Report Maker (Basics) – Session #1

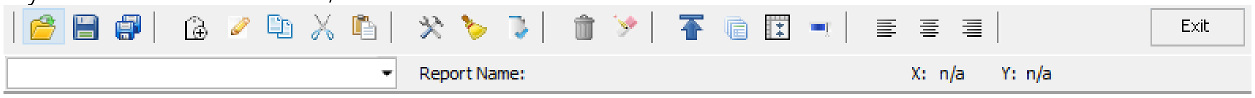
When data needs to be extracted from the clinical record, reports are an effective and aesthetically pleasing way to display data. Reports simply display data entered in the clinical record. If the data exists, a report can be created. There are multiple things to consider when creating a report:

- Where is the data located that needs to be displayed?
- How much data needs to be displayed?
- Will the report display data for one resident or multiple residents?
- How often will this report be used?

To access Report Maker, click onto the drop-down American Data – ECS > Setup > Report > Report Maker.

Report Maker Tool Bar

If you hover over an icon, it will describe what feature the icon launches.



	Open: click this to open an existing report
	Save: click this option to save changes made to the report
	Save As: click this to save a copy of the existing report, allowing a new name/changes/user group rights to the copied report
	Add field: used to add fields onto the report
	Properties: opens the field properties (you may alternately open the field properties by double clicking onto a field or right clicking and selecting Properties)
	Copy: click this to copy an existing field
	Cut: used to cut a field from one location and then paste somewhere else
	Paste: used to insert a field into its new location
	Tools: opens the overall report options (e.g., disable the footer, choose a specific date attached to the report, adjust the margins)
	Clean: used to remove all fields off the current design area, allowing for new report creation
	Check for Errors: before saving a report, a user may check for any errors (this will also occur automatically anytime you save the report)
	Delete: click this to then select a report to be deleted
	Delete Field: used for deleting fields on the report

	Bring to Top: click onto this is needing to bring a field that is on the bottom of another to the top, so it is no longer hidden
	Multi-Select: used for selecting multiple fields (can also drag your mouse around a selection of fields to select them all)
	Alignment: used to align multiple fields that are highlighted (e.g., space equally, align the two fields so they match on the left/right/center/etc.)
	Select in Field: used to select all fields layered over a larger field
	Alignment: aligns a selected field to the left, right, or center of the entire report

Field Types

Text		Text fields are the most basic in Report Maker. These fields allow the user to place labels onto reports. These fields are often used as titles for other fields. The text in this field remains constant (i.e., it displays the same on reports for all clients)
Demographics		Demographic fields pull information from the client record that was entered via the Demographics or Locate screen. These fields will pull information for Clients, Providers, and Vendors. Demographic data includes name, age, birth date, record number, client number, sex, site, service, floor/unit/wing, Medicare number, Medicaid number, VA number, SSI number, and Other Number.
View		The View field pulls information from the client record which was entered via a documenting screen. A single report may contain several View fields of varying sizes. A View field may pull a lot of information (e.g., all nurses notes) or one single piece of information (e.g., room number, attending physician).
Column		Column fields are unique because they can pull information entered via the Demographics/Locate screen as well as the documenting screen. This field type may be utilized to populate information from several different name(s) onto one report. This can only be accomplished with a Column field and does not work utilizing a View field.
Frame		Frame fields can be used to add a nice black frame around the information that is being populated into the field this is laid underneath. Typically, you would see Frame fields layered underneath a Text, Demographics, View, or Column field.
Sign		This field type is no longer utilized. The Sign field used to offer facilities an option to print MARs/TARs for medication administration, however now that ECS has the Electronic Sign option this is no longer utilized. In addition, this Sign field does no patterning of orders (which the Electronic Sign does). If a user needs to print the MARs/TARs, this can still be accomplished from directly within the Electronic Sign icon.
System		System fields pull computer data to a report. System data includes date, time, time period, page number, previous month/year, current

		month/year, next month/year, user's full name, and user's initials. Additional System options are populated directly from Site Settings (File > Setup > Settings > Site Settings). These include ID #, Federal ID #, State #, NPI, Name of Site, Address, City, State, Zip, and Phone # of facility.
Bar Graph		The Bar Code field allows for the printing of bar codes for clients. This will automatically generate a bar code specifically associated with each resident. This may be utilized to print bar code bracelets for the residents to wear and then allow the end user the capability to more easily access the correct resident during a medication pass.
Graph		Graph fields are formatted to illustrate two-dimensional and three-dimensional line, bar, and pie graphs. Graph fields may also contain equations to calculate and track various rates and totals.
Word Property		The Word Property field pulls a word's short name, long name, and values to the report. This is only utilized if needing to see the setups of a group of words to assist in word setups.
Picture		The Picture field will populate a picture file onto the report. This is utilized for facility logos or to bring in a specific report that can be overlaid with ECS fields. This is not the field to be utilized to bring in resident's pictures, but rather a *View field* would be used for that.
Print Files		The Print Files field gives the user the capability to attach documents to the report that have been scanned into ECS. This may be added into an existing report, so that for example, a Face Sheet report always will print with the scanned insurance card; or can be placed on a report all on its own.
RAP		The RAP field is only utilized with MDS 2.0, so will be removed out of ECS within the next 1-2 years.
CAA		The CAA field is utilized to print CAA's off the MDS 3.0. These fields have already been added to all the necessary CAA reports, so typically end user setup of these fields is not necessary.
Days		The Days field can count calendar-based items between a designated starting and ending date. For example, this field can create an Average Length of Stay report for you SNF and AL that will count a stay from Admit/Readmit through Discharge. Since this field was developed, ECS has created MDS Analytics, which is a more user-friendly option when wanting to view length of stay and average length of stay. This field is therefore no longer utilized as often as it may have been before.
Signature		The Signature field adds an area to allow for electronic signatures when the report is viewed. This is used most often on admissions paperwork, physician order sheets, etc.

Report Setups

Add a New Field

Fields may be added to existing and new reports. Once in report maker, click onto the **Add Field** icon. Select the appropriate field type (based on the Field Types section of this handout). Click **OK** to add the field to the report.

The **Field Properties** box will appear. All fields have the **General** tab. Make appropriate changes to the General tab. This is where font and sizing for the field is controlled. If the field has a **Look** tab, make desired changes in here. Selections in this tab define various cosmetic choices used to make the report pleasing to the eye. The setups in the Look tab does not change the content of the report.

Once all tabs are updated, click **Close** to add your field onto the report. Move the field to the desired position. Size the field to appropriate dimensions. The following rules apply to sizing field types:

- Demographic and System fields should not be manually sized. These fields will automatically adjust as content is added to them.
- Column and Word Properties fields should not have the width manually changed. The width of these fields is determined by the width designated for each column.

Save this report by selecting the **Save As** or **Save** icon.

General Tab

- **Field Name:** Words typed in here label the field in report maker (which may be helpful in cases of troubleshooting multiple fields). This can also serve as headings for variable height fields. Placing words in here however is not required.
- **Sizing:** Used to control the side of the field.
    - o **Variable to content (Width):** Place a check here to allow the computer to size the field based on the amount of data in the field. If this item is not checked, the user needs to size the field manually (by adjusting the column widths on the Column tab). This defaults checked for text, system, and demographic fields.
    - o **Variable to content (Height):** Place a check here to allow the field to stretch vertically in order to pull all desired information so another variable height field can begin underneath. This will reduce the amount of excess spacing in between and will having reports run onto multiple pages due to static fields.
- **(Maximum) Width – (Maximum) Height:** The field width and height (in inches) is in this area. The user may type a number in this area to alter the width/height of the field.
- **Location:** Displays the placement of the field on the screen. When new fields are created, they always appear in the upper left corner of the screen. Typically, the field is dragged to the desired location. Another alternative is to alter the coordinates to reflect the desired location.

- Field Font/Header Font: Use these to change the font options of the text in the field/header. Each tab has a [Font] and [Color] button. The [Font] button allows for font type, style, and size selection and the [Color] button allows for background color of the field. In a case where a report is using the Variable to content (Height) option, a Field Name can serve as a heading for that field and the Header Font area controls the font, style, and size of that heading.
- Transparent: An option that allows removal of the block outline of the field, if checked. If left unchecked, a frame will appear around the field and the field itself will cover anything beneath it.

Look Tab

- Primary Field: This allows the field to be sensitive to dates that are entered in when the report is viewed. Without this checked, the field will ignore any dates selected and display any entries, not just those made within the selected date range. For example, on a Nurse's Note report, the field for the resident's room would not have this checked as if the user selects Current Month on the date selection screen, we don't want only rooms documented within the current month to display. However, the field for the nurse's notes would have this checked as we only want entries made within the selected date range to display.
- Master Field: This field will hide blank reports by not generating a page for residents without any data. If this is checked, the resident must have a data point from within this field for them to generate any of the report. For example, if this not checked and you run an activity attendance report on seven residents (but only five have data), you will get seven reports listed. There will be five reports with data and two without any data on them. However, with this option checked, only five reports would display and would skip the two residents completely that do not have any data in the field with Master checked.
- Isolate: When Isolate is selected, only the words specified in the setup appear in the report. Without this checked, the entire entry appears. An example of this is in physician order report where there are two columns, one for routine medications and one for PRN medications. All medications are entered into the same topic, so to separate them into their respective columns, we can pull in the PRN frequency words vs. the routine frequency words. However, on the report itself, we do not just want only the frequency words to display, which is what would happen with Isolate checked. So, we would want to uncheck Isolate so that the entire entry associated with the word will display.
- Order: Defined the order in which the data will appear within the specific field. Placing a check in "Reverse" lists the information in the reverse of the order selected, for example, reverse chronological lists data from the most recent first then progresses backward in time.
    - Topic Order: The information appears in the order the topics are listed in the field setup.

- Chronological Order: The information appears in chronological order.
    - Question Order: The information appears in the order the question words are listed in the field setup.
    - Selected Order: The information appears in the order the words are in the field setup. This is like question order, however "Selected Order" does not group words by topic.
    - Sort Within Each Column: This is only available in a column field. Within each column, the data that appears will be sorted by whichever option above is selected.
- Process Options: This area is available on the Look tab for column fields only.
    - One Line per Entry: Creates one line for each entry across all columns.
    - One Line per Topic: Creates one line for each topic across all columns.
    - One Line per Name: Keeps each entry for a specific name together across columns. If this is not selected, the information for an individual name may appear staggered across the columns and no lines appear to separate each name. Note that "Multiple Names per Report" would also need to be selected (using the Options icon).
    - One Topic per Page: This option separates topics by page when printing. This is useful in printing care plans when facilities would like each care plan to print on its own sheet of paper.
- Composite: Allows for averaging of values for the overall report. These are not currently utilized in any reports.
    - Average of Values: Shows the total values of all the averages selected.
    - Average of Totals: Shows the averages of all the total values selected.
- Split/Page (Row, Entry): Select the Entry or Row checkbox if you want to split entries, client information, or rows between pages. There may be circumstances where you do not want this checkbox selected because you want information together on one page. For example, when printing a care plan report, the report by default splits entries and/or rows between pages, so you may end up with part of a care plan approach on the bottom of one page, and then the rest of the approach on the top of another page. This can be cumbersome to read. If the checkboxes are not selected, the entire approach would carry over to the top of the next page if the entire entry did not fit on the bottom of the first page. In addition, rather than just making the entry not split you can disable the split between Row, so the entire care plan will start on a new page if it does fit on the bottom of the first.
- Column: This area is only available in a column field.
    - Vertical Column Heading: Prints the column heading words up and down instead of across, allowing the column widths to be minimal. Use this for columns which data will not be very wide, such as Yes/No columns.
    - Alternate Column Shading: Causes every other column within the specific field to be lightly shaded when it prints. This makes it easier to find information on a grid of columns. Adjust the shading darkness by dragging the manipulator.

- Percentage: Sets the column to show a percentage. This will apply to all columns, unless they have "Disable Total" checked. This can be used for activity attendance to display the percentage of activities attended vs. declined.
- Show Names Without Data: When set, the names of clients not containing the information requested on the report will display. When not set, only those names that have the requested data will be listed.

- Spacing: Defines various options to cosmetically separate the entries or topics. Options include: a line after topics, space after topics, line after entries, space after entries, and no lines. If none of these options are selected, there will be no spaces or lines between entries or topics. More than one option may be chosen if desired.
- Report: Further defines values for the overall report.
  - Average of Average: Shows the average value of all the values selected. When averaging, the report will total the values and then divide by the number of total entries.
  - Total: Shows the total value of all columns per column. For example, can total the number of "Yes/No" in a column, or the total clients who have a specific diagnosis/medication. Can also total text that was entered after a word.
  - Name Total: Provides a total for each name listed on the report rather than an overall total of all names. Both Name Total and Total can be checked to obtain a total per name as well as per facility.
- Export: Select this checkbox to be able to turn this report into a data file that can be used in other programs, such as Excel, for further data analysis. Selecting this checkbox will add an Export button on your toolbar when previewing the report. Click this button, enter a file name, and select the location where you would like to save the file. The file will be exported and saved as a file that can be opened using Excel.
- Frame: This is only available in a view field. This allows the user to put a frame around the view field (therefore not needing to utilize the Frame field separately). The frame color may be selected by clicking onto [Frame Color].

Move Fields

When new fields are created or copied, they are placed in the upper left corner of the screen. The fields are moved to the desired position in the report utilizing one the methods described below.

Move Fields by Defining X and Y Coordinates

- When in field properties, click into the **General** tab.
- Define the X coordinate of the filed in the **Location/Left** area.
- Define the Y coordinate of the field in the **Location/Top** area.
- Click **OK** to save changes.

Move Fields by Dragging

- **Left click** on your mouse and hold the fields that is to be moved.

- While holding the left-click, move the field to the desired position. Release the left-click when done moving the field.

Move or Stretch Fields by Using the Keyboard

- **Left click** on your mouse the field that is to be moved or stretched.
- Hold down the **Shift** key and use the arrows on the keyboard to stretch a field to make it bigger/smaller.
- Hold down the **Ctrl** key and use the arrows on the keyboard to move a field into the desired place. Using the keyboard option helps with more precise accuracy than using a mouse.

Remove Reports and Fields

Reports may be deleted from the system, however once deleted it can no longer be restored. Rather than deleting a report, it may also be made Inactive so that it no longer appears in the report list but can be retrieved later if it is determined it is needed.

Delete a Report

Reports can be deleted one of two ways:

- If a report is already opened, you may click onto the delete icon (garbage can), select the report to delete, click **Delete**, and select **Yes** when prompted if sure; or
- From within the **Open Report** screen, click onto a report you would like to delete, and click onto **Delete.** Click **Yes** when prompted if you are sure.

Make a Report Inactive

Reports can be inactivated one of two ways:

- From within the **Open Report** screen, click onto a report you would like to inactivate, and click onto **Inactive**; or
- From **Tasks/Reports** (American Data – ECS > Setup > Security > Tasks/Reports), in the upper left-hand corner, in the **Types** box, select **General Reports**. Click **Display** to show all reports in the system. Highlight one or multiple reports, click onto **Inactive.**

Delete Field(s) on a Report

Individual fields may be removed from reports. Once a field is deleted, there is no way to bring it back.

- Highlight the field that is to be deleted and click onto the delete field icon (eraser) or click **Delete** on the keyboard.
- Multiple fields may be deleted at one time by using the Multi-Select icon or dragging a box around all fields that are to be deleted. Once all fields are highlighted, click onto the delete field icon (eraser) or click **Delete** on the keyboard.

Make an Inactive Report Active Again

Reports can be re-activated one of two ways:

- From within the **Open Report** screen, click onto a report you would like to re-activate, and click onto **Active.**
- From **Tasks/Reports** (American Data – ECS > Setup > Security > Tasks/Reports), in the upper left-hand corner, in the **Types** box, select **General Reports**. Click **Display** to show all reports in the system. Highlight one or multiple reports, click onto **Active**.