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Pragmatic Clinical Trials: Research in the "Real-World"

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University of Maryland School of Nursing
Research Seminar
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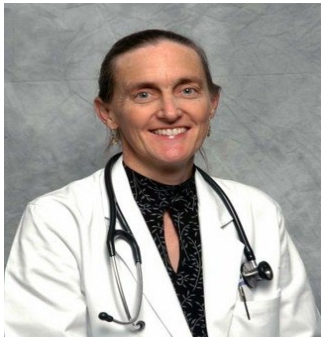
I have no conflicts of interest.

Acknowledgments





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Objectives

- Describe the NIH stage model for intervention development.
- Explain the clinical trials research continuum for intervention testing.
- Identify the elements of a pragmatic clinical trial.

Introduction

Usual care interventions in real world settings.

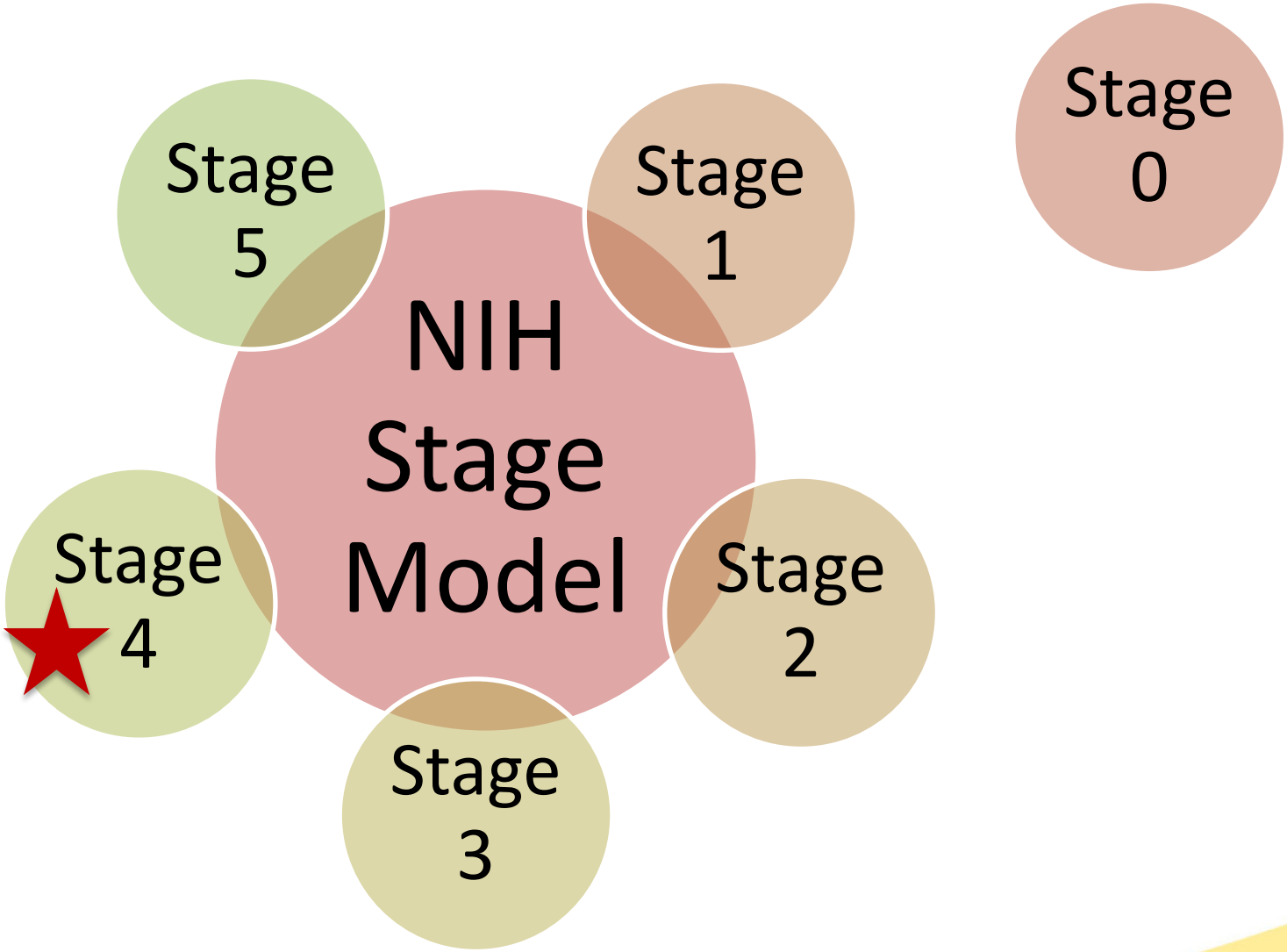
What *is* a pragmatic trial?

Why *use* a pragmatic trial?

NIH Stage Model

- Intervention development

https://www.nia.nih.gov/research/dbsr/nih-stage-model-behavioral-intervention-development



Source: https://www.nia.nih.gov/research/dbsr/nih-stage-model-behavioral-intervention-development

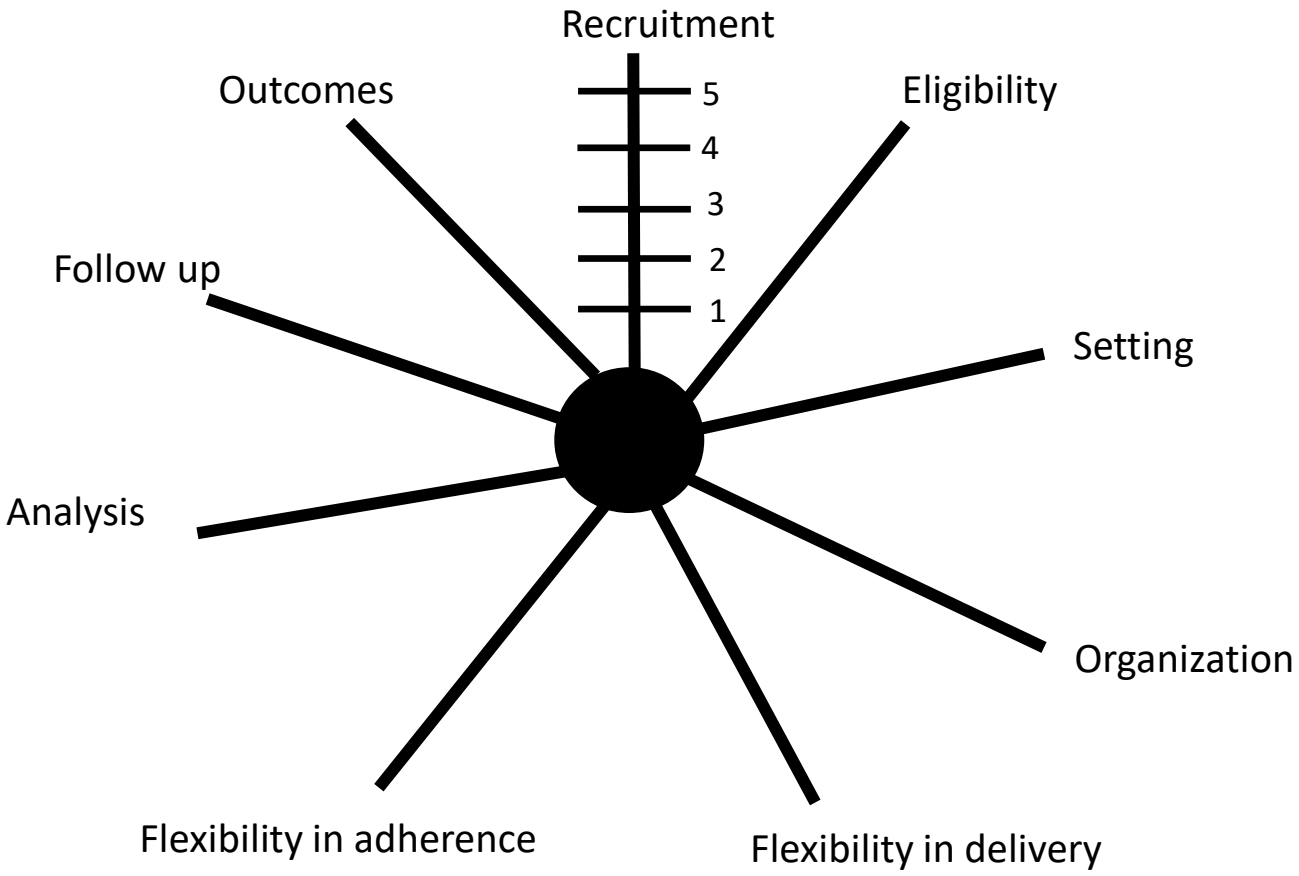
Clinical Trial Continuum

Intervention Testing & The *PRagmatic Explanatory Continuum Indicator Summary-2 (PRECIS-2)*

- 9 domains for trial design choices
  - Recruitment, Eligibility, Setting, Organization, Delivery, Adherence, Follow up, Outcome, Analysis

Source: https://www.precis-2.org/; Loudon K, Treweek S, Sullivan F, Donnan P, Thorpe KE, Zwarenstein M. The PRECIS-2 tool: designing trials that are fit for purpose. BMJ. 2015;350:h2147. Published 2015 May 8. doi:10.1136/bmj.h2147

Highly explanatory (close to inner circle) = lower score
Highly pragmatic (close to outer words) = higher score

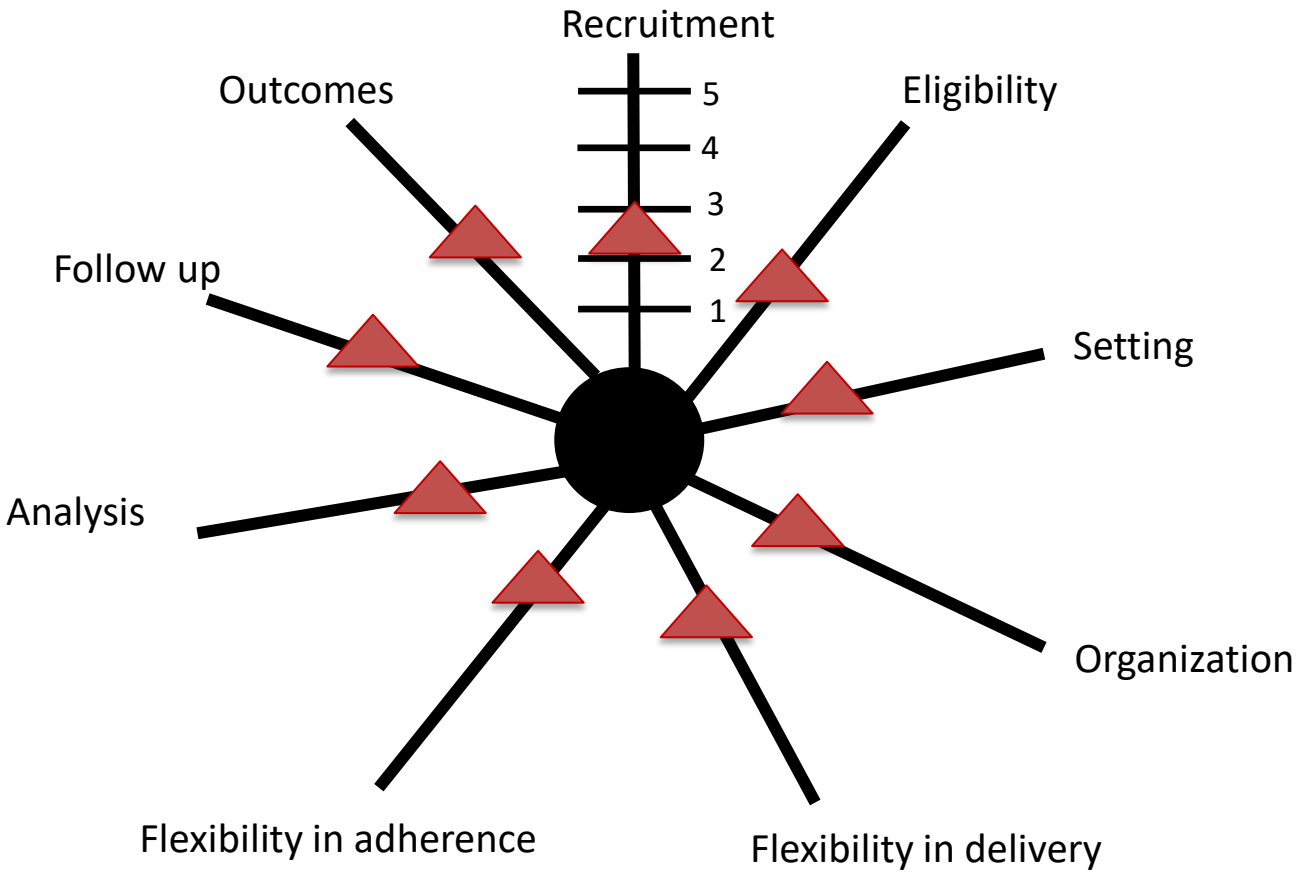


Adapted from: Loudon K, Treweek S, Sullivan F, Donnan P, Thorpe KE, Zwarenstein M. The PRECIS-2 tool: designing trials that are fit for purpose. BMJ. 2015;350:h2147. Published 2015 May 8.

Explanatory Clinical Trials

- Effectiveness of a particular intervention in a controlled setting
- *“Does this intervention work under ideal conditions?”*
- Tend to be less flexible and more restrictive

Explanatory Clinical Trials



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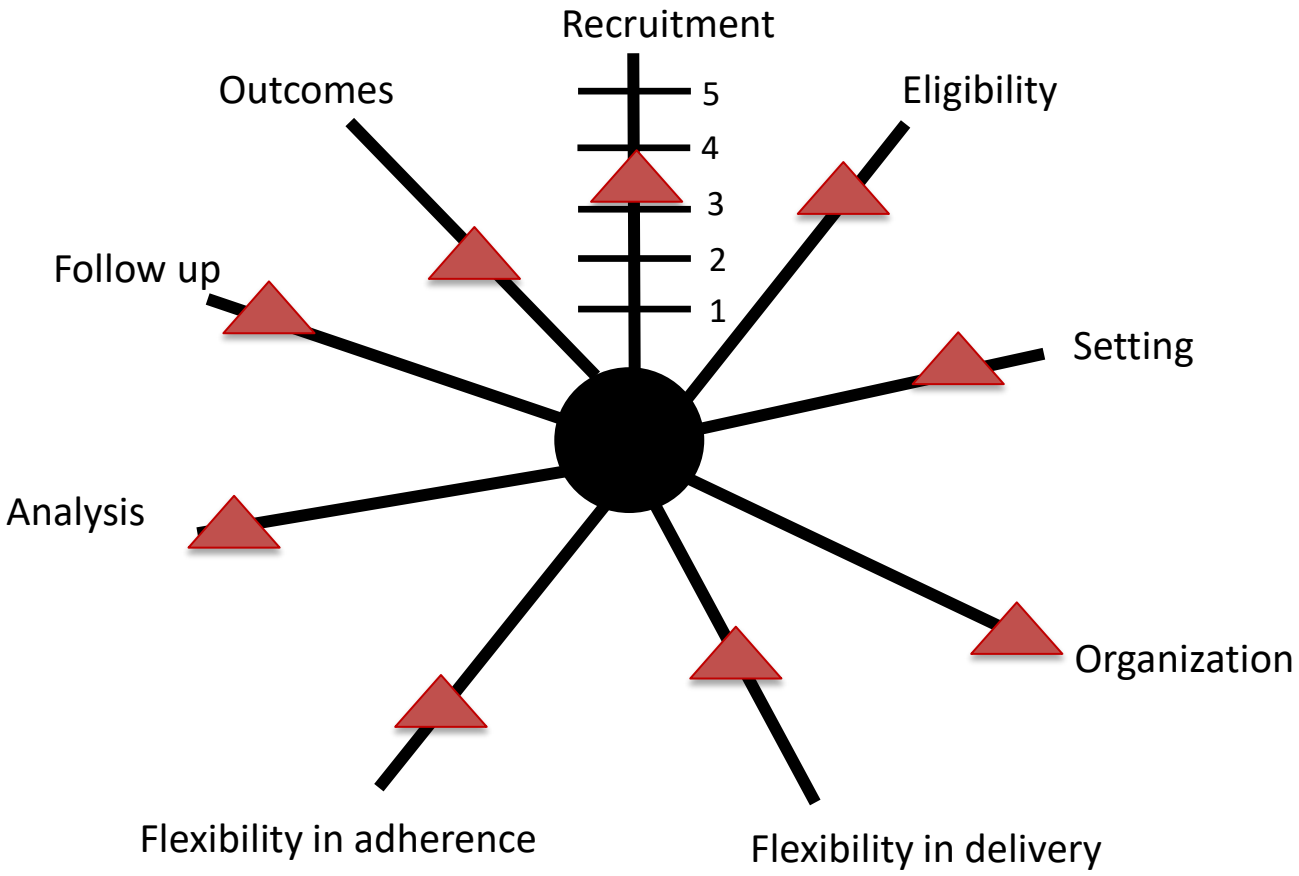
Pragmatic Clinical Trials

- Effectiveness of an intervention in a real-world setting.
- *“Does this intervention work under usual conditions?”*
- Tend to be more flexible and less restrictive

Pragmatic Clinical Trials



Palliative Care for Persons in the Medicare Skilled Nursing Facility Setting
ClinicalTrials.gov #NCT03958552

Adapted from: Loudon K, Treweek S, Sullivan F, Donnan P, Thorpe KE, Zwarenstein M. The PRECIS-2 tool: designing trials that are fit for purpose. BMJ. 2015;350:h2147. Published 2015 May 8.

Review: Study Design Elements

- Flexibility
  - Eligibility criteria, comparison condition, intervention
- Fidelity
- Follow up intensity
- Outcomes

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What is "*no more than minimal risk*"?

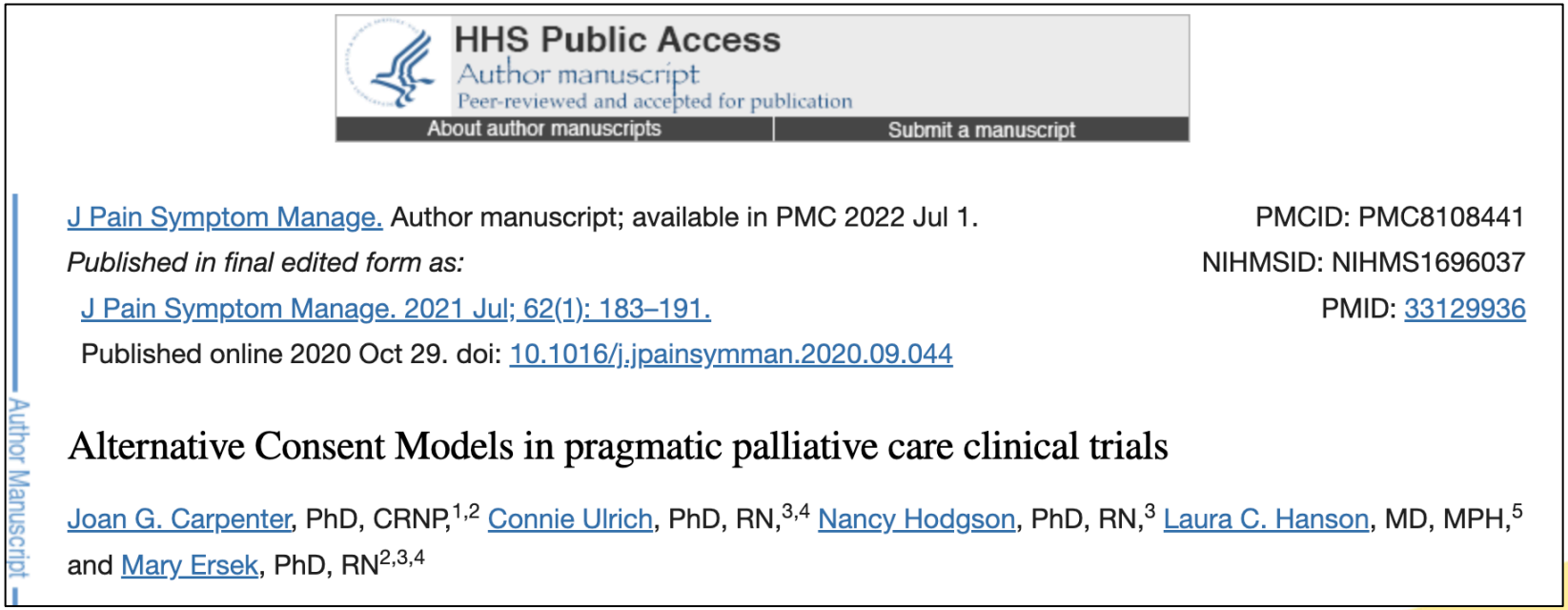
- 45 CFR 46.102: "the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests

- Interpretation A:
  - Everything in life is risky
- Interpretation B:
  - Some things in life are risky
- Interpretation C:
  - Degree of risk introduced by study participation over and above the risk that characterizes the person's life if he or she was not participating in the study

https://www.hhs.gov/ohrp/sachrp-committee/recommendations/2015-september-28-attachment-a/index.html; https://www.govinfo.gov/app/details/CFR-2007-title45-vol1/CFR-2007-title45-vol1-sec46-116;

Ethics and Informed Consent

- Alternative approaches to informed consent



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Alternative Consent Models in pragmatic palliative care clinical trials

Joan G. Carpenter, PhD, CRNP,[1,2] Connie Ulrich, PhD, RN,[3,4] Nancy Hodgson, PhD, RN,[3] Laura C. Hanson, MD, MPH,[5] and Mary Ersek, PhD, RN[2,3,4]

Carpenter JG, Ulrich C, Hodgson N, Hanson LC, Ersek M. Alternative Consent Models in Pragmatic Palliative Care Clinical Trials. J Pain Symptom Manage. 2021;62(1):183-191.

Alternatives to traditional informed consent

Waivers of Consent

- Participants are not informed about the research, do not actively decide to participate
- Treatments offered outside of the trial without consent
- Use: minimal risk, genuine clinical equipoise exists, no person would prefer one treatment over another
- Benefits: purpose of the research serves the common good

Kalkman et al., Journal of Clinical Epidemiology, 2017, 89; 181-187.

Alternatives to traditional informed consent

Broadcast Approach

- General notification placed in a prominent location in a health care facility
- Informs potential participants that they could be part of a research study
  - Some facilities will allow for opt-out
  - If no opt-out option, patients need to seek care elsewhere
- Use: minimal risk research implemented in a health care facility; where participants are regularly informed that randomized research is permitted
- Benefits: honors decision making—prior notification so patients can opt-out or seek treatment elsewhere

Kalkman et al., Journal of Clinical Epidemiology, 2017, 89; 181-187.

Discussion

- What do you think about the NIH stage Model?
- What do you think about the PRECIS-2 tool?
- What do you think about alternatives to traditional informed consent?

Resources

- https://rethinkingclinicaltrials.org/
  - Living textbook
- https://www.nia.nih.gov/research/dbsr/nih-stage-model-behavioral-intervention-development
- https://impactcollaboratory.org/learning-resources/impact-resources/
  - Pragmatic Trials Video Learning Library, Certificate Program

Thank You!

Connect with us!

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