Impact of Proposed Federal Research Regulation Amendments
(the Common Rule NPRM) on Life Sciences Companies

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On Sept. 8, 2015, the U.S. Department of Health and Human Services (HHS), along with 15 other federal departments and agencies,1 issued a Notice of Proposed Rulemaking (NPRM) to revise significantly the Federal Policy for the Protection of Human Subjects (the “Common Rule”),2 the set of regulations that governs research conducted, funded or otherwise subject to regulation by the federal government. The NPRM marks the first systematic attempt to overhaul the Common Rule since its promulgation in 1991, and sets forth proposals to modify requirements for biospecimen research, improve the understandability of consent forms, mandate single institutional review board (IRB) oversight of cooperative U.S. research and establish data security safeguards.

Even though the NPRM would apply directly only to research funded by the federal government and to certain “clinical trials,”3 several NPRM proposals would impact the way in which industry-sponsored research is conducted. Accordingly, even commercial life sciences companies that do not conduct federally funded research4 but that sponsor or fund research at institutions

1 The following federal departments and agencies are signatories to the Notice of Proposed Rulemaking: HHS, Department of Homeland Security, Department of Agriculture, Department of Energy, National Aeronautics and Space Administration, Department of Commerce, Social Security Administration, Agency for International Development, Department of Justice, Department of Labor, Department of Defense, Department of Education, Department of Veterans Affairs, Environmental Protection Agency, National Science Foundation and Department of Transportation.


3 The NPRM would expand the scope of the Common Rule to cover “clinical trials,” defined as “a research study in which one or more human subjects are prospectively assigned to one or more interventions (which may include placebo or other control) to evaluate the effects of the intervention on biomedical or behavioral health-related outcomes.” § .102(b) (80 Fed. Reg. at 54,047). To be covered by the Common Rule, a “clinical trial” must be conducted at a U.S. institution that receives federal research funding and not be otherwise subject to FDA regulations. § .101(a)(2) (80 Fed. Reg. at 54,045).

4 For purposes of this article, “federally funded research” includes both research that is federally funded and research...
conducting any federally funded research, should pay close attention to how these proposed revisions could affect their research efforts. Moreover, according to the NPRM, “FDA intends to modify its regulations in light of this NPRM, to the extent appropriate, considering its unique statutory framework and regulatory mission.”

Thus, life sciences companies that sponsor or conduct research subject to FDA jurisdiction, despite not being directly subject to the Common Rule, should anticipate that FDA regulations will follow suit, unless otherwise prohibited by the Federal Food, Drug, and Cosmetic Act, or other enabling statute for FDA regulations, or if misaligned with the agency’s mission. The NPRM therefore presents considerable implications for a wide range of stakeholders across the life sciences industry, including drug, device and biological product manufacturers.

**Background**

Since 1991, the nature, volume and settings of clinical research have undergone sizable shifts. While much biomedical research continues to be conducted in academic medical centers, more research is being conducted in outpatient clinics and in physician group practices, as well as in clinical care settings that combine an individual’s research and medical data. In addition, the number of biospecimen repositories and large clinical databases has risen dramatically. Research is also expanding in geographic scope, with studies often conducted at multiple domestic and international sites and across research networks. Further, new technologies, including genomic sequencing, are rapidly increasing the data to which investigators have access. Correspondingly, the nature of risks has shifted. Researchers may not interact directly with research subjects, instead analyzing information obtained from medical records, administrative claims data and existing biospecimens stored in repositories, which transfers the risks from physical harms to informational concerns related to privacy and confidentiality.

On July 26, 2011, the Office of the Secretary of HHS, in coordination with the Executive Office of the President’s Office of Science and Technology Policy, published an advance notice of proposed rulemaking (ANPRM) requesting comment on 74 questions related to how current regulations for protecting human subjects in research could be modernized and revised to become more effective in the current research context. In response, HHS received over 1,000 comments, and revised the proposal based, in part, on the public input.

The NPRM aims to “better protect human subjects involved in research, while facilitating valuable research and reducing burden, delay, and ambiguity for investigators.” Like the ANPRM, the NPRM actively seeks public input on numerous proposals and questions, recognizing that public trust in medical research is essential to its success. The 90-day comment period is set to close on Dec. 7, 2015, unless it is extended.

**Significant Proposed NPRM Changes and Implications for Life Sciences Companies**

I. Informed Consent (§ .116)

The NPRM proposes significant changes to the content and process of consent for research that would be subject to the Common Rule, in an effort to facilitate a prospective subject’s decision about whether to participate in research.

To streamline and shorten consent forms, the NPRM would require that information in consent forms be organized and presented in a way that does not merely provide lists of isolated facts, but rather facilitates the prospective subject’s understanding of the reasons why one might, or might not, want to participate. When obtaining informed consent, the NPRM would require that the investigator present first the Common Rule-required information, before providing any other information to the subject, which would be included in an appendix. In addition, the NPRM would require that consent forms provide information that a reasonable person would want to know in order to make an informed decision about whether to participate. This standard (derived from tort law) may impose further disclosures beyond the required elements, depending on the nature, risks, benefits and alternatives of the study.

Regarding future research uses of data, the NPRM would introduce a new basic element related to the potential for downstream transfer and research use of de-identified data. Specifically, the NPRM would require consent forms to disclose to subjects either that: (i) identifiers might be removed from the data and that the non-identified data could be used for future research studies or distributed to another investigator for future research studies without additional informed consent from the subject; or (ii) subject’s data collected as part of the research would not be used or distributed for future research studies, even in a non-identified form.

Further, the NPRM proposes three new additional elements to be included in consent forms when appropriate: (i) in regard to future research use of biospecimens, a statement that the subject’s biospecimens may be used for commercial profit and whether the subject will or will not share in this commercial profit; (ii) a statement whether clinically relevant research results, including individual research results, will be disclosed to

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11 Id.
12 See, e.g., 76 Fed. Reg. 54,408 (Sept. 1, 2011) (public comments on the ANPRM initially were requested by Sept. 26, 2011, but in response to public requests for an extension, HHS extended the comment period until Oct. 26, 2011).
15 Id.
16 Id.
subjects, and if so, under what conditions; and (iii) an option for the subject to consent, or refuse to consent, to investigators re-contacting the subject to seek additional information or biospecimens or to discuss participation in another research study.

The NPRM also seeks to increase transparency and facilitate the development of more informative and meaningful consent forms. To that end, the NPRM proposes to require that a copy of the final version of the consent form for clinical trials conducted or supported by a Common Rule department or agency be posted on a publicly available Federal website.21 Within 60 days after a trial closes to recruitment, the posting would include the consent document, the name of the clinical trial and information about whom to contact for additional details.22 The NPRM explains that the primary purpose of this mandate is to improve the quality of consent forms for research subject to the Common Rule by assuring that such documents become subject to public scrutiny.23 With knowledge that consent forms would become publicly available, albeit redacted for any proprietary or subject-level data, and thus subject to close analysis by academic researchers, the federal government and plaintiffs attorneys, researchers and research institutions may begin authoring the documents with even more of a risk-management perspective. In turn, research institutions, such as large academic medical centers, probably will begin to adopt template informed consent forms for their federally sponsored research studies, and such templates will predictably be preferred also for industry sponsored studies. Life sciences companies that sponsor clinical trials therefore should be prepared to be presented with consent forms that reflect the new NPRM provisions, if the NPRM is finalized in its current form, and it would not be surprising if, after a period of transition, industry practice in drafting informed consent forms begins to conform to the new provisions applicable to federally funded research. Moreover, if, as is anticipated, FDA conforms its own regulations to the ultimately adopted NPRM changes, to the extent consistent with FDA statute and regulatory mission, then these consent form content and presentation requirements would be directly applicable to industry sponsored studies.

II. Expanding ‘Human Subject’ To Cover All Biospecimens, Even De-Identified Biospecimens (§ .102(e)(1))

At present, the Common Rule does not apply to the research use of de-identified biospecimens because the current regulatory definition of “human subject” means “a living individual about whom an investigator (whether professional or student) conducting research obtains data through intervention or interaction with the individual, or identifiable private information.”24 HHS does not consider research involving only coded biospecimens to meet the current definition of “human subject” if: (i) the biospecimens were not collected specifically for the proposed research through interaction or intervention with living individuals, and (ii) the investigator(s) cannot readily ascertain the identity of the individual(s) to whom the coded biospecimens pertain—because, for example, the investigators and the holder of the key enter into an agreement prohibiting the release of the key to the investigators, or there are IRB-approved written policies for a repository that prohibit the release of the key to the investigators.25

The NPRM would expand the scope of “human subject” to cover all biospecimen collections for research and all research uses of biospecimens, regardless of whether the biospecimens are identifiable or de-identified, if those biospecimens are collected or used in federally funded research.26 As a consequence, under the NPRM, the storage, maintenance and secondary research use of biospecimens could be exempt from the Common Rule if the research satisfies, among other provisions, broad consent, limited IRB review27 and data security protection requirements.28 If the investigator anticipates that individual research results will be returned to a research subject, the biospecimen research cannot be exempted and instead must be reviewed by the IRB, and standard informed consent for the research must be obtained.29

III. Broad Consent for Storage, Maintenance and Secondary Research Use of Biospecimens (§ .116(c))

Under the NPRM, broad consent for future research use of biospecimens would include certain basic elements, additional elements, and new elements. For the storage, maintenance, or secondary research use of the biospecimens to be exempt, an HHS-provided broad consent template must be used and obtained from the human sources of the biospecimens.30 Although these requirements, as stated above, largely apply only to federally funded research, life sciences companies receiving biospecimens that were collected in federally funded research will be required to adhere to the Common Rule’s requirements of IRB review and data security safeguards.31

The existing basic elements for informed consent generally that must also be included in broad consent are: (i) a description of reasonably foreseeable risks or discomforts; (ii) a description of any benefits to the subject or to others that may reasonably be expected; (iii) a statement describing the extent, if any, to which confi-

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21 § .116(b) (80 Fed. Reg. at 54,054).
22 § .116(b) (80 Fed. Reg. at 54,054-54,055).
24 45 C.F.R. § 46.102(f).
26 See footnote 4.
27 Under the NPRM, limited IRB review would entail only an IRB’s determination that: (i) procedures for obtaining broad consent for storage, maintenance and secondary research use of biospecimens will be conducted in accordance with the first paragraph of § .116, and (ii) if there will be a change for research purposes in the way the biospecimens are stored or maintained, that the privacy and information protection standards are satisfied for the creation of any related storage database or repository. § .111(a)(9) (80 Fed. Reg. at 54,051).
30 § .104(f) (80 Fed. Reg. at 54,049) and § .116(d) (80 Fed. Reg. at 54,054) (if the HHS-established broad consent template is not used, the broad consent and the secondary research use would be subject to IRB review (80 Fed. Reg. at 53,966)).
31 § .105(c) (80 Fed. Reg. at 54,049-54,050).
dentiality of records identifying the subject will be maintained; and (iv) an explanation of whom to contact for answers to pertinent questions about the research and subjects’ rights, and whom to contact in the event of research-related injury.

The NPRM proposes new additional elements applicable to all informed consent when appropriate (as described above), which also must be included in the so-called “broad consent”: (1) a statement that the subject’s biospecimens may be used for commercial profit and whether the subject will or will not share in this commercial profit; (ii) a statement explaining whether clinically relevant research results, including individual research results, will be disclosed to subjects, and if so, under what conditions; and (iii) an option for the subject to consent, or refuse to consent, to investigators re-contacting the subject to seek additional information or biospecimens or to discuss participation in another research study.

The NPRM further prescribes certain consent elements unique and specific to broad consent, including: (1) a general description of (i) the types of research that may be conducted with biospecimens/information, (ii) the information that is expected to be generated from the research, (iii) the types of biospecimens/information that might be used in research and (iv) the types of institutions that might conduct research with the biospecimens/information; (2) a clear description of the types of biospecimens or information that were or will be collected and the period of time during which biospecimen or information collection will occur; (3) a description of the period of time during which an investigator can continue to conduct research on the biospecimens/information (can be indefinite); (4) a statement that subjects may at any time and without penalty or loss of benefits, withdraw consent, if feasible, for research use or distribution of the subject’s information or biospecimens, though data or biospecimens already distributed for research use may not be retrieved; and (5) an option, if relevant, for an adult subject to consent or refuse to consent to the inclusion of the subject’s data, with removal of the identifiers subject to consent or refuse to consent to the inclusion of the subject’s data, with removal of the identifiers that might be used in research and subject to the storage and maintenance for secondary research use of biospecimens and identifiable private information. This requirement would, in turn, require not simply that broad consents be obtained and preserved, but that refusals to give broad consent must be tracked until the deaths of each patient who refused consent. Otherwise, it would be impossible to assure, in a waiver application, that all human sources of the biospecimens in question had not refused a broad consent.

The NPRM does not elucidate the “compelling” standard, although it states that waiver under these more rigorous standards would be granted only “in very rare circumstances.” Under what conditions exploratory research, for example, could meet this criterion remains unclear. Also, to determine whether a research project could be conducted using other biospecimens for which consent has been or could be obtained would create a considerable due diligence effort and present logistical challenges for a researcher to survey all potential biobanks and determine the availability of the banked biospecimens.

Finally, although current FDA regulations lack a general provision for waiver of informed consent for minimal risk research, the recently passed House version of the 21st Century Cures Act would grant FDA statutory authority to promulgate a general waiver of consent provision for minimal risk research, with appropriate safeguards in place to protect subjects’ rights, safety and welfare. In light of these NPRM waiver criteria, even the addition of an FDA waiver of consent might be of little help to life sciences companies and their funded researchers, if FDA ultimately adopts waiver criteria that are the same as those set forth in the NPRM.

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32 This may include all biospecimens and information from the subject’s medical record or other records existing at the institution at the time informed consent is sought. In addition, for biospecimens or information initially collected for non-research purposes, the period of time during which biospecimens or information collection will occur cannot exceed 10 years from the date of consent. For research involving children as subjects, that time period cannot exceed 10 years after parental permission is obtained or until the child reaches the legal age for consent to the treatments or procedures involved in the research, whichever time period is shorter. § 116(c)(1)(ii) (80 Fed. Reg. at 54,053).

33 45 C.F.R. § 164.512(h)(2)(ii)(C).


V. Limitations on Transfer of Biospecimens Collected in Research

Under the NPRM, unless otherwise required by law, institutions and investigators may release biospecimens collected for research subject to the Common Rule only for, among other purposes: (1) any lawful purpose with the consent of the subject; or (2) other research purposes if the institution or investigator has obtained adequate assurances from the recipient that:

(i) the recipient will implement and maintain Common Rule-prescribed data security safeguards;

(ii) except for certain low-risk research, the research has been approved by an IRB before release of the biospecimens; and

(iii) the recipient will not further release the biospecimens except for Common Rule-regulated human subject research, or other permitted purposes.\textsuperscript{38}

The proposal would mandate that “recipients” of biospecimens, even of de-identified biological samples, be subject to the Common Rule’s requirements for data security protections and IRB review unless the subject consents to the release of the biospecimens to the recipient.

On this issue, the NPRM would represent a marked departure from current practice, in which life sciences companies can obtain and use biospecimens so long as such transfer and secondary research uses are not inconsistent with the terms of the original informed consent that allowed for the biospecimen collection. For example, under the current Common Rule, a life sciences company typically can obtain from an academic medical center stored, identifiable biospecimens for use in the life sciences company’s internal research, provided that the initial informed consent permits storage of the biospecimens and does not limit the transfer or secondary research use of the biospecimens in such a way as to preclude shipment to and use of the biospecimens by the life sciences company. In such a situation, even if the biospecimens in question had been collected under federally funded research and even if the biospecimens were identifiable, the recipient of the biospecimens (the life sciences company) currently would not be subject to the Common Rule. (Note, however, that there may be other applicable federal requirements regarding data privacy and IRB review, such as a data use agreement with the academic medical center to satisfy the requirements of HIPAA,\textsuperscript{39} or IRB review if the company’s internally conducted research constitutes a “clinical investigation” under the Federal Food, Drug, and Cosmetic Act.\textsuperscript{40})

By startling contrast, the NPRM, however, would subject life sciences companies to federal requirements for IRB review and data security measures based on the receipt of biospecimens that were collected during federally funded research. Unless the consent of the research subject has been obtained for the transfer and secondary research use of that subject’s biospecimens, the life sciences company could not obtain the biospecimens for research purposes unless the company imple-

\textsuperscript{38} § .105(c) (80 Fed. Reg. at 54,049-54,050).


\textsuperscript{40} See 21 C.F.R. Parts 50, 56, 312 and 812.
long the collected biospecimens can be used.\textsuperscript{41} Thus, the company would be responsible for tracking each batch of biospecimens collected under different broad consents to allow only for the research use of those biospecimens for which consent is still valid under the terms of the consent form (which could be indefinitely).

Given the increased importance of biospecimen research to life sciences companies for the development of drugs, devices and biological products, the NPRM, if finalized in its current form, could force meaningful changes to the external and internal research practices of many such companies, to the extent that industry research, either internally conducted or sponsored at other institutions, rely on biospecimens collected from federally funded research. Most alarmingly, however, if FDA follows these NPRM Common Rule requirements with its own parallel regulations, this would mean that even internal industry research and research sponsored at external institutions not otherwise subject to FDA jurisdiction, if using biospecimens collected in studies under FDA jurisdiction, may require IRB review and approval, and adherence to data security standards. That would represent a level of intrusiveness of regulation in the inner research workings of life sciences companies that has little or no precedent in U.S. law.\textsuperscript{42}

VI. Single IRB Mandate for Cooperative Research (§ _._114)

The NPRM would mandate that all institutions located in the U.S. engaged in cooperative research covered by the Common Rule rely on a single IRB as the reviewing IRB for that study.\textsuperscript{43} Cooperative research subject to the Common Rule would include federally funded “research” and “clinical trials,” as that term is defined in the NPRM, that are conducted at an institution that receives federal funding and are not subject to FDA’s regulations.\textsuperscript{44} The single IRB would be selected by the federal department or agency supporting or conducting the research, or by the lead institution if there is no such funding agency or department. The NPRM requirement would not apply to cooperative research for which more than single IRB review is required by law (e.g., FDA-regulated device studies).

The NPRM clarifies that this proposal would not relieve any site of its other obligations under the regulations to protect human subjects. Although a local IRB may conduct its own additional internal review, such a review would not be binding on the local site if not adopted by the single IRB, and its terms would not be enforced by OHRP.

The single IRB requirement would directly apply to clinical studies sponsored by life sciences companies and not federally funded only in the rare instance in which such research constitutes a “clinical trial,” as conducted at a U.S. institution and not otherwise subject to FDA jurisdiction. Nevertheless, the requirement may lead to an overall increase in the use of single IRB review in industry sponsored trials because institutions may develop a general policy on the use of single IRBs for all research conducted at the institution once acclimated to the process of using central IRBs for federally funded research. Further, if as anticipated, FDA adopts a similar standard for clinical trials under FDA jurisdiction, unless prohibited by federal law, such as for FDA-regulated device clinical trials, this would indicate a nearly uniform requirement for the use of central IRBs in multi-site, industry sponsored clinical trials. While this would represent a massive strengthening of life sciences companies’ ability to force use of central IRBs in their sponsored trials, it would mark an erosion in the influence and importance of IRBs based within individual research institutions.

VII. Data Security Safeguards (§ _._105)

As discussed in Section V above, the NPRM proposes to require, for the first time, that institutions conducting research subject to the Common Rule implement specific data security safeguards. Life sciences companies would be required to implement these safeguards if they receive biospecimens that were collected in federally funded research, for which no consent was obtained permitting the release of the biospecimen to the life sciences company. The required safeguards are intended to protect against risks to the security or integrity of biospecimens or identifiable private information, as well as protect from any intentional or unintentional use, release or disclosure of biospecimens or identifiable private information.\textsuperscript{45}

The NPRM would allow investigators and institutions to implement either (i) safeguards that meet the standards in the HIPAA rules, or (ii) specific measures to be published by HHS.\textsuperscript{46} The specific measures to be published by HHS include security safeguards to limit access to physical biospecimens or information, ensure that access to electronic information is only authorized for appropriate use and ensure that biospecimens posing informational risks to subjects be protected. Therefore, life sciences companies would be required to adopt an adequate set of data security safeguards in order to receive biospecimens collected from research subject to the Common Rule.

VIII. Compliance Dates

The NPRM proposes an effective date of the final rule to be one year after publication in the Federal Register.\textsuperscript{47} The compliance date also would be one year, except for certain transition provisions in which human subjects (including de-identified biospecimens) were involved prior to the compliance dates.\textsuperscript{48} Research involving the use of prior collections of biospecimens would be grandfathered under the NPRM if the biospecimens were collected before the compliance date of the final rule, and the individually identifiable information associated with the biospecimens has been removed.

Conclusion

The NPRM includes extensive and substantive revisions to the Common Rule, which could considerably

\begin{itemize}
\item \textsuperscript{41} § _._116(c)(1)(ii) (80 Fed. Reg. at 54,053).
\item \textsuperscript{42} Note that in some cases, state laws regarding genetic testing and other handling of specific categories of medical information (e.g., genetic test results, mental health information) may apply to internal company research, even if FDA regulations do not.
\item \textsuperscript{43} § _._114(c)(1)(ii) (80 Fed. Reg. at 54,052).
\item \textsuperscript{44} § _._101(a) (80 Fed. Reg. at 54045).
\item \textsuperscript{45} § _._105(a) (80 Fed. Reg. at 54,049).
\item \textsuperscript{46} § _._105(b) (80 Fed. Reg. at 54,049).
\item 80 Fed. Reg. at 53,992.
\item § _._101(k) (80 Fed. Reg. at 54,046-54,047).
\end{itemize}
affect the internal and external research practices of the
life sciences industry. Each of the NPRM proposals is
made more acute for life sciences companies by the
likely prospect that new FDA regulations would follow
the principles laid down in the NPRM, consistent with
FDA statutes and its regulatory mission. The NPRM
seeks active public engagement on the proposed regu-
latory text, on the numerous questions identified for
public comment and on the alternative schemes dis-
cussed in the preamble. The proposed rule will be open
for public comment until Dec. 7, 2015, unless an exten-
sion is granted. Life sciences companies should not as-
sume that these proposed NPRM requirements will
have no affect on their internal and external operations,
and should take care lest principles enacted in the final
issuance of Common Rule reforms be carried over di-
rectly into new or revised FDA regulations.