THE OHIO STATE UNIVERSITY

Secondary Use of Data and Specimens

Biomedical & Cancer

Part 1: Determining if Review is Required

Cheri Pettey, MA, CIP
Quality Improvement Specialist
Regulatory & Exempt Determinations

Objectives

- ✓ Review relevant definitions related to secondary use of data and/or specimens
- ✓ Explore the process used to determine when review is required for secondary research use of materials
- ✓ Discuss possible review outcomes

Overview

- Background
- Definitions, considerations, and review determinations
- Examples and FAQs
- Related Ohio State Human Research Protection Program (HRPP) policies and guidance

Background

- The volume of research involving secondary use of data and specimens has grown exponentially
- Current practices have evolved nationally to place greater emphasis on the ethical obligation to obtain prospective informed consent for collection and use of data and/or specimens for research and to reconsider research uses of data and specimens (particularly identifiable materials) for which consent was never obtained

Background (cont.)

- A multidisciplinary working group representing investigators, IRB leaders, and research administrators was convened
- Existing guidance, national and international standards, and peer institutions' policies and practices were considered and recommendations were forwarded to the IRB Policy Committee (IPC)
- The Research Involving Data and/or Biological Specimens Policy was updated and approved by the IPC to include recommendations from this working group

How do we determine review requirements?

There are three main questions*:

Definitions	Yes	No
Is the project *research* according to the applicable regulations (DHHS, FDA, etc.)?	continue	stop
Does the project involve *human subjects* according to the applicable regulations (DHHS, FDA, etc.)?	continue	stop
Is our institution *engaged* in the research involving human subjects?	continue	stop

*the order of the questions matters!

1. Is the project *research?*

Is the project *research* according to DHHS regulations?

A systematic investigation, including research development, testing, and evaluation, designed to develop or contribute to generalizable knowledge

Is the project *research* according to FDA regulations?

The FDA has defined “clinical investigation” to be synonymous with “research.”

Clinical investigation means any experiment that involves a test article and one or more human subjects that either

1. Meets the requirements for prior submission to FDA under sections 505(i) or 520(g) of the Food, Drug, and Cosmetic Act; or
2. Need not meet the requirements for prior submission to FDA under the sections noted above, but the results of which are intended to be later submitted to or held for inspection by FDA as part of an application for a research or marketing permit

Questions to ask:

- Is it systematic?
- What is the purpose of the project? Are there multiple purposes (quality improvement, teaching, clinical, research, etc.)?
- Are drugs or devices involved in a way that triggers FDA requirements?
- Is the project designed to develop or contribute to generalizable knowledge?
- How will the data and/or specimens be used?

Systematic Investigation:

A planned scientific or scholarly activity involving qualitative or quantitative data collection and/or data analysis that sets forth an objective(s) and a set of procedures intended to reach the objective(s), i.e., to acquire knowledge, develop a theory, or answer a question

Generalizable Knowledge:

Information from which one may infer a general conclusion; knowledge brought into general use or that can be applied to a wider or different range of circumstances

- For example, publication and presentation are typical methods used to disseminate research findings, thereby contributing to “generalizable knowledge.” However, not all information that is published or presented represents generalizable knowledge
- Generalizable knowledge is also interpreted to include data intended for general use, regardless of its eventual distribution or acceptance

Examples of activities involving secondary analysis that do not meet the definition of *research*:

- Data collection solely for internal departmental, school, or other university administrative purposes
- Data collection/analysis purely for internal quality improvement/assessment purposes

  Note: Other processes and requirements may still apply (HIPAA, FERPA, internal quality improvement and/or assessment review process, etc.)

Examples of activities involving secondary analysis that do not meet the definition of *research,* continued:

- Independent contract, commercial, or consultant activities conducted as a service or as work for hire without professional recognition as a collaborator (e.g., no authorship credit, no additional intended research use by Ohio State personnel)
  - e.g., a statistician hired by the State of Ohio to assist in project design and data analysis in order to create a report for the state (no additional research use/purposes)

2. Does the project involve *human subjects?*

Does the project involve *human subjects* according to DHHS regulations?

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

Does the project involve *human subjects* according to FDA regulations?

An individual who is or becomes a participant in research, either as a recipient of a test article or as a control. A subject may be either a healthy human or a patient. For research that involves medical devices, a human subject also includes an individual on whose specimen an investigational device is used.

Questions to ask:

- Is information about individuals collected?
- Is information about living individuals collected?
- Exactly what data points are being collected? From where/who? How?
- Are the sources public or private?
- Do the sources contain individually identifiable information?
- Is the development or testing of a device involved?

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 in order for accessing or obtaining the information to constitute research involving human subjects under DHHS rules

Individually Identifiable

Materials are considered individually identifiable when the identity of the participant is or may readily be ascertained by the investigator or the investigator's staff, or associated with the information

Note: Individually identifiable for the purposes of HRPP policy may be similar to, but is not the same as, individually identifiable health information or protected health information as defined by the HIPAA Privacy Rule at 45 CFR Part 160. Limited data sets released from data repositories with IRB approval to release such data sets are not considered to be individually identifiable

Protected Health Information (PHI)

Health information that is individually identifiable (contains at least one of the 18 HIPAA identifiers) and created or held by a covered entity

- HIPAA authorization is required when the data to be stored for future research include protected health information

HIPAA Identifiers

1. Names
2. All geographical subdivisions smaller than a State, including street address, city, county, precinct, zip code, and their equivalent geocodes, except for the initial three digits of a zip code in certain circumstances
3. All elements of dates (except year) for dates directly related to an individual, including birth date, admission date, discharge date, date of death; and all ages over 89 and all elements of dates (including year) indicative of such age, except that such ages and elements may be aggregated into a single category of age 90 or older
4. Phone numbers
5. Fax numbers
6. Electronic mail addresses

HIPAA Identifiers (cont.)

7. Social Security numbers
8. Medical record numbers
9. Health plan beneficiary numbers
10. Account numbers
11. Certificate/license numbers
12. Vehicle identifiers and serial numbers, including license plate numbers
13. Device identifiers and serial numbers
14. Web Universal Resource Locators (URLs)
15. Internet Protocol (IP) address numbers
16. Biometric identifiers, including finger and voice prints
17. Full face photographic images and any comparable images
18. Any other unique identifying number, characteristic, or code

3. Is Ohio State *engaged* in human subjects research activities?

Engaged: Involved in human subjects research in such a way (or to the extent) that the ethical and regulatory requirements for human subjects protection are applicable

An individual (or organization) generally becomes engaged in human subjects research when for the purposes of non-exempt research the individual (or organization's employee or agent) obtains any of the following:

- Data about research participants through intervention or interaction, identifiable private information about research participants, and/or informed consent of research participants

Note: An organization is also engaged in human subjects research whenever it receives a direct federal award to support non-exempt human subjects research

- The fact that Ohio State receives a federal award for work that involves non-exempt human subjects research automatically engages Ohio State in human subjects research requiring review (DHHS definitions), even if no activities are taking place at Ohio State or conducted by Ohio State researchers
- In general, Ohio State IRB review is required. In limited circumstances, we may cede IRB review to one of the other participating institutions, but this is done through a formal process facilitated by ORRP staff

When are individuals providing existing materials considered engaged in the research?

The Office of Human Research Protections (OHRP) does not consider the act of solely providing identifiable or coded materials (for example, by a tissue repository) to constitute involvement in the research conduct. However, if the individuals who provide the materials collaborate on other activities related to the project with the investigators who receive such information or specimens, then OHRP would consider such additional activities to constitute engagement in the conduct of the research

Examples of such additional activities include, but are not limited to: (1) the study, interpretation, or analysis of the data resulting from the coded information or specimens; and (2) authorship of presentations or manuscripts related to the research

Questions to ask:

- What activities will Ohio State personnel perform?
- What materials will Ohio State access or receive?
- What are the roles of external institutions/investigators?
- What agreements are in place?
- Is Ohio State the direct awardee on a federal grant?

???

After asking the three questions, there are four possible determinations:

1. The proposed project/activity is not regulated human subjects research (HSR) and may be conducted without requesting exemption or IRB review (no formal application needed); or
2. The proposed project/activity is regulated HSR, but Ohio State is not engaged in the research and the project may be conducted without requesting exemption or IRB review (no formal application needed); or

Possible Review Determinations (cont.)

3. The proposed project/activity is regulated HSR, Ohio State is engaged, and the project appears to meet the criteria for exemption from IRB review (an exempt application should be submitted); or
4. The proposed project/activity is regulated HSR, Ohio State is engaged, and the project requires IRB review (an IRB application should be submitted for expedited or convened review)

As a reminder:

We will address the specifics related to review type (i.e., exempt, expedited IRB, and convened IRB review), consent and HIPAA authorization requirements, and waiver requests in part 2 of this presentation series scheduled for September 20th

Examples

Case 1

A faculty member from Nursing wants to collect and analyze student demographics, student grades, and student assignments, as well as instructor demographics and instructor feedback for the past 5 years in all sections of two introductory level courses generally taught by new faculty

Does he need review?

We ask the three questions, in order:

Definitions	Yes	No
Is the project *research* according to the applicable regulations?	continue	stop
Does the project involve *human subjects* according to the applicable regulations?	continue	stop
Is our institution *engaged* in the research involving human subjects?	continue	stop

Is it *research* according to DHHS regulations?

A systematic investigation, including research development, testing, and evaluation, designed to develop or contribute to generalizable knowledge

Questions to ask-

- Is it systematic?
- Is it designed to develop or contribute to generalizable knowledge?
- What is the purpose of the project? How will the data be used?

Additional information provided:

The faculty member will analyze the data to compare the data from courses taught both before and after the implementation of a new instructor training program. The information he gathers will be used internally to evaluate and improve the training program

The data will not be used for any other purposes

Not Research

At Ohio State, we would determine that this project is not *research* (and therefore no human subjects review is required), as the purpose of the project is internal, programmatic development

The project is not intended to create, develop, or contribute to generalizable knowledge

But what if…

the faculty member also knew that in addition to using the data for internal purposes, he wanted to design the project and data collection to make claims applicable beyond Ohio State?

- Now this activity meets the federal definition of *research*
- Remember that when there is research intent (i.e., a project is designed to develop or contribute to generalizable knowledge) then review is still required even if the project is also intended for non-research purposes, such as quality improvement

Case 2

A doctoral student in the College of Public Health wants to access an existing, federal dataset. The data will be analyzed for her dissertation. It has already been established that the project meets the definition of *research* under the federal regulations

Does she need review?

We ask the three questions, in order:

Definitions	Yes	No
Is the project *research* according to the applicable regulations?	continue	stop
Does the project involve *human subjects* according to the applicable regulations?	continue	stop
Is our institution *engaged* in the research involving human subjects?	continue	stop

Does the project involve *human subjects* according to DHHS regulations?

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

Questions to ask-

- Is information about living individuals collected?
- Exactly what data is being collected? From where/who? How?
- Are the sources public or private?

Additional information provided:

All data can be accessed and downloaded directly from the website, without any special permissions. The doctoral student will not access a restricted version of the dataset or any versions requiring special permissions/approvals

Not Human Subjects Research

As all data can be accessed and downloaded directly from the website, it is considered freely available to the public and therefore the project does not include *human subjects* as defined by the federal definition (i.e., there is no identifiable, private information accessed or utilized)

But what if…

The student wanted to access a restricted (or non-public) version of the dataset?

- Then the project could be human subjects research requiring review. We would need to know what additional data points were going to be provided, and if the addition of those data points could make the information potentially identifiable

Note: Data holders sometimes mandate IRB review for restricted versions of datasets (even if otherwise de-identified)

Case 3

A faculty member contacts ORRP about a federal award received for a collaborative research project. Ohio State investigators will only be analyzing de-identified specimens, but there is some work being done with identifiable data at other institutions. Our investigator states that the external investigators are obtaining their own IRB approvals and asks if Ohio State IRB approval is also required

We ask the three questions, in order:

Definitions	Yes	No
Is the project *research* according to the applicable regulations?	continue	stop
Does the project involve *human subjects* according to the applicable regulations?	continue	stop
Is our institution *engaged* in the research involving human subjects?	continue	stop

Is Ohio State engaged in human subjects research requiring review?

Questions we ask:

- Is non-exempt human subjects research funded by the grant, even if these activities take place outside of Ohio State and are conducted by non-Ohio State investigators?
- Is the project FDA regulated?
- Is Ohio State engaged in the human subjects research activities? What are we actually receiving?
- Is Ohio State the direct awardee on the grant?

Additional information provided:

Ohio State is the primary awardee on the federal grant. The other sites will receive funds through Ohio State. The project is not FDA-regulated. The investigators confirm that non-exempt human subjects research activities are occurring at the other institutions.

Ohio State is engaged in human subjects research (DHHS) requiring review

- The fact that Ohio State receives a federal award for work that involves non-exempt human subjects research automatically engages our institution in human subjects research requiring review (DHHS definitions)
- Ohio State IRB review is required (in limited circumstances, IRB review may be ceded to one of the other participating institutions, but this is done through a formal process facilitated by ORRP)

But what if…

Ohio State was not the primary awardee on the grant?

- Then we need to know more about Ohio State's exact role in the project, and more details about the specimens and data points (if any) Ohio State investigators were going to be provided
- If the primary awardee was an institution other than Ohio State, the project was not FDA-regulated, and our role was only the analysis of completely de-identified materials with a data use agreement (DUA) in place that stated identifiers would never be released to Ohio State investigators, then Ohio State would not be engaged, and no human subjects review at Ohio State would be required

Frequently Asked Questions

How do I receive a written determination about the review requirements necessary for my project?

A determination can be requested from ORRP via email at ORRPDeterminations@osu.edu

- Investigators will need to provide sufficient materials for a determination: e.g., research protocol/description, grant (as applicable), information about collaborators, contracts/agreements (if any), and any study-specific materials (data points to be obtained)

- Upon receipt of complete information, review requirement determinations are usually made within five business days (additional information may be requested)

Am I required to seek a review determination any time I am using data or specimens?

No. At Ohio State, there is no requirement that an investigator seek a human subjects research review determination if he or she is certain that no human subjects research review is required

However, if an investigator is unsure of a project's review requirements, a determination should be requested from ORRP

In addition, funding agencies, data sources, specimen repositories, collaborators, etc. may require such determinations be made/documented before materials can be released or agreements can be processed

What is the difference between prospective and retrospective studies?

Retrospective studies collect or evaluate materials that are existing (on the shelf) at the time that the research is conceived and submitted for IRB review or exemption

Prospective studies plan to collect/evaluate at least some materials that are not yet in existence at the time the research is conceived and submitted for IRB review or exemption

Note: Studies may have both prospective and retrospective elements

Is there a difference between the rules for use of data and use of tissue?

In general, human subjects review requirements hinge on the DHHS and FDA (as applicable) definitions of research and human subject, and are therefore treated similarly in the human subjects research review process

It is important to remember that the FDA has a different definition of human subject that can include de-identified specimens. Also, there may be additional laws, rules, processes, and required protections for the use of data vs. specimens (e.g., FERPA, HIPAA, GINA, IBC, etc.) to consider

i am only using data and/or specimens from deceased individuals; do I need IRB review or exemption?

No. Use of existing materials from deceased individuals (e.g., autopsy materials) does not constitute research with human subjects. Note that other laws, university processes, and requirements may still apply (e.g., biosafety/IBC review, HIPAA, material transfer agreements (MTAs), DUAs, etc.)

Do case reports require IRB review or exemption?

It depends. If the project is limited to one or two case reports, (defined as a factual description of the clinical features and/or outcomes of the case(s) without any additional testing, evaluation, analysis, or review of others for comparison), then no review is required. Three or more reports, or projects involving additional testing, evaluation, analysis, or comparison require IRB review or exemption (as applicable)

Even if no IRB review or exemption is required, investigators will still need to work with the stewards of the records to determine whether permission is required, to satisfy other requirements (e.g., FERPA, HIPAA), and to complete the proper forms for data access/use

Do I need IRB review or exemption if I am purchasing materials from a commercial entity?

No, in general, unless the research is both FDA-regulated and from living individuals (or those of unknown status). As long as the research is not subject to FDA regulations (which includes in-vitro device development/testing and data collection for reports or applications to the FDA), and the materials are not otherwise restricted from use in the state of Ohio, then no human subjects research review is required to use commercially available materials. You will still need to obtain any other non-human subjects research approvals and agreements, as necessary (e.g., IBC, IACUC, MTAs, purchasing agreements, etc.)

Do I need IRB review or exemption if I am receiving materials from a public database or public registry?

No, as long as the source is truly publicly available (i.e., available to anyone on request, without qualification or restriction). If obtaining a restricted version dataset or a dataset considered not truly publicly available, then review may be required if the data is considered identifiable or potentially identifiable

Note: Individually identifiable for the purposes of HRPP policy may be similar to, but is not the same as, individually identifiable health information or protected health information as defined by the HIPAA Privacy Rule at 45 CFR Part 160. Limited data sets released from data repositories under DUAs with IRB approval to release such data sets are not considered to be individually identifiable

I have left-over or existing materials from a research project; can I de-identify them and share them with other investigators or use them myself without review?

No. An investigator may not de-identify data and/or specimens under his or her control (such as materials collected by the investigator for another study) in order to share them with others or use them for future research without IRB review and approval

Secondary (i.e., “new”) use of materials obtained for primary research purposes by an investigator with IRB approval (or exemption) requires either IRB review of an amendment or submission of a new protocol describing the proposed secondary use. Informed consent may also be required for this new use, depending on the scope of the original consent and the newly proposed research

HRPP Policies, Links, and Guidance

HRPP Polices

http://orrp.osu.edu/irb/osuirbpolicies/hrpppolicies/

HRPP Glossary

http://orrp.osu.edu/irb/osuirbpolicies/hrppglossary/

FAQs

http://orrp.osu.edu/irb/irb-faqs/

Ohio State Research Involving Data and/or Biological Specimens Policy:

http://orrp.osu.edu/irb/osuirbpolicies/hrpppolicies/

FERPA Policy

https://registrar.osu.edu/policies/privacy_release_student_records.pdf

Student Data

http://oesar.osu.edu/

HIPAA Guidance

http://orrp.osu.edu/irb/investigator-guidance/hipaa/

Ohio State University Privacy Officers

http://orrp.osu.edu/files/2011/10/privacyofficers_060115.doc

Questions?


OSU.EDU
Help BuckeyeLink Map Find People Webmail Search Ohio State
OFFICE OF RESEARCH
Office of Responsible Research Practices
THE OHIO STATE UNIVERSITY
Home About Us Animal Care and Use Biosafety Human Subjects Resources Contact Us News
Protecting Human Subjects in Research at Ohio State
Human Subjects
The Human Research Protection Program is responsible for all Ohio State research involving human subjects. The HRPP's primary responsibility is to protect the rights and welfare of human research subjects, in accordance with Department of Health and Human Services (DHHS) and Food and Drug Administration (FDA) regulations.
NEWS
Spring 2015 IRB Newsletter now available
POSTED: MARCH 26, 2015
New System for IRB and Exempt Submissions