This guidance document provides information about what content is expected in a research project protocol as part of an exemption application for the MaineHealth Institutional Review Board (IRB) and/or the Scientific Review Committee (SRC). Please see the Appendix of this document to determine if your study is likely to fall into the exempt research category.

In addition to describing the purpose of each project protocol section, this document summarizes the information needed for the IRB to make sure that your project meets all appropriate regulatory and institutional requirements. Not all sections of this guidance may apply to your project; please consider which elements should be included in your project protocol based upon your proposed study's design and logistics.

The instructions in this template in black text apply to ALL studies and generally describe sufficient information for studies of retrospective (pre-existing) data. Text in blue describes additional content for prospective studies (new data: e.g. future observations, surveys/interviews/focus groups)

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For assistance with study design and proposal development, contact Research Navigation https://informatics.tuftsctsi.org/pims/request.htm#/

For questions about the regulatory aspects of your proposal contact MMC_IRB@mmc.org

Introduction/Summary & Background

In the first paragraph, describe an overview of your proposed project in lay language; reviewers may not be experts in your field or have a clinical background. Be sure to spell out acronyms at the time of first use and define any clinical or technical terms.

- Describe the problem that you propose to study.
- Describe what is currently known about this topic and the gap in knowledge you propose to study.
- Describe your proposed approach to answering your research question.
- If it would be helpful to understand the project, include a diagram, flow chart or schema visual aid.

In the middle paragraphs, build the rationale for why your project is important.

- Describe any prior research, performed by yourself and/or by others, which provide the clinical and scientific background to your project.
- Identify the specific problem or "gap in knowledge" that your study will address.
- Describe the significance of your proposed research.
- Explain the likelihood that the research will be successful.

In the last paragraph, explain your solution to address the problem or 'gap in knowledge' and state your project's anticipated outcome(s), if appropriate.

Hypothesis/Research Question & Specific Aim Statement(s)

Briefly describe in one to two sentences the idea or proposed explanation that you plan to test through study and experimentation (hypothesis). Define how you will test your hypothesis or address your research question (Specific Aims). You may have more than one specific aim statement but typically should have no more than three. Each specific aim statement may be followed by a brief summary of your strategy or approach to achieve that aim.

Methods

Provide information about study methodology and logistics in sufficient detail to permit regulatory review (and/or scientific review) and to demonstrate project feasibility. Typical subsections are described separately below.

Study Design

State the overall design of your study (e.g., retrospective, prospective, observational, randomized, cohort, pilot, etc.) and briefly summarize your approach (study population, data collection strategy, data analysis).

Study Population

Describe your proposed study population in detail. The IRB may require supplemental documents with your submission depending on the design of your study and the vulnerability of your population - see IRB Exempt Initial Application Submission Checklist located under Forms and Templates in IRBNet.

- Define and describe your study population including their clinical and demographic characteristics and their origin (specific hospital, clinic(s), medical record, listserve, etc). For retrospective studies, include the time period over which you will collect data. Provide the number of subjects that you will include in your study, and support this number with patient flow estimates and/or power analysis, as appropriate. For a retrospective chart review, indicate the maximum number or records you anticipate reviewing for the study.

- Provide the specific inclusion and exclusion criteria that define your study population. For example:
  - Inclusion criteria: Age 18 or greater, clinical diagnosis, etc.
  - Exclusion criteria: Specific comorbidities, adults with impaired decision making capacity, abnormal lab values, etc.

For Prospective Studies, provide detailed information regarding your recruitment plan. Describe logistics and any potential ethical issues.

Recruitment

Describe how potential subjects will be identified, for example from a list of investigator or clinician patients, a referrals process, flyers, web recruitment, and/or emails; include any recruitment materials with your IRB application.

- **Participant permissions**
  An informed consent process is not required for prospective studies that qualify for exemption e.g. surveys, focus groups, and semi-structured interviews**)**. Instead, subjects must be provided with a "Participant Information Sheet" or equivalent information in a recruitment email and/or survey preamble. If your study population requires non-English speaking people, translation of the study information sheet is necessary. Describe how information will be translated and by whom.

This information sheet should include:

- The title of the study.
- The purpose of the study.
- Statement: "You are being asked to participate in research."
- Statement that participation is voluntary (e.g., participants can choose not to answer any questions and can stop participation at any time).
- Description of the procedures to be performed and the amount of the participant's time the study will take up. If applicable, differentiate research from standard clinical/educational activities.
- Description of any compensation or incentives, if offered.
- Description of any potential or perceived risks/discomforts and benefits. For example, a statement describing the extent to which confidentiality of records identifying the subjects will be maintained.
- If the research involves subject deception, a statement that subjects will be unaware of, or misled, regarding the nature or purposes of the research.
- The Principal Investigator's name and contact information.
- Statement: "For questions about your rights as a research participant, please contact MaineHealth's Institutional Review Board (the group of people who review the research to protect your rights) at MMC_IRB@mmc.org or (207)661-4474."

Study Procedures

Provide a detailed description of all study-specific activities. For retrospective studies this may be limited to data collection and analysis (see sections below). Describe the location where study activities will be performed, and who will perform them (do not include specific names, but provide roles instead, e.g. Principal Investigator, Resident, Research Assistant, etc.). Include the planned duration/time-frame for all study activities.

For Prospective studies ONLY, also provide a detailed description of all study-specific activities. Describe all study procedures, number of sessions/visits, time for each session/visit, and total study duration (e.g., 6-months, 2 years, etc.), and including any follow up plan. Reference by name the surveys/questionnaires, interview guide and/or focus group script that you will upload in your IRB submission with other project documents. In addition to activity descriptions, consider including a grid that outlines the required activities for each time point/visit in the study.

- **Surveys/Questionnaires**
  - Describe the source of this survey; is it a published, validated survey or was it developed in house? For validated surveys, provide a reference; for in-house surveys, describe your development and testing process. Include information about how long the survey will take to complete.

  - Each survey should include a preamble that summarizes the information presented in the participant information sheet (see above).
  - Describe in detail the logistics for survey distribution and management. Will this be a paper or electronic survey? How will you introduce the study to potential participants? If mailing or emailing surveys to subjects please attach a file giving the text of the accompanying letter/email. Also, include your plan for following up with non-responders; e.g., potential participants will be sent two reminders, each two weeks apart, after which the survey will be closed.

- **Semi-Structured Interviews**
  - Include a copy of your interview guide or script with your application.
  - Describe in detail who will conduct the interviews, where they will be held, how long they will last, and how data will be collected (e.g. notes, audio/video recordings).

- **Focus Groups**
  - Include a copy of your focus group script with your application.
  - Describe in detail who will facilitate the group, where the sessions will be held, how long they will last, how data will be collected (e.g. notes, audio/video recordings), how many focus group session you will hold, and the anticipated number and type of participants at each.

Data Collection, Management, and Analysis

Data collection

- This section describes the data that you will collect in order to complete your study. For quantitative data, provide a tabulated list of all variables, preferably in a separate file (e.g., Excel file, REDCap PDF, Word document etc.). In this Table, use additional columns/annotation to:
  - Distinguish between data collected as part of usual care and data collected for research purposes, as appropriate.
  - Specify whether each variable will be collected manually or electronically.
  - Identify data fields with protected health information (PHI) - health information linked with HIPAA-defined identifying elements (e.g., name, DOB, Medical Record Number) Please see MaineHealth 2018 Common Rule HRPP SOPs document in IRBNet for a complete list of the 18 HIPAA-defined identifying elements that you will collect initially for screening/recruitment/dataset assembly but will deleted at a later time to create a database that includes only coded data.
  - If your database is not de-identified explain which identifier(s) will be retained and why it/they will be retained.
- If your study is retrospective, describe where data are currently housed. Will data be extracted from the medical record? An existing database or registry?
- Describe in detail the logistics for each data collection process used. Identify persons (by role) who will be accessing and/or extracting data (investigator, Enterprise Reporting, honest broker, other). Do these personnel already have access to the information as part of their daily work?

Data management

This section describes your plan for data security and safety, so that privacy and confidentiality are protected. Describe in detail the procedures that will be used to maintain anonymity or confidentiality during collection of information/biospecimens, entry of study data, and long-term data storage.

Definitions:

a. *Coded data are those fields represented by either derivatives of, or substitutes for, "raw" identifiable data. For example, age may be derived from date of birth and study ID# may be substituted for MRN/name.*
b. *De-identified data are data that cannot be traced back to an individual because all links to the source identifiers have been destroyed; it is no longer possible to re-identify a study subject using these data.*
c. *A Master List (sometimes referred to as a Key) is a separate database that links, often temporarily, study ID#s used in the Research Database with their associated identifiers (MRN, names, date of birth, service dates etc.). A Master List is often needed if additional chart review is required to complete a dataset and/or if coded data must be created before their addition to the Research Database; the Research Database will never include these identifiers, only coded data.*
d. *Deleting a Master List converts coded data to de-identified data (assuming that the study data contains no HIPAA identifiers).*

- Describe your use of a separate Master List database to link, temporarily, personal identifiers with data collected in the Research Database. To create coded data from source data within the Master List, names and medical record numbers are replaced by a unique study number, service dates are expressed as time (e.g. time from admission, time from first encounter etc.), and dates of birth are expressed as age, with ages >89 years combined in a single category of ≥90 years. Include with your submission a shell Table that shows the variables that will be stored in the Master List.
- Once the Research database is complete and has been validated, the data can be fully de-identified by deleting the Master List. Please describe when this will happen.
- Describe who will have access to study data, information, and/or biospecimens.
    - If this is a multi-site study, who will you be sharing data with (contact information)?
    - Are the data de-identified, coded, or in a limited data set with accompanying data use agreement?
    - Is a data use agreement (DUA) between institutions needed?
- Describe how will the information/biospecimens will be used and any plans for future research on the data/specimens.
- Describe the platform used for data collection and storage (e.g. REDCap database). This should be described for both the Research Database and the Master List.
- If paper documents will be maintained, describe who will have access, where and how they will be stored, and when will they be destroyed. Include information about the method used to prevent unauthorized access to study information (such as electronic or physical barriers).
- Provide a plan for any data movement, if applicable. Describe what data will be provided, to whom, under what circumstances, and when.
- Describe any strategies to protect patient confidentiality and prevent the release of any Protected Health Information (PHI). For example, describe encryption or de-identification of data and specimens.
    - Explain what will happen to all study records when the study has been completed. For compliance with OHRP regulations, investigators must retain research records for at least 3 years (granting agencies or sponsors may have additional requirements). For compliance with HIPAA regulations,

investigators will need to retain research authorizations, or documentation of waivers or alterations of authorization, for a minimum of 6 years after the authorization or waiver/alteration was last obtained or in effect, whichever is later; although these documents are stored in IRBNet, they should also be maintained separately.
    - When will information/biospecimens (including audio or video tapes) be destroyed/deleted?
    - If information/biospecimens is to be retained longer than would be reasonable to complete, present and/or publish your study, why is this necessary?
    - Will identifiers or links to identification be destroyed? When?
- Describe the method and location for short term and long term biospecimen storage, if applicable.

Data analysis

Provide details of the statistical methods that you will use to analyze your data, and how these analyses relate to your Specific Aims and anticipated outcomes.

- Include information about your power analysis/sample size calculation, if applicable.
- Include information about who will perform the analyses and the software that will be used.

Anticipated Risks and Benefits

Identify possible risks to the participant because of the research. Consider breach of confidentiality (typically the sole risk associated with retrospective studies), possible psychological harm, financial, social, or legal damages, as well as any physical risks.

- What is the seriousness of potential risks and what is the likelihood that they may occur?
- What detailed safeguards will be implemented to minimize risks?
- What follow-up procedures are in place if harm occurs?
- What special precautions/safeguards will be instituted for vulnerable populations to ensure that these subjects do not fall prey to coercion or undue influence? Note that MaineHealth employees and students who are learning at MaineHealth institutions are considered to be vulnerable populations; therefore, your study needs to be designed to insure that they do not feel that their employment status or educational status will be affected by their participation.
- What benefits can the participant reasonably expect from his/her involvement in the research? If none, state that.
- What are the potential benefits to participants or others?

Potential Problems

Consider problems that realistically might occur during your study, and describe ways in which you could address them. For example, if low enrollment is a possibility suggest alternative or additional strategies that could be used to reach potential participants.

Timeline

If it would be helpful, you may choose to include a Gantt chart (or similar Figure) that displays the timing or time allotted to accomplish each of the required elements (e.g. planning, recruitment, data collection, data analysis, etc.). The starting point of your timeline will be the time of IRB approval.

References

List the references citied in your proposal. (APA style using EndNote is preferred, but not required)

APPENDIX: EXEMPTION CATEGORIES, per 45 CFR 46.104(d)

Note: Special thanks is given to the University of Kentucky, Office of Research Integrity for sharing their template.

Minimal risk research must fit within one or more of the categories below to qualify for exemption.

- Studies Involving Pregnant Women, Fetuses & Neonates are Eligible for Exempt Under All 6 Categories
- Exemptions Do Not Apply to Research Involving Prisoners Except "for Research Aimed at Involving a Broader Subject Population that Only Incidentally Includes Prisoners"
- Children are allowed in categories 1, 4, 5, & 6; Limitations & Exclusion of Children in Category 2 & 3

Category	New Citation	Exemption Category Description	Limited IRB Review	Conditions/Allowances/Limitations
1	**104(d)(1)**	**Research in Established or Commonly Accepted Education Settings that Involves Normal Educational Practices**	N/A	**Not Likely to Adversely Impact Students' Opportunity to Learn or Assessment of Educators**
2	**104(d)(2)**	**Research only includes Educational Tests, Surveys, Interviews, Public Observation if at least ONE of the following criteria met:**	N/A	**Data Collection Only; May include visual or auditory recording; May NOT include Intervention**
		(i) Recorded information cannot readily identify the subject (directly or indirectly/linked); **OR**	N/A	**Surveys & Interviews: No Children;** Educational Tests or Observation of Public Behavior: Can Only include Children When Investigators Do Not Participate in Activities being Observed
		(ii) Any disclosure of responses outside of the research would NOT reasonably place subject at risk (criminal, civil liability, financial, employability, educational advancement, reputation); **OR**	N/A	**Surveys & Interviews: No Children;** Educational Tests or Observation of Public Behavior: Can Only include Children When Investigators Do Not Participate in Activities being Observed
		(iii) Information is recorded with identifiers & IRB conducts Limited Review	Privacy and Confidentiality Review Required	NO Children
3	**104(d)(3)(i)**	**Research involving Benign Behavioral Interventions (BBI) through verbal, written responses, (including data entry or audiovisual recording) from adult subject who prospectively agrees and ONE of following met:**	N/A	**NO Children; May Not include Medical Interventions; Subject prospectively agrees;** **(ii) BBI must be:** • **Brief in Duration** • **Painless/Harmless** • **Not Physically Invasive** • **Not Likely to Have a Significant Adverse Lasting Impact on**
		A. Recorded information cannot readily identify the subject (directly or indirectly/linked): **OR**	N/A	
		B. Any disclosure of responses outside of the research would NOT reasonably place subject at risk (criminal, civil liability, financial,	N/A	

Category	New Citation	Exemption Category Description	Limited IRB Review	Conditions/Allowances/Limitations
		employability, educational advancement, reputation); **OR**		**Subjects** • **Unlikely that Subjects Will Find Interventions Offensive or Embarrassing** **(iii) deception unless participant prospectively agrees**
		C. Information is recorded with identifiers & IRB conducts Limited Review	Privacy and Confidentiality Review Required	
4	**104(d)(4)**	**Secondary Research for Which Consent is Not Required: Use of Identifiable Information or Identifiable Biospecimens that have been or will be collected for some other 'primary' or 'initial' activity, if ONE of following criteria met:**		**No Primary Collection from subjects for the research;** **Allows Both Retrospective and Prospective <u>Secondary Use</u>**
		(i) Biospecimen or Information is Publically Available; **OR**	N/A	Must be publically available
		(ii) Information recorded so subject cannot readily be identified (directly or indirectly/linked); Investigator does not contact subjects and will not re-identify the subjects; **OR**	N/A	
		(iii) Collection and Analysis involving Investigators Use of Identifiable Health Information when use is regulated by HIPAA "health care operations" or "research" or "public health activities and purposes"; **OR**	N/A	HIPAA still applies; HIPAA protections include authorizations or waiver of authorization
		(iv) Research information collected by or on behalf of federal government using government generated or collected information obtained for non-research activities	N/A	If research generates identifiable private information it is subject to specified federal privacy laws (see iv for list)
5	**104(d)(5)**	**Research and demonstration projects supported by a Federal Agency/Dept. AND Designed to study, public benefit or service programs**	N/A	**Must be posted on a Federal Website**
6	**104(d)(6)**	**Taste and Food Quality**	N/A	