



ALARA, The ICRP System, Ethics and Innovation: Aligned?

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GENDA/CONTEXTS

Ethics Sensibilities, Moral Compass, Collective and Individual.

Ethics; Law, Protocols, Guidelines, ICRP et al.

Examples: Imaging.

Note: ICRP System based on incomplete science



What is Ethics?

- Not abstract discipline discussed in University departments. Practical. How should Dr X deal with Project Y today?

Ethics is:

- Essentially practical
- Obligations v ordinary
- And v numerous
- What I ought to be doing right now ...?
- Personal Moral Compass
- Not sufficient



RP Principles (ICRP)

Principles

- System (ICRP) consists of:
 - (Incomplete) science
 - Value judgments
 - Experience
- Purpose built; detached from MEDICAL ethics
- Change: ICRP 138 published in 2018, plus additional report (TG 109) on medical in progress..

Ethics for Radiation Protection in Medicine



Jim Malone, Friedo Zölzer,
Gaston Meskens, and Christina Skourou

ICRP 138, and the “pragmatic value set”.



Pragmatic Set (Malone & Zolzer 2016)

Dignity/Autonomy

Beneficence and Non
Maleficence

Justice

Prudence / Precaution

Honesty/ Transparency

Value Sets for RP in Medicine

Dignity/Autonomy

+

**Additional Values
(under review)**

Non-Maleficence/ and
Beneficence



**Solidarity,
Inclusiveness**

Justice

Empathy

Prudence/Precaution

Medical Ethics
ICRP/UN/WMA.

Honesty/ Transparency

Social Expectation

Prudence and Precaution



- UN: Action required. Minus full knowledge. “Potential serious irreversible harm – lack of full scientific knowledge shall not ---”
- Rooted in “common morality” -- “not relative to cultures ----”. Common to all wisdom literatures

Need to recalibrate the manner in which we exercise prudence

Professor Russet, Cardiologist

(Cardiac CT request for Mr Golden)

- Terrence Golden's tennis partner dies of heart attack. He is less fit and his children suggest CT at Prof Russet's private Clinic.
- Facility has Imaging Centre (CT & Interventional). She is shareholder.
- Provides info on dose and risks, but explains latter not proven.
- Terry G: no symptoms/ risk factors/referral. Accepted for CT at Prof Russet's Imaging Centre, subject only to consent. Contrary to CIC.
- Doesn't mention shareholder role or that CT older high dose model.
- Ethics, Legal and enforcement issues. How to evaluate.

Dignity Autonomy	Beneficence, Non- Maleficence	Justice	Prudence Precaution	Honesty Transparency
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CT Dose Dilemma

(Public and Private Facilities)

- St Aran's, a public facility, adjoins a private hospital.
- Both have CT scanners. The equipment in the private is newer and has better low dose facilities.
- Public hospital lacks capacity for its imaging needs, and some patients referred to the private for CT imaging
- Audit shows older patients preferentially referred private.
- Further investigation indicates older patients also have better private insurance.

Dignity Autonomy	Beneficence, Non- Maleficence	Justice	Prudence Precaution	Honesty Transparency
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Two Optimisation Problems

- Survey finds underuse of Imaging in Nursing home.
- Patients must be referred to hospital.
- Mobile units improve this situation.
- Local Radiology Dept objects to use of mobile units on quality grounds.
- EU Survey: large disparity in dose/ exam (and frequency) between countries.
- Professions note this, and note that this has been the situation since first surveys in the 1980's.
- No Concerted action.
- Patient advocates horrified.

Ethics Essential

- Where what ought to be done (possibly?) can't be done
- Evaluation of situations where Law/ Protocols / lack maturity.
- Collective responsibilities
- Working on Culture of Profession
- Accidental/Inadvertent exposures
- Patient centred focus



Moral Compass Professions & Ethics

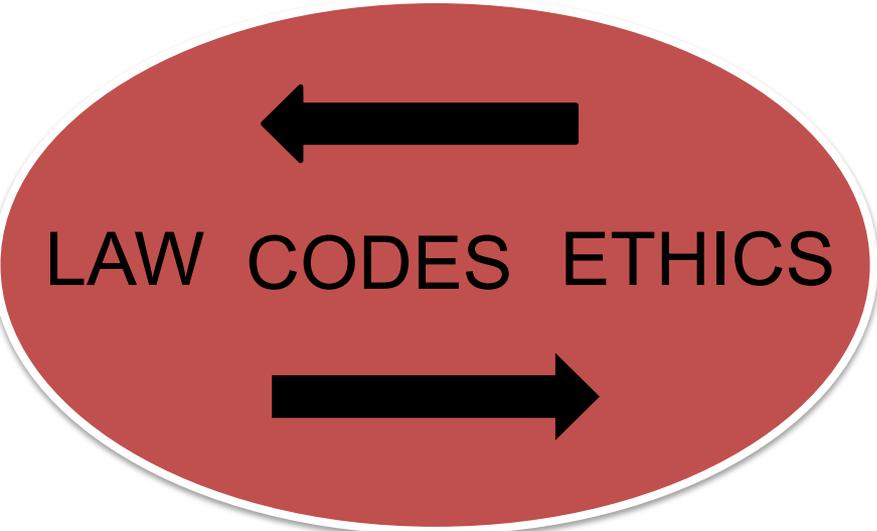
- Ethics reasoning: obligations are ordinary & v numerous
- AAPM Survey (N = 969)
 - 49% never met Ethics dilemma in workplace
 - 31.5% rely on personal moral compass only
- For professions/policy values cannot be just personal



Guidelines, protocols and law,
determine culture we work in.

NOT ETHICS,

SUMMARY



A red oval containing the text "LAW CODES ETHICS" with a black arrow pointing left above the text and a black arrow pointing right below the text.

LAW CODES ETHICS



A red rectangle containing a white oval with the text "PERSONAL" at the top, "PROFESSIONAL" in the middle, and "Collective" at the bottom. A black arrow points down from "PERSONAL" to "PROFESSIONAL", and a black arrow points up from "PROFESSIONAL" to "Collective".

PERSONAL

PROFESSIONAL
Collective





COLLECTIVE & INDIVIDUAL

