Why Travel Health Belongs in Primary Care



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helsea had been stationed with the Peace Corps in Ghana and decided to take her 7-year-old daughter, Amber, with her on a return trip to visit friends she had made there. They planned to spend three weeks in the African nation.

Since Amber was home-schooled, Chelsea had not felt it necessary to follow the CDC guidelines for routine child-hood immunizations. Once they planned to travel abroad, however, she made appointments with their primary care provider (PCP) to update Amber's immunizations and with the travel clinic—where I practice—for yellow fever vaccines (required for entry to Ghana) for both of them.

Chelsea explained their travel plans to the PCP, adding that she intended to get the yellow fever vaccine at another clinic. The PCP administered Amber's varicella and MMR vaccines.

Aware that it takes 10 days for yellow fever vaccine to be effective, Chelsea scheduled their appointments with me at the travel clinic for two weeks prior to their departure—which was also one week *after* their visit to the PCP. Did I mention they had nonrefundable tickets?

Chelsea became very upset when I told her I could not give Amber her yellow fever vaccine. I explained the live virus vaccine rule, which states that live virus

Nancy Dirubbo practices at Travel Health of New Hampshire and Laconia Women's Health Center in Laconia, New Hampshire. vaccines must be given either on the same day or 28 days apart. If they are not given 28 days apart, the second vaccine—in this case, Amber's yellow fever immunization—is not considered effective.

Chelsea and Amber were not able to travel to Ghana as planned, because her PCP did not know enough about the administration of yellow fever vaccine. As a result, Chelsea lost \$5,000 in airline tickets and cancellation fees. She insisted that her PCP pay her expenses, and her PCP did. But how easily could this have happened in your practice?

It's been only 100 years since the first commercial airline service began. Today, the travel industry is the largest service industry in the world; 1 billion people traveled internationally in 2013.² We travel for pleasure, business, education, adventure, adoption, and humanitarian reasons (not to mention visiting friends and family). It is now possible to travel around the world in less than 36 hours.²

Study results vary, but many report that 50% or more of all international travelers will become sick or injured because of their travel.³ Travel health now plays a larger role in public health as travelers bring home more than just souvenirs. Measles outbreaks are at a 30-year high, with many cases attributed to importation by international travelers.⁴ Many microbes—including SARS, novel influenza strains, and Ebola—are able to spread more easily be-

cause of advances in international travel.

The field of travel health grew from the recognition that many of the conditions being treated in infectious disease clinics could have been prevented by pretravel interventions. To address these issues, travel health—a new multidisciplinary specialty—was created, and in 1985 the International Society for Travel Medicine was formed. As a result, the practice of travel health has been concentrated in specialist-led clinics, often in the infectious disease departments of hospitals.

Research indicates that most international travelers do not seek any pretravel health advice.⁵ When they do, they consult their PCP more often than a travel clinic. Yet most PCPs are woefully undereducated in travel health. Patients such as Chelsea think it is less expensive to consult a PCP first to catch up on routine immunizations before going to a travel clinic for required vaccines. But it makes more sense to consult a travel clinic expert first.

The travel health specialist, who could be an NP, PA, registered pharmacist, RN, or MD, can devise a travel immunization plan that can be coordinated with a PCP to save costs. Many travel clinics don't accept insurance because most payers do not cover travel health services or immunizations. This includes most private third-party insurers, Medicaid, and Medicare.

But what if Chelsea's PCP could have provided her travel health needs? It is possible for PCPs to gain knowledge and expertise about travel health, even if they don't choose to provide every travel immunization.

For example, yellow fever vaccine can only be provided at a certified yellow fever center. Certification requirements are determined at the state level and therefore vary by state. It is possible for PCPs to become certified to administer yellow fever vaccine, if they so choose.

But since not all international travelers require yellow fever vaccine, a PCP could still meet the needs of the majority of patients traveling internationally without taking that step. PCPs can provide vaccination against hepatitis A, typhoid, adult polio, meningococcal disease, Japanese encephalitis, and rabies (preexposure) not to mention what I consider the most important travel vaccine, influenza. PCPs can counsel patients about food and water safety and insect precautions and provide strategies for self-treatment of traveler's diarrhea and malaria chemoprophylaxis.

Patients go to a travel clinic because they recognize that they are exposing themselves to risk and want to mitigate that risk. In a primary care office, the PCP has an opportunity to identify patients who don't *know* they are at risk and intervene.

Since I also work in a primary care setting, I look for opportunities to identify patients who may be traveling and evaluate their immunization status in that broader context. When I see patients who were born in other countries, I ask if they plan to travel back home. When patients ask for extra prescription refills because they are traveling, I ask where they are going. As part of wellness visits, I ask if my patient has any plans to travel outside the United States in the next year as I assess their vac-

cine needs. None of these interventions takes much time.

The foundations of travel health include immunization, patient education on food- and waterborne diseases, insect-borne diseases, and safety. PCPs are experts at patient education, risk identification and management, and immunizations.

So ask your patients if they are planning to travel. Make sure everyone's routine immunizations are current at every visit. Provide every patient with a personal immunization record to take with them when they visit any other provider and when they travel.

More information on travel health is available from the CDC (www.cdc.gov/travel), the International Society of Travel Medicine (www.istm.org), and the American Travel Health Nurses Association (www.athna.org). By availing yourself of these resources, you will protect the health of your community and keep your traveling patients well, wherever they go.

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