Provider Guidelines

Disclaimer

This document is property of International Medical Relief (IMR) and may not be shared, distributed or reproduced for any use outside of IMR under penalty of law. This document does not supersede best practice medical judgment. IMR is not held accountable for those practitioners who do not follow suggested personal protection guidelines.
WELCOME!

Congratulations! You are preparing to have an experience of a lifetime. We are pleased to welcome you to the IMR team. The next few weeks will be full of activity as you ready yourself for the challenging and incredibly rewarding experience of bringing healthcare to those people most in need across the globe.

Our briefing packet will help you organize as you prepare for your journey, as well as provide you with important clinic and procedure protocols, pharmacy formularies, scope of practice protocols, a flow of clinic map and the essential roles of each volunteer on an IMR team. Please review this packet before your departure so you are familiar with its contents and BRING THIS PACKET WITH YOU to use as a reference tool during clinic.

We at IMR are looking forward to working with you in the field and getting to know you well during this amazing journey. Thank you for your service and all your hard work!

Kindly,

Shauna King - President - International Medical Relief
ACUTE MEDICAL AND DENTAL TEAMS

IMR provides acute medical care to underserved people around the world. It is our goal to provide skilled, compassionate care for every patient in our clinic. Patients are able to select to visit the medical team, dental team, or both. Our first consideration is, “Do No Harm.”

In the medical clinic, we strive to provide a comprehensive experience for our patients, including vital signs, a physician or nurse visit, Vitamin A and deworming medications for all children under 5, fluoride or varnish for children between 3 under 5, free medications (if required) and laboratory/wound care/IV hydration therapy as required. All patients also receive health education on basic hygiene, sanitation, and healthy lifestyles and individual counseling from our providers based on their diagnoses. While IMR focuses on acute illness, we frequently see patients with chronic illness such as hypertension or diabetes. These patients may be referred to a local provider and medication may be provided for a short period of time, if their condition is severe and medication can be safely prescribed. Patients may also be referred to local hospitals if warranted.

IMR’s dental clinic experience includes an examination, recommendations for future care, extractions if appropriate, treatment for abscesses and other oral infections as needed, and oral hygiene. Patients may be referred to the local hospital or local providers if warranted.

We function as a highly collaborative team with nurses, medical staff, providers, and team leadership all working together to provide the best possible care for our patients.

In addition to patient care, IMR collects statistical data on the health of the communities we work in and provides that information to the local Ministry of Health and other organizations as appropriate.

HEALTH EDUCATION AND COUNSELING

IMR teams provide health education in interactive, small group classes on a wide variety of basic topics such as lung health (smoking/cooking inside), basic hygiene (hand washing/drinking water purification), and oral hygiene. Providers counsel patients on their individual illness and medication safety at their stations. Education is the heart of IMR and makes our patient and their community healthier.
MEDICAL PROVIDER REQUIRED DIAGNOSTICS

All providers are required to bring their own diagnostics. IMR will provide SUPPLEMENTAL diagnostic tools for use on an emergency basis (broken equipment, etc.)

Providers include: EMS, Nursing, Advanced Practice Providers, Physicians, Medical and Nursing students)

Diagnostic tools:

**Mandatory**

- [ ] Stethoscope
- [ ] Blood pressure cuff
- [ ] Thermometer (all)
- [ ] Penlight
- [ ] Otoscope (battery or rechargeable) (Physicians/APP)
- [ ] Reflex Hammer (Physicians/APP)
- [ ] Gloves - to your liking, minimum 1 box recommended

**Optional**

- [ ] Ophthalmoscope (battery or rechargeable)
- [ ] Calculator
- [ ] Sanford Guide or other prescribing references
  - [ ] dermatology/tropical medicine/other references as books or phone apps (downloaded, not on line)
- [ ] Any other tools you utilize in your specialty

**Helpful**

- [ ] Hand sanitizer (personal size)
- [ ] Pen
DENTAL PROVIDER REQUIRED EQUIPMENT

Dentists and Oral Surgeons have the option of providing their own surgical instruments or renting a full surgical kit from IMR. This choice must be made a minimum of 6 weeks prior to departure. Many dentists and dental teams request donations from their suppliers with great success. This includes anesthetics, varnish or fluoride treatments, toothbrushes, and floss. If you are not able to dd

**Mandatory**

- Dental surgical instruments as required (rental kits available for a small fee)
- Dental needles
- Anesthetics
- Gauze
- Headlamp (>150 lumens recommended)

**Optional**

- Teaching tools
- Specialized equipment
LABORATORY, TREATMENT, AND DIAGNOSTIC EQUIPMENT

Laboratory equipment provided:
- Glucometers
- Rapid Malaria Tests
- Pregnancy tests
- Rapid HIV tests
- Urinalysis tests (strips)
- Additional testing as available

In Clinic Treatment Supplies:
- Nebulizer compressor, medications and tubing
- IV tubing, catheters, and fluids
- Surgical instruments, sutures, and anesthetic for minor surgical procedures and wound care

Diagnostic equipment that may be available to you:
- Ultrasound
- 12 lead EKG

PATIENT RECORDS

The Patient Intake Form provides a comprehensive record of the care the patient receives in clinic and includes the patient history, chief complaint, physical findings, laboratory results, diagnosis, prescribed medications, and referral information. Patient records are important for good patient care and are sent with the patient as a record of their health at the current time.

Each interaction with a patient should be recorded and initialed as patients move through clinic. Initialing your findings helps other providers collaborate with you if questions arise during treatment or at the pharmacy.

IMR utilizes a patient log form to record patient information and capture statistics that are provided to the Ministry of Health. It is important to accurately record all diagnoses for each patient, including diagnoses where you may not provide treatment (i.e. hypertension, suspected diabetes, tumor). Well patients should receive a diagnosis of “well” as the primary diagnosis.
IMR PATIENT RECORD

FRONT:

WHEN PATIENT IS FINISHED, THIS FORM IS SENT WITH PATIENT. PROVIDERS: LOG ENTRY REQUIRED!

Name ____________________________ Date_________________ Form #__________

M / F Age:_________ S-Provider WC-Provider Dental Other Provider

Children 6mo - 60 months: ALBENDAZOLE GIVEN? _____ VITAMIN A GIVEN?_____

Initial Initial

Primary reason for Today’s Visit______________________________________________________________

Length of time of primary symptoms_________ Do symptoms interfere with daily routine? Yes No

Known Allergies_________________________ Pregnant? Yes No

VITAL SIGNS: P:_____ BP:_____ RR:_____ T:_____ Wt (<18 yrs old):_____

------------

BACK:

PROVIDER/NURSE NOTES

General
Impression:__________________________________________________________________________

Positive Labs : HCG UA ____ ____ ____ Malaria HIV Non-fasting BG ____ Other _____

Diagnosis: Well patient Primary:______________________Secondary:______________________

Education:

__________________________________________________________________________________

Procedures / IV / Injectables Prescriptions

1.____________________________ 1.____________________________ 3.____________________________

2.____________________________ 2.____________________________ 4.____________________________
Please circle positive findings. Please capture all Dx as appropriate, including Dx that is not treated.

<table>
<thead>
<tr>
<th>Provider Initials</th>
<th>Gender</th>
<th>Age</th>
<th>Laboratory Testing Performed</th>
<th>Procedures Performed (i.e. wound care, minor surgical procedure, respiratory treatment, IV hydration, oral hydration)</th>
<th>Primary Diagnosis</th>
<th>Secondary Diagnosis</th>
<th>Blood Pressure &gt;140/90</th>
<th>Non-fasting glucose &gt;180mg/dl</th>
<th>Rx meds Rx’d?</th>
<th>OTC meds Rx’d?</th>
<th>Dx education given?</th>
<th>Vit. A given? (6-59 months)</th>
<th>Albendazole given? (6-59 months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>F</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>F</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>F</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>F</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SCOPE OF TREATMENT

It is IMR's expectation that providers are aware of the scope of practice of their state and national licensure. IMR takes very seriously the role of patient advocate during our medical mission trips. No one may work outside of his or her lawful scope of practice. This includes diagnosis, medication prescribing, and procedures.

Professional students are also expected to practice within the scope consistent with their current level of education, standards of care, and under the direct supervision of licensed providers.

IMR supports learning and education during our medical mission trips. It is the sole decision of a provider (MD, DO, DDS, PharmD, RN, EMT, Paramedic etc.) to offer education and teaching with the understanding it is done under their license and they accept full responsibility for the intern under their tutelage.

It is the privilege and an IMR CMO Protocol for the CMO to empower RNs under the CMO license to assess patients and recommend over the counter medications such as ibuprofen, acetaminophen, antacids, allergy medications and various creams as well as work at our worming station distributing worming medications and Vitamin A to appropriate patients. This will be done on a case-by-case basis and reviewed and approved by the CMO.

Any providers found to be operating outside of their scope of practice will be placed on probation for a length of time determined by the Team Leader and CMO and may be reported to their state/national licensure board if deemed necessary by the CMO, Team Leader and IMR headquarters.
Transport/Referral Note (SENT WITH PATIENT)

Attention Facility: These notes are from our field assessment of this patient and are in no way meant to represent orders or instructions for this patient – only suggestions for a next course of action. IMR is not responsible for any financial costs that will be incurred by the patient. All financial obligations for this patient’s care must be negotiated directly with the patient.

Patient’s Name: ______________________ Phone: _______________ DOB (d/m/y): _____________

Patient’s Address if available: ____________________________________________________________

Attending Physician: ______________________ BP: ___ / ___

Medications currently being taken (medication / dose): Weight: ___ KG./ Resp: ___

________________________________________________________ Temp: ___°C./ Pulse: ___

Patient Assessment:

PATIENT TRANSPORTED / REFERRED TO: ________________________________

SIGNATURE: CMO: ______________________ DATE: ________________

---------------------------

Transport/Referral Note (RETAINED BY IMR TEAM LEADER)

Attention Facility: These notes are from our field assessment of this patient and are in no way meant to represent orders or instructions for this patient – only suggestions for a next course of action. IMR is not responsible for any financial costs that will be incurred by the patient. All financial obligations for this patient’s care must be negotiated directly with the patient.

Patient’s Name: ______________________ Phone: _______________ DOB (d/m/y): _____________

Patient’s Address if available: ____________________________________________________________

Attending Physician: ______________________ BP: ___ / ___

Medications currently being taken (medication / dose): Weight: ___ KG./ Resp: ___

________________________________________________________ Temp: ___°C./ Pulse: ___

Patient Assessment:

PATIENT TRANSPORTED / REFERRED TO: ________________________________

SIGNATURE CMO: ______________________ DATE: ________________
IMR team members will sometimes encounter a patient who requires a higher level of care than IMR can offer at their field clinic; this may be either an emergent or a chronic condition. The following protocol must be followed to ensure the patients’ needs are best met and the intervention is within the capacity of the local community and IMRs medical clinic.

1. Inform CMO and Team Leader of patient history, current condition and justification for transfer to a primary health care center.
2. Determine closest medical center to IMR field clinic.
3. Determine mode of transportation of patient to clinic and their return trip home.
4. Determine cost/benefit for patient.
5. If transfer is approved provider must fill out the IMR transfer paperwork prior to departure, one copy to remain with the patient and one for IMRs clinic file.
6. Providers are not authorized to write any orders for the local hospital or health clinic to fulfill on a patient transferred out of an IMR clinic. Doing so will result in the provider being financially responsible for any charges incurred by the patient.
7. Provider accompanies patient to local medical center, gives report to clinic health care workers and returns to IMR clinic immediately. If the provider is not able to accompany the patient, they must appoint and designate an IMR representative to accompany the patient during transfer.
   Take translator and security if deemed necessary by CMO and Team Leader
   May take additional assistance if deemed necessary and approved by Team Leader.
8. It is IMRs sole discretion and decision what, if any, monetary assistance is provided for the patient after transfer.
### What You May See in Clinic

<table>
<thead>
<tr>
<th>Various fungal infections</th>
<th>Malaria</th>
<th>UTI</th>
<th>Dehydration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parasitic infections</td>
<td>Dengue fever</td>
<td>Vaginal/Penile Infections</td>
<td>Acute pain</td>
</tr>
<tr>
<td>Impetigo</td>
<td>HIV/AIDS</td>
<td>Sexually Transmitted Infections</td>
<td>Chronic pain</td>
</tr>
<tr>
<td>Scabies</td>
<td>Typhoid</td>
<td>Otitis Media</td>
<td>Asthma/COPD/Allergies</td>
</tr>
<tr>
<td>Dental cases</td>
<td>TB</td>
<td>URI</td>
<td>Malnutrition</td>
</tr>
<tr>
<td>GERD</td>
<td>Zika/Chikungunya</td>
<td>Common Cold</td>
<td>Diabetes/Hypertension</td>
</tr>
<tr>
<td>Gastritis</td>
<td>Skin, pelvic, abdominal masses</td>
<td>Flu</td>
<td>Cancers</td>
</tr>
</tbody>
</table>

Hospital transport with family member for severe dehydration, Phnom Penh, Cambodia
SYNDROMIC MANAGEMENT OF ILLNESS

International Medical Relief takes a syndromic approach to the management of minor acute illness and chronic illness with acute exacerbation.

**Syndromic Management requires:**

- A collaborative approach with patients, your team members, and local providers
- A good grasp of the likely etiologies of various syndromes in the area being served
- Knowledge of the pathophysiology of common diseases as they occur in IMR Clinics
- Ability to make a clinical assessment of the symptoms and signs with which the patient presents
- Ability to establish a working diagnosis, without laboratory confirmation
- Knowing what is on hand in the pharmacy and what other local resources are available to use
- Information on what works in the culture in which the patient lives
- Ability to put together a reasonable plan of management, including a plan for the patient if the illness is not self-limiting or the prescribed treatment does not result in resolution of symptoms

**Benefits of Syndromic Management:**

- Treat patients symptomatically
- Same day treatment at the first point of contact
- Completion of the visit for the patient with a satisfactory outcome

**Limitations of Syndromic Management:**

- Asymptomatic patients may be missed
- Communication and trust are limiting factors
- Follow-up when symptoms don’t resolve, is limited or not possible
DENTAL CLINIC

• Our goal is far greater than simply treating the acute dental need today; our goal is to save teeth in the future by providing oral hygiene education and toothbrushes to our patients, and educating local dental students wherever possible.

• X-rays: X-rays are not generally available for use in clinic. Difficulty and safety of extractions should be considered prior to starting any procedure. Refer patients to local providers if the extraction is too difficult.

• Root tips: If a root tip is lost, notify the CMO and the Team Leader immediately to determine the best course of action for patient safety and good patient care within normal standards of practice.

• Adverse reactions to anesthetic: Care for the patient and notify the CMO and Team Leader as soon as possible.

Dental clinics focus on short term and long term dental health:

• Meeting the greatest needs of our patients through urgent and emergency care.
  • performing examinations and consultations, extractions, treating abscesses, treating pain and infection, and referring patients for suspected oral cancers.

• Long term sustainability or good oral health and hygiene practices.
  • Conducted through restorations (if time and materials permit), sealants, cleanings, fluoride treatments, and oral hygiene instruction.

Sustainability:

• Conduct community outreach to define the breakdown in dental health.

• Educate patients on the root cause of disease in caries be it poor nutrition, access to refined sugars, hydrating with soda, lack of fluoride, poor hygiene habits, etc.

Low Resource Environment:

• You will be working in a low-resource environment providing high-value care.

• You should not expect to have electricity in the dental clinic.

• Our sterilization protocol utilizes a 0.55% ortho-phthalaldehyde solution based cleaning system in the field and instruments can be additionally boiled at night.

In addition to licensed dentists and oral surgeons, dental residents and students, hygienists, dental assistants, and pre-dental students significantly enhance the value of our dental program.
HEALTH EDUCATION AND COUNSELING

Health education is the provision of accurate and truthful information so that a person can become knowledgeable about the subject and make an informed choice.

Counseling is a two-way interaction between a client and a provider. It is an interpersonal, dynamic communication process that involves a kind of contractual agreement between a client and a counselor who is trained to an acceptable standard and who is bound by a code of ethics and practice.

Health education and counseling are closely linked. Both activities may take place at the same time. In health education, the aim is to make the patient better informed, so that he/she can make an informed choice about health related behaviors and activities. Counseling relates more to issues of anxiety and coping with the infection or its biomedical as well as social consequences.

The Importance of Education and Counseling

The aim of risk reduction counseling and education includes:

- Help patients re-examine long-standing habits and situation that are putting them at risk
- Prevent disease transmission
- Remain free of infection in the future
- Encourage teaching to others
- Enhance coping mechanisms and identify positive behaviors to improve health for chronic or socially unacceptable diseases
ACUTE VS. CHRONIC ILLNESS

IMR diagnoses and treats acute illness in clinic. We frequently see patients with acute illness and secondary chronic conditions and patients with chronic conditions who are otherwise well. Many providers desire to treat the chronic conditions seen every day in offices in the United States. Please consider that in many places we go, the local health care system can not continue the care or medications you would normally start patients on. What happens to these patients after medication you provided runs out?

Guidelines for patients with chronic conditions:
- Evaluate the patient and record all diagnoses regardless of treatment plan in the patient record.
- Provide education for the patient about their diagnosis, its treatment, and their current condition.
- Make an appropriate recommendation to obtain follow-up in the community.
- If the patient’s condition is severe, establish a treatment plan with the patient, CMO, and team leader for immediate care.
- Review the protocols for Referrals, Severe Hypertension and Elevated Blood Glucose protocols below.
- When making a referral outside of the IMR clinic setting, provide the patient with a referral note explaining findings, diagnoses, and proposed treatment plan.
- Evaluate the patient for any acute illness that can be treated appropriately in clinic. Initiate any treatment required.
PATIENT AUTONOMY

IMR operates under the belief that patients have autonomy over their care. Just as you have right to refuse to treat a patient for something you don’t believe to be necessary or not in their best interest, patients have the right to determine if they want to follow your recommendations or to refuse elective procedures.

- Always let the patient know that they have autonomy over decisions about their care.
- Ensure that your interpreter understands the procedure or recommendation you are making to the patient. Ask them to repeat back what you are trying to say.
- Ensure that your patient understands the procedure or recommendation you are making.
- Before starting any procedure
  - Ask the patient about their duties at home and at work. Will performing the procedure stop them from doing needed tasks?
  - Ask the patient if they are capable of caring for the wound at home
  - Determine if the local health center can provide any additional care needed.

SAFE PRACTICE

IMR strongly suggests that all volunteers - medical and non-medical wear/utilize the appropriate personal protection during any procedure or during clinic when deemed appropriate, especially when working with body fluids. Before you take care of your patient you MUST be taking care of yourself.

- **Standard/Universal Precautions:** Wearing gloves, goggles/glasses and masks as necessary during patient contact, particularly when working around body fluids or during procedures.
- **Droplet Precautions:** Wearing protective mask when appropriate.
- **Airborne Precautions:** Wearing N95/TB mask when appropriate.
- **Contact Precautions:** Standard precautions plus gown and cleaning of all items/tools used during patient contact.
- **Disposal Precautions:** Appropriate use of sharps disposal; Only trained provider personnel (physicians, nurses, EMTs, PAs, NPs) are to handle sharps for disposal.
MEDICATION PRESCRIBING PROTOCOL

In keeping with Do No Harm, and with dedication to safe practice in the field:

1. Realize that many patients that IMR serves are medication naïve and may be more sensitive to medication prescribed.
2. Understanding this, medication doses, frequency of administration, and duration of treatment can be minimized in many cases.
3. Thoughtful prescriber judgement is extremely important regarding medication dosing.
4. All prescriptions must be accompanied by patient education, utilizing interpreters, as to: reason for medication usage, doses/frequency, possible adverse side effects, and storage of medications.
5. The power of your “prescriptive voice” should not be underestimated; all patients should receive education/information regarding their diagnosis, its treatment, and prevention of future disease.
6. Single day dosing recommended if possible.
7. Giving first dose of medication at provider station or pharmacy, strongly recommended both for education and safety purposes.
8. All medications provided by pharmacy are to be labeled as to content and dosing instructions, preferably in the language of the patient and as a “universal” or picture-based prescription.

Pediatric Patients

1. Always attempt to find a parent, guardian, responsible adult, or older sibling before evaluating and treating a child.
2. Never provide medication directly to a child under 10. If a parent, responsible adult, or older sibling is not available, ask a local pastor or teacher if they will remain for the examination and accept the medication on the child’s behalf. Educate the responsible party on medication safety and ask for assurance that the medication will be given only to a responsible adult or that they will provide the medication to the child personally.
3. Never provide vitamins to a child not accompanied by a responsible adult.
4. When a parent or responsible sibling or guardian is not available:
   - Always consider the level of maturity of the child in front of you
   - Always consider the distance traveled and difficulty in obtaining further care
   - <10: do not prescribe or provide prescriptive or over-the-counter medications for any child without a responsible adult or older sibling present and accountable for the medication.
   - >10 <12: prescribe with caution
   - >12: Medication safety must be discussed and the child must “teach-back” to determine understanding.
PROCEDURE PROTOCOLS

IMR’s mantra is DO NO HARM.

In order to support our volunteers during clinic and ensure the safety of our patients the following steps are mandatory prior to any and all procedures or interventions during clinic.

- Communicate the situation and suggested intervention during a conference with the Chief Medical Officer (CMO) and Team Leader prior to any and all major interventions or procedures to determine the following:
- Determine the long term results and future care needs for the patient post procedure in their home setting.
- Determine if our clinic is able to appropriately manage the procedure within DO NO HARM guidelines.
- Consult with pharmacy regarding appropriate medications and the availability of these medications for the procedure.
- Discuss the procedure with the patient and family members, provide options and education.
- **Gain consent of the patient and/or a family member if patient is a minor**, use a translator and thumb print consent if necessary.
- Have a second trained medical provider with you during the procedure for support and assistance.
- Non-medical personnel may only observe the procedure with permission of CMO and Team Leader.
- **STOP immediately** and get assistance from the CMO if you become overwhelmed or patient is showing signs and symptoms of intolerance to the procedure.
- Follow up with the family and patient to ensure understanding.
  - Provide after care or referral instructions to a local clinic if necessary.
  - Provide all appropriate prescriptions and instructions.
  - Provide wound care education and supplies if required.
- Follow up and debrief with the CMO and Team Leader regarding the procedure, outcome, and patient care concerns.
- **TAKE A TIME OUT!** Before starting any laboratory test or procedure: Do you have patient consent, CMO approval (for procedures only), all appropriate personnel, PPEs, supplies, and a sharps container prior to starting any laboratory test or procedure? Do you have a plan in place for patient follow-up and continued care?
STANDARD PREVENTION PROTOCOLS FOR WELL PATIENTS

Pediatric Patients:

- Deworm all children >12 months and <5 years with albendazole
- Provide all children >6 months and <5 years with Vitamin A on the tongue
- Provide 90 days of children’s vitamins for each child, assuming sufficient quantity on hand.
- Never give medication (including vitamins) directly to a child under 12.
- Check all children for wounds and scabies, as appropriate. Gain consent to treat if not in the chief complaint.
SEVERE HYPERTENSION GUIDELINES

- Elevated blood pressures are common findings encountered on IMR trips.
- Mild, moderate and severe hypertension are found at various times and all counties visited by IMR teams.
- Generally, when found, hypertension is treated with patient education as to the nature and course of hypertension, as well as diet and behavior modification.
- Medications are not prescribed, as the condition is most often chronic. It requires professional monitoring, and often, medication that is titrated to patient response.
- There are patient encounters, however, that indicate severe hypertension involving pressures that put patients at risk for acute, serious events. Pressures in excess of 180/120 are not uncommon. In this situation the option to treat with medication can be justified. Lowering the blood pressure from severe to the moderate range can be attempted, and considered to be a form of stabilization.

The following recommendations are to be considered:

- In establishing the severity of the problem, several blood pressure readings, over time, with appropriate sized cuff, and in different patient positions should be taken.
- Arrangements for patient follow up should be made, and emphasized, to patient, making sure patient understands nature and severity of problem.
- If there is no contraindication to its use, a beta blocker (atenolol, metoprolol) may be used to treat elevated pressure. Low to moderate dosing is recommended.
- Patient should be monitored for response, and possible adverse effects for 1-4 hrs while in clinic setting.
- Basic education regarding hypertension, its treatment and course, should be provided to patient.
- Patient should be counseled about risks of not seeking treatment.
- Provider’s note regarding patient information, diagnosis, medication administered, and recommended follow-up should be given to patient, and copy of note kept by CMO.
- Note the diagnosis on the IMR intake form, even if no medication is prescribed.
Elevated blood glucose levels are a common finding on IMR trips. Most patients will not be previously diagnosed or aware of consistently elevated sugars. All patients with elevated blood glucose levels should be counseled on the potential risks associated with untreated and educated about diabetes, diet, and potential consequences.

1. It is important to remember that patients undergoing blood glucose testing may not be fasting.
2. Patients may have lived with elevated blood glucose for a significant period of time.
3. Education about the significance of elevated glucose levels, its treatment and course, should be provided to the patient.
4. Strongly encourage the patient to seek follow-up care in their community or at the local hospital or health center.
5. Provider’s note regarding patient information, diagnosis, medication administered, and recommended follow-up should be given to the patient, and a copy of the note kept by the CMO.
6. Note the diagnosis on the IMR intake form, even if no medication is prescribed.

Reference ranges:
- Fasting plasma glucose: 70-99 mg/dL
- Postprandial plasma glucose at 2 hours: Less than 140 mg/dL
- Random plasma glucose (non-fasting): Less than 140 mg/dL
- Random plasma glucose (non-fasting) >200: consider diabetes mellitus

Serum glucose values are 1.15% lower than plasma glucose values
Plasma glucose numbers read about 10 - 12% higher than the older whole blood numbers.

<table>
<thead>
<tr>
<th>Current Diagnosis</th>
<th>Normal Range</th>
<th>Increased Risk of diabetes</th>
<th>Indicative of diabetes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without diabetes</td>
<td>4.5% - 5.6%</td>
<td>5.7% - 6.5%</td>
<td>&gt;6.5%</td>
</tr>
<tr>
<td>Diagnosed diabetes</td>
<td>&lt;7%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SEXUALLY TRANSMITTED INFECTIONS GUIDELINES

• If you suspect an STI, provide broad coverage for the patient and expedited partner therapy for all partners. It is not necessary to see the partner(s) to provide treatment but it is preferential to provide education and treatment to the partner personally, if possible.
• Additionally, provide a second course of treatment for the patient and the partner(s).
• Provide education about safe sexual practices, family planning, and condom use as appropriate.
• Provide education about the consequences of STIs during pregnancy and birth, future fertility, and for the partner(s). Provide condoms as appropriate. Counsel the patient appropriately if pregnant
• Encourage testing for HIV for the patient and partner. Provide a referral and education. Provide counseling if required.

Primary Preventive measures:
Some of the measures patients can employ to avoid STIs includes:

• Abstinence: This might be total abstinence from sex or for groups such as students and youths not yet married, one should encourage, delaying sexual activity till one is ready for marriage.
• Mutually faithful sexual relationship or “Mutual monogamy”. This is what is usually termed as “Zero grazing”. It is useful if both partners are not already infected.
• Correct and consistent use of condoms. This intervention is especially recommended for those who cannot abstain and yet cannot have mutually faithful relationship.
• Safer Sex practices. Educating patients (and the general public) on the dangers of unsafe sex and persuading them to use condoms consistently and correctly, limit sexual partners to one monogamous relationship.
2015 CDC Treatment Guidelines for Sexually Transmitted Diseases

These guidelines are based on the CDC Guidelines and standard IMR formulary. This summary is intended only as a source of clinical guidance. They are not meant to replace your clinical judgement in the field nor to deny substitutions if recommended medications are not available.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Adults</th>
<th>Alternative</th>
<th>Pregnancy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bacterial Vaginosis</strong></td>
<td>metronidazole oral 500mg orally 2x/day/7 days</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Chlamydial Infections</strong></td>
<td>azithromycin 1 g orally in a single dose</td>
<td>doxycycline 100mg orally 2x/day/7 days</td>
<td>azithromycin 1 g orally in a single dose</td>
</tr>
<tr>
<td><strong>Gonococcal Infections</strong></td>
<td>ceftriaxone 250mg IM in a single dose PLUS azithromycin 1g orally in a single dose</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Scabies</strong></td>
<td>ivermectin 200ug/kg orally, repeated in two weeks</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Syphilis</strong></td>
<td>Primary, secondary, or early latent &lt;1 year: benzathine penicillin G 2.4 million units IM in a single dose</td>
<td>Latent &gt;1 year, latent of unknown duration: 2.4 million units IM in 3 doses each at 1 week intervals - provide doses 2 and 3 to the local health center with syringes, diluent, and confirmed arrangements</td>
<td></td>
</tr>
<tr>
<td><strong>Trichomoniasis</strong></td>
<td>metronidazole 2g orally in a single dose</td>
<td>tinidazole 2g orally in a single dose</td>
<td>persistent or recurrent: 500mg orally 2x/day/7 days</td>
</tr>
</tbody>
</table>
PEDIATRIC PATIENTS

This section outlines basic safety precautions for providers who don’t normally treat pediatric patients, as may be the case on IMR trips and in the field.

• Basic Care
  • Always attempt to find a parent, guardian, responsible adult, or older sibling before evaluating and treating a child.
  • Never provide medication directly to a child under 10. If a parent, responsible adult, or older sibling is not available, ask a local pastor or teacher if they will remain for the examination and accept the medication on the child’s behalf.
  • Educate the responsible party on medication safety and ask for assurance that the medication will be given only to a responsible adult or that they will provide the medication to the child personally.

• Diagnosis and Prescribing Errors
  • Pediatric patients may be at a great risk of treatment errors due to the following factors:
    • Errors in prescribing, dosing, storage, and administration
    • Inaccurate age, weight, or history

• Vital Signs
  • All pediatric patients MUST have an accurate weight in kilograms (<12 or if small in stature, >12)
  • All pediatric patients must have a accurate temperature recorded prior to sick/well triage
    • >99: Consider if the child has been in the sun for a long period of time
    • >100: Sick provider only
  • Pediatric patients >5 should have a blood pressure taken by the provider or nurse. Non-medical staff should not take pediatric blood pressures.

• Age of Care
  • Always consider the level of maturity of the child in front of you
  • Always consider the distance traveled and difficulty in obtaining further care
  • <10: do not prescribe or provide prescriptive or over-the-counter medications, including vitamins, for any child without a responsible adult or older sibling present and accountable for the medication.
  • >10 <12: prescribe with caution
  • >12: Medication safety must be discussed and the child must “teach-back” to determine understanding.

• Concerns of diagnosis or prescribing
  • Always ask the IMR team leader as we have many pediatricians on call for questions from the field.
  • It is always recommended to bring a reference on pediatric diagnosis and prescribing if you do not normally treat pediatric patients.
NEEDLE STICK/BODY FLUID EXPOSURE

Providers are expected to operate under the guidelines of safe needle practice, disposing of needles in designated sharps containers and not re-capping needles. It is expected all IMR volunteers will use universal precautions.

Only qualified providers should obtain required blood samples or use “sharps.” If a professional student is being trained, close supervision is required. There is no exception to this policy.

TAKE A TIME OUT! Before starting any laboratory test or procedure: Do you have patient consent, CMO approval (for procedures only), all appropriate personnel, PPEs, supplies, and a sharps container prior to starting any laboratory test or procedure? Do you have a plan in place for patient follow-up and continued care?

In the event of a needle stick or body fluid exposure:

1. Immediately inform the CMO and Team Leader.
2. Wash the area with soap and water thoroughly. If mucous membrane exposure occurs wash the area with water and saline.
3. You may additionally clean the area with alcohol wipes. DO NOT milk the area as it will increase the trauma to the surrounding tissues increasing the possibility of infection.
4. If the source is available, gain consent for a rapid HIV antibody test (available from the CMO and Team Leader.) If the source test results are a positive rapid HIV antibody test ALWAYS assume it is a true positive.
5. If the source test results are negative, assume the possibility of an early undetected infection in rapid HIV antibody tests and inform the team member that post exposure prophylaxis is standard of care.
6. Consider post exposure prophylaxis. The team member will be sent home for follow-up at their own expense if they choose to start prophylaxis.
7. **IMR assumes no responsibility for any long-term health effects for any persons (refusing or accepting treatment) after body fluid exposure.**

POST EXPOSURE PROPHYLAXIS

Health care volunteers working abroad, particularly in areas of high HIV prevalence or where preferred PEP regimens may not be readily available, often choose to travel with personal supplies of PEP. If the team member, after advisement by the Chief Medical Officer, wants to start Post Exposure Prophylaxis, the team member will return home immediately at their own expense to start the appropriate course of therapy.

**IMR assumes no responsibility for any long-term health effects for any persons (refusing or accepting treatment) after body fluid exposure.**
**Clinic Flow**

The environment in which we will be working and the expected patient load defines how a clinic is set up. These can include private homes, established health clinics, hospitals, community centers, open-air communal areas, outdoor clinics, religious centers and more.

Despite these varying conditions, IMR sets clinic up in a similar way for each site - defined by this map - in order to facilitate the intake and triage process, support an even patient flow to providers and provide a forum for IMR community education classes. Signs designate each area during clinic.

Clinic also includes a Dental station and a procedure area. The procedure area is where all surgical procedures (outside of dental) and sterilization of instruments occurs.

**Example: Clinic Setup and Patient Flow**
CLINIC ROLES

Every job in IMR clinics is vital to the clinic success. Volunteer roles include patient intake and health history, triage, patient and community health education, diagnosis and treatment, pharmacy, trip historian/photographer and more.

Medical staff (non-medical volunteers) assist throughout every aspect of clinic and gain a perspective of learning and working in the field in developing countries with a medical relief organization. There are numerous opportunities for learning and teaching and IMR encourages taking the time to show and teach during every clinic.

Team Leader
IMR Team Leaders are the liaisons between IMR and the host country and are solely responsible for clinic set up, organization and all clinic functions. Team Leaders manage all in country logistics such as housing, food, water and transportation, supporting and attending to team member needs and ensuring the safety of all IMR volunteers. IMR Team Leaders organize clinic, guide you, support you, and help make your experience an unforgettable one.

Chief Medical Officer
The CMO oversees all medical treatment and medical volunteers (nurses, physicians, PAs, NPs, Paramedics, and EMTs) in IMR clinics. All major decisions, consults, interventions or procedures must be approved by the CMO. The CMO is also a teaching resource and may lead teaching sessions during clinic along with other qualified personnel.

The CMO is also the trip physician for IMR volunteers. Any volunteer suffering from illness during a trip or with medical needs and questions should see the CMO and Team Leader.

Registration/Intake
Patient health history and chief complaints are taken at the intake station, creating the IMR patient record. While conducting patient intake, volunteers have the opportunity to have one-on-one conversation with the patients with the assistance of translators. This can often be one of the busiest stations during the early part of a clinic day.

Triage
Basic diagnostics of each patient i.e. pulse, blood pressure, temperature and weight are taken by qualified IMR volunteers. Patients will then be sorted into ‘sick’ and ‘well’ waiting areas. All RNs will attend to ‘well’ patients while MDs, NPs and PAs will be attending to the ‘sick’ patients.
Dental Team
Dental volunteers assist the DMD/DDS with fluoride treatments for children, post dental care teaching, dental hygiene, distribution of medications to patients post extraction, cleaning dental instruments and teaching oral hygiene instructions.

The dental clinics are always busy and are excellent learning and teaching environments. There is no previous medical or dental experience required to be a dental team volunteer.

Pharmacy
IMR adheres to applicable standards and guidelines regarding distribution and use of medications. A medication information sheet and standard medication formulary list will be available to each team member and available in pharmacy.

IMR frequently runs two separate but related pharmacies during clinic. The “sick” pharmacy dispenses Rx medications as prescribed. The “well care” pharmacy prepackages and labels common over the counter medications and provides them to all providers for dispensing at their station.

Typically one of the busiest areas of clinic, the pharmacy is often staffed with more than one IMR volunteer and is strongly support by the CMO and IMR Team Leader to ensure correct medication, dosing and patient safety. We strive to have a licensed pharmacist when possible.

Community Education Classes
Volunteers will engage in fun learning activities with local communities to teach basic hygiene, oral hygiene, water purification, proper hydration, sanitation, mosquito/food/water related disease prevention,

This is often the most fun area of clinic as IMR teach the community health materials in ways that are creative, fun and full of energy.

Documentarian
The IMR trip documentarian is vitally important to IMR trips. Trip documentarians are charged with taking photos of the clinic setting for the day, documenting medical and dental cases for use in education and teaching forums. They also write the daily blog from the field updating family and friends at home. There may be one person assigned as a trip historian for the length of the trip or it may be rotated between other team members.
<table>
<thead>
<tr>
<th>Item Description</th>
<th>Size/Strength</th>
<th>Brand</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphenhydramine</td>
<td>25mg</td>
<td>Benedryl</td>
<td>Allergy/Sedation</td>
</tr>
<tr>
<td>Cetirizine</td>
<td>10mg</td>
<td></td>
<td>Allergy</td>
</tr>
<tr>
<td>Antifungal cream,</td>
<td>20gm</td>
<td>clotrimazole</td>
<td>Anti-Fungal</td>
</tr>
<tr>
<td>Aspirin</td>
<td>81mg</td>
<td>Baby Aspirin</td>
<td>Cardiac</td>
</tr>
<tr>
<td>Calcium Carbonate</td>
<td></td>
<td>TUMS</td>
<td>GI</td>
</tr>
<tr>
<td>Docusate Sodium</td>
<td>capsules</td>
<td>Wax impaction</td>
<td>GI</td>
</tr>
<tr>
<td>Loperamide</td>
<td>2mg</td>
<td>Imodium</td>
<td>GI</td>
</tr>
<tr>
<td>Artificial Tears</td>
<td>single use disposable</td>
<td>Refresh</td>
<td>Ophthalmic</td>
</tr>
<tr>
<td>ORS</td>
<td>packets</td>
<td></td>
<td>Oral Rehydration</td>
</tr>
<tr>
<td>Aspirin, adult</td>
<td>325mg</td>
<td></td>
<td>Pain</td>
</tr>
<tr>
<td>Acetaminophen</td>
<td>500mg</td>
<td>Tylenol</td>
<td>Pain/Fever</td>
</tr>
<tr>
<td>Ibuprofen, adult</td>
<td>200mg</td>
<td>Advil</td>
<td>Pain/Fever</td>
</tr>
<tr>
<td>Hydrocortisone cream</td>
<td>15mg</td>
<td></td>
<td>Skin - itching</td>
</tr>
<tr>
<td>Topical Antibiotic</td>
<td>single use disposable</td>
<td>Skin - wound care</td>
<td></td>
</tr>
<tr>
<td>Ferrous Sulfate</td>
<td>325mg</td>
<td></td>
<td>Anemia</td>
</tr>
<tr>
<td>Folic Acid</td>
<td>1.5mg</td>
<td></td>
<td>Vitamins - prenatal</td>
</tr>
<tr>
<td>Fluconazole</td>
<td>200mg</td>
<td>Diflucan</td>
<td>Anti-Fungal, Yeast</td>
</tr>
<tr>
<td>Prednisone</td>
<td>20mg</td>
<td></td>
<td>Anti-inflammatory</td>
</tr>
<tr>
<td>Acyclovir</td>
<td>400mg</td>
<td></td>
<td>Anti-viral</td>
</tr>
<tr>
<td>Amoxicillin</td>
<td>500mg</td>
<td></td>
<td>Antibiotic</td>
</tr>
<tr>
<td>Amoxicillin</td>
<td>250mg</td>
<td></td>
<td>Antibiotic</td>
</tr>
<tr>
<td>Amoxicillin/Clavulinate</td>
<td>875mg/125mg</td>
<td></td>
<td>Antibiotic</td>
</tr>
<tr>
<td>Azithromycin</td>
<td>250mg</td>
<td></td>
<td>Antibiotic</td>
</tr>
<tr>
<td>Cephalexin</td>
<td>500mg</td>
<td>Keflex</td>
<td>Antibiotic</td>
</tr>
<tr>
<td>Cephalexin</td>
<td>250mg</td>
<td>Keflex</td>
<td>Antibiotic</td>
</tr>
<tr>
<td>Ciprofloxacin</td>
<td>500mg</td>
<td>Cipro</td>
<td>Antibiotic</td>
</tr>
<tr>
<td>Doxycycline</td>
<td>100mg</td>
<td></td>
<td>Antibiotic</td>
</tr>
<tr>
<td>Metronidazole</td>
<td>500mg</td>
<td>Flagyl</td>
<td>Antibiotic</td>
</tr>
<tr>
<td>Nitrofurantoin</td>
<td>100mg</td>
<td>Macrobid</td>
<td>Antibiotic</td>
</tr>
<tr>
<td>Sulta/Trimeth DS</td>
<td>800mg/160mg</td>
<td>Bactrim DS</td>
<td>Antibiotic</td>
</tr>
<tr>
<td>Sulta/Trimeth SS</td>
<td>400mg/80mg</td>
<td>Bactrim SS</td>
<td>Antibiotic</td>
</tr>
<tr>
<td>Amlodipine</td>
<td>5mg</td>
<td></td>
<td>Antihypertensive</td>
</tr>
<tr>
<td>Metformin</td>
<td>500mg</td>
<td></td>
<td>Diabetes</td>
</tr>
<tr>
<td>Promethazine HCL</td>
<td>25mg</td>
<td>tablets</td>
<td>GI</td>
</tr>
<tr>
<td>Omeprazole/other PPI</td>
<td>varies</td>
<td></td>
<td>GI</td>
</tr>
<tr>
<td>Ranitidine</td>
<td>150mg</td>
<td></td>
<td>GI</td>
</tr>
<tr>
<td>Ofloxacin Ophthalmic</td>
<td>drops</td>
<td></td>
<td>Ophthalmic</td>
</tr>
<tr>
<td>Gentamycin ophthalmic</td>
<td>Drops</td>
<td></td>
<td>Ophthalmic</td>
</tr>
<tr>
<td>Item Description</td>
<td>Size/Strength</td>
<td>Brand</td>
<td>Classification</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>---------------</td>
<td>------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Tobramycin with Dex</td>
<td>Drops</td>
<td>TobraDex</td>
<td>Ophthalmic</td>
</tr>
<tr>
<td>Ivermectin</td>
<td>6mg</td>
<td>Stromectal</td>
<td>scabies</td>
</tr>
<tr>
<td>Ceftriaxone inj</td>
<td>1gm</td>
<td>Rocephin</td>
<td>Antibiotic, Inj</td>
</tr>
<tr>
<td>Ceftriaxone inj</td>
<td>250gm</td>
<td>Rocephin</td>
<td>Antibiotic, Inj</td>
</tr>
<tr>
<td>Lidocaine</td>
<td>1%</td>
<td>Diluent</td>
<td></td>
</tr>
<tr>
<td>Pedialyte solution</td>
<td>powder</td>
<td>individual</td>
<td>Oral Rehydration</td>
</tr>
<tr>
<td>Diphenhydramine, pediatric chewable</td>
<td>12.5mg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acetaminophen, infant</td>
<td>80mg</td>
<td>Tylenol</td>
<td>Pain/Fever</td>
</tr>
<tr>
<td>Acetaminophen, pediatric</td>
<td>melts/chew</td>
<td>Tylenol</td>
<td>Pain/Fever</td>
</tr>
<tr>
<td>Acetaminophen, pediatric, liquid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ibuprofen, infant</td>
<td></td>
<td>Advil/Motrin</td>
<td>Pain/Fever</td>
</tr>
<tr>
<td>Ibuprofen, pediatric</td>
<td>melts/chew</td>
<td>Advil/Motrin</td>
<td>Pain/Fever</td>
</tr>
<tr>
<td>Ibuprofen, pediatric, liquid</td>
<td>100mg/5ml/1</td>
<td>Advil/Motrin</td>
<td>Pain/Fever</td>
</tr>
<tr>
<td>Multivitamin, children</td>
<td></td>
<td></td>
<td>Vitamins, Pediatric</td>
</tr>
<tr>
<td>Amoxicillin, chewable</td>
<td>250mg, scored</td>
<td></td>
<td>Antibiotic, Pediatric</td>
</tr>
<tr>
<td>Amoxicillin, dispersable</td>
<td>125mg</td>
<td></td>
<td>Antibiotic, Pediatric</td>
</tr>
<tr>
<td>Amoxicillin, suspension</td>
<td>125/5ml</td>
<td></td>
<td>Antibiotic, Pediatric</td>
</tr>
<tr>
<td>Amoxicillin, Suspension</td>
<td>250/5ml/100ml</td>
<td></td>
<td>Antibiotic, Pediatric</td>
</tr>
<tr>
<td>Azithromycin, suspension</td>
<td>200mg/5ml/15ml</td>
<td></td>
<td>Antibiotic, Pediatric</td>
</tr>
<tr>
<td>Cephalexin suspension</td>
<td>125mg/5ml</td>
<td>Keflex</td>
<td>Antibiotic, Pediatric</td>
</tr>
<tr>
<td>Sulfa/Trimeth Suspension</td>
<td>200mg/40mg</td>
<td>Bactrim Suspension</td>
<td>Antibiotic, Pediatric</td>
</tr>
<tr>
<td>Albuterol solution</td>
<td>2.5mg/3ml</td>
<td>Neb Solution</td>
<td>Asthma</td>
</tr>
<tr>
<td>Duoneb</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitamin A</td>
<td>200,000 IU</td>
<td></td>
<td>Vitamins</td>
</tr>
<tr>
<td>Albendazole</td>
<td>400mg</td>
<td>Chewable</td>
<td>Parasites</td>
</tr>
</tbody>
</table>