AAHP Course #1:
Beyond Regulatory Compliance: Improving Performance Through Occupational Health and Safety Management Systems
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Occupational health and safety management systems (OHSMS) provide a structured framework to efficiently plan, communicate, and implement safety programs and services and then verify, review, and report on effectiveness. They are characterized by continual improvement and the systematic elimination of underlying root causes of deficiencies. The basic tenet of a safety management system is that integrating safety into business strategy and core work improves overall performance of an organization.

Many well-known OHSMS frameworks exist. Examples include:

- United States Occupational Safety and Health Administration's Voluntary Protection Programs (VPP).
- National Safety Council's Nine Elements of a Successful Safety and Health System.
- American National Standards Institute's Z10-2012 Occupational Health and Safety Management Systems Standard.
- British Standard Occupational Health and Safety Assessment Series 18001:2007.
- ISO Occupational Health and Safety Management System Standard 45001 (pending).

Virtually all OHSMSs are based on the plan, do, check, act management model and embody the principle of continual improvement. The systems begin with leadership commitment and cycle through system elements, concluding with leadership review of performance on a periodic basis. The selection of—or components of—a system standard to adopt is highly dependent upon the values, culture, and ability to integrate with existing management processes within an organization. The systems are designed to be flexible and applicable to any organization, regardless of size or structure.

This presentation will identify key elements of a safety management system and how they can be leveraged to improve organizational performance, beyond compliance. The challenges and lessons learned when creating and implementing a comprehensive safety management system at a large academic medical center will be described. Recommendations for safety professionals facing the need for improved performance will be offered.

Expected learning outcomes/participants will understand:

1. The essential elements of an OHSMS.
2. Prioritizing improvement opportunities in alignment with an organization's business strategy.
3. Measuring overall performance, not just compliance.
4. Lessons learned when implementing an OHSMS.

Course #2: So You Want to Be a Medical Radiation Safety Officer?
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The use of radiation sources in health care is constantly changing with new and exciting radiopharmaceuticals and radiation-producing machines. It is a constant challenge for the radiation

safety staff to stay ahead of the curve and provide value-added guidance to practitioners prior to acquisition of the new technology. This course will outline the fundamental differences between medical and nonmedical licensees for those new to medical health physics. However, the primary focus of the course will be examining the radiation safety and regulatory hurdles involved in the different modalities, for example:

- Diagnostic Imaging – PET/MR; $^{68}Ge/^{68}Ga$ Generators; new PET radiopharmaceuticals.
- Radiation Therapy – new infusion therapies and patient-release considerations.
- Fluoroscopy Guided Interventions – staff and patient radiation dose minimization.
- Emerging Technologies – ^{90}Y microspheres; ^{125}I seed localization.

Another aspect of a large medical program that will be examined is radiation safety involvement in human use research protocol review. This includes process steps and informed consent form reviews—with examples. Whenever radioactive materials are administered to a patient or research participant, there is an opportunity for something to go wrong, so no discussion of a medical radiation safety officer's role would be complete without a discussion of the medical-event regulations and reporting requirements.

This course will give an overview of medical health physics to health physicists not in health care, while providing an opportunity for medical health physicists to share experiences and gain insights into a variety of elements within a broad-scope medical licensee program.