

ICRP TG109 Workshop: Education and Training in Ethics

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Draft Document: Final Section Outline

- 8.1 Education and training of relevant stakeholders (KM 26, 27)
 - Background and introduction
 - 8.1.1 Education for the engagement and empowerment of patients, families, and carers (key message 28)
 - 8.1.2 Educating and involving other stakeholders
- 8.2 Elements of ethical education and training in radiological protection in medicine (key messages 29, 30)
 - Table 8.1 Taxonomy for Learning
 - Table 8.2 Example of KSCs based on scenarios
- 8.3 Conclusions for education and training

Key Messages in Section 8.1

- Key Message 26: **Everyone** in the diverse groups of relevant stakeholders **is responsible** for assuring strong radiological protection and ethical values in health care. **Each target group needs to be empowered and educated to ensure that patients are imaged and treated correctly.**
- Key Message 27: Although it may be of value to integrate the ethics teaching into everyday practical education, it is necessary to provide specific, practical teaching on ethics.

8.1.1

- Key Message 28: Radiological protection campaigns have improved radiation health literacy for the consumer and provided transparent ethical values for all stakeholders.

Current Medical Practices Not Uniform

- Each radiological professional must have a foundation of knowledge, skills, and competencies in their area of expertise and in RP (Pub113) to practice safely and effectively
 - This must continue throughout their career
 - Employer should support
- Wide variation in ethical education/training
 - Yet essential for ethical behavior and effective communication with medical team and patients (e.g., benefit/risk)

Current Medical Practices Not Uniform

Key Message 26

- Authority-based decisions → Shared decision-making
 - Ethical basis: honesty, transparency
- All stakeholders require knowledge of ethics (practiced locally), expectations
“Ethics is an essential component of an effective and balanced radiological protection education and training that enables informed decision-making and helps achieve the greatest possible benefit at the lowest possible risk”
 - Tailor education to each group

Teaching Ethics

Key Message 27

- Recommend dedicated but practical ethical education:
 - Initial ethical education during the undergraduate years and lifelong training in ethics as part of professional development
 - Societal and patient values are not static
 - There will be ethical dilemmas during our work life... How do we process them? The TG109 method provides a balanced approach to arrive at a solution (no one correct answer, as it depends on many factors)
 - References and E&T programs provided

Improving Health Literacy of Patients and Families

Key Message 28


- RP education and awareness campaigns have improved shared decision making, consumer knowledge, and other stakeholder engagement
- Facilities are responsible as well for public education programs
- All stakeholders have responsibilities for ethical, safe and appropriate use of radiation in medicine
 - Both patient facing and non-patient facing: Administrators, medical clerks, regulators, vendors

Elements of Ethical E&T in RP in Medicine

- Key Message 29: An understanding of the basic principles of radiological protection is an absolute pre-requisite – **this understanding is necessary but not sufficient without also including ethical training** – for all health professionals working with radiation for the purpose of diagnosis or treatment.
- The core of safe and accurate practice is an **understanding of both the principles of RP and the ethical foundation for its application.**
- Teaching and measuring adult learning outcomes **should be based on Bloom's hierarchical taxonomy of learning.**
- Benjamin Bloom (1956) and colleagues devised **the hierarchical taxonomy to classify forms and levels of learning.** Learning at the higher level is dependent on having acquired the prerequisite knowledge and skills at lower levels.

Elements of Ethical E&T in RP in Medicine

- Revision (Anderson and Krathwohl, 2001), currently used or adapted across a professional career - **Taxonomy Learning Definitions** -



Remembering	is retrieving information from long-term memory
Understanding	is constructing meaning from instructional messages including oral, written and graphic communication
Applying	is carrying out a procedure in a given situation
Analysing	is breaking the material into its constituent parts and determining how the parts relate to one another and to the overall structure or purpose
Evaluating	is making judgements based on criteria and standards
Creating	is putting elements together to form a coherent whole function: reorganising elements into new patterns of structure

- Key Message 30: Taxonomy model enables the educator to define learning outcomes based on the **knowledge, skills and competencies (KSC) that are necessary for health professionals to make carefully considered ethical decisions in clinical setting when using radiation.**

Example of a KSCs Framework on Ethics

- A Table describes a sample of KSCs for ethics learning by RP students and health professionals, based on **definitions of ethical values, sensitizing questions and case scenarios presented in the sections of TG 109 report.**

Knowledge, Skills(ability to apply knowledge) **Competences** (attitudes/behaviours)

- ⇒ Principles of RP: - justification, - optimisation
- ⇒ Core and procedural values of ethics of RP in medicine:
 - dignity/autonomy
 - beneficence/non maleficence
 - prudence/precaution
 - justice/solidarity
 - accountability/transparency/(honesty)
 - inclusiveness/empathy

KSCs on Beneficence/Non-Maleficence

Knowledge

- Define the ethical values of B/n-M.
- List the benefits of performing a given procedure.
- Recognise radiation risks associated with the procedure.

Skills

- Determine how the value of B/n-M can be applied in the process of justification.
- Explain benefit and potential harm associated with the procedure to the patient.
- Ask the patient what they understand about the proposed procedure.

Competences

- Apply the value of beneficence when weighing benefit/risk in recommending radiological management.
- Validate the requested procedure's appropriateness.
- Ensure that the patient understands the options necessary to make an informed decision.

KSCs on Inclusiveness/Empathy

Knowledge

- List the components of effective listening.
- Define the process of an 'empathic approach' in medicine.
- Give examples where patient and medical team opinions might differ.

Skills

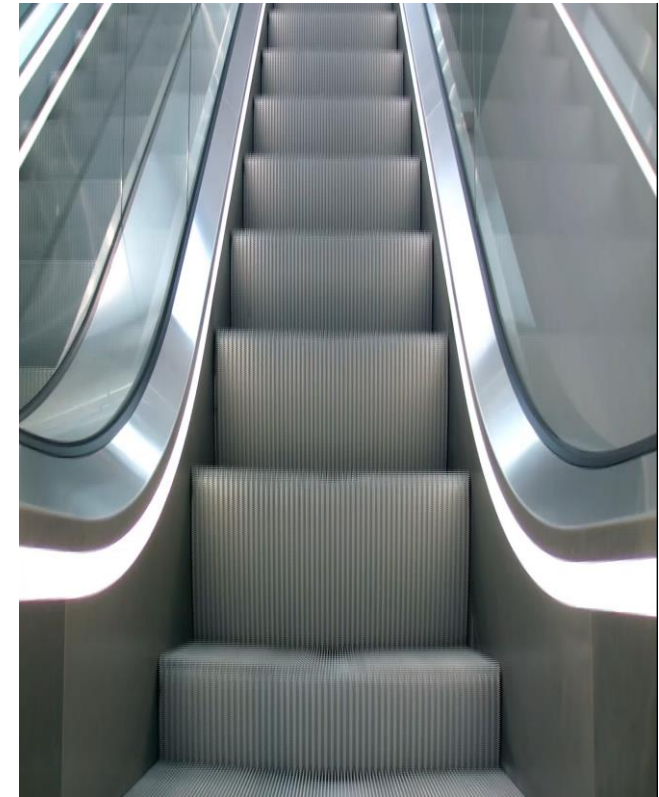
- Compare and contrast empathy and sympathy.
- Explain the proposed procedure in language the patient can understand.
- Respond to patient queries.

Competences

- Empower the patient in making a decision with respect to the proposed procedure.
- Implement patient/public engagement plan.
- Facilitate inclusiveness of patients and families.

Conclusions

- These guidelines, learning strategies, and references are meant to provide general information that may be adopted and then locally adapted
- Case scenarios for group discussion or individual review/reflection
- Longitudinal approach to integration of ethics and RP into medical curriculum, starting in undergraduate school throughout professional career



Thank you!

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