



## **POLICY ON RESEARCH DATABASES AND SPECIMEN REPOSITORIES**

06/01/04

### **Introduction**

Databases and specimen repositories (sometimes called registries, banks, or libraries) are used to store data and/or specimens for future use. When the use is for clinical purposes or quality improvement (QI), IRB approval is not required. However, when the use is for research purposes, the databases/repositories must be approved by the IRB. The databases/repositories must satisfy the requirements of the Common Rule (45CFR46) for protection of human research subjects and the requirements of the Privacy Rule, i.e., the Health Insurance Portability and Accountability Act (HIPAA) (45CFR160 and 164), for protection of health information. Further information is available on the NIH website [http://privacyruleandresearch.nih.gov/pdf/research\\_repositories\\_final.pdf](http://privacyruleandresearch.nih.gov/pdf/research_repositories_final.pdf)

Research databases/repositories require consent and authorization (C/A) by participants for the storage and future research use of their data/specimens or a waiver of C/A by the IRB. Exemption from IRB review is not an option if the data/specimens retain an identifier or a link that would permit anyone to identify, directly or indirectly, the person whose data/specimens are stored.

### **DUHS GUIDELINES FOR RESEARCH DATABASES/REPOSITORIES**

**A. When used for a specific research study.** When the data/specimens are stored in a database/repository for use only in a designated specific research study, a description of the storage and use must be included in the IRB protocol and in the C/A form for the specific study.

**B. When used for future research studies.** When the data/specimens are stored for use in future studies other than, or in addition to, one designated specific study, the IRB requirements differ according to where the database/repository is maintained, as follows:

**1. Maintained at DUHS.** When the database/repository is maintained partly or completely at DUHS, a separate IRB protocol must be submitted for the database/repository itself. The protocol should include the following:

**a. Purpose of the database/repository.** Describe the type of research to be done with the data and/or specimens. Describe the database/repository not as a research study itself, but rather as the source of data/specimens for future (usually unspecified) research studies. To avoid confusion, do not use the word "study" when referring to the database/repository in the protocol narrative or in the C/A form, because no research studies will occur under the sole auspices of this database/repository protocol.

**b. Separate protocols for research studies.** A statement should be made in the database/repository protocol that separate IRB approval will be requested for each specific research study that uses data/specimens from the database/repository. Each study is considered to be a research activity that is separate from the database/repository itself.

**c. Data/specimens to be included.** Describe the data/specimens to be included, their sources, and the process of acquisition. If some of the data/specimens have been or are to be collected at sites outside of DUHS for storage at DUHS, include a recommended collection plan and C/A document for distribution to data/specimen collectors and possible use by their local IRBs. Confirm that documentation of local IRB approval will be provided to the DUHS IRB for each site contributing data/specimens to the DUHS database/repository.

**d. Security and confidentiality.** Describe how and where data/specimens will be stored, and how the privacy of subjects and the confidentiality of data will be protected. A Certificate of Confidentiality is recommended, but not required, as an additional protective measure. If a Certificate of Confidentiality is to be requested, the IRB first could approve the database protocol contingent on receipt of the certificate. The appropriate institute at the National Institutes of Health may then issue the Certificate. The Certificate relieves the investigator of any obligation to identify a participant in answer to a subpoena from state or federal court or from local civil or criminal authorities. The federal government need not fund the research for the research to be eligible for a Certificate. Also, subjects must be informed when a Certificate is in effect. The participant must be told that the Certificate does not apply to child abuse reporting, to reportable communicable diseases, or to threats of violence to self or others.

**e. Access to the data/specimens.** Describe who will have access to the data/specimens, what the requirements for access are, and who will control access.

**f. Consent and authorization (C/A).** Describe how C/A will be obtained from subjects, or why waiver of C/A is justified.

(1) Written C/A.

(a) Content: The C/A form should contain all the basic elements for C/A required by federal regulations. (See Attachment 1.) Be sure to have a clear statement in the C/A form that the subjects are giving permission for their data and/or specimens to be stored in the database/repository in order to be used in future research studies relating to the stated area of investigation. In the future, when an IRB protocol is submitted for each specific study, the IRB will consider a request for waiver of C/A (provided that all criteria for the waivers have been met) given that subjects have expressed their willingness to have their data/specimens used in future research.

(b) Separate C/A Forms: In the past, combination of C/A for a specific study and for a database/repository in a single compound C/A form has been the usual practice. However, the new policy requires separate forms with separate signatures for the specific study and for the database/repository.

(2) Waiver of C/A. Waiver of C/A can be granted by the IRB as follows:

(a) For inclusion of data and/or specimens that have been collected in the past from DUHS patients for other research studies or solely for clinical or QI purposes. The federal criteria must be met for waiver of consent [45CFR46.116(d)] and waiver of authorization [45CFR164.512(i)(1)and(2)]. (See Attachment 2.) The principal requirements for waiver are:

- i. No more than minimum risk, and
- ii. No adverse effect on rights or welfare, and
- iii. Research cannot “practicably be carried out” without the waiver. At the present time there is no specific federal guidance for defining “practicably.” The DUHS IRB interprets the regulation to mean that C/A can be waived for use of data/specimens from patients who have been seen at DUHS in the past, but who are not expected to be seen at DUHS on a regular and frequent basis in the future. Patients who are expected to return soon should be asked for written C/A at their next visit. OR

(b) For inclusion of data and/or specimens that will be collected in the future from DUHS patients for other research studies or solely for clinical or QI purposes, provided that the federal criteria for waiver of consent and authorization have been met, as well as all of the requirements of the *DUHS Policy on Exemption of Research that Uses Coded Specimens or Coded Protected Health Information*. Databases/repositories cannot be exempted under this exemption policy because the policy applies only to specific research studies. OR

(c) For inclusion of data and/or specimens that will be collected in the future, provided that the federal criteria for waiver of consent and authorization have been met, and also that both of the following conditions have been satisfied:

- i. The data/specimens will be collected for purposes other than submission to this database/repository, e.g., solely for clinical purposes, QI, or prior IRB-approved research, and
- ii. The data/specimens are entered into the database/repository without any identifiable private data or information, i.e., none of the 18 HIPPA identifiers [45CFR164.514(b)(2)(i)] and no codes or links of any sort maintained either by the submitter or by the database/repository that would permit access to identifiable private information about the individual from whom the data/specimens were obtained.

**2. Maintained outside of DUHS.** When the database/repository is maintained outside of DUHS, and also there is no DUHS IRB protocol for a related specific study, then a separate protocol and C/A form are required for the external database/repository that follow the guidelines above for DUHS databases/repositories. On the other hand, when there is a DUHS IRB specific study protocol, then a separate IRB protocol is not required for the database/repository. However, the following are required:

**a. Description.** The external database/repository must be described within the IRB protocol for the related specific study. Details are required on the purpose of the database/repository, the type and source of data/specimens, the process of acquisition, how and where data/specimens will be stored, who will have access to the data/specimens, how access will be managed, how the privacy of subjects and the confidentiality of data will be protected, and whether a Certificate of Confidentiality has been obtained.

**b. Assurances.** The DUHS IRB requires either documentation of local IRB approval at the database/repository site (such as at an academic institution), or written assurances from the keeper of the outside database/repository (such as with an industry sponsor) that the subjects' privacy will be protected adequately. These assurances can be provided as part of a data use agreement between DUHS and the institution or sponsor maintaining the database/repository or in a separate document. The assurances are those required by HIPAA for data use agreements [45CFR164.514(e)(4)], i.e., appropriate safeguards are to be used to ensure that protected health information (PHI) is not used or disclosed inappropriately, and no attempt will be made to identify the individuals to whom the PHI pertains, or to contact such individuals except as otherwise stipulated in the C/A form. The wording of the assurance may vary depending upon the specific characteristics of the database/repository and other circumstances.

**c. Consent and authorization (C/A).** Describe how C/A will be obtained from subjects, or why waiver of C/A is justified.

(1) Written C/A.

(a) Content: The C/A form should contain all the basic elements for C/A required by federal regulations. (See Attachment 1.) Be sure to have a clear statement in the C/A form that the subjects are giving permission for their data and/or specimens to be stored in the database/repository in order to be used in future research studies relating to the stated area of investigation. In the future, when an IRB protocol is submitted for each specific study, the IRB at the proposed site for the specific study will consider a request for waiver of C/A (provided that all criteria for the waivers have been met) given that subjects have expressed their willingness to have their data/specimens used in future research.

(b) Compound or Separate C/A Form: C/A for an external database/repository may be included within the C/A form for the related specific research study, i.e., a compound C/A form, or in a separate C/A form. When a compound C/A form is used, there should be a separate section of the form in which the subject gives separate C/A for participation in the external database/repository, with the option to decline. However, research-related treatment, payment, or eligibility for benefits must not be conditioned on C/A for either one of the two research activities (i.e., database/repository and specific study) and not the other.

(2) Waiver of C/A. Waiver of C/A can be granted by the DUHS IRB as follows:

(a) For inclusion in the external database/repository of data and/or specimens that have been collected in the past from DUHS patients for other research studies or solely for clinical or QI purposes. The federal criteria must be met for waiver of consent [45CFR46.116(d)] and waiver of authorization [45CFR164.512(i)(1)and(2)]. (See Attachment 2.) The principal requirements for waiver are:

- i. No more than minimum risk, and
- ii. No adverse effect on rights or welfare, and
- iii. Research cannot "practicably be carried out" without the waiver. At the present time there is no specific federal guidance for defining "practicably." The DUHS IRB interprets the regulation to mean that C/A can be waived for use of data/specimens from patients who have been seen at DUHS in the past, but who are not expected to be seen at DUHS on a regular and frequent basis in the future. Patients who are expected to return soon should be asked for written C/A at their next visit. OR

(b) For inclusion of data and/or specimens that will be collected in the future from DUHS patients for other research studies or solely for clinical or QI purposes, provided that the federal criteria for waiver of consent and authorization have been met, as well as all of the requirements of the *DUHS Policy on Exemption of Research that Uses Coded Specimens or Coded Protected Health Information*. Databases/repositories cannot be exempted under this exemption policy because the policy applies only to specific research studies, OR

(c) For inclusion of data and/or specimens that will be collected in the future, provided that the federal criteria for waiver of consent and authorization have been met, and also that both of the following conditions have been satisfied:

- i. The data/specimens were collected for purposes other than submission to this database/repository, e.g., solely for clinical purposes, QI, or prior IRB-approved research, and
- ii. The data/specimens are entered into the database/repository without any identifiable private data or information, i.e., none of the 18 HIPAA identifiers [45CFR164.514(b)(2)(i)] and no codes or links of any sort maintained either by the submitter or by the database/repository that would permit access to identifiable private information about the individual from whom the data/specimens were

obtained.

**C. Conversion of a Clinical Database/Repository to a Research Database/Repository.** Data/specimens that have been stored in a database/repository solely for clinical or QI purposes in the past can be moved into a research database/repository under an IRB waiver of C/A. Ordinarily, this would occur only once per research use because care must be taken to ensure that the continued collection of such data/specimens occurs solely for non-research purposes.

**D. Conversion of a Research Study Protocol to a Research Database/Repository Protocol.**

Some currently approved IRB protocols include not only a specific research study, but also a research database/repository to store data/specimens for future studies. When the research database/repository is maintained at DUHS for use in future studies, the protocol should be split into a separate protocol for the specific study and a separate protocol for the database/repository, with separate C/A forms. This is primarily a paperwork activity to reword the protocol summaries and C/A forms to meet the requirements outlined above. Subjects who are currently enrolled under the combined protocol usually will not have to be re-consented because they have already given C/A for both the specific study and the database/repository. Future subjects in the research study must sign separate C/A forms for the specific study and the database/repository.

## **ATTACHMENT 1: Basic Elements of Consent and Authorization**

### **COMMON RULE BASIC ELEMENTS OF CONSENT [Excerpts quoted from 45CFR46.116(a)]**

- “(a) ...statement that the study involves research...purposes of the research...expected duration...procedures to be followed...and identification of any procedures which are experimental,
- (b)...risks or discomforts,
- (c) ...benefits,
- (d)...alternative procedures or...treatment, [Not applicable for minimum risk studies.]
- (e)...extent to which...confidentiality of records...will be maintained,
- (f)...compensation...and... available medical treatments if injury occurs, [Not applicable for minimum risk studies.]
- (g)...whom to contact...for questions about the research and research subject’ rights,
- (h)...participation is voluntary...refusal...will involve no penalty...and the subject may discontinue participation at any time.”

### **PRIVACY RULE (HIPAA) CORE ELEMENTS AND REQUIRED STATEMENTS FOR USE OR DISCLOSURE OF PHI [Excerpts quoted from 45CFR164.508(c)]**

- “(a) Core Elements...
- i ...information to be used or disclosed,
- ii ...identification of the person(s)...authorized to make the requested use or disclosure,
- iii...identification of the person(s)...to whom [DUHS] may make the requested use or disclosure,
- iv...each purpose of the requested use or disclosure,
- v...an expiration date...of the use or disclosure,
- vi...signature of the individual and date.
- (b) Required Statements...
- i...individual’s right to revoke the authorization in writing,
- ii...condition treatment...on the authorization,
- iii...potential for information...to be subject to redisclosure...and no longer protected.
- (c) Plain Language Requirement...
- (d) Copy to the Individual...”

## **ATTACHMENT 2: Requirements for Waiver of Consent and Authorization**

### **COMMON RULE WAIVER OF CONSENT [45CFR46.116(d)]**

“An IRB may approve a consent procedure which does not include, or which alters, some or all of the elements of informed consent set forth in this section, or waive the requirements to obtain informed consent provided the IRB finds and documents that:

- (1) The research involves no more than minimal risk to the subjects;
- (2) The waiver or alteration will not adversely affect the rights and welfare of the subjects;
- (3) The research could not practicably be carried out without the waiver or alteration; and
- (4) Whenever appropriate, the subjects will be provided with additional pertinent information after participation.”

### **PRIVACY RULE (HIPAA) WAIVER OF AUTHORIZATION [45CFR164.512(i)(2)(ii)]**

“Waiver criteria. A statement that the IRB or privacy board has determined that the alteration or waiver, in whole or in part, of authorization satisfies the following criteria:

- (A) The use or disclosure of protected health information involves no more than a minimal risk to the privacy of individuals, based on, at least, the presence of the following elements;
- (1) An adequate plan to protect the identifiers from improper use and disclosure;
  - (2) An adequate plan to destroy the identifiers at the earliest opportunity consistent with conduct of the research, unless there is a health or research justification for retaining the identifiers or such retention is otherwise required by law; and
  - (3) Adequate written assurances that the protected health information will not be reused or disclosed to any other person or entity, except as required by law, for authorized oversight of the research study, or for other research for which the use of disclosure of protected health information would be permitted by this subpart;
- (B) The research could not practicably be conducted without the waiver or alteration; and
- (C) The research could not practicably be conducted without access to and use of the protected health information.”

A "Request for Waiver or Alteration of Consent and HIPAA Authorization" form may be found on the IRB website.