Pennsylvania Outcomes and Performance Improvement Measurement System

POPIMS – User Guide

December, 2013

To be used in conjunction with the POPIMS Operational Definitions Manual.
Table of Contents

1. Introduction ............................................................................................................................................. 1
   1.1 Purpose ............................................................................................................................................... 1
   1.2 Concepts ............................................................................................................................................. 1
       Issues ..................................................................................................................................................... 1
       Review Status ....................................................................................................................................... 1
       Opportunity for Improvement, Factors, and Actions Taken .............................................................. 2
       Provider Identification .......................................................................................................................... 3
       Loop Closure Tracking .......................................................................................................................... 3
       Audits .................................................................................................................................................... 3
       Outcome Results ................................................................................................................................... 3
       Referrals ............................................................................................................................................... 4
   1.3 Applications ...................................................................................................................................... 4

2. Basic Configuration ................................................................................................................................. 5
   2.1 Security ............................................................................................................................................. 5
       Initial Login .......................................................................................................................................... 5
       Adding Accounts for the First Time ....................................................................................................... 5
       Adding an Account ............................................................................................................................... 5
       Setting Access Rights ......................................................................................................................... 6
   2.2 Interface ............................................................................................................................................ 7
   2.3 Sign Off ............................................................................................................................................. 9
   2.4 Referral Contacts ............................................................................................................................. 10
   2.5 Configuring Transfer ....................................................................................................................... 11

3. Using POPIMS ....................................................................................................................................... 13
   Using Outcomes ...................................................................................................................................... 13
   3.1 Running the Interface ....................................................................................................................... 13
       Steps to Run Interface .......................................................................................................................... 13
   3.2 Searching for Records ..................................................................................................................... 15
   3.3 Data Entry Environment ................................................................................................................... 17
       Entering Information ............................................................................................................................ 18
       Working with Issues ............................................................................................................................ 19
       Upgrading Pre-existing Conditions .................................................................................................... 20
       Saving Records .................................................................................................................................... 21
       Copying Issue Information ................................................................................................................... 21
       Editing Related Meeting Discussion Notes ......................................................................................... 23
   3.4 Working with the Narrative Generator ............................................................................................ 24
       Using the Narrative Generator to Construct Meeting Notes ................................................................ 24
   3.5 Closing Records ............................................................................................................................... 27
       Completing the POPIMS Record ......................................................................................................... 28
       Signing Off on a POPIMS Record ....................................................................................................... 28
   3.6 Checking the POPIMS Record ......................................................................................................... 28
### 7.7 Template Letters

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Template Letters</td>
<td>76</td>
</tr>
</tbody>
</table>

### 7.8 Spreadsheets

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spreadsheets</td>
<td>79</td>
</tr>
</tbody>
</table>

### 7.9 Statistics

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistics</td>
<td>81</td>
</tr>
<tr>
<td>Over Under Triage Analysis</td>
<td>81</td>
</tr>
<tr>
<td>Issue Trending Reports</td>
<td>81</td>
</tr>
<tr>
<td>Issue Cross Tabular Reports</td>
<td>84</td>
</tr>
</tbody>
</table>

### 7.10 Queries in POPIMS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Queries in POPIMS</td>
<td>86</td>
</tr>
<tr>
<td>Query Differences in POPIMS</td>
<td>86</td>
</tr>
<tr>
<td>Issue Based Filtering Queries</td>
<td>86</td>
</tr>
<tr>
<td>Queried Issue List Functions</td>
<td>88</td>
</tr>
</tbody>
</table>
1. Introduction

Digital Innovation, Inc., in conjunction with PTSF, has developed the POPIMS Collector Software - Version 3.6. POPIMS is an acronym for the Pennsylvania Outcomes Performance Improvement and Measurement System. The POPIMS Collector software has been designed to work in conjunction with the Collector Trauma Registry.

1.1 Purpose

POPIMS has been developed as a multi-purpose tool that fulfills the following objectives:

- Analyzes the overall quality of care provided to trauma patient.
- Provides a tool that allows for tracking and documentation of issues related to patient care that are addressed in the peer review/multi-disciplinary trauma program setting.
- Provides standardized measurement tools that can record, report, and analyze performance measures based upon:
  - Judgment Status
  - Factors
  - Action Items
  - Related Providers
- Identifies and tracks provider performance related issues and specific opportunities for improvement.
- Generates referral correspondence and record feedback/results.

The overall goal of the POPIMS software is to measure and improve overall outcome for patients.

1.2 Concepts

Issues

Issues are any event that may affect patient outcome. POPIMS has the ability to identify issues based upon trauma registry data as well as the capability for users to further identify issues related to the patient.

Issues identified by the trauma registry through the POPIMS interface include:

- Occurrences (Complications) – OCC codes
- Audit Filters – PAF codes and JCAF codes
- Pre-Existing Conditions – PEC codes
- Opportunities for Improvement – OFI codes
- User Defined Issues matched with User Defined Data Elements – UDI codes

In addition, any patient that has expired is also flagged with an issue code of death (DTH), thus allowing for the overall review and determination of preventability for the death. Any death, occurrence, or audit filter identified will be marked as an issue for review in POPIMS.

Pre-existing conditions are not marked as an issue for review by the interface directly. Rather, these codes are presented in a separate section and can be individually selected to be upgraded to an issue for review.

Review Status

POPIMS allows an issue to be marked using a review status indicator. The indicator records how a particular issue was handled during the review process. Review status indicators include:
• **Reviewed in Committee** – Indicates that the issue was presented as part of the case review during a peer review meeting. Results are determined in agreement/consensus with the participating members of the peer review.

• **Reviewed Individually** – Indicates that the issue was reviewed in a private setting involving only one person determining the results. Issues reviewed individually are not considered or discussed in peer review but are still documented and reviewed for outcome analysis.

• **Acknowledged but Not Discussed** – Indicates that the issue was examined and acknowledged that it has occurred. No decision regarding preventability, factors, related provider or ACS grade are determined. Issues marked as acknowledged indicate that the issue was not of importance for review of any kind for overall outcome analysis.

• **Forwarded** – Indicates that the issue was forwarded for review outside of the trauma program. Issues forwarded are not considered appropriate for review by the trauma program staff and usually have occurred due to circumstances outside the responsibility of the trauma program.

### Opportunity for Improvement, Factors, and Actions Taken

POPIMS provides three methods for the measurement of issues. They are:

- **Judgment Status**
- **Factors**
- **Actions Taken**

Each measurement tool is applied to each issue that is reviewed (Reviewed Individually or Reviewed in Committee).

#### Judgment Status

Judgment Status measures the potential that may have existed in improving the event outcome of the issue. There are five OFI Status scores that can be assigned for each patient:

- **Unanticipated Event with Opportunity for Improvement** – The event outcomes was unanticipated, and there was an opportunity for improvement presented that could have altered the event outcome.

- **Anticipated Event with Opportunity for Improvement** – The event outcomes was anticipated; however, there was an opportunity for improvement presented that could have altered the event outcome.

- **Event without Opportunity for Improvement** – There was no opportunity for improvement presented that could have altered the event or its outcome.

Detailed definitions regarding OFI and its application on deaths, occurrences, and audit filters can be found in the POPIMS Operational Definition guide.

#### Factors

Factors are used to identify contributing actions to an issue. They help identify potential causes to the occurrence of an issue. Factors are broadly classified as:

- **Provider/Team Related** – Action items taken by a patient care provider.

- **System Related** – Action items taken/occurred in a patient care setting not related directly to a provider or to the patient.

Factors alone are not considered issues because they do not manifest into a resulting event that has the potential to affect patient outcome. In other words, a factor that occurs in isolation that did not result in an issue occurrence will not have any impact on patient outcome. For example, if a provider has a delayed diagnosis for a patient, but no issue developed with the patient, the factor alone did not have any impact on patient outcome.

Example actions that are considered factors include:

- Deviation from Protocol (Provider related factor)
- DNR Order
- Equipment Failure (System related factor)

Detailed definitions for each factor can be found in the POPIMS Operational Definition guide.
**Actions Taken** is used to identify actions that were taken to address the issue. Not all issues have actions taken. Actions taken indicate steps taken by clinical staff to mitigate the event outcome of an issue or to minimize and/or eliminate the occurrence of the issue or its outcomes in the future.

Example actions taken include:
- Education Session – Rounds
- Develop Policy – Protocol
- Provider/Team Counseling
- Enhanced Resources, Facilities, or Communication
- Referral
- External Review

**Provider Identification**

Providers are any individual or team that is directly involved in the care of the patient. POPIMS has the capability of tracking provider information for the overall case and procedures (through the trauma registry interface) as well as for specific issues.

POPIMS can allow the user to identify a related provider for each issue. Provider identification requires the customization of provider and team identifiers which designate a specific provider (using a provider identifier) or a set of providers (using a team provider identifier).

Each issue only allows the identification of one related provider. The related provider identified is considered the specific provider held responsible or accountable for the specific issue. If a team provider identifier is used, the team as a whole is considered as responsible or accountable for the specific issue. Specific information regarding the appropriateness and impact of provider tracking can be found in the POPIMS Operational Definition guide.

**Loop Closure Tracking**

Loop closure flags are used in POPIMS to indicate whether an issue has been addressed (i.e. the QA loop has been completed). Records can be marked with an open or closed loop closure status. An open loop closure status indicates that the issue still has items in the QA process that have yet to be completed. A closed loop closure status indicates that the QA process has been completed for that issue.

POPIMS provides a loop closure tracking capability that allows individual issues to be marked as either addressed (closed) or requiring an action item (open). The date of expected completion/completion date can also be tracked. Optionally, the user can be reminded of unaddressed issues using this feature.

**Audits**

For deaths, the audit section is completed to further evaluate the associated care given to the patient. The issues that are directly related to the death are identified and further questions regarding the appropriateness of care, the impact issues that contributed to the patient’s death, the primary cause of death, and further evaluation of the opportunities presented is recorded. Optionally, the audit section can be used with survivors in further examining more complex issues.

**Outcome Results**

Outcome results are action items taken and the results of those actions taken to address an issue or the overall case. The results and action items taken to address issues within each case can be recorded in POPIMS. Result information usually includes (but is not limited to):
- Actions taken to rectify the outcome of the patient
- Actions taken to prevent an issue from occurring in the future
• Results of those actions
In addition, sign off information that indicates all issues have been addressed and the case is ready to
close is required. Sign off information includes the specific user account closing the record (sign off
identifier) and the level of sign off (trauma director, coordinator, etc.)

Referrals
A referral is any communication or correspondence related to either a specific issue or the case. POPIMS
has the capability to track up to five (5) referrals per case. POPIMS also has the capability to record a
referral reply along with the referral. Referral information includes:
• Referral Contact Information
  o Name
  o Address
  o Phone, e-Mail, Salutation
• Specific details communicated in the referral
  o Body of the referral correspondence
  o Template used to generate the referral correspondence
• Reply information
  o Date of reply
  o Contents of the reply

1.3 Applications
POPIMS has been designed to be easily integrated into a trauma program’s peer-review tracking and QA
management process. POPIMS can be used in all phases of the QA/peer review process including:
• Issue identification
• Case tracking (using the Case Management Log)
• Preparation of cases for peer review
• Tracking of action items taken and results
• Referral correspondence

Using POPIMS reports, providers can also be analyzed over a period of time to identify trends in issue
occurrence and overall provider improvements.
2. Basic Configuration

2.1 Security

Initial Login
1. Click the POPIMS Registry Icon to start the POPIMS Registry.

2. In the User Name: text box, type OUTCOME. In the Password: text box, type in popims. NOTE: Asterisks will appear in place of the letters.

3. Click Login to continue.
The default account is restricted only to allow the setup of additional accounts and initial configuration of the software.

Adding Accounts for the First Time
To set up each account follow the steps under Adding Accounts and Setting Access Rights. Once all accounts have been set up and tested, remove the OUTCOME account using the instructions under Deleting Accounts. It is STRONGLY RECOMMENDED that the OUTCOME account be removed once all other user accounts have been set up.

Adding an Account
1. Select the option Accounts/Add under the Admin pull down menu.
The following window will appear:

2. Enter in an account name in the **User ID**: text box. The account name can be no more than 8 characters (letters or numbers only). Enter a password in the **Password**: text box. The password can be no more than 8 characters and is case-sensitive. Enter in the same password in the **Confirm**: text box.

   **NOTE:** The user designated for that account should change the password at a later time using the option Change Password under the Customize pull down menu.

3. Click **Add** to create the new account. The **User Accounts** window will now appear.

4. The **User Accounts** window is used to set the access rights for each account. Refer to **Setting Access Rights** below for further instructions.

### Setting Access Rights

1. The **User Accounts** window allows you to configure the access rights for each user account. To grant access rights, check each box associated with the desired access right.
   - **Configuration Access** – Provides access to customization features including popup menus, referral contacts, POPIMS setup, and data entry defaults.
   - **System Maintenance Access** – Allows the user to setup, delete, and modify user accounts. **NOTE:** At least one person must have this right.
   - **Transfer Access** – Allows the user to generate transfer files to be sent to a central site. This must be set for at least one account if the hospital plans to participate in submitting POPIMS cases to PTOS.
   - **Report Writer/Querier Access** – Allows the user to run reports, write queries, and write user defined reports.
   - **File System Access** – Provides access to files (view, edit, delete) in the POPIMS Registry. This access should be granted for anyone with the **Report Writer/Querier Access**.
2. In addition to the access rights, the data modification level can be configured for each account. The four **Data Modification** levels include:
   - **1, View Only** - Allows the user view only access to the database. No modifications can be made to the database.
   - **2, Interactive** - Allows the user to add or modify records, run data checks, and list/search records in the database. Batch mode operations such as batch checking cannot be done.
   - **3, Batch** - Allows the user interactive modification of data, the ability to renumber and delete records, and access to the batch mode operations.
   - **4, Administrative** - Allows the user full access to the database with no restrictions. This level also gives access to the Diagnostics, Import, Export, DBF Export, and Accounts sections of the Administrative Menu.

   **NOTE:** Anyone running the interface between POPIMS and the Collector Trauma Registry will need the data modification level to be set to 4, Administrative and have Report Writer/Querier Access. POPIMS does not currently use the Data Access level option.

3. In addition to granting access levels, an optional user name can also be specified in the **User Name:** text box.

4. Once the User Accounts window has been properly configured click **OK** to save changes.

### 2.2 Interface

All cases in POPIMS are linked with records in the Collector Trauma Registry. Data is transferred from the Collector Trauma Registry database to the POPIMS database using the interface script generated during interface configuration.

To setup the interface:

1. Select **POPIMS Setup and Referral Contacts** from the Customize pull down menu.
2. Enter the path of the Collector Trauma Registry in the text box provided. If the Collector Trauma Registry runs on a network, enter the path for the Collector Trauma Registry Server Software.

Press 1 to browse for the Collector Trauma Registry folder CV4TRAUMA\SERVER\CVW path (e.g. D:\CV4_LIVE\CV4TRAUMA\SERVER\CVW)

Click OK to select a folder or Cancel to abort.
3. Once selected, your institution number should automatically appear on in the **Institution Number** field box.

4. The starting index and key value control how far back POPIMS retrieve records from the trauma registry. The Key Index is usually set to 0 (Trauma Number) and the Starting Key Value is usually set to the desired starting trauma number. If you are starting to use POPIMS for the first time, use the following values:
   
   Key Index: 0  
   Starting Key Value: 2014001  
   
   **NOTE:** This is only used for the initial execution of the interface. After running the initial interface, only modified records from the trauma registry will be updated in POPIMS (regardless of trauma number).

5. Select the option of having loop closure reminders appear during login for POPIMS. If set to Yes or left blank, a window will appear with loop closure reminders when POPIMS is launched. This window is updated each time the interface is executed.

### 2.3 **Sign Off**

POPIMS requires at least one user account with data entry capabilities to also have sign off privileges. The generic account **OUTCOME** cannot be used as a sign off account.

**NOTE:** Accounts with this privilege are reserved for trauma coordinators, staff physicians who complete reviews, or trauma directors. Do not setup this privilege for anyone else without prior written authorization from your trauma director.
To grant sign off privileges to a user account in POPIMS:

1. Select the Sect 3 tab to access the Authorization for Sign Off Setup Screen.

![Authorization for Sign Off Setup Screen]

2. Enter the User IDs for the accounts that will have sign off privileges. POPIMS will allow up to ten accounts with this privilege.

2.4 Referral Contacts

POPIMS has provided a spreadsheet with one sample entry filed to use for the referral contacts database. The spreadsheet file, called REFLIST.CSV, can be found in the FILES sub-folder under the resource and folder which POPIMS is located on the server. (For Stand-Alone installations, the folder would be on the local hard drive under the folder which the stand-alone POPIMS software was installed).

To set the location of the referral contact list:

1. Go to Section 5 to access the Referral Contact Data Setup Screen.

![Referral Contact Data Setup Screen]
2. Press Y to browse for the CSV file.

3. Select the file REFLIST.CSV file.

4. Click OK to save changes OR continue with the setup process.

2.5 Configuring Transfer

Prior to transferring cases to the POPIMS PTOS Central site, the transfer process has to be configured. The configuration steps are provided below.

1. From the Welcome screen of POPIMS, select the menu option Transfer from the Admin pull-down menu.

2. Click Configure...
3. Enter the User ID, password, and facility ID assigned for data submission to PTSF. **NOTE:** This is the same User ID, password and facility ID used to upload Collector trauma submissions to PTSF.

Click **OK** to continue.

4. Click **Exit** to complete the configuration.
3. Using POPIMS

Using Outcomes

3.1 Running the Interface

Once configured, POPIMS is ready to interface with the Collector Trauma Registry. Communication between the POPIMS registry and the Collector Trauma Registry is conducted using an automated script. Other important differences unique to the POPIMS software include:

- All registry data originates from the Collector Trauma Registry. No new records can be entered into POPIMS directly. All new records must first be entered in the Collector Trauma Registry and then brought into POPIMS using the interface.
- Because all POPIMS data originates in the Collector Trauma Registry, all database Add functions of the registry have been disabled or removed. Other Add functions (such as accounts) are not disabled.
- If you need to begin a new record in POPIMS, you will need to enter the record in the Collector Trauma Registry first and then execute the interface.
- The POPIMS system can be run with the Collector Trauma Registry simultaneously.

Steps to Run Interface

1. Click the POPIMS Registry with Interface shortcut to execute the interface scripts, and start the DI Outcomes Registry.

   The POPIMS interface will run automatically without any prompts. Once completed, the DI Outcomes Registry splash screen will appear.

2. In the User Name: text box, type the User ID associated with your account.
   In the Password: text box, type the password associated with your account.
   Click Login to continue.
3. The Loop Closure status reminders will appear if the option has been selected to display during login.

4. Click **OK** to get to the Welcome screen for Outcomes.
### 3.2 Searching for Records

Once records have been transferred from the Collector Trauma Registry into POPIMS, searching for and accessing records in POPIMS is similar to accessing records in any Collector Software System.

To search for records to edit in POPIMS:

1. Select **Add/Modify Records** from the **Registry/Database** pull down menu.

2. The **Add/Modify Record** window will appear.

The default search criteria include searching for any active or closed cases in POPIMS and including either or both PTOS and non-PTOS cases with at least one issue identified. Cases are sorted by the arrival date.

If any values are specified in the Name, Trauma Number, and Medical Record Number text boxes, the default search criteria is automatically overridden and will search for a case using the information that was entered. Names can be searched using an exact match or sounds like match. **Answer N to Exact Match** to search for names that sound like the name provided.

If searching for cases using the **Issue** text box, entering the partial issue code (i.e. OCC) will generate a list of all cases with that partial code.

The search can also be limited to:
- Loop Closure Status type and date
- Record Flag
- Meeting Month/Year
- EDA Month/Year
- PTOS Patient Status

The “Specify a Subset of Records” field box limits the search to active, closed, or all records depending on the value specified.

The **Sort By** field box sorts the results using the value specified. The default is to sort by arrival date.
If a more than one search parameter is specified, the search will be performed by applying ALL
the search criteria specified. Click OK to activate the search.

3. The search results are displayed in the Select Record window.

   ![Select Record Window]

   The window also reports the total number of patients listed and the search criteria applied along
with the issues.

   For each record listed, the following information is provided:
   a. Record Number – The unique identifier (usually trauma number) that is used in the
      Trauma Registry to store a record. NOTE: Some trauma registry systems use the
      alternate key as the unique identifier.
   b. Alternate Key – An alternate unique identifier (usually medical record with visit number)
      that is used in the Trauma Registry to store a record.
   c. MR Number – Medical record number that is used for the patient from the Trauma
      Registry.
   d. Patient Name – Name entered for the patient in the Trauma Registry. The Patient Name
      is displayed in the format: “Last name, First name Middle initial.”
   e. Disch Status – The patient’s final outcome status indicated in the Trauma Registry.
   f. Record Status – The patient’s record status in the DI Outcomes Registry.
   g. Issues – List of issues with both the issue code and description. If the issue code has not
      been added to the Issues menu, the description portion will have the code in place of a
      description.

   Issues are tagged accordingly:
   F: - Filter that has been triggered by the trauma registry but not upgraded to an
   issue in the DI Outcomes Registry record. NOTE: Filters are not REQUIRED to be
   reviewed unless directed by a regional, statewide, or national accreditation
   board.
   * - Issue has not been addressed in the DI Outcomes Registry
   ? - Issue has been reviewed but no OFI Status determined
   ^ - Issue has been acknowledged but not reviewed or forwarded for review
   outside the trauma program
   # - Issue has been addressed

4. To select a record for editing, highlight the desired record and click OK.

   ![Select Record Window]

   ![Select Record Window]
3.3 Data Entry Environment

Similar to the Collector Trauma Registry, POPIMS presents record information using a data entry window divided into two sections:

- **Data Entry Form**
- **Status Bar and Buttons**

The **Data Entry Form** contains the data elements that are part of the POPIMS database. The form is organized into sections and screens. Sections can be accessed by using the tabs at the bottom of the data entry form.

Alternatively, the ALT+SectionID keyboard button combination can be used. For example, to go to section 3, press the combination ALT+3 on the keyboard.

Each section contains one or more screens. Use the **PgUp** and **PgDn** buttons to navigate through screens.

Alternatively, the “Page Up” and “Page Down” keyboard buttons can be used.

The **Status Bar and Buttons** contain record identification and status information as well as buttons. The buttons provided include:

- ✔ **Check** - Activates data entry checking for the record.
- ✒ **Exit** - Saves and exits the record.
- ✗ **Cancel** - Exits the record without saving changes.
- ? **Help** - Activates on-line help for data entry.

The information provided on the status bar includes the screen name, record number and record status.
The **Current section and screen location** indicates which specific part of the data entry form is currently being presented in the data entry window. The first number indicates the section and the second number (after the decimal point) indicates the screen within that section.  

The **Record Identification** includes the patient name and the assigned trauma number.  

The **Record Status Flags** indicate the following:

- **Slot 1: Active/Closed Status** – Indicates whether the record is active or closed in POPIMS.  
- **Slot 2: Modification Status** – Indicates whether changes to the record have been saved. A *blank* slot indicates that the record has been saved, an asterisk * indicates that the record has changes that have not been saved.  
- **Slot 3: Transfer Status** – Indicates whether the record has been transferred. A *blank* slot indicates that the record has never been transferred, a T in the slot indicates that the record has been transferred to the central site, and an R in the slot indicates that the record has been retransferred (transferred more than once) to the central site.  

**Entering Information**

Enter the information for each section as appropriate. The POPIMS Operational Guide contains specific information regarding the appropriate use of each data entry field in POPIMS. Some fields have associated popup menus that can be used for selecting a choice during data entry. For example, in section 5.1, the field “Loop Closure Status” has the following associated popup menu:

![Loop Closure Status Popup Menu](image)

To make a selection using the popup menu, double click on the desired value. Some menus include sub-menus. These are indicated with a + sign in front of the sub-menu as shown below.

![Issue Popup Menu](image)
To open the sub-menu, double click on the sub-menu. The + sign changes to a – sign and the associated values (or sub-menus) are displayed. An example is given below.

### Highlighted Fields

In POPIMS, they are used to indicate that the data elements are transferred to the PTOS POPIMS Central Site.

### Trauma Registry Fields

Formerly the highlights were used to indicate registry data elements. This is no longer the case. However, changing data in a field that is brought over from the trauma registry does NOT change data in POPIMS. Changes to these fields must be completed in the Collector Trauma Registry. All other fields are native to POPIMS and can be edited in the data entry form regardless of highlight.

### Working with Issues

Section 5 of the POPIMS data entry form contains the issue evaluation form used for each issue reviewed. A total of 20 issues can be entered for review in this section. An example view of this section is given below.

Issues identified by the interface will appear automatically in this section. Users can also identify issues in this section using the next available issue screen. At a minimum, for each issue identified or entered the fields Date Identified, Issue Location, and Acknowledged/Review Status must be completed.
If an issue is reviewed in committee, the Presented By and Meeting Discussed fields must also be completed. For all issues that are reviewed (regardless of whether they are reviewed in committee or reviewed individually), Factors, Preventability, and the question “Does medical record documentation support the issue discussed” must be completed.

If an issue is determined to be potentially preventable or preventable, the System Related, Provider/Team Related, and Prov/Team ID fields must be completed.

The Comments, Action Details, and Loop Closure fields are optional.

When completing the issue evaluation, some fields will be skipped depending on the answer given for another field in the evaluation form. For example, if the field Acknowledged/Reviewed is answered with value 3 (Acknowledged) or 4 (Forwarded), all other fields except issue comments and loop closure fields are skipped.

**Upgrading Pre-existing Conditions**

Any new records that have a pre-existing condition (PEC) identified will not flag the PEC as an issue. Instead, the flagged PEC code will be identified in section 4 (Pre-Existing Conditions Identified by the Trauma Registry) of the POPIMS data entry form. An example view of this section is given below.

![Pre-existing Conditions Identified by the Trauma Registry](image)

Although PEC codes are no longer flagged as an issue, the user still has the option of upgrading one or more of the PEC codes for review in the issue evaluation section.

If Y is entered next to corresponding PEC code, the following actions occur in the POPIMS record:

1. A message window will appear similar to the one given below.

   ![PEC upgraded to issue #2](image)

   The window will indicate that the PEC code has been upgraded and to which screen in section 5 the PEC code has been upgraded. Click OK.

2. The PEC code is copied to section 5, ready for review.

3. The Y column is cleared.
PEC codes can only be upgraded once to an issue. If the user attempts to upgrade the same PEC code again, a message window indicating that the PEC code has already been upgraded will appear.

If section 5 is full (all 20 issues slots are used), the PEC cannot be upgraded to an issue. The following message will appear if the user attempts to upgrade the PEC to an issue.

**Saving Records**

To save editing changes and exit the record, click Exit. Alternatively, the record can be saved without making changes by selecting from the pull down menu, File/Save or by using the CTRL+S combination on the keyboard.

<table>
<thead>
<tr>
<th>File</th>
<th>Edit</th>
<th>Browse</th>
<th>Tools</th>
<th>New</th>
</tr>
</thead>
<tbody>
<tr>
<td>Save</td>
<td>Ctrl+S</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Close</td>
<td>Exit Collector</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If a record is complete, ready for transfer, and has been signed off, click Check to run data entry checks and close the record. For more information on closing records and transfer, see section 3.4.

**Copying Issue Information**

The Issue Evaluation Section includes a time-saving feature that allows the user to copy review information from one issue to another. Copying issue review information can be done for two or more issues that have been reviewed in tandem and have similar results. Copied information from one issue to another can be changed after copying. The copy feature is only available when the issue that the review information is being copied to is completely blank except for the Issue Code.
To copy information from one issue to another:

1. Go to the Issue Evaluation page containing the issue that you want to copy review information into.

2. In the field **Copy from Issue #**, enter the page number of the issue to be copied from. For example, if copying review information from the issue on page #1 to page #2, enter 1 in this field.

3. Any valued fields from issue #1 (with the exception of the Issue Code) are copied from Issue #1 to Issue #2.
Editing Related Meeting Discussion Notes

The Issue Evaluation Section allows the user to edit discussion notes using a text editor without the need to switch pages between the issue and the related meeting.

To edit related Meeting Discussion Notes within the issue section:

1. Make sure that you have indicated the meeting using the Primary Meeting name field in the Meeting Section (section 3).

2. For a given issue, indicate the related meeting in the field Meeting Discussed.

3. Next to the Meeting Discussed and Date field, enter Y to open the discussion notes for the related meeting.

If no notes have been entered, a blank discussion form will open.

**HINTS:**

- The notes are opened using the default text editor for your operating system (usually Microsoft Notepad). Initially word wrapping may be turned off. To turn on word wrapping in Notepad, select Format/Word Wrap. Automatic word wrapping will be activated. This needs to be done only once in Notepad.
• It is strongly recommended to close Notepad before going back to the Issue Evaluation page. Changes made to the discussion notes will not be reflected until Notepad is closed and the discussion notes are saved.

4. If any changes are made, save them before exiting Notepad. Any changes will be reflected in the Meeting Information section for the related meeting.

### 3.4 Working with the Narrative Generator

POPIMS includes the Narrative Generator feature which allows users to quickly construct review and discussion notes using a form based question/answer process along with automatically generated narrative based on data from the trauma registry.

#### Using the Narrative Generator to Construct Meeting Notes

1. To access the Narrative Generator feature, click the **Narrative** button in the “Data Entry Window.”
2. The **Narrative Generator** form will appear presenting preliminary information and a patient summary that is used to construct the narrative.

   ![Narrative Generator Form](image)

   Use the **Template Topic/Questions** tab to add specific discussion/review notes organized by phases of care and/or by specific issue(s). To include issue notes, click the **Include in Narrative** checkbox.

3. Each phase of care is represented by a tab (e.g. ED/Resuscitation) and has both objective information and review/discussion topic questions. To include a phase of care in the constructed narrative, click the **Include in Narrative** checkbox.

   ![Phase of Care Tab](image)
4. Once activated, specific topic areas can be used to organize and include discussion/review notes. Use the memos under each topic section to enter specific notes. Sections that are not completed are not included in the constructed narrative.

To generate narrative, go to the Generated Narrative tab. The constructed narrative will be presented under the constructed narrative memo.

Adjustments can be made to the constructed narrative before copying it to a meeting discussion section in Outcomes.
5. To copy the constructed narrative to a specific meeting discussion, click the Generate? checkbox next to the meeting to copy the narrative into and then click Generate Narrative.

Further adjustment can be made in the meeting discussion memo if desired.

6. Click Generate, Save, Exit to save changes and return to the POPIMS registry. All topic information and settings will be saved, and any generated narrative in meeting discussion notes are copied back into the meeting discussion memo in POPIMS.

3.5 Closing Records

POPIMS requires completed and signed off records to be closed. A closed status indicates that the QA process has been completed, issues have been addressed, outcome results recorded, referrals completed, and action items addressed. Closing a record involves three steps:

1. Completing the POPIMS record, including all appropriate information and marking loop closure status values as closed, inactive, or no closure necessary.
2. Signing off on the POPIMS record.
3. Checking the POPIMS record.

Once these steps are completed, the record can then be closed. Not all records are required to be closed in POPIMS. However, any record with at least one identified issue should be closed, and EVERY record that indicates a death (Issue value: DTH) MUST BE CLOSED.
Completing the POPIMS Record

For a POPIMS record to be considered complete, the following criteria must be met:

- For all records, the record must be closed in the Collector Trauma Registry prior to closing in POPIMS.
- For all records with at least one issue indicated, Approval/Sign Off must be completed.
- For each issue, the following fields must be completed:
  - Presented By (may be filled with inappropriate or unknown)
  - Identified Date
  - Issue Location
  - Acknowledged/Reviewed Status
  - Loop Closure Status (must have a closed, inactive, or no closure value)
- For any reviewed issue, in addition to the fields listed above, the following additional fields must also be completed:
  - At least one Factor must be indicated
  - Judgment Status
  - Outcome Result notes and Resolution Items
- For any issue audited, the appropriate audit section must be completed.
- For any issues reviewed in committee, in addition to all fields listed above, the following additional fields must also be completed:
  - Meeting Title
  - Meeting Date
  - Meeting Attendees
  - Meeting Discussion

Once a record is complete and sign off is completed, data checks can be used to close the record.

Signing Off on a POPIMS Record

To sign off on a POPIMS record, the Approval/Sign Off fields must be completed. The fields consist of:

- Sign off account ID
- Sign off level

Only account IDs specified for sign off in the POPIMS Setup can be used in the sign off account ID slot. In addition, the account ID provided must match the ID used to login to POPIMS when closing the record.

Signing off on a POPIMS record implies the following:

- All issues have been addressed.
- The QA process for the case has been completed (including documentation of the process).
- No additional follow-up is required or has been determined to be inactive.
- All loop closure items have been addressed.

In other words, a sign off indicates that the review of the POPIMS record is completed.

3.6 Checking the POPIMS Record

To start data checks for an individual POPIMS Record:

1. In the “Data Entry Window”, click Check.
2. If any errors are detected, a check window will appear at the top of the Collector desktop window.

Correct the corresponding check. The window will indicate OK if the correction is valid.

Click Next Check to continue.

NOTE: If the check cannot be corrected, click Validate Check to bypass the check for this record. However, not all checks can be validated.

3. Once all checks are completed, the following window will appear.

Click Yes to close the record. The record will be saved, exited and marked as closed.

NOTE: For centers participating in the POPIM Central Site data submissions - Once the Transfer Configuration steps have been completed, POPIMS can be used to submit cases to PTSF. Only PTOS qualifying death cases from January 1, 2013 are submitted to PTSF. The cases submitted do NOT include any user entered notes, discussions, comments or other memos. If you wish to participate, contact Nate McWilliams at PTSF.

3.7 Transferring Cases to the POPIMS PTOS Central Site

NOTE: Prior to performing the steps to transfer cases, please make sure that you have configured the transfer process in section 2.5 of the POPIMS Users Guide. To transfer cases to the POPIMS Central Site, follow the steps below.

1. From the Welcome screen of POPIMS, select the menu option Transfer from the Admin pull-down menu.
2. Click **Transfer**.

3. The transfer process will automatically scan for cases to be submitted to PTSF. If there are no cases to submit, the following message will appear:

   ![Message](image1)

   Click **OK** to continue.

   If there are cases to be transferred to PTSF, the following window will appear:

   ![Window](image2)

   Click **Yes** to continue.

4. Follow the prompts that will create the POPIMS transfer submission file to send to PTSF. During the process, the transfer window will indicate that the file is being transferred:

   ![Window](image3)

5. Once completed, a final message indicating a successful transfer will appear:

   ![Window](image4)

   Click **Exit** to continue.
6. The PTOS site will list all successful submissions to the PTSF site (https://www.ptsfafs.org/) under PTOS Submission Review. POPIMS submission will use the following naming convention:

POPIMS-####-YYYYMMDDHHMMSS.XFR

Where #### is your facility ID and YYYYMMDDHHMMSS is a string containing the date/time the submission was generated.

Example: POPIMS-0304-20130620111931.XFR
4. Customization

4.1 Provider Codes

As of version 3.6 of POPIMS, provider codes are now handled by the interface process between the PTOS Collector Trauma Registry and POPIMS. Codes should no longer be edited in POPIMS. It is recommended that provider codes be edited through the PTOS Trauma Registry. Provider codes manually entered before the update are preserved in a user defined branch that can still be edited in POPIMS. It is recommended to review this list and eliminate duplicate codes.

4.2 Referral Contact Editing

To edit the referral contact list from within POPIMS:

1. Select the option POPIMS Setup and Referral Contacts from the Customize pull down menu.

2. Go to Section 5 to access the Referral Contact Data Setup Screen.

3. Press Y for the second field (Press Y to edit the CSV file). The CSV file will open in MS Excel (or the default spreadsheet program installed on your machine).

4. In the spreadsheet program, complete the entries desired.
5. Save the spreadsheet as a CSV file.

![Image of saving a CSV file]

6. MS Excel will warn you that the CSV format is not a fully supported format.

   ![Image of MS Excel warning]

   In MS Excel, click Yes to continue with the saving process.

7. Close the spreadsheet program.

8. Click OK to save changes.

9. To update the menu, restart POPIMS using the shortcut POPIMS with Interface.

### 4.3 Facility Contact Setup

The facility contact information in the POPIMS Setup can be edited for use with the inside address information in the referral templates. To edit:

1. Select the option **POPIMS Setup and Referral Contacts** from the Customize pull down menu.
2. Go to Section 6 to access the *Facility Contact Data Setup Screen.*

![Facility Contact Data Setup Screen]

3. Complete the contact information. An example of a completed screen is given below:

![Completed Facility Contact Data Screen]

4. Click **OK** to save changes.
4.4 Adding Meeting Names

1. Select the option Pop up Menus under the Customize pull down menu.

![Dropdown menu with Pop up Menus selected]

2. Select Meeting Title.

![Meeting Title selection dialog]

Click OK.

3. Enter a meeting title, one per line. The meeting title:
   - May be no more than 25 characters in length
   - Must not contain any commas or semi colons
   - Must be unique

![Meeting title input]

4. Click OK to save changes.
5. Run the option *Update As Text Definitions* from the *Customize* pull down menu.

![Customize Menu](image)

### 4.5 Meeting Attendees Setup

Meeting Attendees Defaults are used to set default attendees lists for a specific meeting. The default attendees set for a meeting are automatically completed when the meeting is specified under the Meeting Name field. Once completed, the list of attendees can be edited within the record to add other attendees or subtract an absent attendee. The original defaults set are not affected by the editing in the case.

Prior to completing this portion of the setup, make sure to edit the related menu for meeting names. This will aid in consistently using the defaults as well as correctly assigning the proper meeting name for specific meetings.

To set default attendees for a specific meeting:

1. Select the option *POPIMS Setup and Referral Contacts* from the *Customize* pull down menu.

![Customize Menu](image)

2. Go to Section 7 to access the *Meeting Attendees Defaults* Setup Screen.

![Meeting Attendees Defaults](image)
3. Enter the specific meeting name that defaults will be set for in the Meeting Name field.

4. Enter the default attendees for in the Associated Attendees field.

5. Steps 3 and 4 can be repeated for a total of five meetings.

6. Click OK to save changes.

4.6 Configuring User Defined Issues

Modeling a User Defined Issue

Aspects of an Issue
The key to determining how an issue is recorded and evaluated is understanding the QA process behind the issue. Not all issues require the same level of analysis, tracking, or evaluation but all issues will exhibit the following aspects:

1. All identified issues stem from observations of the clinical environment that patient care is given.

2. Each issue has a set of causes involved. Sometimes a particular cause or combination of causes can be identified. Other times, no single cause or pattern of causes can be identified.
3. With the proper data, each issue can be tracked and a start point can be set. A start point is simply a measurement of the frequency of the issue in stasis.

4. For each issue, there is a goal that either:
   a. Resolves the issue completely,
   b. Minimizes the frequency of the issue, or
   c. Minimizes the effects of the issue.

In addition, some issues may also exhibit the following aspects:

1. Issues may have multi-variable aspects (i.e. more than one cause or factor is involved).
2. Additional tracking may be necessary to measure multiple aspects.
3. Issues can reoccur after solutions have been put in place.
4. Issues may have multiple solutions.

Data Modeling Technique

The example below walks the user through modeling an issue and determining the best way to capture the information for tracking and evaluation. The steps provided use a simplified data modeling technique that helps the user determine the best data model for evaluating the issue.

The steps in this technique include:
1. Issue identification – Determine the issue at hand and possible causes.
2. Issue Analysis – Determine the aspects and goals related to the issue.
3. Measurement – Determine what data is necessary to measure and show resolution.
4. Implementation – Apply a data model that will correctly and efficiently measure the issue and show resolution.

Example Issue – Medication Utilization

Scenario:
General Hospital’s Trauma Program is experiencing declining and rejected insurance reimbursements for certain brand name drugs being used, in particular, Brand Drug X. In addition, after some key reviews, it has been determined that some of the staff prescribes Brand Drug X instead of its generic equivalent. Other times, Brand Drug X or its generic is being prescribed for symptoms without a diagnosis of the specific disease the drug is intended for.

Analysis:

Step 1: Issue Identification

What is the issue at hand?
The trauma program is losing funds because of declining and rejected claims for Brand Drug X.

What are the causes?

- Insurance companies are cutting back on reimbursements. They are also demanding better justifications for use of certain medications or they will reject those claims.

- Clinicians are prescribing Brand Drug X when its generic equivalent would be just as effective in a majority of cases.

- Clinicians are prescribing Brand Drug X or its generic equivalent when the need for the drug is only suspected and not confirmed by diagnosis.
Step 2: Issue analysis

Why?
- A trending in declining profits coupled with raised costs in healthcare contributes to declining reimbursements and more stringent reimbursement claims.
- Clinicians have a bias for this drug because of its proven effectiveness in treating patients.

What can be controlled?
- Insurance reimbursements can be improved with better documentation.
- Little control in how or what insurances will continue to reimburse for.
- Clinician behavior can be altered for better utilization of this drug while minimizing the effects on patient care.

What goals are desired?
- Better reimbursement for Brand Drug X and its generic equivalent.
- Smarter utilization of Brand Drug X and its generic equivalent.
- Cost savings.

How can those goals be obtained?
- Additional documentation for justification when Brand Drug X or its generic equivalent is used.
- Protocols determining when and how Brand Drug X will be used and when its equivalent would be prescribed instead.

Step 3: Measurement

How are these goals measured?
- Whenever Brand Drug X or its equivalent is prescribed, this information should be recorded in the trauma registry.
- Record the cost and reimbursement amounts for the drug for each patient (optional).
- Track as a user defined issue when reimbursement was not granted for Brand Drug X.
- Record all aspects involved in the issue, including preventability and clinicians involved. In addition, document details that may shed light on why or what can be done to remedy the situation for each individual case.

What is the start point?
- Document when changes took place. Trend the frequency of the issue and cost/reimbursement rate changes over a period of time (3 to 6 months).

How is change measured?
- Examine related data including preventability and clinicians for trends. Possible trends may include:
  - Non-compliance—One particular person or department may not be adhering to protocol or not properly documenting supporting justification.
  - Overall protocol effectiveness—How has the protocol contributed to a change?
  - Cost savings—Demonstrate a cost change differential over time.
Patient care impact – Demonstrate any effects or changes in patient care due to changes in protocol.

**Will the data measure this change effectively?**
- For Brand Drug X, there is fixed daily cost per patient and overall reimbursement information can be contributed by other systems. The need to record costs in the trauma registry is not necessary. There is still a need to record which type of drug (brand or generic) was prescribed and the period of time of the prescription.
- Issue tracking needs to distinguish between departmental, clinician, and preventability status. The issue section already records this information.
- Patient care impact needs to be tracked. This can be done using comments or quantifying positive or negative patient care impact using either:
  - Additional data points to track this information
  - Using the factor section to record patient care impacts.

**Step 4: Implementation**

**What data points will be needed in the trauma registry?**
- Two data points
  - Custom Data Element Field – Was Brand Drug X or its generic equivalent prescribed for this patient? Values include: 1, Brand or 2, Generic. N/A would represent that the drug was not prescribed.
  - Custom Data Element Field – Duration. Measures in days the time that the patient was on the drug.

**What data points or menu changes will be needed in POPIMS?**
- A user-defined issue will need to be added to track when there was no reimbursement.
- Data points for preventability, clinicians, and departments built in to the system in the issues section. There is no need to add these points.
- If patient care impact is being measured, how will that be tracked? The comments section may record whether there was a negative, positive, or no impact to patient care. The trauma registry could also record this information if it makes sense to place it in there instead. In this case, comments can be effectively used and queried.

**What types of reports will effectively show change?**
- Built in list tables and statistics for issues can be used to demonstrate change.
- Additional ad-hoc queries and reports could be written to further analyze cost effectiveness (using the number of days prescribed and cross referencing to records with identified non-reimbursements or comparing changes in cost versus reimbursement amounts over a course of time).

**Other Considerations**

**Impact on Patient Care and Outcomes:**
Ideally, any issue that is examined and resolved will improve patient care. It may however turn out that this is not the case. In evaluating overall outcome and patient care, changes in outcomes may be direct or indirect. The example presented above can have both positive and negative direct aspects to patient care. In addition, there may be additional indirect outcome effects due to cost savings and better resource utilization.
Not all patient care outcome effects can be quantified, but for every issue, there should always be a demonstration of change – whether that change may be directly related to patient care or not.

Data Availability:
Many times, once an issue has been modeled and implemented, the data to track or evaluate the issue may not be available. Other times, data may already exist that can be used to evaluate the issue.

Understanding what is already available or potentially available can save an enormous amount of time and effort that is given to evaluating an issue. It is strongly recommended to work with your trauma program staff, medical records, and information systems when determining sources and availability of data.

For the trauma registry, refer to the operational definitions published by PTSF each year BEFORE modeling additional data points in the trauma registry. Likewise, refer to the POPIMS Operational Definitions guide BEFORE modeling additional data points in POPIMS.

Feasibility:
Sometimes, the cost of tracking and evaluating an issue may outweigh the benefits. Other times, there may be a handful of issues that all need resolution, but the resources to tackle all of them at once are not available.

Determining the feasibility and overall benefits of an issue will help decide which issues will yield in the most benefit to all parties involved. Work with your trauma program director, other key staff in your trauma program, and your hospital QA departments to determine which issues resolutions are worth tackling.

Adding a User Defined Issue
Steps:
1. Select the option **Popup Menus** under the **Customize** pull down menu.
2. Select the menu User Defined Issues. Click OK.

![Menu Select](image)

3. Enter the User Defined issue code and description.
   Make sure that the code follows the format: UDI####
   Where #### is an alphanumeric combination that uniquely identifies the issue.
   It is strongly recommended that specific issues under a general category use a pattern to determine the code.

   ![Edit Menu](image)

   For example, if a general category of provider protocol issues for spinal cord patients includes several specific issues, the pattern of UD\text{ISP}## can be used. (Where SP indicates a spinal cord category and the final two digits (##) can be used for each specific issue under that category).

4. Click OK to save changes.

5. Run the option Update As Text Definitions from the Customize pull down menu.
4.7 User Defined Issues/UDI Table Match Up

The POPIMS Registry has the ability to transfer user-defined data element definitions and data from the Collector Trauma Registry into POPIMS. Along with this feature, POPIMS has the ability to flag issues based on the user-defined data elements.

Using the User Defined Elements/UDI Match Up Table, user-defined data elements can be matched to user-defined issues (UDI) in POPIMS. The match up table can also perform four different types of tests to determine when a UDI is flagged for a corresponding user-defined data element. The four tests are:

- **1. Yes Test** – Flags the corresponding UDI if the matching user-defined data element is answered Yes, Y, or 1.
- **2. No Test** – Flags the corresponding UDI if the matching user-defined data element is answered No, N, or 2.
- **3. Valued Test** – Flags the corresponding UDI if the matching user-defined data element is valued.
- **4. Not Valued Test** – Flags the corresponding UDI if the matching user-defined data element is not valued.

POPIMS allows up to 50 user-defined elements/UDI matches.

To configure the user-defined elements/UDI match up table:

1. Select the option **POPIMS Setup and Referral Contacts** from the Customize pull down menu.

2. Select the **Sect 4** Tab to access the **User Defined Elements/UDI Match Up Table** Setup Screen.
3. Select or enter the user-defined element name that will be matched up with a UDI in the User Defined Element column.

4. Select which test in the Test column to use with the user-defined data element. This will determine when the UDI will be flagged.

5. Select or enter the UDI issue that will be matched up with the user-defined data element.

6. Repeat steps 3 through 6 to add other user-defined data elements/UDI match ups.

7. Click **OK** to save changes.

### 4.8 Additional Filters

Some of the audit filters from the trauma registry are not required for review in POPIMS. However, you can select these additional filters for review by customizing the additional filters section of the POPIMS setup.
Steps:
1. Select POPIMS Setup and Referral Contacts from the Customize pull down menu.

2. Select the Sect 2 Tab to access the Additional Filters Setup Screen.

3. To select a specific filter for detection and flagging by POPIMS, enter 1 (Yes) in the field next to the specific PTSF or JCAHO filter.

4. Click OK to save changes.
5. Generating Letter Templates

5.1 Introduction

POPIMS supports the use of template documents to use with POPIMS records. The template documents (referred to as letter templates) allow the user to create custom base letters that can be used repeatedly for different letters. The template letters are linked to the POPIMS records using the reference field that stores the related template letter location relative to POPIMS.

It is strongly recommended that all letter templates be stored in the provided subfolder in the POPIMS Server Installation called Files. If POPIMS is ever relocated to another server or another location, any referenced templates in the Files folder will continue to work.

There are two types of letter templates in POPIMS:

- General Template
- Referral Template

A General Template does not require a referral to be completed. POPIMS allows a single general template to be selected for each POPIMS record. Examples of general templates include:

- Thank you letter
- Provider feedback letter

A Referral Template requires a referral to be completed. Each referral can have one referral template attached along with one external letter referenced. Examples include:

- Issue Referral
- Referral Follow-Up
- Case Referral

5.2 Using a General Template

Steps:

1. Select a record to modify using either Add/Modify Record or Browse Records option from the Registry/Database pull-down menu.

2. Select the tab 7 Outcome (Outcome Summary Section).
3. In the field *Template Letter*, press Y to select a template. The following window will appear:

![Location of Template Window]

4. Select the desired template to link to the record. Click **Open** after selecting the template. The template file name will now appear in the template letter field.

   **Template Letter (Y to select)**: 0:FILES\MeetingSummary.doc

5. To generate a letter using the template, select the option *Run Report for this Record* from the *Tools* pull down menu. The following window will appear:
6. Click the … next to the report box and select the report Template Letters from within the Outcomes Record.

Click OK. The following window will reappear with the specified report:

Click Run to generate the template.

7. The template letter will open in MS Word. Switch to MS Word to view the template.
8. Select Mailings and then Preview Results to view the merged document.

9. Close MS Word to return to POPIMS.

5.3 Adding a Referral

Steps:
1. Select a record to modify using either Add/Modify Record or Browse Records option from the Registry/Database pull-down menu.

2. Select Sect 8 Tab Refer/ ReEval (Referral Section).

If information is already on this screen, Page Down to the first empty screen. NOTE: A maximum of five (5) referral letters can be written for a single case.
3. Enter the date of the letter. If zero (0) is entered in the month field and Tab is pressed, the field defaults to today's date (i.e. the date on your computer's system clock). Press Tab to continue entering information.

4. If appropriate, enter the related issue code. A list of issues identified for the record will appear in a corresponding window.

5. Enter the referral contact name in the Referred To field. If the contact menu has been configured and is used to select a name, the corresponding contact information will be entered automatically.

6. Type any specific details to use in the referral letter in the memo field. The memo is used in the body of the template letter.

7. Press CTRL+S to save changes without exiting the record.
5.4 Using a Template with a Referral

1. Follow the steps under section 5.3 to enter a referral.

2. Select a template letter to use with the referral by pressing Y in the field Export Referral to Template. The following window will appear:

3. Select the desired template to link to the referral. Click Open. The template file name will now appear in the Merge Template Used field.

4. To generate referral template, select Run Report for this Record from the Tools pull down menu.

The following window will appear.
5. Click the ... next to the report box and the corresponding referral letter report. For example, if the desired referral letter is for the first referral entered (Screen 7.1), select the report Referral Letter for Referral 1.

Click OK to continue.

The following window will reappear with the selected report.

Click Run to generate the template.

6. The referral template will open in Microsoft Word. Switch to MS Word to view the template.
7. Select Mailings and then Preview Results to view the merged document.

8. Close MS Word to return to POPIMS.

5.5 Customization of Templates

The templates provided with POPIMS can be customized and saved for use as custom templates in POPIMS. Custom templates can be tailored for use with your trauma program and work with your center’s letterhead.

To customize a template in the DI Outcomes Registry:

1. If customizing a template, use steps provided in 5.4 (for a referral template) or steps provided in 5.2 (for a general template) to initially open the template.
2. **Save the template in MS Word** with a different name by:
   a. **Selecting the option** File/Save As
      
      ![Save As dialog box in MS Word](image)
      
      - Selecting the option File/Save As
      - Selecting the option File/Save As
      - Selecting the option File/Save As
      
      ![Save As dialog box in MS Word](image)
      
      - Provide a new name for the customized template.
      
      ![Save As dialog box in MS Word](image)
      
      - Click **Save**.
      
   b. **Provide a new name for the customized template.**

3. **Make the desired changes to the template letter.** If a new field from the DI Outcomes Registry record is desired, use the **Insert Merge Field** button from the **Mailings** tab in the toolbar.

   ![Insert Merge Field button in MS Word](image)
4. After all changes are made, save the modified template by selecting **File/Save**.

5. Close **MS Word** to return to the POPIMS Registry.
6. Loop Closure Management

6.1 Introduction

POPIMS provides loop closure fields for each issue that can be used to manage your QA process during the review and follow-up of trauma cases within your trauma program. Each issue can be individually flagged with a loop closure status independently from other issues. The loop closure status flags, along with dates, will provide a convenient method of tagging open ended and unresolved issues, as well as track completed QA for issues along with a completion date.

6.2 Using Loop Closures

Each issue has two fields that are used for loop closure.

- Loop Closure Status – Indicates current QA status for an issue
- Loop Closure Date – The associated date with the status

<table>
<thead>
<tr>
<th>Loop Closure: Status</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>04/01/2011</td>
</tr>
</tbody>
</table>

There are three types of loop closure status values:

- Open Status
- Closed Status
- Indeterminate Status

Issues marked with an Open Status indicate that there are unresolved item(s) associated with the issue. Depending on the specific open status indicates why an issue is unresolved. The open status flags include:
  1. Open – Pending Action
  2. Open – Pending Autopsy
  3. Open – Pending Referral
  4. Open – Pending Other

If an issue has more than one type of unresolved item, it can be marked with the status of 4 (Open – Pending Other) and the detailed unresolved items can be noted in the issue comments.

When an issue has a loop closure (i.e. an Open issue) with an open status, the loop closure date can be used as a date in the future to either:
  - Remind the user when to re-examine the issue, or
  - Denote the expected date of resolution

Open issues with dates will appear as reminders in the Loop Closure Status Reminder List report.

A Closed Status flag indicates that action items have been resolved and the QA process has been completed for that issue. An issue marked with a closed status (i.e. a Closed Issue) can be marked for follow-up depending on the specific closed status flag used. The closed status flags are:
  8. Closed – Tagged for Follow-Up
  9. Closed – Resolved

For closed issues, the loop closure date indicates either:
  - The date of follow-up (for issues with a loop closure status of 8), or
  - The date of resolution (for issues with a loop closure status of 9)
Inactive Status flags are used with issues where the no further activity is necessary. The inactive status flags are:

- 5. Inactive – No Action Follow-Up
- 6. Inactive – No Referral Feedback
- 7. Inactive – Other/Not Resolved

Indeterminate Status flags are used with issues where:

- Unresolved items still exist but no foreseeable resolution time period can be determined (marked with an Inactive Status flag)
- The QA process does not apply for the issue (0. No Loop Closure Necessary)

For issues marked with an inactive status (i.e. Inactive Issue), the loop closure date is used to indicate the date that issue became inactive.

### 6.3 Generating Loop Closure Reminders

By default, POPIMS will generate reminders on any issues with a future date and on any open issues that are past due. The reminders list is generated during the interface process and is presented to the user immediately after login. An example is given below.

![Loop Closure Status Reminders List](image)

If reminders are not desired immediately after login, this feature can be turned off in the POPIMS Setup.

To turn off this feature:

1. Select **POPIMS Setup and Referral Contacts** from the Customize pull down menu.

   ![Customize Menu](image)

2. Set the field **Loop Closure Reminders During Login** to N (No).
Loop closure reminders can also be generated anytime by running the report Loop Closure Status Reminders from the Standard Reports list.

A sample of the report output is given below.

6.4 Searching using Loop Closure Status

POPIMS also provides searching capabilities using loop closure status values and dates. The Add/Modify search screen contains fields that can limit a search for cases using a desired status value and/or a desired date.
1. Select the option Add/Modify Records from the Registry/Database pull down menu.

2. The Add/Modify Record window will appear.

3. Using the loop closure status fields, enter the loop closure status, date, or both to search. If both the date and status value are given, then the search will be limited to both criteria.

Click OK to continue.
NOTE: In addition, if a partial date is given (e.g. Month alone), the search will be done on the all possible dates meeting the partial date criteria in the current year. For example, if the date only had January for the month, any loop closure dates in January of 2005 will be included.

4. A list of matching cases to select from will be displayed.

Select a case and click OK.
7. Basic Reporting

7.1 Introduction

POPIMS provides standard reports designed for immediate application to the peer review/QA process in your trauma program. To meet the varying demands from different trauma programs, many of the standard reports provided have extended features that allow users to create a customized output. Standard reports in POPIMS can be classified into three types based upon the intended use in a trauma program. These types are:

- **Daily Reports** – Reports that are used during the review of an individual case in the peer review/QA processes of a trauma program. Tactical reports focus on a single patient record and are designed to be executed from within the patient record.
- **Management Reports** – Reports that are designed to work in the management of cases in a peer review/QA process. Managerial reports focus on a group of records and provide tables or listings that focus on specific groups of cases.
- **Research and Benchmarking Reports** – Reports that are designed to provide statistics for the peer review/QA process in a trauma program. Strategic reports also focus on specific groups but generate descriptive statistics (counts, averages, percentages) for those groups. Strategic report outputs can then be analyzed and used in decision making processes that can affect the outcomes in a trauma program.

7.2 List of Standard Reports

<table>
<thead>
<tr>
<th>Name of Report</th>
<th>Output</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meeting Minutes Report</td>
<td>Printout – Word</td>
<td>Management</td>
<td>Meeting details and issue review information for a selected meeting name and date in a Word document.</td>
</tr>
<tr>
<td>Meeting Summary</td>
<td>Printout – Word</td>
<td>Management</td>
<td>Meeting details only for a selected meeting name and date in a Word document.</td>
</tr>
<tr>
<td>Objective Review Summary (Outline for PP)</td>
<td>Outline – Text for PowerPoint</td>
<td>Daily/Management</td>
<td>Text file named ObjDetails.TXT containing an outline based on patient information and objective review information that can be used to generate PowerPoint slides.</td>
</tr>
<tr>
<td>Meeting Summary (Outline for PP)</td>
<td>Outline – Text for PowerPoint</td>
<td>Management</td>
<td>Text file named ObjDetails.TXT containing an outline based on patient information and objective review information that can be used to generate PowerPoint slides.</td>
</tr>
<tr>
<td>Patient Record List</td>
<td>Text</td>
<td>Management</td>
<td>Listing of records, record status, transfer status, and related issues.</td>
</tr>
<tr>
<td>Loop Closure Status Reminders</td>
<td>Text</td>
<td>Management</td>
<td>Listing of records with today’s and past due open loop closures.</td>
</tr>
<tr>
<td>Data Form Facsimile</td>
<td>Text</td>
<td>Daily</td>
<td>Outcomes record printed out in plain text form.</td>
</tr>
<tr>
<td>Name of Report</td>
<td>Output</td>
<td>Type</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>---------------------------------------------</td>
<td>-------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Referral Letter for Referral (1-5)</td>
<td>Template – Recommended to be run from within the Outcomes Record only.</td>
<td>Daily</td>
<td>Mail merge CSV file used with an associated template specified for a given referral. The template is opened and the associated mail merge file is linked to the template. Using mail merge features, letters with integrated data from the POPIMS record can be generated.</td>
</tr>
<tr>
<td>Template for Meeting (1-5)</td>
<td>Template – Recommended to be run from within the Outcomes Record only.</td>
<td>Daily</td>
<td>Mail merge CSV file used with an associated template specified for a given meeting. The template is opened, and the associated mail merge file is linked to the template. Using mail merge features, letters with integrated data from the POPIMS record can be generated.</td>
</tr>
<tr>
<td>Report Template Letters in DI Report Writer</td>
<td>Template – Recommended to be run from DI Report Writer only.</td>
<td>Management</td>
<td>Mail merge CSV file used with an associated template specified selected from the Specify Records window. The template is opened, and the associated mail merge file is linked to the template. Using mail merge features, letters with integrated data from the POPIMS record can be generated.</td>
</tr>
<tr>
<td>Template Letter from within the Outcomes Record</td>
<td>Template – Recommended to be run from within the Outcomes Record only.</td>
<td>Daily</td>
<td>Mail merge CSV file used with an associated template specified in the Outcomes Summary section of the POPIMS record. The template is opened, and the associated mail merge file is linked to the template. Using mail merge features, letters with integrated data from the POPIMS record can be generated.</td>
</tr>
<tr>
<td>Issue Duplicates Report</td>
<td>Spreadsheet – Excel</td>
<td>Management</td>
<td>Spreadsheet in Excel of patient issues that are duplicated within the POPIMS record. Each row represents a single issue. Patient can repeat in the output. Columns can be turned on/off during in the Specify Records window.</td>
</tr>
<tr>
<td>Name of Report</td>
<td>Output</td>
<td>Type</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------------------</td>
<td>-----------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Provider List Report</td>
<td>Spreadsheet – Excel</td>
<td>Management</td>
<td>Spreadsheet in Excel of patient issues by a specified provider. Each row represents a single issue that has been related to that provider. Provider is selected in the Specify Records window. Patient can repeat in the output. Columns can be turned on/off in the Specify Records window.</td>
</tr>
<tr>
<td>Over Under Triage Analysis</td>
<td>Statistics – Excel</td>
<td>Research and Benchmarking</td>
<td>Spreadsheet in Excel containing cross tabulations by ISS and Trauma Activation Levels. Highlighted counts for over and under triage patients based on published guidelines. The Specify Records window allows report breakdown by month/year of arrival or by year of arrival.</td>
</tr>
<tr>
<td>Issue Trending by Arrival Month/Year</td>
<td>Statistics – Excel</td>
<td>Research and Benchmarking</td>
<td>Spreadsheet in Excel containing cross tabulations of issues counts by arrival month/year.</td>
</tr>
<tr>
<td>Issue Trending by Discharge Month/Year</td>
<td>Statistics – Excel</td>
<td>Research and Benchmarking</td>
<td>Spreadsheet in Excel containing cross tabulations of issues counts by discharge month/year.</td>
</tr>
<tr>
<td>Issue Statistics</td>
<td>Statistics – Excel</td>
<td>Research and Benchmarking</td>
<td>Spreadsheet in Excel containing issue counts, issue frequency, and issue counts by judgment status.</td>
</tr>
<tr>
<td>Issue by ISS Ranges</td>
<td>Statistics – Excel</td>
<td>Research and Benchmarking</td>
<td>Spreadsheet in Excel containing cross tabulations of issues counts by ISS ranges.</td>
</tr>
<tr>
<td>Issue by Related Provider</td>
<td>Statistics – Excel</td>
<td>Research and Benchmarking</td>
<td>Spreadsheet in Excel containing cross tabulations of issues counts by related providers to issues.</td>
</tr>
<tr>
<td>Issue by Factors</td>
<td>Statistics – Excel</td>
<td>Research and Benchmarking</td>
<td>Spreadsheet in Excel containing cross tabulations of issues counts by factors.</td>
</tr>
<tr>
<td>Issue by Actions</td>
<td>Statistics – Excel</td>
<td>Research and Benchmarking</td>
<td>Spreadsheet in Excel containing cross tabulations of issues counts by actions.</td>
</tr>
<tr>
<td>Issue by Admitting Surgeon</td>
<td>Statistics – Excel</td>
<td>Research and Benchmarking</td>
<td>Spreadsheet in Excel containing cross tabulations of issues counts by admitting surgeon.</td>
</tr>
<tr>
<td>Issue by Trauma Attending Surgeon</td>
<td>Statistics – Excel</td>
<td>Research and Benchmarking</td>
<td>Spreadsheet in Excel containing cross tabulations of issues counts by attending surgeon.</td>
</tr>
<tr>
<td>Provider Statistics</td>
<td>Statistics – Excel</td>
<td>Research and Benchmarking</td>
<td>Spreadsheet in Excel containing comparative provider statistics. Providers to include in the report are selected in the Specify Records window. Comparison counts include:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Count of issues by related provider</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Count of judgment status by related provider</td>
</tr>
<tr>
<td>Name of Report</td>
<td>Output</td>
<td>Type</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>---------------</td>
<td>-------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Total number of cases</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Total number of closed cases in POPIMS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Total number by review status</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Total number by judgment status</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Breakdown counts by factors and judgment status</td>
</tr>
<tr>
<td>Single Provider/Team General</td>
<td>Statistics – Excel</td>
<td>Research and Benchmarking</td>
<td>Spreadsheet in Excel containing overview statistics for the provider specified in the Specify Records window. Statistics include:</td>
</tr>
<tr>
<td>General Statistics</td>
<td></td>
<td></td>
<td>- Breakdown counts of issue type by judgment status</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Breakdown counts of factors by judgment status</td>
</tr>
<tr>
<td>Trauma Surgeon Analysis Report</td>
<td>Statistics – Excel</td>
<td>Research and Benchmarking</td>
<td>Spreadsheet in Excel containing overview statistics for the provider specified in the Specify Records window. Statistics include:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Total Admits</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Breakdown counts by injury type</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Mean ISS, Age, RTS, Time in ED to ICU, Time in ED to OR</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Breakdown patient counts with specific judgment status and related factors.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Total number of survivor/deaths/unexpected deaths/deaths within 48 hrs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Patient counts by issue type</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Patient counts by factor</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Number of patients and procedures performed.</td>
</tr>
<tr>
<td>Single Provider/Team Detailed</td>
<td>Statistics – Excel</td>
<td>Research and Benchmarking</td>
<td>Spreadsheet in Excel containing detailed statistics for the provider specified in the Specify Records window. Statistics include:</td>
</tr>
<tr>
<td>Detailed Statistics</td>
<td></td>
<td></td>
<td>- Breakdown counts of detailed issues by judgment status</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Total counts of issues</td>
</tr>
</tbody>
</table>
### Name of Report  | Output | Type                  | Description                                                                                                                                 |
|------------------|--------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Issue CSV Table  | Data Extraction – CSV File | Research and Benchmarking | CSV file generated that contains detailed issue information. Each row of the CSV represents a single issue. The report can be filtered by the following:  
- Issue Code  
- Review Status  
- Meeting Name  
- Factors  
- Providers  
- Identified Date Range  
- Judgment Status  
- Loop Closure Status  
- Loop Date Range |
| UDI to OFI Mapping | Utility | Mapping Data | Optional utility used to map UDI codes to matching OFI codes in POPIMS Issue data. |

#### 7.3 Generating Standard Reports

POPIMS provides a number of ways to generate standard reports. Standard reports can be generated from within the POPIMS record or by using the DI Report Writer. Many of the reports can be generated to Microsoft Word or Microsoft Excel. The output for outline text reports can be integrated into Microsoft PowerPoint. It is strongly recommended to use Microsoft Office 2007 or newer.

**Generating a Report within the POPIMS Record**

When editing a record in POPIMS, any of the printout or template reports can be generated using the following steps:

1. Select the option *Run Report for this Record* from the *Tools* pull down menu.

![Run Report for this Record](image)

2. From the *Run Report on Current Record* window, use the ellipses (…) to select a printout or template report.

![Run Report on Current Record](image)
3. In the example below, the Case Printout report is being selected.

![Select a Standard Report dialog box]

Click **OK** to continue.

4. The Run Report on Current Record window will now contain the name of the report to generate. Click **Run** to generate the report.

![Run Report on Current Record window]

5. If the output is designed to generate to Excel or Word, the output will appear in that software. In addition, a final message will appear in POPIMS indicating the output has been generated.

![Generated file message]

Close this window to return back to data entry.
Generating a Report using the DI Report Writer for POPIMS

Use the following steps within the DI Report Writer for Outcomes to generate a report.

1. From the Welcome Page, select **Report**.

2. From the **Run Report** window, click the **Report** button.
3. Select the desired report to run. In the example below, the *Issue List Report* is being selected.

![Standard Reports Window](image)

Click **Select** or double click the report desired to continue.

4. Click **Run** from the *Run Report* window. The *Specify Records* window will appear.

![Specify Records Window](image)

Depending on the specific report, there may be multiple options or selections that will affect the report output. Make any desired changes to those options along with selecting the range of dates or trauma numbers to include and click **OK** to continue.

5. Depending on the report selected, the report output will be generated to the screen directly, to Word or to Excel. If the output is generated to Word or Excel, a final message window will appear indicating that the output has been generated.

![Final Message Window](image)

Close this window to return back to the DI Report Writer.
6. When output is generated to Excel or Word, select Word or Excel from the Windows toolbar to see the output. In the example below, the output for the *Issue List Report* is provided.

![Issue List Report](image)

Additional features (depending on the specific report) can be utilized in Word or Excel depending on the specific report.

### 7.4 Printouts

**Case Printout Report**

The *Case Printout Report* is designed to generate a printout of the POPIMS record and includes detailed information from all sections of the POPIMS record including:

- Patient Information
- Objective Summary
- Meetings
- Issues
- Case Audit
- Outcome
- Referrals
- Other Reviews/ Re-Evaluations

If using Word 2007 or later, the report is generated to take advantage of the navigation pane. The navigation pane can be activated in Word by going to the View ribbon and selecting *Navigation Pane*. 

![Navigation Pane](image)
An example of the *Case Printout Report* with the navigation pane activated is displayed below.

Clicking on any entry in the navigation pane will go directly to that part of the document. The outline structure used in the navigation pane for the *Case Summary Report* is as follows:

- **Record**
  - Patient Information
  - Objective Summary
  - Meetings
    - *Specific meetings by Meeting name*
  - Issues
    - *Specific issues by Issue Description*
  - Case Audit
  - Outcome
  - Referrals
  - Other Reviews/Re-Evaluation
Meeting Minutes Report

The Meeting Minutes Report is designed to generate meeting notes and related information for a selected meeting name and/or date. Using the Specify Records window when running the report, the output can be limited by a specified meeting name and date.

If the date is left blank but the meeting name specified, any record with matching meeting name is included. If the meeting name is left blank and the date is specified, any record with a meeting occurring on the given date will be selected. If both are left blank, the report will include any records within the range selected under specify patients.

If using Word 2007 or later, the report is generated to take advantage of the navigation pane. The navigation pane can be activated in Word by going to the View ribbon and selecting Navigation Pane.

An example of the Meeting Minutes Report with the navigation pane activated is displayed below:
Objective Review Summary
The Objective Review Summary report is designed to generate patient and objective summary information in an outline form to use for case presentation during a review meeting.

If using Word 2007 or later, the report is generated to take advantage of the navigation pane. The navigation pane can be activated in Word by going to the View ribbon and selecting Navigation Pane.

An example of the Objective Review Summary with the navigation pane activated is displayed below:

Clicking on any entry in the navigation pane will go directly to that part of the document. The outline structure used in the navigation pane for the Objective Review Summary is as follows:

- Record
  - Patient Summary
  - Objective Summary
    - Prehospital Details
    - Emergency Department/Resuscitation Details
    - Operative Procedures
    - ICU Details
    - Consults
    - Floor/Ward Details
    - Discharge/Outcome Details (including ISS/RTS/TRISS)
Meeting Summary

The *Meeting Summary* report is designed to generate meeting information in an outline form to use as a recap/review of previous meeting(s). The report can be generated for a selected meeting name and/or date. The output can be limited by a specified meeting name and date using the *Specify Records* window.

If using Word 2007 or later, the report is generated to take advantage of the navigation pane. The navigation pane can be activated in Word by going to the **View** ribbon and selecting *Navigation Pane*.

An example of the *Meeting Summary* with the navigation pane activated is displayed below:

Clicking on any entry in the navigation pane will go directly to that part of the document. The outline structure used in the Navigation pane for the *Meeting Summary* is as follows:

- Institution/ Trauma # (Record Identifier)
  - Meeting Name
7.5 PowerPoint Outlines

There are two PowerPoint Outline reports available in POPIMS: the Objective Review Summary (Outline for PP) and Meeting Summary (Outline for PP). Each of these reports generates output to the file **ObjDetails.TXT**. The file contains the text for generating slides from an outline in PowerPoint.

The steps to generate PowerPoint slides from the outline are as follows:

1. In PowerPoint, from the New Slide tool on the Home ribbon, select Slides from Outline.

2. From the Files folder located in the POPIMS folder on the server, select the file **ObjDetails.TXT**. Click Insert to continue.
3. Slides will automatically be generated from the outline.

Adjustments can be made to the final slides including changing the slide formats, styles, etc. It is recommended to save the final PowerPoint as a separate document and not overwrite the default document provided in POPIMS.

7.6 Text Outputs

Text output reports in POPIMS will generate output directly to the screen or to the printer without using other software such as Word or Excel. There are three primary text output files in POPIMS:

- Patient Record List
- Loop Closure Status Reminders
- Data Form Facsimile

The Output control box in the Run Report window can be used to direct text file output directly to the screen or printer. You can also select File and save the output directly to a location on your computer.
7.7 Template Letters

Template letters reports allow the user to create custom correspondence that integrates data from POPIMS into a template letter (i.e. a custom Word mail merge document that can be modified by the user).

Template letters in POPIMS utilize a CSV data file generated by POPIMS with patient data along with a template letter designed in Word. The data from the CSV is incorporated with the template using the Mail Merge features of Word.

Most of the template letters reports in POPIMS are designed to work within the POPIMS record and are not recommended for use in the DI Report Writer. However, the Report Template Letters in DI Report Writer report is specifically designed to work within the DI Report Writer.

When running the Report Template Letters in DI Report Writer report, the specific template must be selected in the Specify Records window.
To run the Report Template Letters in DI Report Writer report:


   ![Run Report Window]

   Once selected, click Run.

2. In the Specify Records window, go to the Template File Name field and enter Y.

   ![Specify Records Window]

   From the Files folder within the POPIMS server folder, select the desired template document.
3. Configure the rest of the **Specify Records** window to select the desired group of records. Click **OK** to continue.

4. The template letter will open and the following prompt will appear:

Click **Yes** to continue. If using the template for the first time, you will get the following message:

The steps below demonstrate selecting the CSV file:

a. Click **Find Data Source** ... to continue. The following window will appear:
b. Browse to the Files folder located in the POPIMS folder on the server, and select the file OutcomesMerge.CSV. Click Open to continue.

5. The document should now open. Under the Mailings ribbon, select Preview Results to view the data integrated into the template letter.

Below is a sample output of an integrated template letter with POPIMS data:

![Sample Output of Integrated Template Letter]

### 7.8 Spreadsheets

Spreadsheet reports allow the user to create issue spreadsheets in Excel that can either be printed or further analyzed with Excel tools such as filter and pivot table. In POPIMS, the following spreadsheet reports are available:

- Issue List
- Issue Not Addressed List
- Issue Duplicates List
- Provider Issue List
Individual columns in the spreadsheet can be turned on or off using the Specify Records window. To turn off a column, answer N next to the name of the column in the Column Control tab of the Specify Records window.

![Specify Records Window](image1)

Once generated in Excel, the spreadsheet can be further filtered using the Filter option under the Data ribbon.

![Filter Option](image2)

When the Filter option is selected, the column headings in the spreadsheet will change and include a downward arrow to indicate that data can be filtered.

![Filtered Data](image3)
Click the downward arrow and select the item or items to filter the spreadsheet. In the example below, the spreadsheet is being filtered by the death issue code (DTH).

At any point, all filters can be deactivated by clicking the Filter option under the Data ribbon.

7.9 Statistics

Over Under Triage Analysis

The Over Under Triage Analysis report is designed to generate trending counts by arrival date of trauma activation categories by ISS ranges. The report also utilizes the following rules to categorize over and under triaged patients:

Over Triaged –
- ISS <=15 AND Highest Trauma Activation Level

Under Triaged –
- ISS >= 25 AND Not Highest Trauma Activation Level
  Or
- ISS 16 to 24 AND Not Highest Activation Level AND Not Second Highest Trauma Activation Level
  Or
- ISS 10 to 15 AND No Alert/Activation

Options for running this report include the following:
- Initial Activation Level or Final Activation Level
- Trends by Month/Year of Arrival or Year of Arrival Only
- Classification of trauma activation levels by
  - Highest Level
  - Second Highest Level
  - Consult
  - No Activation
Sample output for this report is given below:

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Over Under Triage Report - Initial Alert Levels</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Report generated on 12/18/2013</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trauma Numbers: 00000000 to 99999999</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active and Closed Records</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Query is EVERYONE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Patients: 6129</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confidential - For Peer Review Purposes Only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Arrival Year: 2008</th>
<th>ISS 1 to 9</th>
<th>ISS 10 to 15</th>
<th>ISS 16 to 24</th>
<th>ISS &gt;= 25</th>
<th>Total with ISS</th>
<th>Not Valued ISS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest</td>
<td>126</td>
<td>51</td>
<td>66</td>
<td>112</td>
<td>355</td>
<td></td>
</tr>
<tr>
<td>Second Level</td>
<td>206</td>
<td>85</td>
<td>98</td>
<td>76</td>
<td>465</td>
<td>6</td>
</tr>
<tr>
<td>Consult</td>
<td>88</td>
<td>28</td>
<td>41</td>
<td>15</td>
<td>173</td>
<td>5</td>
</tr>
<tr>
<td>No Alert</td>
<td>452</td>
<td>109</td>
<td>100</td>
<td>49</td>
<td>710</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>672</td>
<td>273</td>
<td>305</td>
<td>252</td>
<td>1709</td>
<td></td>
</tr>
<tr>
<td><strong>Over Triaged</strong></td>
<td>Number of Patients: 177</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Percentage</strong>: 10.40%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Under Triaged</strong></td>
<td>Number of Patients: 390</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Percentage</strong>: 22.91%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Arrival Year: 2009</th>
<th>ISS 1 to 9</th>
<th>ISS 10 to 15</th>
<th>ISS 16 to 24</th>
<th>ISS &gt;= 25</th>
<th>Total with ISS</th>
<th>Not Valued ISS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest</td>
<td>138</td>
<td>51</td>
<td>86</td>
<td>90</td>
<td>365</td>
<td>2</td>
</tr>
<tr>
<td>Second Level</td>
<td>192</td>
<td>99</td>
<td>120</td>
<td>69</td>
<td>480</td>
<td>6</td>
</tr>
<tr>
<td>Consult</td>
<td>101</td>
<td>42</td>
<td>27</td>
<td>15</td>
<td>185</td>
<td>1</td>
</tr>
<tr>
<td>No Alert</td>
<td>517</td>
<td>94</td>
<td>103</td>
<td>49</td>
<td>763</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>948</td>
<td>286</td>
<td>336</td>
<td>223</td>
<td>1793</td>
<td></td>
</tr>
<tr>
<td><strong>Over Triaged</strong></td>
<td>Number of Patients: 189</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Percentage</strong>: 10.54%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Under Triaged</strong></td>
<td>Number of Patients: 357</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Percentage</strong>: 19.91%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Highlighted areas in blue indicate over triaged statistics and highlighted areas in red indicate under triaged statistics.
Issue Trending Reports

The Issue Trending by Arrival Month/Year report and Issue Trending by Discharge Month/Year generate trending counts of issues by arrival month/year and discharge month/year. Sample output of the Issue Trending by Arrival Month/Year is given below:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DTH - Death</td>
<td>4</td>
<td>7</td>
<td>4</td>
<td>10</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>JCAFO6 - Pt w/ open fx of long bones</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>JCAFO7 - Pt w/ diag of liver/spleen lac w/ int</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>JCAF12 - Pt expired w/ in 48 hrs of ED</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>OCC10 - Burn Graft Loss</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>OCC11 - Burn Wound Infection Post Excision</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>OCC21 - Acute Respiratory Failure</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>OCC22 - Aspiration/Aspiration Pneumonia</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>OCC26 - Pneumonia</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>OCC28 - Pulmonary Embolus</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>OCC32 - Extremity Compartment Syndrome</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>OCC33 - Deep Vein Thrombosis</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>OCC34 - Major Dysrhythmia</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>OCC35 - Myocardial Infarction</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>OCC40 - Blood Transfusion Reaction</td>
<td>RETired 2011</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>OCC41 - Coagulopathy</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Trending counts are also broken down by Judgment Status categories.
**Issue Cross Tabular Reports**

The Issue Cross Tabular reports generate counts on specific issues and Judgment Status categories by one of the following variables:

- **ISS** – *Issue by ISS Ranges*
- Related Provider – *Issue by Related Provider*
- Factors – *Issue by Factors*
- Actions – *Issue by Actions*
- Admitting Surgeon – *Issue by Admitting Surgeon*
- Trauma Attending Surgeon – *Issue by Trauma Attending Surgeon*

The reports can be trended by running one of these reports in combination with Gather by Arrival or Discharge Month/Year or Year.

A sample output from the *Issue by ISS Ranges* is given below:

<table>
<thead>
<tr>
<th>Issue/ISS Range Totals</th>
<th>ISS 1 to 8</th>
<th>ISS 9 to 15</th>
<th>ISS 16 to 24</th>
<th>ISS 25 to 50</th>
<th>ISS 51 to 74</th>
<th>ISS 75</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTH - Death</td>
<td>24</td>
<td>28</td>
<td>48</td>
<td>96</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>JCAF06 - Pt w/open fr of long bones blnt (in recv surgery &gt; 8 hrs ED arrival</td>
<td>1</td>
<td>20</td>
<td>4</td>
<td>7</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>JCAF07 - Pt w/diap of liver/spleen lac w/ initial lap &gt; 2hrs ED arrival</td>
<td>-</td>
<td>2</td>
<td>5</td>
<td>6</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>JCAF08 - Pt undergoing lap for wound penetrating abdominal wall</td>
<td>3</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>JCAF12 - Pt expired w/in 48 hrs of ED arrival w/ autopsy performed</td>
<td>1</td>
<td>4</td>
<td>7</td>
<td>15</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>OCC10 - Burn Graft Loss</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>OCC11 - Burn Wound Infection Post Excision</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>OCC12 - Burn Wound Sepsis</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>OCC13 - Burn Wound Cellulitis</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>OCC20 - Acute Respiratory Distress</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>
### 7.10 Queries in POPIMS

#### Query Differences in POPIMS

The POPIMS dataset is based on a relational structure that allows issues to repeat within the POPIMS record. When querying for any information, the query functions are designed to return patient records, not individual issues. When using counting queries or using queries in statistics, the results are based on the number records found, not the number issues within the record.

To handle targeted issue querying, specialized issue queries have been designed which handle complex querying and return of issue specific data from the issue evaluation section. These specialized queries and list functions are detailed below.

#### Issue Based Filtering Queries

The POPIMS report writing system includes a set of filtering queries that are used to develop issue and provider based queries. The chart below highlights each filtering query including its purpose, syntax, and examples.

<table>
<thead>
<tr>
<th>Query</th>
<th>Purpose</th>
<th>Syntax</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEST_ISSUE_FACTOR</td>
<td>Selects records with matching pair of issue and factor. Used to query a specific factor tied to a specific issue.</td>
<td>TEST_ISSUE_FACTOR(x y) where x is the issue and y is the factor. The issue would be placed in quotes.</td>
<td>TEST_ISSUE_FACTOR(&quot;OCC26&quot;,22) The example would query for any pneumonia that has disease related as a factor identified.</td>
</tr>
<tr>
<td>TEST_ISSUE_REVCMT</td>
<td>Selects records with an issue reviewed in committee.</td>
<td>TEST_ISSUE_REVCMT(x) where x is the issue. The issue would be placed in quotes.</td>
<td>TEST_ISSUE_REVCMT(&quot;DTH&quot;) The example would query for any deaths reviewed in committee.</td>
</tr>
<tr>
<td>TEST_ISSUE_REVDN</td>
<td>Selects records with an issue reviewed individually.</td>
<td>TEST_ISSUE_REVDN(x) where x is the issue. The issue would be placed in quotes.</td>
<td>TEST_ISSUE_REVDN(&quot;PAF02&quot;) The example would query for any audit filter #2 reviewed individually.</td>
</tr>
<tr>
<td>TEST_ISSUE_ACK</td>
<td>Selects records with an issue that was acknowledged.</td>
<td>TEST_ISSUE_ACK(x) where x is the issue. The issue would be placed in quotes.</td>
<td>TEST_ISSUE_ACK(&quot;PEC.A.01&quot;) The example would query for any PEC A.01 acknowledged.</td>
</tr>
<tr>
<td>TEST_ISSUE_STAT</td>
<td>Selects records with an issue and a matching preventability status.</td>
<td>TEST_ISSUE_STAT(x y) where x is the issue and y is the preventability status. The issue would be placed in quotes.</td>
<td>TEST_ISSUE_STAT(&quot;DTH&quot;,1) The example would query for any preventable deaths.</td>
</tr>
<tr>
<td>TEST_ISSSTAT_BLANK_NA</td>
<td>Selects records with an issue that the preventability status was left blank or entered with n/a.</td>
<td>TEST_ISSSTAT_BLANK_NA(x) where x is the issue. The issue would be placed in quotes.</td>
<td>TEST_ISSSTAT_BLANK_NA(&quot;DTH&quot;) The example would query for any deaths that the preventability is left blank or entered n/a.</td>
</tr>
<tr>
<td>Query</td>
<td>Purpose</td>
<td>Syntax</td>
<td>Example</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>TEST_ISSTAT_UNK</td>
<td>Selects records with an issue that the preventability status entered with unknown.</td>
<td>TEST_ISSTAT_UNK(x) where x is the issue. The issue would be placed in quotes.</td>
<td>TEST_ISSTAT_UNK(&quot;OCC26&quot;) The example would query for any pneumonias that the preventability was answered with unknown.</td>
</tr>
<tr>
<td>TEST_ISSTAT_VALUED</td>
<td>Selects records with an issue where the preventability is known.</td>
<td>TEST_ISSTAT_VALUED(x) where x is the issue. The issue would be placed in quotes.</td>
<td>TEST_ISSTAT_VALUED(&quot;PAF01&quot;) The example would query for any patients with amb scene time &gt; 20 minutes and the preventability is known.</td>
</tr>
<tr>
<td>TEST_ISSUE_SYIN</td>
<td>Selects records with an issue where it was systems related in-house.</td>
<td>TEST_ISSUE_SYIN(x) where x is the issue. The issue would be placed in quotes.</td>
<td>TEST_ISSUE_SYIN(&quot;OCC26&quot;) The example would query for any pneumonias that were systems related in-house.</td>
</tr>
<tr>
<td>TEST_ISSUE_SYOT</td>
<td>Selects records with an issue where it was systems related out of house.</td>
<td>TEST_ISSUE_SYOT(x) where x is the issue. The issue would be placed in quotes.</td>
<td>TEST_ISSUE_SYOT(&quot;OCC26&quot;) The example would query for any pneumonias that were systems related out of house.</td>
</tr>
<tr>
<td>TEST_ISSUE_PRIN</td>
<td>Selects records with an issue where it was provider related in-house.</td>
<td>TEST_ISSUE_PRIN(x) where x is the issue. The issue would be placed in quotes.</td>
<td>TEST_ISSUE_PRIN(&quot;OCC26&quot;) The example would query for any pneumonias that were provider related in-house.</td>
</tr>
<tr>
<td>TEST_ISSUE_PROT</td>
<td>Selects records with an issue where it was provider related out of house.</td>
<td>TEST_ISSUE_PROT(x) where x is the issue. The issue would be placed in quotes.</td>
<td>TEST_ISSUE_PROT(&quot;OCC26&quot;) The example would query for any pneumonias that were provider related out of house.</td>
</tr>
<tr>
<td>TEST_ISSUE_PROV</td>
<td>Selects records with an issue were it was related to a specific provider.</td>
<td>TEST_ISSUE_PROV(x y) where x is the issue and y is the provider. The issue would be placed in quotes.</td>
<td>TEST_ISSUE_PROV(&quot;DTH&quot;,&quot;111111&quot;) The example would query for any deaths that were related to provider 111111.</td>
</tr>
<tr>
<td>TEST_ISSUE_PROV_STAT</td>
<td>Selects records with an issue where it was related to a specific provider and had a specific preventability status.</td>
<td>TEST_ISSUE_PROV_STAT( x y z) where x is the issue, y is the provider, and z is the preventability status. The issue would be placed in quotes. The provider would be placed in quotes.</td>
<td>TEST_ISSUE_PROV_STAT(&quot;DTH&quot;,&quot;111111&quot;,1) The example would query for any deaths that were preventable and related to provider 111111.</td>
</tr>
<tr>
<td>TEST_PROV_STAT</td>
<td>Selects records with a specific provider that had at least one matching preventability status.</td>
<td>TEST_PROV_STAT(y z) where y is the provider and z is the preventability status. The provider would be placed in quotes.</td>
<td>TEST_PROV_STAT(&quot;111111&quot;, 1) The example would query for records where provider 111111 had at least one preventable issue.</td>
</tr>
<tr>
<td>Query</td>
<td>Purpose</td>
<td>Syntax</td>
<td>Example</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>TEST_ISSUE_LOC</td>
<td>Selects records with a matching issue an location</td>
<td>TEST_ISSUE_LOC(x y) where x is the issue and y is the location. The issue is placed in quotes.</td>
<td>TEST_ISSUE_LOC(&quot;OCC26&quot;, 3) The example above selects any pneumonias that occurred in the ICU.</td>
</tr>
</tbody>
</table>

**Queried Issue List Functions**

In addition to filtering queries, POPIMS also provides queried issue list functions that return a list of values depending on a related specified set of values to test from the issue evaluation section. The resulting lists can be used in queries or in data table report outputs.

The purpose of these list functions is to provide a way to construct a list of values from the issues evaluation section based upon a specific desired subset of issue related values.

Each of the list functions and the associated list generated are detailed in the chart below:

<table>
<thead>
<tr>
<th>List Function (Query and Data Table)</th>
<th>Purpose</th>
<th>Syntax and Example</th>
</tr>
</thead>
</table>
| Query: ANY(ISSUE_W_PRID(@LIST()))    | Given a list of providers, a list of issues associated with those providers is returned. | Syntax: ANY(ISSUE_W_PRID(@LIST("ProviderCode1", "ProviderCode2", ...))
ISSUE_W_PRID(@LIST("ProviderCode1", "ProviderCode2", ...))
Example: ISSUE_W_PRID(@LIST("01", "02", "03")) |
| Data Table: ISSUE_W_PRID_LIST(@LIST()) |                                                                            |                                                                                  |
| Query: ANY(PRID_W_ISSUE(@LIST()))    | Given a list of issues, a list of providers associated with those issues is returned. | Syntax: ANY(PRID_W_ISSUE(@LIST("IssueCode1", "IssueCode2", ...))
PRID_W_ISSUE_LIST(@LIST("IssueCode1", "IssueCode2", ...))
Example: PRID_W_ISSUE_LIST(@LIST("DTH", "OCC21")) |
| Data Table: PRID_W_ISSUE_LIST(@LIST()) |                                                                            |                                                                                  |
| Query: ANY(ISSUE_W_LOOP(@LIST()))    | Given a list of loop status codes, a list of issues associated with those loop status codes is returned. | Syntax: ANY(ISSUE_W_LOOP(@LIST("LoopStatusCode1", "LoopStatusCode2", ...))
ISSUE_W_LOOP_LIST(@LIST("LoopStatusCode1", "LoopStatusCode2", ...))
Example: ISSUE_W_LOOP_LIST(@LIST(1, 2, 3, 4)) |
| Data Table: ISSUE_W_LOOP_LIST(@LIST()) |                                                                            |                                                                                  |
| Query: ANY(LOOP_W_ISSUE(@LIST()))    | Given a list of issues, a list of loop status codes associated with those issues is returned. | Syntax: ANY(LOOP_W_ISSUE(@LIST("IssueCode1", "IssueCode2", ...))
LOOP_W_ISSUE_LIST(@LIST("IssueCode1", "IssueCode2", ...))
Example: LOOP_W_ISSUE_LIST(@LIST("DTH", "OCC21")) |
| Data Table: LOOP_W_ISSUE_LIST(@LIST()) |                                                                            |                                                                                  |
| Query: ANY(ISSUE_W_STAT(@LIST()))    | Given a list of preventability status codes, a list of issues associated with those preventability status codes is returned. | Syntax: ANY(ISSUE_W_STAT(@LIST("LoopStatusCode1", "LoopStatusCode2", ...))
ISSUE_W_STAT_LIST(@LIST("LoopStatusCode1", "LoopStatusCode2", ...))
Example: ISSUE_W_STAT_LIST(@LIST(1, 2)) |
| Data Table: ISSUE_W_STAT_LIST(@LIST()) |                                                                            |                                                                                  |
| Query: ANY(STAT_W_ISSUE(@LIST()))    | Given a list of issues, a list of preventability status codes associated with those issues is returned. | Syntax: ANY(STAT_W_ISSUE(@LIST("IssueCode1", "IssueCode2", ...))
STAT_W_ISSUE_LIST(@LIST("IssueCode1", "IssueCode2", ...))
Example: STAT_W_ISSUE_LIST(@LIST("DTH", "OCC21")) |
<p>| Data Table: STAT_W_ISSUE_LIST(@LIST()) |                                                                            |                                                                                  |</p>
<table>
<thead>
<tr>
<th>List Function (Query and Data Table)</th>
<th>Purpose</th>
<th>Syntax and Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Query: ANY(ISSUE_W_GR(@LIST( )))</td>
<td>Given a list of ACS grade codes, a list of issues associated with those ACS grade codes is returned.</td>
<td>Syntax: ANY(ISSUE_W_GR(@LIST(&quot;LoopStatusCode1&quot;, &quot;LoopStatusCode2&quot;, ...)))</td>
</tr>
<tr>
<td>Data Table: ISSUE_W_GR_LIST(@LIST( )))</td>
<td></td>
<td>ISSUE_W_GR_LIST(@LIST(&quot;LoopStatusCode1&quot;, &quot;LoopStatusCode2&quot;, ...))</td>
</tr>
</tbody>
</table>

| Query: ANY(GR_W_ISSUE(@LIST( ))) | Given a list of issues, a list of ACS Grade codes associated with those issues is returned. | Syntax: ANY(GR_W_ISSUE(@LIST("IssueCode1", "IssueCode2", ...))) | |
| Data Table: GR_W_ISSUE_LIST(@LIST( ))) | | GR_W_ISSUE_LIST(@LIST("IssueCode1", "IssueCode2", ...)) | Example: GR_W_ISSUE_LIST(@LIST("DTH", "OCC21")) |