

AHA/HRET Hospital Improvement Innovation Network Improvement Calculator Instruction Manual

Version: 7.1

Last Updated: 10/16/2019

What's New: October 2019

The October 2019 release of the Improvement Calculator was a follow-up to the major update (version 7.0) with one key new modification:

- New Selector for the CEO Dashboard allowing users to select both any baseline and any monitoring periods they prefer
 - Default selection for the baseline period is the “baseline” as submitted by each hospital
 - Default selection for the monitoring period is the entire project-to-date period matching what has been available historically
- If using the macro to create files for each hospital, the default periods as describe above will be used. If you wish to use different periods for each file created here are the steps for doing so:
 - Download IC version 7.1 and save to your desktop or network
 - Open the file and go to the “CEO Dashboard” and find the period selectors on the lower left
 - Select the baseline period of your choice
 - Select the monitoring period of your choice
 - You may go to cell G10 in the CEO Dashboard and note the period there if you wish to have it on the PDF files
 - Save this file and use this file
 - Open the file with the macros and data provided to you on Sharepoint and download this file
 - Select a button to run the macro
 - When prompted by the macro to locate your IC template, or "source file" use the IC template file saved above

What's New: August 2019

The August 2019 release of the Improvement Calculator was a major update (version 7.0) due to the following modifications:

- New Selector to limit to single calendar year for Dashboard, CEO Dashboard, and all Summary tables. Users can compare baseline rates to either the entire HIIN study period or just this single year. See the “Release Notes” and “Methods” tabs within in the Improvement Calculator for further details and instructions.

- Possible Ventilator-Associated Pneumonia (PVAP) added to summary table

- Dropped 8 retired measures:
 - MRSA (Rate and SIR)
 - Worker Safety (2 rates)
 - SSI total hip (1 rate, 1 SIR)
 - SSI knee replacement (1 rates, 1 SIR)

- Removed two tabs based on rates per discharge:
 - Summary Table per Discharge
 - Total Harms per Discharge
 - Recommend using CEO Dashboard for calculations of harms prevented, costs avoided, and lives saved

- Removed monthly plots of harms prevented and lives saved from dashboard
 - Focus is on clinical rates
 - Run chart of rates and table showing rates more prominent
 - Added a column for the aggregate number of harms prevented monthly to show progress toward the total number shown in the CEO Dashboard.

Introduction

The AHA/HRET HIIN Improvement Calculator (IC) is one of many tools provided by the Health Research & Educational Trust (HRET), a part of AHA's Center for Health Innovation, to help participating hospitals utilize the data submitted to the Comprehensive Data System (CDS), in support of the HIIN.

The IC translates raw HIIN data into meaningful information. The main feature of the IC is that it calculates "improvement," comparing results from a defined "monitoring period" to baseline values for several HIIN evaluation measures. It also provides a graphical display of the results for each measure.

We have developed this tool in Excel in order to empower users to customize the tool as they desire. For example, if you wish to do something simple like changing color schemes, you may do this and save your own version of the IC with this change incorporated. Similarly, if you wish to remove some measures from the summary table that you do not report, you can do this in a blank version of the IC and save for your future use. Just make sure you periodically check [the HRET HIIN website](#) to make sure you have a recent version of the IC and are aware of fixes with new versions.

Important Notes:

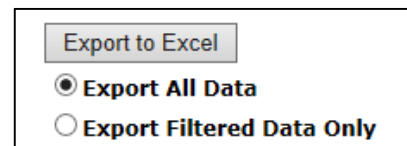
- The HIIN IC is designed for Excel 2010 or later. Prior versions of Excel may limit functionality and are not supported by the IC development team.
- To retrieve your results from the CDS, you must have a valid user account with access to reports.

Getting Started

1. Download the Improvement Calculator file from [the HRET HIIN website](#), to a location on your computer or on a network.
2. Retrieve your “CDS Results” file, from the Comprehensive Data System (CDS):
 - a. Log in to the Comprehensive Data System (CDS) at <https://www.hretcds.org>
 - b. Click on the “Reports” tab on the top of the screen, then click on the “Basic Items” report

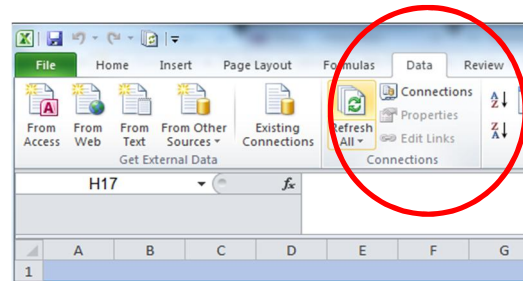


- c. Once the Basic Items report displays, directly below the report you will see an export file feature. Select “Export All Data,” and then click on the “Export to Excel” button.
- d. Save the file to your computer or a network drive



3. Importing data into the IC, using CDS download file
 - a. Open the Improvement Calculator file you downloaded in Step 1, and click on the “data load” tab (worksheet).
 - b. Browse to the location of the file you downloaded in Step 2, and open the file. NOTE: You may receive a warning that the file is “in a different format than specified by the file extension,” which you can safely ignore.
 - c. Select the CELLS from A2 to n , where n =last row of data in your file. Do NOT select entire columns or rows of data. Copy the cells (shortcut: hold the CTRL key down, then press C)
 - d. Select cell A2 in “Data Load” worksheet of the HIIN IC
 - e. Paste the data into Data Load worksheet (shortcut: hold the CTRL key down, then press V)
 - f. Close the “basic items” report file

4. Refreshing data and calculating results
 - a. From the Excel toolbar in the IC, select “Data > Refresh All,” or press Ctrl-Alt-F5 to update the IC using the new data. NOTE: If this shortcut does not work, Right-click on the desktop, hover over the menu option "Graphics Options" > "Hot Keys" > click Disable.
 - b. Choose the “Dashboard,” “Summary Table,” or “CEO Dashboard” worksheets to get started.

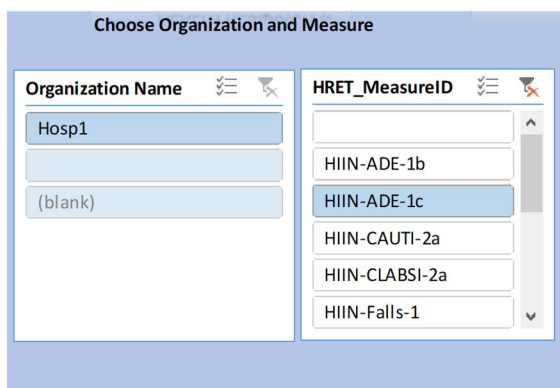


Using “Slicer” Buttons

The buttons that allow you to choose organizations and measures use an Excel function called a “slicer”. By clicking these buttons, you can view a “slice” of the data you entered in the Data Load tab.

The results shown in the Dashboard will reflect the measure(s) and organization(s) you choose using these buttons. Choosing multiple hospitals will provide a combined result. Choosing multiple measures will provide results for all selected measures for side-by-side comparison.

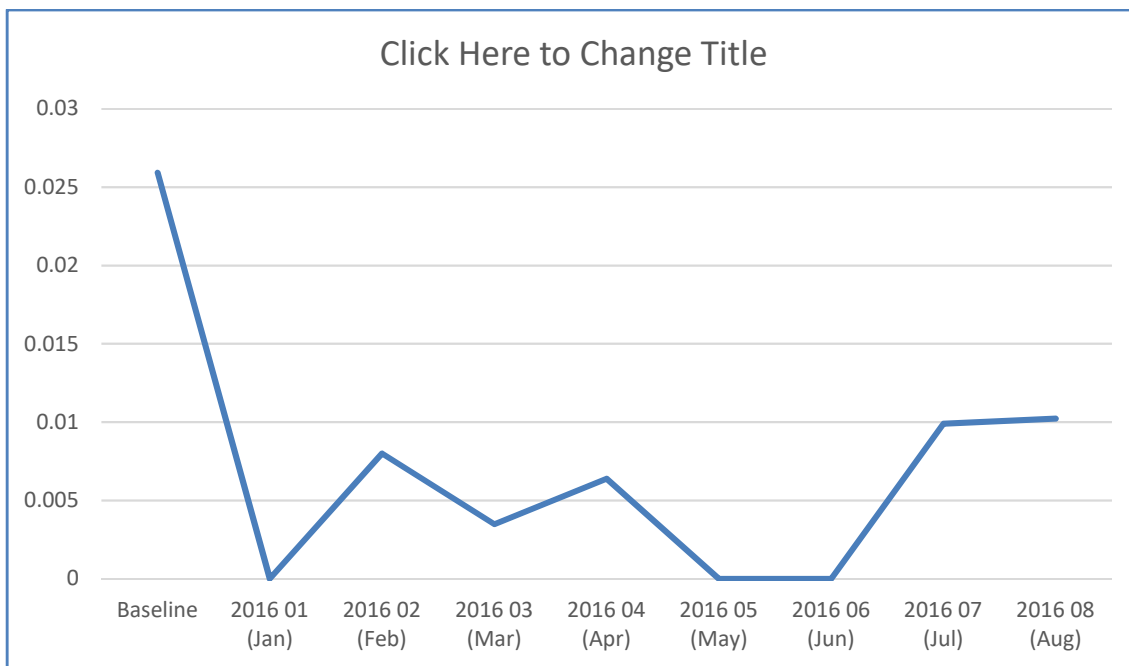
The Summary Tables show results for all measures and only require you to choose the organization(s) of interest. The slicer buttons on the Summary Tables work with those on the Dashboard and CEO Dashboard— they are now copies of the same slicer so your selections from one tab will carry through to the other tabs. For the measures, “Readmissions Rate 30-Day All Cause” will be chosen by default, but you can use the slicer to look at any other measure. We advise selecting only a single measure at a time. If multiple measures are selected, the first graphic will show only the readmissions data. You may select multiple hospitals at a time, and it will include the average for the given measure across all selected hospitals.



Using Graphics and Reporting

Whether publishing a newsletter, reporting to a committee, or creating a presentation, you may want to use the graphics generated by the HIIN IC in another format. Because the HIIN IC is based in Excel, moving, updating, and reformatting the graphics is simple.

Select the graphic you want, copy it, and then paste it into your document, report, or slide. You can then resize, recolor, or reformat as needed. You can also customize titles, axis labels, and chart options as you see fit. The example below was copied and pasted from the HIIN IC test data and is fully customizable.



Printing Reports

Printing the Dashboard: To print a Dashboard report for a specific hospital or measure directly from the HIIN IC, select the hospital and measure of interest in the Dashboard tab using the slicer buttons. Then select “File...print” from your toolbar. The Dashboard will print on a single page in landscape format.

Printing multiple pages: In order to print the Dashboard and Summary Tables together, select all of the tabs you want to print by holding the ctrl key while selecting. When multiple tabs are selected, they will each print on separate pages. Be sure to select the hospital of interest on the Dashboard as well as the Summary Tables using the slicer buttons on all tabs. The slicer button on the Dashboard does not affect the Summary Tables, and vice versa.

Hospital Reporting Tool

A Hospital Reporting Tool is available that uses the HIIN IC populated for multiple hospitals to create smaller, more portable versions with data for individual hospitals. These files can be more easily e-mailed and shared and they maintain data privacy for other hospitals.

The Hospital Reporting Tool is a stand-alone file that must be used in a macro enabled environment. If your system does not allow macros to be enabled, the reporting tool will not function.

The reporting tool also requires HIIN IC v5.2 or higher. Visit the HRET HIIN website for details: <http://www.hret-hiin.org/>. Contact your data liaison if you need assistance downloading the macro reporting tool.

Hospitals can download their “Basic Items” report from CDS at any time and populate the IC for real-time updates. Additionally, HRET provides all 34 of its participating Allied Associations monthly updates based on analytic data. These updates are delivered via Sharepoint each month in a ready-to-use macro file. Users will also need to download the latest HIIN IC to use with this tool. CEO dashboards are included in this monthly file and separate PDFs can be created for each hospital.

Troubleshooting

- It is possible to overwrite data, add data, or correct data in the “Data Load” worksheet of the HIIN IC Template. However, care must be taken to ensure that all of the old data are cleared/replaced or errors may result.
- It may be necessary to refresh the data more than once
- Refreshing the data may take a few seconds. For larger states, bigger refreshes will take a bit longer.