

American College of Radiology

Data Analysis and Research Toolkit

ASSESS-AI REPORT USER GUIDE

Version 1.0

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Document Revision History

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1.0	Initial Version	N. Stjepanovic	30-Apr-2025

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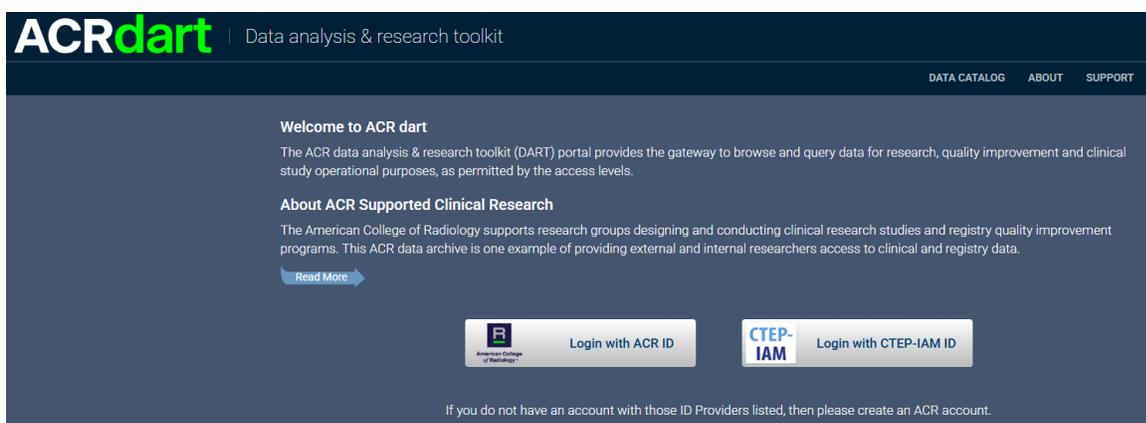
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Purpose

The purpose of this user guide is to provide guidance to Assess-AI users on how they may access their organization’s data in the American College of Radiology (ACR) Data Analysis and Research Toolkit (DART) system.

How to Access DART

A user can access their Assess-AI reports by navigating to dart.acr.org and logging into ACR’s DART system. A user may use their ACR login credentials to login to DART. If a user does not have an account, they will need to follow the noted steps to register for one.

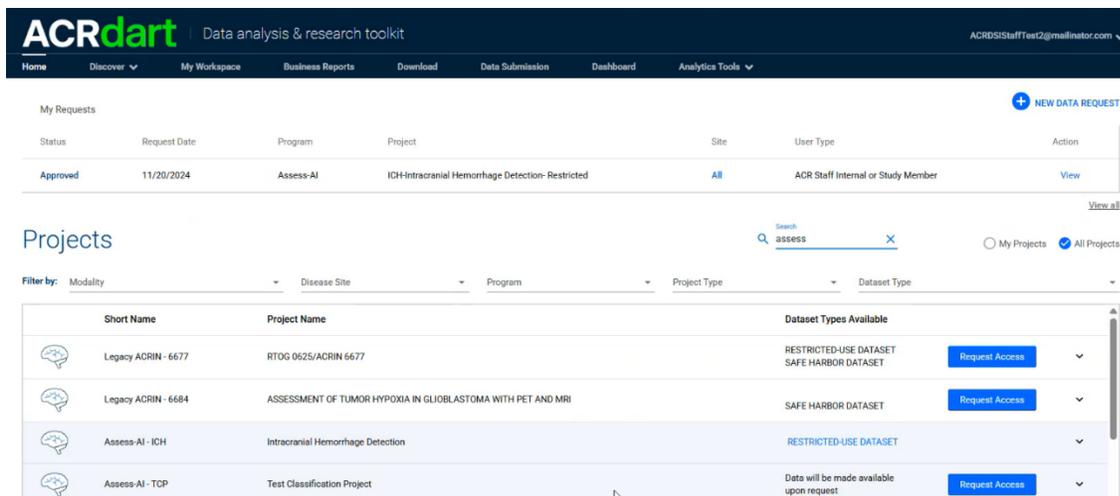


How to Access Your Organization’s Data

Once the account is created, a user must be granted access to the Assess-AI program through their organization. A designated administrator for an organization grants proper access to registered user accounts.

After a user has the proper access to view their organization’s data, they will be able to view data associated with that program on the “Home” page in DART, as indicated below.

A user may also search for a specific program or project and request access to it from their organization’s administrator.

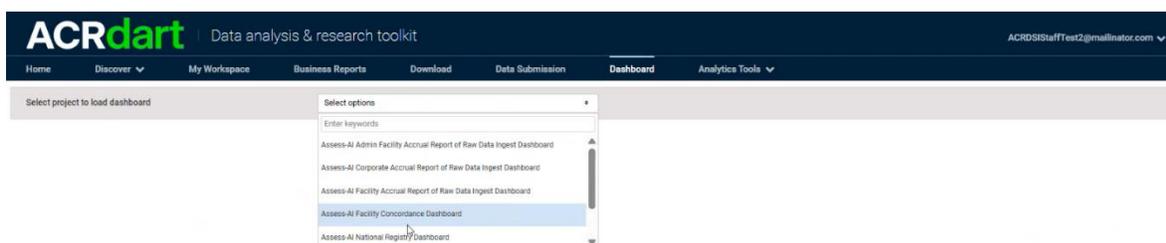


DART Dashboards

Once a user has the appropriate access granted, they may navigate to the “Dashboard” page. From there, there are several Assess-AI dashboards a user can select from depending on that user’s access.

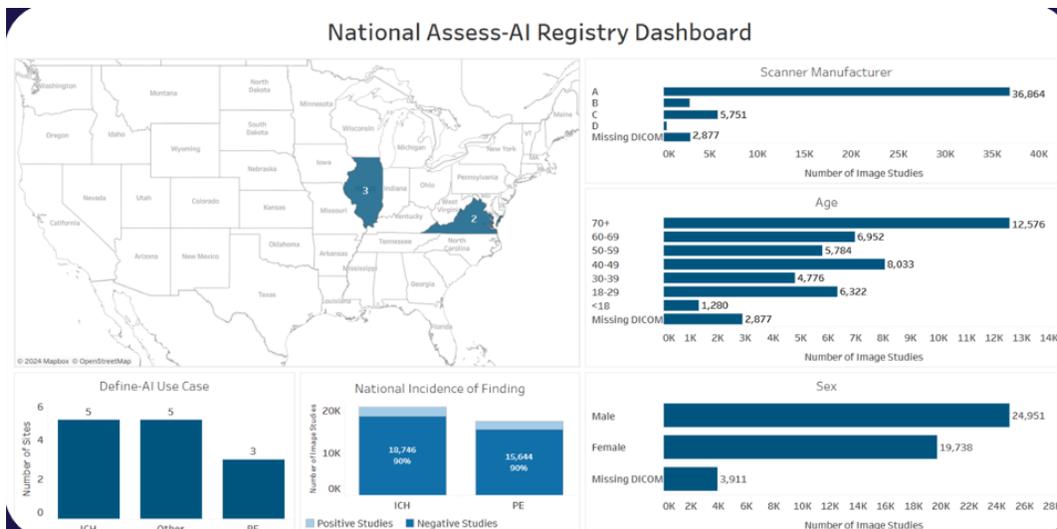
- A facility user will see the facility-level reports. This will enable a user to only see data associated with a specific facility, whether that is one or more facilities.
- A corporate user will see corporate-level reports. This will enable a user to see data associated with all facilities enrolled in your Assess-AI program.

From the “Dashboard” page, a user will need to select a specific data set to be loaded, as indicated below.



Assess-AI National Registry Dashboard

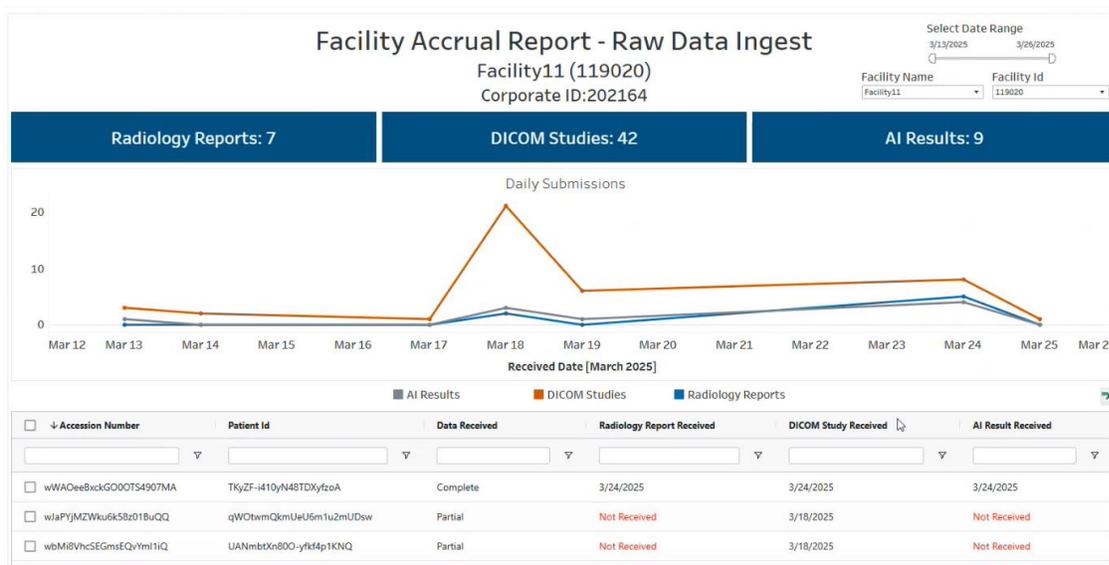
This report is a snapshot of the Assess-AI program. It includes anonymized data from all the facilities participating in the program. The dashboard groups all data, across all vendors, for the participating sites, and is updated monthly.



It offers a breakdown across the entire registry on the use cases that sites are contributing to e.g. ICH, PE, CT Lung Nodule, etc., incidence of disease for those use cases, data elements about the sites’ scanners, and patients’ age and sex.

Facility Accrual Report, Raw Data Ingest

The raw data report is used to track sites’ data as data is submitted to the ACR. This means that the report is continuously updated.



To view a specific facility’s data, a user will need to select that facility from the dropdown menu of options in the upper right-hand field. The default displayed date range is 14 days

of data submissions. The date range may be adjusted to look at a shorter or longer time frame, depending on a user's need. If a longer time frame is selected, loading the data might be slower than desired as it is querying your organization's live data in ACR's database.

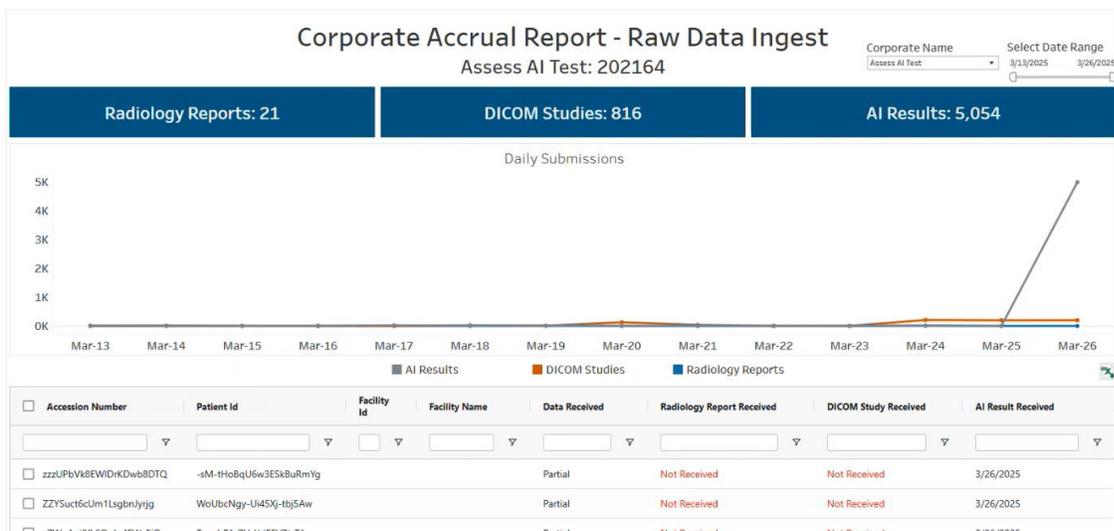
There are several intentions with this report. ACR is providing a tool to confirm that data is actively flowing from your organization as expected and confirm that specific data your organization has submitted via the Connect Platform is being received by the central ACR registry. The report shows trends for the three types of data artifacts your organization is submitting. Lastly, it enables users to see which studies are complete i.e. all three expected data artifacts have been submitted for a specific study. If any artifacts are indicated as not having been received, users have an indicator to investigate that specific study and ensure data is being sent to the registry.

Users can click on the Excel icon in the upper right corner of the table view to download the table locally as an Excel file. Users can filter the data by clicking on the columns and making selections.

Corporate Accrual Report, Raw Data Ingest

The raw data report is used to track sites' data as data is submitted to the ACR. This means that the report is continuously updated.

The chart and tabular data views for the corporate view is almost identical to that of a facility view.



This report identifies records where only AI results were submitted without corresponding DICOM or radiology report data. This is not possible to see in the facility report view.

The additional data elements that the Corporate Accrual Report includes are 'FacilityId' and 'FacilityName' given that the report is an aggregation of all the facilities under your organization. Of note, a user will only see these two fields populated for studies where a DICOM data was submitted. This is because sites are using the Assess AI App to map their scanners to a specific facility.

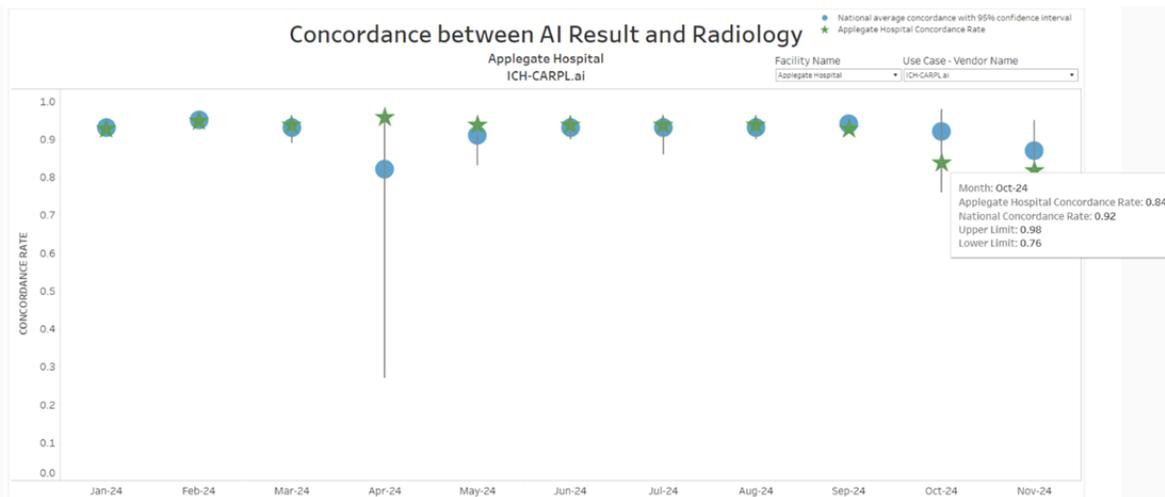
Facility Concordance Dashboard

The Facility Concordance reports are use case and algorithm specific and are updated monthly. Upon launching the dashboard, a user will need to select the facility and use case and algorithm of interest.

Once selected, a user can review the concordance between the AI results and radiology reports. A user can also review specifics on concordance and incidence volumes.

The chart below compares the selected facility across other facilities. It is important to note that users across organizations cannot see each other's metrics.

On the report, the *blue circle* indicates the national concordance rate and the gray line indicates the upper and lower limits of a 95% confidence interval for the national concordance rate. The green star indicates the selected facility's concordance rate, allowing for a comparison of the local performance to the national performance for the given use case and algorithm.



A deeper dive into the data enables a user to look at the specific concordant or discordant cases. Given there is an increase in discordant cases for a site, a user can do a forensics deep dive into the data by extracting it from DART, cross walking the deidentified data (accession, patient, physician identifiers) within their site's firewall on the Connect Platform, and determining the cause of the discordant case increase.



Users can click on the Excel icon in the upper right corner of the dashboard to download the table locally as an Excel file. Users can filter the data by clicking on the columns and making selections or by selecting groups from the concordance and incidence plots.