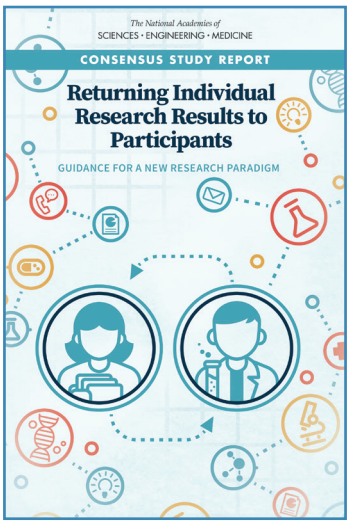
Consensus Study Report

July 2018

HIGHLIGHTS

Returning Individual Research Results to Participants

Guidance for a New Research Paradigm



Conducting research with human participants depends on a collaborative, productive relationship: Volunteers give their time and biospecimens, and investigators and their teams conduct research to make scientific discoveries that improve the health of patients, communities, and society. While the sharing of individual research results with participants has not traditionally been a part of the research process, the last several decades have begun to emphasize greater transparency and engagement with participants throughout the research enterprise. The return of individual research results is one way to engage and show respect for research participants; however, the risks—such as returning unvalidated or poor-quality results—and associated burdens on the research enterprise are competing considerations that need to be balanced.

In this context, an ad hoc committee of the National Academies of Sciences, Engineering, and Medicine reviewed the current evidence on the benefits, harms, and costs of returning individual research results, while also considering the ethical, social, operational, and regulatory aspects of the practice. The resulting report, *Returning Individual Research Results to Participants: Guidance for a New Research Paradigm,* offers a process-oriented approach to returning individual research results that considers the value to the participant, the risks and feasibility of return, and the quality of the research laboratory.

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The justification for returning results becomes stronger as both the potential value of the result to participants and the feasibility of return increase.

REGULATORY BACKGROUND

Recent significant changes to federal regulations have promoted transparency and allowed people greater access to their clinical and research test results. One such change is the elimination of the laboratory exclusion from the Health Insurance Portability and Accountability Act (HIPAA) privacy rule. Under HIPAA, people have the right to inspect and obtain a copy of their protected health information. Since 2014, this right now also applies to HIPAA covered laboratories.

In 2017, the Department of Health and Human Services announced changes to the "Common Rule" that deals with the protection of human research subjects. In the revisions, investigators must disclose their plans on whether "clinically relevant research results, including individual research results," will be returned to participants.

In contrast to these changes, the Clinical Laboratory Improvement Amendments of 1988 (CLIA) regulation prevents laboratories that are not CLIA certified from reporting individual research results. And with increasing frequency, academic and industry-sponsored studies use non-CLIA-certified laboratories to conduct tests, sometimes involving cutting-edge methods, presenting a challenge for investigators who want to return results. While CLIA was established to ensure patient safety through requiring certain quality controls and standards for clinical laboratories, this poses a dilemma for investigators when research results that are clinically relevant or otherwise valuable or of interest to participants are generated in research laboratories that are *not* CLIA certified.

THE COMMITTEE'S RECOMMENDATIONS

The committee's report includes 12 recommendations to help (1) support decision making regarding the return of results on a study-by-study basis, (2) promote high-quality individual research results, (3) foster participant understanding of individual research results, and (4) revise and harmonize current regulations. To read the full text of the committee's recommendations, please visit **nationalacademies.org/ReturnofResults.**

Support Decision Making Regarding the Return of Results on a Study-by-Study Basis

Decisions on whether to return individual research results will vary depending on the characteristics of the research, the nature of the results, and the interests of participants. The justification for returning results becomes stronger as both the potential value of the result to participants and the feasibility of return increase. Investigators should not make assumptions about the kinds of results that participants may value and should incorporate participant needs, preferences, and values into their decision-making process.

The responsible return of individual research results requires careful forethought and preparation. Thus, the committee recommends that investigators include plans in study protocols that describe whether results will be returned and, if so, when and how, and that research sponsors and funding agencies require that applications for funding consistently address the issue. Additionally, institutions and institutional review boards (IRBs) should develop policies to support the review of plans to return individual research results.

Promote High-Quality Individual Research Results

Confidence in the validity of individual research results is critical to decisions about whether to return results to participants. Requirements established by CLIA were designed to ensure the quality of results from clinical laboratories but are not appropriate or feasible for all research laboratories. However, no alternative exists that defines basic quality standards for research laboratories in the United States. To promote the quality of results returned and to improve the reproducibility of science, the committee recommends that the National Institutes of Health (NIH) lead an effort to develop a quality management system (QMS) for research laboratories testing human biospecimens.

When individual research results are intended for clinical decision making in the study protocol, investigators must continue to perform tests only in laboratories that are CLIA certified. However, when results are not intended for clinical decision making in the study protocol, IRBs should permit the return of results under the recommended QMS—once developed—or after

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determining that the laboratory analysis is sufficient to provide confidence in the result, the value to participants outweighs the risks, and appropriate disclaimer information on the limitations of the validity and interpretation of the individual's result is provided.

Foster Participant Understanding of Individual Research Results

Once the decision is made to return individual research results to participants, investigators and institutions should communicate those results in a manner that conveys the key takeaway messages and fosters participants' understanding. Doing so requires providing contextualizing information and explanations that convey what is known and unknown about the meaning and potential clinical implications of the results, including the level of uncertainty in the results' validity. Communications should be appropriate for participants with different needs, capabilities, resources, and backgrounds. The development of evidence-based best practices, which will require the systematic evaluation of the effectiveness of various approaches, will improve the quality of the process of returning individual research results.

Revise and Harmonize Current Regulations

As currently written and implemented, the regulations governing access to research laboratory test results are not harmonized: they afford inconsistent and inequitable access for participants, and regulatory conflicts create dilemmas for laboratories, investigators, and institutions. For example, while Centers for Medicare & Medicaid Services (CMS) prohibits the return of results from laboratories that are not CLIA-certified, in some circumstances HIPAA may require the return of results requested by a participant, regardless of whether they were generated in a CLIA-certified laboratory. Accordingly, the committee recommends that regulators 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. For example, CMS should revise CLIA regulations to allow for the return of results from non-CLIA certified laboratories when results are requested under the HIPAA access right and also when an IRB process determines it is permissible. However, the Office for Civil Rights of the Department of Health and Human Services should limit access to individual research results under HIPAA to those generated in a CLIA-certified laboratory or in a research laboratory compliant with the recommended externally accountable QMS for research laboratories.

CONCLUSION

Adoption of the committee's recommendations will take time, permitting an increase in the return of individual results as stakeholders prepare for such responsibilities and develop the necessary expertise, infrastructure, policies, and resources. Although initial investments will likely be significant, the return on those investments—increased participant trust and engagement with the research enterprise, as well as higher quality standards for research laboratories—will be worthwhile.

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To read the full report, please visit
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