RETAIN TA Resource: Recruitment-to-Enrollment Pipeline Dashboard Tool: User's Guide

Overview

This User's Guide is a companion tool, developed to support the use of the RETAIN Recruitment-to-Enrollment Pipeline Dashboard Tool—a Continuous Quality Improvement (CQI) resource designed to help states understand the effectiveness of their recruitment and enrollment efforts. The Dashboard uses data obtained by states to display information about the number of potential participants that states connect with at each stage of the recruitment-to-enrollment process, and who ultimately enrolls in the project.

The Dashboard provides a framework for data-driven continuous monitoring of recruitment efforts, and may be used by RETAIN state teams to reach a shared understanding of, and serve as a jumping off point for identifying, underlying problems and potential solutions.

Specifically, the tool is intended for use by all state RETAIN project staff involved with recruitment efforts. It can be used to identify strengths and gaps in states' recruitment and enrollment plans, including:

- Determining which stage of the pipeline people are dropping out from
- Understanding reasons for non-enrollments
- Identifying recruitment and enrollment trends
- Monitoring and improving recruitment efforts
- Determining which referral sources yield the most enrollments
- Identifying characteristics of RETAIN enrollees and dropouts
- Tracking progress over time to assess the impact of quality improvement activities

What Are the Recruitment-to-Enrollment Process Steps?

This Dashboard Tool has been developed with the assumption that, prior to enrollment in RETAIN, a potential participant moves through a series of steps toward enrollment. At each step, data are collected on whether the person moves on to the next step, and if not, the reason why not.

The general steps for this process are as follows (with the dashboard label in parentheses):[1]

1. A person is identified as a potential participant (Identified)
2. The RETAIN project attempts to contact the person (Contacted)
3. Eligibility is determined (Eligible)
4. The person expresses interest in enrolling (Expressed interest)
5. The person enrolls in the RETAIN project (Enrolled)
6. The person receives the initial RETAIN service (First service received)

Step 6, First service received, occurs after enrollment, but is included in this tool for states to track if desired, given that some individuals may fail to show up for initial project activities despite completing enrollment.

To support sustainability, RETAIN TA recommends that state teams define each step in the pathway so that everyone has a shared understanding of how the recruitment-to-enrollment pathway is operationalized.

What Is Needed to Use This Tool?

This Dashboard Tool has been developed with the assumption that the state RETAIN project meets the following prerequisites:

- **Tracking system:** The state project has a separate electronic system in place (Excel, Access, or other spreadsheet or database) aside from the Dashboard Tool that collects structured data on each person who is identified as a potential RETAIN participant. This guide will refer to that system as the recruitment tracking system (RTS).
- **Person-level tracking:** The RTS has a record (database record or spreadsheet row) for each potential participant that can be updated over time as that person moves through the steps from identification to enrollment.
- **Getting data into correct format:** The state project has the capacity to retrieve data from the RTS, transform it as needed to match the data structure of the Dashboard Tool, and copy the data into the Dashboard Tool each time the state project desires updated data in the dashboard.
- **Staff:** The state project has Microsoft Excel version 2013 or later,[2] and has one or more staff with basic Excel proficiency.[3]

[1] States may have a different recruitment-to-enrollment pathway, and the RETAIN TA team can work with states to modify this pathway.
[2] The only feature of the Dashboard Tool incompatible with Excel 2010 is the timeline filter. This could be customized by replacing the timeline filter with a different type of date filter.
[3] RETAIN TA recommends that state teams designate one or two people to be responsible for managing the tool and data entry.

If the state does not have an RTS in place, data can be entered directly into the Dashboard Tool. *However,* this approach will require more time. The area for data entry is simply a series of Excel rows and columns.

Considerations

The usage of text fields in the dashboard assumes that data categories are always entered in the same way. Whether data are from an RTS or entered directly into the tool, the dashboard will be useful only if data categories are standardized. Therefore, the team will have to agree on what terminology they want to use. For example, if the reason that the person was not interested is that they had already returned to work, then that reason must be recorded with the exact same word or phrase in each record—otherwise they will appear in the dashboard as multiple reasons. If fields that mean the same thing have different text, such as "already working," "back at work," and "returned to job," those will all appear as separate reasons in the dashboard.

Obtaining the Dashboard Tool

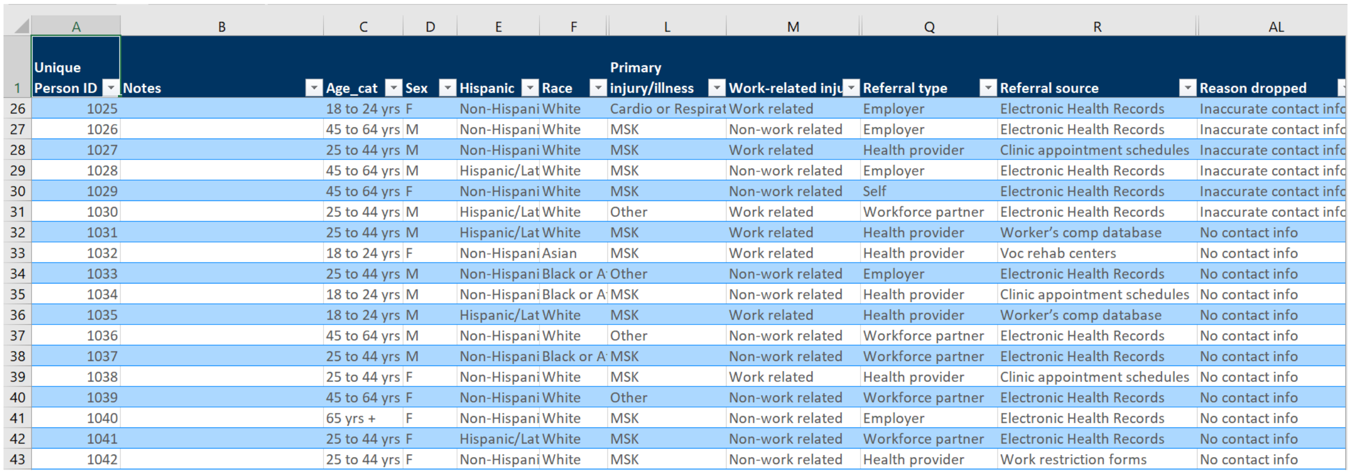
The Dashboard Tool can be downloaded from the RETAIN Online Community (RETAINTA.org) or obtained via e-mail by request to the state's Technical Assistance State Liaison or RETAINTA@air.org. There are two files:

- **Recruitment-to-Enrollment Sample Dashboard:** This file is prefilled with sample data, enabling states to see what the dashboard looks like and how it functions.
- **Recruitment-to-Enrollment Dashboard Tool:** This file is the Dashboard Tool for use by states. It has no data and can be used by the state to copy and enter their pre-enrollment data.

How Does the Dashboard Tool Work?

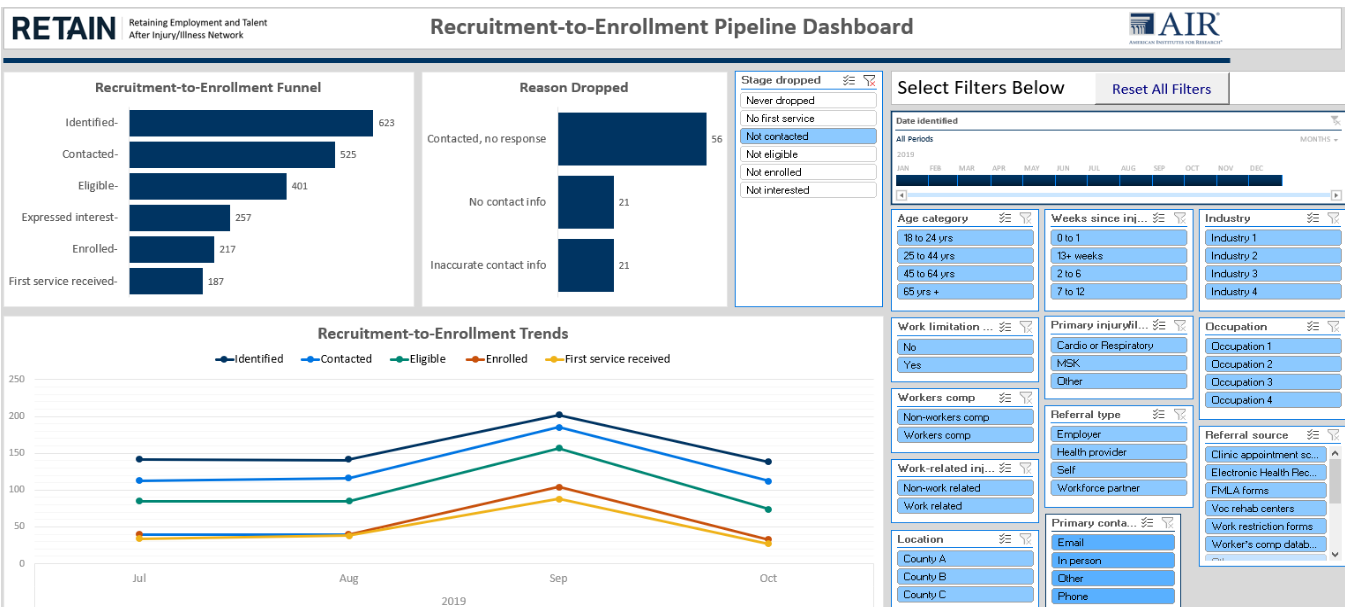
Within the dashboard Excel file there are two worksheets: Data and Dashboard. The Data worksheet contains the data that are viewed in the dashboard (Figure 1). The Dashboard worksheet contains the dashboard charts and filters (Figure 2).

Figure 1. Data Spreadsheet



	A	B	C	D	E	F	L	M	Q	R	AL
1	Unique Person ID	Notes	Age_cat	Sex	Hispanic	Race	Primary injury/illness	Work-related inju	Referral type	Referral source	Reason dropped
26	1025		18 to 24 yrs	F	Non-Hispani	White	Cardio or Respirat	Work related	Employer	Electronic Health Records	Inaccurate contact info
27	1026		45 to 64 yrs	M	Non-Hispani	White	MSK	Non-work related	Employer	Electronic Health Records	Inaccurate contact info
28	1027		25 to 44 yrs	M	Non-Hispani	White	MSK	Work related	Health provider	Clinic appointment schedules	Inaccurate contact info
29	1028		45 to 64 yrs	M	Hispanic/Lat	White	MSK	Non-work related	Employer	Electronic Health Records	Inaccurate contact info
30	1029		45 to 64 yrs	F	Non-Hispani	White	MSK	Non-work related	Self	Electronic Health Records	Inaccurate contact info
31	1030		25 to 44 yrs	M	Hispanic/Lat	White	Other	Work related	Workforce partner	Electronic Health Records	Inaccurate contact info
32	1031		25 to 44 yrs	M	Hispanic/Lat	White	MSK	Work related	Health provider	Worker's comp database	No contact info
33	1032		18 to 24 yrs	F	Non-Hispani	Asian	MSK	Work related	Health provider	Voc rehab centers	No contact info
34	1033		25 to 44 yrs	M	Non-Hispani	Black or A	Other	Non-work related	Employer	Electronic Health Records	No contact info
35	1034		18 to 24 yrs	M	Non-Hispani	Black or A	MSK	Non-work related	Health provider	Clinic appointment schedules	No contact info
36	1035		18 to 24 yrs	M	Hispanic/Lat	White	MSK	Work related	Health provider	Worker's comp database	No contact info
37	1036		45 to 64 yrs	M	Non-Hispani	White	Other	Non-work related	Workforce partner	Electronic Health Records	No contact info
38	1037		25 to 44 yrs	M	Non-Hispani	Black or A	MSK	Non-work related	Workforce partner	Electronic Health Records	No contact info
39	1038		25 to 44 yrs	F	Non-Hispani	White	MSK	Work related	Health provider	Clinic appointment schedules	No contact info
40	1039		45 to 64 yrs	F	Non-Hispani	White	Other	Non-work related	Workforce partner	Electronic Health Records	No contact info
41	1040		65 yrs +	F	Non-Hispani	White	MSK	Non-work related	Employer	Electronic Health Records	No contact info
42	1041		25 to 44 yrs	F	Hispanic/Lat	White	MSK	Non-work related	Workforce partner	Electronic Health Records	No contact info
43	1042		25 to 44 yrs	F	Non-Hispani	White	MSK	Non-work related	Health provider	Work restriction forms	No contact info

Figure 2. Dashboard Spreadsheet



Copying Data Into the Tool

Begin with data that are ready to be copied into the Data tab from the state RTS.

- The data should be in a table with rows and columns. Each row should represent a person (potential participant) and each column a data field in the form and order described in the Appendix.
- Data should be copied into the Data tab in Excel columns A through AO. Columns AP and AQ are formula fields that should not be overwritten.

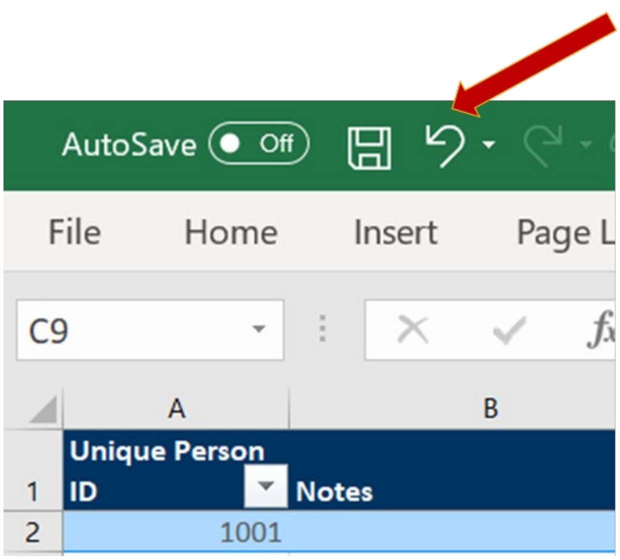
- Data copied should begin with the first row that is empty (row 2).
- For data copied subsequent to that, there are two options.
  - Option 1: Overwrite all prior data by copying once again into row 2.
  - Option 2: Add only new data by copying into the first blank row below the existing data. This second option should only be used if there have been no changes to the existing data. After the data are copied, they will automatically appear in the dashboard when the Dashboard tab is viewed.
- When pasting the data into Excel, use ***Paste Special > Values*** so that the formatting of cells in the data tool is not accidentally overwritten.

Although the Data tab is designed for copying data into it, rather than manual data entry, it is possible to directly enter data by keying in the information. Data can be entered into new rows, or data in existing rows can be edited.

Whether the data are copied into the Data tab or entered manually, the data in the Dashboard tab will automatically update with the new or modified data.

A word of caution: When you first enter data into the empty template, there is a placeholder date value (e.g. 7/1/2019) in row 2 for the *"Date Identified"* column. You can and should overwrite this by pasting or entering data into row 2, **but do not delete that placeholder value and do not delete the entire row 2.** Deleting this value or deleting the entire row 2 will remove all data from the Data tab. The connection between the data and the dashboard will be broken and the dashboard will not work. If this happens, you can click Undo (Figure 3) or re-download the tool and start again.

Figure 3. Undo Function



Viewing and Filtering the Dashboard

The dashboard is divided into two sections: charts and filters.

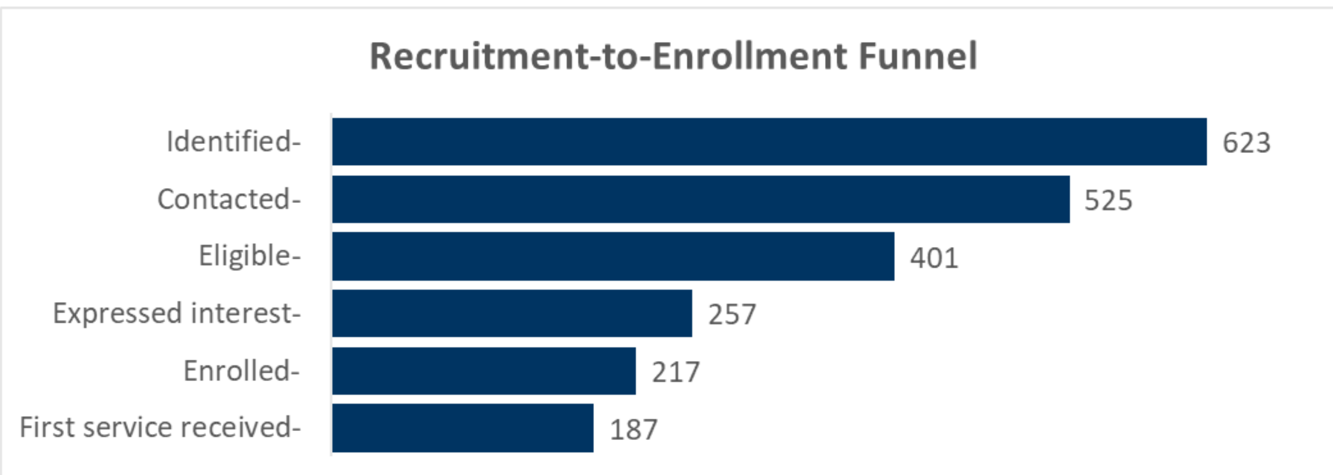
Charts

There are three charts:

- Recruitment-to-Enrollment Funnel
- Reason Dropped
- Recruitment-to-Enrollment Trends

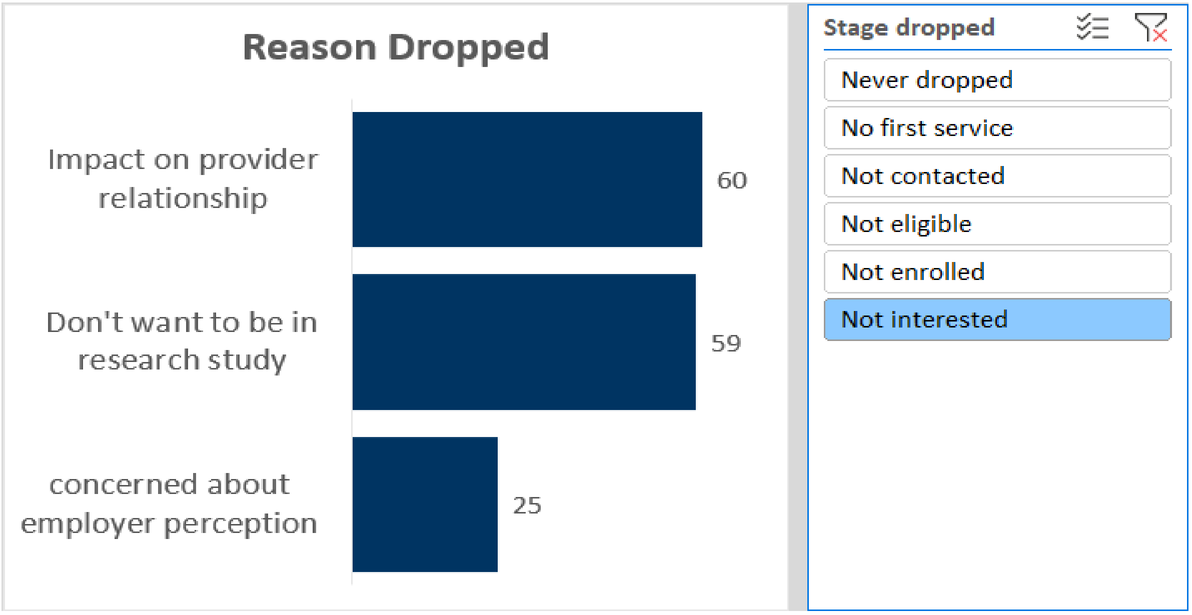
The Recruitment-to-Enrollment Funnel chart (Figure 4) shows the number of people at each stage between Identified and First Service Received. The larger the gap between two adjacent bars, the larger the number of people who dropped out at that stage of recruitment.

Figure 4. Recruitment-to-Enrollment Funnel



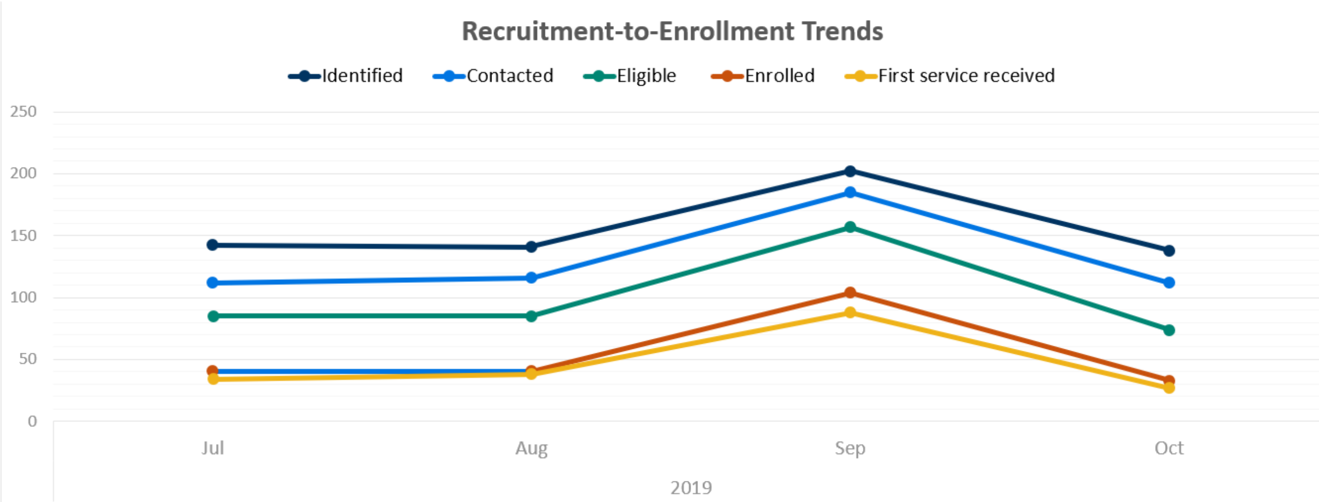
The Reason Dropped chart (Figure 5) shows the reason the person dropped out at each stage. Note that this chart requires states to identify and insert standardized reasons why participants dropped out at a specific stage of the pathway (e.g., not interested, no response). The user can select which stage to view data from by selecting a filter to the immediate right of the chart, under the heading "Stage Dropped"—such as "Not eligible" or "Not interested." This selection affects only the Reason Dropped chart.

Figure 5. Reason Dropped Chart



The Recruitment-to-Enrollment Trends chart (Figure 6) shows how the number of individuals at different stages (identified, contact attempted, contact successful, and enrolled) has changed over time. The month and year of the bottom axis are the month and year that the person was first identified. If a person was identified in September 2019, the person will continue to be counted in September 2019 even if the person was contacted, eligible, enrolled, or received first service in subsequent months. The month and year can be thought of as the cohort for each person based on the month the person entered the recruitment-to-enrollment pipeline. This chart can help to show whether a new strategy helped to increase participant numbers. For example, if there was a new process used to encourage enrollment, the enrollment trendline may show an increase affecting all people still in the pipeline when that process was implemented.

Figure 6. Recruitment-to-Enrollment Trends Chart



Filters

Filters are to the right of the charts (Figure 7). They allow you to view different subsets or combinations of the data. When you select a filter, this changes the data that are displayed in the charts. For example, let's say you only want to view data for participants who have a non-work-related injury. If you click on that filter and you will see that the data charts change to only reflect data for participants with this type of injury.

Figure 7. Filters

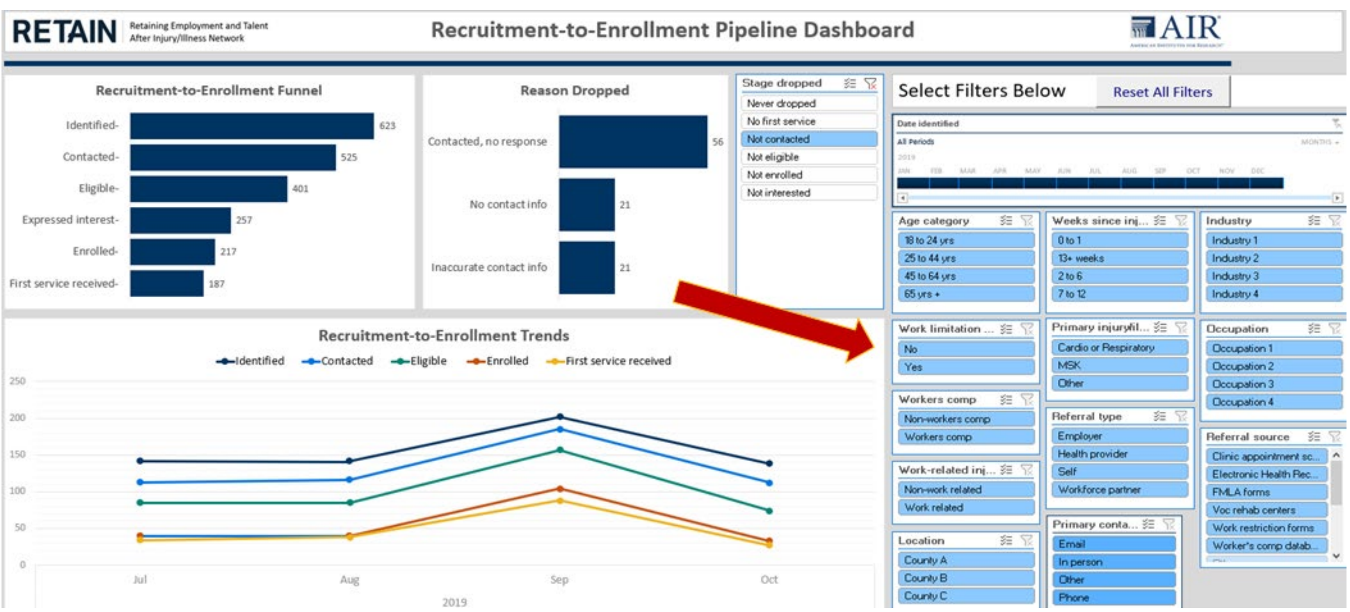
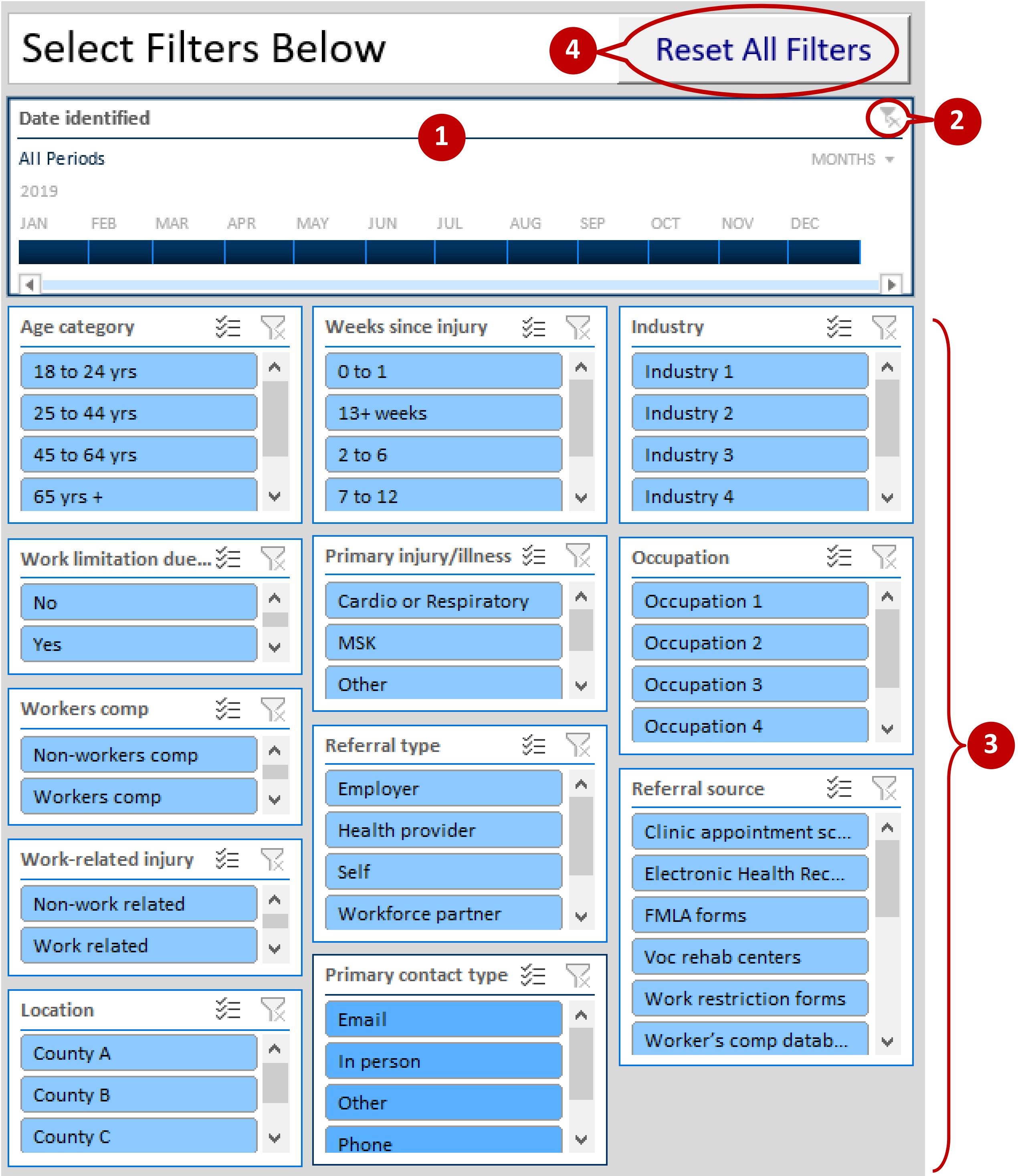


Figure 8 shows the location of several filter features:

- **The filter near the top is the timeline filter (1)**. It controls which individuals are shown based on the Date Identified field (i.e., the date that the person was first identified as a potential RETAIN participant). The user can click on a single month or click and drag to see multiple months.
  - In the far right corner of the timeline filter is a **Clear Filter button (2)** that removes the filter so that all individuals are shown. Below that is a period selector, which controls the unit of time that is being filtered. By default, it is set to months, but it can be set to years, quarters, or days.
- **Below the timeline filter are a series of filters reflecting the characteristics of potential participants and other recruitment variables (3).** Filters can be applied by clicking on a single item or by clicking and dragging to select multiple items. If a filter item is light blue, that means that no individuals are available with those characteristics based on the other filters already selected. At the top right of each filter box is a Clear Filter button.
- At the top of the filters is a **Reset All Filters button (4)**, which clears all filters so that all data are showing. It performs the same function as clicking each of the Clear Filter buttons for all of the filters separately. It also resets the Stage Dropped filter in the Reason Dropped chart to "Not eligible."

Figure 8. Filters



Tips for Viewing the Dashboard

To maximize the viewing area of the dashboard, do the following:

- Collapse the Main Menu ribbon by selecting the caret symbol at the lower right corner of the Main Menu ribbon (Figure 9). This ribbon can later be restored by clicking the "Pin the Ribbon" icon in the same location **after any main menu item has been selected** (Figure 10).

Figure 9. Collapsing Main Menu Ribbon

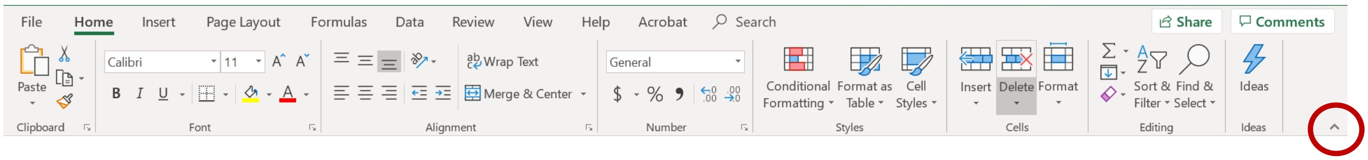
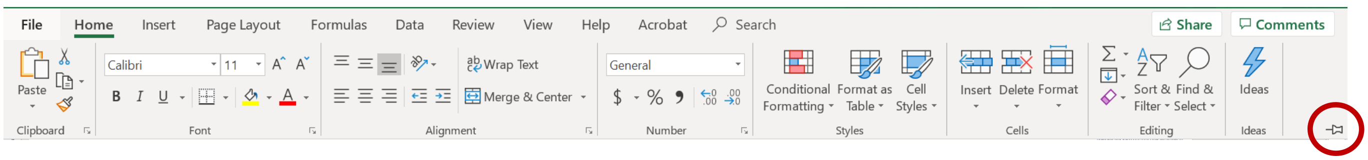


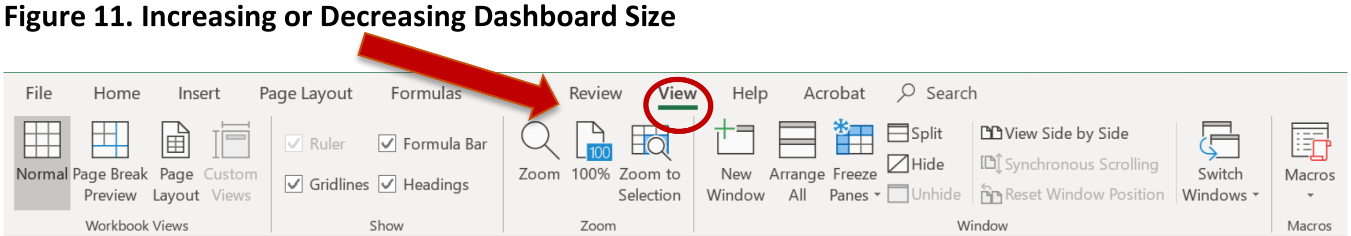
Figure 10. Restoring Main Menu Ribbon



To make the entire dashboard larger or smaller, or to zoom in or out on a portion of the dashboard, do the following:

- Select **View > Zoom** from the Excel main menu and set the magnification level (Figure 11). Zoom levels between 75% and 125% are recommended, but any zoom level may be used based on the size of the screen and the desired view.

Figure 11. Increasing or Decreasing Dashboard Size



Use of Macros

The Dashboard Tool is a macro-enabled Excel workbook. A macro is an automated set of actions that you can run as many times as needed to simplify complex set of actions that are conducted repeatedly. Use of the dashboard does not require any knowledge of macros because they are used to perform functions in the background without requiring any user input.[4] Understanding the macro functions is helpful if macros are disabled for some reason.

Macros are used in this tool for two functions. First, a macro enables the Reset All Filters button to reset all filters. If the macro is not enabled, nothing will happen when the Reset All Filters button is clicked. A user can reset all filters without the macro by clicking on the Clear Filter button for each filter that has a filter item selected.

Second, a macro is used to refresh the dashboard automatically any time data are pasted in or modified in the Data tab. If macros are disabled when using the tool, the user will have to refresh the data manually each time new data are added or modified in the Data tab. To do so, in the Excel main menu select **Data > Refresh All** and click on **Refresh All**.

Customizing the Tool

The Dashboard Tool has been developed with the intention of being generally applicable to most state RETAIN projects. It is possible to make modifications if the structure of the Dashboard Tool does not fit the process followed or the data collected by the state during the recruitment process. The following list provides an example of possible ways in which the tool can be customized.

1. **Revising the data table:** States may consider adding or removing columns from the data table to match the data collected in their RTS.
2. **Modifying the recruitment-to-enrollment funnel pathway:** If the existing pathway does not work for a state's project, the state may modify the steps so that it is aligned with their project's recruitment process. For example, a state may add a pre-screening step or change the order of the pathway.
3. **Adding or removing filters:** The dashboard comes with a predetermined set of filters; however, if a state prefers different filters, it is possible to add new filters or remove existing ones.
4. **Preparing an Excel data entry form or a spreadsheet for direct data entry:** If the state does not have an RTS, significant customization could be done to add a data entry form function to this tool and have those data tie directly to the dashboard.

Individuals with a knowledge of Excel, including knowledge of Excel tables, pivot tables, pivot charts, and slicers, can make these and other modifications to the tool.[5] In addition to customizing the tool

[4] Information from Microsoft about Excel macros can be found here: https://support.office.com/en-us/article/enable-or-disable-macros-in-office-files-12b036fd-d140-4e74-b45e-16fed1a7e5c6.

[5] The tool also uses VBA (Visual Basic for Applications), but knowledge of VBA may not be necessary to customize the tool.

based on state needs, RETAIN TA can train members of state teams on how to modify the tool (upon request).

RETAIN TA Support

RETAIN state teams' users with questions about the Dashboard Tool or who require any support may make a request to the state's Technical Assistance State Liaison or via e-mail at RETAINTA@air.org. This can include, for example:

- Developing and implementing a plan to modify the tool to meet the state's needs
- Planning modifications to the RTS to align it with the data and dashboard in this tool
- Developing a process to move data from the state's RTS to the tool on a regular basis
- Interpreting the dashboard data and developing strategies in response

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Appendix: Data Fields

The table below shows the fields in the Data tab of the Dashboard Tool. If the fields for which "required" is marked as yes (Y) are missing, the Recruitment-to-Enrollment Funnel and Trends charts will be empty or will have gaps.

If the format is text, states can use any values and those will automatically appear in the dashboard. But data should be standardized so that items with the same meaning have identical text. For example, for sex, the state may use "M," "Male," or "male," but if all three are used, then they will appear in the dashboard as three distinct sex categories.

Fields shown below in italics are created automatically by Excel, based on data entered or pasted in by the user. The user should not modify or overwrite these fields.

Name	Excel Column	Required	Format	Example	Dashboard Usage	Note
Unique person ID	A	—	Text	12345	None	Included only as a convenience for state projects that want to use an ID as reference to information outside the Dashboard Tool
Notes	B	—	—	—	—	Allows states to include any notes about the recruitment or enrollment of a potential participant—**notes should not include identifiable information**
Age category	C	—	Text	18 to 24 years	Filter	—
Sex	D	—	Text	F	Filter	Not used but could be used as filter if customized by state
Hispanic	E	—	Text	Hispanic/Latino	None	Not used but could be used as filter if customized by state

Name	Excel Column	Required	Format	Example	Dashboard Usage	Note
Race	F	—	Text	Asian	Filter	Not used but could be used as filter if customized by state
Work limitation due to injury/illness	G	—	Text	Yes	Filter	—
Earned gt 1000 per mo	H	—	Text	Yes	None	Not used but relates to "Reason not eligible"
Applied for SSI/SSDI last 5 yrs	I	—	Text	Yes	None	Not used but relates to "Reason not eligible"
Employment status	J	—	Text	Employed	None	Not used but relates to "Reason not eligible"
Weeks since injury	K	—	Text	2 to 6	Filter	—
Primary injury/illness	L	—	Text	MSK	Filter	—
Work-related injury	M	—	Text	Yes	Filter	—
Workers comp	N	—	Text	Yes	Filter	—
Industry	O	—	Text	Construction	Filter	—
Occupation	P	—	Text	Welder	Filter	—
Referral type	Q	—	Text	Self	Filter	—
Referral source	R	—	Text	ABC Hospital	Filter	—
Location	S	—	Text	Smith County	Filter	—

Name	Excel Column	Required	Format	Example	Dashboard Usage	Note
Primary contact type	T	—	Text	E-mail	Filter	—
Identified	U	Y	1	1	Funnel chart	This must always be equal to 1 because all individuals included have been identified as potential participants
Contacted	V	Y	0,1	1	Funnel chart	0=Person was never successfully contacted 1=Person was successfully contacted
Reason not contacted	W	—	Text	No answer	Reason Dropped chart	—
Eligible	X	Y	0,1	1	Funnel chart	0=Person is not eligible 1=Person is eligible
Reason not eligible	Y	—	Text	Applied for SSI	Reason Dropped chart	—
Expressed interest	Z	Y	0,1	1	Funnel chart	0=Person did not express interest in enrolling 1=Person expressed interest in enrolling
Reason not interested	AA	—	Text	Already working	Reason Dropped chart	—
Enrolled	AB	Y	0,1	1	Funnel chart	0=Person did not enroll 1=Person enrolled

Name	Excel Column	Required	Format	Example	Dashboard Usage	Note
Reason not enrolled	AC	—	Text	Circumstances changed	Reason Dropped chart	—
First service received	AD	Y	0,1	1	Funnel chart	0=Person never received any RETAIN services 1=Person received at least one RETAIN service
Reason first service not received	AE	—	Text	No show	Reason Dropped chart	—
Date identified	AF	Y	mm/dd/yyyy	7/1/2019	—	—
Date first contacted	AG	—	mm/dd/yyyy	7/1/2019	—	—
Date last contacted	AH	—	mm/dd/yyyy	7/1/2019	—	—
Date enrolled	AI	—	mm/dd/yyyy	7/1/2019	—	—
Date first service	AJ	—	mm/dd/yyyy	7/1/2019	—	—
Stage dropped	*AK*	*Y*	*Auto text*	*Not eligible*	*Reason Dropped chart*	*This field cannot be copied over or removed; it is autogenerated by Excel.*
Reason dropped	*AL*	*Y*	*Auto text*	*No work limitation*	*Reason Dropped chart*	*This field cannot be copied over or removed; it is autogenerated by Excel.*