In 2014, NIH began a multi-faceted effort to enhance the quality, relevance, feasibility, and transparency of NIH-funded clinical trials. A key element of these stewardship reforms was the development of a clearer, more comprehensive definition of clinical trial. The NIH clinical trial definition is:

A research study in which one or more human participants are prospectively assigned to one or more interventions (which may include placebo or other control) to evaluate the effects of those interventions on health-related biomedical or behavioral outcomes.

The NIH definition may be broader than other clinical trial definitions because it reflects NIH’s mission and considers all biomedical or behavioral outcomes to be health-related. At the same time, not all clinical studies are clinical trials. Important features that distinguish a clinical trial from a clinical study are whether there is prospective assignment of an intervention, a study design that evaluates the effect of the intervention on the participants, and a health-related biomedical or behavioral outcome. If these features are present, the study is a clinical trial.

The simplified case studies provided below are designed to illustrate the differences between clinical trials and clinical studies using the following four questions:

- Does the study involve human participants?
- Are the participants prospectively assigned to an intervention?
- Is the study designed to evaluate the effect of the intervention on the participants?
- Is the effect being evaluated a health-related biomedical or behavioral outcome?

If the answer to all four questions is “yes,” then the clinical study would be considered a clinical trial according to the NIH definition.

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1 See Common Rule definition of “research” at 45 CFR 46.102(d).
2 See Common Rule definition of “human subject” at 45 CFR 46.102(f).
3 The term “prospectively assigned” refers to a pre-defined process (e.g., randomization) specified in an approved protocol that stipulates the assignment of research subjects (individually or in clusters) to one or more arms (e.g., intervention, placebo, or other control) of a clinical trial.
4 An “intervention” is defined as a manipulation of the subject or subject’s environment for the purpose of modifying one or more health-related biomedical or behavioral processes and/or endpoints. Examples include: drugs/small molecules/compounds; biologics; devices; procedures (e.g., surgical techniques); delivery systems (e.g., telemedicine, face-to-face interviews); strategies to change health-related behavior (e.g., diet, cognitive therapy, exercise, development of new habits); treatment strategies; prevention strategies; and diagnostic strategies.
5 A “health-related biomedical or behavioral outcome” is defined as the pre-specified goal(s) or condition(s) that reflect the effect of one or more interventions on human subjects’ biomedical or behavioral status or quality of life. Examples include: positive or negative changes to physiological or biological parameters (e.g., improvement of lung capacity, gene expression); positive or negative changes to psychological or neurodevelopmental parameters (e.g., mood management intervention for smokers; reading comprehension and/or information retention); positive or negative changes to disease processes; positive or negative changes to health-related behaviors; and, positive or negative changes to quality of life.
6 The NIH definition is consistent with the clinical trial definition found in the final revised Common Rule: 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 interventions on biomedical or behavioral health-related outcomes.
The cases below are grouped into studies involving biomedical interventions and studies involving behavioral interventions. Note that studies of surveys, questionnaires, user preferences, and studies involving focus groups are not clinical trials. Likewise, studies that involve secondary research with biological specimens or health information are not clinical trials. Finally, educational studies, such as those with outcomes focusing on memorization, or retention and recall of information to assess teaching methods, are not clinical trials.
CASE STUDIES

BIOMEDICAL STUDIES

Case #1: The study involves the recruitment of research participants to receive one of two approved drugs. It is designed to measure the effect of the drugs on the level of a protein in the blood of the participants.

- Does the study involve human participants? Yes, the study involves human participants.
- Are the participants prospectively assigned to an intervention? Yes, the participants are prospectively assigned to receive an intervention, one of two drugs.
- Is the study designed to evaluate the effect of the intervention on the participants? Yes, the study is designed to evaluate the effect of the drugs on the level of the protein in the participants’ blood.
- Is the effect being evaluated a health-related biomedical or behavioral outcome? Yes, the effect being evaluated, the level of a protein, is a health-related biomedical outcome.
  ➢ This study is a clinical trial.

Case #2: The study involves the recruitment of research participants with condition Y to receive a drug that has been approved for another indication. It is designed to measure the drug’s effects on the level of a biomarker associated with the severity of condition Y.

- Does the study involve human participants? Yes, the study involves human participants.
- Are the participants prospectively assigned to an intervention? Yes, the participants are prospectively assigned to receive an intervention, the approved drug.
- Is the study designed to evaluate the effect of the intervention on the participants? Yes, the study is designed to evaluate the drug’s effect on the level of the biomarker.
- Is the effect being evaluated a health-related biomedical or behavioral outcome? Yes, the effect being evaluated, the level of a biomarker, is a health-related biomedical outcome.
  ➢ This study is a clinical trial.

Case #3: The study involves the recruitment of research participants with condition X to receive investigational compound A. It is designed to assess the pharmacokinetic properties of compound A.

- Does the study involve human participants? Yes, the study involves human participants.
• **Are the participants prospectively assigned to an intervention?** Yes, the participants are prospectively assigned to receive an intervention, compound A.

• **Is the study designed to evaluate the effect of the intervention on the participants?** Yes, the study is designed to evaluate how the body interacts with compound A.

• **Is the effect being evaluated a health-related biomedical or behavioral outcome?** Yes, the effect being evaluated, pharmacokinetic properties, is a health-related biomedical outcome.

  ➢ This study is a clinical trial.

**Case #4a:** The study involves the recruitment of research participants with disease X to receive an investigational drug. It is designed to assess safety and determine the maximum tolerated dose of the drug.

• **Does the study involve human participants?** Yes, the study involves human participants.

• **Are the participants prospectively assigned to an intervention?** Yes, the participants are prospectively assigned to receive an intervention, the investigational drug.

• **Is the study designed to evaluate the effect of the intervention on the participants?** Yes, the study is designed to assess safety and determine the maximum tolerated dose of the investigational drug.

• **Is the effect being evaluated a health-related biomedical or behavioral outcome?** Yes, the effect being evaluated, safety and maximum tolerated dose, is a health-related biomedical outcome.

  ➢ This study is a clinical trial.

**Case #4B:** The study involves the recruitment of research participants with disease X to receive a chronic disease management program. It is designed to assess usability and to determine the maximum tolerated dose of the chronic disease program (e.g., how many in-person and telemedicine visits with adequate adherence).

• **Does the study involve human participants?** Yes, the study involves human participants.

• **Are the participants prospectively assigned to an intervention?** Yes, the participants are prospectively assigned to receive an intervention, the chronic disease management program.

• **Is the study designed to evaluate the effect of the intervention on the participants?** Yes, the study is designed to determine the maximum tolerated dose of the program to obtain adequate adherence.

• **Is the effect being evaluated a health-related biomedical or behavioral outcome?** Yes, the effect being evaluated, tolerable intensity and adequate adherence of the intervention, is a health-related outcome.
This study is a clinical trial.

Case #5: The study involves the recruitment of research participants with disease X to receive either an investigational drug or a placebo. It is designed to evaluate the effectiveness of the investigational drug to relieve disease symptoms.

- Does the study involve human participants? Yes, the study involves human participants.
- Are the participants prospectively assigned to an intervention? Yes, the participants are prospectively assigned to receive an intervention, the investigational drug or placebo.
- Is the study designed to evaluate the effect of the intervention on the participants? Yes, the study is designed to evaluate the effect of the investigational drug on the participants’ symptoms.
- Is the effect being evaluated a health-related biomedical or behavioral outcome? Yes, the effect being evaluated, relief of symptoms, is a health-related outcome.

This study is a clinical trial.

Case #6: The study involves the recruitment of research participants with disease X to receive an investigational drug. It is designed to assess whether there is a change in disease progression compared to baseline. There is no concurrent control used in this study.

- Does the study involve human participants? Yes, the study involves human participants.
- Are the participants prospectively assigned to an intervention? Yes, the participants are prospectively assigned to receive an intervention, the investigational drug.
- Is the study designed to evaluate the effect of the intervention on the participants? Yes, the study is designed to evaluate the effect of the investigational drug on the subject’s disease.
- Is the effect being evaluated a health-related biomedical or behavioral outcome? Yes, the effect being evaluated, disease progression, is a health-related outcome.

This study is a clinical trial.

Case #7a: The study involves the recruitment of research participants with disease X to test an investigational in vitro diagnostic device (IVD). It is designed to evaluate the ability of the device to measure the level of an antibody in blood.

- Does the study involve human participants? Yes, the study involves human participants.
- Are the participants prospectively assigned to an intervention? Yes, the participants are prospectively assigned to an intervention, the IVD.
- Is the study designed to evaluate the effect of the intervention on the participants? No, in this context, the study is designed to evaluate the ability of the IVD to measure the level of an antibody.

➢ This study is not a clinical trial.

Case #7b: The study involves the recruitment of research participants with disease X to be evaluated with an investigational *in vitro* diagnostic device (IVD). It is designed to evaluate the ability of the device to measure the level of an antibody in blood, and the investigators plan to measure the impact of this knowledge on the treatment of disease.

- Does the study involve human participants? Yes, the study involves human participants.

- Are the participants prospectively assigned to an intervention? Yes, the participants are prospectively assigned to an intervention, the IVD.

- Is the study designed to evaluate the effect of the intervention on the participants? Yes, the study is designed to evaluate the ability of the IVD to measure the level of an antibody to inform treatment.

- Is the effect being evaluated a health-related biomedical or behavioral outcome? Yes, the effect being measured, how blood antibody levels inform treatment, is a health-related outcome.

➢ This study is a clinical trial.

Case #8a: The study involves the recruitment of research participants with disease X. It is designed to compare the performance of approved devices A and B, both of which are used in clinical practice, to measure disease markers. Device A will be used in half of the patients; device B will be used in the other half.

- Does the study involve human participants? Yes, the study involves human participants.

- Are the participants prospectively assigned to an intervention? Yes, the participants are prospectively assigned to receive an intervention, one of two diagnostic devices.

- Is the study designed to evaluate the effect of the intervention on the participants? No, in this context, the study is designed to compare the functionality of the two approved devices.

➢ This study is not a clinical trial.

Case #8b: The study involves the recruitment of research participants suspected to have disease X. It is designed to compare the ability of approved devices A and B to diagnose the disease and inform the management of clinical outcomes. Device A will be used in half of the patients; device B will be used in the other half.

- Does the study involve human participants? Yes, the study involves human participants.
• **Are the participants prospectively assigned to an intervention?** Yes, the participants are prospectively assigned to receive an intervention, one of two diagnostic devices.

• **Is the study designed to evaluate the effect of the intervention on the participants?** Yes, the study is designed to evaluate the ability of the two approved devices to diagnose disease X.

• **Is the effect being evaluated a health-related biomedical or behavioral outcome?** Yes, the effect being evaluated, diagnosis and clinical management of patients with disease X, is a health-related outcome.

  ➢ This study is a clinical trial.

**Case #8c:** The study involves the recruitment of research participants suspected to have disease X. It is designed to compare the ability of commercial sensors A and B to improve diagnosis of the disease and inform the management of clinical outcomes. Device A will be used in half of the patients; device B will be used in the other half.

• **Does the study involve human participants?** Yes, the study involves human participants.

• **Are the participants prospectively assigned to an intervention?** Yes, the participants are prospectively assigned to receive an intervention, one of two diagnostic devices.

• **Is the study designed to evaluate the effect of the intervention on the participants?** Yes, the study is designed to evaluate the ability of the two commercially available devices to diagnose disease X to inform diagnosis and inform management of clinical outcomes.

• **Is the effect being evaluated a health-related biomedical or behavioral outcome?** Yes, the effect being evaluated, diagnosis and clinical management of patients with disease X, is a health-related outcome.

  ➢ This study is a clinical trial.

**Case #9:** The study involves the recruitment of healthy volunteers who will be deprived of sleep for a period of time and have blood drawn. It is designed to determine whether the levels of stress hormones in blood rise in response to sleep deprivation.

• **Does the study involve human participants?** Yes, the healthy volunteers are human participants.

• **Are the participants prospectively assigned to an intervention?** Yes, the participants are prospectively assigned to an intervention, sleep deprivation followed by a blood draw.

• **Is the study designed to evaluate the effect of an intervention on the participants?** Yes, the study is designed to measure the effect of sleep deprivation on stress hormone levels.

• **Is the effect being evaluated a health-related biomedical or behavioral outcome?** Yes, the effect being evaluated, stress hormone levels, is a health-related biomedical outcome.
This study is a clinical trial.

Case #10a: The study involves the analysis of de-identified, stored blood samples and de-identified medical records of patients with disease X who were treated with an approved drug. The study is designed to evaluate the level of a protein in the blood of patients that is associated with therapeutic effects of the drug.

- **Does the study involve human participants?** No, the study does not involve human participants because only de-identified samples and information are used.

- **This study is not a clinical trial.**

Case #10b: The study involves the analysis of identifiable, stored blood samples and identified medical records of patients with disease X who were treated with an approved drug. The study is designed to evaluate the level of a protein in the blood of patients that is associated with therapeutic effects of the drug.

- **Does the study involve human participants?** Yes, patients are human participants because the blood and information are identifiable.

- **Are the participants prospectively assigned to an intervention?** No, secondary research with biospecimens or health information is not a clinical trial.

- **This study is not a clinical trial.**

Case #11: The study involves the recruitment of a healthy volunteers whose blood is drawn for genomic analysis. It is designed to identify the prevalence of a genetic mutation in the cohort and evaluate potential association between the presence of the mutation and the risk of developing a genetic disorder.

- **Does the study involve human participants?** Yes, the healthy volunteers are human participants.

- **Are the participants prospectively assigned to an intervention?** No, sample collection (blood draw) is not an intervention in this context.

- **This study is not a clinical trial.**

Case #12: Physicians report that some patients being treated with drug A for disease X are also experiencing some improvement in a second condition, condition Y. The study involves the recruitment of research participants who have disease X and condition Y and are being treated with drug A. The participants are surveyed to ascertain whether they are experiencing an improvement in condition Y.

- **Does the study involve human participants?** Yes, the study involves human participants.
• **Are the participants prospectively assigned to an intervention?** No, participants are not prospectively assigned to receive an intervention. Questionnaire is not considered an intervention.

   ➢ **This study is not a clinical trial.**

**Case #13a:** The study involves the recruitment of patients with disease X who are receiving one of three standard therapies as part of their clinical care. It is designed to assess the relative effectiveness of the three therapies by monitoring survival rates using medical records over a few years.

• **Does the study involve human participants?** Yes, the study involves human participants.

• **Are the participants prospectively assigned to an intervention?** No, there is no intervention. The therapies are prescribed as part of clinical care; they not prospectively assigned for the purpose of the study. The study is observational in nature.

   ➢ **This study is not a clinical trial.**

**Case #13b:** The study involves the recruitment of research participants with disease X vs. healthy controls and comparing these participants on a range of health processes and outcomes including genomics, biomarkers, laboratory measures, etc. to explore differences that may be relevant to the development of disease X.

• **Does the study involve human participants?** Yes, the study involves human participants.

• **Are the participants prospectively assigned to an intervention?** No, the measures needed to assess the outcomes are not interventions in this context.

   ➢ **This study is not a clinical trial.**

**Case #14:** The study involves the recruitment of healthy volunteers for a respiratory challenge study. The study evaluates the severity and mechanism of the immune response to combinations of allergens introduced via inhalation.

• **Does the study involve human participants?** Yes, healthy volunteers are human participants.

• **Are the subjects prospectively assigned to an intervention?** Yes, healthy volunteers are prospectively assigned to the respiratory challenge.

• **Is the study designed to evaluate the effect of the intervention on the participants?** Yes, the study is evaluating the effects of the allergens on healthy individuals.

• **Is the effect being evaluated a health-related biomedical or behavioral outcome?** Yes, the study evaluates the severity and mechanism of the immune reaction to allergens, which are health-related biomedical outcomes.
Case#15: The study involves the recruitment of research participants with Alzheimer’s disease (AD) to evaluate the effects of an investigation drug on memory, and retention and recall of information.

- **Does the study involve human participants?** Yes, the study involves human participants.

- **Are the subjects prospectively assigned to an intervention?** Yes, participants are prospectively assigned to receive the investigational drug.

- **Is the study designed to evaluate the effect of the intervention on the participants?** Yes, the study is evaluating the effects of the drug on participants.

- **Is the effect being evaluated a health-related biomedical or behavioral outcome?** Yes, the study evaluates memory, and retention and recall of information in the context of AD.

➢ **This study is a clinical trial.**
BEHAVIORAL STUDIES

Case #16: The study involves the recruitment of individuals to receive a new behavioral intervention for sedentary behavior. It is designed to measure the effect of the intervention on hypothesized differential mediators of behavior change.

- **Does the study involve human participants?** Yes, the individuals are human participants.
- **Are the participants prospectively assigned to an intervention?** Yes, the participants are prospectively assigned to receive a behavioral intervention.
- **Is the study designed to evaluate the effect of the intervention on the participants?** Yes, the study is designed to evaluate the effect of the intervention on mediators of behavior change.
- **Is the effect being evaluated a health-related biomedical or behavioral outcome?** Yes, the effect being evaluated, mediators of behavior change, are behavioral outcomes relevant to health.
  
  ➢ **This study is a clinical trial.**

Case #17a: The study involves the recruitment of patients with disease X to be evaluated with a new executive function task. It is designed to evaluate the ability of the new task to measure executive function.

- **Does the study involve human participants?** Yes, the study involves human participants.
- **Are the participants prospectively assigned to an intervention?** Yes, the participants are prospectively assigned to an intervention, the executive function test.
- **Is the study designed to evaluate the effect of the intervention on the participants?** No, the study is designed to evaluate the ability of the executive function task to measure executive function (as measured by the current standard instrument).
  
  ➢ **This study is not a clinical trial.**

Case #17b: The study involves the recruitment of research participants with disease X to be tested with a new executive memory task. It is designed to evaluate the ability of the task to measure executive function and determine cut scores or clinically meaningful scores by evaluating differential treatment course among research participants.

- **Does the study involve human participants?** Yes, the study involves human participants.
- **Are the participants prospectively assigned to an intervention?** Yes, the participants are prospectively assigned to an intervention, the executive function test.

- **Is the study designed to evaluate the effect of the intervention on the participants?** Yes, the study is designed to evaluate the ability of the executive function test to measure executive function and determine clinically meaningful scores.

- **Is the effect being evaluated a health-related biomedical or behavioral outcome?** Yes, the effect being evaluated, executive function and cut scores or clinically meaningful scores, is a health-related outcome.

  ➢ This study is a clinical trial.

**Case #18:** The study involves the recruitment of healthy volunteers who will perform working memory tasks while an fMRI is performed. It is designed to determine the brain functions involved in working memory.

- **Does the study involve human participants?** Yes, the healthy volunteers are human participants.

- **Are the participants prospectively assigned to an intervention?** Yes, the participants are prospectively assigned to an intervention, working memory tasks.

- **Is the study designed to evaluate the effect of an intervention on the participants?** Yes, the study is designed to measure the effect of working memory tasks on brain function.

- **Is the effect being evaluated a health-related biomedical or behavioral outcome?** Yes, the effect being evaluated, brain function, is a health-related biomedical or behavioral outcome.

  ➢ This study is a clinical trial.

**Case #19:** The study involves the recruitment of research participants with CHF who were hospitalized before or after the Medicare incentives to reduce re-hospitalizations. Morbidity, mortality, and quality of life of these participants are evaluated to compare the effects of these Medicare incentives on these outcomes.

- **Does the study involve human participants?** Yes, the study involves human participants.

- **Are the participants prospectively assigned to an intervention?** No, the intervention (incentives to reduce re-hospitalization) were assigned by Medicare, not by the research study.

  ➢ This study is not a clinical trial.

**Case #20:** The study involves the recruitment of healthcare providers to assess the extent to which being provided with genomic sequence information about their patients informs their treatment of those patients towards improved outcomes.
• **Does the study involve human participants?** Yes, both the physicians and the patients are human participants.

• **Are the participants prospectively assigned to an intervention?** Yes, physicians are prospectively assigned to receive genomic sequence information, which is the intervention.

• **Is the study designed to evaluate the effect of the intervention on the participants?** Yes, the study is designed to evaluate the effect of intervening with physicians, on the treatment they provide to their patients.

• **Is the effect being evaluated a health-related, biomedical, or behavioral outcome?** Yes, the effect being evaluated, the extent to which providing specific information to physicians informs the treatment of patients, is a health-related outcome.

  ➢ This study is a clinical trial.

**Case #21:** The study involves the recruitment of research participants with a behavioral condition to receive either an investigational behavioral intervention or a behavioral intervention in clinical use. It is designed to evaluate the effectiveness of the investigational intervention compared to the intervention in clinical use in reducing the severity of the obsessive compulsive disorder.

• **Does the study involve human participants?** Yes, the study involves human participants.

• **Are the participants prospectively assigned to an intervention?** Yes, the participants are prospectively assigned to an intervention, either the investigational intervention or an intervention in clinical use.

• **Is the study designed to evaluate the effect of the intervention on the participants?** Yes, the study is designed to evaluate whether the investigational intervention is as effective as the standard intervention, at changing behavior.

• **Is the effect being evaluated a health-related biomedical or behavioral outcome?** Yes, the effect being evaluated, the interventions’ effectiveness in reducing the severity of the condition, is a health-related behavioral outcome.

  ➢ This study is a clinical trial.

**Case #22:** The study involves the recruitment of healthy children who will be presented with a series of learning activities. It is designed to evaluate the children’s ability to retain and retrieve specific information.

• **Does the study involve human participants?** Yes, the healthy children are human participants.

• **Are the participants prospectively assigned to an intervention?** Yes, the children are prospectively assigned to an intervention, the learning activities.
• Is the study designed to evaluate the effect of the intervention on the participants? Yes, the study is designed to evaluate the effect of the intervention, the learning activities, on the children’s ability to retain and retrieve information.

• Is the effect being evaluated a health-related biomedical or behavioral outcome? No, this educational study is evaluating learning activities, and has no clear link to health.

➢ This study is not a clinical trial.

Case #23: The study involves the recruitment of physicians to assess whether a new app, which cues directed interviewing techniques, is better than an existing app at assisting physicians in identifying families in need of social service support. The number of community service referrals will be measured.

• Does the study involve human participants? Yes, both the physicians and the families are human participants.

• Are the participants prospectively assigned to an intervention? Yes, physicians are prospectively assigned to use one of two apps, which are the interventions.

• Is the study designed to evaluate the effect of the intervention on the participants? Yes, the study is designed to evaluate the effect of intervening with physicians, on social service support referral for families.

• Is the effect being evaluated a health-related biomedical or behavioral outcome? Yes, the effect being evaluated, the number of referrals, is a health-related outcome.

➢ This study is a clinical trial.

Case #24: The study involves evaluating different types of printed announcements to identify the best designs for ensuring comprehension and retention of information in adults. Visitors to public libraries will be selected at random and asked to read one of the two announcements and then to take a short survey to elicit their perspectives about readability.

• Does the study involve human participants? Yes, the visitors to the library are human participants.

• Are the participants prospectively assigned to an intervention? Yes, the participants will be prospectively assigned to an intervention, reading printed announcements.

• Is the study designed to evaluate the effect of the intervention on the participants? No, the study is designed to learn about participants’ opinions on the readability of the different printed announcements. It is not designed to evaluate the effect of the printed material on the participants.

➢ This study is not a clinical trial.
Case #25: The study involves randomly assigning adults to different processes for informed consent in order to assess preferences for interactive and multimedia components during informed consent. The study measures participant preferences.

- **Does the study involve human participants?** Yes, the adults who will experience different informed consent processes are human participants.

- **Are the participants prospectively assigned to an intervention?** Yes, the participants are prospectively assigned to an intervention, the informed consent processes.

- **Is the study designed to evaluate the effect of the intervention on the participants?** No, the study is not evaluating the effects of informed consent on the participants. The study is measuring user preferences for different informed consent processes.

  ➢ **This study is not a clinical trial.**

Case #26: The study involves randomizing individuals to different processes for informed consent. It is designed to assess the effectiveness of interactive and multimedia components in enhancing participants’ understanding of the study’s purpose and procedures.

- **Does the study involve human participants?** Yes, the individuals assigned to the different consent processes are human participants.

- **Are the participants prospectively assigned to an intervention?** Yes, the participants are prospectively assigned to an intervention, different consent processes.

- **Is the study designed to evaluate the effect of the intervention on the participants?** Yes, the study is designed to evaluate the effect of different informed consent processes on understanding the study.

- **Is the effect being evaluated a health-related biomedical or behavioral outcome?** No, the effect being evaluated, comprehension of information in healthy participants, is not a health-related biomedical or behavioral outcome.

  ➢ **This study is not a clinical trial.**

Case #27: The study involves the recruitment of parents to participate in focus groups to discuss topics related to parental self-efficacy and positive parenting behaviors. It is designed to gather information needed to develop an intervention to promote parental self-efficacy and positive parenting behaviors.

- **Does the study involve human participants?** Yes, the parents are human participants.

- **Are the participants prospectively assigned to an intervention?** No, a focus group is not an intervention.

  ➢ **This study is not a clinical trial.**
Case #28: The study involves the recruitment of healthy volunteers to test a new behavioral intervention. It is designed to evaluate the effect of a meditation intervention on adherence to exercise regimens and quality of life to inform the design of a subsequent, fully-powered trial.

- **Does the study involve human participants?** Yes, study participants are human participants.
- **Are the participants prospectively assigned to an intervention?** Yes, the participants are prospectively assigned to a behavioral intervention.
- **Is the study designed to evaluate the effect of the intervention on the participants?** Yes, the study is designed to evaluate the effect of the intervention on adherence, and quality of life.
- **Is the effect being evaluated a health-related biomedical or behavioral outcome?** Yes, adherence and quality of life are health-related outcomes.

➢ This study is a clinical trial.

Case #29: The study involves the recruitment of healthy volunteers to test a new behavioral intervention. It is designed to evaluate the acceptability of the intervention. The outcome is acceptability, not efficacy, of the intervention to the target providers and their patients.

- **Does the study involve human participants?** Yes, the study involves human participants.
- **Are the participants prospectively assigned to an intervention?** Yes, the participants are prospectively assigned to a behavioral intervention.
- **Is the study designed to evaluate the effect of the intervention on the participants?** No, the study is not designed to evaluate the effect of the behavioral intervention on the participants. It is designed to assess user acceptability.

➢ This study is not a clinical trial.

Case #30a: The study involves the recruitment of healthy family members of patients hospitalized for disease X to test two CPR training strategies. Participants will receive one of two training strategies. The outcome is improved CPR skills retention.

- **Does the study involve human participants?** Yes, family members of patients are human participants.
- **Are the participants prospectively assigned to an intervention?** Yes, the participants are prospectively assigned to one of two CPR educational strategies.
- **Is the study designed to evaluate the effect of the intervention on the participants?** Yes, the study is designed to evaluate the effect of educational strategies on CPR skills.
- **Is the effect being evaluated a health-related biomedical or behavioral outcome?** No, retention of skills, is not a health-related biomedical or behavioral outcome.
Case #30b: The study involves the recruitment of research participants in three different communities (clusters) to test three CPR training strategies. The rate of out-of-hospital cardiac arrest survival will be compared.

- **Does the study involve human participants?** Yes, the study involves human participants.
- **Are the participants prospectively assigned to an intervention?** Yes, the participants are prospectively assigned to receive one of three types of CPR training, which is the intervention.
- **Is the study designed to evaluate the intervention or the effect of the intervention on the participants?** Yes, the study is designed to evaluate the effect of different CPR training strategies on patient survival rates post cardiac arrest.
- **Is the effect being evaluated a health-related biomedical or behavioral outcome?** Yes, out-of-hospital cardiac arrest survival is a health-related outcome.

- **This study is not a clinical trial.**

Case #31a: A study involves the recruitment of school children to evaluate two different tools for monitoring food intake. Food consumption behavior will be measured by asking children to activate a pocket camera during meals and to use a diary to record consumed food. The accuracy of the two food monitoring methods in measuring energy intake will be assessed.

- **Does the study involve human participants?** Yes, children are human participants.
- **Are the participants prospectively assigned to an intervention?** Yes, the participants are prospectively assigned to two food monitoring methods.
- **Is the study designed to evaluate the effect of the intervention on the participants?** Yes, the study is designed to evaluate the monitoring tools.
- **Is the effect being evaluated a health-related biomedical or behavioral outcome?** No, calculating the accuracy of monitoring tools is not a health-related biomedical or behavioral outcome.

- **This study is not a clinical trial.**

Case #31b: A study involves the recruitment of school children to evaluate two different tools for monitoring food intake. Food consumption behavior will be measured by asking children to activate a pocket camera during meals and to use a diary to record consumed food. Changes to eating behavior will be assessed.

- **Does the study involve human participants?** Yes, children are human participants.
• **Are the participants prospectively assigned to an intervention?** Yes, the participants are prospectively assigned to two food monitoring methods.

• **Is the study designed to evaluate the effect of the intervention on the participants?** Yes, the study is designed to determine whether using the monitoring methods changes eating behavior.

• **Is the effect being evaluated a health-related biomedical or behavioral outcome?** Yes, eating behavior is a health-related outcome.

  ➢ This study is a clinical trial.

**Case #32:** A study involves the recruitment of children at two schools to monitor eating behavior. Children’s food choices will be monitored using a remote food photography method. Food consumption and the accuracy of food monitoring methods will be assessed.

• **Does the study involve human participants?** Yes, the children participating in this study are human participants.

• **Are the participants prospectively assigned to an intervention?** No, the participants are not prospectively assigned to any intervention. The study observes eating behavior. This is an observational study.

  ➢ This study is not a clinical trial.

**Case #33:** A study involves the recruitment of children at two schools to evaluate their preferences for graphics and colors used in healthy food advertisements. Children will be presented by multiple health advertisement and their preferences for graphics and colors will be assessed.

• **Does the study involve human participants?** Yes, children are human participants.

• **Are the participants prospectively assigned to an intervention?** Yes, the participants are prospectively assigned to different advertisements.

• **Is the study designed to evaluate the effect of the intervention on the participants?** Yes, the study is designed to evaluate the advertisements.

• **Is the effect being evaluated a health-related biomedical or behavioral outcome?** No, preferences are not health-related biomedical or behavioral outcomes.

  ➢ This study is not a clinical trial.