Grand Valley State University Human Research Review Committee	
Title: *Assessing risks to vulnerable participants*	
Section: 720.	This policy and procedure supersedes those previously drafted
Approved by HRRC: 9/13/2011 Revised: 09/10/2013 Reviewed: 10/28/2014 Revised by HRRPPC: 04/24/2018	Approved by the RIO/HRPA: 09/23/2011 Revisions Approved: 09/10/2013 Approved by the AIO/RIO: 05/23/2018
Effective Date: 01/21/2019	
Related documents: 710: *Assessing risk to research participants* *730: Collection, management and security of research information* *G-1: Guidance on research involving vulnerable populations* *G-5: Guidance on assessing risk using magnitude of harm in categorizing risk level* *G-6: SACHRPP guidance on assessing risk*	

Policy

It is HRRC policy that the decision to participate in research should be informed by a description of risk based on the *objective (analytic) risk model rather than the subjective (category) model*. Participants' decision to enroll in research should be well informed and free from coercion and undue influence. The minimal standard for decision is that which can be reasonably accomplished under the circumstances of deliberate and intentional decision making by competent persons acting in the best interests of the participants and the general social welfare. The HRRC shall endeavor to acknowledge what, if any, special accommodations may be required to protect the research study population while also avoiding stereotyping any individuals or groups.

- *Note:* See Guidance section below for clarification on analytic vs. category models of risk.

Procedures

1. Special considerations for vulnerable populations

a. How should the risk to participants in a research study that includes walking a mile without resting be classified? It depends on who the participants are.

i. The definition of risk is generally understood on either the objective (analytic) risk model or a subjective (category) model. An objective or analytic model identifies risk as present/possible to all participants based on particular physical circumstances and processes integral to the research procedures itself. Walking without resting for a mile on level ground has inherent physical risk to all participants because of the nature of the activity. It is generally considered within the routine activities of daily living for most normal adults, and therefore generally classified as minimal risk.

In contrast, a subjective or category model identifies risk as present/possible to some persons but not to others, based on specific characteristics of the persons themselves. Walking without resting for a mile on level ground may be assessed as

greater than minimal risk for specific groups of persons, e.g. persons over a certain age, or who have specific physical conditions such as hypertension (high blood pressure).

- A helpful analysis of assessing research related risk is available from the Secretary's Advisory Committee on Human Research Protections (SACHRP).

2. Prisoners

Assessing research related risks to research participants who are prisoners in prison is especially challenging due to the difficulty of assuring uncoerced, voluntary participation. Federal regulations specify that research involving prisoners has additional required protections and restrictions on permitted goals and intent of the study. See Guidance section below and *Additional Protections Pertaining to Biomedical and Behavioral Research Involving Prisoners as Subjects*, subpart C: 45 CFR 46.306 (a) (i-iv).

3. Minors

If research involving a minor aged participant is greater than minimal risk based on the analytic model of risk, but includes the prospect of direct benefit to the participant, the degree of risk must be justified by the type and degree of anticipated benefit.

4. Significantly Disadvantaged Persons

Persons significantly disadvantaged due to social, economic or educational circumstances including the sensory and mobility challenged, the poor, and the illiterate may require additional protections of their interests and welfare before allowing them to enroll in research studies. Researchers planning or anticipating significantly disadvantaged persons to be enrolled in their research should describe planned procedures for minimizing any possible objective (analytic) risks to the participants.

Additional Guidance

1. Defining Minimal Risk to Prisoners

a. Minimal Risk for prisoners involved in research is defined slightly differently than for non-prisoners in the federal regulations. In addition, additional restrictions and protections are specified.

ii. *The probability and magnitude of physical or psychological harm that is normally encountered in the daily lives, or in the routine medical, dental, or psychological examination of healthy persons.* [45 CFR 46.303(d)]. ("discomfort" is not a listed harm for prisoners, but is for non-prisoners)

iii. *The risks involved in research are commensurate with risks that would be accepted by non-prisoner volunteers* [45 CFR 46.305(a) (3)];

iv. *The study presents no more than minimal risk and no more than inconvenience to the subjects* [45 CFR 46.306(a)(2)];

b. The permitted research categories include the effects of incarceration, health conditions specifically affecting prisoners, and other narrow areas. In its 2006 report, *Ethical Considerations for Research Involving Prisoners,* the Institute of Medicine (IOM) argued for changing to a risk based assessment of vulnerability as a more useful and appropriate strategy than the category approach. This would allow some studies containing greater than minimal risk, provided there is sufficient potential benefit to the individual. The consensus report also acknowledges that much research involving prisoners now takes place outside current federal regulations, to which the Department of Justice's Bureau of Prisons and state prison authorities are not signatory agencies. The IOM panel called for Congressionally mandated uniform guidelines and a national oversight system for all human research programs that enroll prisoners. The Secretary's Advisory Committee on Research Protection Programs (SACHRP) went further and proposed that legislation setting standards for prisoners should extend to all human subject research, including independently funded studies that fall outside the boundaries of the Common Rule [45 CFR 46].

c. Approval of research proposals involving prisoners currently is based on a subjective (category) model of risk rather than an objective (analytic) model. Further, there is no category for exempt research involving prisoners in the federal regulations, and the definition of risk is different in the FDA regulations than the DHHS regulations pertaining to prisoners. [See **Background** section of this policy, supra. And also see http://www.hhs.gov/ohrp/archive/irb/irb_chapter3.htm]

2. Differing Approaches to Assessing Risk

a. The general regulations of the Department of Health and Human Services (DHHS) at 45 CFR 46 and the Food and Drug Administration (FDA) at 21 CFR 56, identify vulnerable participants as persons who belong to one or more of the following categories: Women; Human fetuses; Neonates; Prisoners; Children; Persons with physical handicaps or mental disabilities, or disadvantaged economically or educationally. *The Belmont Report* also describes racial minorities, the very ill, and the institutionalized as vulnerable.

Contra, the *National Bioethics Advisory Committee* (NBAC) and a 2006 Institute of Medicine Report both recommend an analytic or functional approach to addressing vulnerability rather than the category approach used by the DHHS and FDA. Thus, prisoners would be classified as vulnerable only if known to have diminished or impaired mental abilities rather than residing in a particular environmental (prison) context. The NBAC identified six traits of vulnerability that may "interfere with an individual's ability to protect themselves in research especially during the informed consent process." The vulnerability traits are: Cognitive or communicative; Institutional; Deferential; Medical; Economic; Social. Further, an NBAC commissioned background paper used 6 concepts of vulnerability: cognitive, juridic, deferential, medical, allocational, and infrastructural see: *Vulnerability in Research Subjects: A Bioethical Taxonomy,* (Kipnis, 2000).

Finally, in addition to identifying a research study population as vulnerable vis-a-vis a particular research study, the "risks" can refer to two quite different things: (1) chances of incurring harm that specific individuals are willing to undertake in order to achieve some

desired goal; or (2) the inherent conditions that make a situation dangerous *per se*. The HRRC is responsible for evaluating risk only in the second sense. It must then judge whether the anticipated benefit, either of new general knowledge or of improved health for the research participants, justifies inviting any person to undertake the identified risks. The HRRC disapproves research in which the risks are judged unreasonable in relation to the anticipated benefits. [*See also* IRB Guidebook, Chapter 5, Section A, "Overview: Social Policy Experimentation."] http://www.hhs.gov/ohrp/archive/irb/irb_chapter3.htm

Background

1. Minimal Risk for the general research population is defined in the federal regulations as: *The probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests.* [45 CFR 46.102, and 21 CFR 56.102(23)(i)].

2. Five populations have been provided specific additional protections in the three subparts to the federal regulations at 45 CFR 46: B (pregnant women, fetuses & neonates); C (prisoners); and D (minors). As noted below there are specific populations identified as vulnerable in the federal regulations, Office of Human Research Protections (OHRP) guidance, and various advisory groups to the Secretary of DHHS. The HRRC has identified an additional group, those in relationships of significantly unequal authority to the researcher. This policy is intended to apply to members of all these specific populations.

3. The specific vulnerable populations are:

    - Prisoners (additional protections in 45 CFR 46 subpart C)
    - Minors (additional protections in 45 CFR 46 subpart D)
    - Persons who are significantly disadvantaged due to social, economic or educational circumstances including the sensory & mobility challenged, the poor, and the illiterate
    - Persons with diminished decision making capacity (e.g. developmentally delayed or cognitively impaired)
    - Racial minorities
    - The very ill
    - Institutionalized persons
    - Persons in independently unequal authority relationships to the researcher, e.g. students in research conducted by their course instructors, athletes in research conducted or supported by their coaches, and employees in research conducted or supported by their employer.