Welcome!

CAREWare Quick Start guides will walk you through the basics of setting up, managing and using the main CAREWare functions. It is intended for non-technical users who just need to get basic information in and out of CAREWare.

About This Guide #7:
Creating Basic Custom Reports

PLEASE NOTE: The client data you see is purely fictional.

Guides in this series:

1. *Downloading and installing CAREWare*
2. *Creating contracts and services*
3. *Entering Clients and their Service and Clinical Data*
4. *Customizing tabs and fields*
5. *Customizing clinical data*
6. *Working with CAREWare's prebuilt reports (including the RSR)*
7. *Creating basic custom reports*
8. *Creating more advanced reports*
9. *User and System Administration*

For additional information:

Please refer to the **Frequently Asked Questions** page on the CAREWare programmers' website:

http://www.jprog.com/wiki/

Or contact the help desk at cwhelp@jprog.com.

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First Things First
What do I need to get started?

- You must have the appropriate user privileges to create and run reports.

- You should have enough data entered to see how report filtering works in practice.

Best practices before you start

- Decide what the purpose of your report is. "I need a list of my clients broken down by race and gender," for instance.

- Diagram your report by selecting the fields you'll need – in this case, client name, race, and gender.

- You may need to add fields temporarily that will confirm your reports are running as intended – i.e., you create a filter for active clients only, so to make sure it's working, you might add the "Enrollment status" field to your report. If the report runs correctly, and only Active results return in that column, you can delete it from the report for a "clean" result.

- Demographic reports run differently than other reports:

  o Demographic reports display results per client. This can be useful in determining the number of clients in a given date span. With the use of calculated objects, demographic reports can be a powerful tool for data analysis (see Quick Start guide 8).

  o Other report types; such as services and labs display results 'per service visit or lab date.' This often results in several lines for each client, providing a detailed summary.
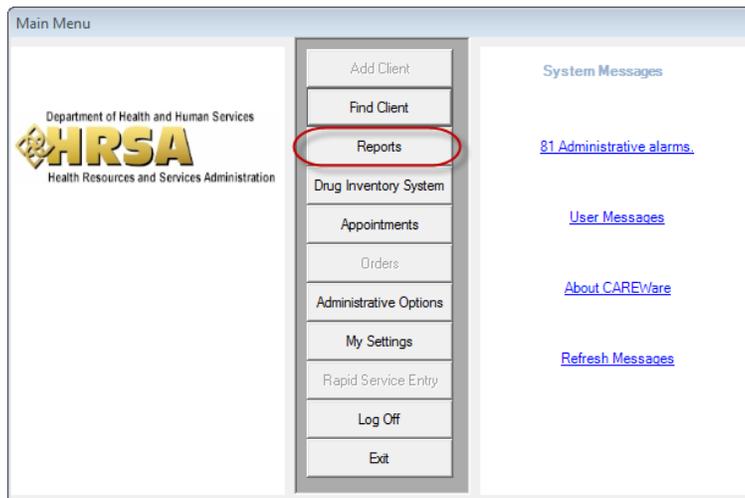
Creating Custom Reports

In addition to the prebuilt reports in CAREWare, you can use custom reports to view data sets tailored to your needs. It helps if you have some familiarity with SQL databases before you use custom reports, but if not, the report builder feature will help you design queries without any database experience.

1. Log into CAREWare. If you have administrative privileges and are asked to choose between Central Administration and Provider ("Default" until you change the name), you can log in as either a Provider or Central Admin. To run reports for multiple agencies within a provider network, log in as Central Administrator.
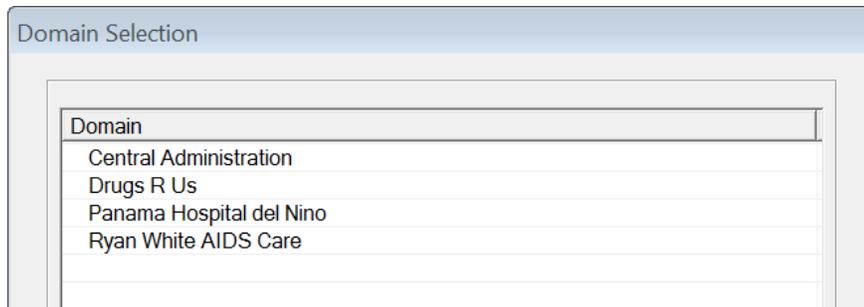
2.   Select **Reports** from the main menu.

The various report categories will appear:
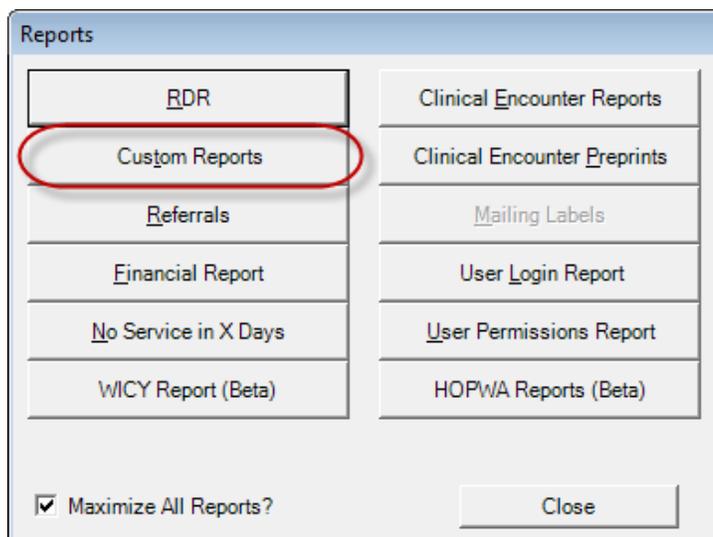
TIP: By selecting the **Maximize All Reports?** check box, reports will open in full screen mode rather than in a reduced-size window.

3.   Click **Custom Reports** from this menu.

Creating a basic custom report

Take a moment to look at the custom report menu below.

You'll use this window to start new reports and work with existing reports.

From the Central Admin domain, you will have the options seen above:

- **Data Scope – Provider**, which allows you to run your report on one or more providers (use Ctrl + Click to select multiple providers).

- **Set Primary Provider**, which tells the system which provider's data should be used as the primary source should there be several reported values.
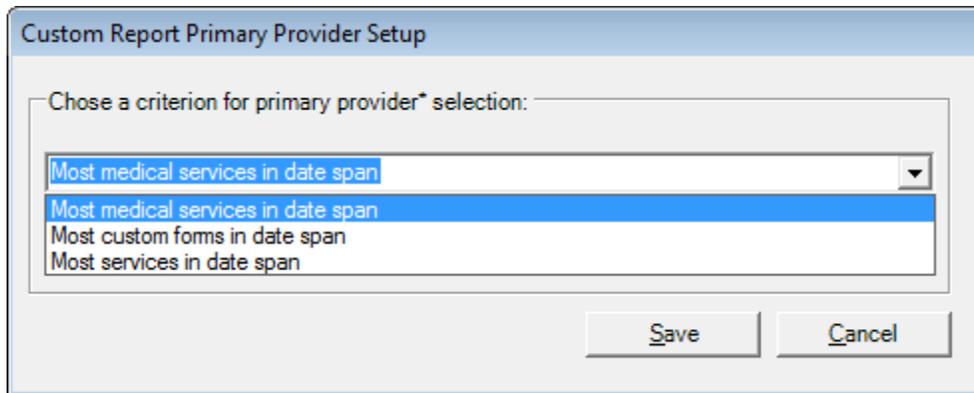
- Group by Provider, which lists each provider and their results separately.

PLEASE NOTE: When working with custom reports from within a <u>provider</u> domain, your only option in this area will be to see information you share on the reported clients with other agencies.

<u>In a Provider domain</u>, your only option in this area will be to see information you share on the reported clients with other agencies:

- Show Shared Service Records

- Show Shared Clinical Records

- Show Shared Custom Subform Records
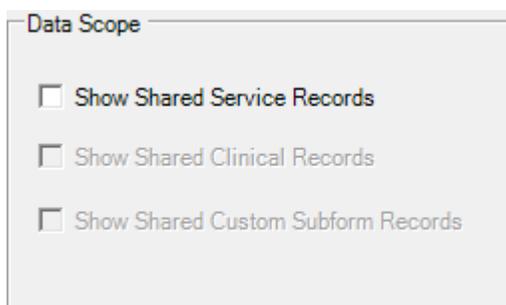
Note that in the example above, only **Show Shared Service Records** is available because this agency does not share Clinical or Custom Subform Records with other providers.

- The **Filter by Report Type** drop-down list refers to the types of custom reports you can create and run. These correspond with data fields populated under tabs and subtabs in the client records. For instance, a Demographic report, a Service report, Encounter data report, etc.

With the inclusion of calculated object fields (See Guide #8), Demographic custom reports have become especially powerful for collecting information from different parts of CAREWare, such as labs and medications and services.

Note that the Demographic fields are available for ALL report types.

- **Date Span** allows you to select a date range on which to report. Which dates fall into scope for a report vary by type of report, as shown in the table below.

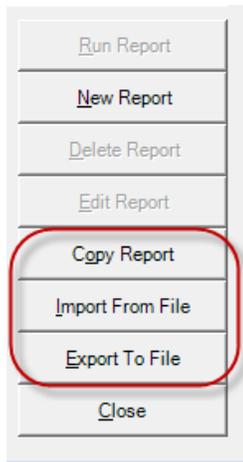**Date Range Selection for Custom Reports**

Report Type	**Client Records Included in Custom Report if Specified field within Date Range**
Counseling and Testing	HIV test date
Custom Subform	Custom subform date
Demographic	**At least one service visit (no date range will include all clients)**
Diagnoses	Diagnosis Date
Immunization	Immunization Date
Lab	Lab Test Date
Medication	No Stop Date or Stop Date within range
Pregnancy History	Est. Conception Date
Referrals	Referral Date
Screening	Screening test date
Screening Labs	Screening lab test date
Service	Service visit date
Vital Signs	Encounter date

IMPORTANT: A service visit must have been received within the selected Date Range, regardless of which report type is chosen; only the Counseling and Testing/HIV test date does not require an associated service. **(No date span will include all clients respective to the report type.)**

- If you are reporting over 2 or more calendar years, the **Clinical Review Year** drop down menu allows you to specify which year's annual review data you want to use. (This is important if you are using annual review data in your report, such as income, HIV status, etc. which may change over time).

- The check boxes allow you to

    o **Show New Clients Only** (only those clients who became new clients in the specified date range, based on their enrollment year)

    o **Show Specifications** (whether or not to display the criteria the report is run on)

    o **Sum Numeric Fields** (if you are using the Totals functions--GroupBy or sum or count -- see below).

Additional features are available to simplify report creation and sharing:

Revised 9/21/12

Run Report

New Report

Delete Report

Edit Report

Copy Report

Import From File

Export To File

Close

- Copy Report is only available from the Central Admin domain. It allows you to copy a report created either centrally or at one provider and copy it to the reports available to another provider.

- For providers who are not on the same computer network, Import From File allows you to import a custom CAREWare report in the XML format, which is created using the Export To File function. One provider can then email the report to another for use. (Only the report specifications for field selections and filters are included – this does NOT include provider client data).
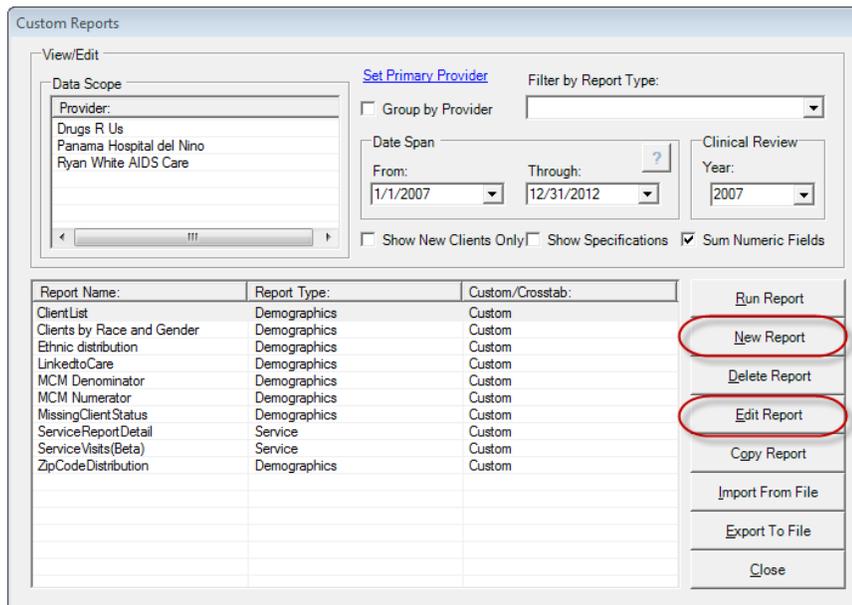
To Export a report:

1. Select **Export To File**. You will see a list of available reports.

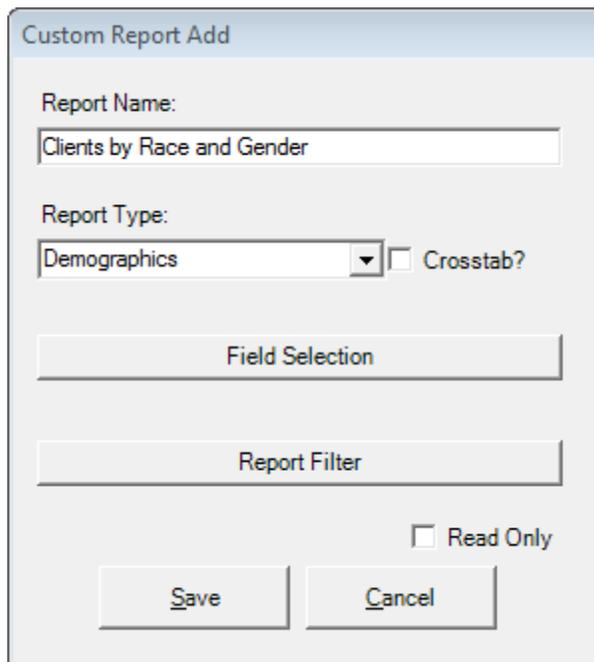2. Check one or more reports and click **Export**.
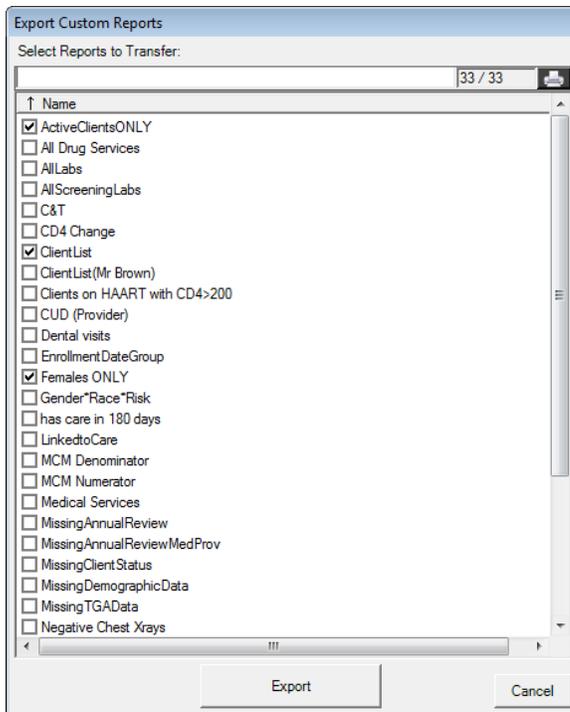
3. Name the file and save it.

Create a basic custom report: "Clients by Race and Gender"

1.   From the **Reports** menu, select **Custom Reports** and click New Report. You can also edit an existing report.

2.   The **Custom Report Edit** menu will appear.

3. Enter the **Report Name if new**. It's best practice to use full descriptive titles for your reports. If you come back later and see a report called ClsbRG1, it may be difficult to remember what it was for.

4. Enter the **Report Type** from the drop down menu. (We'll cover crosstab reports below.) This will be Demographic, Service, Lab, etc.

5. Click **Field Selection**. Field Selections are the columns that you want to appear on your report (e.g. Name, URN, gender, last CD4 count, etc.).

    Use **Field Selection** to choose which fields or columns you want to see in your report. (Keep in mind, you will only be able to display about 7 or 8 columns, depending on which fields you choose.) <u>Field Selection does NOT select specific data</u> – you must create a filter(s) for that.

    TIP: Field and filter selections are "sets" you can use over and over in different reports. They are templates which can help you create new reports faster.

    We will discuss **Report Filters** after you've created the basic field selection report.


The report type is shown and is grayed out as it can't be changed once created.

The **Use Totals** box is employed when you need to sum certain values, or group the report in a specific way (for instance, over clients or service categories). Please refer to Quick Start #8, Advanced Custom Reports, for more information.

Click **Add Field** to select the first field you'll use in your report. All fields in CAREWare, relevant to the type of report you created, are available - in this case,

Demographic fields and "internal" fields related to Demographic tables such as **Date of Last Service**. This is not a field into which you would enter data in CAREWare; rather, it is a "reporting field" which will retrieve the client's last service date regardless of the type of service.
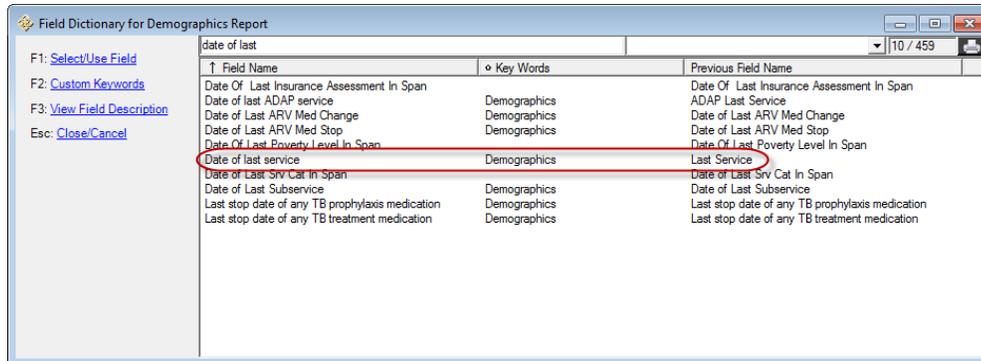
Select the first field for your report by clicking on it. You can also start typing the field name if you know it; CAREWare will also search for fields. For example, if you wanted to find a field that had the word "Lab" in it, simply type that word and all fields with that word in it will be returned, such as here:
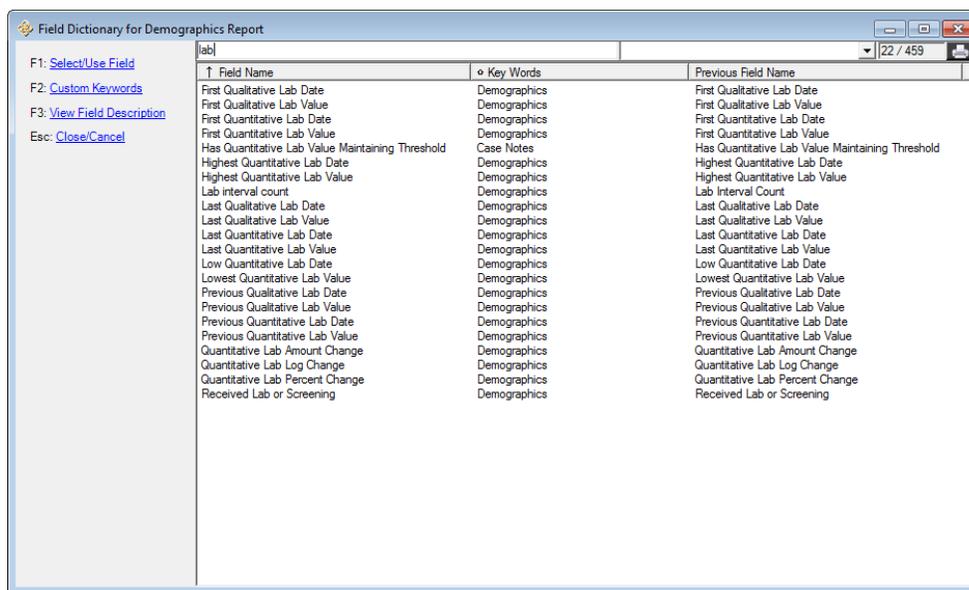
IMPORTANT: You will only find the types of fields relevant to the report type you are running, i.e. here you will NOT be able to add all lab information. You will have to specify "Lab" as the report type to access fields including Lab Result, Lab Test, etc.
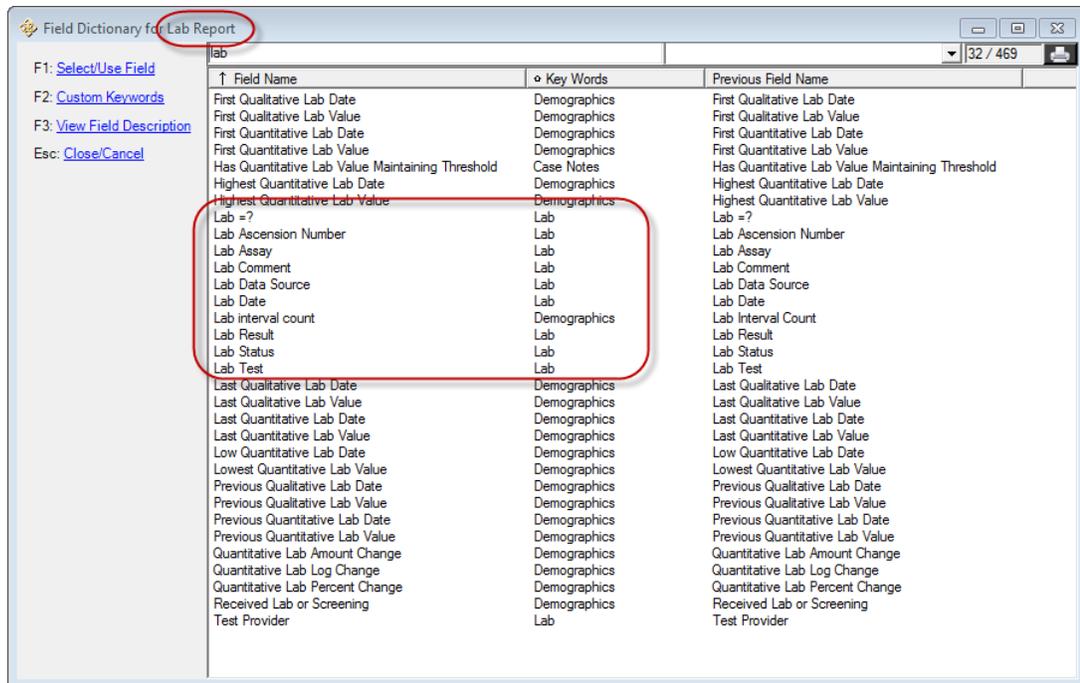
6.   After selecting the field, click **F1 Select/Use Field**. Double-clicking on a field will also add the field to your report and return you to the Field Selection menu.
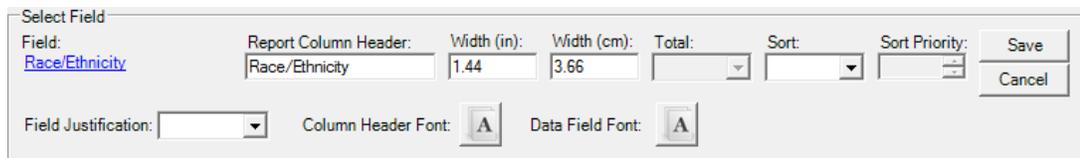
7.   Select **Race/Ethnicity** as your first field.
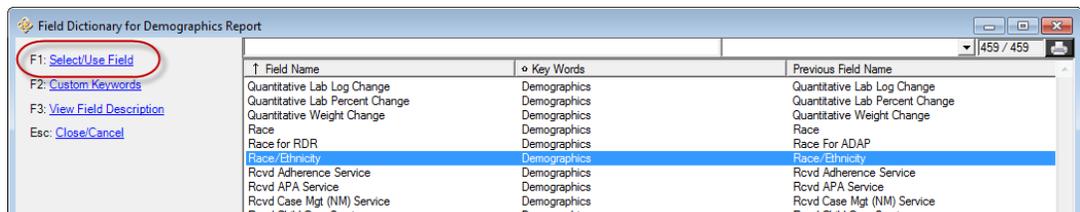
8.   You will be given a number of field options:

Report Column Header is the wording that will appear on your report. You can edit this as preferred; the meaning of some field names may not be clear to end users so you can substitute "plain English" column names.

Width controls the width of the column in either inches or centimers (changing one changes the other). You may wish to widen or narrow columns to get more information on a page.

Total will not appear as available unless you choose **Use Totals**. You will have the option to **Sort** "Ascending" or "Descending" in alphanumeric order. **Sort Priority** indicates that you wish to sort first by this field.

Field Justification will align the data as you need. Left justification is the default; you may wish to change this for numeric results.

Column header font and **Data field font** are just that, the fonts used in display of the report. Arial is the default font.

9.   Click **Save** when you're done. Your first field will appear in the lower window.

Col#	Field Name	Column Header	Width (in)	Width (cm)	Totals	Sort	Sort Priority
0	Race/Ethnicity	Race/Ethnicity	1.44	3.66			

10.   Use the steps above to add **Gender** and **Name** to your report. Name is the full name concatenated from the First and Last Name fields.

Col#	Field Name	Column Header	Width (in)	Width (cm)	Totals	Sort	Sort Priority
0	Race/Ethnicity	Race/Ethnicity	1.44	3.66			
1	Gender	Gender	0.88	2.24			
2	Name	Name	1.44	3.66			

There is currently no order to this report; if run as is it would look like this:

Clients by Race and Gender

Data Scope: **Ryan White AIDS Care**

Race/Ethnicity:	Gender:	Name:
Hispanic	Male	Cottontail, WILLIAM
White (non-Hispanic)	Male	Zoology, Benjamin
Asian	Male	Beagle, Barney J
More than one race	Transgender MtF	Summers, Martha-Ann
Black or African-American	Male	DOE, JOHN D
White (non-Hispanic)	Male	Man, Snow
Unknown	Male	Mills, Flower
Hispanic	Male	Larkspur, PAUL
Hispanic	Female	Bonzo, Rita
Other	Female	Garbo, Gretta
White (non-Hispanic)	Male	Finn, Huckleberry Sean
White (non-Hispanic)	Male	Gruyere, DONALD
More than one race	Male	ALLEN, LAWRENCE
White (non-Hispanic)	Male	Appleseed, JOSEPH
White (non-Hispanic)	Female	Cantsleep, BARBARA
Am. Indian/Alaska Native	Female	Starfish, Constance
White (non-Hispanic)	Female	BLOWFISH, CHRISTINA

We want to edit our field selections to put this report in order.

11.   Click on **Race/Ethnicity**, then **Edit Field**. Choose **Sort Ascending** from the drop down menu.

12.   Do the same for **Gender** and **Name**. You'll see that the Sort Priority is set as you choose each field to sort on.

Col#	Field Name	Column Header	Width (in)	Width (cm)	Totals	Sort	Sort Priority
0	Race/Ethnicity	Race/Ethnicity	1.44	3.66		Ascending	1
1	Gender	Gender	0.88	2.24		Ascending	2
2	Name	Name	1.44	3.66		Ascending	3

13.   You can reorder columns on your report using the up and down arrows on the side of the screen. You can select a field by clicking on it and using the arrows to reposition the column. (Note that "Col# 0" is actually the 1st column on your report.).

    (Don't change one here yet, as we are happy with the order as is.)

Col#	Field Name	Column Header	Width (in)	Width (cm)	Totals	Sort	Sort Priority
0	Race/Ethnicity	Race/Ethnicity	1.44	3.66		Ascending	1
1	Gender	Gender	0.88	2.24		Ascending	2
2	Name	Name	1.44	3.66		Ascending	3

14.   Click the **Close** button to save your selection, then the **Save** button on the Custom Report Add screen.

IMPORTANT: If you click the **Read Only** checkbox, this report will no longer be editable by anyone. You may want to use this feature to prevent users from altering certain reports, without restricting their permissions to create/modify their own. In this case it's best to create these reports at the Central Admin domain and export them to the provider, so that if necessary you can modify the core version later.

15.   Your report will appear on the list of reports as seen below.

16.   Set the Data Scope to a Provider (in this case, Ryan White AIDS Care), with the date span **From:** 1/1/2012 **Through:** 12/31/2012. Ensure the **Sum Numeric Fields** and **Show Specifications** boxes are checked before running the report.

PLEASE NOTE: Clients need to have at least one service visit during the date span to be included in the report. If no date span were entered, you would get a list of ALL your clients.

17.   Click on the report if necessary to select it and click **Run Report**.

18.   The report will appear in a new window. (Remember to check **Maximize All Reports?** on the **Reports** menu to force all reports to open at full screen width/height.)

Clients by Race and Gender

Data Scope:	Ryan White AIDS Care	

Race/Ethnicity:	Gender:	Name:
Am. Indian/Alaska Native	Female	Starfish, Constance
Asian	Male	Beagle, Barney J
Black or African-American	Female	Bonaparte, Napa
Black or African-American	Female	Pretty, Day Love
Black or African-American	Male	DOE, JOHN D
Hispanic	Female	Bonzo, Rita
Hispanic	Female	facebook, user joy
Hispanic	Male	Cesar, Julius
Hispanic	Male	Cottontail, WILLIAM
Hispanic	Male	Hispanico, Geraldo
Hispanic	Male	Larkspur, PAUL
Hispanic	Male	Salamander, Jose
More than one race	Male	ALLEN, LAWRENCE
More than one race	Male	Anderson, James k
More than one race	Transgender MtF	Summers, Martha-Ann

Since we sorted ascending by Race/Ethnicity, then by Gender, then Name, the ethnicities are listed alphabetically. Within them are groupings of females listed alphabetically, then males listed alphabetically.

19.   Close the report using the "X" in the upper right hand corner.

# Adding filters to "Clients by Race and Gender"

Use the **Report Filter** to choose how to sort your data. (It is a good idea to include Field Selections that will verify your filters are working as intended.) For example: if you filter your report for Females only, you would want to include the 'Gender' column among your Field Selections in the report.

You can add a filter at the same time you create your field selections, before saving your report. However, sometimes it's more efficient to run a report without filters to make sure you're getting data, and then add the filters.
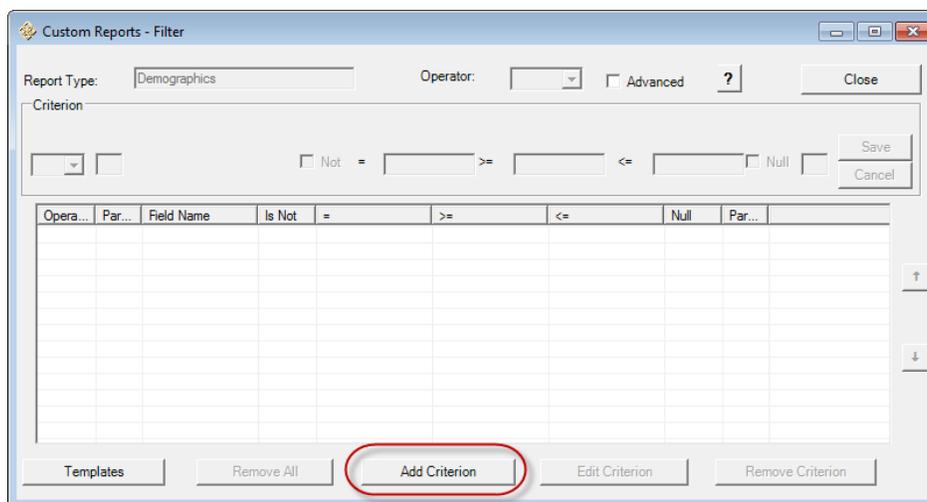
1.   If you've closed your report, click to highlight it and click the **Edit Report** button.
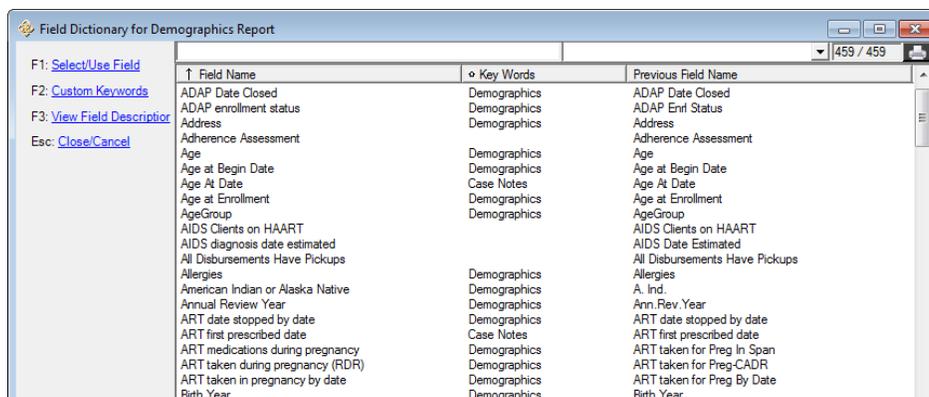
Revised 9/21/12
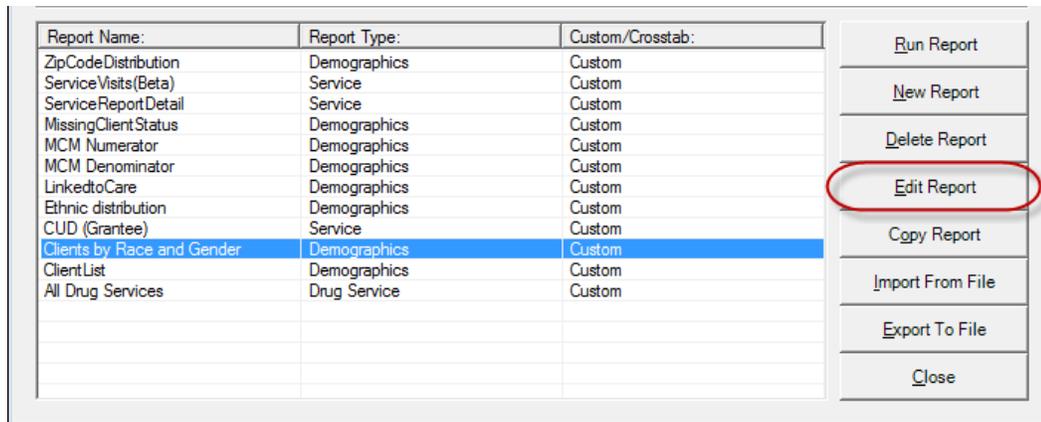
2.　　　Click the **Report Filter** button.
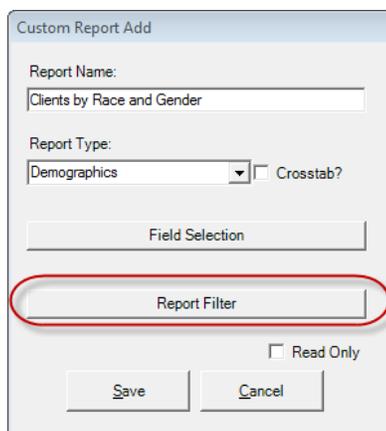
3.　　　The **Filter** menu will appear. Click the **Add Criterion** button.

4.　　　The **Field Dictionary** will give you a list of all fields by which you could filter this type of report (Demographic).

5.   Select **Gender** from the list. As in Field selection, you can either double-click the field to add it, or click once to select and then click F1 Select/Use Field (or select it and press the F1 button).

6.   The values for the field are determined by the field you selected. In this case, since you selected Gender, only those options for gender entered into the system will be available:

7.   The default value for a field is "=". Checking the **Not** box will return all values <u>unlike</u> the one you select. I.E., if you selected Gender NOT Female, you'll get all males, transgenders, refused to reports, and unknowns.

8.   Select **Female** for this report (i.e., Gender = Female).

Saving filters as Templates

After selecting your field(s), you can close the selection window and apply this filter, OR you can save this field selection as a template. Saving as a template lets you apply the filter you've created to any report type.

1.   Once you've made your field selection, click the **Templates** button.

Opera...	Par...	Field Name	Is Not	=	>=	<=	Null	Par...	
		Gender		Female					

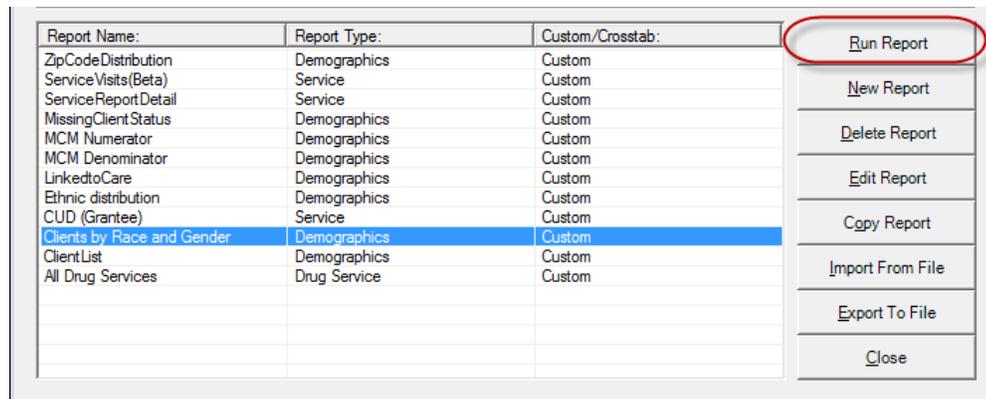Templates   Remove All   Add Criterion   Edit Criterion   Remove Criterion
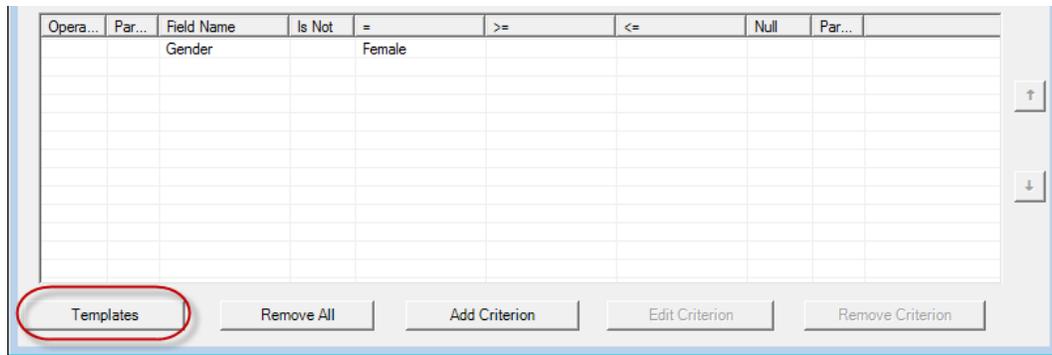
2.   You'll see a list of existing templates, if any. Click **F3 Save to New Template** and name it. Use a name that will make it easy to find and use again.
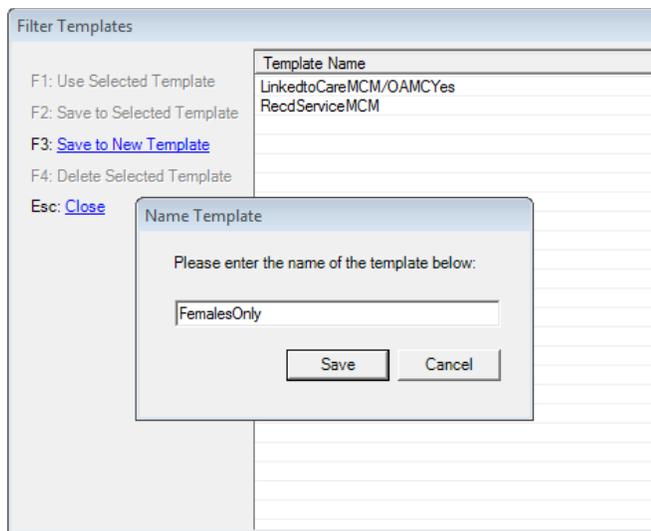
3.   Click **Save**. The template will appear on the list. In the future you can go to the Templates window and select a template to run as a filter or set of filters. Just select the filter and click **F1 Use Selected Filter**. For quick reference, hover your mouse over a template name to see the fields included.

Revised 9/21/12
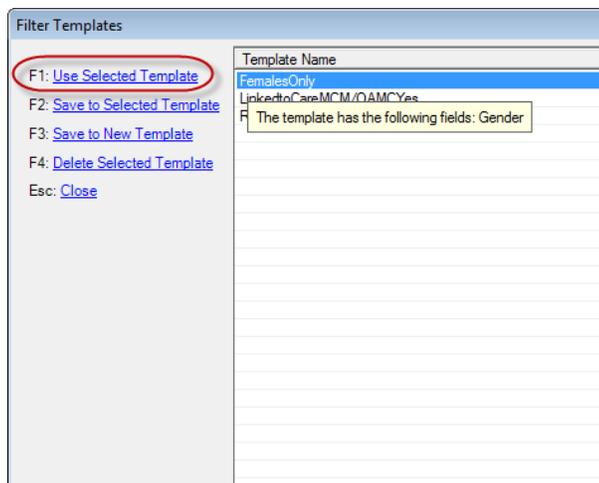
4.   Close out of the template and filter windows and click **Save** on the Custom Report Edit window.

5.   Click to select this report and click **Run Report**. Make sure you've specified a date span that will return client information.

6.   The report will appear in a new window. Note that only females appear in this report.

Crosstab Wizard

<u>Turning a custom report into a Crosstab report.</u>

In the example above we produced a report that listed each client separately. This is especially helpful when you need a list in order to identify specific clients requiring follow up (e.g. needing a vaccine, or who haven't had an office visit for more than 3 months). In addition, custom reports can be very useful to aid in assessing data quality: List all the clients who have missing or out-of-range information for a certain field or fields.

Crosstabs, however, allow you to quickly obtain the *counts* of clients for specific criteria. For example, you may need to report the number of clients you are serving cross-classified by Race/ethnicity and Gender, or by HIV status and CD4 group. The crosstab wizard allows you to generate counts.

Crosstabs have a row, column, and, if specified, a strata field.

1. Click **New Report** on the Custom Reports menu.

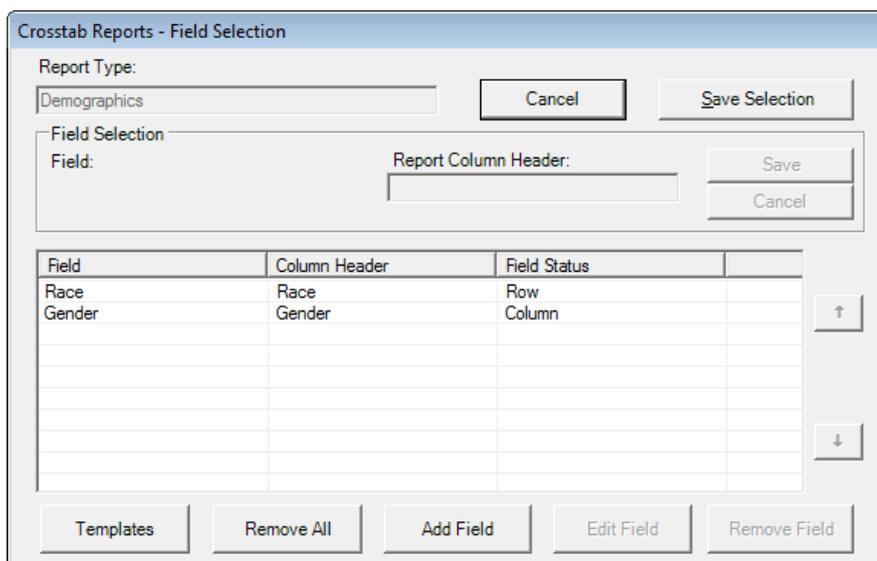2. Name it **Race by Gender Distribution.**

3. Select Report Type **Demographics.**
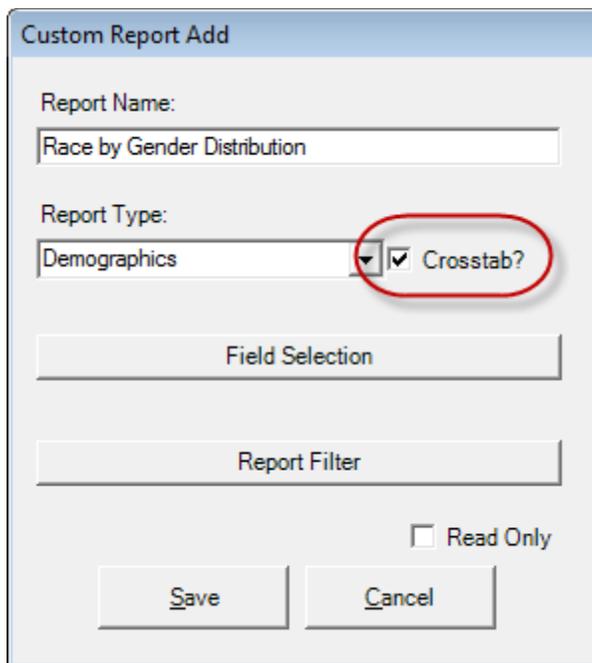
4. Check the **Crosstab?** Box and click **Field Selection**.
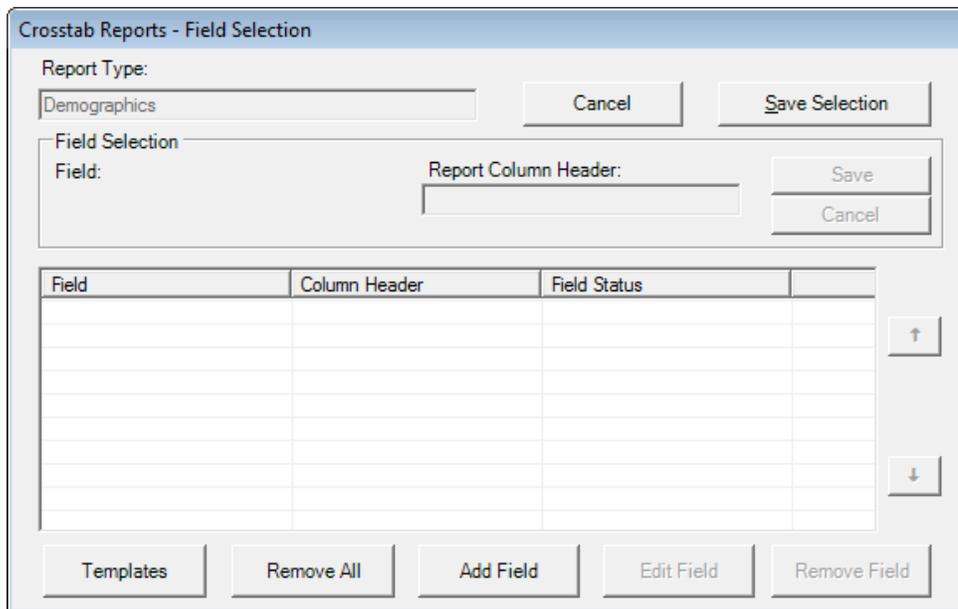
5. The Field Selection menu for a crosstab report is different. Click **Add Field**.

6. Select **Race** as the first field, and **Gender** as the second. You'll see that the first field is set as the Row, the second as the Column.

7. Click **Save Selection,** then **Save** the report, then run the report.

Race by Gender Distribution (Race by Gender)

   Data Scope: Ryan White AIDS Care

Race by Gender

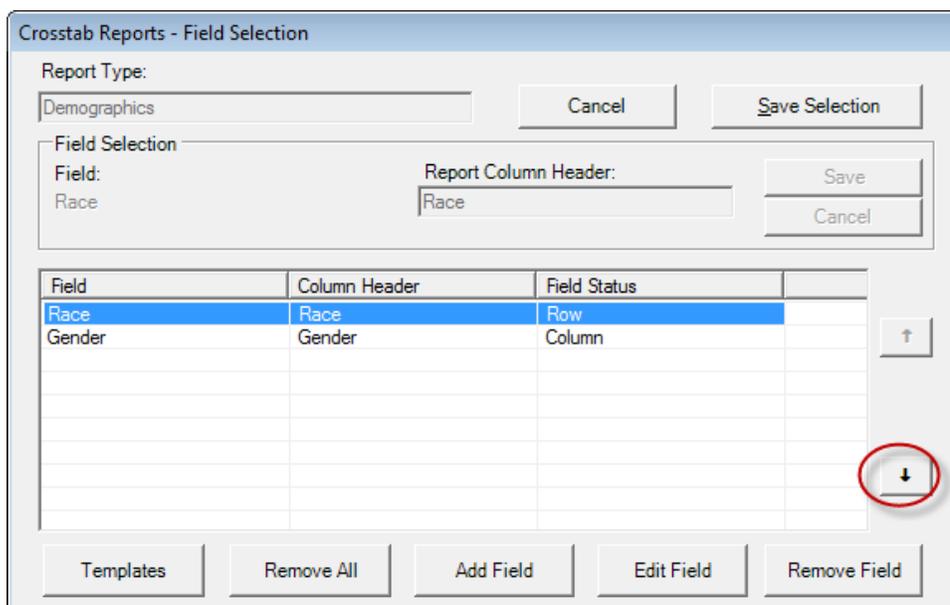| Race:	Total:	Col. %:	Female:	Male:	Transgender MtF:
Am. Indian/Alaska Native	1	2.6	1 (100.0%)	0	0
Asian	1	2.6	0	1 (100.0%)	0
Black or African-American	6	15.4	3 (50.0%)	3 (50.0%)	0
More than one race	5	12.8	1 (20.0%)	3 (60.0%)	1 (20.0%)
Not Specified	2	5.1	0	2 (100.0%)	0
Other	2	5.1	1 (50.0%)	1 (50.0%)	0
Pacific Islander	2	5.1	0	2 (100.0%)	0
Unknown	1	2.6	0	1 (100.0%)	0
White	19	48.7	3 (15.8%)	16 (84.2%)	0
Total:	39	100.0	9 (23.1%)	29 (74.4%)	1 (2.6%)

Number of Records: 10

The **Total** provides the number of clients by race.

The **Col. %:** shows the percent distribution of clients by Race.

The **Female, Male** and **Transgender** columns show the gender distribution for each Race category. In this example, African-American clients are 50/50 male and female clients, whereas 84% of white clients are male. This could be a typical match with your city's HIV demographics, or it could indicate that some outreach is needed to a certain race/gender demographic.

8. You can switch the row and column designations using the up/down arrows as shown previously:

Crosstab Reports - Field Selection

Report Type:

Demographics   [Cancel]   [Save Selection]

Field Selection
Field: Report Column Header: [Save]
Race   Race   [Cancel]

Field	Column Header	Field Status	
Race	Race	Row	↑
Gender	Gender	Column	↓

[Templates] [Remove All] [Add Field] [Edit Field] [Remove Field]   Asf

9. Switching these designation, the report runs like this:

Race by Gender Distribution (Gender by Race)

Data Scope: Ryan White AIDS Care

Gender by Race

Gender:	Total:	Col. %:	Am. Indian/Alaska Native:	Asian:	Black or African-American:	More than one race:	Not Specified:	Other:	Pacific Islander:	Unknown:	White:
Female	9	23.1	1 (11.1%)	0	3 (33.3%)	1 (11.1%)	0	1 (11.1%)	0	0	3 (33.3%)
Male	29	74.4	0	1 (3.4%)	3 (10.3%)	3 (10.3%)	2 (6.9%)	1 (3.4%)	2 (6.9%)	1 (3.4%)	16 (55.2%)
Transgender MtF	1	2.6	0	0	0	1 (100.0%)	0	0	0	0	0
Total:	39	100.0	1 (2.6%)	1 (2.6%)	6 (15.4%)	5 (12.8%)	2 (5.1%)	2 (5.1%)	2 (5.1%)	1 (2.6%)	19 (48.7%)

Number of Records: 4

This now divides the racial distribution of client population by gender.

10. If you need to see if the race and gender distribution of your clients differs by HIV risk, you can add **HIV Risk Factor** as the third or **Strata** field.

Field	Column Header	Field Status	
Gender	Gender	Row	
Race	Race	Column	
HIV Risk Factor	HIV Risk Factor	Strata	

Running the report now gives you the race/gender stats broken out by risk factor. (Partial results shown here.)

Race by Gender Distribution (Gender by Race by HIV Risk Factor)

Data Scope: Ryan White AIDS Care

Heterosexual

Gender:	Total:	Col. %:	Am. Indian/Alaska Native:	Asian:	Black or African-American:	More than one race:	Not Specified:	Other:	Pacific Islander:	Unknown:	White:
Female	3	50.0	1 (33.3%)	0	1 (33.3%)	0	0	0	0	0	1 (33.3%)
Male	3	50.0	0	1 (33.3%)	0	0	1 (33.3%)	0	0	0	1 (33.3%)
Total:	6	100.0	1 (16.7%)	1 (16.7%)	1 (16.7%)	0 (0.0%)	1 (16.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (33.3%)

Number of Records: 3

IDU

Gender:	Total:	Col. %:	Am. Indian/Alaska Native:	Asian:	Black or African-American:	More than one race:	Not Specified:	Other:	Pacific Islander:	Unknown:	White:
Female	4	44.4	0	0	0	1 (25.0%)	0	1 (25.0%)	0	0	2 (50.0%)
Male	5	55.6	0	0	1 (20.0%)	0	0	0	0	0	4 (80.0%)
Total:	9	100.0	0 (0.0%)	0 (0.0%)	1 (11.1%)	1 (11.1%)	0 (0.0%)	1 (11.1%)	0 (0.0%)	0 (0.0%)	6 (66.7%)

Number of Records: 3

Group Format Wizard

The Group Format Wizard allows you to put into categories any continuous, quantitative field including lab results and dates.

If a field can have a group format applied to it, you'll see the Format link above the field name, either in **Field Selection** or **Report Filter** parameter selection.

1. Click **Format** to work with the wizard.

2. You can **Make a new group format** or **Use selected group format template**. You can Change or Delete existing templates. In this case, we'll select AgeGrp and click **Change Selected Template**.

3. Use the **Add**, **Edit** and **Delete** buttons to modify the group. Seen here is a revision that adds a 65+ group:

Transferring Reports across Providers

At the Central Administration domain, you can create reports and copy them 'to' or 'from' other Provider domains..

1. Select a report from the list and click **Copy Report**.

2. Select the provider from the drop down menu on the right. You'll see a list of reports they currently have in the system.

3. Select the report to transfer from Central Admin and click the **>>>>** button. The selected report is now available to the provider. Conversely, you could select the report to transfer from a provider and click the **<<<<** button.

WARNING: Clicking the **Remove Selected Definition From List** button DELETES a report completely. There is no warning and there is no recovering these reports.