Resource for the Internal Medicine Travel Clinic

Billing:

Use the travel consultations codes and the ICD-9 code for general medical exam (V70.0) to bill for travel visits. Though insurance will generally cover the cost of immunizations, the patient will bear the cost of the consultation. In assigning a charge consider not only your time with the patient, but the time the staff spend acquiring preliminary information and preparing the report in preparation for the visit.

- Brief (99401) – for the simplest visits, one prescription and one immunization
- Routine (99402) – for most travel visits, several prescriptions, malaria prevention, and several immunizations
- Detailed (99203) – for trips requiring multiple prescriptions and immunizations or consideration of important underlying medical conditions
- Complex (99204) – for trips involving multiple destinations or very complex underlying medical conditions

Couples and families – Charge the first patient at the level indicated by the complexity of the travel, but charge the accompanying family member at the brief level.

Immunizations:

General information – The travel visit is an excellent time to update patients on routine immunizations including Tdap or Td, MMR and pneumococcus. Vaccinations can be given to patients with minor illnesses, but should not be given to patients who are febrile or who have some other significant acute illness. All commonly used vaccines can be given simultaneously using separate sites. Travelers without time to complete a full series should be started on the first immunization, because within two weeks of administration, vaccines will have some protective effect. An interrupted course of vaccination can be reinstituted at any time and does not require restarting the series. The following vaccines use live virus and should not be administered to immune compromised patients: MMR, oral Typhoid, Varicella, Yellow Fever.

Influenza – Influenza is endemic in the tropics year round and the vaccine can be offered to patients traveling to tropical areas at any time of the year. Patients traveling to the southern hemisphere during our summer should be offered influenza immunization, because influenza circulates there during our summer months.

Hepatitis A – This immunization is recommended for travel to most underdeveloped countries. Though completion of a series of two is recommended, high levels of protection are achieved within 2 weeks of a single injection. Travelers to very high risk destinations and circumstances, who do not have a two week interval to gain immunity should be offered simultaneous administration of immune serum globulin.
**Hepatitis B** – This vaccine is commonly recommended, but need is based on the likelihood that the patient will engage in risky sexual behavior or require medical care in an underdeveloped country. Patients at low risk may safely decline hepatitis B immunization.

**Typhoid fever** – Injected and oral typhoid vaccine are equivalent in effect and price, but the oral vaccine lasts for five years while the parental is good for only two. The oral vaccine is a live attenuated virus, must be taken over a one week period and must be refrigerated.

**Polio** – A onetime Injectable Polio booster is recommended for all travelers to underdeveloped countries. This recommendation presumes completion of a primary series. The injectable vaccine is a killed virus and conveys no risk of paralytic disease.

**Yellow Fever** – The Yellow Fever vaccine is required for entry into some countries and recommended for others. Where required it must be administered 10 days before travel and travelers must display the WHO International Certificate of Vaccination. This vaccine is associated with two types of serious and sometimes fatal reactions. Neurologic reactions including encephalitis, meningitis, Guillain Barre Syndrome and bulbar palsy occur with a frequency of 1/100,000. They all tend to be fully reversible. The viscerotrophic disease causes multi-organ system failure and may be fatal. This disease occurs at a rate of 1/250,000. Both illnesses are more common in recipients over the age of 60 and even more common after the age of 70. Travelers, particularly those over 60, to countries where vaccination is recommended but not required, may reasonably decide to use measures to avoid mosquito bites and forego immunization.

**Japanese Encephalitis** – The vaccine is expensive and the disease is rare. It is indicated for extreme travelers who will be backpacking or camping in wet areas for prolonged periods. The usual tourist does not need this vaccine.

**Rabies** – This vaccine is indicated for the traveler who will have a prolonged stay in rural parts of underdeveloped countries. Most other travelers will do well to avoid stray dogs and return within 2 weeks of exposure if they are bitten, earlier of course if the wound is on the face.

**Meningococcus** – Saudi Arabia requires this vaccine. It is recommended for travelers to the meningitis belt in sub-Saharan Africa and to other areas, based on location of epidemics and travel advisories.

**Preventable infections:**

**Travelers’ diarrhea** – Travel to all underdeveloped countries carries risk of acquiring TD. Patients should avoid untreated water, uncooked foods and food from sketchy sources. Ciprofloxacin 500 bid will result in symptomatic improvement within 6-12 hours and typically shorten the course of the disease to 36 hours. Though most patients can stop treatment after 2 doses, some will have prolonged symptoms and may want to complete a 3 day course. Travelers to Southeast Asia, particularly Thailand where resistant disease is common, should take
Azithromycin 1gm as a single dose, rather than ciprofloxacin. Azithromicin may be use as a substitute for ciprofloxacin in all other parts of the world.

**Malaria** – Prophylactic treatment for malaria is required in many parts of the world. Chloroquine is the treatment of choice in parts of Central America and the Caribbean. For all other destinations travels will choose between two equally effective drugs, Malarone and Doxycycline. Malarone, 1 qd starting one day before departure and continuing for a week after return, is very well tolerated and for some the first choice, but costs nearly $3 per pill. Doxycycline 100mg qd, starting 1 day before departure and continuing for a month after return, works very well, but patients may experience gastrointestinal symptoms and must use sun protection to avoid solar sensitization. Mosquito repellants and protective clothing also play a role in preventing malaria.

**Influenza** – Travelers to areas of influenza activity who should be immunized, but may also want to take oseltamir 75mg qd for prophylaxis or carry a prescription for early treatment, 75mg bid x 5d.

**UTI** – Travelers prone to UTI’s may want to take ciprofloxacin for as needed use.

**Vaginitis** – Travelers prove to vaginitis may want to take fluconazole for as needed use.

**Other preventable and treatable illness:**

**Altitude sickness** – Travelers ascending rapidly to elevations greater than 8,000 feet are at risk for altitude sickness and may want to take prophylactic medication. High altitude airports include Cuzco, Peru; La Paz, Bolivia; and Lhasa, Tibet. Treatment with acetazolamide 125mg bid starting one day prior to ascent and continuing for 2 more days is effective and safe.

**Motion sickness** – This illness can be prevented by using a scopolamine transdermal patch which is applied behind the ear and left in place for 3 days at a time. Meclizine 25mg tid can also be used to treat symptoms.

**Sunburn** – It is good to remind travelers about the risks of sun exposure and to recommend the use of sunscreens.

**Jet lag** – Zolpidem 5-10mg per day for 2 days can help travelers adjust to a new time zone. Because of the rare amnesic reactions, patients should try this medication at home before using it on a trip and should avoid using it during flight.

**DVT** – Prolong air travel is associated with an increase risk for DVT. Travelers can reduce their risk by walking, stretching and contracting calf muscles at regular intervals. Patients at high risk may want to wear graduated compression hose.