#### **An Ethical Framework for Clinical Research**

Presented by Ben Wilfond, MD

2:15pm-3:15pm UW Husky Union Building



## An Ethical Framework for Clinical Research: Rethinking and Going Beyond Informed Consent

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#### **Learning Objectives**

By the end of the session, you will be able to:

- Describe the eight ethics benchmarks for ethical clinical research
- Discuss how empirical data illustrates challenges with informed consent
- Identify the role of researcher-participant interactions in the ethical conduct of research







#### Overview

- A framework for ethical clinical research (20 min)
- Case study: A randomized study of financial incentives for hepatitis B vaccination in an immigrant community
  - Small group discussion (15 min)
  - Large group discussion (15 min)
- Q&A (10 min)







#### What is the Value of Research Ethics?

- To prevent exploitation of human subjects
- To prevent unjustified or unnecessary harm
- To provide guidance to researchers who are unsure about their ethical obligations
- To ensure public trust in research and support for future research







#### "Born in Scandal"

- Guidelines for ethical research are largely responsive to research ethics scandals
  - Nuremberg Trials → Nuremberg Code (1947)
  - Tuskegee syphilis study and other research ethics scandals → Belmont Report (1979)
- "The voluntary consent of the human subject is absolutely essential." – Nuremberg Code, 1<sup>st</sup> principle







#### **Elements of Informed Consent**

- Capacity
- Disclosure
- Understanding
- Voluntariness
- Authorization







#### Elements of Informed Consent – Empirical Data

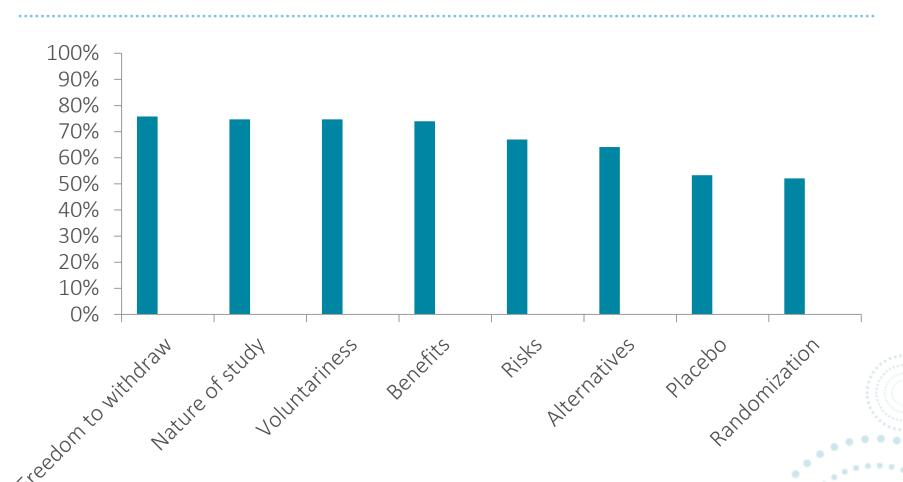
- Capacity
- Disclosure
- Understanding
- Voluntariness
- Authorization







# Systematic Review of Participant Understanding of Consent Elements



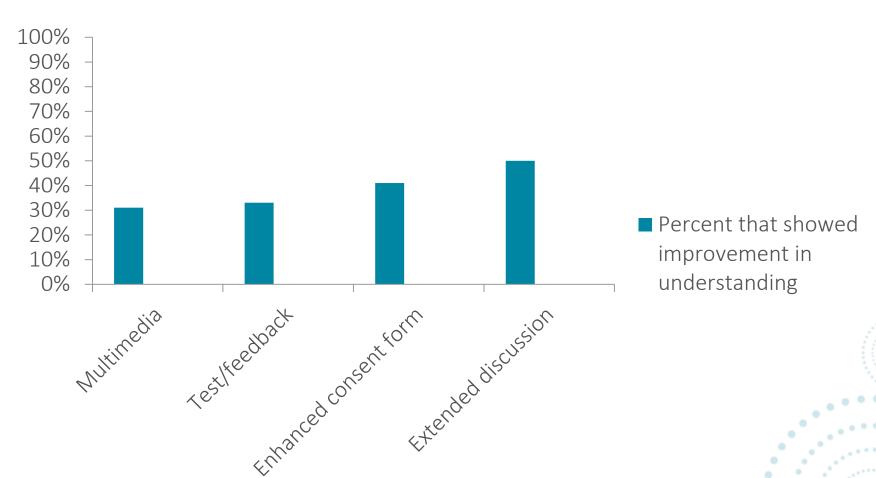
Nguyen TT et al. Participants' understanding of informed consent in clinical trials over three decades: systematic review and meta-analysis. *Bull WHO* 2015.







# Meta-analysis of Interventions to Improve Understanding



Nishimura et al. Improving understanding in the research informed consent process: a systematic review of 54 interventions tested in randomized control trials. *BMC Med Ethics* 2013.







#### The Enduring Challenges of Informed Consent

- Understanding is limited and hard to improve
- Empirical social science research is important but challenging
  - Better metrics for understanding, voluntariness, satisfaction, and other outcomes are needed
- Easy to study a form; harder to study the whole recruitment, enrollment, and study process
  - When do people actually make decisions about research?
  - What else informs their decisions?
- → Conceptual research to develop a systematic, comprehensive ethics framework can contextualize the role of informed consent







#### Eight Benchmarks to Balance

- 1. Collaborative partnership
- 2. Social value
- 3. Scientific validity
- 4. Fair subject selection
- 5. Favorable risk/benefit ratio
- 6. Independent review
- 7. Informed consent
- 8. Respect for participants and communities

Emanuel et al. What makes clinical research ethical? JAMA 2000;283:2701-11; JID 2004;189:930-37.













1. Collaborative Partnership

#### Collaborative Partnership

- Clinical researchers should partner with the community in which or with which the research occurs
  - Community engagement in planning, conducting, and overseeing research (e.g., community advisory boards)
  - Sharing benefits with the community
- Many reasons for community consultation:
  - Transparency
  - Buy-in
  - Assessing risks and ensuring benefits are actually beneficial
- Challenges:
  - Different reasons may warrant different forms of engagement
  - Different definitions of community

Wendler & Shah. Involving communities in deciding what benefits they receive in multinational research. J Med Phil 2015















## 2. Social Value

#### Social Value

- Clinical research should lead to improvements in health or generalizable medical knowledge for:
  - Participants
  - Communities
  - Future patients
- Research with limited social value:
  - Unimportant questions
  - Limited advancement in knowledge
  - Non-generalizable studies
  - Non-disseminated research









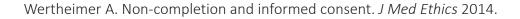




## 3. Scientific Validity

#### Scientific Validity

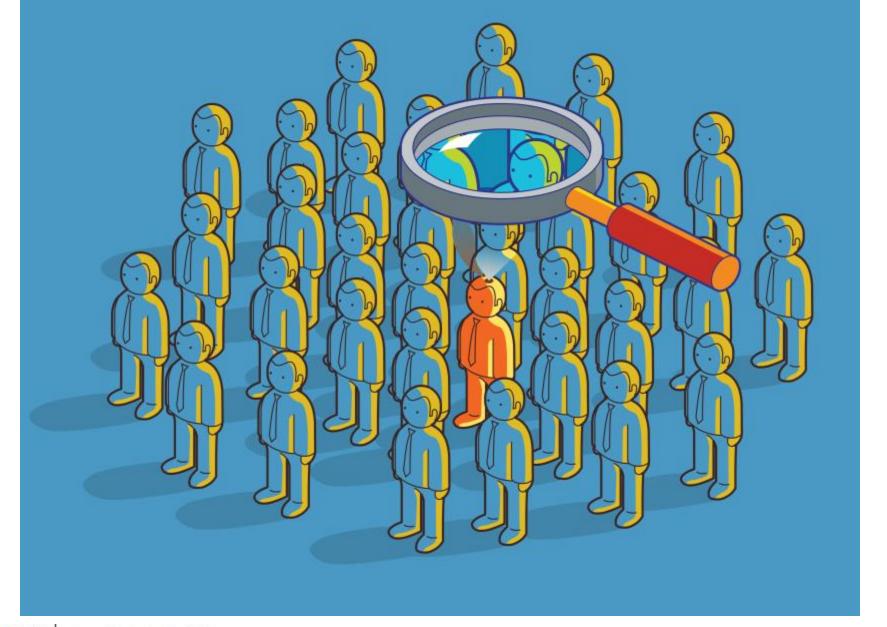
- Must be a reasonable possibility that research will produce valid scientific results
- If a study is not valid, there is no basis to justify:
  - Resources used to generate knowledge and promote health
  - Risks and burdens undertaken by participants
- Invalid research includes:
  - Underpowered studies
  - Studies with biased endpoints, instruments, or statistical tests
  - Studies that cannot enroll sufficient subjects













4. Fair Subject Selection

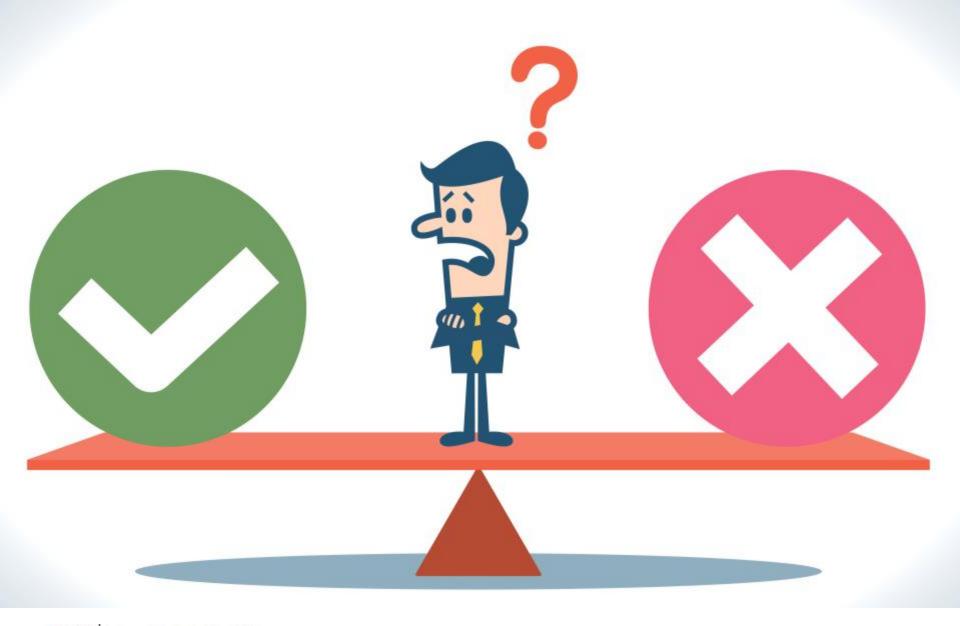
#### Fair Subject Selection

- Scientific objectives of the study, not vulnerability or privilege, should guide inclusion criteria and targeted populations
  - Vulnerability = decreased ability to protect one's own interests
- May be good reason to exclude certain groups (e.g., higher risk or unable to consent)
- Consider distribution of burdens and benefits of research
  - Research as burden: participants need protection
  - Research as benefit: participants need access













Translational Health Sciences 5. Favorable Risk/Benefit Ratio

#### Favorable Risk/Benefit Ratio

#### Identify, assess, and minimize risks

Likelihood of harm

Magnitude of harm



Identify, enhance potential benefits



#### Weigh risks and benefits

If benefits > risks to individual, proceed

If risks > benefits to individual, societal benefit must justify net risk









6. Independent Review

#### Independent Review

- Investigators have multiple legitimate interests
- Can lead to conflicts of interest
- Independent review:
  - Minimizes the impact of conflicts of interest
  - Assures society that research is ethically appropriate and demonstrates trustworthiness











### 7. Informed Consent

#### Informed Consent

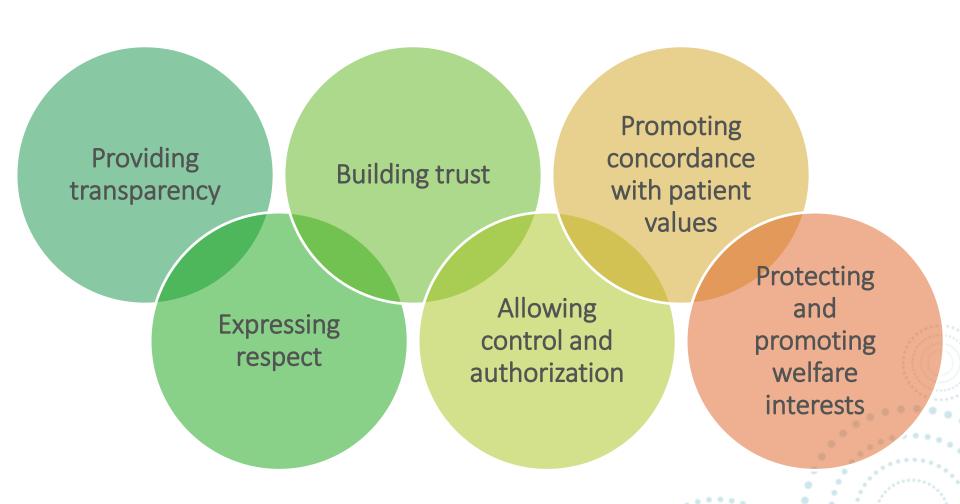
- A process (not a form or an episode) by which participants decide whether to take part in a study
- Some research can be ethical without consent, or without one or more elements of consent
  - E.g., research on de-identified biospecimens
  - E.g., waiver of documentation







#### Informed Consent Serves a Variety of Functions

















# 8. Respect for Participants and Communities

#### Respect for Participants and Communities

Ethical requirements of research do not start or end with signed consent document, and may include:

Protecting confidentiality

Respecting right to withdraw

Developing monitoring plan, stopping rules

Compensation for research injury

Post-trial obligations







#### Conclusions

- There are historical and ethical reasons for caring about ethics of clinical research
- Eight benchmarks can help identify issues that need attention
  - Systematic approach
  - Balancing is often necessary
- Informed consent is ethically important, but imperfectly realized
  - And not the only benchmark we should care about







#### Learning Objectives

- Describe the eight ethics benchmarks for ethical clinical research
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#### Questions









#### Case Study

- Background:
  - Up to 75% of African-born individuals have evidence of past or current HBV infection; at least 25% are at risk for infection
  - In a large US city with a large African-born population, only 10% of atrisk adults completed vaccination when offered free of charge
  - Community focus groups revealed no particular objection to vaccination
- Proposed study: Compare effects of education vs. financial incentives (\$10 or \$20) on vaccination uptake
- Main question: Is it ethically appropriate to offer financial incentives for hepatitis B vaccination in a randomized trial?







#### **Discussion Questions**

- 1. How should the research team <u>partner with the community</u>? About what? When in the research process?
- 2. How would you describe the <u>value</u> of this research? Are the results likely to be generalizable?
- 3. What other study designs might be feasible and <u>scientifically</u> <u>valid</u>?
- 4. Does the selection of this **study population** seem fair?
- 5. What is the <u>risk/benefit ratio</u> in this study? Is it appropriate?
- 6. Should all participants be <u>informed</u> that some people in the study are getting a larger financial incentive? How and when might this disclosure be done?









#### ITHS Research Bioethics Consultation Service

# ITHS Institute of Translational Health Sciences Accolorating Research, Improving Realth. Research Bioethics Consultations

The ITHS Research Bioethics program provides a forum for discussion and analysis of ethical issues in clinical and translational research.

#### The Consultation Process

ITHS offers research bioethics consultations to researchers, trainees, research staff, and personnel involved in the protection of human subjects. Discussions with consultants can take place by telephone or in person. There is generally no charge.

Bioethics consults are advisory and provide a forum for in-depth conversation and analysis of ethical issues in clinical and translational research. Recommendations are supplemental to the authority and oversight of review groups such as an Institutional Review Board or Data Monitoring Committee.

To ensure a balanced understanding of the facts or to facilitate resolution of a conflict, the consultant is available to talk with others involved in the issue if the requestor so desires.







#### Acknowledgments

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#### Questions?

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