

Chapter 17: Death Clearance

Death Clearance is the process of linking death certificate records with the registry database in order to determine all deaths among registrants and to identify deaths from cancer among persons previously unknown to the registry.

When a death certificate record enters the workflow, SEER*DMS attempts to move the record through the editing, screening, matching, and consolidating tasks. If the record is deemed non-reportable, it is used for passive follow-up. If the record is deemed reportable and a registrar confirms that it matches a cancer/tumor/case (CTC) in the system, it is linked to the CTC and consolidated into the patient set data. If the death certificate record indicates a new reportable tumor, an effort will be made to create an abstracting assignment for the case. This involves identifying a facility in order to obtain an abstract, or following back with the physician associated with the death certificate. SEER*DMS reports and AFL manager can be used to determine when follow-back is required and to identify the appropriate source of follow-back.

Finally, the remaining reportable death certificate records can be used to create death certificate only (DCO) cases. SEER*DMS provides system reports enabling you to monitor the percentages of death certificate only CTCs submitted each year.

In this chapter, you'll learn about

- Death Clearance and SEER*DMS
- Performing Death Clearance Follow-back
- Reports Related to Death Clearance
- Using the Death Clearance Summary Report (RPT-019A)
- Building DCO Cases
- Monitoring Death Certificate Only Levels

Death Clearance and SEER*DMS

*The steps involved in performing death clearance using SEER*DMS are:*

1. The death data received from a state agency are loaded into SEER*DMS (see *Chapter 5: Importing Data Files* for more information).
2. Each record enters the workflow. Once it moves through registry coding and edit checks, it is screened for reportability.
3. If the record is not reportable, it is used for the purpose of follow-up and is not directly involved in Death Clearance processes. Processes described in steps 4 and forward only apply to reportable death certificate records.
4. The *AFL Auto-create Rules* are applied. These rules are defined by the registry and are documented on the AFL help page in SEER*DMS. In most registries, an AFL is created for all reportable death certificate records. Some registries specified that AFLs should not be created for all facilities; and some registries specified that an AFL should not be created if it is a duplicate AFL. The *AFL Auto-create Rules* and *Matching Algorithm – Prevent Duplicate AFL* sections of the AFL help page describe the algorithms used for your registry.
 - a. If an AFL is created, you will be able to use the AFL Manager to track follow-back activity related to the death certificate.

- b. If an AFL is not created, the death certificate record is tracked via Death Clearance reports. System reports and external processes are used to identify and contact a physician or facility to obtain information.
5. The death certificate record moves to the automatic matching task in the workflow. The matching algorithm used in this task is typically the Record Linkage algorithm documented on the Matching help page.
- a. A manual Match-Consolidate task is created if two or more patient sets return a score of 1000; or no matches with a score of 1000 are found, but there are patient sets that are possible matches (score greater than zero, but less than 1000).
 - i. If you determine that one or more items in the list of Matches contain data for the same patient as the death certificate record, click Consolidate. Proceed with step 7.
 - ii. If you determine that the death certificate is for a new patient, click No Matches. The death certificate will exit the workflow and be retained in the database as described in step 6.
 - b. If the automatic match returned a single patient set with score of 1000, an attempt is made to auto-link the record to the patient set. If an auto-consolidation failure is encountered, a manual Consolidate task will be created (the linkage must be confirmed and completed by an editor as described in step 7). If SEER*DMS is able to auto-consolidate the death certificate, the record will be linked as described below. (This is a general description; exact algorithms vary slightly by registry.)
 - i. If more than one of the record's causes of death are reportable, the record is linked at the patient level.
 - ii. If the record has a single reportable cause of death, the cause of death is converted to an ICD-O-3 site code. The ICD-O-3 code is matched against CTCs in the patient set. The record is linked to a CTC if the death certificate site matches the CTC primary site using a 3-character match. Otherwise, the record is linked at the patient level.
6. If no matches were found by the automatic and manual matching tasks, the death certificate record will exit the workflow. It will remain in the database, waiting to be processed via AFL management and follow-back procedures (described further in step 8). Allow this record to remain in the database as an unlinked record until the weeks prior to submission. If an abstract cannot be obtained in time for submission, you will use the record to build a death certificate only CTC.
7. Consolidate the data in the normal fashion, as described in *Chapter 12: Consolidating Data*. The following describes considerations specific to the consolidation of reportable death certificate records.
- a. If the death certificate record represents a new cancer for the patient:
 - i. Link the record to the Patient Set at the patient level ("P"). Do not create a new CTC from this record at this time.
 - ii. Consolidate the follow-up data into the patient set: vital status, date of last contact, causes of death, etc.
 - iii. Because the record is not linked to a CTC, it will continue to be monitored via reports and other mechanisms related to Death Clearance. As described in step 2 above, there will either be an AFL associated with the record or external follow-back procedures will be required. This record will be listed on the Death Clearance

Summary Report (RPT-019A). If an abstract cannot be obtained in time for submission, use the record to create a death certificate only CTC.

- b. If the death certificate data pertains to an existing CTC:
 - i. Link the record to the CTC.
 - ii. Consolidate the follow-up and cancer data into the patient set and CTC.
 - iii. AFL auto-close rules will be applied. These vary by registry and are documented in the *Auto-close Rules – Patient Set is Saved* section of the AFL help page. Typically, the AFL will close and this record will not require any further processing related to Death Clearance.
8. Monitoring Death Clearance. The goal is to link each reportable death certificate record to a CTC as a non-DCO case (in other words, to a CTC which includes abstract data). To achieve this goal for as many records as possible, use the tools described below.
 - a. Worklist Filters - Find and assign worklist tasks related to death certificate records for the current reporting year. Completing these tasks will yield some linkages and reduce efforts related to AFLs, abstracting, and follow-back. You may also want to use RPT-019A to identify worklist tasks related to abstract records that match unlinked death certificate records. Completing these tasks will link the abstracts and death certificates into the same patient sets and complete the processing of the death certificates.
 - b. AFL Manager – Assign death certificate AFLs to an abstractor. Once the abstracted data are received, load the abstract records into the system. SEER*DMS will match the imported abstract records against the AFLs and auto-close matching AFLs. You can also use the AFL manager to create lists for follow-back or group AFLs by facility. External reports can query the record or AFL tables to create follow-back letters designed by registry staff.
 - c. Death Clearance Reports – Use the SEER*DMS Death Clearance Reports to monitor reportable death certificates that are not linked to a CTC. Throughout the year, the number of records should decrease as you complete worklist tasks and receive abstracts. Pay particular attention to death certificates that are not associated with an AFL or are associated with an unknown facility. Per registry policies and procedures, these records may require follow-back to the physician or facility.
 - d. External Reports and Letters – Generate registry-specific physician letters, hospital listings for death clearance follow-back, and other registry-defined reports and letters.
9. If all data sources are exhausted and the only source of information about the cancer is from the death certificate, a patient set with limited information can be created from the death certificate. In SEER*DMS, you can build a CTC from a death certificate record that indicates a reportable cancer and does not match an existing CTC. For more information, see the *Building DCO Cases* section of this chapter.

Performing Death Clearance Follow-back

If an abstract is required but an appropriate facility could not be identified for the abstracting assignment, you should seek information to identify a facility or obtain additional data related to the case. Typically, this involves sending a letter and/or questionnaire to the physician who signed the death certificate. The letters and questionnaires are implemented in external reports; this implementation provides registry staff with complete control over the initial design and subsequent modifications.

To automatically create a letter addressed to a physician, the external report must be able to associate a physician in the Contacts List with data in the death certificate record. This involves matching a value in the record to the Contact List using the physician license number, National Provider ID (NPI), or other identifier. A physician letter cannot be generated if any of the following situations occurs:

1. The physician indicated on the death certificate did not match any entries in the Contacts List. This problem can be resolved by adding the physician to the Contacts List; or updating identifying fields used in the matching process (physician license number, NPI, etc.).
2. The physician field on the death certificate record was missing or unknown. If possible, review the image of the death certificate and attempt to identify the physician.

SEER*DMS provides a system report, RPT-019A, to identify death certificate records that are potential DCO cases. Physician information is included on this report. This report may be helpful in identifying cases for follow-back. To automate the process as much as possible, review the report and resolve the issues described above, when possible.

When a response to the follow-back inquiry is received, the new information should be processed according to registry guidelines. If the information indicates that it is not a reportable case, modify the record and/or AFL accordingly. If you received data items that you would like to store in the database, you may enter the data into a patient set created from the death certificate record (as described in the *Building DCO Cases* section of this chapter).

Reports Related to Death Clearance

SEER*DMS includes the following system reports related to DCO cases. If you require additional information regarding death certificate data, you may generate an external report. See *Chapter 24: Creating Reports and Extracting Data* and *SEER*DMS Data Dictionary* for more information.

Report ID	Title	Description
RPT-019A	Death Clearance Summary	A listing of all unlinked, reportable death certificate records. This report indicates the status of each record in terms of workflow activity and AFLs.
RPT-020A	Death Certificate Records that Require Follow-back	A list of the death certificate records that require follow-back; a parameter allows you to select only those for which follow-back letters cannot be auto-generated because of missing physician information.
RPT-068B	Frequency of Records for the Build DCOs System Task	Number of records, by facility, that will be built into DCO cases by the Build DCO System Task.
RPT-068C	Candidate Records for the	A list of the records that may be built into

	Build DCO System Task	DCO cases. These are the records that would be used to build a CTC if you ran the Build DCO task.
RPT-119A	Death Certificate Only CTCs, by Year of Diagnosis	Frequencies and percentages of CTCs that are DCO by year of diagnosis. The early years can be collapsed into one year range (typically thru 1972).
RPT-119B	Death Certificate Only CTCs by Source	List of the death certificate only CTCs in the patient set data. These are listed by source (facility, physician, or medical examiner).

Using the Death Clearance Summary Report (RPT-019A)

The Death Clearance Summary Report lists all reportable death certificate records that are not linked to a CTC. Use this report to monitor death certificate records which require processing. The report shows the status of the record in terms of its location in the workflow and AFLs. The following columns are displayed:

- **WT** – Worklist Task. If the death certificate record is the focus of a worklist task, the type of task will be indicated here. This column will be blank if the record has exited the workflow.
- **DC Record** – The Record ID of the death certificate record.
- **Patient ID** – If the record is linked to a Patient Set, the ID is listed. If this column is blank, the record is not linked to a Patient Set.
- **AFL** – ID of the AFL created by the death certificate record.
- **Closing Rec** – The ID of the record that closed the AFL. This would typically be an abstract record or a Short Health record. Other record types may close AFLs in some registries. Please consult your registry's workflow diagram for more information.
- **Name** – Patient name.
- **SSN** – Social Security Number.
- **DOB** – Date of birth.
- **DC #** - Death certificate number.
- **DOLC** – Date of death.
- **COD** – Primary cause of death.
- **FAC** – Facility coded on the death certificate record.
- **ST** – State of death.
- **Phys ID, Phys Name** – ID and name of the physician coded as Physician 3 (Doctor 1) on the death certificate record. Space limitations prevent these fields from being displayed if format is PDF; set the format to CSV to include these fields in the report.

It is recommended that you use CSV format for the report. This will allow you to sort and subset the results in Excel. In addition, you will be able to copy-and-paste Record IDs or AFL IDs into the Patient Lookup, AFL Manager, or Worklist filter.

Considerations when reviewing the Death Clearance Summary Report:

1. Review records where AFL is listed as closed and consider the following possibilities:
 - a. A Record ID is not listed in the Abstract column. This indicates that the AFL was closed manually. You should use the AFL Manager to open the AFL. Review the AFL Result field. If it was set to Abstracted when the AFL was closed, you should search to see if

there is truly an abstract. Add a comment to the AFL to document your findings. If the death certificate is inappropriately designated as reportable, change the AFL Result to "Not a Reportable Cancer". The record's reportability status will be updated.

- b. A Record ID is listed in the Abstract column. This indicates that an abstract record entered the workflow and closed the AFL associated with the death certificate record. The death certificate record is listed on this report because it is not linked to a CTC. However, it may be a matter of timing. The Abstract record may be in the workflow. The two records will be consolidated when the abstract's task is completed. Search for these abstracts in the Patient Lookup. A View link will be listed if the record is involved in a worklist task.
2. Review records where a Task ID is listed in the WT (Worklist Task) column. These are death certificate records for the current reporting year with outstanding worklist tasks. These efforts are being monitored and tracked in the worklist. You have the option of excluding these from this report, if you wish.
3. Review records where AFL is listed as open. These records are being monitored and tracked via the AFL Manager. You have the option of excluding these records from the report, if you wish.
4. Review the records where AFL and WT columns are blank. These are reportable death certificate records which are not in the workflow and are not associated with an AFL. You must generate follow-back reports and letters to obtain further information about these cases.

Building DCO Cases

Requires system permission: *rec_build_cfo*

Once Death Clearance procedures have been completed, you may determine that one or more Death Certificate Records should be submitted to SEER or other sources as death certificate only (DCO) cases. Follow the instructions provided below to create a CTC from an individual record. Alternatively, use the Build DCO system task to create CTCs from a set of records (see *Chapter 27: System Administration* for instructions). Whether using the system task or the record editor, a record can only be used to create a DCO case if it is a reportable record, is not the source of an AFL that is closed, and is not in the worklist.

If the record is not linked to an existing patient set, a new patient set will be created. If the record is linked to a patient set but not to a CTC, a new CTC will be created within the patient set.

To build a DCO case from an unlinked death certificate record:

1. Open the record in the record editor.
2. Select **Build Patient Set** from the record menu. This menu item is only available if the record is unlinked and you have the *rec_build_dco* permission. If a patient set cannot be built from this record, an error message will be displayed at the top providing the reason (the record is either in the worklist or is the source of a closed AFL).
3. Click **OK** to confirm.
4. SEER*DMS will create an automated workflow task to create a patient set. When the task completes, a Visual Edit Patient Set task related to the new patient set will be assigned to you.

To build a DCO case from a record linked to a patient set:

1. Search the database for the death certificate record or its associated patient set. You may enter the Patient Set or Record ID into the quick search, or click **View > Patients** to use the Patient Lookup. (See *Chapter 20: Searching for Patients and Records.*)
2. Verify that the record is not already linked to a CTC. If it is linked at the patient level, you may proceed.
3. Click the ID of the record in the patient set navigation box.
4. Select **Move To > New CTC** from the record's menu.
5. SEER*DMS will create a new CTC; you may proceed with visual editing.

Monitoring Death Certificate Only Levels

Requires system permission: *reports*

A SEER*DMS system report is available to analyze the results of death clearance. Report 119A shows the frequencies and percentages of death certificate only CTCs by year of diagnosis.

To create a report of your registry's death clearance rate:

1. Select **View > Reports**.
2. Enter 119A in the search box.
3. Open report specifications page for RPT-119A.
4. If you are monitoring DCO cases for the purposes of a SEER submission, set the **Select** parameter to *SEER-Reportable Only*.
5. The report includes a row of data for each year of diagnosis. If you are only interested in more recent years, combine the early years into one year range by entering a value for the **Group Years Through** parameter. For example, enter 1972 to display a single row for the range of years prior to 1973.
6. Click **Run** or **Run Offline**. (Please refer to *Chapter 24: Creating Reports and Extracting Data* for specific instructions related to running reports and viewing report output.)