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Strategies for Navigating Common Ethical Dilemmas Encountered by Operational Radiation Safety Professionals

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Abstract

Because operational radiation safety professionals can encounter ethical dilemmas in the course of their work, codes of ethics and professional standards of conduct are maintained by the Health Physics Society (HPS) and the American Academy of Health Physics (AAHP). While these works provide valuable guidance, they do not operationalize the types of ethical dilemmas radiation safety practitioners might encounter. For example, consider the ethical conundrum of “dual loyalty”, defined as the situation in which an individual holds simultaneous obligations to two or more parties. In the case of radiation safety, practicing professionals hold obligations to the workers being protected and to the leaders of the organization. If these obligations are in conflict, serious difficulties can arise. The conundrum of dual loyalty is described and a strategy for reducing its effect is discussed. Two other common ethical issues; “confidentiality” and “organizational dissent” are similarly presented. A foundation from which to launch an ongoing dialogue about ethical issues within the radiation safety profession is also proposed.

Introduction

As in many work settings, radiation safety professionals can encounter ethical dilemmas in the course of their operations. Several tools exist to provide guidance for radiation safety professions in ethical decision making. For example, the Health Physics Society (HPS) maintains a Code of Ethics for its members (HPS 2014) (see Figure 1). Similarly, the American Academy of Health Physics (AAHP) maintains a Standards of Professional Responsibility statement (AAHP 2010) (see Figure 2).

Other health and safety disciplines maintain similar guides. In the field of safety, the Board of Certified Safety Professionals maintains a Code of Ethics that applies to Certified Safety Professionals (CSP) and the American Board of Industrial Hygiene (ABIH) requires certified industrial hygienists (CIH) to follow a Code of Ethics (BSCP 2013, ABIH 2007). Interestingly, the ABIH also requires that their board certified practitioners document two hours of ethics continuing education training every five years to maintain board certification (ABIH 2014). This practice is similar to that of health professions. Physicians adhere to the American Medical Association’s Principles of Medical Ethics (2001) and are required to complete two hours of ethics or professional responsibility education every 24 months (AMA 2001). Nurses adhere to a similar standard (ANA 2001).

Ethics Defined

The term “ethics” is defined in many ways and, to a limited extent, depends on the profession under study. Thinking generally, however, one practical definition is offered by Beabout and Wennemann in their classic 1994 text Applied Professional Ethics: A Developmental Approach for Use with Case Studies. The authors take an applied approach, stating that the study of ethics “should help us to give articulate, defensible reasons for why certain actions ought or ought not be done” (Beabout and Wennemann 1994). These authors further define ethics as “the study of how to live life well”. Combining this general definition with the uniqueness of a given profession or industry, ethics can be practically defined as a set of moral principles or values that govern an individual or a group (Pantankar et al. 2005). In professional settings, members of an organization agree to conform to accepted professional standards of conduct in order to provide assurance to clients and the public that the work being performed is of high quality and without undue influence from outside parties. These are often called codes of ethics or professional standards of practice.

The founders of the health physics profession provided a valuable service by crafting ethical guidelines, but unfortunately these documents do not provide specific information on how to address specific dilemmas typically encountered by operational radiation safety personnel. Three very common ethical dilemmas that recurrently arise in the radiation safety profession include: dual loyalty, confidentiality, and organizational dissent.

Dual Loyalty

The ethical conundrum of dual loyalty presents itself when an individual holds simultaneous ethical obligations to two or more parties (Kipnis 2011; London 2005). If the goals and objectives of all parties are aligned, then the management of the situation is quite simple. But, if the goals and objectives become misaligned, difficulties can ensue. Operational radiation safety professionals can find themselves in a dual loyalty situation when the workers they are obliged to protect feel as though their health and well-being are secondary to the needs of their employer, who may be motivated to reach other objectives. While a radiation safety professional facing this conundrum might refer to the profession’s existing codes of conduct for assistance, she or he will not find explicit guidance regarding this situation. For example, the American Academy of Health Physics (AAHP) Standards for Professional Responsibility for Certified Health Physicists (CHPs) Section C. Act in the Public Interest in Principle C.1 states “The CHP shall have due regard for the safety and health of the public and of individuals who may be affected by his/her work” (AAHP 2010). Additional guidance on methods to operationalize this principle is not provided, however. A lesson may be learned from other parallel professions. Consider the code of medical ethics for physicians published by the American Medical Association (AMA). In it, the AMA explicitly addresses the dual loyalty situation in Principle 8 which states: “regard responsibility to the patient as paramount” (AMA 2001). Also consider the Code of ethics for nurses published by the American Nurses Association, which clearly states in Provision 2 “The nurse’s primary commitment is to the patient, whether an individual, family, group, or community” (ANA2001). Finally, consider the code of ethics published by the American Board of Industrial Hygienists (ABIH); Statement II.B.3 states “assure that a conflict of

interest does not compromise legitimate interests of a client, employer, employee or the public and does not influence or interfere with professional judgments” (ABIH 2007). The health physics profession would be well served by the embodiment of a similar statement and perhaps in the future, consideration should be given to the modification of the profession’s code of conduct to include such explicit guidance. In the meantime, operational radiation safety professionals should be aware of the potential for the dual loyalty situation to exist and, in all cases, overtly express the following sentiment: “As an ethical radiation safety practitioner, my recommendations and decisions are always based on my primary obligation to protect you, the potentially exposed worker.” The overt articulation of this pledge to workers can be a very powerful message that reassures the workers about the radiation safety professional’s primary intentions and motivations, particularly in contentious situations.

Confidentiality

Operational radiation safety professionals often encounter situations where information is produced that should be held in confidence and not shared with others without the expressed permission of the person who owns the data or the person who is the subject of the data. Common examples might be the results of dosimetry measurements or the formal declaration of pregnancy. However, a situation that is not commonly discussed is the one in which confidentiality might be inadvertently breached, even when the best and most honorable intentions are in mind. The example that follows describes such a situation.

A hypothetical group of seven interventional cardiologists are meeting to discuss a variety of operational issues including their collective occupational radiation doses. Each individual has been confidentially provided with their own dosimetry results for the previous monitoring period. In an attempt to facilitate the group discussion about possible steps that can be taken to keep doses as low as reasonably achievable (ALARA), the Radiation Safety Officer creates a summary table that reflects the average dose received each month, along with an associated standard deviation and the minimum and maximum values. Unfortunately, all of the cardiologists know that occupational doses received are largely associated with patient load, so in the meeting they can readily ascertain that the highest dose reported is associated with the physician with the highest case load. This situation could have been avoided by perhaps eliminating the high and low values, or supplementing personal dosimetry results with area monitoring results that would not carry the associated implicit and explicit confidentiality expectation, while still achieving the goal of addressing ALARA concerns.

Organizational Dissent

Organizational dissent (or sometimes called principled dissent) can be defined as “the expression of disagreement or contradictory opinions about organizational practices and policies” (Kassing 1998) and how an organizations manages dissent reflects its safety performance (Rebbitt 2013). Since dissent necessarily involves disagreement, or at least conscientious objection, organizations may articulate messages (both verbally and non-verbally) that discourages dissent in order to reduce or eliminate disagreement, particularly

disagreement that can be perceived as negatively impacting the work environment and productivity (Perlow 2003). However, dissent can be a very powerful tool for detecting employee dissatisfaction, lack of trust and dangerous conditions. Receptiveness to dissenting opinions has been shown to empower employees and facilitate corrective actions for immoral or unethical behaviors (Redding 1985).

The key to successfully using dissent is in how the organization responds when dissent is voiced. Radiation safety practitioners play a crucial role in this endeavor by attentively listening when organizational dissent is being voiced, by seeking to understand the underlying concerns or frustrations and by trying to gain an understanding of the origins of the issues being voiced. It is important to acknowledge that the dissent has been heard; for example, consider repeating the concern to the dissenter by saying, “Let me make sure I understand what it is I’m hearing...” This technique will confirm that the dissenter’s concern was heard accurately. Next, the safety practitioner should commit to investigating the concern as well as commit to returning to the dissenter with the results of the investigation.

Beyond the scope of this summary article is the situation in which the radiation safety professional assumes the role of the organization’s dissenter. Guidance on how this situation may be approached is generally lacking for the radiation safety profession, but could be addressed if an ongoing dialog about such issues was created.

Discussion

While the health physics profession’s code of ethics and standards of professional conduct provide useful general guidance when encountering an ethical dilemma, the three ethical situations described here suggest that an ongoing dialog within the profession might be useful in the identification and cataloging of situations practitioners might encounter. Health physicists, especially those who are members of the HPS and/or AAHP, are encouraged to consider the steps taken to promote ethical decision making by the members of the AIHA and the ABIH. The AIHA routinely publishes manuscripts about ethical issues in its monthly newsletter called “The Synergist”. For example, in the October 2014 edition, Rice addressed the issue of “it’s legal, but is it ethical?” (Rice 2014). As noted previously, the ABIH also requires two hours of documented training on ethics for each five-year board recertification cycle. Such efforts in the health physics realm could add further value and integrity to the profession, and instill an elevated level of awareness among radiation safety practitioners about the situations where ethical dilemmas can be present, and the possible steps for preventing or minimizing its effects.

Biography

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Code of Ethics for the Members of the Health Physics Society
(<http://hps.org/aboutthesociety/codeofethics.html>)

These principles are intended to aid members of the Health Physics Society, individually and collectively, in maintaining a professional level of ethical conduct. They are intended as guidelines by which members may determine the propriety of their conduct in relationships with employers, coworkers, clients, governmental agencies, members of other professions, and the public.

- Members of the Society shall give support to the objectives of the Health Physics Society.
- Members shall strive to improve their professional knowledge and skill.
- Each member shall be a judge of his/her competence and will not undertake any assignment beyond his/her abilities.
- All relations with employers, coworkers, clients, governmental agencies, and the general public shall be based upon and shall reflect the highest standard of integrity and fairness.
- Members shall never compromise public welfare and safety in favor of an employer's interest.
- No employment or consultation shall be undertaken which is contrary to law or the public welfare.
- Members will gladly accept every opportunity to increase public understanding of radiation protection and the objectives of the Society.
- Professional statements made by members shall have sound scientific basis. Sensational and unwarranted statements of others concerning radiation and radiation protection shall be corrected, when practical.
- Members shall protect the sources of confidential communications, provided that such protection is not itself unethical or illegal.

Figure 1.
Code of Ethics for the Members of the Health Physics Society

The American Association of Health Physics Standards of Professional Responsibility
(www.hps1.org/aahp/members/wp_ethics.htm)

These principles are the standards of professional responsibility for CHPs. By applying for and achieving certification, the Certified Health Physicist recognizes and assumes the following responsibilities. The Certified Health Physicist (CHP) shall:

A. Support and Improve the Profession of Health Physics

1. The CHP shall support the purposes of the American Academy of Health Physics (the Academy).
2. The CHP shall endeavor to advance the Health Physics profession by sharing information and experience with others and by contributing to the work of professional associations, schools, and the professional, scientific, and technical press.
3. The CHP shall not act in a manner that may bring the profession or the Academy into disrepute.

B. Provide Technical Competence

1. The CHP shall remain active in the field, strive to improve his/her professional knowledge, and endeavor to be aware of contemporary scientific, technical, and regulatory developments.
2. The CHP shall practice only in areas of his/her expertise.
3. The CHP shall practice his/her profession following recognized scientific principles.
4. The CHP shall counsel affected parties factually regarding potential health risks and precautions necessary to avoid adverse health effects.
5. The CHP should accept opportunities to increase public understanding of radiation protection and the purposes of the Academy.

C. Act in the Public Interest

1. The CHP shall have due regard for the safety and health of the public and of individuals who may be affected by his/her work.
2. The CHP shall not undertake any employment or consultation that is contrary to law.
3. The CHP shall not compromise public welfare and safety in favor of a private interest.

D. Maintain High Standards in Dealing with Others

1. The CHP shall maintain the highest standards of integrity and fairness in his/her professional interactions with employers, colleagues, workers, clients, government agencies, and the general public.
2. The CHP shall not attempt to falsely injure the reputation of any person.
3. The CHP shall protect the sources and content of confidential communications or other confidential personal or business information obtained in the course of his/her practice, provided that such protection is not itself unethical or illegal.
4. Without the knowledge and consent of his/her client, the CHP shall not accept or offer commissions, allowances, or finder's fees, directly or indirectly, from contractors or other parties dealing with the client.
5. The CHP shall avoid circumstances where a compromise of professional judgment or conflict of interest may arise.
6. The CHP shall not knowingly take credit for the work of others and shall give credit where it is due.

Figure 2.

The American Association of Health Physics Standards of Professional Responsibility