follow-up Information: Health conditions are sometimes identified which require urgent medical follow-up. This is especially true in poor communities that lack health insurance. This is also important for patients who will need more

routine follow-up of high blood pressure and other conditions. If the screening setting is in the US, contact information for a local sliding fee-scale clinic is usually included. The contact info for the local Ministry of Health clinic is included in most other countries.

See **Section III** of the HEPFDC [Health Screening](#) page for additional information and Examples and Templates of the *Patient Health Screening & Education Record*.

b. Additional On-site Sponsor Follow-up Information may also be provided at CHS&E booths/tables or as part of a Health Fair setting.

c. Community Health Indicators and Follow-up Forms. These forms provide the information necessary for patient follow-up. They also enable documentation of patient requests for church and other community health related follow-up services such as Diet and Exercise Groups, etc.

IV. ADDITIONAL EVIDENCE-BASED COLLABORATIVE ACTIVITIES

As noted previously, curative care remains essential for at least 30% of our patients' healthcare problems and we always work very closely with the local health clinics and/or hospitals.

Although the STM drug-based approach cannot be condoned (See again [Why Patients are at Much Greater Risk of Serious Harm from Drugs in the Short-term Missions Setting](#)), we continue to believe there is much that qualified doctors and pharmacists can do to truly assist communities. Simply leaving our drugs at home also enables STM to focus our resources on those services that are evidence-based, safe and effective, sustainable, and truly needed by our patients:

1. INTEGRATION OF COMMUNITY HEALTH INTO PRIMARY CARE PRACTICE

The critical importance of integration of community health into primary care practice cannot be overemphasized. For example, *The Lancet* (Volume 372, Issue 9642, 13Sept2008) reports that the very future of our health care systems is dependent on our ability to implement this approach. Yet nearly all communities, in the US as well as developing countries, continue to need assistance in its implementation.

The *Health Education Program for Developing Countries* has been used to integrate community health into primary care at all levels of the WHO health care pyramid (Hospital, Clinic/Health Center, and Family/Community[Includes Churches & Schools]) in both rural and urban areas, and in developed as well as developing countries all over the world. And it is used with or without the concurrent provision of curative care services.

As with Community Health Screening & Education(CHS&E), partnership with local and sending team physicians working side by side is essential. However, this approach definitely requires much more provider training and expertise than the more focused CHS&E approach. See [How the Program has been used by Community Health/Primary Care Medical Teams](#)

2. OTHER CLINIC AND HOSPITAL (PHARMACY/MEDICAL/DENTAL/SURGICAL/NURSING/ETC.) COLLABORATIVE CONTINUING MEDICAL EDUCATION (CME)

Local clinic and hospital providers throughout the world are in great need of high quality, relevant, evidence-based CME. Team physicians, pharmacists, dentists and other providers can do much to meet the critical needs in this area. Vision/Planning Meetings are used to match up

the providers' area of expertise with the most important local CME needs.

3. OTHER PHARMACY/MEDICAL/DENTAL/SURGICAL/NURSING/ETC.

COLLABORATION There are numerous other areas where STM providers can greatly improve the quality of local curative care services. Again Vision/Planning meetings are used to match up STM resources with local needs. For example, most local clinics have ongoing critical shortages of even the basic WHO recommended essential medicines. There is much that sending organizations, and pharmacists in particular, can do to assist local communities in the best possible use of these limited resources in accordance with international standards and practice guidelines (For example see [WHO Guidelines for Drug Donations](#))

V. EXIT EVALUATION/ SUSTAINABILITY/MULTIPLICATION

At least two **Exit Evaluations** usually take place.--One with all team members, another attended by leaders from all sponsoring organizations. The evaluation usually includes review of the following:

1. PROCESS EVALUATION usually includes the following 21 areas: What went especially well? What were the problems? What did we learn? How can we do better next time?

I. VISION/PLANNING

1. Vision/ Planning Meetings & Trips
2. Community Direction and Sponsorship
3. Services & Site Selection

II TEAM PREPARATION & TRAINING

1. Critical Need for Qualified Physicians & Pharmacists
2. Short-Term Missions Guidelines
3. Patient-Centered Holistic Care
4. Participatory Health Education
5. Provider Guidelines & Patient Counseling Materials

III SCREENING & EDUCATION EVENT

1. Advertising & Engaging the Community
2. Registration for Event.
3. Height & Weight Station for BMI determination.
4. Patient Waiting & Participatory Learning Station.
5. Provider-Patient Evaluation and Counseling Stations.
6. Health Fair and/or Other Participatory Learning Activities.
7. Patient Follow-up with Local Sponsors (Onsite and/or Referral)

IV. ADDITIONAL COLLABORATIVE ACTIVITIES

1. Integration of Community Health into Primary Care Practice
2. Other Clinic and Hospital (Pharmacy/Medical/Dental/Surgical/Nursing/Etc.) Collaborative Continuing Medical Education (CME)
3. Other (Pharmacy/Medical/Dental/Surgical/Nursing/Etc.) Collaborative Activities

V. EXIT EVALUATION/SUSTAINABILITY/MULTIPLICATION&PLANNING

1. Process Evaluation
2. Community Health Indicators Form Results
3. Sustainability/Multiplication & Planning

2. COMMUNITY HEALTH INDICATORS & FOLLOW-UP FORM RESULTS

Completion of these check-off forms begins as part of the registration process (Templates may be downloaded from **Section V** of HEPFDC [Health Screening](#) page.)

- a. The information obtained from the form is determined by the local community in collaboration with the Ministry of Health.
- b. Indicators for adults usually include results of BMI, BP, Tobacco Use, Exercise, Diabetes Screening (History of symptoms associated with diabetes).
- c. This is valuable information for community and MOH planning purposes, and only takes a few seconds to check off with the *Community Health Indicators Form*. It also helps determine the need for further health education and other preventative services.
- d. Patient contact information is also often needed for follow-up. (This is also often used for subsequent distribution of "Health Related Door Prize" drawings.) A **registration number** is recorded on the *Patient Health Screening & Education Record* which remains with the patient. Use of **Form 5A and 5B** allow separation of indicators from follow-up contact info for confidentiality purposes. **Form 5C** includes both indicators and the contact info necessary for follow-up.
- e. The *Community Health Indicators Form* can be completed by providers, or the information can be recorded from the *Patient Health Screening & Education Record* by an assistant or at the next station.

f. When used in subsequent years, the forms can also provide documentation of the community's response to health screening and education efforts. For Example: # Total Patients____ # With Decreased BMI ____ #With Increased BMI____
With Tobacco Use____ # With less than 30 Min Exercise/Day____ #With Symptoms of Diabetes____ # Requesting referral for F/U Evaluation/Counseling/Treatment/Support____

g. Exit evaluation of the indicator results could include:

- Did the screening document important risk factors for premature death and suffering?
- Was the WHO-based counseling potentially life-saving?
- Did the knowledge empower patients to assist in resolving their own health problems?
- Did the patient response indicate that the services you provided were important?
- (Often most important) What were the "# Requesting referral for F/U Evaluation/Counseling/Treatment/Support"?

3. SUSTAINABILITY/MULTIPLICATION PLANNING

Based on the above evaluation, was this a worthwhile project? Would you be interested in doing this again?

Would you be interested in helping other churches, schools and clinics in your community provide similar CHS&E events? What would prevent you from doing this? When do you think you could schedule your next event?

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Thank you.

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