

TASK GROUP 126

Radiological Protection in Human Biomedical Research



Under Committee 3

MANDATE AND SCOPE

Participation of patients and healthy volunteers in medical research exposing them to ionising radiation necessitates specific recommendations.

ICRP Task Group 126's mandate is to provide updated guidance to ICRP Publication 62 due to significant advances in social norms, ethical frameworks, scientific RP evidence, and medical practice leading to new complexity in medical research involving ionizing radiation.

The scope is limited to medical research involving human participants. The report is intended to be of use to individuals, regulatory bodies, and ethical committees concerned with the design, assessment (justification), evaluation and oversight of such research.

All chapters are currently being updated to integrate the current state of knowledge on doses and risks also considering modern diagnostic imaging and treatment modalities involving ionising radiation.

Chapters 5 and 6 provide the practical aspects of the updated recommendations. They are currently being developed based on the analyses of the responses to a survey which was designed and circulated by TG members and mentees in the second half of 2024.

STRUCTURE OF THE REPORT

TG members agreed on the final structure of the report:

1. Introduction
2. Ethical Aspects
3. Nature, Types and Magnitude of Radiation Risks
4. Dose Estimation and Risk Assessment Methodologies
5. Principles, Evaluation And Execution Of The Research Projects Involving Ionising Radiation
6. Education and Training

Have experience in human biomedical research involving ionising radiation?
ICRP Task Group 126 wants to hear from you!



See Poster ID 49
Implementation of Radiological Protection in Human Medical Research: Insights from an International Survey by ICRP TG 126
Presented by Benjamin Puzantian

A first manuscript presenting the quantitative analysis of the survey's results was submitted in August 2025 for publication in the British Journal of Radiology.

NEXT STEPS

A qualitative analyses of the survey results is currently being investigated, with additional information gathered among the survey participants (publication to be prepared).

The mentees are also involved in compiling documentation such as national/regional guidelines and regulations to support our analysis.

Chapters 5 and 6 will be finalised based on the analysis of the survey results and compiled documentation. A few case-based scenarios will be created to illustrate the recommendations and their application in practice.



Figure 2: TG 126 meeting, Le Cottage de Clairefontaine, Chonas L'Ambellan, France, April 2025

CURRENT STATUS

The *ethical framework* for participation of volunteers in medical research has been substantially reviewed to ensure that the proposed recommendations align with the current international ethical standards. The main highlighted aspects refer to the key ethical values in radiological protection (ICRP Pub 138).

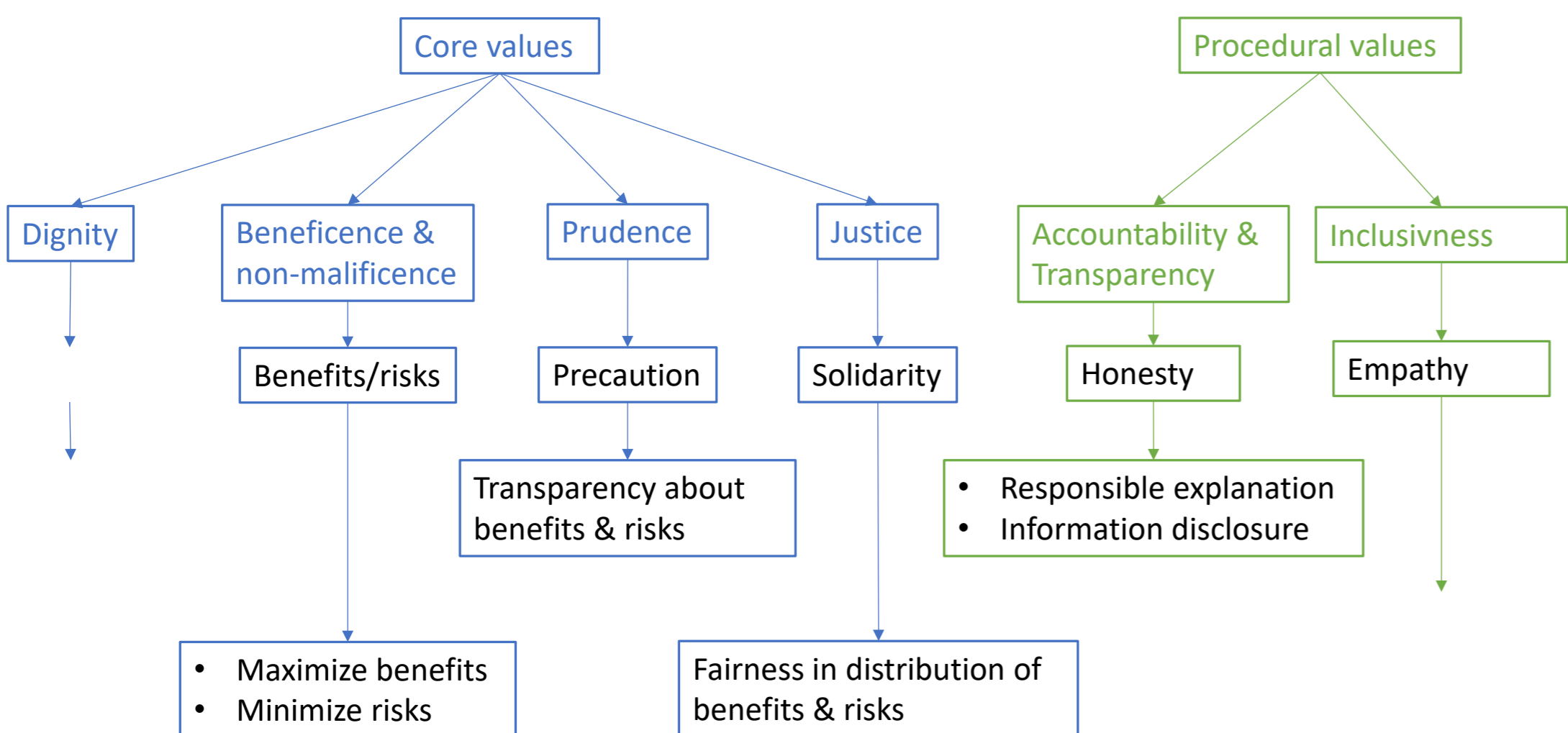
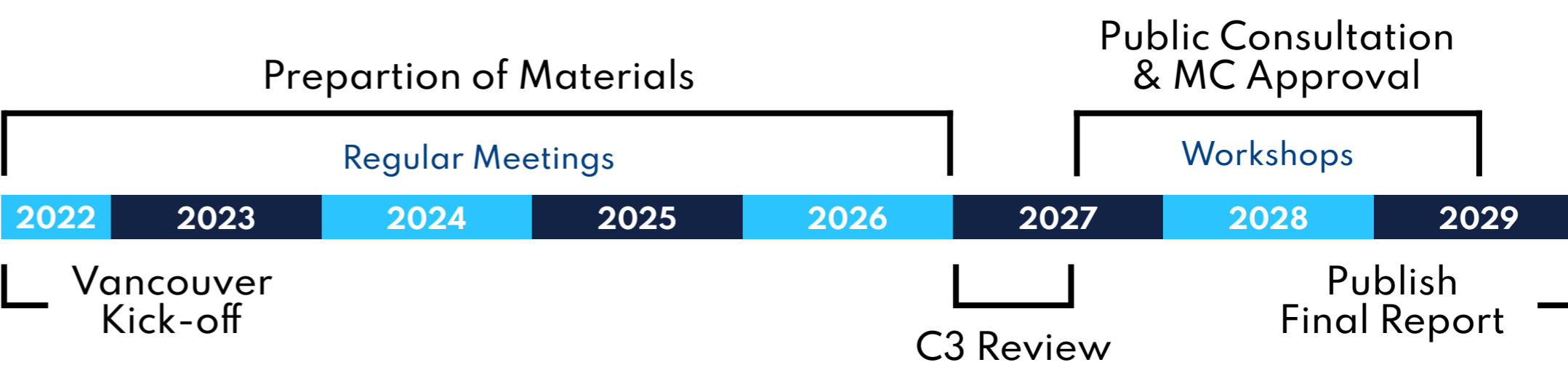


Figure 1: Application of the ethical values identified by ICRP in medical research

TIMELINE



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Poster ID 213

