Why WFA, WAFA, & WFR Certification Standards Provide Effective and Practical Industry Standards for Medical Certifications

Written by Paul Nicolazzo on behalf of the WMEC:

Industry standards, accreditation, certification, licensure, and curriculum within the outdoor industry, particularly as they apply to wilderness medicine and WFA, WAFA, WFR, and WEMS certifications, can be confusing. This article attempts to answer the following questions:

What is certification, and why is it important?

How is the curriculum related to certification?

What is the difference between certification and licensure?

What is a medical scope of practice, and why is it important?

What is the difference between scope-of-practice, curricula, and certification standards?

What are industry standards, and why are they important?

What are the industry standards for WFA, WAFA, and WFR certifications?

What is the relevance of industry standards under the law?

What is accreditation?

Introduction

The knowledge and skills necessary to prevent, assess, and treat illnesses and injuries in a wilderness or remote setting where Emergency Medical Service (EMS), rescue, and definitive treatment are non-existent or delayed *differ* from those needed in an urban setting. In a wilderness environment, first aid is typically administered *in the field* by members of the patient's party or bystanders at the site where the injury or illness occurred. Depending on the resources and the training of the person(s) rendering aid, the patient may require additional treatment not available in the field setting. If emergency medical or rescue services are available, they are dispatched to the scene to provide further assessment, treatment, and evacuation. In most expedition settings, EMS personnel have more advanced training and treatment options than those requesting aid. If outside assistance is not possible, it is up to field personnel to continue treatment and initiate an evacuation.

What is certification, and why is it important? How is the curriculum related to certification?

Wilderness medicine certifications assure employers and licensing agencies that a graduate is qualified to assess and treat specific injuries and illnesses in a remote setting; they are closely tied to training and, therefore, to the curriculum. For certifications to be portable (accepted across organizational, state, and international boundaries), they must adhere to a consistent and widely accepted set of standards.

Assessment and treatment skills are fragile and degrade over time, and protocols change as new research and technologies emerge. Wilderness medicine certifications require renewal to ensure graduates maintain their knowledge and skills.

Different course options address the needs of outdoor recreationalists, outdoor professionals, search and rescue groups, and wilderness EMS. As a result, wilderness medicine schools offer courses and certifications in Wilderness First Aid (WFA), Wilderness Advanced First Aid (WAFA), Wilderness First Responder (WFR), and Wilderness EMT or Wilderness EMS (WEMT/WEMS). Most wilderness medicine certifications expire in two or three years but can be renewed indefinitely via a two- or three-day course.

What is the difference between certification and licensure?

Licensure is different from certification, and in the United States, individual states are responsible for licensing clinics, hospitals, EMS services, physicians, PAs, nurses, and EMS personnel; in other countries, a professional society or university is often responsible for licensing. A license authorizes (under law) an individual or medical facility to provide specific medical services.

Generally, governments do not require people providing first aid at the scene of an injury or illness to be licensed. However, some states and land managers require commercial outfitters, camps, etc., to have operating permits. Most commercial operating permits require guides and field staff to be certified in first aid, often wilderness first aid. Examples of agencies that require commercial operating or land-use permits in the United States include many states, the US Forest Service, the National Park Service, the Bureau of Land Management, the US Coast Guard, and large private landholders like paper companies.

What is a medical scope of practice, and why is it important? What is the difference between a scope of practice, curriculum, and certification standards?

Medically, scope of practice defines the assessment and treatment skills that graduates have been trained to perform, while curriculum refers to content, delivery, and assessment strategies. Scope of practice, curricula, and certification are related and often overlap. For example, a graduate's scope of practice may state they should be able to recognize and treat volume shock. As a result, volume shock becomes part of their course curriculum; however, a scope of practice document will not specify how it should be taught. Certification standards documents differ from scope of practice documents in that they specify gross content, minimum course hours, and core delivery strategies, like skill labs and simulations; standards documents typically include the scope of practice and leave curriculum details and assessment strategies to the individual school.

The Wilderness Medicine Education Collaborative (WMEC) formed in 2010 to provide a forum for discussing trends and issues in wilderness medicine and to develop consensus-driven scope of practice documents and de facto standards for WFA, WAFA, and WFR certifications. In 2022, they expanded their work to include related white papers and position statements. WMEC's overall mission is to elevate wilderness medicine education internationally. Decisions regarding the content are made based on emerging research and technology, peer-reviewed articles, and best practices. The process begins by identifying a project—standard, scope of practice, white paper, or position statement—and selecting a committee that researches and prepares the first draft of the document or article. The completed draft is reviewed by all the member schools and discussed. Once consensus has been established, the document is updated and checked for errors before approval and publication. The graphic below summarizes the process.



The certification standards documents provide a basis for certification and curriculum development and are available for public use on the WMEC website; they include content [topics and skills], scope of practice, and total and in-person class hours.

What are industry standards, and why are they important? What are the industry standards for WFA, WAFA, and WFR certifications?

Industry standards are operational guidelines developed by industry experts and leaders. One common and broad-based outdoor industry standard is: "Participants and staff should wear helmets while rock climbing." Industry standards create a quality check within the industry while fostering appropriate levels of competitiveness and innovation. Industry standards help assure customers, government agencies, land managers, etc., that a product or service will meet their needs. While some industry standards have become legally codified (Clients must wear a Coast Guard-approved Class V life jacket on all commercial whitewater rafting trips in Utah.), most are voluntary. However, it may be difficult for an organization that does not follow its industry's standards to remain in business.

People take courses in wilderness medicine for multiple reasons:

- They want to be able to take care of themselves or the people in their party or community when traveling or living in a wilderness or remote setting.
- An employer requires the course to increase the safety of their trips or to adhere to licensing or permit requirements. A first-aid certificate must be on file at the organization's office and carried with the employee when in the field.

To be practical and effective, WFA, WAFA, WFR, and WEMS certification standards must be closely tied to training, curriculum, and assessment. Standards should include:

- The injuries and illnesses a graduate is expected to assess and treat; in other words, their scope of practice, that defines:
 - 1. the limitations of the certification
 - 2. core topics and electives
 - 3. the number of course and in-person hours required for the certification
- The standards should be flexible enough to allow for different delivery strategies (to encourage competition and innovation) but include:
 - 1. enough training in human anatomy, physiology, and pathophysiology to understand the signs, symptoms, and treatment of a specific set of injuries and illnesses
 - 2. skill labs
 - 3. case study reviews
 - 4. realistic simulations
 - 5. practical assessment tools

What is the relevance of industry standards under the law?

If attorneys in a lawsuit show that the defendant failed to meet an industry standard, the jury generally finds for the plaintiff. Because industry standards are intentionally broad-based to encourage competition and development, they may leave some details up for interpretation; hence, the common practice of opposing expert witnesses in a jury trial.

States and governments create Good Samaritan Laws to encourage people to stop and render aid after an accident. The laws protect caregivers from civil lawsuits and criminal prosecution as long as they act for the patient's benefit, within their level of training or scope of practice, and do not receive payment for their services. Certification and industry standards help determine if a good samaritan has acted reasonably and prudently according to their training.

What is accreditation?

Accreditation is similar to certification but applies to schools or organizations. If a wilderness medicine school is accredited, an external body has reviewed and approved its curricula, delivery strategies, topics, scope of practice, assessment requirements, instructor hiring, hours, and instructor training guidelines according to a previously agreed-upon set of standards. Accreditation is not a panacea; it does not guarantee quality but indicates an organization has gone through an evaluation process that may improve its operations.

Seeking accreditation is voluntary, and the process generally requires a rigorous, often costly, evaluation of the organization's pedagogy with a focus on educational quality. The accrediting body is typically a non-profit organization comprised of widely recognized experts in the field.

At present, there is no accrediting body for wilderness medicine schools. Establishing such a body would be expensive and time-consuming and has significant drawbacks: The bureaucracy and cost associated with accreditation would create barriers to establishing new wilderness medicine schools and slow innovation.

Conclusion

In contrast to activity-specific instructor certifications, the outdoor industry views wilderness medicine certifications as an independent requirement for all trip leaders. In the absence of an accrediting body, the consensus-driven certification standards developed by the WMEC provide practical, industry-wide standards for WFA, WAFA, and WFR certifications.