# Clinical Trials & Data Sharing and other policy priorities

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Deputy Director for Science, Outreach, and Policy NIH

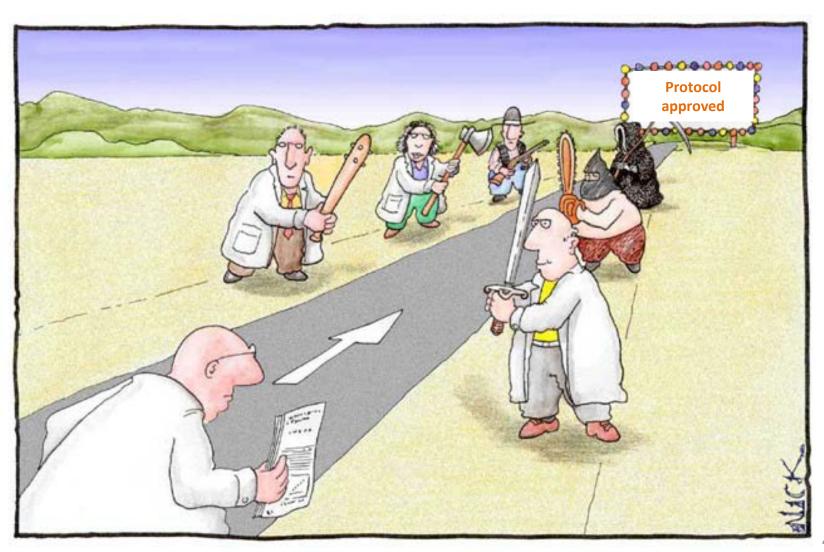
**December 12, 2014** 

## **Topics**

- Single IRB
- Standard of care research
- Clinical trials results reporting

## Single IRB

## IRB Review: There has GOT to be a better way



## NIH Models of Single IRBs

- NCI Central IRB (CIRB)
- NeuroNEXT
- StrokeNet
- Others in development (e.g., CTSAs)

## Why Move to a Single IRB of Record?

- Multiple IRB review does not appear to enhance protections for participants
- Single IRB review reduces costs and review time, and increases consistency
- Consistent with Common Rule reform mandate (as described in the ANPRM)
- Concept has been tested by NIH and others

## Why Move to a Single IRB of Record?

#### Reduces review time

- NCI CIRB review 34 days faster than local review
- Staff spent an average of 6.1 fewer hours on protocols that received
   CIRB review for a cost saving of \$717
- 1<sup>st</sup> NeuroNEXT protocol reviewed by the Central IRB achieved full approval to allow participant enrollment within 56 days<sup>3</sup>

#### Reduces costs

- Multiple IRB review = \$431 \$799/protocol
- NCI CIRB review = \$91 \$106/protocal

Sources: Wagner, et al, J Clin Oncol. 2010 Feb 1;28(4):662-6.; Kaufmann, et al, Acad Med. 2014 Nov 18

## Why Move to a Single IRB of Record?

#### Increases consistency

"Lack of uniformity in the review process creates uneven human subjects protection and incurs considerable inefficiency" – McWilliams *et al*, 2003

 17/20 multicenter trials with local review showed inconsistencies in the review and the resulting recommendations

#### Specific examples:

- Pediatric protocol, 34 IRBs<sup>1</sup> 13 approved w/o changes, 18 conditional approvals, 3 deferred approval
- Observational health services research protocol, 43 IRBs
  - ~4680 hours of staff time over 19 months
  - Protocol review: 1 found the protocol exempt, 10 eligible for expedited review, 31 required full review, 1 rejected as too risky

## **Investigator Preferences**

NIH-funded study (2014), human genetics researchers were asked

How important would the following be to facilitating genomic research, on a scale of 1 to 10, where 1 is not at all important and 10 is very important: A single IRB of record for multi-site studies.

- 30% rated single IRB as a 10
- 61% rated as an 8 or higher
- 75% rated as a 7 or higher
- 10% rated as a 4 or lower

## **Investigator Preferences**

2006 survey of NCI CIRB investigators found that:

- 80 percent believed that participation in the CIRB saved them some or a lot of time and effort
- 65 percent rated their overall experience with the review board as good or very good

# **Building Evidence to Inform Policy** *FY 2014 Bioethics Awards*

#### Central IRBs overseeing multisite studies (2 awards)

- Using real world decisions to develop a modified central IRB model
   Understand the rationale used when selecting a cIRB, including barriers; evaluating alternative models on key outcomes (e.g. ethical quality, efficiency of review)
- Central IRBs: Enhanced Protections for Human Research Participants?
  - Characterize organizational aspects and procedural features of cIRBs; assess differences between local and central review;

# Draft NIH Policy on the Use of a Single IRB for Multi-Site Research

- NIH-funded multi-site studies in U.S.
- Single IRB identified by the applicant; IC has final approval
- Costs of fee-based IRB review will be included in the award as a direct cost
- Exceptions allowed if:
  - A designated IRB is unable to meet the needs of specific institutions or populations; or
  - Local IRB review is required by federal, tribal, or state laws or regulations.

# Draft NIH Policy on the Use of a Single IRB for Multi-Site Research

- Published in the NIH Guide on December 3<sup>rd</sup>
- 60 day comment period
- We've heard a lot already
- PRIM&R meeting in Baltimore
- AAU, APLU, AAMC hosted a call with us and several of their members
- Support the general concept; strong concerns about implementation
- We are interested in institution experience, different models, existing evidence comparing central to local review

## Standard of Care Research

#### **SUPPORT**

Surfactant, Positive Pressure and Pulse Oximetry Randomized

- DESIGN: 1,316 infants (24-27 wks ga) randomized within standard of care: 85-89% or 90-95% oxygen saturation (AAP rec. 85-95)
- STUDY: Carried out at >20 Sites from 2004 2009
- QUESTION: Ideal oxygen saturation targets for preterm infants?
- GOAL: Identify the target that would minimize the risk of ROP;
   no known increased risk of death within SOC range
- RESULTS:
  - ROP was reduced at lower range
  - Incidence of death increased at lower range;16.2% to 19.9% (P = 0.04) Unexpected



### **SUPPORT: OHRP's Position**

Surfactant, Positive Pressure and Pulse Oximetry Randomized

- Study involved "substantial risks" that were not disclosed.
- "the level of oxygen being provided to some infants, compared to the level they would have received had they not participated, could increase the risk of brain injury or death."
- Randomizing to arms both within the standard of care places participants at risk.

"Their position is apparently that informed consent forms need to inform parents not only of known risks and of possible risks, but also of risks that the investigators did not think were possible – even after those risks have been shown not to exist."

John Lantos, 4/18/13

Hastings Bioethics Forum

## **SUPPORT:** *Divided Community*

#### And those who don't

#### Those who agree with OHRP

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#### CORRESPONDENCE



#### The OHRP and SUPPORT

TO THE EDITOR: We are a group of scholars and that the institutional bodies responsible for releaders in bioethics and pediatrics with extensive viewing SUPPORT failed to exercise appropriate

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#### CORRESPONDENCE



#### P and SUPPORT — Another View

TO THE EDITOR: We are a group of physicians, bioethicists, and scholars in allied fields who agree with the Office for Human Research Pro-

from usual clinical care, and that information should have been included in the consent forms. About half the forms indicated that because

## NIH weighs in



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## Perspective

#### In Support of SUPPORT — A View from the NIH

Kathy L. Hudson, Ph.D., Alan E. Guttmacher, M.D., and Francis S. Collins, M.D., Ph.D.

Each year in the United States, nearly 500,000 infants — 1 in every 8 — are born prematurely, before 37 weeks of gestation. Despite substantial advances in their care, premature infants face a

daunting array of challenges; they are at high risk for death in infancy and face severe and lifelong health problems if they survive. The National Institutes of ized Trial (SUPPORT), carried out at more than 20 sites between 2004 and 2009, sought to identify, in infants born very prematurely at 24 to 27 weeks' gestaence in mortality between the two treatment groups in SUPPORT — one with the oxygen saturation target of 85 to 89%, the other with the target of 91 to 95%.

An important finding of the study was a reduced incidence of ROP in the lower oxygen-saturation range. However, contrary to what was known at the time, the study also showed a slightly but

# **Building Evidence to Inform Policy** *FY 2013 Bioethics Awards*

NIH-funded studies on ethical issues surrounding standard of care, FY13

- U Penn; Laura Dember, Scott Halpern
   Understand how patients value physician autonomy to choose treatment strategies within the standard of care
- UC Irvine; Susan Huang
   Insight into expected improvements in healthcare (QI) and what constitutes research
- Duke, Johns Hopkins; Rob Califf, Jeremy Sugarman
   Preferences about research & consent in the setting of usual care
- U Washington, Stanford; Ben Wilfond, David Magnus
   Understand how patients, general public, IRBs view the ethical implications of randomization within the standard of care

#### **OHRP's Draft Guidance**

Disclosing Reasonably Foreseeable Risks in Research Evaluating Standards of Care

Published in the Federal Register on **October 24, 2014 for 60 day comment period**; Community has asked for more time

#### Addresses four topics:

- What are "standards of care"?
- What are "risks of research" in studies evaluating risks associated with standards of care?
- When is evaluating a risk in a research study considered to be a "purpose" of the research study?
- What are "reasonably foreseeable risks" that must be disclosed to prospective subjects in the informed consent process?

### **OHRP's Draft Guidance**

Risks associated with SoC interventions must be considered and disclosed if:

- At least some research participants would receive a different intervention than they would in clinical care.
- The risk is "reasonably foreseeable," i.e., a risk whose evaluation is a purpose of the study.

## OHRP Guidance says...

(2) the identified risks the research proposes to evaluate as one of the purposes of the study are reasonably foreseeable risks that generally must be disclosed to prospective subjects when seeking their informed consent (45 CFR 46.116(a)(2)).

### Does this Work in Real-World Examples?

A study comparing interventions in suicide prevention. Efficacy will be measured by the impact of one or more of these interventions on suicide attempt and/or suicide death.

Is it rational to view suicide as a risk of the research?

The Lung Screening Study, randomized 55,000 people who were smokers to receive different screening tests for lung cancer – chest X-ray or low dose CT. Usual practice leaves screening at the discretion of the practitioner and patient, but most patients do not get screened. The outcome measures were either rates of lung cancer and deaths from lung cancer.

Is it rational to view death from lung cancer as a risk of the research?

## **IOM Workshop**

#### December 2-3, 2014

- NIH commissioned
- Public forum for in-depth discussion of ethical issues in SoC research
  - Distinguishing risks of <u>the research</u>
  - Criteria for identifying reasonably foreseeable risks
  - Is randomization a risk?
  - Role of IRBs in assessing and overseeing SoC research
  - Communication of information to patients
- Widely attended by patient advocates, researchers, bioethicists.
- Webcast available: http://www.iom.edu/Activities/Research/StandardofCare/2014-DEC-02.aspx

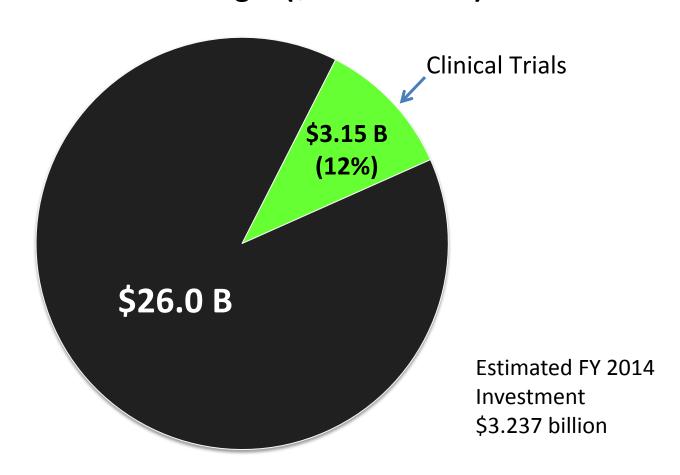
## **Clinical Trials**

# Data Sharing: Inherent in the NIH Mission

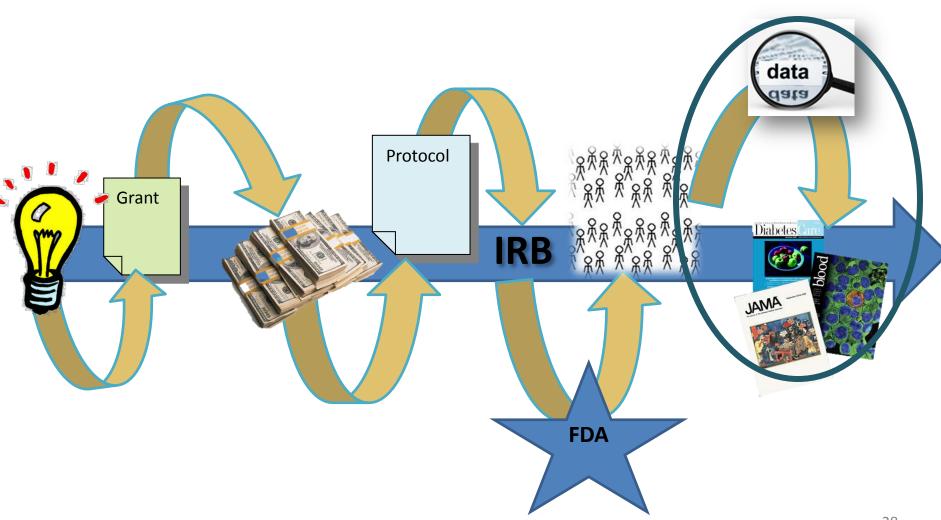
NIH's mission is to seek fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to enhance health, lengthen life, and reduce illness and disability.

## **NIH Clinical Trials**

NIH FY 2013 Budget (\$29.15 billion)



# Clinical Trials Critical to the NIH Mission



## Public Benefits of Clinical Trial Data Sharing

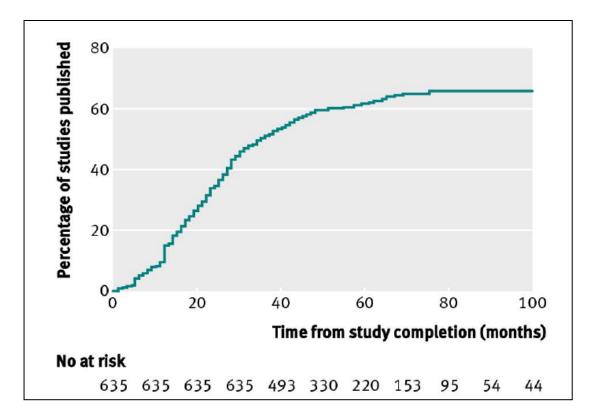
- Inform future research and research funding decisions
- Mitigate bias (e.g., non publication of results, especially negative results)
- Prevent duplication of unsafe trials
- Meet ethical obligation to human subjects (i.e., that results inform science)
- Increase access to data about marketed products

All contribute to public trust in clinical research

# Yet...Poor Publication Rates of Clinical Trial Results

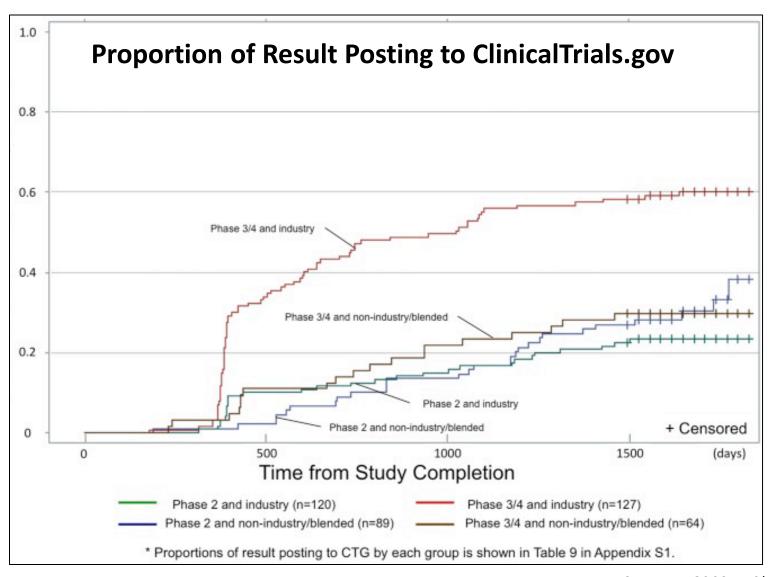
NIH-Funded trials published within 100 months of completion

- Less than 50% are published within 30 months of completion
- Our own data show the same trends



Source: *BMJ* 2012;344:d7292.

#### **And Dissemination of Results Overall**



Source: PLOS 2014; 9(7):e101826

### So, on November 21, 2014...





Opinion

#### NIH Requ NIH-Fund

Notice Numb

NOT-OD-15-01

#### Key Dates

Release Date: Nove

Response Date: Fe

Related Ann

None

Issued by

#### VIEWPOINT

Kathy L. Hudson, PhD National Institutes of Health, Bethesda, Maryland.

#### Francis S. Collins, MD,

National Institutes of Health, Bethesda, Maryland.

#### Sharing and Reporting the Results of Clinical Trials

The principle of data sharing dates to the dawn of scientific discovery-it is how researchers from different disciplines and countries form collaborations, learn from others, identify new scientific opportunities, and work to turn newly discovered information into shared knowledge and practical advances. When research involves human volunteers who agree to participate in clinical trials to test new drugs, devices, or other interventions, this principle of data sharing properly assumes the role of an ethical mandate. These participants are often informed that such research might not benefit them directly, but may affect the lives of others. If the clinical research community fails to share what is learned, allowing data to remain unpublished or unreported, researchers are reneging on the promise to clinical trial participants, are wasting time and resources, and are jeopardizing public trust.

Across public and private sectors, the United States has increasingly focused on data sharing, including through directives from the White House to ensure that valuable scientific data generated with federal funding

be blamed entirely. A recent analysis of 400 clinical studies revealed that 30% had not shared results through publication or through results reporting in Clinical Trials.gov within 4 years of completion. <sup>4</sup> This is a serious issue and the proposed rule underscores the intent of NIH to take strong action to promote timely dissemination of clinical trial results.

Without access to complete information about a particular scientific question, including negative or inconclusive data, duplicative studies may be initiated that unnecessarily put patients at risk or expose them to interventions that are known to be ineffective for specific uses. If multiple related studies are conducted but only positive results are reported, publication bias can distort the evidence base. Incomplete knowledge can then be incorporated into clinical guidelines and patient care. However, one of the greatest harms from non-disclosure of results may be the erosion of the trust accorded to researchers by trial participants and, when public funds are used, by taxpayers.

The efforts to make information derived from

National Institutes of Health (NIH)

#### Purpose

#### Summary

The National Institutes of Health (NIH) is seeking public comments on a draft policy to promote broad and responsible dissemination of information on clinical trials funded by

of

FR

#### **FDAAA Title VIII**

- Applies to public & private sector
- Covers trials of FDA-regulated:
  - drugs and biologics (except phase 1)
  - devices (except small feasibility studies)
  - pediatric postmarket surveillance studies of devices required by FDA
- Requires trial registration before 21<sup>st</sup> day after enrollment begins
- Requires submission of summary results of trials of approved products
- Includes enforcement provisions
  - Notices of non-compliance
  - Withholding of NIH/HHS grant funds
  - Civil monetary penalties up to \$10,000/day (FDA)

## Notice of Proposed Rulemaking: Clinical Trials Registration & Results Submission

- Clarifies FDAAA's registration and basic results submission requirements
- Proposes to require submission of results of unapproved products
- Asks for comment on whether to require narrative summaries
- Asks for comment on whether to require submission of protocols

## Trial Types NOT Covered by FDAAA

- Phase 1 trials of FDA-regulated drugs and biologics
- Small feasibility device studies
- Pediatric postmarket surveillance studies that are not required by FDA
- Trials of interventions that are not regulated by FDA, e.g., behavioral trials, surgical trials
- Observational studies (i.e., where usual/standard of care interventions are assigned by clinician in the course of care)

We need all NIH-funded clinical trials posting results

# Number of Clinical Trials Initiated Annually – ACTs and Others

	Total	NIH Funded	Other Federally Funded
ACTs of approved products (FDAAA)	1,850	400	40
ACTs of unapproved products (NPRM)	7,400	900-1200	200
Other Clinical Trials (not ACTs)	9,600	500-650	200

# **Draft NIH Policy:** Dissemination of NIH-funded Clinical Trial Information

- Expects registration and results submission to ClinicalTrials.gov for all NIH clinical trials regardless of
  - phase
  - type of intervention
  - whether they are subject to FDAAA
- Same timelines as FDAAA
  - Registration not later than 21 days after enrollment
  - Submission of results one year after the completion date

#### **Send in Comments!**

- Notice of Proposed Rulemaking on Clinical Trials Registration and Results Submission published for a 90 day comment period in the Federal Register on November 19, 2014.
  - Send written comments to Docket No. NIH-2011-0003 at http://www.regulations.gov
- Draft NIH Policy on Dissemination of NIH-funded Clinical Trial Information published for a 90-day comment period in the NIH Guide for Grants and Contracts on November 19, 2014.
  - Send written comments to <u>clinicaltrials.disseminationpolicy@mail.nih.gov</u>