Criteria for Recognition of Travel Health Nursing as a Nursing Specialty

Per ANA 3SC Booklet-FINAL-2017-08-17

June 27, 2019

**1. Defines itself as nursing. Describes the registered nurse, graduate-level prepared nurse, and advanced practice registered nurse and their use of the nursing process as a critical component of the specialty nursing practice.**

**Definition of Travel Health Nursing**

Travel health nursing is defined as a specialized practice of professional nursing that advances the well-being of travelers. This specialty focuses on the health and safety of travelers through continuous surveillance and assessment of the multiple determinants of health with the intent to promote health and wellness, and prevent disease, disability and premature death. Travel health nursing is a highly complex nursing specialty that draws on knowledge from nursing, pharmacology, epidemiology, tropical medicine, primary care and behavioral psychology to provide evidence-based interventions that ensure the health and safety of travelers and the communities they impact. As described by Schlagenhauf, travel health and its clinical practice “encompasses the identification and continuously changing epidemiology of travel-associated disorders and diseases and their geographical distribution, the pre-travel prevention of these conditions through education, vaccination, chemoprophylaxis, and self-treatment (for certain conditions) … as well as … the triage and care of the returned ill traveler or the newly arrived migrant or refugee.” (Schlagenhauf, 2010)

Travel health nursing professionals represent the myriad of specially educated and trained registered nurses, advanced practice registered nurses and graduate- level prepared travel health nurses who exercise the expert nursing process skills of assessing patients, analyzing patient subjective and objective data pertinent to travel, educating patients about travel-related health risks and safety concerns, as well as teaching health promotion and illness avoidance. The methods of this specialty are evidence-based and in accordance with professional and ethical standards. Travel health nurses practice within the scope of their state nurse practice acts and the standards of the specialty. They function as direct care providers and as educators and consultants to businesses, organizations and the traveling public.

**Description of the registered nurse, graduate-level prepared nurse, and advanced practice registered nurse and their use of the nursing process as a critical component of travel health nursing practice**

Travel health nurses are licensed at all levels of nursing. Many also hold a variety of graduate degrees (MS, MSN, MPH, MBA, PhD and DNP). Travel health nurses provide clinical and consultative services in accordance with their state nurse practice acts and the standards of the specialty. Individual roles also vary with education, experience and institutional policies.

Registered Nurse

Across the United States and in diverse practice settings, RNs provide the majority of pre-travel care to travelers. Functioning within their state nurse practice acts and the standards of the specialty, they complete the pre-travel assessment of the traveler and the itinerary, identify health and safety risks of the journey and establish with the traveler an individualized prevention plan that consists of immunizations, customized health education, and referrals as may be indicated. In many states, utilizing standing orders, RNs will then proceed to vaccinate, counsel and educate travelers about the myriad of non-vaccine preventable risks of travel as well as travel medications ordered by prescribers in the clinical practice. RNs are also usually the first clinicians returning travelers will encounter. The RN will take a health history and triage the ill or injured traveler in accordance with practice protocols. RNs in travel health are especially alert to illness syndromes that may warrant quarantine and immediate referral for emergency care. In addition to these clinical responsibilities, RNs may function as practice managers, trainers and members of global security, global health, emergency response and related committees of universities, corporations and governments. RNs contribute to travel health nursing data collection, research studies, travel health nursing guideline development and both lay and professional publications. Individual roles also vary with education, experience and institutional policies.

Travel Health Nurses Prepared at the Graduate Level

RNs prepared at the graduate level may assume all RN functions, augmenting the RN role within a greater range of formal training and greater authority to practice to the full extent of their education and licensure. They hold a variety of clinical and management positions. Clinical nurse specialists may serve as clinic managers and experts for orientation and training. Travel health nurses prepared at the graduate level serve as research investigators and serve on research review committees. They author professional publications (articles, chapters, texts) and also serve as peer reviewers and on journal editorial boards. In addition, these nurses may direct quality assurance efforts and oversee the development of policies and procedures. They foster collaboration with other travel health nurses and nursing organizations in the U.S. and elsewhere, lead efforts to establish and promote standards in the specialty, and organize initiatives to develop practice innovations. The graduate- level prepared RN may serve as the clinical coordinator for vaccine trials and author travel health guidelines and regulatory content for state and national bodies such as the CDC.

Advanced Practice Registered Nurse

The APRN will function, as per state regulations, either in collaboration with a physician or independently to provide the full range of pre- and post-travel clinical services including the prescribing of medical therapies. APRNs may also qualify to provide mandated, fitness-to-travel examinations for corporate and governmental organizations. These nurses may serve as tele-health clinicians assisting travelers abroad, and may also serve as onsite providers accompanying traveling groups. They often have additional skills in travel disease diagnosis, management of complex cases or complicated itineraries, and the care of travelers who are pregnant, immunosuppressed or coping with advanced illness (e.g., stage IV cancers, kidney disease requiring dialysis). In addition to these clinical roles, the APRN may be responsible for all the professional activities described for the RN and the graduate- level prepared RN. Some may also operate fully independent travel health clinics.

As travel health nursing continues to evolve and expand, nurses are assuming more varied roles within the specialty. Many travel health nurses hold graduate degrees in disciplines other than nursing (business, law, public health, epidemiology, journalism) and they utilize their specialized knowledge in a wide variety of ways—not only as clinicians, but as researchers, faculty members, informatics consultants and department heads. They work in executive management, policy development and as nurse leaders in nursing and multi-disciplinary professional organizations. They are leaders in regional, national and international travel health societies and organizations. Many are entrepreneurs, serving as owners and operators of their own travel health centers. They write blogs and maintain a social media presence. They work in risk management and provide care to travelers during trips abroad.

**2. Is clearly defined. Answers the “who, what, where, when, how and why” questions about the specialty. Includes a history of development and evolution of the specialty practice.**

**The “Who, What, Where, When, How and Why” of the specialty.**

**Travel Health Nursing: The WHO**

Travel health nursing is provided by nurses with all the professional nursing designations described in #1 above: the registered nurse, the nurse prepared at the graduate level and the advanced practice registered nurse. Nurses at each of the five levels of professional development, novice to expert, also participate in the specialty as described in #8 below.

**Travel Health Nursing: The WHAT**

Travel health nursing focuses on the health and safety of travelers through continuous surveillance and assessment of the multiple determinants of health with the intent to promote health and wellness, and prevent disease, disability and premature death. It is a highly complex nursing specialty that draws on knowledge from nursing, pharmacology, epidemiology, tropical medicine, primary care and behavioral psychology to provide evidence-based interventions that contribute to the health and safety of international travelers and the communities they impact.

Objectives of Travel Health Nursing

• The travel health nurse uses the nursing process to promote the health and safety of travelers, the destinations to which they travel and the communities to which they return.

• The travel health nurse assesses subjective and objective data obtained from the patient, as well as authoritative national and international travel health resources to structure an outpatient encounter focusing on illness prevention and health promotion, including safety and security information for the traveler. The goal is to prepare travelers to achieve a healthy and safe trip that meets their personal goals.

• The travel health nurse individualizes patient care in the context of caring, compassion and sensitivity to multiple traveler factors, including: age, gender, ethnicity, culture, health status, previous travel history, reason for travel, finances, planned events during the trip and time before departure.

• The travel health nurse customizes patient care utilizing the most up-to-date national and international global health and safety risk data, including vaccine preventable illness and non-vaccine preventable infectious diseases, seasonal, climate and altitude risks, food and water borne illnesses, transportation accidents, activity risks (fresh water swimming, spelunking, ocean sports, mountaineering etc.), sexually transmitted infections (STIs), social unrest, crime, disease outbreaks, and access to and quality of medical and safety services. The travel health nurse incorporates role play and the teach-back method with the traveler to verbalize how these risks are to be managed while abroad in order to evaluate how well the education was received.

• The travel health nurse performs a comprehensive health and safety risk assessment customized to the traveler and his/her itinerary, utilizing appropriate reliable resources (CDC, WHO etc.) to develop and implement an evidence-based nursing plan of risk reduction using pharmaceutical and non-pharmaceutical interventions, and evaluates outcomes for travelers, their destination(s), and their home community.

• The travel health nurse triages the ill or injured post-travel patient with special attention to the serious, treatable and transmissible. If a transmissible illness is identified, the travel health nurse will notify the proper authorities and take action to protect the local community and traveler as indicated and in accordance with practice protocols.

• The travel health nurse participates in ongoing education, research and advocacy to implement/translate learning to actions in order to achieve continuous improvements in the 1.) pre- and post-travel care of travelers, 2.) global coordination and implementation of health and safety measures that benefit all populations, and 3.) advancement of the practice of travel health nursing.

Travel Health Nursing Encounters

Nurses in this specialty provide services in three different clinical encounters: pre-travel, during travel (“in-transit”) and post-travel. In addition, travel health nurses can provide a variety of administrative and educational nursing services, such as seminars for healthcare personnel and groups of travelers, and consultations to organizations and providers who have questions about a challenging travel encounter.

Pre-travel Encounters

Travel health nurses provide direct nursing care in a variety of out-patient settings and by tele-health and electronic messaging. Travel health nurses provide pre-travel care visits to individuals, families and groups. The clinical encounter is episodic and time-limited. While a single visit is common, multiple visits for a particular trip or multiple itineraries may be required either to complete the assessment, and/or an immunization series or for extended health counseling. Additionally, travel health nurses provide expert consultation encounters to promote travel-related health and safety of groups and organizations. Moreover, they are indispensable speakers to audiences new to the idea of international travel, as the expertise of travel health nurses is freely shared regarding the benefits of seeing the world, current requirements and recommendations for vaccine preventable illness, and practical advice regarding self-care in order to optimize health and safety while abroad and upon return.

Most travelers initiate the travel health nursing clinical encounter as they prepare for international travel; alternatively, some travelers are directed to travel health nursing care by employers, school authorities, tour managers, the military and others. The assessment phase of the encounter encompasses a largely self-reported traveler health history. Next, health and safety risks for a given itinerary (destination and activity risks) are identified using sophisticated internet-based search engines. At the heart of the assessment is a complex risk analysis, considering both the likelihood as well as the consequences of specific health and safety occurrences. Risk factors related to the traveler include age, possibility of pregnancy, chronic illness, unstable medical and psychiatric conditions, allergies, risk- taking tendencies as they relate to sexual behavior, drug use and extreme sports, travel health insurance coverage, previous immunizations, previous travel related illnesses, travel motivation, concerns, attitudes, and medications, country restrictions, and status as a “Visiting Friends and Relatives” (VFR) traveler. Risk factors related to the trip include destination(s), departure dates, specific order of countries to be visited, duration in each country (especially greater than one month), season, climate, altitude at destination, types of accommodations, trip purpose, specific activities, and modes of transportation.

International travel expands every year in terms of numbers, destinations and reasons for travel. Increasingly, travel health nurses are called upon to provide individualized care to travelers who are making trips that go beyond typical vacation, employee and VFR travel. Pre-travel encounters include care for unaccompanied minors, expats, flexpats, medical and dental tourists, romance tourists, ecotourists, students (school and college), researchers, missioners, babymooners, voluntourists, military, emergency responders, pilgrims, specialty tourists (food, spa, adventure, history, LGBTQ, solo, single parent), space travelers, cruise travelers, war zone travelers, bucket list travelers, disaster response workers and volunteers, sex tourists, persons adopting internationally, multi-generational tourists, and remote travelers. As more travelers journey with chronic, even terminal health conditions, or seek medical or dental care internationally, the expectation that a traveler is “in good health” is no longer valid. To add to this concern are travelers who are physically disabled and require assistive devices, are oxygen dependent, have a companion animal, or need syringes or other specialized equipment and supplies to manage illnesses, such as diabetes, psoriatic arthritis, or bleeding disorders.

Travel health nurses can expect to prepare travelers with a wide range of physical and mental health issues that can include chronic physical illness (e.g., COPD, CHF, DM, RA, severe allergies, severe motion sickness, asplenia), mild to severe psychological conditions (e.g., OCD, ADHD, panic attacks, depression, bipolar disorder, eating disorders, addictions, flying phobias), pregnancy or trying to conceive, post-surgeries, immunosuppressive conditions and therapies, new diagnoses currently being investigated, conditions requiring the use of medications either not available internationally or outlawed at the destination, and medical or dental issues that will be addressed with services in another country.

During the implementation phase of the encounter, the travel health nurse provides pharmaceutical interventions (immunizations, medications within state scope of nursing practice guidelines) and non-pharmaceutical interventions (health counseling, coordination of care with other health providers, referrals for additional evaluation and care and guidance for post-trip health management). A typical visit may include the administration of routine, recommended and required vaccinations and customized counseling to prevent traveler’s diarrhea, vector-borne infections that include malaria, Aedes illnesses (e.g., dengue, Zika, yellow fever) and rabies, STIs, motor vehicle accidents, airline hazards (DVT, jet lag, respiratory infections and disinsection pesticide spraying in airplane cabins), climate, and fresh water-related illness.

Many travelers will require a review of their routine medications, as well as guidance for the use of drugs indicated for certain travel-related risks destinations (altitude illness, traveler’s diarrhea, malaria) and recommendations for the assembly of a personalized travel medical kit. Travelers with preexisting conditions will receive self-care management counseling and education about medical services and access abroad. Travel health nurses will document the encounter in the health record, and also complete any necessary medical documents required by a tour company, employer, camp, school or college. They will properly issue the International Certificate of Vaccination or Prophylaxis (ICVP) card, if a required vaccine is administered, provide a waiver if yellow fever vaccine is medically contraindicated, and provide medical letters that travelers may need or want to carry on the trip (e.g., explaining a chronic condition or the use of an injectable medication). The travel health nurse may also assist in the translation of these documents into the primary language of the destination.

Every traveler during the pre-travel encounter receives guidance about post-travel care that may include a timeline for additional vaccine doses or boosters, urgent follow-up for febrile illness, the need to complete a malaria medication schedule, post-trip behaviors after travel to Zika regions (pregnancy avoidance, use of repellents), and recognition of signs and symptoms that warrant medical attention upon return. Time spent in the pre-travel encounter is valuable for assessing adverse vaccine reactions and providing instantaneous management of same and for offering the traveler role play and teach-back opportunities of common health issues encountered during travel to confirm traveler knowledge of counseling content and correct responses. As travelers with more complex needs are cared for during the pre-travel encounter, the scope and complexity of travel health nursing practice has broadened and increased. This is especially true of travelers who are immunosuppressed, older, pregnant or with co-morbidities related to chronic disease and disability.

Travel health nurses with prescriptive authority will also prescribe travel medications during the pre-travel encounter that may include, but are not limited to, therapies for altitude illness, malaria, traveler’s diarrhea, skin infections, respiratory infections, chronic illnesses such as asthma or diabetes, severe allergic reactions, contraception, UTIs and musculoskeletal injuries.

In-transit Encounters

With advances in communication technology, travel health nurses may be called upon to offer patient counseling, arrange for referrals or order prescriptions for travelers in transit almost anywhere in the world. For example, patients may call to say that their malaria medication is causing problematic side effects and they want a referral to a destination clinic for a replacement drug. Assistance with evacuation from Israel for a traveler with an acute case of “Jerusalem Syndrome” (psychotic episode with associated religious obsessions or delusions) would be another example. In addition to these at-a-distance contacts, travel health nurses can travel with a group and serve as the designated, on-site health care provider. As a result of in-transit encounters, the travel health nurse may recommend changes to clinic or organizational pre-travel and post-travel policies and procedures, as well as suggestions for travel medical kits and staff training.

Post-Travel Encounter

In post-travel encounters, travel health nurses will, in accordance with the parameters of their state nursing scope of practice and institutional policies, provide triage, health evaluation, medical and nursing diagnosis and management of health problems encountered during an international journey. These problems may include trauma, routine illness and tropical or more exotic emerging diseases. The travel health nurse providing post-travel care focuses on the infectious versus the non-infectious, and proceeds to evaluate and manage the serious, treatable and transmissible based on his/ her level of training and practice in accordance with site protocols, referring as appropriate. The goal is to treat the patient, while preventing transmission to others and reporting to authorities as appropriate.

During the assessment phase of a post-travel encounter, the travel health nurse must answer some initial critical questions: Is there a risk to self? Is there a risk to others? How much time is available? The process is quite complicated as many illnesses present in a similar fashion with flu-like symptoms. Life-threatening illnesses can initially appear benign, and the differential diagnosis can be quite large. Since an illness like Plasmodium falciparum malaria can be fatal very quickly, timely intervention is critical.

The first step is to determine what personal protective equipment is needed and if isolation is necessary. A thorough history is essential. The travel health nurse will ask the traveler about signs and symptoms of illness, as well as dates of onset, and then collect information on a number of variables that can contribute to trip-related illness, including but not limited to: all geographic destinations and associated dates, seasonal and cultural factors, food, water and insect precautions, accommodations, ectoparasites, modes of travel, local contacts, compliance with personal protective measures (PPM) and medications, animal contacts, fresh water exposure, medical or dental care abroad, trip purpose and activities, number of new sexual partners, consumption of reef fish, unpasteurized dairy products or bush meat, and outbreaks. The travel health nurse will make the necessary referrals for further evaluation. If the ill traveler is a member of a group or organization, the travel health nurse will take additional actions to provide surveillance and evaluate other members of the group as warranted. In the event of a communicable disease risk, the travel health nurse will take measures to ensure the safety of other patients and staff, and notify the appropriate public health officials immediately.

If the travel health nurse is an Advanced Practice Registered Nurse with additional training in post-travel care, he/she creates a differential of diagnoses utilizing the traveler’s health history and up-to-date information about global health. The travel health nurse will then determine if the patient's complaints are related to travel exposures, unrelated to exposures during the recent trip, or because of past travel or previously forgotten trips. Based on the likelihood of specific illnesses, and taking into account incubation periods and exposure times, the travel health nurse determines any appropriate diagnostic testing.

The travel health APRN implements appropriate treatment measures, including medical therapies and health education. In some circumstances, the travel health nurse recognizes the need to initiate treatment based on history and clinical findings before definitive lab results are available (e.g., malaria or serious rickettsial infections). The travel health nurse refers to other specialists as indicated and provides follow-up as appropriate. Finally, the travel health nurse makes recommendations for future screening for asymptomatic conditions (e.g., schistosomiasis, strongyloides, filariasis, Chagas Disease). As a result of this encounter, the travel health nurse may recommend changes to site prevention policies and protocols and staff training.

Administrative and Educational Roles

In addition to clinical encounters, travel health nurses are often called upon to provide consultation services, utilizing their assessment, risk reduction, and analytical skills to advise groups and organizations pre- or post-travel. Employers, tour companies, colleges, nongovernment organizations (NGOs), governments and other entities will seek travel health nursing assessments of potential hazards for a given itinerary and travel health nursing recommendations for primary and secondary prevention measures. For example, the travel health nurse may be asked to recommend appropriate accommodations for a corporate frequent flyer who is morbidly obese or a student with a seizure disorder joining a study abroad group. Travel health nurses may also be asked to identify and assess health care services abroad or confirm the availability of, and sources for, medical equipment (wheelchairs, oxygen) at destinations. Travel health nurses provide group presentations as part of these consultations and develop relevant policies, standing orders, web content and CE programs for nurses, physicians, public health officials and pharmacists as well as educational materials, such as articles, brochures and posters for health professionals and the public.

During the pre- and post-travel clinical encounters, travel health nurses actively seek opportunities to improve the care of individual travelers. In an administrative or educational capacity, travel health nurses strive to improve the care of and outcomes for travel populations. Many travel health clinics in the United States are managed by travel health nurses, utilizing nursing protocols established by travel health nurses. Throughout the United States, travel health nurses engage with local and national stakeholders to maximize the health and safety of travelers, and minimize the impact of travel risks on communities here and abroad.

**Travel Health Nursing: The WHERE**

Travel health nurses provide clinical services to individuals, families and groups in a variety of outpatient settings in the United States and abroad including:

• Hospital outpatient clinics

• Emergency rooms

• Group multispecialty practices

• Solo practices: internal medicine, family practice, pediatrics, ob-gyn, infectious disease

• Nurse owned or managed practices

• Travel health clinics

• Tele-health call centers

• Pharmacies

• School health centers

• College health centers

• Occupational health units

• Public health departments

• Military bases

• Urgent care centers

• Visiting Nurse Associations

• Government offices (CIA, FBI, U.S. embassies etc.)

Travel health nurses also serve on the faculty of nursing and medical schools. In addition, travel health nurses provide consultation, management and educational services for the prevention and treatment of travel-related illness and injury in community centers and religious organizations, local, regional, national and international corporate and university settings, community centers, NGOs, government offices, and national and international professional nursing and medical meetings.

**Travel Health Nursing: The WHEN**

Travel health nurses provide care to travelers at any stage of their journey. They most frequently interact with travelers during pre-travel encounters for trip preparation and during post-travel encounters for triage, evaluation and management of travel-related injury or illness. In addition, individuals, groups and organizations often engage travel health nurses in the trip planning process to identify and reduce itinerary health and safety risks. During an outbreak or its aftermath, the travel health nurse may also function as part of the response and evaluation team. Travel health nurses routinely design and deliver travel health curricula and educational programs to varied professional groups including nursing, medicine, public health, pharmacy and veterinary medicine, as well as lay audiences. At any time, travel health nurses may be called upon by clinics, institutions, communities and governments to develop policies and procedures that promote the health and safety of travelers and their destinations. Travel health nurses provide tele-health services to travelers in-transit and also serve as accompanying healthcare providers on group trips, such as treks and safaris. Travel health nurses are actively involved in travel health research and writing for peer and lay publications on diverse travel-related health topics (e.g., repellent choices, Zika, transporting medications abroad). They manage clinical travel health services and serve in leadership roles in professional organizations, academic settings and governmental groups. The scope of travel health nursing encompasses the range of roles, functions, responsibilities and activities the travel health nurse has the authority to perform when the patient is a traveler or a health or safety issue involves travel.

**Travel Health Nursing: The HOW**

Travel health nursing starts from a very broad knowledge base that includes current information regarding global epidemiology, emerging infectious diseases, human safety risks and environmental impacts on health. This list is quite long and includes diseases from vectors, from other people, spread through contaminated food and water, associated with contact with water, associated with pollution and from animal bites or stings. Travel health nurses must also be aware of threats to security, such as civil unrest and migration of refugees. One aspect that makes this role unique is the ever evolving—sometimes daily—updates that are necessary to make informed decisions. For this type of data, the travel health nurse relies on trustworthy sources such as the WHO, CDC and the Pan American Health Organization (PAHO) and very specialized commercial subscription database services. Travel health nurses rely on updates from the U.S. State Department, the Immunization Action Coalition (IAC), and organizations such as the International Society of Travel Medicine (ISTM), the American Society of Tropical Medicine and Hygiene (ASTMH), the American Association of Occupational Health Nurses (AAOHN), the American College Health Association (ACHA), and their own professional association, the American Travel Health Nurses Association (ATHNA). Travel health nurses utilize content in peer-reviewed journals including the *Journal of Travel Medicine,* *Travel Medicine and Infectious Disease* and the *New England Journal of Medicine*. It is also important for travel health nurses to have broad contextual knowledge around global health and traveler issues obtained from quality news sources, such as *The New York Times*, *National Public Radio,* and *The Wall Street Journal.*

Travel health nurses must be familiar with concerns associated with specific travel destinations and a wide variety of trip activities. They know about air pollution, jet lag, disinsection risks (airplane cabin pesticide spraying), DVT/embolism associated with long flights or drives, barotrauma with diving, spelunking hazards, altitude sickness, frostbite, hypothermia, heat stroke/sunburn, global traffic statistics and hazardous road conditions.

Travel health nurses must have a strong working knowledge of current immunology and vaccinology. They must understand basic principles, how to manage and store vaccines properly and all aspects of vaccine administration with a focus on contraindications and adverse reactions. The travel health nurse must be familiar with all the U.S. routine and recommended vaccines, as well as all the travel vaccines (including those available outside the United States) such as Bacille Calmette-Guerin (BCG), Japanese encephalitis, cholera, tick-borne encephalitis, rabies, typhoid, yellow fever, dengue and Ebola. The travel health nurse keeps current with ACIP and CDC updates published in the *Weekly Morbidity and Mortality Report (MMWR)*, as well as WHO and the guidelines of destination countries. Travel health nurses must also be knowledgeable about how travelers can access vaccines when traveling as well as how to complete vaccination series at reputable clinics nationally and internationally.

Often, when someone (including some health professionals) refers to travel health preparation, they describe it dismissively as “just getting your shots.” The travel health nurse is well aware, however, that a professional, evidenced-based travel health preparation encounter is not focused on injections, but on a complex, comprehensive risk analysis that identifies clearly the specific destination risks to the traveler and the options available to mitigate those risks via an open dialog with the traveler in which the traveler is a full and active participant.

Armed with their expert knowledge base, travel health nurses complete a comprehensive assessment of each traveler and each trip. Based on the cumulative information, the travel health nurse then considers the likelihood of specific events and potential outcomes. This assessment will vary from individual to individual and trip to trip. For example, if a traveler will be staying in an urban hotel with air conditioning, the likelihood of malaria will be much lower than if the traveler is camping in a rural, high-transmission area. Another example would be exposure to Zika virus; the consequences of Zika infection for a non-pregnant traveler are usually minimal as most infections result in no symptoms. However, for a pregnant traveler the outcome of the Zika virus on the fetus can be potentially catastrophic, and is yet, largely unknown.

For a pre-travel consultation, the travel health nurse provides any routine, recommended, and required vaccinations, medications (e.g., for traveler’s diarrhea, altitude illness, leptospirosis prophylaxis, asthma, contraception), prevention and risk reduction counseling (e.g., personal safety measures, food and water precautions, insect precautions, rabies), any appropriate referrals (e.g., mental health consultation, chronic and serious illness specialists, dental care, traveler insurance), and recommendations for follow-up (e.g., fever post-travel, GI illness, booster vaccinations).

In post-travel encounters, travel health nurses will, in accordance with the parameters of their state nursing scope of practice and institutional policies, provide triage, health evaluation, medical and nursing diagnosis and management of health problems encountered during an international journey. These problems may include trauma, routine illness and tropical or more exotic emerging diseases. The travel health nurse providing post-travel care focuses on the infectious versus the non-infectious, and proceeds to evaluate and manage the serious, treatable and transmissible based on her level of training and practice and in accordance with site protocols, referring as appropriate. The goal is to treat the patient, while preventing transmission to others and reporting to authorities as indicated.

**Travel Health Nursing: The WHY**

In the United States, as well as worldwide, travel health nursing has evolved as a distinct and increasingly complex specialty over the last three decades. Travel health is devoted to the health and education of persons and groups who travel internationally and travel health nursing professionals focus on the multiple determinants impacting travel health that include infectious disease, environmental risks, and personal safety. Travel health nursing practice “encompasses the identification and continuously changing epidemiology of travel-associated disorders and diseases and their geographical distribution, the pre-travel prevention of these conditions through education, vaccination, chemoprophylaxis, and self-treatment (for certain conditions) … as well as … the care of the returned ill traveler or the newly arrived migrant or refugee.” (Schlagenhauf, 2010)

The need and significance for the establishment of the travel health nursing specialty can be attributed to multiple factors: more travelers and more diversity of travelers, more travel-related illness and injury, improved epidemiology of travel-related risks, new vaccines, recognition of the critical importance of prevention counseling, recognition of the larger global role of travel health services, and emergence of planetary health as a critical priority.

•More travelers and more diversity of travelers

In this century, and even more recently in the past decade, a steady, upward trend exists in the growing number and diversity of U.S. persons traveling internationally. In addition, U.S. travelers are engaged in trips with increasing duration and complexity of itineraries and travel activities. Moreover, travelers, often with complicated medical conditions and specialized equipment needed to manage those conditions, are taking journeys at all stages of life.

According to the United Nations World Tourism Organization (UNWTO) international travel increased in 2017 by 7% for a total of 1,322 billion overnight visits, a number higher than the consistent 4% annual increase since 2010. (UNWTO, 2019) The U.S. Travel Association (USTravel.org) ranks the United States as number one for international trips taken with 21.5% of the total. Both groups predict that international travel will continue to increase annually by at least 4-6% in the future. (US Travel Association, 2019) More travel health nurses are needed to meet this growing demand as the destinations of travelers are also changing with increased frequency of travel to Asia, the Middle East and Africa, placing more travelers at risk for tropical or vaccine preventable infections. (CDC, 2018)

•More travel-related illness and injury

The worldwide increase in global travel has led to more frequent exposure to illness during travel and to instances of diseases imported into the U.S. by returning travelers (e.g., measles, Zika, multi drug-resistant bacteria, multi- resistant TB). Travel health nurses are prepared to provide accurate pre-travel guidance to reduce excess morbidity and mortality with age and destination appropriate vaccines and travel education. Travelers and the communities to which they return can benefit from this specialized knowledge and expertise.

Improved epidemiology of travel-related risks

Over recent decades, epidemiologic studies have defined the risk for acquisition of many travel-related illnesses. Familiarity with the traveler and his or her travel details plus disease etiology and risk, prophylaxis, and self-treatment guidance have positioned the travel health nurse as the “go to” source for optimal health related information and education. Travel health nurses now have the opportunity to aid travelers in the prevention of numerous vaccine and non-vaccine preventable health and safety hazards such as malaria, traveler’s diarrhea, and altitude illness using medications carefully selected for efficacy, cost and traveler preference.

•New vaccines

In the past 30 years there has been tremendous growth in the field of vaccinology, with the introduction of new travel vaccines to prevent disease. Travel nursing professionals are most knowledgeable about the judicious use of travel vaccines such as yellow fever, typhoid, Japanese encephalitis and cholera across the lifespan and within special populations (e.g., HIV+, pregnant, highly allergic). Travel health nurses also attend expert- led educational events focused on the ever-changing Advisory Committee on Immunization Practices (ACIP) immunization standards and are also well-informed about safe vaccine availability at international destinations. Travel health nurses can interpret and provide guidance with international and state vaccination records. Travel health nurses also assist travelers to select less risky itineraries when required vaccines are in short supply or unavailable, (e.g., Hepatitis A, yellow fever vaccine) or provide the traveler with international clinics where the required or recommended vaccines may be obtained safely. This often involves changing the trip timing as some immunizations require documented administration ten days before arrival, as in the case with yellow fever.

•Recognition of the critical importance of prevention counseling

Health counseling to prevent illness and injury is an essential component of pre-travel care. The provision of vaccinations and chemo prophylactic agents alone no longer meets the CDC or WHO standard for travel health prevention services. (CDC, 2018) Travel health nurses discuss the impact of personal choices on travel-related illness and safety. They provide counseling on such topics as food and beverage safety, motor vehicle accident prevention, risk reduction for climate and other environmental hazards, and access to medical care abroad. Travel health nurses also recognize that certain travel populations have special needs and they customize their counseling for such groups, including: seniors, pregnant women, families with young children, persons with co-morbidities (e.g., diabetes, CVD, migraines), persons who are highly allergic or immunosuppressed, business travelers, transgender individuals, and the VFR traveler who will be visiting friends and relatives.

•Recognition of the larger global role of travel health services

There is recognition now that the prevention of injury and illness in travelers is only part of the much larger role of the travel health nurse. Travel health nurses serve a critical public health function as travelers and their destinations are increasingly interdependent, and are important epidemiologically because of the traveler’s mobility and propensity to carry disease between countries and home. Travelers on vacation, a business trip or service project can impact the “cultural, ecological, physical, and sexual health of the local population...” (Hill, 2006) Travel health nurses have the expertise for early identification of potential public health emergencies related to travel, and can rapidly activate public health protocols. As respected professionals in the field of travel health, travel health nurses have an important role in promoting global wellness by advising travelers of evidence-based health and safety information for their current and future travel plans.

•Emergence of planetary health as a critical priority

Planetary health is a multidisciplinary field that recognizes that human health and the health of our planet are inextricably linked. Water scarcity, climate change, urbanization, changing food systems, global pollution, civil strife and displacement of large numbers of migrants and refugees have enormous implications for all of us. Travel health nurses are uniquely qualified to provide guidance to diverse travelers grappling with these concerns.

**History of the Development and Evolution of Travel Health Nursing as a Specialty**

While there have always been international travelers and clinicians willing to help prepare them for their journeys, travel medicine evolved as a U.S. medical specialty in the 1980’s. Initially, the specialty was known as “Emporiatrics,” and the number of providers grew as U.S. businesses expanded globally, tourism increased, and more students elected to study abroad.

Travel health nursing developed in parallel to travel medicine. During the ‘80’s, nurses in college health, occupational health, and ambulatory care were called upon to add pre-travel assessment and risk management services to their clinical role. At first, these nurses supported physicians in the care of patients traveling internationally, but by the late 1980’s, nurses started to assume central roles in the preparation of travelers. These nurses came from many different professional nursing backgrounds, but soon they all self-identified as travel health nurses. Often confused by the public as nurses who traveled from hospital to hospital (“traveling nurses”), travel health nurses brought a strong commitment to prevention and quality care to their practice of preparing business, student, and personal travelers. Of necessity, they were all self-taught since no travel medicine textbooks existed, the CDC “Yellow Book” was only a small pamphlet, and nursing schools offered little curricula specific to travel health.

In 1991 physicians and nurses from around the world met in Atlanta to form an international, interdisciplinary professional organization, the ISTM. More than 600 nurses in attendance voted for a more inclusive name; however, when these nurses left the meeting, there was already consensus that U.S. nurses needed to form their own network for support, education and professional development. Informal groups started to spring up around the country and then, in 1999, the New York Nurses Network was established. This self-funded group, initially comprised of 25 nurses, met six to eight times a year for case studies, clinical updates and professional networking. At the same time, principals in the New York group also started a nursing task force within ISTM, joined ISTM committees and presented posters at biennial international meetings. At these meetings in Paris, Lisbon, and Montreal, they learned about travel health nurses coming together as a national specialty in the U.K. and in the Netherlands; and soon they, too, started to envision a travel health nursing specialty in the U.S.

By 2004 the New York Network had seriously outgrown its name and now included nurses from around the country; the necessity and benefit for creating a national professional travel health nursing organization was apparent. With that in mind, ATHNA was incorporated in 2004 and established as a tax-exempt entity under Section 501(c) (3) of the U.S. Internal Revenue Service Code and registered with the NYS Attorney General’s Charities Bureau. As described in the articles of incorporation, “This corporation is formed to advance the profession of travel health nurses. Its purpose is educational within the meaning of 501(c) (3) of the Internal Revenue Code, including, but not limited to, the advancement of travel health nursing through education and public awareness.” ATHNA’s inaugural board included founding members from the New York Network, as well as nurses from Wisconsin, California, Colorado, Texas, Massachusetts, and New Hampshire.

From its inception, ATHNA was committed to the inclusion of all nurses (RNs, graduate- level prepared nurses, APRNs) who provided care to travelers; the organization reached out to nurses working in college health, occupational health, public health, the military, private practice and academic centers. In its earliest years, ATHNA was not yet a full-fledge membership society, but rather ATHNA saw its purpose to serve as a primary professional resource for U.S. nurses entering the field and as an engine for professional development and advocacy for travel health nursing in this country.

With those goals in mind, ATHNA established an open-access website for communication ([www.athna.org](http://www.athna.org)), wrote the first *Travel Health Nursing: Scope & Standards of Practice* (2004) and stated its mission as: “The Mission of ATHNA is the advancement of the profession of travel health nurses through education and public awareness.” On its fifth anniversary as a professional society, ATHNA voted to expand into a membership organization. That goal was fully achieved on April 15, 2010.

Since that time, ATHNA has continued to grow its numbers and expand its support for travel health nursing. Today, more than 1,500 nurses representing every state are registered members. To promote networking and keep travel health nurses updated, ATHNA continues to add website content, including a Clinic Manual, Clinic Toolkit, standing order templates, updated listing of *Courses and Conferences*, a “CareerCenter,” as well as links to CDC and the International Association for Medical Assistance to Travellers (IAMAT). Regular educational features include a monthly Constant Contact communication, the ATHNA blog *TravelBytes* and the Q&A column *Ask Us Anything*. Since 2010, ATHNA has offered a variety of CE activities that now includes its unique and innovative annual NED: Networking, Education and Development Day. This free member benefit is a novel CE activity offered simultaneously each summer in multiple U.S. communities. In 2018, members attended NED sessions in California, New York, Texas and Pennsylvania. In addition, ATHNA provides periodic free or low-cost CE accredited content on its website. To support comprehensive and quality travel health nursing education consistent with U.S. standards, ATHNA has also created and posted on its website a model travel health nursing curriculum for the development of short courses, CE activities, and nursing school content.

Since its founding, ATHNA has been a strong advocate for travel heath nursing research and its *Travel Well* Research Award has been conferred several times over the past decade. ATHNA facilitates the collaboration of members on studies that benefit travel health nursing as a specialty, as well as studies to improve traveler outcomes. Recently, ATHNA members were awarded first prize for their ISTM poster “The Highly Allergic Traveler: Simple Steps to Save a Life.” Currently, ATHNA is partnering with CDC, ISTM and ACHA on a multi-site, multi-year study of student travel health.

ATHNA created a working group in 2012 to explore official recognition of travel health nursing as a specialty. In 2017, the ATHNA Board of Directors met in retreat to develop a five-year strategic plan that included an updated mission statement and established the goal of ANA specialty recognition as a priority. A proposal to create an ATHNA Fellows program was launched, and a plan for the first national ATHNA meeting was initiated. The Board also made a commitment to foster certification in alignment with U.S. standards for travel health nurses. The mission of ATHNA was updated to reflect these goals: “The mission of the American Travel Health Nurses Association is to advance nurses engaged in the care of international travelers through professional development, evidence-based practice and advocacy.” The inaugural class of ATHNA Fellows, ten outstanding contributors to the science and development of travel health nursing, was introduced at the first national ATHNA meeting held on June 4, 2019 at the Barbara Jordan Conference Center in Washington, DC. Conference attendees expressed the universal hope that this meeting might be an annual event.

**3. Is concerned with phenomena of the profession of nursing. Addresses such concepts as person, health, wellness, caring, environment, health promotion, disease prevention, healing, human response, holism, culture, health literacy, and learning.**

Travel health nursing is concerned with the wholeness of the traveler’s life; a crucial assessment for a travel health professional to make in order to provide holistic health care and support of each person’s distinctive health needs in light of the intended destination and activity plan. Travel health interrelates the person, family, community in which he/she resides and the community in which he/she visits in protecting the traveler’s health before, during and after the trip with full recognition that the management of health and wellness impacts the local environment and the world at large. While society has made great technological advances to benefit health promotion and disease prevention, travelers gain value from the expert advice of a skilled travel health clinician who provides quality and cost effective health care to address concerns for health and safety while abroad. Travel health nursing encourages the traveler to be an active participant in the encounter and empowers the traveler to respect his/her native culture and the culture of the destination. Travel education is presented at the traveler’s level of understanding and health literacy; learning is measured through teach-back and role play of common travel health situations and experiences and the traveler’s response.

**4. Subscribes to the overall purposes and functions of nursing. Includes affirmation of nursing’s Code of Ethics and social contract with society. Describes scope and standards of practice content.**

Nursing is the protection, promotion, and optimization of health and abilities; prevention of illness and injury; facilitation of healing; alleviation of suffering through the diagnosis and treatment of human responses; and advocacy in health care for individuals, families, communities, and populations. (American Nurses Association, 2017) Travel health nursing consistently supports the ANA definition of the overall purposes and functions of nursing. In each encounter, travel health nurses assess the traveler for his/her needs based on a number of variables including age, gender, culture, physical abilities, current health status, destination(s), and activities planned. Additionally, but no less importantly, travel health nurses protect the community to which the traveler is visiting and the community to which he/she returns through detailed and consistent traveler education and immunizations as well as collaboration and communication with relevant stakeholders. While the commanding travel health goals are to prevent illness and injury, travel health nursing professionals also provide state of the art post- travel care through diagnosis and treatment of travel acquired disease. Travel health nurses serve as advocates for the traveling population in research, education, and mentoring. Travel health nursing affirms nursing’s Code of Ethics as travel health clinicians respect the dignity of those in their care and empower the traveler with evidence- based practice guidelines and recommendations in order to provide safe and effective quality care.

The authority for the practice of nursing is grounded in a social contract that allocates professional rights and responsibilities of the travel health nurse as well as mechanisms for public responsibility. In the United States, nursing practice is defined and governed by law, and entrance to the profession is regulated at the national or state level. The intention of the travel health nursing community is for its nursing professionals to ensure quality care for all, while maintaining their professional credentials, licensure, code of ethics, standards, and competencies, and continuing their education.

*Travel Health Nursing: Scope and Standards of Practice, 3rd edition* and the [*Application of Code of Ethics Provisions by Travel Health Nurses*](http://www.athna.org/documents/%20%09ApplicationofCodeofEthicsProvisionsbyTravelHealthNurses_june_2019.docx)have been developed and are submitted with this application for recognition as a nursing specialty.

**5. Can identify a need and demand for itself. Addresses and validates the need for the specialty supported by evidence such as data, needs analysis, role delineation studies, trends, and demonstrated impact of the specialty. Incorporates health consequences if the specialty practice is not present**.

According to the United Nations World Tourism Organization (UNWTO) international travel increased in 2017 by 7% for a total of 1,322 billion overnight visits, a number higher than the consistent 4% annual increase since 2010. (UNWTO, 2019) The U.S. Travel Association (USTravel.org) ranks the United States as number one for international trips taken with 21.5% of the total. Both of these resources predict that international travel will continue to increase annually by at least 4-6% in the future. (US Travel Association, 2019) It is equally apparent that the destinations of travelers are also changing with increased frequency of travel to Asia, the Middle East and Africa, placing more travelers at risk for tropical or vaccine preventable infections. (CDC, 2018)

The outcome of a pretravel consultation hinges on the expanse of knowledge, expertise, and communication skills of the travel health nurse, as well as the health beliefs of the traveler. Counseling by trained nursing professionals can successfully convey many messages, including the need for appropriate immunizations, destination specific risks, and prevention measures. Awareness of the particulars of the traveler’s destination, its culture, infrastructure, and disease patterns can assist the travel health nurse in providing superior quality care and personalized advice.

Travel nurse specialists have in-depth knowledge of vaccines, risks associated with specific destinations, and the implications of traveling with underlying conditions such as oxygen dependency or diabetes requiring insulin injections. Therefore, a comprehensive consultation with a travel health nurse expert is indicated for any traveler with a complicated health history, special risks (such as traveling at high altitudes or working in refugee camps, pregnancy or travel with an infant less than a year old), or exotic or complicated itineraries. (CDC, 2018)

It stands to reason travelers on vacation, a business trip or service project can impact the “cultural, ecological, physical, and sexual health of the local population...” (Hill, 2006) Travel health nurses are prepared to provide accurate pre-travel guidance to reduce excess morbidity and mortality with age and destination appropriate vaccines and travel education. Travelers and the communities to which they return can benefit from this specialized knowledge and expertise. There is recognition now that the prevention of injury and illness in travelers is only part of the much larger role of the travel health nurse. Travel health nurses serve a critical public health function as travelers and their destinations are increasingly interdependent, and are important epidemiologically because of travelers’ mobility and propensity to carry disease between countries and home.

Travel-related transmissible illnesses not only affect the traveler, but have the potential to harm entire communities. Infections such as MERS, measles, avian influenza and the deadly viral hemorrhagic fevers, such as Ebola, pose a threat across borders. Post-travel patients rarely present in infectious disease specialty clinics, but rather arrive for care in every type of ambulatory setting. Travel health nurses working in these clinics have the unique education, training, and skills to rapidly identify and respond to potentially serious travel- related illnesses, thereby impacting patient morbidity and mortality and avoiding further community contagion. Many travel acquired illnesses such as malaria, yellow fever, meningitis and others present initially with vague flu- like symptoms; a well-informed travel health nurse can advise the primary care team of a possible public health disease threat that matches traveler symptoms with trip destinations, activities, and exposures. The presence of travel health nurses serving as local experts in all types of clinic settings can dramatically improve the quality and timely response of patient care, thereby protecting healthcare workers, other patients, families and communities.

The consequences for not having the specialty of travel health nursing are multiple: pre- and post-travel health visits that are less comprehensive and less customized, more ill and injured travelers, more communities impacted by travel -related illness, and fewer nurses skilled to respond to outbreaks, epidemics or pandemics.

It is clear to see that a steady, upward trend exists in the growing number and diversity of U.S. persons traveling internationally throughout the lifespan. In addition, U.S. travelers are engaged in trips with increasing duration and complexity of itineraries and travel activities. Moreover, travelers, often with complicated medical conditions and specialized equipment needed to manage those conditions, are taking journeys at all stages of life. The worldwide increase in global travel has led to more frequent exposure to illness during travel and to instances of diseases imported into the U.S. by returning travelers (e.g., measles, Zika, multi drug-resistant bacterial infections). Travel health nurses are uniquely qualified to make early identification of potential public health emergencies related to travel and can rapidly activate public health protocols. As respected professionals in the field of travel health, travel health nurses have an important role in promoting global wellness by advising travelers of evidence-based health and safety information for their current and future travel plans. Travel health nurses recognize the growing impact of planetary health and the critical link between the health of our environment and human health. Water scarcity, climate change, urbanization, changing food systems, global pollution, civil strife and displacement of populations have enormous implications for all of us. Travel health nurses are uniquely qualified to provide guidance to diverse travelers grappling with these concerns as well.

*One example that clearly illustrates the need for travel health nurses is malaria, a potentially fatal illness that is easily preventable and easily treated when diagnosed early. According to CDC, “Every year, millions of U.S. residents travel to countries where malaria is present. About 1,700 cases of malaria are diagnosed in the United States annually.” (CDC, 2018) This is just one of many non-vaccine preventable issues that travel health nurses routinely address during a pre-travel consultation. During the assessment phase of the consultation, the travel health nurse determines the risk of different malaria species for a traveler based on specialized malaria maps and information about trip destinations, travel duration, activities, and overnight accommodations. While some countries are holoendemic for malaria, travelers to other countries may only be at risk in certain areas of the country. It is therefore crucial for the travel health nurse to be able to determine individualized risk, effectively communicate that risk to the traveler, and then educate the traveler in ways to prevent this potentially deadly infection. As there is no vaccine against malaria, prevention requires adherence to multiple protective behaviors including the correct use of personal protective measures (clothing, bednets, repellents, insecticides), the proper use of nonresistant chemo prophylactic agents before, during and after exposure, and evaluation for fever during the trip or post travel. The travel health nurse will use counseling skills to motivate the traveler to take the necessary precautions then confirm adequate traveler understanding of the disease, its spread, and all primary and secondary prevention measures. The travel health nurse will do so* *without unduly raising traveler anxieties, while also challenged to adequately address other critical travel health and safety risks for this itinerary that might include consumption of safe food and water, daytime insect precautions, sun protection, DVT signs & symptoms and prevention, animal avoidance, medical evacuation insurance, altitude illness, STIs, and personal safety & security.*

*Another example that supports the need for the specialty of travel health nursing is the growing impact of student travel. GeoSentinel, a CDC affiliated global surveillance network of travel and tropical medicine providers, monitors travel related morbidity. In its 2018 publication, “Illness among US resident student travellers after return to the USA: A GeoSentinel analysis, 2007–17,” the network recommended that U.S. students traveling abroad should receive individualized pre-travel advice, travel vaccinations and chemo prophylaxis to prevent gastrointestinal, vector-borne, sexually transmitted and vaccine-preventable infections. Immunizations alone are not sufficient. (Angelo et al., 2018) Health consequences for the traveler who does not have access to a travel health nurse consultation prior to the trip can range from mild illness to severe discomfort, even death.*

**6. Has a well-derived knowledge base particular to the practice of the nursing specialty. Describes examples of concepts, topics, information, and evidence comprising the knowledge base for the specialty.**

Travel health nursing composes a complex and wide knowledge base including, but not limited to: traveler specific data such as age, gender, medical and surgical history, medications, allergies to drugs or foods, previous and future travel plans, vaccinations, and activities planned such as scuba diving, hiking the Inca trail or backpacking in Southeast Asia. The travel health clinician must also be aware of the impact of geography on traveler risk such as journeys to the Meningitis Belt or the Yellow Fever areas, reaching altitudes such as treks to Mount Kilimanjaro or Cusco, trips to areas with disease transmitting insects as in malaria, dengue and chikungunya areas, the seasons of the year and expected weather including heat and cold extremes, political, civil and social unrest, method of travel via flight or cruise, and accommodations in a five star hotel or camping under the stars. Adding to these topics and requiring an advanced level of travel health nursing experience is preparing travelers for more complex trips, such as a pregnant traveler or a VFR infant less than 1 year old to some destinations, as there are inherent risks in both populations in vaccine precautions or contraindications, exposures to communicable disease, and the traveler’s inaccurate perception of decreased risk when visiting friends and relatives. The travel health specialist must be aware of ever- changing disease outbreak locations such as measles and Ebola, and of mass gatherings for spiritual or recreational events such as the Hajj, India’s Kumbh Mela, or the World Cup which add enormous crowds and risks of personal safety issues, contagious diseases, and access to very limited or nonexistent medical care in that locale. Many travelers sustain an animal bite or scratch as they visit destinations where animals roam freely or spend time in caves and need immediate care to prevent a fatal case of rabies. It is estimated that five million students traveled internationally in 2018 with diagnoses such as ADHD, depression, eating disorders and substance abuse. (Mochrie, 2018) The travel health clinician must provide exceptional care and information for these travelers as well as those who have disabilities, require oxygen, need to use syringes for diabetic or autoimmune disease management, are solo travelers, health care volunteers, or are working at a construction site abroad with the risk of occupational illness or injury. Travel health nurses working in advanced practice roles must also possess advanced assessment skills and current detailed knowledge regarding appropriate diagnostics for illnesses and injuries occurring in travelers. They must also be well-versed in treatment options based on evidence-based guidelines.

**7. Describes existing mechanisms to develop, support, review, disseminate, and integrate research into practice to substantiate and advance its knowledge base and evidence-based practice.**

Travel health nursing is unique in that the knowledge travel health nurses must rely on evolves extremely rapidly - often on a daily basis. High quality research illuminating current outbreaks, alterations in climate, mass migration, international conflicts and emerging infectious diseases is critical in order to provide expert care. As a result, travel health nurses are engaged in all aspects of the research process. They consistently review updates every day. They design and collaborate on specific research projects to identify and manage travel health risks in order to decrease or eliminate trip hazards. They engage with each other and professional groups such as ACHA, ISTM, and the International Society for Infectious Diseases to review relevant research findings and then share these findings within their own professional organization, ATHNA. Travel health nurses give evidenced-based presentations and design posters for professional and lay audiences. As an example, ATHNA members have given talks and shared research via abstracts or posters at every ISTM meeting since 1993. Travel health nurses participate as active contributors to the GeoSentinel Network for post-travel surveillance research and the Global TravEpiNet pre-travel research consortium. Research collaboration with other health professionals is frequent and the current Student Travel Health Project managed jointly by CDC, ISTM, ATHNA and ACHA is just one example. Travel health nurses also serve on editorial boards and provide peer review for travel health- related research in a number of nursing and medical journals. In addition, they serve on the scientific program committees of national and international travel health and nursing conferences to help insure the dissemination of the latest travel health knowledge and evidence-based practice guidelines. These meetings include the interdisciplinary biennial ISTM conference, yearly South African Society of Travel Medicine (SASTM) conference, and the Asia Pacific Travel Health Society biennial meeting as well as the yearly meetings of ACHA, AAOHN, and the American Academy of Nurse Practitioners (AANP).

As the professional organization for travel health nursing in the United States, ATHNA plays a significant role by disseminating the latest research findings regularly in the *What's News* section of its website as well as in the blog "*TravelBytes.*" ATHNA posts upcoming courses and conferences to help keep travel health nurses informed regarding the latest opportunities to learn about travel health- related research and results. Members are regularly alerted to new texts and important journal articles. Every year, across the country, ATHNA conducts research driven multi-site networking, education, and development events (NEDs) to help nurses advance their knowledge and enhance patient care. Finally, ATHNA encourages travel health nursing research through the establishment of the *Travel Well* Research Award.

**8. Defines competencies for the area of specialty nursing practice. Addresses competencies for the registered nurse, graduate-level prepared registered nurse, and advanced practice registered nurse, as well as evolution from novice to expert.**

Competencies for the seventeen practice and professional performance standards of travel health nursing are delineated in the *Travel Health Nursing: Scope and Standards of Practice, 3rd edition*. For each standard, competencies are defined for the registered nurse, the nurse prepared at the graduate level, and the advance practice registered nurse who provides nursing care for travelers.

As with other nursing specialties, travel health nurses progress through five levels of competency as per Benner: novice, advanced beginner, competent, proficient, and expert. (Benner, 1982)

* Nurses new to travel health are novices and need careful, ongoing supervision and active mentoring as they encounter travelers in the pre and post -travel visit for the first time. As illustrated in the ATHNA *Model Core Curriculum*, travel health nursing encompasses a myriad of nursing process skills that include assessing patients, analyzing patient subjective and objective data pertinent to travel, educating patients about travel-related health risks and safety concerns, providing the correct routine, recommended and required vaccines for the patient and destination at the correct dose, as well as teaching health promotion and illness avoidance. Novice nurses need to initially observe more experienced nurses during uncomplicated encounters and then will require practice, extra time and continuous support to provide safe and appropriate uncomplicated pre-travel consultations per clinic protocols. Novice nurses are learning with every encounter and as learners they have yet to acquire the requisite decision-making skills or competencies of the specialty. At this time, they must establish the habit of regularly reviewing relevant new research and updated guidelines from recognized authorities. The novice must also come to appreciate the role of the travel health nurse in bringing relevant concerns to their colleagues in their setting and broader communities for both pre and post-travel patients.
* The advanced beginner is a nurse who has had some experience with travel patients and so will require less direct supervision for some or many uncomplicated traveler encounters. Travel health nursing knowledge is building and this nurse may begin, under supervision, to observe and then deliver care for more complex itineraries or travelers with special needs. This advanced beginner nurse will seek out additional training to fully master all elements of the core curriculum, to demonstrate greater ability to research destinations for health and safety risks, to select and utilize travel health resources and references with greater ability, and to use expanded travel health and global health knowledge and vocabulary. Assessment and counseling skills continue to develop and the advanced beginner is becoming more efficient in delivering care within the required timeframe of an encounter. The advanced beginner must identify and begin to communicate with all relevant stakeholders including local administrators, colleagues, emergency rooms, and health departments. The advanced beginner must also become fully knowledgeable with agency policies and procedures regarding assessing and triaging patients with any post-travel concerns. There must be a focus on initial assessment and personal protective equipment, isolation procedures, appropriate referrals, and contact information for infectious disease specialists, emergency department staff and public health departments. To gain mastery of the specialty, the advanced beginner nurse will ideally average at least twenty patient encounters with travelers per week for at least one to two years.
* The competent travel health nurse is a registered nurse who fully meets all the minimum competencies for the specialty and is able to provide quality pre-travel care in accordance with U.S. standards of professional nursing without additional supervision. The competent nurse demonstrates confidence, organization and efficiency in the careful planning and delivery of pre-travel care. This nurse demonstrates the ability to utilize all available resources to increase his/her knowledge of global travel health issues and regulations. This nurse is committed to self-directed learning in a specialty where travel health risks, guidelines and recommendations can change daily. The competent travel health nurse has several years of solid experience working with a variety of travelers and trip itineraries, including travelers with special needs, high risk destinations, and hazardous travel activities. This nurse has fully mastered the core curriculum for the specialty. The competent nurse regularly collaborates and consults with primary care providers and specialists, and local public health authorities regarding any pre and post-travel concerns. The competent travel health nurse regularly engages in continuing education activities in the specialty and may have initiated or completed graduate studies relevant to travel health nursing. A competent nurse may have also earned one of the international, interdisciplinary certificates from ISTM, ASTMH, the University of Glasgow or the London School of Tropical Medicine and Hygiene. This travel health nurse may be involved in local groups and committees related to travel health as well. In post-travel encounters, the competent travel health nurse, in accordance with the parameters of his/ her state nursing scope of practice and institutional policies, provides triage, health evaluation, medical and nursing diagnosis and management of health problems encountered during an international journey. The competent nurse refers as appropriate and institutes a plan for follow-up care for all ill or injured travelers.
* The proficient travel health nurse has gained perspective in the specialty and can anticipate with confidence the need to modify routine approaches to pre travel care for a wide variety of travelers. Decision-making skills are highly developed and the nurse can adjust his/her planning and care delivery to meet any time constraints. This nurse usually has five, ten or more years of robust experience in the specialty, has helped author practice protocols, has served to orient or mentor less experienced travel health nurses, may have participated in travel heath nursing research, and has earned one of the international, interdisciplinary travel health certificates and/or a relevant graduate degree (e.g., MPH, MS tropical disease). Proficient travel health nurses may be involved as members or leaders in national travel health groups, organizations and initiatives. If this nurse is also certified as an advance practice registered nurse he/she may be examining, diagnosing, treating and managing post-travel patients within his/her state scope of practice regulations and site guidelines. These APRNs often serve as local experts in providing education and training of primary care staff and developing order sets and screening protocols for symptomatic as well as asymptomatic post-travelers based on current evidence-based guidelines.
* The expert travel health nurse has a deep understanding of the specialty, an intuitive grasp of travel health nursing issues, and is extremely flexible and proficient. This nurse demonstrates the highest level of analytical thinking in the specialty and is looked to by peers as a clinical authority. The expert nurse demonstrates the strongest commitment to the specialty and so will have earned a relevant graduate degree and/ or one of the international, interdisciplinary certificates, and contributed to the travel health nursing research and literature. While continuing to keep current, the expert travel health nurse works to share the full breadth of his/her knowledge at the state, national and international levels, frequently providing consulting, mentoring, and authoring travel health- related materials outside her local setting. The expert nurse will likely be a recognized and respected leader in the specialty participating in the development and leadership of national and international travel health organizations, both nursing and interdisciplinary.

**9. Has defined educational criteria for specialty preparation or graduate degree. Identifies recommended core curriculum content and post-licensure educational options.**

Nurses at every educational level who practice travel health nursing find it necessary to take specialty specific coursework in addition to the basic courses required for their state licensure as RNs or APRNs. The specialty of travel health nursing necessitates that all travel health nurses master a body of knowledge distinct from their foundation of professional nursing education. At present, through undergraduate classes, short courses, CE activities and self-directed learning, RNs acquire the knowledge and skills to provide the complete pre-travel consultation. Specialty educational content includes awareness of and resources for national and international standards of travel health care, pre-travel and post-travel assessment of the traveler and itinerary, basic research methods and statistics, global epidemiology of health and safety risks to the traveler, vaccinology, behavioral measures for the prevention of travel-related injury and illness, and techniques for customized, motivating health counseling designed to maximize the health and safety of diverse travelers with diverse itineraries. If not previously acquired through basic nursing education or through employment, internet search skills, knowledge of world geography, cultural competency, and excellent written and verbal communication skills must be developed. Travel health nurses must know current CDC travel health and safety guidelines that include ACIP pre-travel vaccine recommendations and requirements, as well as destination-specific and activity-specific risks and prevention recommendations. In their clinical and administrative roles, travel health nurses understand the role and guidelines of WHO, international differences in pre- and post- travel standards, medical statistics, global health epidemiology, tropical disease transmission and avoidance, personal injury risks, behavioral health principles, transcultural considerations, and preventive and therapeutic pharmacology. Travel health nurses are familiar with specialized map reading, global geography including specific health concerns and likely activities in selected destinations, health risk analysis, individual traveler and group prevention counseling, tropical disease triage, and complex vaccination care and schedules for multiple age groups and foreign-borne travelers.

Travel health nurses pursue any number of post-licensure educational options to gain mastery and maintain currency in the specialty. Travel health nurses consult the ATHNA *Model Core Curriculum*, the CDC *Health Information for International Travel* and the ISTM *Body of Knowledge* as just three of the primary resources for acquiring and maintaining current knowledge. Additional resources include subscriptions to travel health journals, memberships in ISTM and ATHNA, participation in travel health webinars, courses and journal clubs, and attendance at national and international travel health, vaccinology and tropical disease conferences organized by such organizations as CDC, ATHNA, ISTM, the Infectious Disease Society of America, ASTMH, the Northern European Conference of Travel Medicine (NECTM) and SASTM and various global health departments in academic institutions (e.g., Stanford, University of Minnesota, and University of Washington).

Comprehensive academic programs for travel health nursing in the United States continue to lag behind international learning options. As a result, U.S. nurses seeking more knowledge and skills in this specialty post-licensure undertake international courses in a variety of ways at present. They travel to the University of Glasgow to attend the certificate program at the Royal College of Physicians and Surgeons, Faculty of Travel Medicine, attend courses at the London School of Tropical Medicine, and participate in summer courses offered by McGill University and the University of British Columbia. In addition they seek out and attend select relevant sessions of annual conferences of AAOHN, ACHA, the Wilderness Medicine Society (WMS), and AANP. Some corporations offer in- house training and several CE accredited short courses are offered year round by U.S. travel health nursing experts.

The graduate- level prepared RN in this specialty has completed a masters, DNP, ED or PhD program that included academic courses in advanced research methods, statistics, epidemiology, advanced pharmacology, advanced counseling theories, and graduate- level courses in global health, tropical disease, injury prevention and health education. Additional coursework can include any number of graduate- level management, education or clinical courses, such as health administration, finance, grant writing, project management, adult learning, advanced courses in infectious disease, courses in chronic disease management and behavioral studies.

APRNs who practice travel health will need to complete a course of study that meets the requirements for state licensure and their professional certification (pediatrics, geriatrics, family, etc.). In addition, APRNs will need to master all the travel health knowledge and skills of the RN and take additional graduate-level courses appropriate to their role as prescribing clinician, practice director, educator and / or researcher. APRNs who provide post-travel care will also need to take advanced course work in tropical disease diagnosis and management. Language courses to facilitate communication with different travel populations are also valuable.

Presently there are no academic centers in the United States that offer a nursing concentration in travel health. Initially, to address this gap, ATHNA developed a travel health nursing model core curriculum that outlines the knowledge, skills and attitudes required for competent practice. First written in 2002, over the years this curriculum has served as a foundation for a number of short courses, orientation and training programs, and CE activities offered by nurse experts, travel health companies, government agencies and academics. Posted on the ATHNA website, it is available for use by individuals and groups seeking to educate nurses in the specialty, to inform and engage many more U.S. nurses in the care of travelers, and to educate travelers about quality travel health nursing care and the specialty. This curriculum is periodically validated by travel health nursing experts and against other international curricula (e.g., ISTM Body of Knowledge, University of Glasgow course), updated regularly, and can be accessed via the ATHNA website at www.athna.org.

As of yet, no U.S. nursing certification comparable to those offered by the American Nurses Credentialing Center exists. Nurses who seek a specialty credential for professional development, employment or promotion apply for one of three international, interdisciplinary alternatives: the ISTM Certificate of Knowledge (CTH®), the ASTMH Certificate of Knowledge in Clinical Tropical Medicine and Travelers' Health (CTropMed®) or the University of Glasgow Certification in Travel Health. ANA recognition of the specialty of travel health nursing is the crucial first step necessary to develop a certification process in alignment with other U.S. specialty nursing certifications. In addition, this travel health nursing certification will be based on the U.S. standards of care, a practice that does not currently exist. The travel health nurse’s attainment of this credential will document the highest skills and knowledge of travel health nursing as practiced in this country.

Commitment to Lifelong Learning

Travel health is a dynamic and ever-changing specialty. Travel health nurses are devoted to the health and education of persons and groups who travel internationally, and travel health nursing professionals focus on the multiple determinants impacting travel health that include infectious disease, environmental risks and personal safety. Travel health practice “encompasses the identification and continuously changing epidemiology of travel-associated disorders and diseases and their geographical distribution, the pre-travel prevention of these conditions through education, vaccination, chemoprophylaxis, and self-treatment (for certain conditions) … as well as … the care of the returned ill traveler or the newly arrived migrant or refugee.” (Schlagenhauf, 2010) There’s really no other nursing specialty where recommendations routinely change overnight.

Travel health nurses know that yesterday’s knowledge of global health and safety risks may not serve to protect today or tomorrow’s world traveler; failure to keep current with itinerary hazards and customized risk reduction measures for the various traveling populations (e.g., students, boomers, pregnant travelers, persons with HIV) can result in excess travel-related illness, injury, even death.

**10. Has continuing education programs or other mechanisms for nurses in the specialty to maintain competence.**

As a specialty, travel health nursing provides numerous continuing education programs and other mechanisms to help nurses maintain competence and gain mastery. ATHNA has made a commitment for all of its 15 years to promote continuing education. *Courses and Conferences* is a regular, updated listing of educational programs for nurses in the specialty. Anyone can access this list on the ATHNA website and many of the offerings are free or low cost. Throughout the year, ATHNA also publishes *TravelBytes,* a peer reviewed travel health nursing blog often highlighting current clinical challenges in the specialty. In addition, as part of yearly membership, ATHNA offers four free online CE accredited educational activities on current practice and professional topics. Within the past year, for example, members could earn CE credits for updates on these travel health nursing topics: Chagas Disease, Contraception Options for Travelers, Care of the Last Minute Traveler, and Useful Travel Health Apps for Clinicians and Travelers. Starting in 2015 ATHNA has provided its annual NED series, a day- long CE accredited conference offered regionally across the U.S. to update its members about important clinical issues and resources in the specialty.

CDC, through its website and publications, is another particularly rich resource available to nurses in the specialty. CDC offers educational materials, monthly webinars and CE accredited programming on a wide variety of pertinent topics including vaccines and vaccine-preventable diseases, arboviral disease, malaria, and health counseling for special populations (e.g., VFR traveler, pregnancy, young children). Travel health nurses read the *MMWR* to keep apprised of U.S. infections and travel- related illness and injury data. The CDC “Yellow Book” *Health Information for International Travel*, “Pink Book” *Epidemiology and Prevention of Vaccine-Preventable Diseases, and “*Pink Book*”* online course are resources widely used by travel health nurses to maintain competencies. The WHO “Green Book” *International Travel and Health* is another valuable resource to keep current with different international standards of travel health care.

Travel health nurses can also attend conferences nationally and internationally for continuing education. Content specific to the specialty is now regularly offered at annual meetings of AAOHN, ACHA, AANP, and other nursing organizations. ISTM holds a multi-day biennial conference and also provides accredited courses on its website [www.istm.org](http://www.istm.org). ASTMH has a yearly conference with relevant content as well. Other conferences with sessions specific to travel health nursing include NECTM held every two years and SASTM held yearly. Nurses seeking short courses in the U.S. have several CE accredited online and in- person offerings available year round. Organizations such as Kaiser-Permanente, Premise Health, Passport Health, and Concentra offer educational programming for their travel health nursing employees.

Nurses can readily access updated editions of textbooks relevant to the specialty (e.g., Keystone’s *Travel Medicine*, Auerbach’s *Wilderness Medicine*, Sanford et al. *The* *Travel and Tropical Medicine Manual* and Plotkin et al. *Vaccines*) as well as two journals devoted to travel health through PubMed, the *Journal of Travel Medicine* and *Travel Medicine and Infectious Disease.*

Additionally, ATHNA surveys its membership yearly for suggestions for CE activities and topics for website articles and blogs.

**11. Adheres to the overall education, licensure, and certification requirements of the profession.**

Each travel health nurse must understand and be compliant with their state board of nursing’s regulations and requirements. In addition, they must adhere to the *Travel Health Nursing: Scope and Standards of Practice, 3rd edition (2019)* that describes specific competencies for the various levels of registered nurse, graduate- level prepared nurse and APRN and as well as the professional progression from novice to expert. Travel health nurses are expected to adhere to the American Nurses Association, (2015b), *Code of Ethics for Nurses with Interpretive Statements* as well as the *Application of Code of Ethics Provisions by Travel Health Nurses,* 1st edition. At the present time there is no U.S. certification for travel health nurses, but this is one of the objectives in the ATHNA strategic plan for professional development of the specialty (as described in #9 above).

The American Nurses Association is founded on the concept of ethical decision making, which incorporates the travel health nursing theories of respect for persons and their patient rights. Travel health nursing focuses on ethical importance based on the relationship of a skilled travel health clinician and the traveler. Travel health nurses are committed to learn continuously and follow ethical codes that apply to research, sharing that information with travelers to best prepare them safely and effectively. Providing safe, high quality care is the commanding principle in travel health nursing, guiding nurses to maintain up- to- date clinical knowledge and technical skills, and familiarity with the latest science in the multifaceted world of travel health. Professional development does not end, but constantly develops as travel health nurses meet biennial continuing education requirements for licensure and the practice environment.

**12. Is practiced nationally or internationally.**

Travel health nursing is practiced in every state across the United States, in Canada, and in most of the countries represented in the 100 nation membership of the International Society of Travel Medicine. Travel health nurses in the United Kingdom were the first to issue professional competencies in the specialty and the University of Glasgow was the first academic institution to create a Faculty of Travel Medicine. U.S. nurses are now among the associates, members and fellows of that College. The Netherlands has a well-organized specialty group for travel health nursing and Australia, New Zealand, and Japan have emergent organizations and recognized leaders in this specialty. Item #13 below, as well as two sections in the *Travel Health Nursing:* *Scope and Standards of Practice, 3rd edition,*  The History of Travel Health Nursing and The History of Health Nursing Standards, provide further descriptions of the expanding national and international practice of this specialty.

**13. Includes a substantial number of registered nurses who devote most of their professional time to the specialty. Provides data and metrics.**

Determining an accurate count of travel health nurses is currently challenging. Without specialty designation, no nurse can self-identify as a “travel health nurse” when describing his/her professional role because for many nurse clinicians, in various positions such as college and occupational health, travel health nursing is the primary professional role, but one that may not be clearly discerned by position title. ATHNA has endeavored to provide the ANA with a reasonable assessment of the number of nurses at all levels of practice who provide care to travelers as a substantial portion of their professional time. For this data, ATHNA convened a group of expert travel health nurses in 2017 and asked them to identify key stakeholders in travel health nursing. Based on the efforts of this professional group, ATHNA reached out to Gary Burnett, Chief of the CDC Travel Health Branch, for his assessment. In 2018 he estimated 25,000 nurses serve the pre and post- travel needs of travelers in this country (personal communication, May 2018). Steve Denny, principal leader in Shoreland, a company that produces the largest travel health database software, reconfirmed the 25,000 number (email communication, June 2019). ATHNA serves a membership of 1500 for whom travel health nursing comprises the significant portion of their work and professional responsibilities. Among ATHNA’s members, nurses perform travel health consultations in public health, college and occupational settings, the VNA, hospital based travel health clinics, the military, the federal government, and private practice travel health clinics. It is known that at least half of the more than 4000 four year colleges employ nurses to provide this service for their students going abroad, according to ACHA. Leaders at national occupational health contractors Premise Health, Concentra, and EHE ratify they employ over 1000 nurses in travel health nursing. Passport Health and Travel Clinics of America report retaining more than 2000 nurses nationwide for travel health nursing care. Despite considerable effort, ATHNA was unable to ascertain sources to confirm the number of nurses who care for travelers in district and community health centers, although their presence in many states is well known.

As international travel increases, travel health nursing will expand to meet the increasing demands of the consistently growing number of travelers. Abroad, travel health nursing is well established in the Netherlands where every municipality has one or more nurse specialists who comply with the guidelines of the National Travel Advice Coordination Centre (LCR). “Traveler nurses,” as they are known in that country, must fulfill strict training and recertification requirements as established by the Broad Working Group on Traveler Advice. In the UK, the National Travel Health Network & Centre supports travel health nurses throughout England and Wales. Sandra Grieves at the RCN estimates there are over 5000 UK nurses in this role (personal communication, May 2018). Australia, Japan, New Zealand and Canada all report growing numbers of travel health nurses as well.

It is clear from the results of ATHNA’s expert group assessment that a substantial number of U.S. travel health nurses provide specialized care to thousands of travelers every day. ANA recognition of this specialty will help ensure a standard of quality care as travel health nursing continues to grow.

**14. Is organized and represented by a national or international specialty association or branch of a parent organization.**

ATHNA is the specialty nursing organization for travel health nurses in the United States. ATHNA establishes, maintains and promotes the standards for professional travel health nursing practice. Formally incorporated in 2004, ATHNA is a 501 (c) (3) professional organization based in New York with over 1500 members from all 50 U.S. states. The organization has a ten member board and an Executive Committee that manages the day-to-day operations. ATHNA membership is comprised of registered nurses, nurses prepared at the graduate level, and advance practice registered nurses who provide care to travelers in more than 15 different practice settings (e.g., occupational health, public health, college health, private travel clinics, government offices). Student nurses are also welcome to join the organization. ATHNA maintains a website for the sharing of travel health nursing updates, organizational news, continuing education content, career development, and more @ [www.athna.org](http://www.athna.org). ATHNA provides a travel health nursing blog *TravelBytes* as well as a monthly email newsletter via Constant Contact. Every year ATHNA offers a one day CE accredited conference at multiple sites around the country for networking, educational updates, and professional development. This NED is a free benefit of membership. To support travel health nursing research, ATHNA sponsors the *Travel Well* Research Award. To recognize leaders in this specialty, ATHNA chartered its first class of ATHNA Fellows in 2019. In 2019 ATHNA also offered its first national conference at the Barbara Jordan Center in Washington DC. The organization plans to initiate its first study abroad program for travel health nursing in Panama in March 2020. ATHNA maintains organizational affiliations with AANP, ACHA, IAC, IAMAT, and ISTM and is a CDC COCA partner.

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