

"Evaluating the Science and Ethics of Research on Humans: A Guide for IRB Members"

Dennis J. Mazur, 2007, 252 pages, The Johns Hopkins University Press, \$34.00

Review by Norman M. Goldfarb

"Evaluating the Science and Ethics of Research on Humans: A Guide for IRB Members" goes beyond the basics to provide an excellent resource for any IRB member serious about his or her responsibilities. Along with a readable and compact presentation of the information one would expect in a handbook for IRB members, the book addresses subtleties like the following:

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Essential reading for clinical research professionals

The individuals who control who serves on an IRB...influence the IRB and its decision-making. Changes in membership can be designed to focus the IRB's attention away from the protection of participants toward the facilitation of research. For example, a newly appointed IRB member may bring instructions from a research service chief or a research committee whose goals are to further the research interests of study sponsors, principal investigators, and others instead of fostering the protection of participants.

The balancing of risk against benefit...influences the perception of the severity of the risk. For example, imagine a research study in which there is a 1 in 1,000,000 chance of a participant's death, but the study results may demonstrate that the intervention being studied can extend the life of all people with a particular disease by one week. How would individuals asked to participate in this study react to this risk-benefit ratio in which the severity of the adverse outcome is high (death) but the chance of the adverse outcome occurring is extremely low (1 in 1,000,000) and the benefit to patients very small? Now, suppose the chance of death is changed to 1 in 100,000 and the life extension to one month. With each incremental change in the chance of death and the life extension, there may be a change in one's evaluation of the severity of risk and threshold of willingness to support the risk.

An IRB member must be cognizant of, or the IRB in its review may discover, intentions of the study not revealed in the protocol. For example, a study proposed by a drug manufacturer may have a legitimate research objective (e.g., establishing a new use for a drug approved for another use) or it may be proposing the study so that the company's drug will be introduced into use in the medical center where the study would happen. When a proposal is submitted, the IRB must decide whether the objective is pursuit of a better benefit profile or better risk profile for a treatment, or if the real objective is something else. The institution must decide if it wants to be involved with research studies with limited scientific value and possibly ulterior objectives.

The introduction of a new drug or medical device into a medical center can cause problems. For instance, the health care providers at the institution will be caring for the study participant long after the study is completed, and it is they whom the patient will ask for the drug or the device after the study. Product manufacturers

will not necessarily agree to supply the drug or device to an individual outside the study. As a responsibility to the institution's clinicians, the IRB needs to see that the manufacturer's post-study intentions are clarified. The IRB should ask the principal investigator what will happen regarding the study drug or device at the end of the study.

The necessity of a literature search is illustrated in the example of a study drug that has already been studied to a certain extent and reported on in the peer-reviewed medical literature. The risk section of the scientific protocol reports only the risks mentioned on the product's label. This is inadequate. A long time may elapse between drug approval and approval of a product label, and even when a label is approved, it may quickly be behind the research that is published related to the drug. The IRB can conduct its own search of the literature, looking for adverse outcomes associated with the drug, the nature of the adverse outcome, its chance of occurrence, populations at special risk, etc.

The [informed consent form] paper should not contain a watermark for two reasons. First, a watermark can decrease the readability of the section of text that is printed over the watermark. Second, if it is an institutional watermark, it may carry the same implications that the words "IRB Approved" may in the minds of some individuals; a potential study recruit may consider an institutional watermark an endorsement of the study or of participation in it.

The book includes 14 chapters:

- What is an IRB and What Does It Do?
- Basic Terms and Concepts Used in IRB Work
- What is Risk?
- Prescreening of Proposals
- The Scientific Protocol
- The Informed Consent Form
- Recruitment, Selection and Compensation of Study Participants
- Research Involving Questionnaires and Surveys
- Protection of Participants' Privacy in Research Data and Specimens
- The Ethical Issues of Informed Consent
- Continuing Review, Communications and Feedback
- Where are IRBs Making Mistakes and How Can We Minimize Mistakes?
- Strategies for Managing the IRB Workload and Supporting IRB Decision Making
- Decision-Making Capacity and Accountability in Research

Appendices include two checklists, one for reviewing a protocol and one for a consent form.

The book is available in bookstores.

Reviewer

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