This orientation module was designed to provide you with a baseline overview of the ethical principles, regulatory foundation and responsibilities of IRB members. Please review the following and complete the accompanying exam.

ETHICAL FOUNDATION OF HUMAN RESEARCH PROTECTION

Topics:

Guiding Principles

Learner Objectives:

• Identify the three fundamental ethical principles that guide the ethical conduct of research involving human participants

What ethical principles guide the IRB decision-making process?

The Ethical Principles and Guidelines for the Protection of Human Subjects of Research was written in 1979 by the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research to identify the basic ethical principles underlying the conduct of research involving human subjects. More commonly known as the "Belmont Report", this report identified the following three fundamental ethical principles that must be carefully considered to ensure the ethical practice of research involving human participants:

- 1. Respect for Persons
- 2. Beneficence
- 3. Justice

Each IRB member should read the <u>Belmont Report</u> and apply the ethical principles when conducting protocol/study review.

Respect for Persons

The principle of respect for persons requires the consideration of three ethical standards. First, prospective research participants should be treated as autonomous agents capable of making an independent decision to enter into a research study. To assist participants in being prepared to make such a decision, the researcher must provide accurate information about the study as a part of the informed consent process. No pressure to participate should be applied by any involved parties and the prospective participants or their legally authorized representative must be given the time needed to consider the information provided and decide whether to participate.

Second, additional provisions must be taken to protect prospective participants that have a diminished capacity to act as an autonomous agent. Independent cases arise when a prospective subject lacks the capacity to make an informed decision. In other cases, prospective subjects represent a class of participants that is considered to have a diminished capacity (for example, children). In both cases, additional safeguards must be in place to ensure that prospective participants or their legally authorized representative still have the opportunity to decide whether to participate.

Third, respect for persons dictates that the researcher should design procedures and safeguards which minimize risk of invasion of privacy and assure confidentiality of data.

Beneficence

Beneficence refers to the responsibility of the researcher to maximize possible benefits and minimize possible risks. The researcher and the IRB must be able to differentiate between the

possible benefits and harms for the prospective participants and those for society as a whole. During the IRB review of research protocols, the risk to benefit ratio is assessed and a determination is made whether this ratio is acceptable.

At the University of Kentucky, each study is classified into one of four risk categories:

- 1) not greater than minimal risk;
- 2) greater than minimal risk, but presenting the prospect of direct benefit to individual subjects;
- 3) greater than minimal risk, no prospect of direct benefit to individual subjects, but likely to yield generalizable knowledge about the subject's disorder or condition;
- 4) research not otherwise approvable which presents an opportunity to understand, prevent, or alleviate a serious problem affecting the health or welfare of subjects.

Justice

No individual or group of participants should unduly bear the risks of research nor inequitably receive its benefits. By fairly distributing the risks and benefits of research, the researcher is able to adhere to the practice of this principle. Likewise, equitable selection of subjects is of importance. The IRB has the responsibility of reviewing any requests by researchers to exclude selected subject populations.

REGULATORY FOUNDATION OF HUMAN RESEARCH PROTECTION

What regulations and policies govern human subjects research?

There are many regulations and policies that govern research involving human subjects within the University of Kentucky Human Research Protection Program. An IRB member must apply these regulations and policies in order to determine whether proposed research plans are in compliance. Reviewing research with human subjects requires a working knowledge of the following regulations and policies:

Department for Health and Human Services (DHHS)

At the University of Kentucky, all research involving human subjects must adhere to DHHS regulation 45 CFR 46 unless the requirement is waived by the IRB. Referred to as the "Common Rule", a revised version of this regulation was implemented January 21, 2019. Research Protocols approved prior to the implementation date comply with the former Common Rule, while those approved after the implementation date comply with the revised rule. The Office for Human Research Protections (OHRP) is responsible for executing the 45 CFR 46 regulations. Their website includes agency guidance on a variety of topics such as biological tissue banks, financial conflicts of interest, continuing review, and review of research involving prisoners or children. In addition to establishing guidelines for human subjects research, DHHS regulation also addresses the conduct of research with the vulnerable populations of fetuses and pregnant women, prisoners, and children. Particular attention must be given in determining the risk to benefit ratio for these subject populations and to applying additional safeguards which are listed in the regulations and addressed in the IRB application.

Food and Drug Administration (FDA)

Any clinical investigation that involves the use of a test article (e.g. drug, device, biologic, or food product) and one or more human subjects falls under the Food and Drug Administration Human Subjects Protection regulations. Three pertinent sections of FDA regulation are located at the following links: FDA 21 CFR 50 IRB; Subpart D on Children; and FDA 21 CFR 56 Informed Consent. Additional FDA

regulations may apply, such as 21 CFR 312 (Investigational New Drugs), 21 CFR 812, 814 (Investigational New Devices), and 21 CFR 54 (Financial Disclosure by Clinical Investigators).

Sponsors

Many research projects are funded by federal, state, or industry sponsors that have issued additional human research requirements. Examples of sponsors who have issued additional human research protection requirements include Department of Defense, U.S. Department of Education, National Science Foundation, Centers for Disease Control, U.S. Department of Justice, Bureau of Prisons, Environmental Protection Agency, the National Institutes of Health, and selected NIH funded programs such as the General Clinical Research Center.

University of Kentucky Policies

The University of Kentucky has established policies and Standard Operating Procedures (SOPs) that govern human subjects research conducted by UK employees or students. Every IRB member should have a working knowledge of these policies and procedures. The SOPs are located at the following link: Standard Operating Procedures. Also, IRB review policies and guidance documents may be found in the IRB Survival Handbook.

What Is HIPAA?

The Health Insurance Portability & Accountability Act, commonly known as HIPAA, is another piece of legislation that impacts the conduct of human subjects research. The HIPAA Privacy Rule regulation establishes national standards for the protection of private health information known as Protected Health Information (PHI) under this Act. **PHI** is defined as any individually identifiable health information that is created or maintained by a Covered Entity (CE) department. The University of Kentucky has some departments that are routinely regulated by the Privacy Rule and fall within the UK Covered Entity. Other departments are only regulated under certain circumstances (Non CE). To find out whether a department/college is covered by HIPAA, contact the Office of Research Integrity at (859) 257-9084. Information on HIPAA is located at the following link: HIPAA and UK Implementation of HIPAA.

HIPAA applies when:

- An investigator working in a Non CE department receives PHI from a CE department.
- An investigator working in a CE department creates, receives and/or discloses PHI for research purposes.

The IRB is responsible for reviewing proposed HIPAA authorization forms, de-identification forms, and requests to waive the authorization process for research projects.

What criteria must be met for research to be approved?

DHHS and FDA regulations dictate the criteria that must be met before the IRB can approve a research protocol. The criteria for approval of research are set forth in the federal regulation 45 CFR Part 46.111 and 50 CFR 56.111. To approve research, the IRB should determine that <u>all</u> of the following conditions exist:

- 1. Risks to subjects are minimized: (i) By using procedures which are consistent with sound research design and which 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.
- 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. In

evaluating risks and benefits, the IRB should consider only those risks and benefits that may result from the research (as distinguished from risks and benefits of therapies subjects would receive even if not participating in the research). The IRB should not consider possible long-range effects of applying knowledge gained in the research (for example, the possible effects of the research on public policy) as among those research risks that fall within the purview of its responsibility.

- 3. Selection of subjects is equitable. In making this assessment the IRB should take into account the purposes of the research and the setting in which the research will be conducted and should be particularly cognizant of the special problems of research involving vulnerable populations, such as children, prisoners, individuals with impaired decisions-making capacity, or economically or educationally disadvantaged persons. 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 federal regulations.
- 4. Informed consent will be appropriately documented, in accordance with, and to the extent required by federal regulations.
- 5. When the study is greater than minimal risk, clinical research, or an NIH funded/FDA regulated clinical trial, the research plan makes adequate provision for monitoring the data collected to ensure the safety of subjects.
- 6. When appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of data.
- 7. Where any of the subjects are likely to be vulnerable to coercion or undue influence, additional safeguards have been included in the study to protect subjects.

An IRB must determine that **ALL** of the criteria are met prior to issuing an IRB approval.

What UK resources are available to help IRB members with the maze of federal, state, and UK policies, procedures and regulations?

The Office of Research Integrity (ORI) maintains a number of documents that IRB members can use as resource materials. Examples of key documents provided to or made available to IRB members are listed below:

- <u>Comprehensive Plan for Human Research Protection</u>: includes the components of the UK Human Research Protection Program (HRPP) and a discussion of responsibilities of each component including the IRB;
- IRB Survival Handbook: includes documents outlining the UK policies and procedures such as application instructions, IRB reviewer checklist, summary of key federal regulations, UK IRB policies on topics such as review of projects involving individuals with impaired consent capacity, emergency use, HIV testing, advertisements, finders fees:
- IRB Resource Guide: includes key federal regulatory and funding agency documents including copies of the basic DHHS and FDA regulations, the Belmont Report and international ethical codes, auxiliary federal requirements impacting a variety of topics such as the inclusion of women and minorities in research or financial relationships and interests in research involving human subjects;
- <u>IRB/ORI Standard Operating Procedures</u>: included in the IRB Survival Handbook and has operating procedures relating to all key IRB operations;
- ORI website.

IRB BASICS

Topics:

- Primary Mandate & Authority of IRB
- IRB Membership

Learner Objectives:

- Identify the primary mandate and authority of the IRB
- List IRB membership requirements

What can and does an IRB do?

The primary mandate of an IRB is to protect the rights and welfare of human participants. To carry out this mandate, the IRB is given authority to perform the following tasks:

- · Approve, modify, or disapprove research protocols;
- Conduct continuation reviews of already approved research protocols;
- Observe and verify changes in research procedures;
- Suspend or terminate approval of research protocols;
- Observe, or have a third party observe, the consent process .

The IRB also handles allegations of noncompliance and assists in developing review policies.

Who is on an IRB?

Federal regulation as set forth in DHHS 45 CFR 46 and FDA 21 CFR 56 provides guidance on the membership composition of IRB committees. Committees must be composed of at least five members and preferably have members of both genders. IRB committees are expected to have members with appropriate expertise based upon the types of research reviewed. Federal regulation requires that at least one member be someone whose primary concerns are in nonscientific areas. At least one member must be someone whose primary concerns are in scientific areas and at least one member must be someone who is not otherwise affiliated with the university. If FDA clinical investigations are reviewed, IRB membership must include a physician.

Federal policy also allows IRBs to have "alternate" members. University of Kentucky primary IRB members have alternate members to serve in his/her absence. Alternate IRB members may be appointed as back up for more than one of the primary IRB members. Alternate IRB members have the same authority and responsibilities as the primary IRB members. If the primary and alternate members attend the same meeting only one individual may vote. New members who are not sure whether they are appointed as primary or alternative members should contact the Office of Research of Integrity at (859) 257-9428 for clarification.

THE NINE BASIC IRB MEMBER RESPONSIBILITIES

Topics:

- Conducting Protocol Review
- Applying Discipline & Regulatory Knowledge
- Attending Meetings
- Avoiding Conflict of Interest
- Developing IRB Policy
- Completing Mandatory Education Requirements
- Handling Allegations or Reports of Noncompliance

- Maintaining Confidentiality
- Determining Whether Federal Reports are Required

Learner Objectives:

- Identify types of review
- Identify three mechanisms of review
- List five possible outcomes of protocol reviews
- Define minimal risk
- Identify at least three areas of expertise that an IRB member must exhibit
- Identify at least two reasons why meeting attendance by the IRB member is important
- Define IRB member conflict of interest
- Acknowledge the shared responsibility for developing policy governing research involving human subjects
- Identify the university requirement for mandatory education human subjects protection
- Discuss IRB role in handling allegations of noncompliance
- List individual member responsibilities for maintaining confidentiality
- List of three criteria for submitting federal reports

What are the individual IRB member's responsibilities?

IRB members have nine primary responsibilities that, when met, assist the IRB as a whole in achieving its mandate and carrying out its authority. The nine IRB member responsibilities are: 1) conducting protocol reviews; 2) applying discipline and regulatory knowledge; 3) attending meetings; 4) avoiding conflicts of interest; 5) developing policies; 6) completing training requirements; 7) handling allegations or reports of noncompliance; 8) maintaining confidentiality; and 9) determining whether federal reports are required.

Responsibility 1: Conducting Protocol Review - How does the review process work? TYPES OF IRB REVIEW

- 1. Initial Review (IR)— Occurs when a research protocol is first submitted for IRB review. IR may take place at a meeting of the convened IRB (Full Review) or through Expedited or Exempt review mechanisms.
- 2. Continuation Review (CR) or Administrative Annual Review (AAR) CR occurs at least once every year, or at a greater frequency based on degree of risk as determined by the IRB. Select Expedited Review protocols are eligible for AAR.
- 3. Revisions/Modification Requests –The IRB has the authority to require revisions be made to a research protocol and is responsible for reviewing the revisions that are submitted by the investigator. Also, a researcher may submit a request to revise an already approved research protocol.

OTHER REVIEWS

- Protocol deviations/violations and Unanticipated problems/adverse events –
 Unforeseeable events may arise when conducting research with human subjects. The
 <u>Investigator Guide to IRB Reporting Requirements</u> provides guidance on which events
 require prompt reporting to the IRB.
- 5. Alleged or Reported Noncompliance IRB reviews alleged or reported incidents of noncompliance, including the initial allegation/reports, any subsequent quality assurance reviews, investigation committee reports, or correspondence or information submitted in the course of handling the alleged or reported incident of noncompliance. Procedures

for managing allegations are outlined in the <u>Noncompliance Standard Operating</u> <u>Procedure</u> (pdf).

MECHANISMS OF IRB REVIEW

Under federal regulations, the types of reviews (initial, continuing, modification, unanticipated problem, alleged noncompliance) may be conducted using three mechanisms (exemption certification, expedited, or full review):

What activities require IRB review and IRB Exemption Certification

UK has a policy that outlines when activities involving human subjects need Institutional Review Board (IRB) review and approval. Periodically the IRB is asked to determine if a project meets the federal definition of "human subject", "research", or "clinical investigation". Requests to determine if projects fall under IRB review are handled using exemption certification procedures outlined below.

Also, selected research is **exempt** from the DHHS and FDA regulations if the only involvement of human subjects is in one or more of the <u>federally mandated categories or research activities</u>.

Individual IRB members are assigned the responsibility of conducting "exempt" reviews on a monthly basis. The determination of whether the proposed activities needs IRB review or whether the research meets the federal exemption criteria is made by the individual IRB member assigned to conduct these reviews for the month. The IRB member can make the determination: 1) the proposed activity does not need IRB review; 2) the research activities meet the exemption criteria; 3) additional information/protocol revisions are needed; 4) that the research must be reviewed using either expedited or full review mechanisms.

The IRB Exempt Reviewer may obtain advice regarding how to apply the exemption categories by reviewing the "Issues to be Addressed When Conducting Exempt Review" and contacting the ORI Exempt Review Coordinator at (859) 257-9428.

Expedited Review

Federal regulation, as authorized by 45 CFR 46.110, 21 CFR 56.110, and 38 CFR 16.110, has established categories of research that may be granted review by one or more designated members. Research activities that present no more than "minimal risk" to human subjects and involve procedures that fall solely within those expedited categories may be reviewed by the IRB through the expedited review procedure. Expedited reviews are conducted differently between the Nonmedical and Medical IRB committees. For the Nonmedical IRB committees, expedited review is conducted by a subcommittee which meets at the regularly scheduled meetings. For the Medical IRB committees, individual members are assigned the responsibility to conduct expedited reviews on a monthly basis.

Expedited reviewers must determine the following:

- 1) Do the research activities meet the definition of "minimal risk" and do they fit within the federally mandated expedited categories;
- Do the research activities meet the eight federal criteria for IRB approval (45 CFR 46.111 and 21 CFR 56.111)

"Minimal risk" is defined as "the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves from those ordinarily encountered in daily life or during the performance of routine physical or psychological examination or tests". Members conducting expedited reviews may receive or request comments from consultants for reviews involving special subject populations or issues.

The outcome of the review may include any of the following: 1) approval; 2) request for additional information; 3) request for changes; 4) request that the review be conducted by the full IRB. Expedited reviewers cannot "disapprove" the study; only the "Full" IRB can disapprove a research project.

Minor changes in previously approved research can also be reviewed using expedited procedures. IRB Expedited Reviewers may obtain advice on how to apply the categories by contacting ORI at (859) 257-9428.

The Full Review agenda includes a list of studies/minor changes reviewed using expedited procedures.

Full Review

Research that does not meet the criteria for exempt or expedited review must be submitted to the IRB for review at a convened meeting at which a quorum of the members are present. Each Medical IRB committee meets twice a month and each Nonmedical IRB committee meets once a month. The dates of the meetings for each IRB can be obtained from the Office of Research Integrity and are listed on the ORI web site and included in the IRB Survival Handbook.

Before each full review meeting, each member is sent an agenda packet which includes the following:

- IRB applications for initial and/or continuing full review studies to be reviewed at the meeting;
- Reports of Unanticipated Problems/Adverse Events;
- List of expedited protocols reviewed since the last meeting including initial, continuing, modifications and external reported unanticipated problems/adverse events:
- Committee Business materials such as noncompliance reports or results of quality improvement reviews.

IRB members may request to see the entire file for any of the items listed in the agenda.

One member will be asked to serve as Primary Reviewer for each of the full review applications. Primary reviewers are responsible for: 1) comparing the detailed grant application or industry protocol with the IRB application; 2) informing the full IRB of any discrepancies between the detailed protocol and the summary application materials; 3) determining whether the project involves HHS multi-center clinical trial, and if so, comparing the DHHS "Risks" and "Alternatives" section of the DHHS approved consent with the UK proposed form to ensure that the DHHS and UK sections of consent are consistent; 4) reviewing the final disclosure questions and alerting the IRB if a "yes" disclosure is made; 5) checking the Signature Assurance sheet for appropriate signatures; and 6) conducting an in-depth review.

These are five possible outcomes of IRB full review:

- 1) Approval: If the research meets the eight federal criteria of approval, the IRB can approve the research. An approval period must be set based upon degree of risk but the period cannot be greater than a year. This vote is called a "1".
- 2) Minor Revisions/Additional Information Required: Minor revisions are defined in the Modifications, Deviations and Exceptions IRB Review of Changes SOP. Investigator

responses to the minor revision/additional information request are reviewed using expedited procedures by the individual chairing the meeting. This type of vote is called a "2"

- 3) Table: A protocol is tabled if the requests for revisions/additional information are considered significant or major. A vote of "3" means that the investigator is not required to attend the meeting but the investigator's response is reviewed by the IRB at a convened meeting.
- 4) Table: The same as above except vote of "4" means that the investigator must attend the meeting.
- 5) Disapproval: The full IRB has the authority to disapprove proposed research projects that do not meet the federal criteria for approval. This type of vote is called a "5".

Responsibility 1 Continued: Conducting IRB Review – How does an IRB make a decision?

Serving on the IRB requires a commitment to actively participate in the review of research protocols or project descriptions. There are many issues that must be addressed before an initial or continuing research protocol can be approved.

The guiding ethical principles of respect for persons (autonomy), beneficence, and justice must be considered in conducting each review. (See the <u>Belmont Report</u>)

The IRB must also determine that **ALL** of the eight federal criteria are met prior to approving each research protocol or plan. You will be provided with reviewer checklists, which include links to approval criteria, consent requirements, and regulatory findings. In addition, the <u>IRB</u> Resource Guide provides access to the federal regulations.

Federal regulations and UK policy includes additional safeguards that must be applied when reviewing research involving the following:

- 1. Pregnant women, human fetuses, or neonates
- 2. Prisoners
- 3. Children/minors
- 4. Individuals with impaired consent capacity

The guidance for conducting reviews involving these vulnerable populations and others can be found in the applicable section of the Survival Handbook.

In addition to meeting federal and other institutional criteria, research proposals are reviewed for other issues that arise, such as a recruitment bonus paid by sponsors to researchers for rapid subject recruitment, recruitment advertisements, and incentives given to subjects for participation. These issues are addressed in IRB policies and procedures which are found in the Survival Handbook and/or IRB SOPs.

Responsibility 2: Applying Discipline and Regulatory Knowledge – What type of expertise do IRB members need to be effective?

IRB members must exhibit expertise and be willing to apply that knowledge in the review of research protocols. There are three primary areas of expertise that an IRB member should practice. These are as follows:

Specialized experience – Many IRB members have scientific, medical, or other
professional backgrounds and are expected to apply this knowledge in the review of
research. This often proves useful to the IRB in its review of research that involves

vulnerable subject populations such as children, prisoners, economically or educationally disadvantaged, or individuals with impaired consent capacity. Other members of the IRB are members of the community and not affiliated with UK. These members serve as a rich resource to the IRB by reflecting the interests of the community including the interests of many prospective and current research participants.

- <u>UK policies and procedures</u> The IRB member must exhibit knowledge and application of UK policies and procedures. IRB/ORI Standard Operating Procedures and the IRB Survival Handbook are available at https://www.research.uky.edu/office-researchintegrity/policies-guidance.
- <u>Federal regulations</u> There are several sets of federal regulations that apply to the review of research involving human subjects. It is the responsibility of the IRB member to be familiar with these regulations and understand when each set applies to protocols based upon the nature of the research. A summary of the core regulations is included in the IRB Resource Guide (i.e. 45 CFR 46 Subpart A, 21 CFR 50). The <u>IRB Resource Guide</u> includes copies of the key regulatory documents.

Responsibility 3: Attending Full Review Meetings - How important is IRB meeting attendance?

In order for an IRB meeting to be officially convened for full review, a quorum of at least half of the IRB member roster plus an additional member must be present. If a quorum is not established, no final actions can be taken upon the research protocols to be reviewed at that meeting and vital research may be greatly delayed. Also, Continuing Review approvals may lapse if a quorum is unavailable. In addition, each IRB member brings expertise to the review of research protocols. Each member has an important and unique contribution to make in the overall conduct of full reviews. Even if a quorum is obtained, the full review cannot be conducted without a nonscientist, scientist and, for FDA regulated studies, a physician.

When an IRB member is unable to attend a scheduled IRB meeting, he/she is expected to notify ORI so that an alternate representative for the absent member can be identified. It is important that ORI be notified early so that the alternate member has ample opportunity to review the agenda materials.

Responsibility 4: Avoid/Disclose IRB Member Conflict of Interest - What constitutes IRB member conflict of interest and how is it managed?

A conflict of interest involves any situation where an IRB member has significant personal or financial interest which has the potential to bias the design, conduct, reporting, or reviewing of the research.

Examples of a significant personal conflicting interest would be if the IRB member is:

- Principal Investigator (PI);
- Co-Investigator;
- Receiving funding from the study, as listed in the study budget;
- In a supervisory role over the PI of the study (e.g. faculty advisor); or
- Family member of the PI.

A conflict of interest is also whenever an IRB member has a significant financial interest in the research proposal. *Significant financial interest* is anything of monetary value, including, but not limited to:

• Salary or other payments for services (e.g., consulting fees or honoraria);

- Equity interests (e.g., stocks, stock options, or other ownership interests);
- A proprietary interest in the research such as a patent, trademark, copyright, or licensing agreements including royalties from such rights;
- A financial interest in the sponsor, product or service being tested;
 A position as an executive director or director of the agency or company sponsoring the research regardless of the amount of compensation;
- Any compensation that could be affected by the outcome of the research regardless of the amount of compensation.

Significant financial interest does NOT include:

- Salary, royalties, or other remuneration from the University;
- Income from seminars, lectures, or teaching engagements sponsored by public or non-profit entities;
- Income from service on advisory committees or review panels for public or non-profit entities:
- An equity or financial interest that when aggregated for the IRB member or consultant and the IRB member's or consultant's spouse and dependent children meets both of the following tests: does not exceed \$5,000 in value as determined through reference to public prices or other reasonable measures of fair market value and does not represent more than a 5% ownership interest in any single entity;
- Salary, royalties or other payments that when aggregated for IRB member or consultant and the IRB member's or consultant's spouse and dependent children over the next 12 months are not expected to exceed \$5,000.

IRB members should abstain from participating in an initial or continuing IRB review for a project in which the member has a conflicting interest (45 CFR 46.107d) except to provide information as requested.

IRB members who have a significant personal or financial conflict of interest regarding a project, which is scheduled to undergo IRB full review, should disclose the conflicting interest to the IRB and ORI. The IRB member should remove him or herself from the room during the IRB vote.

In the case that an IRB member is assigned a detailed protocol to review for a committee meeting or for exempt or expedited review, ORI staff should be notified as soon as possible so the review responsibility can be reassigned.

If an IRB member feels like he/she is pressured by undue influence, he/she should report it to the ORI Director (or Associate Director).

Responsibility 5: Developing IRB Policies – Does the IRB have a role in setting review policies?

Establishing policy that impacts the University's Comprehensive Human Research Protection Program is the responsibility of the institutional official (VPR), the Office of Research Integrity, academic administrators (e.g. deans), selected administrative units (e.g. Institutional Biosafety Committee), and the IRB.

The IRB role in developing policy usually focuses upon specific protocol review issues. IRB members may be asked to serve on IRB policy subcommittees or to review and comment on selected proposed policies.

Responsibility 6: Mandatory Education Requirements - What are the IRB members' mandatory education requirements?

The University of Kentucky's requirement for education in human subjects protection was initially implemented in response to the National Institute of Health (NIH) requirements (effective with October 2000 awards) of training. All investigators/key personnel conducting research involving human subjects, or data or biological specimens derived there from, are required to be trained in the protection of human subjects. Likewise, each IRB member is required to complete this education requirement and seek recertification every three years.

In addition, IRB members are asked to participate in IRB Orientation. IRB members are provided with ongoing continuing education opportunities.

Responsibility 7: Handling Allegations or Reports of Noncompliance – What is the IRB member role in handling alleged or reported cases of noncompliance?

Incidents of alleged noncompliance with federal or IRB policy and procedures are periodically reported to the IRB by subjects, family members, research staff, colleagues, ORI staff or other individuals at UK or within the community. Also, researchers report incidents of noncompliance with either approved IRB protocol procedures or University policy and procedures. The IRB Chair, ORI Director, ORI Quality Improvement Coordinator, Legal Counsel, and IRB members may be involved in serving on investigation committees, collecting information, interviewing respondents or complainants, reviewing and/or inspecting research records. The IRB makes a final determination regarding whether noncompliance occurred and if so, what sanctions or protocol/informed consent revisions are needed. A list of range of sanctions that the IRB can impose in cases of noncompliance are included in the Survival Handbook and in the Administrative Regulation 7.1.

Responsibility 8: Maintaining Confidentiality – What are IRB members responsibilities for maintaining confidentiality?

IRB members must maintain the confidentiality of any subject data that is presented to them in the review of research protocols. In addition, IRB members should maintain the confidentiality of all information collected from the researchers during the review. The IRB committee also handles sensitive information regarding noncompliance issues, and members are asked not to discuss these topics in their department, family, or any other outside settings. Each IRB member is asked to sign a confidentiality agreement documenting the commitment to maintaining confidentiality.

Responsibility 9: Determining When Federally Mandated Reports are Required – When must the IRB submit reports to federal regulatory agencies?

The IRB is subject to federal requirements to report certain issues that arise in the conduct of research. The University's ORI provides support to the IRB committee in the preparation of such reports. Per federal regulation, the Food and Drug Administration (FDA) and/or the Office for Human Research Protections (OHRP) should be notified when any of the following are directly related to the conduct of federally funded or FDA regulated research protocol:

- Any unanticipated problem involving risks to subjects or others;
- Any serious or continuing noncompliance with the regulations or requirements of the IRB;
- Any suspension or termination of IRB approval for research due to noncompliance.

The IRB is responsible for making a determination whether an incident meets these federal criteria for reporting to FDA, OHRP, or other applicable institutional or external agency.

Complete the following quiz after reviewing the course material to test your knowledge. Answers are available at the end of this document.

- 1. The historical framework of clinical research includes societal events such as tragic mistakes, well-intended errors, conflict of interest, human atrocities, and epidemic diseases all of which have contributed to the evolution of our regulatory structure. In 1979 the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research issued what document comprising the three ethical principles of justice, beneficence and respect for persons?
 - a. Declaration of Helsinki
 - b. Belmont Report
 - c. Nuremburg Code
 - d. Common Rule
- 2. Which of the following is **NOT** a fundamental ethical principle identified in the Belmont Report?
 - a. Non-maleficence
 - b. Respect for Persons
 - c. Justice
 - d. Beneficence
- 3. The principle of *respect for persons* requires consideration of what ethical standard(s)?
 - a. treat research participants as autonomous agents capable of making their own decisions
 - b. safeguard prospective participants that have diminished capacity to act as autonomous agents, such as children
 - c. adherence to practices to prevent invasion of privacy and assure confidentiality
 - d. all of the above
- 4. A research protocol using a standard marketed antibiotic instead of a placebo to compare investigational antibiotic is an example of applying which ethical principle?
 - a. Justice
 - b. Beneficence
 - c. Respect for Persons
 - d. none of the above
- 5. The IRB has the responsibility of reviewing any request by researchers to exclude selected subject populations.
 - a. True
 - b. False

- 6. In addition to vulnerable subjects listed in 45 CFR 46, the UK IRB has policies or guidance regarding use of all of the following **EXCEPT**:
 - a. IRB members as subjects
 - b. with impaired consent capacity
 - c. Students as subjects
- 7. Food and Drug Administration regulations apply to all of the following research protocols **EXCEPT:**
 - a. device
 - b. drug
 - c. survey
 - d. biologic (i.e. vaccine)
- 8. The probability and magnitude of harm or discomfort anticipated is no greater than what is ordinarily encountered in daily life or during performance of routine physical or psychological exam or test is:
 - a. minimal risk
 - b. maximum risk
 - c. risk ratio
 - d. relative risk
- 9. When assessing risks and benefits to subjects the IRB should consider all of the following **EXCEPT:**
 - a. risks to subjects are minimized
 - b. risks are reasonable in relation to anticipated benefits
 - c. possible long-range benefits such as effects on public policy
 - d. use of procedures consistent with sound research design
- 10. If a primary and alternate member attends the same meeting both individuals may vote.
 - a. True
 - b. False
- 11. IRB Members have six primary responsibilities.
 - a. True
 - b. False
- 12. A protocol initially reviewed by the convened IRB, must undergo continuation review:
 - a. at the conclusion of the trial
 - b. at least once every year
 - c. only if there is an allegation of non-compliance
 - d. only when there is a revision to the protocol

- 13. The IRB has authority to require revisions be made to a research protocol and is responsible for reviewing those revisions as well as any revisions an investigator should propose for already approved research protocols.
 - a. True
 - b. False
- 14. Under federal regulations, the types of reviews may be conducted using three mechanisms. Which of the following is NOT one of the three?
 - a. Exemption Certification
 - b. Expedited Review
 - c. Full Review
 - d. Exhaustive Review
- 15. Which review mechanism does not allow for disapproval of a research protocol?
 - a. Exemption Certification
 - b. Expedited Review
 - c. Full Review
- 16. The Primary Reviewer for a Full Review initial submission is responsible for a more indepth review of all the submission materials and informing the IRB of discrepancies, issues, omissions, etc.
 - a. True
 - b. False
- 17. The _____ IRB member reflects the interests of the public including prospective and current research participants particularly in regard to assessment of understandability of consent forms.
 - a. primary
 - b. community
 - c. physician
 - d. ad hoc
- 18. Failure to meet quorum for an IRB meeting could result in:
 - a. delay of vital research
 - b. lapse in Continuing Review approvals
 - c. added administrative efforts
 - d. any or all the above
- 19. A member or consultant with a conflict of interest cannot vote in any type of review including initial, continuing, modifications, adverse event/unanticipated problem, non-compliance, etc. This requirement applies to studies being reviewed using expedited or Full Review procedures.
 - a. True
 - b. False

- 20. Per federal regulation, the Food and Drug Administration (FDA) and/or the Office for Human Research Protections (OHRP) should be notified when any of the following are directly related to the conduct of federally funded or FDA regulated research protocol, **EXCEPT:**
 - a. Any protocol deviation
 - b. Any unanticipated problem involving risks to subjects or others
 - c. Any serious or continuing noncompliance with the regulations or requirements of the IRB
 - d. Any suspension or termination of IRB approval for research due to noncompliance
- 21. The mission of the Office of Research Integrity is to:
 - a. ensure compliance
 - b. promote ethical conduct
 - c. provide leadership
 - d. all the above

- 1. b. Belmont Report
- 2. a. Non-malficence
- 3. d. all of the above
- 4. b. beneficence
- 5. a. True
- 6. a. IRB members as subjects
- 7. c. survey
- 8. a. minimal risk
- 9. c. possible long-range benefits such as effects on public policy
- 10. b. False
- 11. b. False
- 12. b. at least once every year
- 13. a. True
- 14. d. Exhaustive Review
- 15. b. Expedited Review
- 16. a. True
- 17. b. community
- 18. d. any or all of the above
- 19. a. True
- 20. a. Any protocol deviation
- 21. d. all of the above