Chapter 21: Managing Abstracting Assignments

Casefinding or abstracting assignments are maintained and tracked in SEER*DMS as Abstract Facility Leads (AFLs). As a record or patient set is processed, an AFL is auto-created if SEER*DMS detects, per registry-defined algorithms, that further information must be abstracted from medical records.

An AFL is closed automatically if an abstract record matches the AFL. A registry-specific matching algorithm is used. This match is done when an AFL is created (the AFL is matched against abstract records in the database); the match is also done when an abstract moves through the workflow (the abstract is matched against AFLs to see if the AFL should be closed). In a few registries, other types of records can also close an AFL (e.g., short health records close AFLs in one or two registries). Your registries algorithms for closing AFLs are documented on the AFL help page within SEER*DMS.

Several system reports are available in SEER*DMS to monitor casefinding completeness. If you determine a case should be submitted to SEER or other sources as a Death Certificate Only (DCO) or Casefinding Only (CFO) case, you may build a CTC from the record (see Creating a CTC from a Non-abstract Record for more information).

In this chapter, you’ll learn about

- Relevant Terms
- Understanding Abstract Facility Leads in SEER*DMS
- Abstract Facility Leads Created in Automated Tasks
- Manually Creating an Abstract Facility Lead
- Assigning Leads to an Abstractor
- Tracking Abstracting Assignments
- Updates to AFL Data Fields
- Modifying AFLs
- Creating a CTC from a Non-abstract Record

Relevant Terms

The following terms will be used throughout this chapter:

**Abstract Facility Lead (AFL)**
In SEER*DMS, an AFL is a mechanism for assigning and tracking a request to abstract a case. The processes to create, track, and close AFLs are described in this chapter.

**Casefinding Record**
Data obtained from medical reports which identify new potential cases. These records typically trigger the creation of Abstract Facility Leads. Registry-defined procedures determine whether a new CTC or patient set is built when the casefinding record is first processed or if an attempt is made to obtain an abstract first.

**Death Certificate Record**
A record created from death certificate data files provided by the state. Death certificate data are used to update vital status and cause of death information in patient set data, and to identify potential new cases. If a death certificate indicates a new reportable cancer, an Abstract Facility Lead is created. If an abstract cannot be obtained, death clearance follow-back procedures are performed and a Death Certificate Only case may be created. AFLs
created from death certificate records are managed separately from other AFLs. Death clearance follow-back procedures are described in *Chapter 17: Death Clearance*.

**HL7 E-Path**
Electronically transmitted pathology reports transmitted in an HL7 standard file format. These records typically trigger the creation of Abstract Facility Leads. Registry-defined procedures determine whether a CTC or patient set is built when the HL7 record is first processed or if an attempt is made to obtain an abstract first.

**Health Index Record**
A record type that is typically used to store data from a hospital's diagnostic index records or discharge logs. These data are used for quality assurance related to casefinding; and may provide follow-up and treatment data that are consolidated into existing patient sets. If a Health Index record indicates the need for an abstract, an AFL is auto-created.

**NAACCR Update Record**
The NAACCR short format record used to submit field-specific corrections to data previously submitted to the registry. If a NAACCR Update record cannot be matched to a CTC, an abstract facility lead is auto-created.

**Pathology Report Record**
Pathology reports imported into SEER*DMS using a registry-defined file layout. These records typically trigger the creation of Abstract Facility Leads. Registry-defined procedures determine whether a new CTC or patient set is built when the pathology report record is first processed or if an attempt is made to obtain an abstract first.

**Short Health Record**
A record type used by some registries that contains medical data, but is not a complete abstract. Typically, these records provide additional information regarding follow-up, treatment, and admissions related to a previously abstracted case. An AFL may be auto-created if an abstract record is not linked to the same CTC as the short health record. Short health record is the only record type that is used for both AFL auto-creation and AFL auto-close algorithms. The exact algorithms vary by registry and are described on the AFL help page (select AFL from the Help menu).

### Understanding Abstract Facility Leads in SEER*DMS

The following describes the overall process for assigning and tracking Abstract Facility Leads (AFL). Specific steps vary depending on registry preference and the registry’s abstracting tool. The SEER Abstracting Tool (SEER*Abs) supports synchronization of AFL data with the SEER*DMS database.

1. **AFLs are created**: Typically, AFLs are created in automated processes as Casefinding, HL7, Pathology Reports, Health Index, NAACCR Update, Short Health, or Death Certificate records move through the workflow (a general description is provided in the Abstract Facility Leads Created in Automated Tasks section of this chapter; refer to the AFL help page or your registry’s workflow diagram for the exact algorithms used in your registry). An AFL may also be created manually (see the Manually Creating an Abstract Facility Lead section of this chapter).

2. **AFLs are assigned to an abstractor**: Each registry uses different processes to provide an abstractor with a list of AFLs. A registry casefinding manager may use SEER*DMS to select AFLs based on date, facility, and other fields; or the registry may define a process to automatically provide AFLs to an abstractor in an electronic format.
a. AFLs may be assigned via the Abstracting Assignments extract or report. To use the Abstract Assignments report or extract, the AFLs must be assigned to a single group.

b. AFLs may be assigned by importing the AFLs into the registry’s abstracting tool (see the Assigning Leads to an Abstractor section of this chapter).

c. In some registries, the Processing Status is used to track open AFLs that have been assigned. For example, Processing Status may be set to Sent to Abstractor.

3. Medical records are abstracted: The abstractor investigates each assigned lead and indicates any action taken by indicating the appropriate code for the AFL.

a. The abstractor uses the registry’s abstracting tool to create an abstract record for each reportable case. Records for the abstracted cases are imported into SEER*DMS.

b. If the abstractor determines that an abstract is not necessary for an AFL, the abstractor returns a comment and/or coded reason for not abstracting the case. This may be done using one of the following methods:

c. The abstractor returns a data file created by their abstracting tool. The file should include a comment and/or coded reason for not abstracting the case.

d. Or the abstractor returns a modified version of the Abstracting Assignments extract. In some registries, the abstractor uses Excel or other software to enter codes indicating a reason for each case that was not abstracted.

e. Or the abstractor returns the printed Abstracting Assignments report to a casefinding manager; a reason should be indicated for each case not abstracted.

4. AFLs are automatically closed if there is a matching abstract. SEER*DMS will match the AFL against existing abstract records when the AFL is created; and each abstract record is matched against open AFLs as the abstract moves through the automatic match workflow task. If an abstract record matches an AFL, the AFL is closed automatically. Refer to the AFL help page for the exact algorithms used in your registry.

5. AFLs are automatically closed or updated when AFL assignment updates are loaded from data files. If the abstractor returned an AFL data file, the file can used to update the AFLs in SEER*DMS. The file can be imported directly if it is formatted in the Mass Change file format. Typically, this process would be used to close AFLs but it could also be used to update AFL fields (a change to the facility, for example).

6. AFLs that remain open may be reviewed and processed. They may be manually closed, flagged for further investigation or physician letters, or reassigned:

a. Registry staff use *SEER*DMS to manually close AFLs that are no longer needed. This would include leads that were satisfied by an abstract but were not recognized as a match based on the AFL matching algorithm (e.g., if data fields were missing or incomplete), as well as leads that refer to non-reportable events. The abstractor’s determination ("not a reportable cancer", "not at hospital", etc) may be indicated in the AFL’s result field.

b. A casefinding manager reviews the “Abstracting Assignments” report or listing returned by the abstractor. There may be leads that still require an abstract, for example, if the medical records were not available for abstracting. A new Abstracting Assignments list can be created this group. A manager either assigns the pending leads to another abstractor; or ungroups the AFLs to allow them to be re-assigned at a later time.
c. A casefinding manager uses the AFL Manager to investigate AFLs that were coded as abstracted but did not match an abstract record in SEER*DMS. These AFLs would have status = closed, result = abstracted, but the closing record is missing.

The default values for the AFL result field are listed below. In some registries, different values are used. Registry policies determine how the Result field is populated and maintained.

- Met AFL Auto-close Rules – This value is set by SEER*DMS when an AFL is auto-closed based on algorithms other than the match of the AFL to an abstract. This value cannot be selected manually.
- Abstracted – When an abstract record imported into SEER*DMS matches the AFL, the AFL is closed and the result field is set to abstracted. A user can set the result to abstracted if they determine that there is a matching abstract that was not found by the auto-match.
- FUP Only – The AFL was created for a record that only provided follow-up data.
- Not a Reportable Cancer – If a closed AFL has a result value equal to “Not a Reportable Cancer”, the reportability of the record that triggered the AFL is changed to auditable.
- Tissue Only
- Slide Only
- Not at Hosp
- DOA
- Rad Only
- Recurrence
- Metastatases
- Duplicate
- Out of Area
- Prior to Reporting Date
- Consultation Only
- History Of
- VA Facility – No Agreement
- Closed by Build Task – This value is automatically set by SEER*DMS.
- Other

Abstract Facility Leads Created in Automated Tasks

An AFL is auto-created when SEER*DMS determines, per registry-defined algorithms, that further information must be abstracted from medical records. In general, an AFL is auto-created if there is an indication that a facility has diagnosed or treated a patient for cancer but an abstract record was not received. The following summarizes events that trigger the auto-creation of an AFL. The exact algorithms used for your registry are described in the Auto-create Rules section of the AFL help page (select AFL from the help menu).

Workflow

Auto-create AFL is an automated task in the workflow. This task creates an AFL if the incoming record meets specific criteria defined by the registry. These criteria are documented on the AFL help page (see the workflow section of the Auto-create Rules).

Patient Set Updates

Rules to auto-create AFLs are applied each time a patient set is saved. For example, there may be a rule to create an AFL if the patient set is saved with a NAACCR update record that is linked at the patient level but contains CTC-related data.
If auto-create rules for patient updates are defined for your registry, they will be documented on the AFL help page.

Final Review of Patient Set Data

The final process in the SEER*DMS workflow involves automated checks of the patient set data. For example, the treatment fields may be checked to determine if additional information is required. If this rule exists for your registry, SEER*DMS would create an AFL if data in the patient set indicates that a treatment was performed at a facility, yet the abstract record was not received.

If auto-create rules for the final patient set review are defined for your registry, they will be documented on the AFL help page.

Manually Creating an Abstract Facility Lead

Requires system permission: `afl_initiate`

As you review a patient’s data, information in the text may indicate that the patient was diagnosed with second primary that is not represented by a CTC; or you may determine that a facility should submit an abstract for an existing CTC. You should search the database to verify that an abstract or AFL does not exist in the database. SEER*DMS applies a matching algorithm to prevent duplicate AFLs from being created (see `Matching Algorithm` on the AFL help page).

To request a report from a new facility for an existing CTC:

1. Open the Patient Set in the SEER*DMS editor.
2. Using the CTC links in the Patient Set navigation box, review each CTC.
3. To create an AFL requesting an abstract from a new facility for an existing CTC:
   a. Click the appropriate CTC link to select it (CTC 00 is selected in the figure below).
   b. Click the menu indicator next to Patient ID to open the CTC menu. Select Add AFL.
   c. Information from the CTC will be auto-filled into the AFL form. Review these fields and make changes, as necessary. The Event Date is auto-filled with the date of diagnosis for the CTC. If the new information includes a more appropriate date, revise this field.
   d. Complete as many additional fields as are known. You must specify a Facility.
To request an abstract for a new primary for this patient:

1. Click the **Demographics** link in the **Patient Set** portion of the navigation box. (To verify this, check to see that Demographics is shown on a shaded background.)
2. Open the Patient Set menu by clicking the arrow ➔ next to the Patient Set ID.
3. Select **Add AFL**.
4. Demographic information from the patient set will be auto-filled into the AFL form. Review these fields and make changes, as necessary.
5. Complete as many additional fields as are known. You must specify **Facility Name**.
6. Click **OK**.

Once you save the new AFL, it will be added to the system as an open, unassigned AFL.

**Assigning Leads to an Abstractor**

Requires system permission: **afl_manager**

Your registry must define procedures for assigning leads to abstractors. If your registry maintains an abstracting tool then you may want to configure the tool to load AFL data from SEER*DMS. Or you may need to send a list of AFLs to hospital abstractors. This list may be sent in a data file or you may print a hard-copy of the list. AFLs for a single abstractor are assigned an AFL Group ID.

To group assign a set of AFLs to an abstractor:

1. Select **Manage > Abstract Facility Leads**.
2. Use the Filter controls to reduce the list:
   a. Use the **Data Type** filter to select AFLs created for a certain record type, AFLs created during the review of a Patient Set as it exits the workflow, or AFLs created manually for a patient set.
   b. Set the **Status** filter to open.
   c. To filter by the AFL facility, specify a facility in the **Facility** filter.
   d. If your registry manages data for multiple regions, you may select a value in the **Region** filter. (The filter is not displayed if only one region is defined for the registry).
   e. If you would like to exclude AFLs which were previously grouped and assigned to an abstractor, check **Exclude Grouped**.
   f. If an AFL was assigned to and reviewed by a registrar, they may have coded the **Result** filter. You may multi-select in the Result filter.
   g. You may specify a closed or open-ended date range using the Event Date filter.
3. Click **Apply**.
4. Review the AFLs that are displayed. If an AFL has a group ID, the AFL may have previously been assigned to an abstractor. Determine if you wish to assign the AFL in a new group before continuing.
5. Select **Actions > Modify**.
a. If you wish to limit the number of AFLs assigned in this group, enter a value in the **Maximum Number to Modify** field.

b. Set **Group Action** to Group.

c. Click **OK** to exit the Modify AFLs page.

d. You will be prompted to confirm that you wish to create a new group containing the AFLs. Click **OK**. A new Group ID will be assigned to each AFL.

6. To create an Abstracting Assignments listing for the new group, select **Actions -> Assignments**. A configuration setting defined by registry management determines whether this listing will be presented as a printable PDF report or written to a CSV file that can be opened in Excel.

   a. Depending on your browser settings, you may have the option to Open or Save the listing. If so, click **Open**.

   b. If the listing is in PDF format, it will open in an Adobe Acrobat window. If it is in CSV format, it will open in Excel.

   c. Use the Adobe or Excel controls to print and/or save this report. To print, you may need to use a printer that allows you to use 11x17 inch paper and select the correct paper size in Print Setup (specific instructions vary depending on your printer and the version of the printer driver that is installed, please contact your IT staff for further instructions).

**Tracking Abstracting Assignments**

Requires system permission: *afl_manager*

**To track and update the status of leads assigned to an abstractor:**

1. Collect the Abstracting Assignments report from the abstractor. The **Action** column of the report should contain a code indicating that the case was abstracted or the reason it was not abstracted.

2. Consult your IT staff to ensure that the abstract records submitted with the report were imported into SEER*DMS. It is important to wait for the records to be imported and processed in order to allow SEER*DMS to automatically close as many leads as possible. You will only need to update the leads that did not match abstract records.

3. Click **Manage > Abstract Facility Leads**.

4. Enter the Group ID printed on the Abstracting Assignments report into the **Group ID** filter. **Tip**: If you are viewing a list of AFLs, the Group ID filter is set automatically when you click the Group ID of one of the AFLs.

5. Set the Status filter.

   a. If you wish to limit your review to pending AFLs in this group, set the **Status** filter to **Open**. AFLs in the group will not be listed if they were auto-closed when a matching abstract record was loaded and processed. The number of items now displayed in SEER*DMS should be less than the number of AFLs in the printed report. If this is not the case, consult your IT staff to determine if the abstract records were imported.

   b. Typically, you will only need to review and modify AFLs that remain open to determine if further processing is required or to indicate the reason that an abstract was not obtained. However, if you wish to review all AFLs in the group, set the **Status** filter to **blank**. The list should include all AFLs that were assigned and printed on the report. However, it is possible that some AFLs were ungrouped or re-
assigned in another group (you may search for a specific AFL by AFL ID, if necessary).

6. Click **Apply**.

7. As determined by registry policies and procedures, you may use one of the following methods to process AFLs that were not auto-closed during the processing of the imported records. If you wish to document a change to an AFL, process each AFL individually. Otherwise, you may implement these changes on a set of AFLs that you select (steps for selecting sets of AFLs are discussed in the *Modifying AFLs* section of this chapter).

   a. If an abstract is not necessary or cannot be obtained, set the result field to the appropriate value and close the AFL. Note: If you set result to *Not a Reportable Cancer*, the record that triggered the AFL will be changed from reportable to auditable.

   b. To request an abstract from a different facility, use the lookup to specify an ID in the **Facility** field. The AFL will be removed from the current group. Follow the instructions in *Assigning Leads to an Abstractor* to add the AFL to a new group.

   c. To submit a new request for an abstract from the same facility, you may either ungroup the AFL to allow it to be considered for a new group created at a later time; or you may move a set of AFLs from this group to a new group by setting **Group Action** to **Group**.

   d. If an abstract record is expected but the data file has not yet been loaded, do not modify the AFL. Consult your IT staff to determine when the data will be loaded.

**Updates to AFL Data Fields**

Requires system permission: **afl_manager**

When an AFL is created, the data fields from the source record or patient set are copied into fields in the AFL. If the record data fields are modified, the data fields in the associated AFL are automatically updated. However, the reverse is not true. If you modify the data fields in the AFL, the fields in the source record are not changed. The only situation in which the record is changed due to a change in an AFL occurs when an AFL is closed with a result of *Not a Reportable Cancer*. In this situation, the reportability of the record is changed to auditable.

**Modifying AFLs**

Requires system permission: **afl_manager**

After following the steps in *Tracking Abstract Assignments*, you may wish to modify the Status, Result, Grouping, or Letter flag of an AFL. Status indicates whether the AFL is opened or closed. The Result field is used to track the final determination made by the abstractor when they attempted to abstract the case. Typically, this field is used to code the reason given for not obtaining an abstract. The Grouping Status of an AFL may be changed to ungroup an AFL or assign it to a new group. In addition, you have the ability to set a flag that indicates whether a letter is needed. This flag is not used by SEER*DMS but may be referenced by an external report to create letters requesting additional information from a physician or reporting facility.

If you wish to document a change to an AFL, process each AFL individually. Otherwise, you may implement these changes on a set of AFLs that you select.
To modify a single AFL or a set of AFLs:

1. Click **Manage > Abstract Facility Leads**. Use the filters on the AFL Manager to select the AFLs that you wish to modify.
2. Set the appropriate values for the AFL Manager filters.
3. If you are modifying AFLs assigned as a group, enter the Group ID printed on the Abstracting Assignments report into the **Group ID** filter.
4. Click **Apply**.
5. Select the AFL(s):
   a. To select a single AFL, check the box to the left of the Task ID.
   b. To select two or more AFLs, use one of the following methods:
      i. To select specific AFLs, check the box to the left of each AFL ID. You can only select AFLs on the same page with this method.
      ii. adjacent to the **AFL ID** column heading.
      iii. To select all tasks on all pages, and skip ahead to Step 6.
6. Select **Modify** from the Actions menu. If you manually selected AFLs by checking the box, only those AFLs will be modified. Otherwise, you will be able to modify all AFLs in the filtered list.
7. You may set the following fields for the selected AFLs. Only specify a value for a field if you wish to change that field for the selected AFLs. If you leave a field blank then each AFL will retain its current value for that field.
   a. **Status** – AFLs that require processing should be set to **Open**. If no further processing is required, set this field to **Closed**.
   b. **Result** - use an AFL’s result field to track the determination coded by the abstractor on the Abstracting Assignments report. The valid values for this field are listed below. Registry policies based and tracking procedures should determine how this field is populated and maintained. In SEER*DMS, the **Abstracted** and **Not a Reportable Cancer** values involve special processing as noted below.
   c. **Group Action** – To create a new group containing the selected AFLs, set **Group Action** to **Group**. If an AFL is currently in a group, it will be re-assigned to the new group. To remove the current group ID and allow the AFLs to be re-assigned at a later time, set **Group Action** to **Ungroup**.
   d. **Processing Status** – this flag is not used by SEER*DMS but may be referenced by external reports that create letters requesting additional information from a physician or reporting facility. You may filter by this flag on the AFL Manager page.
8. To change a limited number of the AFLs, enter a value in **Maximum Number to Modify**. Using this method, you cannot control the specific AFLs that are modified. This provides a convenient mechanism for limiting the number assigned to a group and should not be used for other purposes.

Creating a CTC from a Non-abstract Record

Requires system permission: *rec_build_cfo*

If you determine that a case should be submitted to SEER despite the fact that an abstract is currently unavailable, you may use the record editor to create a CTC from the non-abstract record. This feature is available for reportable casefinding, death certificate, and short health records. (In
this context, casefinding includes any record processed in the workflow as “Casefinding”. The specific record types will vary by registry and may include HL7 and other import types). If the record is not linked to an existing patient set, you may create a new patient set. If the record is linked to a patient set but not to a CTC, you may create a new CTC within the patient set.

Alternatively, system tasks are available to auto-build batches of cases from non-abstract records as described in Chapter 27: System Administration. The Build DCO, Build CFO, Build SHO system tasks incorporate reportable, unlinked records into the Patient Set data as new Patient Sets or new CTCs for existing Patient Sets.

To create a Patient Set from a non-abstract record:

1. Open the record in the record editor.
2. If the record is a casefinding or short health record, select Build Patient Set from the record menu. This menu item is only available on unlinked casefinding records and can only be seen by users with the `rec_build_cfo` or `rec_build_sho` permission.
3. Click OK to confirm.
4. SEER*DMS will create an automated workflow task to create the patient set. When the task completes, a Visual Edit Patient Set task for the patient set will be assigned to you.

To create a CTC from a non-abstract record:

1. Search the database for the 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.