

Clinical Research
STANDARD OPERATING PROCEDURE

DM-502– Source Documentation Standards

- 1. PURPOSE:**
 To establish documentation standards for clinical research projects.

- 2. SCOPE:**
 This SOP applies to all entities conducting clinical research at UTRGV or affiliate sites.

- 3. RESPONSIBLE INDIVIDUALS:**
 Principal Investigator (PI) and research personnel are responsible for following source documentation guidelines outlined in this policy.

- 4. RELATED TERMS AND DEFINITIONS:**

- Addenda/Addendum**
- Adverse Event (AE)**
- Case Report Form (CRF)**
- Common Terminology Criteria for Adverse Events (CTCAE)**
- Electronic Health Record (EHR)**
- Electronic Medical Record (EMR)**
- Enrollment/Enrolled**
- Good Clinical Practice (GCP)**
- Health Insurance Portability and Accountability Act (HIPAA)**
- Informed Consent Form (ICF)**
- International Conference on Harmonization (ICH)**
- Investigator of Record (IoR)**
- Serious Adverse Event (SAE)**

Please reference the Standard Operating Procedures Glossary of Terms for complete definitions of terms in this SOP.

5. POLICY STATEMENT

Accurate and complete documentation is the cornerstone of GCP. It permits an observer to recreate a subject’s participation in a research study and to account for the use of any investigational product.

- All data must be verifiable.

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- All documentation needs an audit trail.
- Always refer to sponsor, local, state, institution and/or IRB policies and procedures and follow whichever of those policies is the most stringent.
- To achieve data quality, all data must be ALCOA-C:
 1. Attributable – Is it obvious who wrote it?
 2. Legible – Can it be read?
 3. Contemporaneous – Is the information current and in the correct time frame?
 4. Original – Is it a copy? Has it been altered?
 5. Accurate – Are conflicting data elsewhere?
 6. Complete – Is any information missing?

6. PROCEDURES

Necessary source documents will differ slightly with each protocol. It is the responsibility of the study sponsor (if applicable), PI and study staff to thoroughly review the protocol and consent forms to determine what types of source documents are needed for each study.

These basic principles apply to ALL source documents:

- Each research participant must consent (and that consent must be documented) to direct access to his/her research records (and medical records, if applicable) for research-related monitoring, auditing, IRB review, and regulatory inspection by authorized individuals.
- If source documentation is incorrect, incomplete, or otherwise deficient, it may be corrected by making an additional entry or addendum to the source documentation. The later entry must be signed/initialed and dated.
- All addenda must be signed and dated in present time by the person making the entry.
- Sites must NOT modify past dated source documentation in research records in an attempt to resolve deficiencies. Altering past-dated records is potentially fraudulent.
- Make error corrections in the following manner: draw a single line through the incorrect information, initial, and date. If there is room, state the reason for the change. If there is not room, write a corresponding Note to File regarding the reason for the change.

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- Upon request from a monitor, auditor, IRB, or regulatory authority, the investigator/institution must make available for direct access all requested documentation that may be relevant to the subject’s study or trial participation.
- All research records must be securely stored:
 - ❖ Double locked (for example, locked office and locked cabinet) when not in use.
 - ❖ Restricted access during work hours and/or when unattended.
- All source documents must be labeled with subject identifiers to enable verification that each document corresponds to a particular subject.
- If research records leave the site, follow local institutional policy to ensure that confidentiality is maintained.

CASE REPORT FORMS (CRF) USED AS SOURCE DOCUMENTATION

- Case report forms (CRFs) may be used as source documents if they represent data collected for the study and are the documents on which data were initially recorded.
 1. If data are obtained at a later date (i.e., after the study visit) and recorded on the CRF as source documentation, it must be signed/initialed, and dated.
 2. If data are transcribed from another source onto the CRF, the CRF is not considered the original source document, and it cannot be used as source documentation. Examples of data routinely transcribed from other sources include: laboratory results, radiology reports, histories documented in referral letters, etc.
- CRFs used as source documents are not meant to replace ALL source documentation – there will still be a need for progress notes, lab results, X-rays, etc.
- CRFs used as source documentation need to be maintained and made available for review in the same manner as other source documents.

CHART NOTES

- Refers to all notes entered in the research and/or medical record by site staff (e.g., progress note, nursing note, clinic note, etc.).
- All data entries must be signed/initialed and dated:
 1. Each time a new entry is made by the person making the entry.
 2. Entries by different people must be signed/initialed and dated by the individual making the entry.

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- a. Exceptions:
 - i. Multiple entries to a source document made by the same person on the same day require only one signature/initials and date on the page IF there have been no interim entries made by other individuals. It is incumbent upon the person signing the source document to ensure there are no entries other than their own.
 - ii. A single date on a document with multiple entries is permitted if all entries were made on the same date.
- Outside records (records received from another institution, clinic, or department) must contain, at a minimum:
 - Sufficient identifiers to confirm they are for the correct patient.
 - The date of the visit or intervention.
 - The name of the professional who created the record.

COMMUNICATION – VERBAL

- Verbal communications pertinent to research data collection must be documented in the research and/or medical record in enough detail to support the data collected.
- Document in one of the following:
 1. Chart note
 2. Contact report (i.e., any written or electronic transcriptions of conversations that are signed and dated)

COMMUNICATION – WRITTEN

- Written communication pertinent to research data collection must be documented.
- Documents must have appropriate identifiers to verify that they correspond to the specified subject.
- Includes documents such as:
 1. Letter
 2. Memo
 3. E-mail
 4. Reply correspondence
 5. Admission/discharge summaries

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CERTIFIED COPIES

- A copy used as a source document should be certified that it was verified to be an exact copy of the original, having all the same attributes and information as the original. (This provides an audit trail in the event the copy appears to have been altered).
- If the original document is retained elsewhere, the copy does not need to be certified (e.g., original lab results are filed in the laboratory).
- See UTRGV DM-505 for more information on what constitutes a certified copy and how to create one.
- Certification for copies received from an outside institution indicates it is an unaltered copy as received.
- Documentation received via fax or scan are NOT considered originals.
- Printouts from an institution’s computer system are NOT certified copies if the electronic file is the original source document.
- Documents consisting of more than one page may be verified as certified copies as long as:
 1. The first page of the copy has a signed and dated statement that specifies the number of pages in the packet and indicates the packet is an exact copy of the original information.
 2. All pages are present, and each page is initialed and dated to verify that it is part of the packet.

DEATH

- Document by one of the following:
 1. Obituary
 2. Autopsy report
 3. Death certificate
 4. Contact report documenting verbal communication with the subject’s healthcare provider, family member, significant other, friend, etc.
- If the death is reported via verbal communication, the following must be recorded in the source document to substantiate the date and reported cause of death:
 1. Name of person reporting death and his/her relationship to subject
 2. Date death reported
 3. Date of death
 4. Reported cause of death

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- 5. Dates and methods that research staff used to obtain official documentation to verify the verbal report of the date and cause of death.
- SAE reporting according to protocol, sponsor, and institutional requirements

DEVIATIONS/VIOLATIONS

- All protocol deviations/violations must be recorded in the subject’s research record and/or a protocol-specific deviation log.
- If pertinent, reasons for the deviations and/or attempts to prevent or correct deviations are to be included in the documentation.
- Refer to local/responsible IRB and institutional policies for reporting protocol deviations to the IRB.
- Examples of deviations include but are not limited to:
 1. A missed visit (needs a note stating it is a missed visit and the site’s attempts to locate the subject to request that he/she make up the visit).
 2. Incomplete laboratory evaluations, physical assessments, questionnaires, etc.
 3. Changes in procedures or medications based on clinical judgement. In these situations, a note explaining the following is required: the problem, what was done, communications with the protocol team, sponsor, and IRB, if necessary, actions, and resolution.

DOCUMENTATION STANDARDS

- All research personnel must comply with standards for medical documentation as determined by their institutional policy, professional Code of Ethics, and licensing authority.
- At a minimum, the following general standards must be followed:
 1. Keep handwritten notes and signatures legible (if necessary, print name underneath the signature).
 2. Sign and date all entries.
 3. Make error corrections in the following manner: draw a single line through the incorrect information, initial, date, and state the reason for change.
 4. Never erase/obliterate entries that require correction.
 5. Never destroy original documents if they require error correction.
 6. Keep subject records secure yet accessible.

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7. Do not alter past-dated notes, chart notes/progress notes (e.g., writing alongside or adding to prior entries).
8. Only use dark ink.
9. Never use whiteout.
10. Never use pencils.

ELECTRONIC RECORDS

- When data are entered directly into a computer system, the electronic data in the computer system is the original source document.
- A paper record (printout/hard copy/"print screen") of the electronic data is considered to be a copy (Not a *certified* copy).
- Requirements for documentation, record keeping, and records retention apply to computer records as they do for paper systems.
- Electronic research records may be signed with a 21 CFR Part 11 compliant electronic signature.
- Electronic Medical Record (EMR)/Electronic Health Record (EHR) systems must adhere to institutional policy and state and federal laws regarding electronic signatures. This includes, but is not limited to:
 - Using two (2) distinct identification components to login to the system (identification code (username) AND a password).
 - Electronic signature shall be unique to one individual and shall not be reused by, or reassigned to, anyone else.
 - Audit trail available for all documents.
 - Signed electronics records must contain information associated with the signing that clearly indicate the following:
 - Printed name of signer
 - Date and time signature was executed

ELIGIBILITY CRITERIA (INCLUSION/EXCLUSION CRITERIA)

- Documentation to address each of the protocol’s inclusion and exclusion criteria must be present in the research record.
 1. Chart notes to address the entry criteria.
 2. Eligibility checklists may be used as a source document as long as the criteria included correspond with the protocol and each inclusion/exclusion criterion is addressed.

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3. Original documents or certified copies of protocol-required diagnostic results and/or history (e.g., lab results, radiology report, medication history, etc.).
 4. The signature and date of the PI or treating investigator attesting to the correctness of each patient’s eligibility criteria.
- Documentation to address pertinent negatives must also be present in the research record. For example, exclusion criteria may require that the subject not be using any concomitant medications or has not been diagnosed with any list of diseases.
 1. Chart notes to address each negative criterion. For example, “None of the concomitant medications excluded by the protocol are being used by the subject” is an acceptable way to document the criterion has been met.
 2. Eligibility checklists used as source documentation as long as the criteria included correspond with the protocol and each inclusion/exclusion criterion is addressed.
 3. A blanket statement regarding all such exclusion criteria, such as “The subject does not meet any of the exclusion criteria outlined in the protocol,” is **NOT** considered adequate.

ERROR CORRECTIONS

- Error corrections must be done as follows:
 1. Draw a single line through the incorrect information.
 2. Initial, date, and state reason for change (if necessary).
 3. Insert the correction.
- Never use pencil to write entries.
- Never use white-out.
- Never obliterate entries that require correction.
- Never destroy original documents, even if they require error correction.
- Do not alter past-dated notes, chart notes/progress notes (e.g., by writing alongside or adding to prior entries).
- Error corrections that are not done according to procedure will result in inadequate source documentation.

FLOW SHEETS

- Flow sheets to be used as source documentation must be:

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1. Signed/initialed and dated by the clinician or research staff member responsible for the entry.
 2. Labeled with an appropriate subject identifier.
- If more than one person makes entries on the flow sheet, each entry must be signed/initialed and dated.
 - Entries for timed serial evaluations (e.g., vital signs, pharmacokinetics studies, etc.) must also note times if required by the protocol.

IDENTIFIERS

- All source documents must be consistently labeled with at least 1 (one) unique identifier so monitors can verify that each document corresponds to a particular subject.
- Examples of unique identifiers:
 1. Research Subject ID
 2. Hospital identification number
 3. Medical record number
 4. Patient identification (PID) number
 5. Full name (if there are no other subjects with that name at the site)
 6. Two non-unique identifiers in combination
- Identifiers that are NOT unique:
 1. Date of birth
 2. Subject initials
 3. Full name, if there are other subjects with same name at the site
- Identifiers on original documents must NEVER be obliterated, even if a new identifier is added to the document (e.g., placing a PID label over a subject’s name).

INFORMED CONSENT – See Informed Consent SOP

INITIALS

- Initials may be used in place of signatures provided that a signature log inclusive of the following is maintained at the site or on the document itself:
 1. Initials
 2. Signature
 3. Printed Name

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INVESTIGATIONAL PHARMACY RECORDS – See Investigational Pharmacy SOPs

MEDICAL HISTORY

- Written documentation of medical history as defined by protocol, including but not limited to diagnoses, surgeries, signs/symptoms, medications, tests, etc.
- Verbal history recorded in a research record is acceptable. Note the source (person providing history).
- Chart note from referring healthcare provider’s letter is acceptable.
- Obtain reports of lab tests, diagnostic procedures, and examinations as necessary to substantiate history.

MEDICAL RECORDS

- Review of medical records is necessary to extract all information that may be relevant to the protocol.
 - Monitors and regulatory auditors may request to see original documents or certified copies to verify validity of data for research-related monitoring.
 - The following are examples of data: physical exams, concomitant medications, signs and symptoms, past surgical history, diagnoses, laboratory results, diagnostic reports, etc.
- Medical records from outside institutions and other providers should include:
 - Records sent from other treating facilities that have been incorporated into the subject’s research record.
 - Subject consent must include release/review of medical records to research staff and monitoring/auditing authorities.
 - Unique identifier(s).
 - Notations in the research record efforts to obtain outside medical records as needed for protocol participation.
 - Notations of follow-up efforts for records requested but not received.
- Monitors must have access to the source documents located in these records during audits.

QUESTIONNAIRES: SUBJECT/GUARDIAN AND/OR STUDY PERSONNEL COMPLETED

- The actual data on a subject/guardian completed questionnaire or CRF does not need supporting source documentation.
- Documentation is required to show that the protocol-required questionnaire was given to the subject/guardian in accordance with protocol requirements. For example:

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1. Enter a note into the subject’s chart indicating the questionnaire was given to the subject/guardian on a specific date.
2. If the questionnaire was NOT completed by the subject, indicate who completed it and why.
3. If questions are completed by study personnel:
 - a. Those sections must be signed/initialed and dated.
 - b. Supporting documentation for data must be in the research record.
 - c. Note if the form was completed by study personnel interviewing the subject/guardian.
 - d. Document why the subject was not the one to complete the questionnaire.
 - e. This pertains only to questions that are an actual part of the questionnaire data, not information related to form keying or headers.
4. Retain a copy of questionnaire, form, or test as per the protocol.

RESEARCH RECORD/FILE

- All documents that substantiate data collected and/or are relevant to a subject’s participation in a clinical investigation constitute a research record. They include, but are not limited to, the following:
 1. Subject’s signed informed consent
 2. Source documents
 3. Case history
 4. Investigational pharmacy records, if applicable
 5. CRFs
- Investigators are responsible for maintaining accurate and complete research records.
- Sites must be able to produce a research record in its entirety for monitoring and/or audits.
 1. Sites must provide direct access to each subject’s research records, including the entire medical record held by the institution conducting the research.
 2. Direct access to all records held at the institution is necessary for identifying and verifying research-related and/or pertinent data (e.g., medical history, contraindications for enrollment, adverse experiences, etc.) in the source documents.

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3. The source of study data must be verifiable in original source documents or certified copies.
- Shadow files are an adjunct to the subject’s medical record or clinic chart.
 1. These files, consisting of copies of source documents, are intended to reflect a subject’s complete, study-specific record.
 2. Copied documents in these files are NOT the original source documents.
 3. May include, but is not limited to, protocol required documentation such as:
 - a. Informed consent
 - b. Screening results
 - c. Baseline events
 - d. Vital study
 - e. Clinical and laboratory findings
 - f. Management of study interventions and toxicities

SOURCE DOCUMENT

- Any original documents or certified copies that include documentation pertaining to the subject while on a research study. This includes, but is not limited to:
 1. Medical record
 2. Clinical chart
 3. CRFs used as source documents
 4. Lab and radiology reports
 5. Flow sheets, medication records, prescriptions, EKG tracings, etc.
- If there is not supporting evidence to verify protocol-required data and procedures, source documentation will be considered inadequate.

STORAGE OF DOCUMENTS

- Sites must retain research records according to Federal regulations, institutional policy, and the study sponsor.
- For electronic data storage, the sponsor and regulatory officials expect to be able to reconstruct the study.
 1. This applies not only to the data, but also how the data were obtained and managed.
 2. All versions of application software, operating systems, and software development tools involved in processing data or records need to be

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available as long as data or records associated with these versions are required to be retained.

3. Records should be regularly backed up in a way that prevents catastrophic loss and ensures the quality and integrity of the data.
 - a. Backup records should be stored in a secure location
 - b. Storage of paper records needs to be separate from the original records, such as in a separate building or an offsite facility.
 - c. Backup and recovery logs need to be maintained to facilitate an assessment of the nature and scope of data loss resulting from a system failure.

STUDY DRUG/AGENT

- Supplied study drugs/agents are dispensed only upon the written order of the Investigator of Record (IoR) or upon order of a licensed practitioner directly responsible to the IoR as stated on the Form FDA 1572 (IND Studies) and/or authorized prescribers list.
- Study drug/agent used by the subject must be recorded in the research record.
- Medications that meet one or more of the following criteria for protocol-specified drugs/agents or non-specified drugs/agent are considered to be “study drugs/agents:”
 1. Protocol-specified drugs/agents
 - a. Drugs/agents specified by name for use in the study.
 - b. Risks for each of these drugs/agents must be included in the informed consent form.
 - c. The protocol will specify whether SAE reporting is required and, if so, the intensity or level of AE reporting.
 2. Non-Specific Drugs/Agents
 - a. In addition to any drugs/agents specifically named for use in a study, other drugs/agents that are being used to address the study’s primary therapeutic objective(s) and any other study objective designated for this purpose by the protocol will be considered study drugs/agents.
 - b. Includes drugs/agents that are not individually specified by name in the protocol nor distributed by the sponsor.
 - c. Protocols may designate distinct types or classes of drugs/agents that will or will not be “study drugs/agents.”
 - d. Risk of individual non-specified drugs/agents do not need to be included in the informed consent document; however, general statements regarding study treatment risk may need to be made. For

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example, including common risks for relevant drug classes or referral to package inserts/approved patient education material.

- e. The protocol will specify whether SAE reporting is required and, if so, the intensity or level of AE reporting. Unless the protocol gives further instructions, all drugs/agents meeting this definition must be included in assessments concerning relationship of SAEs to “study drug/agent.”
- Some protocols may have BOTH “specified” and “non-specified” study drugs/agents.

STUDY DRUG/AGENT ACCOUNTABILITY – See Investigational Pharmacy Study Drug Accountability SOP

STUDY TREATMENT

- Prescriptions must include:
 1. PID/SID numbers (subject’s name instead, if for a commercial pharmacy)
 2. Name of study agent
 3. Dose
 4. Schedule
 5. Route of administration
 6. Number of dosing units to be dispensed, OR instructions (e.g., sufficient supply until next visit) in place of exact quantity.
- Documentation of Change in Study Treatment
 1. Any change in study drug/agent status must be documented with sufficient detail to support and an explanation provided for the change as recorded on the CRF.
 2. Entries regarding dose modifications must include the reason for the change and the actual dosage change.
 3. Notes regarding holding of study drug/agent must include the reason for the hold.
 4. Notes regarding the reinstatement of study drug/agent must include the reason for reinstatement of drug/agent and the dosage.

TOXICITIES: GRADING (ADVERSE EVENTS, SIGNS AND SYMPTOMS, LAB RESULTS)

- All toxicities and/or signs/symptoms, including those reported by the subject, must be recorded in the subject’s research record, and graded.
 1. An actual numerical grade that corresponds to CTCAE guidelines or whatever applicable toxicity scale is specified in the protocol.
 2. A written description that corresponds to the definitions in the applicable toxicity scale.

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3. Appropriate places to document this include:
 - a. Chart Note
 - b. Flow Sheet
 - c. Adverse Event (AE)/Symptom Checklist
 - d. Lab results sheet, signed and dated by the PI or Sub-Investigator (Sub-I).
4. If toxicities and/or signs/symptoms are documented by non-study staff, research staff must then document their assessment of the event, including grade and relationship to study drug/agent in the research record.
5. Only the PI or Sub-I with the appropriate delegation assigned by the Principal Investigator can assess causality related to study intervention(s).

VITAL SIGNS AND OTHER ASSESSMENTS

- The protocol must specify the required vital signs (e.g., temperature, pulse, respirations, etc.) and other assessments (e.g., height, weight, body surface area, head circumference, etc.) and at which study visits they are required.
- Record on one of the following:
 1. Chart note
 2. Flow sheet
 3. CRF used as source documentation

7. REFERENCES

- DHHS 45 CFR 46: Protection of Human Subjects
- FDA 21 CFR 50.27: Documentation of Informed Consent
- FDA 21 CFR 312.62: Investigator Record Keeping and Record Retention
- GCP ICH E6 (R2): 1.51 Source Data; 1.52 Source Documents
- FDA BIMO Chapter 48: Biomedical Monitoring Program 7348.811
- UTRGV RA-204
- UTRGV DM-504
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8. FORMS OR ATTACHMENTS:

None

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