Federal regulations define specific criteria that human subject research proposals must meet in order for an Institutional Review Board (IRB) to approve the research (45 CFR 46.111; 21 CFR 56.111). At first glance, satisfying the criteria for IRB approval may seem relatively simple. However, given the complexities of ethical study design, meeting these criteria is not as easy as simply ‘checking a box’. The purpose of this guide is to identify key factors taken into consideration in evaluating whether each IRB approval criterion has been satisfied, in accordance with Office for Human Subject Protection (OHSP) Policy 404 Criteria for RSRB Approval of Research and ensuing sections of the study protocol that should address such factors.

Approval Criteria #1

Risks to subjects are minimized: (i) By using procedures that are consistent with sound research design and that do not unnecessarily expose subjects to risk, and (ii) whenever appropriate, by using procedures already being performed on the subjects for diagnostic or treatment purposes.

• Is the study designed to produce the anticipated results (i.e., does the study have the potential to answer the questions[s] being posed)? Do the study methods and procedures align with the aims of the research?

• Are the study procedures included in the research required to meet the aims of the research? Are any procedures unnecessary and/or unnecessarily repeated? Will data be collected from routine care procedures in lieu of conducting additional procedures when feasible?

• Does the protocol identify and describe all potential risks and burdens, including the likelihood, magnitude and reversibility of each risk?

• What steps will be taken to mitigate all identified risks? Are safeguards included to reduce potential exposure to risks to the greatest extent possible? Are you following routine screening procedures, when applicable? Are there any particular risks that might require special attention/intervention/follow-up?

• Are adequate procedures for monitoring and managing subject safety included? Will specific outcomes/measure be monitored over the course of the study to continually re-assess eligibility and/or investigator-initiated withdrawal criteria? Is the time frame between safety-related monitoring procedures appropriate?

• Will the defined inclusion/exclusion criteria limit enrollment to only the target population? Will defined exclusion criteria appropriately prevent the enrollment of subjects within the target population that are particularly vulnerable or of higher risk?
## Approval Criteria #2

Risks to subjects are reasonable in relation to anticipated benefits, if any, to subjects, and the importance of the knowledge that may reasonably be expected to result.

- What is the rationale for the conducting the research? What is the unmet need? Is the research relevant?
- Is the study designed to produce the anticipated results?
- Is the study team’s level of training and access to resources commensurate with potential risks?
- What are the potential direct benefits to the subject and are they maximized to the greatest extent possible?
- Do the potential benefits to the subject or society outweigh the risks (including physical, psychological, legal, sociological or economic risks)? Is subject exposure to the potentials risks justifiable in relation to the potential benefits? If there are no potential direct benefits to the subject, are the risks ethically acceptable in order to obtain generalizable knowledge?

## Approval Criteria #3

Selection of subjects is equitable.

- What is the scientific basis for the study population? Is the defined study population representative of those who are most likely to benefit from the research? Does the eligibility criteria appropriately reflect this population? What is the scientific and/or risk-related justification for excluding certain groups or individuals from the research (e.g., children, pregnant woman)? Does the eligibility criteria target any groups/populations unnecessarily?
- Does the protocol include reasonable recruitment strategies, aimed at attracting the study population? Do any recruitment strategies unduly influence subjects or bias subject selection?
- Does the protocol include rationale for the sample size? Is there sufficient power to test the objective?
OHSP Policy 404 Criteria for RSRB Approval of Research defines research risk as ‘the probability of harm or injury occurring as a result of participation in a research study’. Types of risk include:

- **Physical** – involves the potential for physical discomfort, pain, injury, illness or disease, as well as physical stimuli (noise, shock, heat, cold and violence)
- **Psychological** – involves the potential for undesired changes in thought processes and emotions (e.g., anxiety, depression, guilt, shock, loss of self-esteem, embarrassment)
- **Social** – involves the potential for stigmatization to the subject or others, alterations in relationships with others that are to the disadvantage of the subject or loss of respect of others
- **Economic** – involves the potential for the subject or others to lose employment, wages (or other income) or the ability to do work due to stigmatizations, psychological or physical injury
- **Legal** – involves the potential for putting the subject or others at risk of civil liability or criminal prosecution
- **Invasion of Privacy** – involves the intrusion of or access to information/behaviors that are considered private
- **Breach of Confidentiality** – involves the release of private information due to inadequate safeguarding of information

A research benefit is a valued or desired result or effect. Generally, benefits includes positive health or behavioral result; benefits do not include payments, reimbursement or incentives. A **direct** benefit is a valued or desired result with an immediate impact on the subject (‘immediate’ in relation to the subject, not timing of the impact). Direct benefits do not include extraneous benefits that are unrelated to the conduct of the research (adjunct medical services or the benefit of gaining understanding about a certain condition or diagnosis), nor do they include benefits that will affect a larger group of subjects or society at-large.

Generally, the ‘riskier’ a study, the greater the magnitude of benefit must be. Conversely, the lower the risk a study involves, the more acceptable an uncertain or no direct benefit becomes. If there are no direct benefits to individual subjects (and there often aren’t), consider whether the benefits to society, from the knowledge that will be gained with the research, outweigh and justify the risk to subjects. If societal benefits do not outweigh the individual risks to subjects, the research cannot be approved/conducted.
Approval Criteria #4

Informed consent will be sought from each prospective subject or the subject’s legally authorized representative, in accordance with, and to the extent required by 45 CFR 46.116 (and, if applicable, 21 CFR 50 – Subpart B).

- What is the process involved in obtaining consent? Who will obtain consent? Where will consent be obtained, is it private? How much time will be given to subjects to consider their participation? Is the information provided in a manner understandable to the study population? Will the process minimize the potential for undue influence or coercion?

- If vulnerable populations (e.g., children, pregnant women/fetuses, prisoners, adults with decisional impairment) will be recruited, have applicable regulatory requirements and OHSP policy requirements been met?

- Does the consent form address all necessary elements and applicable institutional template language (See section 6.0 of the OHSP Policy 701 Informed Consent)?

- If non-English speaking individuals will be enrolled, have all applicable documents been translated? Does the study team have a mechanism for the consent process to occur in the subject’s native language, possibly through a fluent study team member who speaks the language or translation services?

- If a waiver of consent or alteration of consent for deception research is requested, what is the rationale for doing so? Have applicable regulatory requirements been met for the waiver or alteration (See section 8.0 of the OHSP Policy 701 Informed Consent)?

- If the protocol involves subject screening procedures for which data will be collected under a consent exception, does the protocol include the consent exception request? Do screening procedures meet the regulatory requirement for a consent exception (See ‘Provisions for Subject Screening’ in OHSP 2019 Q4 Newsletter)?

Approval Criteria #5

Informed consent will be appropriately documented, in accordance with, and to the extent required by 45 CFR 46.117 (and, if applicable, 21 CFR 50 – Subpart B).

- How will consent be documented? Will subjects sign and date a consent form? Will the person obtaining consent sign and date the consent form?

- If the consent form includes a witness signature, does the protocol: a) provide rationale; b) define who may act as a witness; and c) clarify when/if a witness is required?

- Will a copy of the signed consent be provided to the subject?

- If a waiver of documentation of consent is requested, what is the rationale for doing so? Have applicable regulatory requirements been met (See section 9.0 of the OHSP Policy 701 Informed Consent)?
Approval Criteria #6
When appropriate, the research plan makes adequate provision for monitoring the data collected to ensure the safety of subjects.

- Are adverse events and unanticipated problems defined in the protocol? How will they be monitored? What information will be collected pertaining to these events? Who will be responsible for reviewing and managing the events and do they have the necessary experience and training to do so?
- For research involving greater than minimal risk, does the protocol include a data and safety monitoring plan commensurate with the nature and complexity of the research and the associated risks? Who will be responsible for monitoring? What will be monitored and how?
- If a Data and Safety Monitoring Board or Data Monitoring Committee will be employed, is the board’s composition appropriate/adequate? How often will they meet? What will they review? How will the board/committee’s determinations be documented and communicated back to the study team, sponsor and IRB, as applicable?
- How will data validity and integrity be ensured?

Protocol Elements:
Methods & Procedures
Potential Risks
Data & Safety Monitoring

Approval Criteria #7
When appropriate, there are provisions to protect the privacy of subjects and maintain the confidentiality of the data.

- Are all study procedures (including recruitment and enrollment) conducted in a manner to ensure the protection of subject privacy?
- How will institutional privacy and security standards (including HIPAA, FERPA, and PPRA, if applicable) be adhered?
- Is all of the information collected and/or accessed necessary to meet the aims of the research?
- How and where will the data be stored?
- Will data be shared with individuals outside of the immediate study team? If so, what is the rationale? Is the disclosure included in the consent form? What measures are in place to protect the subject’s confidentiality?
- Will the data be coded? Will the data be de-identified at any point and if so, when? (For clarification on ‘coded’ vs. ‘de-identified’ data, see ‘De-Identified & Coded: One in the Same?’ in OHSP 2015 Q4 Newsletter.)
- If sensitive information will be collected, will additional safeguards be put into place (e.g., Certificate of Confidentiality)?

Protocol Elements:
Recruitment
Methods & Procedures
Potential Risks
Privacy & Confidentiality
Data & Safety Monitoring
Although often used interchangeably, ‘privacy’ and ‘confidentiality’ are two different concepts:

- **Privacy** (relates to the *person*) — Having control over the extent, timing and circumstances of sharing oneself (physically, behaviorally or intellectually) with others.

- **Confidentiality** (relates to the *information*) — The process or method for ensuring the information collected from a subject is protected from inadvertent disclosure to persons/entities not authorized to have access to such information.

Protocols must address both issues: how privacy will be protected and how confidentiality will be maintained.

### ADDITIONAL RESOURCES


---

### Approval Criteria #8

When some or all of the subjects are likely to be vulnerable to coercion or undue influence, such as children, prisoners, pregnant women, individuals with impaired decision-making capacity, or economically or educationally disadvantaged persons, additional safeguards have been included in the study to protect the rights and welfare of these subjects.

- Is the inclusion of the vulnerable population warranted?
- Are there additional measures needed to protect subjects in terms of the recruitment or informed consent process; where, how or when study procedures occur; how privacy will be protected and confidentiality maintained; subject payment processes; or methods of subject communication?
- If children, pregnant women/fetuses, prisoners or adults with decisional impairment will be recruited, have applicable regulations and [OHSP policy requirements](https://www.rochester.edu/ohsp) been met?

#### Protocol Elements:

- **Study Design**
  - Eligibility
  - Recruitment Methods
  - Process of Consent
- **Methods & Procedures**
  - Data & Safety Monitoring
  - Privacy & Confidentiality
  - Costs & Payments

---

**Office for Human Subject Protection**

[www.rochester.edu/ohsp](http://www.rochester.edu/ohsp)  
(585) 273-4127