

RCR: Protecting Human Research Participants

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Overview

- Introduction
- Definitions
- Mechanisms of Oversight
- Practical Considerations
- Ethical Considerations



My discipline more closely aligns with . . .

- Social science
research
- Biomedical
research



It is possible that I may conduct research that involves human subjects.

1. Yes
2. No



“As recently as 1950, the federal government had a relatively minor role in regulating research conduct. There were no federal regulations that required IRB approval to conduct research involving human subjects in most settings.”

Amdur, Robert “Institutional Review Board Member Handbook”, 2003



History

Examples of Human Subject Abuses

- Nuremberg War Crimes
- Tuskegee Syphilis Study (1932-1972)
- Milgram (1960s)

As a result of such abuses, the following documents were developed:

- Nuremberg Code
- Declaration of Helsinki
- Belmont Report



Nuremberg Code

- Developed out of Nuremberg trials of Nazi war criminals including those involved in medical experiments.

Principles

- Voluntary consent
- Freedom from coercion
- Ability to withdraw at any time
- Appropriate research design
- Consideration of risk/benefit ratio
- Qualified investigators



FOR MORE INFO...

For full text, visit <http://www.aches-mc.org/nurm.htm>

Declaration of Helsinki

- Developed by the World Medical Assembly, Helsinki, Finland.
- Research vs. clinical care

Principles

- The health of the patient is the first consideration
- Well-being of subject takes precedence over the interests of science and society.
- Refusal of the patient to participate in research must never interfere with the physician-patient relationship.
- Refers to “ethics committees”

FOR MORE INFO...

For full text, visit <http://www.wma.net/e/policy/b3.htm>



Foundational Ethical Principles: Belmont Report

Principle	Application
Respect for Persons	Informed Consent
Beneficence	Assessment of Risks & Benefits
Justice	Equitable Selection of Subjects



Institutional Review Board (IRB)

- Committees that review proposed research to protect human subjects
- Made up of diverse members including non-scientific & non-affiliated
- Perform initial & continuing review of research projects
- Purpose is to protect the rights & welfare of human subjects by examining criteria such as:
 - Risks & benefits
 - Selection of subjects
 - Informed consent
 - Privacy, confidentiality, & anonymity
- MSU's Institutional Review Boards
 - Biomedical and Health Institutional Review Board (**BIRB**)
 - Social Science / Behavioral / Education Institutional Review Board (**SIRB**)



Some Definitions . . .



Why are the Definitions Important?

Research
(or Clinical Investigation) +
Human Subjects =
MSU IRB Review



Is an Activity Research?

“Research means a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge. Activities which meet this definition constitute research for purposes of this policy, whether or not they are conducted or supported under a program which is considered research for other purposes. For example, some demonstration and service programs may include research activities.” 45 CFR 46.102(d)

IMPORTANT:

1. At MSU, “research” includes the preparation of Masters Theses & Doctoral Dissertations
2. FDA “clinical investigations” involving “human subjects” also require IRB review



Does the Research Involve a Human Subject?

“*Human subject* means a living individual about whom an investigator (whether professional or student) conducting research obtains:

- 1) data through intervention or interaction with the individual, or
- 2) identifiable private information” 45 CFR 46.102(f)



Clinical Investigation

- **Drugs:** "Clinical investigation" means any experiment in which a drug is administered or dispensed to, or used involving, one or more human subjects. Experiment is **ANY use of a drug except for the use of a marketed drug in the course of medical practice.**" (21 CFR 312.3(b))
- **Devices:** Investigation" means a clinical investigation or research involving one or more subjects to **determine the safety or effectiveness of a device.** (21 CFR 812.3(h))

Keep in Mind . . .

- MSU IRB approval must be obtained BEFORE any research begins
- Contact the MSU IRB if you have ANY questions of whether an activity requires MSU IRB Review



Mechanisms of Oversight of Research Involving Human Participants



Requirements

- Federal Regulations
 - U.S. Health and Human Services
 - U.S. Food and Drug Administration
 - Federal Agencies
- State, Local, or International Laws
- Accreditation requirements
- MSU Requirements
- Other Entity Requirements



Responsibilities of IRBs

- Review, approve, require modifications to, or disapprove research studies involving human subjects.
- Monitor approved research studies on a regular basis for compliance with federal, state, and local regulations and university policies, including the consent process.
- Monitor, and may act in response to, unanticipated problems and adverse events.
- Maintain and implement written policies and procedures for addressing allegations and findings of non-compliance with IRB requirements.



* List is illustrative; visit HRPP Manual 4-5, Responsibilities of IRBs for more information

Responsibilities of Investigators

- Obtain IRB approval or an exempt determination before involving human subjects in research.
- Monitor research for potential harm to subjects and take steps to minimize or mitigate those harms when possible.
- Report any activities or circumstances that affect the rights and/or welfare of research subjects, including subject complaints or questions, directly to the IRB or to the PI.

In addition, the Principal Investigator must . . .

- Maintain adequate and appropriate oversight over the conduct of the research study.



* List is illustrative; visit HRPP Manual 4-6, Responsibilities of Investigators for more information

Some Practical Considerations



Timing and Application Process

- Plan ahead and submit early . . .
- Review time depends on the review category
 - Exempt (Less than 7days)
 - Expedited (2-4 weeks)
 - Full Board (4-6 weeks)
- Write your application using methods that you can carry out



Non Human Subject Determinations

- In order to receive an official opinion from the IRB submit a HRP-512 – Template – Determination of Human Subject Research
- HRPP Manual Section 6-9-B, Graduate Student Research.
 - Graduate student research refers to research conducted to fulfill graduate degree requirements, i.e., preparation of master's theses and doctoral dissertations.



Principal Investigator

- The Principal Investigator (PI) assumes the responsibility for the oversight and conduct of the project
- Only faculty members can be the PI
- Graduate students cannot be listed as the PI – but can be listed as the secondary investigator




Training

- All individuals who have contact with human subjects or their identifiable data must have current IRB training
 - Initial training: Completing two modules in the Ability learning system
 - Renewed training is the responsibility of the principal investigator and dependent on the research that is being conducted
 - HRPP may require additional modules when substantive changes occur to the regulations and/or guidance



Ability – New LMS

- <http://train.ora.msu.edu>
 - Helpdesk: train@ora.msu.edu
 - Questions about the human research protection training (HRPP/IRB certification) contact the IRB at 517-355-2180 or irb@msu.edu
 - Requests for alternate GCP training contact hrl@ora.msu.edu
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Multi-Site Research

- Determine if IRB approval is needed
- Be aware of any site specific requirements
- If research is conducted outside of Michigan, be familiar with any state or international laws



Continuing Responsibilities

- Report unanticipated problems that may involve risks to subjects or others immediately to the IRB
- Maintain records relating to the research (e.g. consent forms) for a minimum of three years following completion of the research
- Obtain approval for changes before implementing them
- Obtain renewal for your study before approval expires
- Communicate the completion of your study to the IRB



Some Ethical Considerations



Risks and Benefits

- Risks may be physical, psychological, social, legal, and/or economic in nature
- Identify and minimize risk
 - Probability
 - Magnitude
- Risks to subjects are reasonable in relation to anticipated benefits, if any, to subjects



Privacy and Confidentiality

- Protect the privacy of subjects
- Maintain confidentiality of data
 - Anonymous vs. confidential
- Monitor the data collected to ensure the safety of subjects (when appropriate)



Informed Consent

- Obtain informed consent and document (typically)
- Consider the process (who, what, where, when)
- Provide sufficient opportunity to consider whether to participate
- Minimize the possibility of coercion or undue influence



Basic Elements

- Study involves research
 - Purposes
 - Duration
 - Procedures
 - Identify experimental procedures
 - Risks
 - Benefits
 - Confidentiality (FDA may inspect records)
 - Compensation
- Availability medical treatments if injured
 - Who to contact for answers to questions
 - Research
 - Rights as research subject
 - Injury
 - Voluntary
 - Refusal to participate no penalty / loss benefits
 - Discontinue any time



Additional Elements

- Unforeseeable risk
 - Circumstances participation terminate
 - Additional costs
 - Consequences withdrawal
- New findings relate to willingness will be provided to subject
 - Number subjects in study



Other Consent Information

- [Clinicaltrials.gov](https://clinicaltrials.gov)
- Conflict of interest
- Use of audio / video taping
- Genomic Data Sharing
- Certificate of Confidentiality



Selection of Subjects

- Equitable selection of subjects
- Additional safeguards when subjects are likely to be vulnerable to coercion or undue influence
- Additional safeguards for research involving pregnant women, prisoners, and children



Conflict of Interest

- Occurs when an individual:
 - Is involved in multiple interests, one of which could possibly compromise the individual's judgment or bias the outcome.
 - Financial interests or other opportunities for tangible personal benefit may compromise or appear to compromise the independence of judgment with which the individual performs his/her responsibilities.
- Aggregate individual plus immediate family (spouse, domestic partner, dependent children, and other dependents that reside individual) and any legal entity that one or more of them owns or controls.
- IRB coordinates with the MSU Faculty Conflict of Interest Officer and the Conflict Review Committee



Group Discussion : Scenario



Please select a topic...

1. Domestic Violence
2. Illegal Drug Use
3. Heart Disease
4. Cancer



Please select an age range...

1. 10-18
2. 18-24
3. 18-88
4. 30-60



Please select a type of research intervention...

1. Interview
2. Review of Medical
Records
3. fMRI Scan
4. Bone Marrow
Biopsy



Please select an option...

1. Will
2. Won't



Please select a setting ...

1. Hospital
2. Prison
3. K-12 School
4. University



Please select a location...

1. Michigan
2. California
3. England
4. Malawi



Please select an option...

1. Is
2. Is Not



Scenario

Dr. Smith will be conducting research on _____ (select a topic).

The subject population will be _____ (select an age range).

The research will involve _____ (select a type of research intervention). Subject names _____ (select will / won't) be recorded.

The research will be conducted at _____ (select a location) located _____ (select a location).

There _____ (is / is not) potential for direct benefit to the subject.

What are potential issues with . . .

- Risks and benefits
- Privacy and confidentiality
- Informed consent
- Selection of subjects
- Others?



Revised Human Research Protection Regulation (2018 Requirements)

- The revised human research protection regulation is known as the 2018 requirements.
- It is the “Common Rule” as it has been adopted by a number of federal department and agencies.
- However, the 2018 requirements have NOT been adopted by U.S. Department of Justice or U.S. Food and Drug Administration.
- The 2018 requirements implement January 21, 2019.
- However, an IRB determination is required to transition non-exempt projects that have been approved or determined exempt before January 21, 2019.
 - If transitioned, all 2018 requirements apply.
 - This will be done on a project by project basis.



Revised Human Research Protection Regulation (2018 Requirements)

- Significant changes include:
 - Removes requirement to conduct continuing review of ongoing research for studies that undergo expedited review and certain full board studies.
 - New requirements regarding information that must be given to prospective research subjects as part of informed consent process.
 - Establishes new exempt categories; under some of the new categories, exempt research would be required to undergo limited IRB review.
 - New requirement to publicly post clinical trial consent form(s).
 - Eliminate grant review and approval by the IRB.
 - Creates requirement for U.S. based institutions engaged in cooperative research to use a single IRB for that portion of research that takes place within U.S., with certain exceptions (implements 2020).



Revised Human Research Protection Regulation (2018 Requirements)

- Webinars on the 2018 requirements are scheduled for January 2019.
 - Wednesday, January 9 from 4:00 P.M. – 5:00 P.M.
 - Thursday, January 10 from 10:00 A.M. – 11:00 A.M.
 - Tuesday, January 15 from 11:00 A.M. – 12:00 P.M.
 - Thursday, January 17 from 3:00 P.M. – 4:00 P.M.
 - Wednesday, January 23 from 10:00 A.M. – 11:00 A.M.
 - Tuesday, January 29 from 3:00 P.M. – 4:00 P.M.
 - Registration is required; visit the hrpp.msu.edu website to register for the webinars (Events page)
- Resources are being added to the “Revised Common Rule” HRPP webpage.



Website Resources

- hrpp.msu.edu
 - Contact Information
 - Consent Templates
 - Application Forms and Instructions
 - HRPP Manual



Click Resources

IRB Quick Guides

<https://ra-project.vprgs.msu.edu/institutional-review-board#quick-guides>

Vendor Navigation Guides

<https://ra-project.vprgs.msu.edu/institutional-review-board#vendor-navigation-guides>

Videos

<https://ra-project.vprgs.msu.edu/institutional-review-board#videos>



Questions?

