RECOMMENDATIONS

RECOMMENDATION 1: DETERMINE THE CONDITIONS UNDER WHICH INDIVIDUAL RESEARCH RESULTS WILL BE RETURNED TO PARTICIPANTS

When conducting research involving the testing of human biospecimens, investigators and their institutions should routinely consider whether and how to return individual research results on a study-specific basis through an informed and thoughtful decision-making process.

RECOMMENDATION 2: DEVELOP A QUALITY MANAGEMENT SYSTEM FOR RESEARCH LABORATORIES TESTING HUMAN BIOSPECIMENS

The National Institutes of Health (NIH) should lead an interagency effort including nongovernmental stakeholders to develop an externally accountable quality management system for non-Clinical Laboratory Improvement Amendments of 1988 (CLIA) certified research laboratories testing human biospecimens.

RECOMMENDATION 3: ENSURE THE HIGH QUALITY OF INDIVIDUAL RESEARCH RESULTS THAT ARE RETURNED TO PARTICIPANTS

To provide confidence in the quality of research test results disclosed to participants, institutions and their IRBs should permit investigators to return individual research results if:

A. testing is conducted in a CLIA-certified laboratory; or

B. results are not intended for clinical decision making in the study protocol (as defined in Box S-3) and testing is conducted under the externally accountable quality management system for research laboratories once established (see Recommendation 2); or

C. results are not intended for clinical decision making in the study protocol (as defined in Box S-3) and the IRB determines that:

   1. the probability of value to the participant is sufficiently high and the risks of harm are sufficiently low to warrant return;

   2. the quality of the laboratory analysis is sufficient to provide confidence in the result to be returned, as determined by a review process independent of the laboratory; and

   3. information will be provided to the participant(s) regarding limits on test validity and interpretation (see Recommendation 10).

B and C will require changes to the CLIA regulations, embodied in Recommendation 12, or changes to the interpretation of the CLIA regulations.

RECOMMENDATION 4: ENSURE ADEQUATE RESOURCES AND INFRASTRUCTURE TO GENERATE HIGH-QUALITY RESEARCH RESULTS

When research institutions and funding agencies should develop and provide access to the resources and infrastructure needed to ensure that investigators conducting testing on human biospecimens can meet the necessary standards for quality, so that research test results can be returned to participants (see Recommendation 3). This may include assisting investigators and their research laboratories in:

A. training and access to resources to prepare for the future adoption of the externally accountable quality management system for research laboratories (see Recommendation 2);

B. adopting the externally accountable quality management system for research laboratories once established for relevant laboratories (see Recommendation 2); or

C. becoming CLIA certified or facilitating access to core, affiliated, or third-party CLIA-certified laboratories for sample testing, re-testing, or a confirmatory testing process when research results are for use in clinical decision making in a study protocol.

RECOMMENDATION 5: INCORPORATE PARTICIPANT NEEDS, PREFERENCES, AND VALUES IN DECISION MAKING ABOUT THE RETURN OF INDIVIDUAL RESEARCH RESULTS

Research stakeholders should ensure that participant needs, preferences, and values are incorporated into decision making regarding the return of individual research results. To facilitate this:

A. Investigators should seek information through various mechanisms, including reviewing published literature, leveraging experiences from similar studies, consulting participant or community advisory boards, and engaging community and participant groups and advocacy organizations in the development of the research protocols;

B. Research institutions and sponsors should enable and facilitate investigator access to the relevant community and participant networks, resources, and training; and

C. Research sponsors should engage community and participant representatives in the development of policy and guidance related to the return of individual research results.

RECOMMENDATION 6: INCLUDE PLANS FOR THE RETURN OF INDIVIDUAL RESEARCH RESULTS IN RESEARCH PROTOCOLS

For all studies using human biospecimens, investigators should routinely address their plans regarding the return of individual research results in their funding application or research protocol. The investigator's plan should describe:

A. whether individual research results will be offered to participants and, if so, when and how. The plan should also provide the rationale for these decisions, including how participant needs, preferences, and values were considered;

B. how the consent process will reflect transparency and effective communication with participants regarding whether and, if so, how individual results will be offered;

C. how investigators and their institutions will respond if participants request their results, including how information in the designated record set will be released to participants when they have a right to access their individual research results under HIPAA; and

D. the budget and resources for the return of individual research results, when appropriate.

RECOMMENDATION 7: ENSURE PLANNING FOR THE RETURN OF INDIVIDUAL RESEARCH RESULTS IN APPLICATIONS FOR FUNDING

Research sponsors and funding agencies should ensure that investigators are considering whether and how individual research results will be returned to participants, by:

A. requiring that applications for research funding consistently address the return of individual research results, indicating whether, and if so, when and how individual research results will be offered to research participants, as well as the rationale for these decisions;

B. including in the scientific review process for funding applications an assessment of plans for the return of individual research results; and

C. building funding into grants and contracts or providing administrative supplements for the return of individual research results.

RECOMMENDATION 8: DEVELOP POLICIES AND PROCEDURES TO THE SUPPORT REVIEW OF PLANS REGARDING THE RETURN OF INDIVIDUAL RESEARCH RESULTS

Research institutions and their institutional review boards (IRBs) should develop policies and procedures that support the assessment of plans for the return of individual research results. Policies and procedures should ensure that:

A. the IRB has, or has access to, the necessary expertise to review the return of individual research results plans;

B. appropriate consideration has been given to participant needs, preferences, and values (see Recommendation 5);

C. the research teams have access to the appropriate expertise (e.g., a scientific review committee) to consider the factors relevant to decisions on returning individual research results, including analytic validity, clinical validity, and the value of the results to participants;

D. the consent process is aligned with the return of individual research results plan (see Recommendation 9); and

E. the investigators have access to the necessary resources (e.g., core resources) and expertise to enable the communication of individual research results in an effective manner (see Recommendation 10).

RECOMMENDATION 9: ENSURE TRANSPARENCY REGARDING RETURN OF INDIVIDUAL RESEARCH RESULTS IN THE CONSENT PROCESS

In the consent process, investigators should communicate in clear language to research participants:

A. which individual research results participants can access, if requested, including any results participants have a legal right to access under HIPAA, and how to request these results; and

B. which individual research results, if any, will be offered to participants and why, and the participant's option to decline to receive their research results.

C. If results are going to be offered the following elements should also be communicated during the consent process:

   1. the risks and benefits associated with receiving individual research results;
   2. conditions under which researchers will alert participants of urgent results;
   3. at what time and through what process results will be communicated to participants;
   4. whether the results will be placed in the participant's medical record and whether the results will be communicated to the participant's clinician; and
   5. when relevant to the research protocol, the participant's option to have results shared with family members in the event the participant becomes incapacitated or deceased.

RECOMMENDATION 10: ENABLE UNDERSTANDING OF INDIVIDUAL RESEARCH RESULTS BY RESEARCH PARTICIPANTS

Whenever individual research results are communicated to participants, investigators and institutions should facilitate understanding of both the meaning and the limitations of the results by:

A. ensuring that there is a clear takeaway message and necessary reference information to convey what is known and not known about both the meaning of the result and potential clinical implications;

B. communicating effectively the level of uncertainty in the result validity;

C. providing mechanisms for participants to obtain additional information and answers to questions when appropriate and feasible;

D. providing guidance for follow-up actions/consultations when appropriate;

E. aligning the communication approaches to the particular needs and preferences of the participants and the context of the study;

F. providing a written summary of the results and other information communicated to participants for future reference by participants and investigators; and

G. leveraging existing and emerging health information technologies to enable tailored, layered, and large-scale communications when appropriate.

RECOMMENDATION 11: EXPAND THE EMPIRICAL EVIDENCE BASE RELEVANT TO THE RETURN OF INDIVIDUAL RESEARCH RESULTS

To expand the empirical evidence base relevant to the return of individual research results, sponsors and funding agencies should support additional research to better understand the benefits and harms of the return of results as well as participant needs, preferences, and values and to enable the development of best practices and guidance.

RECOMMENDATION 12: REVISE AND HARMONIZE REGULATIONS TO SUPPORT THE RETURN OF INDIVIDUAL RESEARCH RESULTS

Regulators and policy makers should revise and harmonize the relevant regulations in a way that respects the interests of research participants in obtaining individual research results and appropriately balances the competing considerations of safety, quality, and burdens on the research enterprise.

Specific actions that should be taken include

A. Because the designated record set (DRS) is intended to include information used to make decisions about individuals, those decisions should be based on test results that are of sufficient quality to be valuable for decision making. Accordingly, the Office for Civil Rights (OCR) of the Department of Health and Human Services (HHS) should define the DRS to include only individual research results generated in a CLIA-certified laboratory or under the externally accountable quality management system for research laboratories (see Recommendation 2);

B. OCR should require all Health Insurance Portability and Accountability Act (HIPAA)-covered entities that conduct research on human biospecimens to develop a plan that is reviewed and approved by the IRB for the release of individual research results in the designated record set to participants in a responsive manner when requested under HIPAA;

C. Centers for Medicare & Medicaid Services (CMS) should revise CLIA regulations such that when there is a legal obligation under the HIPAA access right to return individual research results, a laboratory will not be considered in violation of CLIA and need not obtain CLIA certification before satisfying this legal obligation;

D. CMS should revise CLIA regulations to allow research results to be returned from a non-CLIA-certified laboratory when they are not intended for clinical decision making in the study protocol (as defined in Box S-3) and the laboratory conducts its testing under the quality management system with external accountability or the IRB has approved the return of results (as described in Recommendation 3);

E. CMS and OCR should harmonize the definitions of the following terms, providing a clear explanation and justification for any differences or discrepancies: “test report” and “completed test report” (CLIA), and “PHI in the designated record set” (HIPAA);

F. OCR, Office of Human Research Protections (OHRP), and NIH should harmonize the definitions of the following terms, providing a clear explanation and justification for any differences or discrepancies: “de-identified” (HIPAA), “non-identified” (Common Rule), and “identifiable sensitive information” (21st Century Cures Act regarding certificates of confidentiality);

G. HHS (including CMS, The U.S. Food and Drug Administration [FDA], NIH, OHRP) should ensure that all regulations, policies, and guidance relevant to human research refer to research “participants” rather than research “subjects,” in accordance with the ethical principles of autonomy and respect for persons; and

H. FDA should clarify and provide additional guidance that if a device is not exempt from investigational device exemption (IDE) regulations, disclosure of results in many circumstances, including to healthy volunteers, will not necessarily entail significant risk, and FDA should clarify when it will consider the return of individual research results to entail significant risk. Additionally, FDA should provide guidance to IRBs on how to determine significant risk if the device is not exempt from IDE regulations.

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