Central Cancer Registry
Perform Casefinding Audit
Use Case

Version 1.0

Prepared by: NPCR-AERRO Central Cancer Registry Workgroup
NPCR-AERRO Technical Development Team

Centers for Disease Control and Prevention
National Center for Chronic Disease Prevention and Health Promotion
Division of Cancer Prevention and Control
National Program of Cancer Registries

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General Information

1. Use Case ID

CCRUC 2.1

2. Use Case Name

Perform Casefinding Audit

3. Description

A casefinding audit is a review and evaluation of a data source's ability to identify and transmit eligible, reportable neoplasms to the central cancer registry (CCR). It involves a review of the most likely sources of cases—disease indices, pathology reports (including surgical, bone marrow, autopsy, and cytology), radiation therapy logs, surgical logs, and other data sources to identify cancer cases that should have been reported to the central cancer registry, and compare these cases to those that were reported.

This use case describes the components of a casefinding audit and potential areas for implementing electronic or automated methods. It is intended for central cancer registry and data source staff, including registrars and information technology system professionals.

4. Actors

- Central cancer registry (CCR) software
- CCR staff
- Data source staff

5. Definitions

- **Casefinding Source**: A department or service within an institution that may interact with a cancer patient. Its documents are used as resources to identify potentially reportable cancer cases. These include reports for the patient’s medical record and logs that are maintained by individual departments regarding their patient population. It may also include customized reports that are produced as needed. Examples of casefinding sources include the pathology laboratory, radiology, and medical oncology clinic.

- **Event Report**: An electronic transmission of information to a cancer registry.

- **Abstracted Event Report**: An extraction or summary of information created by a data source specifically for a cancer registry.¹

- **EHR Event Report**: A report, document, or note within the Electronic Health Record. Examples include radiology and pathology reports, clinician’s and nurse’s notes, discharge summaries, and admission forms.

- **Casefinding Audit Table**: The table that holds information relating to the casefinding audit. It documents audit activities and results.

Perform Casefinding Audit

Note: Diagrams for this use case are in Appendix A and Appendix B.

1.0 Preconditions

A set of conditions that must be met before the activities described in the use case can begin.

- Data source staff have completed the submission requirements for the time frame to be audited.
- Casefinding audit criteria have been installed in the CCR software.

2.0 Post Conditions

A set of conditions that must be met after the activities described in the use case have been completed.

- Audit results are available; for example, the estimated number of cases expected annually from the data source.
- Data source staff have been notified.
- Problem areas identified by the audit have been addressed.

3.0 Priority

Describes the importance and sequence of the use case in the overall activities of the cancer registry.

Moderate priority.

4.0 Frequency of Use

Describes how often the activities in the use case take place.

Each data source should be audited every five years, or more frequently if issues are identified.
5.0 Normal Course of Events

Describes the specific steps taken to perform the activity in the use case.

Normal refers to the steps that are taken when everything goes according to routine procedures. Problems and exceptions are described in section 6, Alternative Course.

Business rules are statements that describe a decision that must be made and agreed to by those involved in the activity. In the context of this document, a business rule describes the decision that needs to be made, and in some circumstances provides a recommendation; in others, options for consideration and use.

Software requirements are statements that describe the functionality of the software that is required or recommended.

5.1 This use case begins when the CCR software selects a data source and creates a CasefindingAudit Table for the data source. [BR01, BR02, BR03]

<table>
<thead>
<tr>
<th>BR</th>
<th>Business Rule</th>
<th>Purpose</th>
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</tr>
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<tbody>
<tr>
<td>01</td>
<td>The CCR should use a standard set of selection criteria to select data sources for auditing.</td>
<td>To ensure each data source is routinely evaluated.</td>
<td>Facility selection may be based on a variety of factors:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Caseload: Set by each registry. For example, low (1–149 cases), medium (150–499 cases), or high (500+ cases)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Facilities with a lower caseload in the audit year than in the previous three-year average</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• ACoS certification</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Geographic area (to reduce travel costs)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Ability to transmit electronically</td>
</tr>
<tr>
<td>02</td>
<td>At a minimum, a data source should be audited according to standard-setting agency requirements.</td>
<td>To comply with cooperative agreements.</td>
<td>• NPCR requires data sources to be audited every five years.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• A CCR may have additional criteria for the frequency of auditing a data source. For example, a data source that had problems in the previous audit may need to be audited more frequently.</td>
</tr>
<tr>
<td>03</td>
<td>The CasefindingAudit table may include the following fields:</td>
<td>To document the audit activities and results, and track outstanding issues.</td>
<td></td>
</tr>
</tbody>
</table>
|     | • Reporting hospital  
• Casefinding source  
• Social security number  
• Date of birth  
• Medical record number  
• Pathology report number  
• Primary site  
• Laterality  
• Histology |                                                                        |                                                                                                  |
### 5.2 CCR software selects cases based on established criteria. [BR04]

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| 04 | CCR software should determine the time period for review of source records. | • By caseload, for example, high (3 months), medium (4 months), low (6 months), or very low (one year)  
• Cases from non-consecutive months from different departments (radiation, pathology, medical oncology)  
• All cases within the time period versus a subset of sites |

### 5.3 CCR staff make a list of casefinding sources. [BR05, BR06]

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<tr>
<td>05</td>
<td>At a minimum, CCR staff should review the Medical Record Disease Index, pathology reports (surgical, autopsy, bone marrow, non-gynecology, special tests), and hospital-associated clinics.</td>
<td>To achieve the greatest coverage for identifying missed cases with the resources available.</td>
<td>Additional sources may include surgical log books, radiation therapy clinic logs, and outpatient clinic records.</td>
</tr>
<tr>
<td>06</td>
<td>CCR staff should consider reviewing additional casefinding sources based on their resources, the ability to submit records electronically, and past experience with the casefinding source identifying missing cases.</td>
<td>To expand on casefinding activities if additional resources are available.</td>
<td></td>
</tr>
</tbody>
</table>
5.4 CCR staff notify data source staff of the upcoming casefinding audit and request a sample report for each casefinding source. [BR07, BR08]

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</tr>
</thead>
<tbody>
<tr>
<td>07</td>
<td>CCR staff should set audit dates with input from data source staff.</td>
<td>To select the best time for the audit for both CCR and data source staff.</td>
<td></td>
</tr>
</tbody>
</table>
| 08 | CCR staff should send audit documentation to data source staff sufficiently in advance of the audit date. | To allow data source staff time to prepare for the audit. | It may be useful to post audit requirements and materials on the CCR Web site, such as:  
  - Cover letter  
  - Public health law  
  - List of data sources included in the audit  
  - List of reportable diagnoses (codes and/or terms)  
  - Procedure for submitting audit data  
  See Appendix C for a sample posting of audit requirements.  
  Refer to NPCR documentation for a list of ICD-9-CM codes that correspond to reportable diagnoses. |

5.5 Data source staff submit sample casefinding reports to CCR staff. [BR09]

<table>
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</thead>
<tbody>
<tr>
<td>09</td>
<td>Data source staff should send a sample report for each casefinding source prior to submitting actual casefinding reports.</td>
<td>To ensure that the correct format and data are included.</td>
<td></td>
</tr>
</tbody>
</table>

5.6 CCR staff validate the casefinding report format and notify data source staff that the format is acceptable.
5.7 Data source software electronically submits the casefinding reports. [BR10, BR11]

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Data source software must include the required information for each casefinding source.</td>
<td>See Appendix D for a list of data requirements by casefinding source.</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Data source software should use the appropriate file format.</td>
<td>To allow the CCR to perform the audit efficiently and accurately.</td>
<td>See Appendix D for sample formats for the casefinding report.</td>
</tr>
</tbody>
</table>

5.8 CCR software inserts the electronic casefinding report into the CasefindingAudit table. [BR12]

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>CCR software should remove duplicate entries.</td>
<td>To eliminate over-counting of missed cases.</td>
<td></td>
</tr>
</tbody>
</table>

5.9 CCR software compares the casefinding report in the CasefindingAudit table with the existing reports in CCR database and identifies reports that have not been submitted by the data source. [BR13, BR14]

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>CCR software comparison files should include only the report in the CCR database that was submitted by the data source being audited.</td>
<td>To allow the CCR to identify cases missed by the audited data source.</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>A report from the data source should be considered a non-match if it was not submitted previously by the same data source.</td>
<td>To allow the CCR to identify cases missed by the audited data source.</td>
<td>The record is a non-match for the audited facility, even if another data source reported the same record (cancer).</td>
</tr>
</tbody>
</table>
5.10 CCR software creates a reconciliation report (list of non-matches) for each casefinding audit source (such as pathology reports, disease index, and radiology reports) and sends it to the data source staff for reconciliation. [BR15, BR16]

<table>
<thead>
<tr>
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<th>Business Rule</th>
<th>Purpose</th>
<th>Remarks</th>
</tr>
</thead>
</table>
| 15 | The reconciliation report should include the following data items:  
- Casefinding source type (such as MRDI, surgery or cytology report)  
- Patient name  
- Medical record number and/or report identification number (pathology report number)  
- Date of birth  
- Diagnosis code (ICD-9-CM)  
- Applicable date (discharge date, pathology report date) | To provide information for the Data Source Staff to resolve each case. | |
| 16 | The reconciliation report should include an area for data source staff to indicate the result of the reconciliation review. | To provide the reason why a case was not submitted. | |

5.11 Data source staff review and resolve the reconciliation report. [BR17, BR18]

5.11.1 Data source staff create and submit an abstract (abstracted event report) for each non-matched report that is not reported.

5.11.1.1 Continue with step 5.12.

5.11.2 Data source staff document why the non-matched report was not reported to the CCR.

5.11.2.1 Data source staff return the reconciliation report to the CCR.

5.11.2.1 Continue with step 5.13.
<table>
<thead>
<tr>
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<th>Purpose</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>Data source staff should include documentation that justifies why a non-matched report was not submitted.</td>
<td>To allow the CCR to confirm the decision of non-reportability.</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Data source staff should return the completed reconciliation report in the time frame required by the CCR.</td>
<td>To ensure timely completion of the audit.</td>
<td>In general, a response timeframe of 30 days is appropriate. A specific length of time should be set based on the number of cases to be reconciled and other activities at the data source.</td>
</tr>
</tbody>
</table>

5.12 CCR software adds the abstracted event report to the CCR database.

Note: The following NPCR-AERRO use cases are performed to process the abstracted event report.

- CUC 1.2: Receive Batch File
- CUC 1.3: Validate Event Report
- CUC 1.4: Perform Patient Linkage
- CUC 1.5: Perform Consolidation

5.13 CCR staff enter the results from the reconciliation report into the casefinding audit database. [BR19, BR20]

<table>
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</thead>
<tbody>
<tr>
<td>19</td>
<td>CCR staff should validate the completed reconciliation report within 30 days.</td>
<td>To ensure timely completion of the audit.</td>
<td>A specific length of time should be set based on the number of cases to be reconciled and other activities at the CCR.</td>
</tr>
</tbody>
</table>
| 20 | CCR staff should update the casefinding audit database with the following information:  
  - Auditor initials  
  - Reconciliation status (such as missed, not reportable, comments)  
  - Date reported | To document the audit results properly. | |

5.14 CCR staff enter information from the reconciliation report for non-reportable cases into a non-reportable database (if a non-reportable database is available).
5.15 CCR staff analyze and report results to the data source staff. [BR21, BR22, BR23]

<table>
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<tbody>
<tr>
<td>21</td>
<td>CCR staff should highlight problem areas and make recommendations for improved casefinding.</td>
<td>To reduce the number of missed cases.</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>CCR staff should include the number of missed cases and the case completeness rate in the final report.</td>
<td>To provide a useful summary of the audit.</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>CCR staff should provide positive feedback.</td>
<td>To recognize positive audit results.</td>
<td>Examples include a special notice in the audit feedback letter, recognition at an annual meeting, a mention in CCR registry newsletter, and awards for 100% complete casefinding for a time period.</td>
</tr>
</tbody>
</table>

5.16 CCR staff analyze aggregated results from all audited data sources and report or publish the results. [BR24, BR25, BR26]

<table>
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<tbody>
<tr>
<td>24</td>
<td>CCR staff should use casefinding audit results to inform subsequent audit activities.</td>
<td>To improve the audit process.</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>CCR staff may use casefinding audits to prepare training materials.</td>
<td>To help train the data source staff.</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>CCR staff may include consolidated casefinding audit results in annual reports.</td>
<td>To inform stakeholder of audit results.</td>
<td></td>
</tr>
</tbody>
</table>

The process ends.
6.0 Alternative Course of Events

Numbering in this section refers to its associated step above in section 5, Normal Course of Events.

5.1a CCR staff select a data source based on established criteria. [BR01]

5.1a.1 The process continues with step 5.2.

5.2a CCR staff select cases based on established criteria. [BR27]

5.2a.1 The process continues with step 5.3.

<table>
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<td>27</td>
<td>CCR staff should determine the time period for review of source records.</td>
<td>• By caseload, for example, high (3 months), medium (4 months), low (6 months), or very low (one year) • Cases from non-consecutive months from different departments (radiation, pathology, medical oncology) • All cases within the time period versus a subset of sites</td>
<td></td>
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</table>

5.6a CCR software notifies data source staff that the format is not acceptable and provides instructions for modifying the format.

5.6a.1 The process continues with step 5.5.

5.7a Data source staff submit printed report(s) from the casefinding audit source.

5.7a.1 The process continues with step 5.8.

5.9a CCR staff compare the printed reports with the existing reports in the CCR database and identify reports that have not been submitted. [BR13, BR14]

5.9a.1 CCR staff enter the non-matched reports into the CasefindingAudit table.

5.9a.2 The process continues with step 5.11.
7.0 Business Rules

A statement that describes a decision that must be made and agreed to by those involved in the activity. In the context of this document, a business rule describes the decision that needs to be made, and in some circumstances provides a recommendation; in others, options for consideration and use.

Business rules for this use case are presented under the step to which they apply.

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• Caseload: Set by each registry. For example, low (1–149 cases), medium (150–499 cases), or high (500+ cases)  
• Facilities with a lower caseload in the audit year than in the previous three-year average  
• ACoS certification  
• Geographic area (to reduce travel costs)  
• Ability to transmit electronically |
| 02 | At a minimum, a data source should be audited according to standard-setting agency requirements. | To comply with cooperative agreements.                                  | • NPCR requires data sources to be audited every five years.  
• A CCR may have additional criteria for the frequency of auditing a data source. For example, a data source that had problems in the previous audit may need to be audited more frequently. |
| 03 | The CasefindingAudit table may include the following fields:  
• Reporting hospital  
• Casefinding source  
• Social security number  
• Date of birth  
• Medical record number  
• Pathology report number  
• Primary site  
• Laterality  
• Histology | To document the audit activities and results, and track outstanding issues. |                                                                                                                                                                                                       |
| 04 | CCR software should determine the time period for review of source records. |                                                                         | • By caseload, for example, high (3 months), medium (4 months), low (6 months), or very low (one year)  
• Cases from non-consecutive months from different departments (radiation, pathology, medical oncology)  
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<td>To expand on casefinding activities if additional resources are available.</td>
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<tr>
<td>07</td>
<td>CCR staff should set audit dates with input from data source staff.</td>
<td>To select the best time for the audit for both CCR and data source staff.</td>
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| 08 | CCR staff should send audit documentation to data source staff sufficiently in advance of the audit date. | To allow data source staff time to prepare for the audit. | It may be useful to post audit requirements and materials on the CCR Web site, such as:  
- Cover letter  
- Public health law  
- List of data sources included in the audit  
- List of reportable diagnoses (codes and/or terms)  
- Procedure for submitting audit data  
See Appendix C for a sample posting of audit requirements. Refer to NPCR documentation for a list of ICD-9-CM codes that correspond to reportable diagnoses. |
<p>| 09 | Data source staff should send a sample report for each casefinding source prior to submitting actual casefinding reports. | To ensure that the correct format and data are included. | |
| 10 | Data source software must include the required information for each casefinding source. | See Appendix E for a list of data requirements by casefinding source. | |</p>
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<td>CCR software should remove duplicate entries.</td>
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<td>13</td>
<td>CCR software comparison files should include only the report in the CCR database that was submitted by the data source being audited.</td>
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<td>The record is a non-match for the audited facility, even if another data source reported the same record (cancer).</td>
</tr>
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<td>15</td>
<td>The reconciliation report should include the following data items:</td>
<td>To provide information for the Data Source Staff to resolve each case.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Casefinding source type (such as MRDI, surgery or cytology report)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Patient name</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Medical record number and/or report identification number (pathology report number)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Date of birth</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Diagnosis code (ICD-9-CM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Applicable date (discharge date, pathology report date)</td>
<td></td>
<td></td>
</tr>
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<td>Purpose</td>
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<td>----</td>
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<tr>
<td>16</td>
<td>The reconciliation report should include an area for data source staff to indicate the result of the reconciliation review.</td>
<td>To provide the reason why a case was not submitted.</td>
<td></td>
</tr>
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<td>17</td>
<td>Data source staff should include documentation that justifies why a non-matched report was not submitted.</td>
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<td>Data source staff should return the completed reconciliation report in the time frame required by the CCR.</td>
<td>To ensure timely completion of the audit.</td>
<td>In general, a response timeframe of 30 days is appropriate. A specific length of time should be set based on the number of cases to be reconciled and other activities at the data source.</td>
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<td>A specific length of time should be set based on the number of cases to be reconciled and other activities at the CCR.</td>
</tr>
</tbody>
</table>
| 20 | CCR staff should update the casefinding audit database with the following information:  
- Auditor initials  
- Reconciliation status (such as missed, not reportable, comments)  
- Date reported | To document the audit results properly. | |
<p>| 21 | CCR staff should highlight problem areas and make recommendations for improved casefinding. | To reduce the number of missed cases. | |
| 22 | CCR staff should include the number of missed cases and the case completeness rate in the final report. | To provide a useful summary of the audit. | |
| 23 | CCR staff should provide positive feedback. | To recognize positive audit results. | Examples include a special notice in the audit feedback letter, recognition at an annual meeting, a mention in CCR registry newsletter, and awards for 100% complete casefinding for a time period. |</p>
<table>
<thead>
<tr>
<th>BR</th>
<th>Business Rule</th>
<th>Purpose</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>CCR staff should use casefinding audit results to inform subsequent audit activities.</td>
<td>To improve the audit process.</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>CCR staff may use casefinding audits to prepare training materials.</td>
<td>To help train the data source staff.</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>CCR staff may include consolidated casefinding audit results in annual reports.</td>
<td>To inform stakeholder of audit results.</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>CCR staff should determine the time period for review of source records.</td>
<td>By caseload, for example, high (3 months), medium (4 months), low (6 months), or very low (one year) Cases from non-consecutive months from different departments (radiation, pathology, medical oncology) All cases within the time period versus a subset of sites</td>
<td></td>
</tr>
</tbody>
</table>
8.0 Exceptions
None.

9.0 Includes
None.

10.0 Special Requirements
None.

11.0 Assumption
Batch files are in an electronic format.

12.0 Notes and Issues
None.

13.0 References
The NPCR Cooperative Agreement was used to define the content covered in this document.

The following cancer registries contributed their casefinding/re-abstracting audit procedures to help define the content of this use case:

- Arkansas Central Cancer Registry
- Missouri Cancer Registry
- New York State Cancer Registry
- Ohio Cancer Incidence Surveillance System
- Rhode Island Cancer Registry
Appendix A: Perform Casefinding Audit Workflow Diagram
Appendix B: Perform Casefinding Audit Data Flow Diagram
Appendix C: Sample Audit Instructions

General Audit Instructions (Missouri Cancer Registry)
Electronic/Abstract Plus

Note: These are general instructions for review only. Specific instructions will be sent to each facility when an audit is scheduled.

Audit Components

Pathology Review: Pathology reports will be reviewed during the site visit.

MRDI Review: The medical record disease index (MRDI) will be reviewed in the central office.

Resolution: Following the pathology and MRDI reviews, a list of non-matched cases with reportable ICD-9-CM codes will be returned to the registrar(s) for resolution; the charts are to be reviewed and reporting status determined. Additionally, a list of abstracting discrepancies, if any, will be returned for registrar review. The auditor and registrar will collaborate by telephone conference to resolve discrepancies. Resolution forms for both audits are to be returned to the auditor. Ample time will be provided for the resolution process.

Reconciliation and Finalization: Upon completion of the resolution process, the auditor will reconcile the data and provide detailed summary reports of the findings.

Casefinding Review / Data Sources

Refer to the following instructions when preparing for the audit.

To evaluate casefinding procedures, the MRDI and autopsy, histology, and cytology reports will be reviewed.

Pathology

Notify your pathology department that printed reports for (months/year to be determined) will be reviewed during the site visit. All pathology reports (excluding Pap smears) for the specified months will be reviewed, not just those that are malignant, and should include tissue, cytology, bone marrow biopsies, peripheral blood smears, and autopsy reports. Follow up with the pathology contact again just prior to the site visit to ensure the requested data are available and ready for review. A quiet location with an electrical outlet to accommodate one auditor is necessary.

Medical Record Disease Index

The MRDI is to be submitted for (months/year to be determined). Refer to the enclosed ICD-9-CM reportable listing for case selection. To evaluate admission and service type, a copy of your hospital’s legend for admission and service codes also is necessary. After generating the index, please fax the first few pages to us for pre-review to ensure the data is complete and in a useable format.

What to Include: The medical record disease index is to include inpatients, outpatient ambulatory surgery patients, emergency room visits, and hospital outpatient/clinic visits for chemotherapy, radiotherapy, or any other definitive cancer treatment. Do not include patient visits for referred lab work or radiology. In addition to the reportable ICD-9 codes, include all other diagnoses for the patient encounters and the top three procedure codes. The reportable code may be a primary diagnosis, or may be included elsewhere in the list of diagnoses. List the codes in the order in which they were coded originally.

Report Format: Generate the index in a spreadsheet and run as a single report, rather than individual monthly reports. Include patient’s last and first names, date of birth, admission and discharge dates,
admission type/service codes, medical record number, ICD-9-CM diagnosis codes and procedure codes. Sort alphabetically, listing all patient encounters for the specified months under the name (see enclosed example). Important: Do not sort the report by ICD-9-CM code number, as this creates intensive duplication of efforts. If your departmental program cannot generate reports in a spreadsheet or alphabetically, please collaborate with your IS department to run the report.

Oncology/Radiation

If applicable, oncology and radiation therapy logs will be evaluated and will be reviewed if they contain pertinent information that can be used as a casefinding source.

Data Submission

An audit checklist has been provided to assist you with the audit proceedings. Please have the MRDI, copies of the patient charts and abstracts, and a copy of your hospital's admission type/service code legend available on the day of the site visit for the auditor to return to the central office. If your hospital has Hypersend capabilities, the MRDI can be submitted electronically.
Appendix D: Casefinding Source Requirements

Pathology Reports

Case Selection

- Select records based on search for keyword terms (adenocarcinoma, malignant)
- SNOMED-CT, if the pathology codes all eligible reports
- ICD-9-CM codes
- All reports regardless of diagnosis

Required Data Items

- Last name, first name, date of birth, Social Security number, medical record number, account number, pathology report number, primary site (usually text), date of procedure, topography code/diagnosis, and morphology code/morphology text.

Transmission Format

- NAACCR Standards for Cancer Registries Volume V: Pathology Laboratory Electronic Reporting
  – HL7 2.3.1 message or ASCII pipe-delimited format
- Tab-delimited format
- Microsoft® Word or Adobe® PDF files of actual pathology reports

Medical Record Disease Index (MRDI)

Case Selection

- ICD-9-CM code

Required Data Items

NPCR-AERRO data item requirements for the MRDI:

- Patient Type
  - Inpatient/Outpatient Status
  - Service Code (Oncology, Cardiology, Chemo, Radiation Oncology, Internal Medicine, Laboratory, Diagnostic Imaging, Endoscopy, Ambulatory Surgery, Same Day Surgery)
- Patient Last Name
- Patient First Name
- Medical Record Number
- Social Security Number
- Date of Birth
- Admission Date
- Discharge/Procedure Date
- Diagnosis Code

Transmission Format

- NPCR-AERRO pipe-delimited text
- Microsoft Excel spreadsheet
- Microsoft Word document
- Printed copy
Example of Preferred MRDI Formatting in Spreadsheet (NY)

<table>
<thead>
<tr>
<th>IP or OP</th>
<th>Last Name</th>
<th>First Name</th>
<th>MRN</th>
<th>SSN</th>
<th>DOB</th>
<th>Discharge or Procedure Date</th>
<th>DX_1</th>
<th>DX_2</th>
<th>DX_3</th>
<th>DX_4</th>
<th>DX_5</th>
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<tbody>
<tr>
<td>OP</td>
<td>Doe</td>
<td>John</td>
<td>12345</td>
<td>123-45-6789</td>
<td>3/21/1934</td>
<td>5/5/2005</td>
<td>185.9</td>
<td>V58.43</td>
<td>244.2</td>
<td>V10.3</td>
<td>198.5</td>
</tr>
<tr>
<td>IP</td>
<td>Smith</td>
<td>Jane</td>
<td>23456</td>
<td>458-34-5102</td>
<td>11/2/1958</td>
<td>7/8/2005</td>
<td>345.2</td>
<td>140.9</td>
<td>301.2</td>
<td>V58.41</td>
<td>244.2</td>
</tr>
</tbody>
</table>

Formatting: Use NAACCR Data type/format.
- Format MRN and SSN as text fields.
- Format Date of Birth and Discharge/Procedure Date as ccyymmdd (new standard for 2010).

Include the following patients:
- Inpatients
- Outpatient ambulatory surgery patients
- Outpatient/clinic visits for chemotherapy, radiotherapy or any other definitive cancer treatment
- Cancer center patients (if not included in the main MRDI)
- Emergency room visits

Clinical Records (Radiation Oncology, Medical Oncology)

Case Selection
- Not established at this time. The majority of patients in these clinics have a malignancy or tumor.

Required Data Items
- Not established at this time.
  Example: NY: last name, first name, date of birth, medical record number, Social Security number, date of first contact/consult date, ICD-9-CM code.

Transmission Format
- Electronic format not established at this time
- Microsoft Word document
- Printed copy of MRDI

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>ICD-9</th>
<th>SSN</th>
<th>Date of Birth</th>
<th>Acct/MRN</th>
<th>Service</th>
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<tr>
<td>Jones</td>
<td>John</td>
<td>1859</td>
<td>111-11-1111</td>
<td>2/2/1920</td>
<td>624106001</td>
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Use Case Administrative Information

1. Use Case History

Version 0.08 presented to the NPCR-AERRO Central Cancer Registry Workgroup.

2. Created By

- NPCR-AERRO Central Cancer Registry Workgroup
- NPCR-AERRO Technical Development Team

3. Date Created

April 7, 2008

4. Last Updated By

MA

5. Date Last Updated

June 19, 2011

Revision History

<table>
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<tr>
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<td>MA/WKS</td>
<td>4/7/08</td>
<td>Created initial use case; added steps to use case based on procedures provided by workgroup members</td>
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<tr>
<td>MA</td>
<td>9/5/08</td>
<td>Updated the use case with info from the Practice Brief</td>
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<td>WKS</td>
<td>9/24/08</td>
<td>Revised based on NY review</td>
<td>0.03</td>
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<td>WKS, MA</td>
<td>11/7/08</td>
<td>Modified use case</td>
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<td>11/18/08</td>
<td>Modified BR</td>
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