

**PARTNERS HUMAN RESEARCH COMMITTEE
POLICIES AND PROCEDURES**

**Review of Research Involving Devices
Requirement for an Investigational Device Exemption (IDE)**

1.0 PURPOSE

The purpose of this policy is to define the applicability of the United States Code of Federal Regulations Title 21 – Food & Drugs Part 812 – Investigational Device Exemptions (IDE) and the procedures the Partners Human Research Committees (PHRC) follow to determine whether an IDE is needed for a device investigation.

2.0 SCOPE

Non-exempt human-subjects research and clinical investigations reviewed by the PHRC are subject to this policy.

3.0 DEFINITIONS

As used in this document, human-subjects research encompasses activities that meet the DHHS definitions of *research* and *human subject* and/or the FDA definitions of *clinical investigation* and *human subject*. The DHHS definition for *research* and *human subject* and the FDA definition for *subject*, *investigation*, and *device* are provided below.

Research means a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge. [45 CFR 46.102(d)]

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. *Intervention* includes both physical procedures by which data are gathered (for example, venipuncture) and manipulations of the subject or the subject's environment that are performed for research purposes. *Interaction* includes communication or interpersonal contact between investigator and subject. *Private information* includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place, and information which has been provided for specific purposes by an individual and which the individual can reasonably expect will not be made public (for example, a medical record). Private information must be individually

identifiable (i.e., the identity of the subject is or may readily be ascertained by the investigator or associated with the information) in order for obtaining the information to constitute research involving human subjects. [45 CFR 46.102(f)(1)(2)]

Subject means a human who participates in an investigation, either as an individual on whom or on whose specimen an investigational device is used or as a control. A subject may be in normal health or have a medical condition or disease. [21 CFR 812.3(p)]

Investigation means research involving one or more subjects to determine the safety and effectiveness of a device. [21 CFR 812.3(h)]

Device means an instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent, or other similar or related article, including any component part, or accessory, which is (1) recognized in the official National Formulary, or the United States Pharmacopoeia, or any supplement to them, (2) intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease, in man or other animals, or (3) intended to affect the structure or any function of the body of man or other animals, and which does not achieve its primary intended purposes through chemical action within or on the body of man or other animals and which is not dependent upon being metabolized for the achievement of its primary intended purposes.

Custom device means a device that: (1) Necessarily deviates from devices generally available or from an applicable performance standard or premarket approval requirement in order to comply with the order of an individual physician or dentist; (2) Is not generally available to, or generally used by, other physicians or dentists; (3) Is not generally available in finished form for purchase or for dispensing upon prescription; (4) Is not offered for commercial distribution through labeling or advertising; and (5) Is intended for use by an individual patient named in the order of a physician or dentist, and is to be made in a specific form for that patient, or is intended to meet the special needs of the physician or dentist in the course of professional practice.

Investigational device means a device, including a transitional device, that is the object of an investigation.

Transitional device means a device subject to section 520(l) of the act, that is, a device that FDA considered to be a new drug or an antibiotic drug before May 28, 1976.

Sponsor means a person who initiates, but who does not actually conduct, the investigation, that is, the investigational device is administered, dispensed, or used under the immediate direction of another individual. A person other than an individual that uses one or more of its employees to conduct an investigation that it has initiated is a sponsor, not a sponsor-investigator, and the employees are investigators.

Sponsor-investigator means an individual who both initiates and actually conducts, alone or with others, an investigation, that is, under whose immediate direction the investigational device is administered, dispensed, or used. The term does not include any person other than an individual. The obligations of a sponsor-investigator under this part [21 CFR 812 Subpart C] include those of an investigator and those of a sponsor.

4.0 POLICY

Non-exempt clinical investigations reviewed and approved by the PHRC must comply with FDA regulations for devices intended for human use 21 CFR 812 Investigational Device Exemptions.

5.0 PROCEDURES

Investigators relying on the PHRC for IRB review of human-subjects research and clinical investigations are required to complete application forms and provide all required information and documents for review as described in the Protocol Submission Instructions and forms for continuing review, amendments, and unanticipated problems involving risks to subjects or others and adverse events.

When the research involves a device, the investigator is required to provide the PHRC with sufficient information about the device, including FDA status, to assess the risks and potential benefits to subjects.

5.1 Investigations of FDA-approved devices off-label or non-FDA approved devices intended for human use

When a device is being evaluated for safety and effectiveness, the device is considered “investigational” and is subject to the requirements of the IDE regulations 21 CFR part 812, unless exempt.

5.1.1 Exempt studies include:

- Consumer preference testing, testing of a device modification, or testing of two or more devices in commercial distribution if the testing does not collect safety

or effectiveness data or put subjects at risk; [21 CFR 812.2(c)(4)]

- Studies of an already cleared medical device in which the device is used or investigated in accordance with the indications in the cleared labeling; [21 CFR 812(c)(1)(2)]
- Diagnostic device studies (e.g., in vitro diagnostic studies) under certain circumstances. [21 CFR 812(c)(3)]

IDE exempt studies that are being conducted to collect data to support either a clinical investigation or a marketing application must comply with the requirement for IRB review and should comply with the requirements for informed consent.

When an investigator is conducting an investigational device investigation, the PHRC require the investigator to have a standard operating procedure for control of investigational devices. The investigator (or a member of the research study staff) is responsible for the control of investigational devices in accordance with institutional policy and FDA regulations.

Device investigations are scheduled for review at a convened meeting of the PHRC. As part of its review, the PHRC must categorize the investigation as either “significant risk” (SR) or “nonsignificant risk” (NSR). A significant risk device means a device that:

- (1) Is intended as an implant and presents a potential for serious risk to the health, safety, or welfare of a subject;
- (2) Is purported or represented to be for a use in supporting or sustaining human life and presents a potential for serious risk to the health, safety, or welfare of a subject; or
- (3) Is for a use of substantial importance in diagnosing, curing, mitigating, or treating disease, or otherwise preventing impairment of human health and presents a potential for serious risk to the health, safety, or welfare of a subject; or
- (4) Otherwise presents potential for serious risk to the health, safety, or welfare of a subject.

The sponsor generally makes this determination; however the IRB is responsible for making the determination when the sponsor has not submitted an IDE application to the FDA. The PHRC base their determination on the proposed use of the device in the investigation, and not on the device alone. If the proposed use of the device involves a procedure, e.g., a surgical procedure, the PHRC consider the potential harm that could be caused by the procedure as well as the device.

5.1.2 Nonsignificant device investigations

When the IRB makes an NSR determination and the risk to the subjects is determined to be minimal in accordance with 21 CFR 56.102(i), the IRB may vote to allow continuing review to be conducted using the expedited review procedure, as long as the research poses no more than minimal risk to subjects and no additional risks have been identified.

When the PHRC concur with the sponsor that the research is a nonsignificant risk device investigation, the investigation may proceed when fully approved by the PHRC and relevant ancillary committee(s).

5.1.3 Significant risk device investigations

When the PHRC determine that the research is a significant risk device investigation, the sponsor must submit an IDE application to the FDA.

The PHRC require documentation from the sponsor that the IDE is in effect before the research is fully approved.

When a BWH or MGH investigator is the sponsor of the IDE, the IRB requires the investigator to meet with a representative of the Human Research Quality Improvement Program (QI Program) to review his/her FDA responsibilities as a sponsor-investigator and procedures for investigational device control. The QI program is responsible for providing the PHRC with documentation in writing that the review has taken place, and that the investigator understands his/her FDA IDE responsibilities. Full IRB approval is contingent upon receipt of written documentation from the QI Program.

5.2 Humanitarian Use Devices (HUD)

HUDs with approved Humanitarian Device Exemptions (HDEs) may be used for the FDA-approved indication only with approval of the PHRC. The PHRC may vote to allow continuing review to be conducted using the expedited review procedure, as long as the use of the HUD is used within the scope of its approved labeling. The FDA does not consider the use of an HUD within its approved labeling to be research.

When HUDs are being evaluated for safety and effectiveness beyond the scope of the FDA-approved HDE indication, they are subject to the requirements of device investigations as described in Section 5.1 of this Policy.

5.3 Custom Devices

Custom devices made in a specific form for a given patient on the order of a physician or dentist as part of their professional practice are not subject to the requirements for device investigations unless the devices are being evaluated for safety and effectiveness. In such cases, custom devices are subject to the requirements of device investigations as described in Section 5.1 of this Policy.

5.4 Non-FDA Approved Devices Used as a Tool to Study Human Physiology

Non-FDA approved devices used in research to study human physiology are not subject to the 812 IDE regulations, but must meet the criteria for nonsignificant risk devices to be used in human subjects. When the device is electrically powered, the device must also be reviewed for electrical safety by Biomedical Engineering.

5.5 Non-Hospital Inventory FDA-Approved Medical Devices Used for Monitoring or Data Collection

Commercially available FDA-approved medical devices used in research according to the FDA-approved labeling are not subject to the 812 IDE regulations, but must meet the same hospital safety standards as medical devices being used for patient care and as such are subject to the requirements of the Medical Equipment Management Program when used within the hospitals or sites over which the BWH or MGH have control.