

## II. Personal Items to Take and Keep With You

1. A fanny pack that contains the following essential items:
  - Wipes to clean counting tray and hands occasionally.
  - A water bottle so that you can keep adequately hydrated.
  - A small packet of tissues, because you never know what the restroom facilities are like.
  - A small Bible (New Testament & Psalms).
  - An evangelism tool, e.g. the Four Spiritual Laws or Evangeli-Cube
2. Personal medications that you regularly take. (A double supply, keeping half in two separate locations)
3. Malarial medications (if you are in a malaria area), and Pepto Bismol and a fluoroquinolone in case traveler's diarrhea develops.
4. Insect spray, sun screen, moisturizer lotion and toiletries.
5. Personal papers necessary:
  - Visas, (possibly) from consulate
  - Passport
  - Professional License
  - Birth certificate, official copy
  - Immunization certificate

### Reference List

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6. WHO. World Health Statistics 2011 Report. [report on the Internet] Geneva, Switzerland: World Health Organization. *WHO Statistical Information System*, 2011. [Cited 1-30-2013] Available from: <http://www.who.int/whosis/whostat/en/index.html>.



## Pharmacist Handbook v.2

## For Short Term Mission Projects

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## I. Introduction

Short-term team participants prayerfully should think through a number of issues before heading to the field. Adequate access to quality health care is a problem in many parts of the world. Recently there have been improvements in the availability of healthcare services across the globe, especially in the area of maternal and child health. However, access to basic primary healthcare and skilled care during pregnancy, childbirth, and the postpartum period is still inadequate in many areas.

The lack of adequate health care access should be a concern of each of us, and prompt us to action. Jesus is our example; Matt. 9:35-38 (NIV) “*And Jesus went throughout all the cities and villages, teaching in their synagogues and proclaiming the gospel of the kingdom and healing every disease and every affliction. When he saw the crowds, he had compassion for them, because they were harassed and helpless, like sheep without a shepherd. Then he said to his disciples, ‘The harvest is plentiful, but the laborers are few; therefore pray earnestly to the Lord of the harvest to send out laborers into his harvest.’*” The action verbs are not highlighted in the original but were added to emphasize that the church and individual Christians are to follow Jesus’ examples in the mission of making disciples of every nation. We must be compassionate in serving the needs of people. Not only do we need to be extending care to the hurting in this world, but we also need to be praying that more people become involved in following Christ’s example.



The obedient pharmacists and pharmacy students, who have joined teams in increasing numbers in recent years, often work in settings where the available resources are inadequate and mismatched with the extensive healthcare needs. More often than not there is a language barrier where communication directly with patients and caregivers is nearly impossible. Additionally, there are many local customs, cultural barriers and health beliefs that directly affect how the patient views their health and prove to be obstacles to care. The issues of patient safety, provision of the greatest service benefit, and clearly communicating the love of God through the example of team members’ lives becomes the greatest challenge. This manual attempts to blend best practices for pharmacist on a medical team, while balancing limited resources and abilities and provides practical checklists.

## Appendix C - Checklists

### I. Useful Pharmacy Items to Bring Along

1. Waterless Soap
2. Hand Soap (motel size)
3. Roll of Paper Towels
4. Chlorox/Antibacterial wipes for cleaning dispensing trays and surfaces.
5. Bottle of Isopropyl Alcohol
6. Drinking water to reconstitute antibiotics
7. Graduate (100 ml)
8. Counting Trays with Spatulas
9. Tablet crusher
10. Tablet splitter
11. Pliers or tweezers.
12. Pre-Printed Labels
13. Blank white labels
14. A sticky note pad.
15. Marking Pens, several colors
16. Sealing/Masking Tape
17. Plastic Dosing Spoons & Cups
18. Paper Cups (for giving now doses)
19. Rubber bands
20. Plastic basket x2 (6”x10”) to collect the medical records
21. Gallon zip log bags.
22. Small bags to place medications for patients receiving multiple prescriptions.
23. Trash bag for each day
24. Collapsible storage hangers (Top is a door back shoe hanger and bottom is a collapsible shelf: →



## G. Counseling/Ministry (Position 6)

Patients may request counseling and prayer after any station or when waiting at a station. The pharmacy staff should check the medical record and where appropriate counsel and pray with the patient or encourage a patient to stop in the counseling area. Note pertinent data on the form. Sign your name please.



Check schedule and be available for ministry as agreed and assigned. Let those you are working with you know that you are going to minister and give an approximate time you will be gone. Return to your regular position as soon as possible.

## H. Crowd Management

Local volunteers will be assigned to maintain order and monitor patient flow. They will escort patients to their next designated area.



## II. Global Planning of Medical Missionary Clinics

### A. Pre-Trip Preparation

Preparations for the clinic has to be done on both sides of the globe. The first and most important step is that there should be an invitation to your team from the host ministry in the country to which you plan to go. They need to handle the paperwork and arrangements necessary and required by the government of that country.

Gregory and Candi Seager after years of doing short term missions began to assess their work and evaluate whether or not they could improve what they were doing. They developed 16 thought-provoking questions and placed them in a booklet, *Operating Responsible Short-Term Healthcare Missions*.<sup>[1]</sup> It is their desire to have short-term team participants prayerfully think through these issues before heading to the field. Some of these questions will be reviewed as five areas of pre-trip preparation are presented.

#### *Partnership*

The first question that the Seager's asked is whose needs are you serving? If your goal is primarily to provide an opportunity for health professionals to experience an underserved environment, then you will miss what we are called to do. The passage in Matthew reminds us that as we go, we are to teach and proclaim the Gospel. We are to make disciples in addition to healing. To be successful from this perspective, we cannot work alone. Chances are we do not have the language abilities or the cultural insight to have the impact we desire. Therefore, it is important that we establish a partnership relationship with both a local ministry group and a local medical group before leaving on the trip.

- Local ministry
  - Our willingness to teach, proclaim and heal will help this local ministry to multiply its influence in the community long after we leave.
- Local medical group
  - We can train and encourage national healthcare workers to be more effective in the care they provide.
  - Many illnesses that we see may require long-term follow-up and treatment so we must have a means to feed these people into a system with long-term medical follow-up.

## Regulations

Peter emphasized to the early church that respect for governmental authority is important to effectively reach those not following Christ. In I Peter 2:13-15 he says *“Be subject for the Lord's sake to every human institution, whether it be to the emperor as supreme, or to governors as sent by him to punish those who do evil and to praise those who do good. For this is the will of God, that by doing good you should put to silence the ignorance of foolish people.”* Maintaining the separation of your mission outreach from government is often important. However, working with and cooperating with government is imperative.

- **Visas**

Passports identify you as an individual and where you come from, but they did not give you permission to enter another country. A visa gives you permission to enter and to exit a country that is not your own. Many countries stamp that visa in your passport when you arrive, but there are still many that require you to apply for that visa and sometimes undergo various security checks before they will grant that permission to enter their country. In some cases, team members will be required to get a special work visa that enables members to temporarily provide health care in the country. It is essential for each member to know the regulations of the country where the team will serve and obtain the appropriate visa in a proper and timely manner. Partnership with a local ministry and local medical group can make it much easier to understand visa requirements and obtain necessary documents and approvals for visa applications.



- **Vaccinations**

Each country may also have regulations on required vaccinations before you can enter or what vaccinations are required before you can return to your home country. The Center for Disease Control is a valuable resource (<http://wwwnc.cdc.gov/travel/>) in identifying this information and learning about other health travel advisories for your destination country.

([www.cphi.org](http://www.cphi.org)). Interpreters will be assigned to this area because it is essential for the patient to understand how to take or use the treatment. This is a busy station and is the last to close for the day. Medication must be secured for the night. This may require boxing and moving medicines to a lockable smaller room. Those persons not assigned to prayer or counseling at the close of the clinic day should report to the Pharmacy area to aid in the "catch-up" and securing the area for the night.

## E. Dressings Area (Position 4)

The major dressing and re-dressing of severe wounds and/or skin involvements will be done in this area. Minor dressing and treatment can be done in the exam areas. Interpreters will be assigned as needed.



## F. Dental (Position 5)

This area is obviously reserved for dental problems. Patients who request to see the dentist are directed to that area by the registration clerk. In most clinic outreaches, patients will have to select whether they want to be seen by the physician or the dentist. Adequate area will be required to clean and sterilize the dental instruments.



### C. Medical Consultation (Position 3)

The physician or dentist takes a more detailed history with the aid of an interpreter, examines the patient, lists the diagnosis and writes the prescription on the medical record form. In some cases the vitamins and antiparasitics can be dispensed from the consultation area to help



prevent a backlog in the pharmacy, but it is preferable to give the patient all medications at once. When appropriate, pray with and/or counsel the patient, or refer them to local counselors. Follow-up must also be arranged for patients who need on-going medical care.

### D. Pharmacy (Position 4)



Dispensing of pre-scribed medications is done from the medical record (card) that the patient brings from the physician/dentist. Pre-packing and labeling medications in advance can greatly facilitate patient flow and is a necessity in busy clinics. Generic labels should be pre-printed with a space for the patient name and the drug name, then the Sig should be bi-lingual and use universal symbols. See Appendix A. These labels should be available from the GHO office and can be downloaded from the CPFI website

- **Professional Registration** (credentialing)

Another question the Seager's asked is, "Are you aware of the credentialing process in the country you are serving? Does each physician and nurse (and pharmacist) in your group have governmental authorization to work in the receiving country?" Some local health authorities require each clinic to register and obtain a permit before it can provide care. Many countries require each professional to register with their corresponding licensing authority. Failure to abide by the appropriate regulations can prevent the clinic from providing care. On one occasion in Zambia an individual came by the guest house where our medical team was staying to make arrangements for 32 physicians to spend the night before returning to their home country. The team had only been there 2 days, but they failed to register with the Zambian Medical Council. The result was the physicians were not allowed to provide any medical care. The most reliable resource on country regulations is to contact the Ministry of Health in the country to be visited. Often the registration of professionals is a simple process that can be handled by the local partnering groups once the requirements are known.

- **Additional Permits**

Some countries will require importation permits for medicines and supplies brought in to the country for use in your clinic. Others even require local permits for each venue where the clinic will provide services. It is the prudent and wise steward that knows and accomplishes these tasks before the team arrives.

### *Logistical Arrangements*

Most of us allocate about a third of our day resting, to prepare for the day ahead. Generally we set aside 3 times a day to nourish our bodies and spend a portion of our day traveling to and from our work or study place. A medical team in a developing country is no different. However, the logistics of providing for the team's needs are exponentially greater.

## Appendix B – Clinic Flow

- **Accommodation**

It is not easy to find a place for a team of 30, for example, to stay. It is important to identify accommodations that facilitate team building while being located close to the area where the healthcare services are provided.

- **Meals**

If the clinic is held in a remote location will there be sufficient food in the village to meet the needs of the team or is it necessary to bring lunch with the team?

- **Transportation**

Often the greatest risk team members face during their time away from home is local transportation. Care must be taken to arrange for dependable and safe transportation.



Again, local partners are valuable resources in arranging accommodations, meals and local transportation. Team logistics should be coordinated by the team leader to assist with group travel discounts and to minimize the effort of host partners rather than each team member being allowed to make his/her own arrangements.

### **Culture and Customs**

Values, traditions, cultural norms, a person's self-view, and health beliefs all shape a person's worldview. This is the lens we all use to make spiritual decisions and choices about health and well-being.

- It is important for each team member to discover some of the history and cultural beliefs of the country to be visited. This will help you learn about the worldview that can influence how people view their personal and spiritual health. For example, if you learn that most young women must work for hours each day in the field, this information will be helpful in understanding the challenge of promoting regular breast feeding for the first two years of life.
- The CIA World Factbook <https://www.cia.gov/library/publications/the-world-factbook/index.html> is a good source to identify the language, culture, and details of the underserved area that will be visited.

### I. Preview of General Flow of a Clinic

To understand what all needs to be done in advance, it is nice to have an idea of what actually will happen at the mission site once the team begins its ministry.

#### A. Registration (Position 1)

Registrars, often local volunteers, will log initial information on a patient medical record (usually a half page card). They record demographic information.



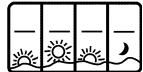
#### B. Triage (Position 2)



Patients are next seen at triage. Here appropriate vital signs are recorded on the medical record, for example, height, weight, pulse, blood pressure, respiration rate, temperature. Vision and audio testing may also be included in this area when available. The nurse at this station will do a brief assessment and refer the patient to the appropriate medical or dental consultant. On some projects where simple lab tests are available, the nurse may refer the patient to the lab for a blood or urine test. Interpreter(s) will be assigned to this station.

Nombre: \_\_\_\_\_

Medicina: \_\_\_\_\_



Qty. \_\_\_\_\_

Take by mouth. Tome \_\_\_\_ pastillas \_\_\_\_ veces al dia.



Patient: \_\_\_\_\_

Medicine: Amoxicillin 500 mg



Qty. 15

For infection:

Take 1 capsule every 8 hours until finished.

Patient: \_\_\_\_\_

Medicine: Cetirizine Syrup 5 mg/5 ml



Qty. \_\_\_\_ ml

For: Congestion

Take 5 ml 2 times a day, if needed.



Patient: \_\_\_\_\_

Medicine: Salbutamol Inhaler



Qty. 1

For the lungs:

Inhale \_\_\_\_ puffs \_\_\_\_ times a day

Patient: \_\_\_\_\_

Medicine: Benzyl Benzoate Topical 25%



Apply to hair at bedtime. Leave overnight. Rinse off in the morning.

Patient: \_\_\_\_\_

Medicine: Atenolol 50 mg



For high blood pressure:

Qty. 30

Take 1 tablet each morning.



- The Ethnomed website

<http://ethnomed.org/> is another resource that integrates cultural considerations into clinical medical practice.

## B. Pharmacy Planning

### Develop the Formulary

The 3 biggest world health problems are HIV/AIDS, maternal mortality, and infant/pediatric mortality. A health development approach coupled with health education is essential to address these key issues. The reality of providing patient focused pharmacy care is that some medications assist with the short term complications associated with these conditions. However, it is possible to bring only a small number of the 9,000 medications approved in the United States. Therefore a limited formulary of medications must be developed.

Formulary development should address the primary health needs of the population of interest. The formulary should be based on the principles of the World Health Organization (WHO) essential drug list.<sup>[2]</sup> This list recommends medications based on disease prevalence, evidence of efficacy and safety, and comparative effectiveness. The same resources useful in learning the history and culture of the destination country are often helpful in identifying the common medical conditions encountered in the country of interest.

Selection of medications for the formulary should include two medications from each essential drug classification. Ideally a formulary from a previous trip to that region is a good starting place. In the absence of guidance from previous teams, a sample formulary is available from the short term mission page on the CPFI website (<http://www.cphi.org/short-term-missions>). It can be downloaded and modified to meet the needs of any team. In summary, the formulary selection should be guided by 3 principles and include only medications that are available locally, affordable, and focused on the basic needs of the people. A small excerpt:

Medication	Bulk Qty.	Disp. Pkg.	# of Pkgs.	Directions
<b>Antifungal</b>				
Clotrimazole Cream 20 g	190xTu	20g	190xTu	Apply 2x/day
Clotrimazole Pessaries 200 mg	36x3	3	36x3	daily at bedtime x 3d
Fluconazole Tablets 50 mg	4x50	3	67x3	Vaginal candidiasis 3 now

## Appendix A - Sample Labels

### Estimate Quantities to Order

Once the formulary is developed and approved by the team leader and the partnering medical group, it is necessary to estimate the quantity of medication to be ordered.


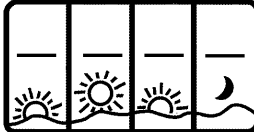

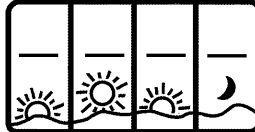


- These estimates should be based on information from previous trips to that area, or similar areas.
- In the absence of any previous information it is possible to predict the number of patients that will be seen.
  - A typical prescriber can see up to 40 patients per day. Higher rates mean less ministry. Because knowing Jesus is the long-term answer to people's needs, ministry should never be neglected.
  - On the average, the number of prescriptions a patient receives should not exceed 2-3 per person in addition to vitamins and antiparasitics. Exceeding this limit increases errors that could harm a patient, especially in populations with low medical literacy.







### Place the Medication Order


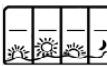




A carefully developed formulary and adequate inventory estimates allow the medications to be obtained. Utilize the host medical partner to identify a reliable source in the country for purchasing the medications you require.

- Best practices would suggest that these medications be ordered in the country where they will be used.
  - This provides economic benefit for the host country.
  - It helps to insure that the medications indeed are available locally.
  - It avoids the need to obtain import or customs approval for supplies that are being brought into the country.
  - With increased limitations for baggage on international flights that can also be an important benefit.
  - Medications are often purchased at very low cost in many countries. However, make sure that purchases are from a reputable pharmacist or registered pharmaceutical distributor.

### Examples of generic dispensing labels:

Medicine: _____ Patient: _____ # _____  Take by mouth.  Take _____, _____ times each day.	Medicine: _____ Patient: _____ # _____  Take by mouth.  Take _____, teaspoonful _____ times each day.
Medicine: _____ Patient: _____ # _____  Apply sparingly _____ times each day.	Medicine: _____ Patient: _____ # _____  Insert <u>1</u> , applicatorful at bedtime <small>Wash hands/insert into vagina/Wash hands again</small>

Patient: _____ Medicine: Amoxicillin 500 mg   Qty. 15 For infection: Take 1 capsule every 8 hours until finished.
Patient: _____ Medicine: _____   Qty. _____ Insert into vagina _____ applicatorful/tablet at bedtime.
Patient: _____ Medicine: Clotrimazole Cream   Qty. 20 g For: Fungal infection Apply sparingly to area 2 times a day.

Patient: _____ Medicine: _____   Qty. _____ For: _____ Take _____ ml _____ times a day.
Patient: _____ Medicine: Chewable Multivitamin   Qty. 30 Chew 1 tablet every morning.
Patient: _____ Medicine: Zinc Sulfate Eye Drops (Similar to Visine)   Qty. 5 ml For: Eye Irritation Use in the eye 2 times a day, if needed.



*which God prepared in advance for us to do.” Eph. 2:10 (NIV)*

- It may be necessary to reassign stations daily for some. That does not mean you are a problem. Many factors are involved in our decisions. Please be willing.
- We need to realize that God has prepared us for this work and that we are there to discover what He wants to do.

We must encourage and build one another up.

- Not only are we called to serve one another and be teachable, but Paul reminds the Thessalonians, *“Therefore encourage one another and build each other up, just as in fact you are doing.”* I Thess 5:11.
- Each team member should always be ready to make suggestions, but never criticize or make demands of fellow teammates.
- We are to function as one body.
- It is also important that we take time each day to encourage and build up the national and missionary staff that we have been called to serve with.
- Lastly we must wear a smile and be ready to extend a hand of warm greeting to each of the patients we have the privilege to love and treat.

These attitudes will allow us to complete the ministry God has called us to provide. Keep these key thoughts in mind:

- Keep a smile.
- Do not argue in front of patients.
- Be a servant and do your work unto the Lord.
- Maintain a teachable spirit.
- RELAX--enjoy the trip.
- Allow God to do His thing, not your thing.
- Suggestions ARE welcome, demands are not.

- Also, make sure that the purchase is long enough in advance so that if the medication is not in stock (some countries this is a frequent occurrence) then it can be purchased at home and brought with the team.
- Some medications may not be available locally or at a reasonable price. Purchase them through reliable sources at home and bring them with the team.
  - Be sure to identify, in advance, what customs regulations apply. Prepare and bring along an inventory of all medications and supplies along with the necessary customs or import permits.
  - Identify and adhere to expiration date regulations since many countries have strict regulations about what they will allow. Failure to adhere to these can result in some trips not being allowed to provide services.
  - Identification and adherence to all relevant local laws and regulations are important. Many countries are now sending health inspectors to inspect all supplies that teams are bringing in to the country. These inspectors are very quick to confiscate anything short-dated, expired, or improperly packaged.
  - No unlabeled medications, for example sample medications removed from their original packaging, should be used.
  - No sample medications should be taken unless a complete dosing regimen can be given. Also, if needed on an ongoing basis, it must be a medication that is available locally at an affordable price.

***Print Dispensing Labels***

The next step is to print and bring preprinted dispensing labels. If the formulary has been identified with appropriate quantities and the standard dispensing quantity is pre-determined, then it is possible to know the number of dispensing labels for each medication. This facilitates prepackaging that will be done on the field.

- The International Federation of Pharmacy (FIP) has developed minimum guidelines for the labeling of medications for patients <http://www.cphi.org/short-term-foreign-mission-opportunities> and must include:

- Name of the medication and strength
- Warnings if necessary
- Patient's name
- Dosage instructions
- Indication (intended use)

The United States Pharmacopeia has developed pictures that can assist patients who are either illiterate or do not speak the language of the healthcare provider. These symbols along with English or Spanish text have been incorporated in sample labels designed to assist the pharmacist in properly educating the patient on safe use of the medication. Sample labels in document templates with various label formats (10 per page, 15 per page or 30 per page) can be downloaded from the CPFI Website (<http://www.cphi.org/short-term-missions>). There are some examples in Appendix A.

### ***Identify and Obtain Information Resources***

The last pharmacy pre-trip preparation is to identify resources to ensure medications are used wisely. Many team physicians will be practicing outside of their comfort zone and will be using a formulary of unfamiliar medications. There will be frequent consults such as, "What can I use to treat this condition?" or "What is the best way to dose this medication?" or "What is the pediatric dose?" Therefore be sure to obtain appropriate references.

- Participants on GHO trips are all given *The Handbook of Medicine in Developing Countries*<sup>[3]</sup> which has valuable treatment information.
- Additional shirt pocket resources that may be useful include:
  - *Tarascon's Pocket Pharmacopeia*<sup>[4]</sup>
  - *Sanford's Guide to Antimicrobial Therapy*<sup>[5]</sup>.
- Electronic resources on mobile devices:
  - Lexi-Comp, Epocrates, Clinical Pharmacology, or Mobile MicroMedex.

It is important to have at least one resource that has basic drug monographs to be used in making therapeutic interchange or dosing recommendations.

## E. When the Trip is Complete.

1. Make sure the "registration cards" that were flagged for either spiritual or medical follow-up get channeled to the right people. Obtain commitments from local medical organizations and/or ministries for this follow-up.
2. Residual medical supplies and medications must be left in responsible, qualified hands for disbursement or storage for later use.

## IV. Your Attitude

### ***Maintain the Proper Attitudes***

Volunteers that serve on a short-term mission should be committed to love God, love others, and serve the world.

#### I am here to serve, not be served.

- Paul writes to the Colossians, "Whatever you do, work at it with all your heart, as working for the Lord, not for men, since you know that you will receive an inheritance from the Lord as a reward. It is the Lord Christ you are serving." Col. 3:23-24 (NIV)
- Each team member needs to be willing to work hard and do more than their share.
- They need to happily conform to standards of conduct set forth by the team leader to protect the testimony of their ministry.

#### Teachable Attitude.

- It is necessary to recognize that short-term participants do not know the culture, costs, government regulations and other constraints with which the ministry operates.
- Their presence on the team is not to be instruments of change, but to learn and then leave foot prints for others to follow.
- Paul writes to the church in Ephesus, "For we are God's workmanship, created in Christ Jesus to do good works,

#### D. After The Clinic is Done

1. All medications and supplies should be carefully secured.
2. Often the pharmacy is the last station to finish. If the team conducts a chapel service for the patients at the end of the clinic time, and if you seem to be unable to get the pharmacy packed up in time to join the service, make arrangements to have someone else close down your operation on at least one occasion so you can participate.
3. Recheck equipment and supplies.
  - Do a quick inventory of medications that are needed or not being used.
  - Inform the physicians of those medications that are running low at the nightly debrief.
  - Continue to prepack medications for the next day.
4. It is helpful to record some basic statistics.
  - As a minimum, use the collected medical records and each day count the number of patients seen during the day and number of prescriptions filled.
  - Ideally, an assistant could be assigned to keep a daily prospective log of the diagnosis of all patients seen that day and what class of medicines were dispensed.
  - Alternatively the medical records could be given to a group of volunteers who following the evening debrief review the records and tally this information.
  - This data is important to help plan the formulary for future teams.
5. During the evening debrief, compare notes on clinic operation and make plans for the next day so that it can be more efficient and successful.
6. Prayer and intercession for the next day, and a time of sharing about what God was able to accomplish through the team.
7. Staff must get adequate sleep and proper food and water.

### III. Key Daily Pharmacist Responsibilities

#### A. Prior to Arriving on the Site

Upon arrival in the country and before the clinic work begins, there are 3 things to be done.

##### 1. **Site Preparation.**

If this is the first time for a clinic in the area, the team leader and local partners should visit each clinic site to plan for an efficient work flow through the clinic. The following should be considered:

- A controlled entry point where patients can be registered.
- Triage area where histories and vitals can be obtained.
- Consultation areas for each physician, physician assistant, dentist and nurse practitioner.
  - Ideally there should be a place for private exams if necessary.
  - There should be a location where minor procedures can be done.
- There will need to be a somewhat enclosed pharmacy with adequate waiting area.
- If reading glasses are provided there should be a station for providing this service.

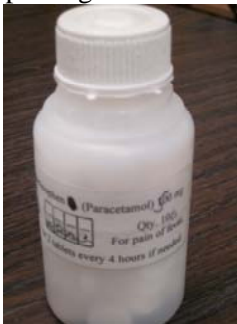
Appendix B has a review of a possible clinic flow.

##### 2. **Medication Preparation**

If the clinic is a busy clinic, 5 prescribers can see 200 or more patients per day. That can mean 600-800 prescriptions to be filled during the day. The only way this can be accomplished is if 80% of the prescriptions to be dispensed are prepackaged.

- The day the team arrives, unpack and sort the locally purchased and medications brought with the team.
- Prepackage so they are ready for dispensing.
  - Any teammate can help, in fact this is a great team-building activity and whenever possible should involve the whole team.

- Use counting trays and count out the correct number for all antibiotics.
- Most other medications, analgesics and vitamins especially, count the correct quantity once, pour that into a plastic medicine cup, mark the level for that quantity, and then pour that amount into each of the dispensing bags or vials. This can save a lot of time for those medications that the quantity is not critical.
- Work must be supervised and checked by the pharmacist.
- The prepackaged child proof vials or ziplock bags must all be labeled with the pre-printed labels. If this is done, all that is required is to add the patient's name and individualize the patient instructions at the time of dispensing.



- Each repackaged medication should be placed in large gallon ziplocs to keep the medications separate.
- Store the bulk and repackaged medications from the same formulary class in the same trunk, box or suitcase.
- Make sure all medications are securely stored in a locked area until they are transported to the clinic.

### 3. Volunteer Preparation

Lastly, the team leader needs to ensure that local partners have identified sufficient translators for each of the vital areas in the clinic. It is desirable to have the same translators in the pharmacy each day. If possible orient the translator to their important role in ensuring the patients know how to correctly take the medications you will dispense.

colored sharpee marker to mark the hand (for example with a red or blue dot) and the prescription label for each child to help ensure no errors are made. This helps prevent the caregiver from giving the patient the wrong medication.



- Be sure to greet each patient with a smile and extend a warm hand shake or greeting as you send them on their way.
- Also note that a spiritual history was also recorded on the card.
  - If the person needs any follow-up prayer or counseling, and they have not received it while waiting in line, then take the person to the appropriate ministry area where they can receive the follow-up or be the vessel to provide this service.
  - You should have your personal testimony prepared and memorized so that as the opportunities arises you will be ready to share what God has done in your life and challenge the individual to consider what God could do with their life.
  - Many of the bi-lingual volunteers that are translating are there because they work closely with the local mission group so use them when appropriate to help meet the spiritual needs of the patient. If you do anything with the patient spiritually, be sure and record that on the card so that any appropriate follow-ups can be made.
- Because you are likely the last station to see the patient, you keep the card and let the patient know that it will be given to the local health worker when we leave.

- If there is no pharmacist, then medications should only be dispensed in the exam room by the prescriber who must take care to carefully educate the patient about the medication.

### 3. Medication Selection

- One advantage of primary care clinics in developing areas is that generally the team operates in very close quarters. Practitioners using unfamiliar medications creates an opportunity for frequent consultations between the pharmacy staff and prescriber.
- Having access to references that provide basic information facilitates the proper use of the medications. These resources were discussed in the planning section.
- Any therapeutic substitutions or altered doses should be clearly documented on the dispensing record following the consultation.

### 4. Medication Delivery and Patient Education

- Train the translators on the importance of the caregiver knowing about each prescription.
  - Medications have a great potential to benefit the patient, but they may also possess a serious risk that can do harm if the medication is not used properly.
  - Encourage, through your translator, the patient to be adherent with instructions and complete the course of therapy.
- WHO statistics indicate language and cultural difficulties result in about 50% of patients in the developing world taking their medications incorrectly.<sup>[6]</sup>
  - Language barriers contribute to this problem.
  - Cultural beliefs influence how a person interprets medication instructions.
  - Therefore, it is essential to utilize translators to insure proper patient counseling along with the prescription label with words and with pictures. Make sure the patient's name is clearly identified on the label.
  - If a mother or grandmother are given multiple medications for several patients the translator must insure that the caregiver can clearly identify the name or markings for each patient. Consider using a different

## B. Preparation - On site

### 1. Finalize the clinic arrangement.

- With the advice of the medical team leader decide on the pharmacy location for best workflow.
- The site must be secure and have adequate space for 4 or more people to work.
- Remember, one of the work stations that can have a back log of people is the pharmacy station, therefore carefully consider traffic and work flow issues. The pharmacist must develop a strategy to maintain orderly patient flow through the pharmacy area.
  - Local ministry volunteers are helpful in controlling the pharmacy waiting area.
- While patients wait for prescriptions to be processed, effective ministry and health education can occur in the waiting area.
  - Each pharmacist and pharmacy student should be prepared to share their personal testimony and be prepared to talk about Jesus as the opportunities arise.
  - Each pharmacist and pharmacy student should also be prepared to give a simple public health teaching. A good source for materials that can be developed into teaching presentations is the Health Education Program for Developing Countries: The Most Important Knowledge ([www.hepfdc.info](http://www.hepfdc.info)).

### 2. Set up your dispensing station.

- Limit access to the dispensing area.



- Anxious patients desiring to receive their medication so they can begin their long journey home have a tendency to crowd the dispensing area. If steps are not taken to control traffic flow and limit the number of patients in the dispensing and counseling area, the pharmacy can become confusing and frustrating for patients, caregivers and pharmacy staff.
- Ideally this would be in a dispensing room in an ongoing clinic. However, it may be under an open tent with the rest of the stations. If the latter is the case, try to obtain a table to work from. If all else fails, creatively use your medication and supply boxes (often plastic foot lockers) to make a table that you can work from.
- Make the fast movers easily accessible and organize the remainder (alphabetically, and possibly by dosage form).

### 3. Orient your helpers.

If there are not sufficient pharmacists for a team (usually at least two for every 5 physicians) then you will likely need some helpers to assist with the dispensing. Take time to orient them.



### 4. Get to know your translators.

A very important part of your work will be to make sure the patient understands how and why to take or use the medication. You will probably need to rely heavily on your translator for this process, so get to know them.

## C. During Dispensing

### 1. Prescription Intake

- Try to limit the number of patients in the intake/ counseling area to 5 or fewer.
- Have the translator collect the medical record and keep them in the order in which they come to assure fair processing of the prescriptions.
- When the medical record comes to you, carefully note from the card which medications have been prescribed.

- Medications should be prescribed only when absolutely necessary. It is not acceptable to treat minor self-limiting symptoms just to give the patient a prescription for coming to the clinic.

### 2. Prescription Processing

- Fill the prescriptions on the medical record.
- Make sure to properly document:
  - the medication dispensed
  - the quantity provided
  - the dispenser's initials or signature
  - ideally record the brand and lot number of medication dispensed.
- Know and adhere to the country's pharmaceutical dispensing laws. Some countries are strict on what should be documented and how records are stored.
- This card will be kept by the local health worker so they can follow-up if necessary.
- Best practices dictate that the medications should be dispensed in child proof containers.
  - Every effort should be made to prevent medication errors, but unfortunately it is not always possible to obtain these dispensing vials in developing areas.
  - When this is the case, then moisture resistant, light resistant ziplock bags are the next best alternative.
- Medications must be properly labeled, using at least the minimum FIP guidelines. (Link to this is on the CPFI website.)
- Bring along and give to the patient medicine measures that can easily be marked with the patient specific dose.