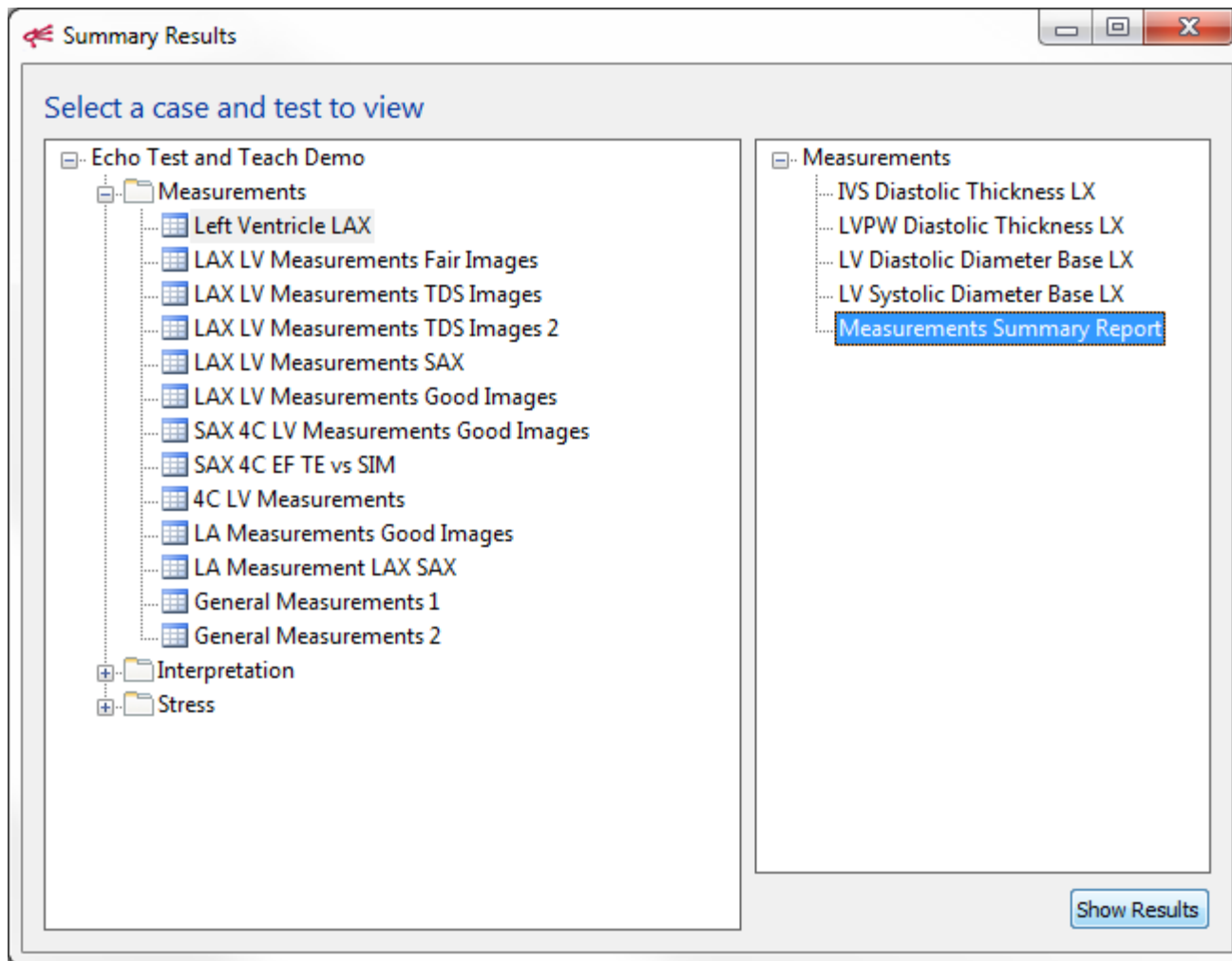


A site administrator can access their result summaries via the **Results** toolbar button by clicking the **Summary Results** menu item.



From here, the result summary for any given case and its tests can be generated by selecting the case and report of interest. Let's start with a full **Measurements Summary Report**.

Case Measurements Report

Form

Case: Left Ventricle LAX

Measurement	# Results	Creator Value	User Mean	Creator Classification	# Classifications Disagree	# Accuracy Outliers (RelErr ≥ 20%)	User Coef of Variation	# Variability Outliers (Dev ≥ 1 SD)
1 IVS Diastolic Thickness LX	16	1.02	1.02	Normal	5	3	0.153	6
2 LVPW Diastolic Thickness LX	16	1.02	0.953	Normal	0	1	0.101	5
3 LV Diastolic Diameter Base LX	16	4.82	4.93	Unknown	0	0	0.031	4
4 LV Systolic Diameter Base LX	16	3.3	3.67	Unknown	0	2	0.0698	4

The Measurements Summary Report compiles results for all of the measurements in a case in an easy-to-digest format, including an average of the user measurements, classifications, and how many of the measurements deviate significantly from the creator's measurement or the rest of the users.

Highlighting a particular measurement and clicking **View** will open a more detailed summary for just that measurement...

Case A1: LAX LV Measurements Good Images - IVS Diastolic Thickness LX

Print View Results Workbench

Case: Left Ventricle LAX

Measurement: IVS Diastolic Thickness LX

Creator Values

Value (cm): 1.02

Classification: Normal

Image: LAX good normal.mpg

Frame Index: 1

User Values - Basic Statistics

Mean	0.941	Minimum	0.836
Standard Deviation	0.128	Maximum	1.28
Coefficient of Variation	0.136	Range	0.444

[Open Data Summary](#)

Results

User	Value	Classification	Value Difference	Value % Difference	Filter
1 Adela Arthur	0.859	Normal	-0.16	-15.91	All
2 Betty Boone	0.922	Normal	-0.1	-9.77	Different Classifications
3 Carlton Clapp	0.925	Normal	-0.1	-9.42	Accuracy Outliers
4 Elzie Eason	0.906	Normal	-0.12	-11.29	Variability Outliers
5 Ellie Eaton	0.881	Normal	-0.14	-13.73	LAX good normal.mpg 1
6 Leonie Lynn	1.28	Abnormal	0.26	25.42	LAX good normal.mpg 2
7 Maybelle Meyers	0.925	Normal	-0.1	-9.42	LAX good normal.mpg 1
8 Meyer Morton	1.01	Normal	-0.02	-1.51	LAX good normal.mpg 27
9 Rowland Randall	0.836	Normal	-0.19	-18.15	LAX good normal.mpg 1
10 Sena Stone	0.87	Normal	-0.15	-14.82	LAX good normal.mpg 1

View Remove

Values are rounded to 3 significant digits. Value difference is rounded to 2 decimal places.

Case A1: LAX LV Measurements Good Images - IVS Diastolic Thickness LX

Print | View Results | Workbench

Case: Left Ventricle LAX View

Measurement: IVS Diastolic Thickness LX

Creator Values

Value (cm)	1.02
Classification	Normal
Image	LAX good normal.mpg
Frame Index	1

User Values - Basic Statistics

Mean	0.941	Minimum	0.836
Standard Deviation	0.128	Maximum	1.28
Coefficient of Variation	0.136	Range	0.444

[Open Data Summary](#)

Results Filter: All

	User	Value	Classification	Value Difference	Value % Difference	
1	Adela Arthur	0.859	Normal	-0.16	-15.9	
2	Betty Boone	0.922	Normal	-0.1	-9.73	
3	Carlton Clapp	0.925	Normal	-0.1	-9.43	
4	Elzie Eason	0.906	Normal	-0.12	-11.29	
5	Ellie Eaton	0.881	Normal	-0.14	-13.74	
6	Leonie Lynn	1.28	Abnormal	0.26	25.32	
7	Maybelle Meyers	0.925	Normal	-0.1	-9.43	LAX good normal.mpg 1
8	Meyer Morton	1.01	Normal	-0.01	-1.11	LAX good normal.mpg 1
9	Rowland Randall	0.836	Normal	-0.19	-18.15	LAX good normal.mpg 1
10	Sena Stone	0.87	Normal	-0.15	-14.82	LAX good normal.mpg 1

View Remove

i Values are rounded to 3 significant digits. Value difference is rounded to 2 decimal places.

A full report can be generated for each measurement in a case. From here, you can see basic statistics about the users as a group as well as how each user did individually.

The user results can be filtered down to interesting subsets of data:

Different Classifications

Includes any users whose measurement classifies differently than the creator's measurement (normal vs. abnormal)

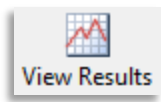
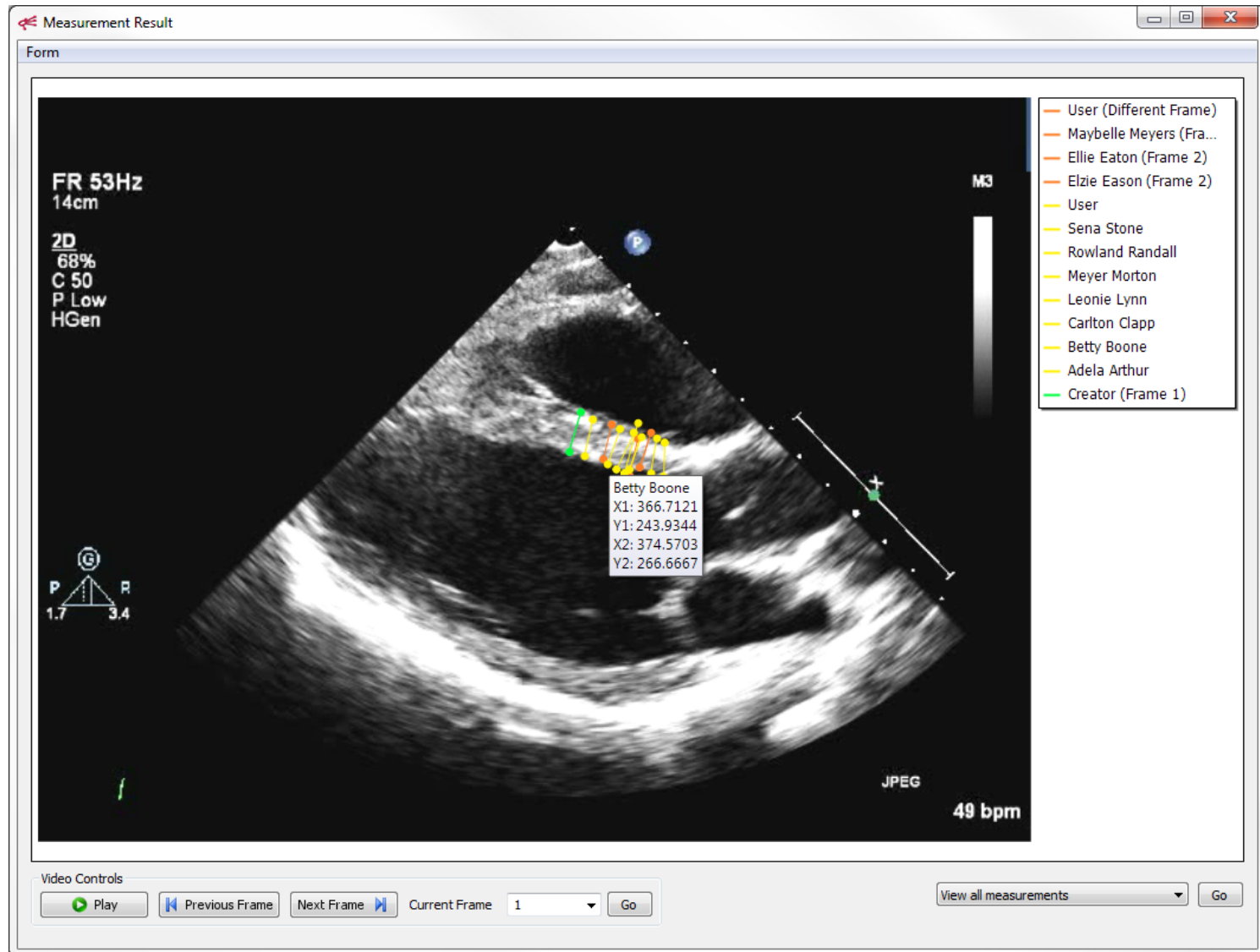
Accuracy Outliers

Includes any users whose measurement is at least 20% away from the creator's measurement

Variability Outliers

Includes any users whose measurement is at least one standard deviation from the user average

The toolbar buttons at the top of the window also provide some very useful functionality.



Clicking **View Results** brings up a composite view of all user-submitted measurements alongside the creator's measurement on the appropriate images. You can find individual measurements by hovering over the line corresponding to the measurement of interest.

Case A1: LAX LV Measurements Good Images - IVS Diastolic Thickness LX

Case Left Ventricle LAX
 Measurement IVS Diastolic Thickness LX

__Creator Values

Value (cm) 1.02
 Classification Normal
 Image LAX good normal.mpg
 Frame Index 1

__User Values - Basic Statistics

Mean Minimum
 Standard Deviation Maximum
 Coefficient of Variation Range

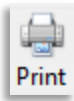
[Open Data Summary](#)

Results

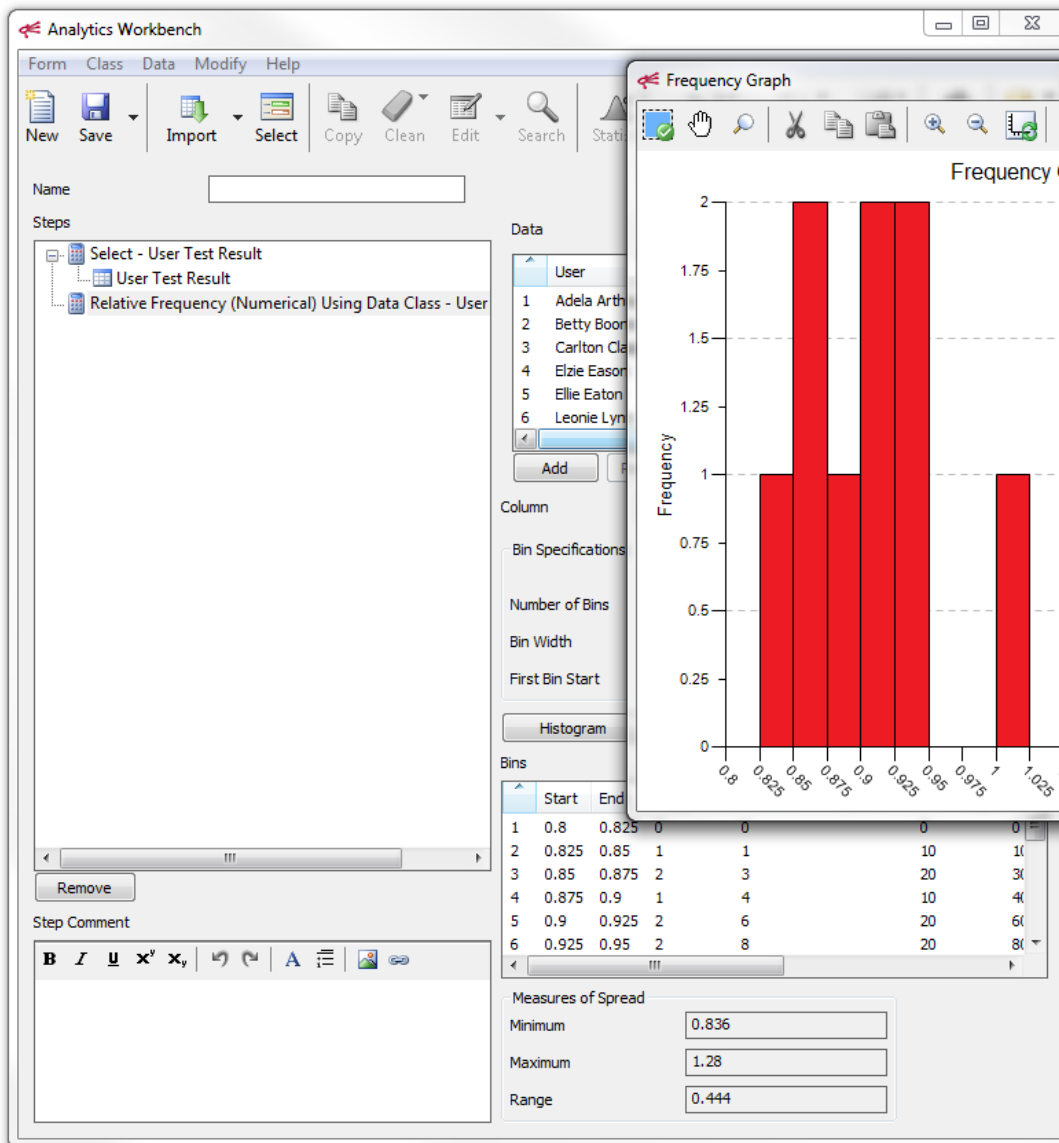
Filter

	User	Value	Classification	Value Difference	Value % Difference	Image	Frame Index	Frame Difference
1	Adela Arthur	0.859	Normal	-0.16	-15.91	LAX good normal.mpg	1	0
2	Betty Boone	0.922	Normal	-0.1	-9.77	LAX good normal.mpg	1	0
3	Carlton Clapp	0.925	Normal	-0.1	-9.42	LAX good normal.mpg	1	0
4	Etzie Eason	0.906	Normal	-0.12	-11.29	LAX good normal.mpg	2	1
5	Ellie Eaton	0.881	Normal	-0.14	-13.73	LAX good normal.mpg	2	1
6	Leonie Lynn	1.28	Abnormal	0.26	25.42	LAX good normal.mpg	1	0
7	Maybelle Meyers	0.925	Normal	-0.1	-9.42	LAX good normal.mpg	27	-2
8	Meyer Morton	1.01	Normal	-0.02	-1.51	LAX good normal.mpg	1	0
9	Rowland Randall	0.836	Normal	-0.19	-18.15	LAX good normal.mpg	1	0
10	Sena Stone	0.87	Normal	-0.15	-14.82	LAX good normal.mpg	1	0

Values are rounded to 3 significant digits. Value difference is rounded to 2 decimal places.

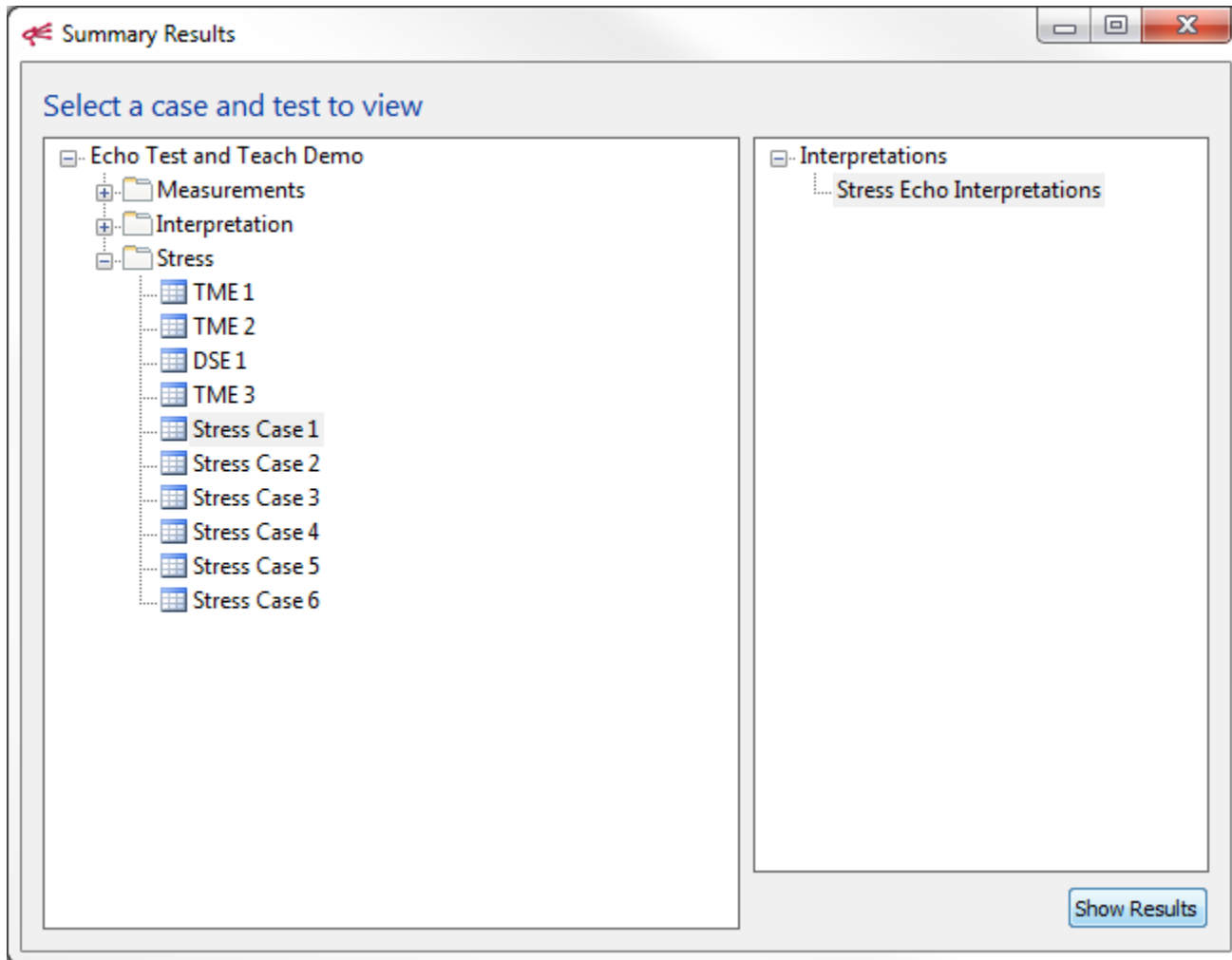


Clicking **Print** opens a print preview, where the full summary can be printed in a clean, easy-to-read format.

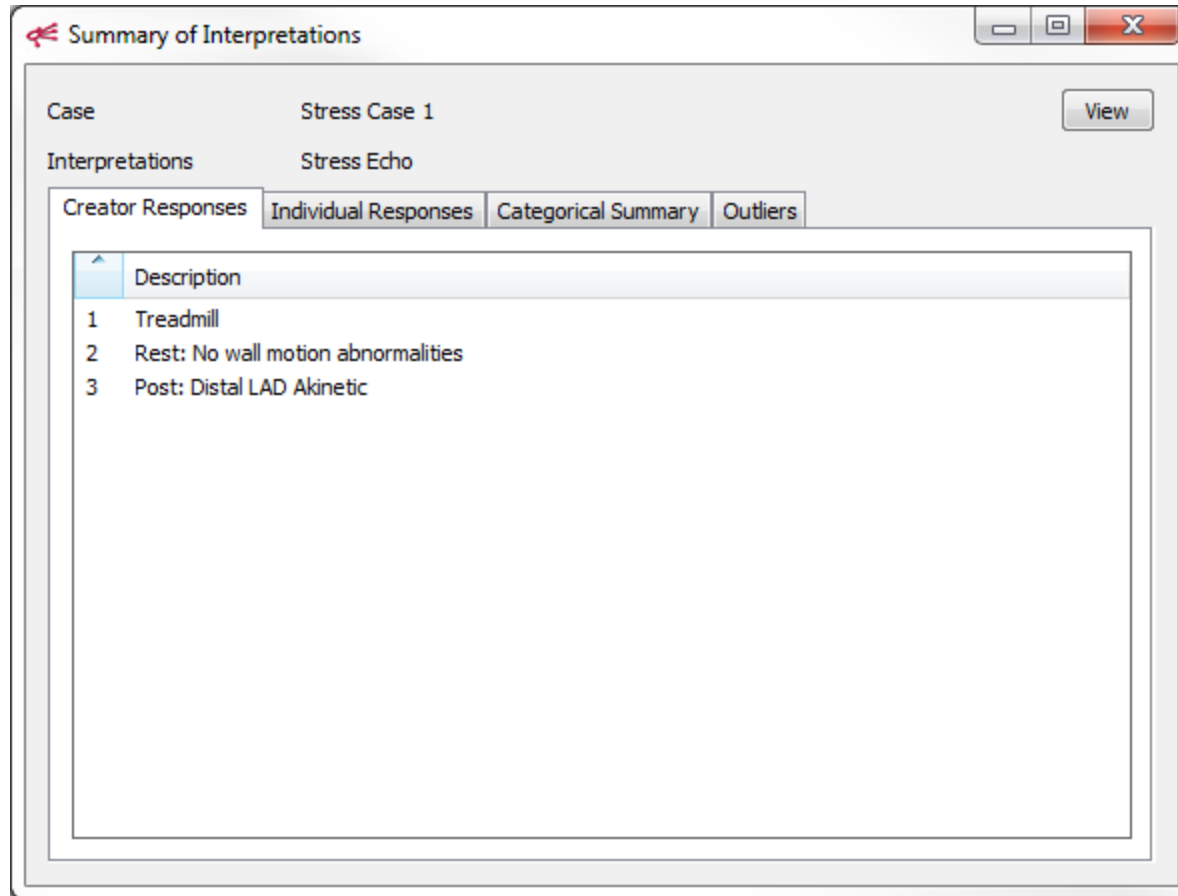


Clicking **Workbench** imports the data into a Data Analytics Workbench, which provides access to a full suite of data analytics and discovery tools, including visualization utilities like the histogram shown.





A full report is also available for all interpretation cases. Let's take a look at **Stress Echo Interpretations**.



When the interpretation report is compiled, the first section of information that will be presented is the creator's interpretations. This provides a quick way to review the case and understand what the creator specified as the correct interpretations.

The image shows two overlapping windows from a software application. The background window is titled "Summary of Interpretations" and displays a list of responses for a case named "Stress Case 1". The "Individual Responses" tab is selected, showing a table with 8 rows. The row for "Helga Hawley" is highlighted. A "View" button is located at the bottom left of this window. The foreground window is titled "Helga Hawley (8/5/14)" and shows a detailed view of the selected response. It includes a "Form" section with fields for "Name" (Helga Hawley) and "Date" (8 / 5 / 2014). Below this is an "Interpretations" section with a table listing three items: "Treadmill", "Rest: No wall motion abnormalities", and "Post: LAD Severely hypokinetic".

Summary of Interpretations

Case: Stress Case 1 [View]

Interpretations: Stress Echo

Creator Responses | Individual Responses | Categorical Summary | Outliers

Number of Responses: 8

	Name	Date
1	Alice Archer	8 / 8 / 2014
2	Billy Branch	8 / 13 / 2014
3	Elinor Elliott	8 / 6 / 2014
4	Francis Forrest	8 / 11 / 2014
5	Helga Hawley	8 / 5 / 2014
6	Melvina MacDonald	8 / 11 / 2014
7	May McKenzie	8 / 6 / 2014
8	Monica Meyer	8 / 12 / 2014

[View]

Helga Hawley (8/5/14)

Form

Name: Helga Hawley

Date: 8 / 5 / 2014

Interpretations

	Description
1	Treadmill
2	Rest: No wall motion abnormalities
3	Post: LAD Severely hypokinetic

In the **Individual Responses** tab, we can focus in on each user's answers when running the case study. We immediately see a list of all results submitted and the dates of submission. By highlighting a row and clicking **View**, we can view the interpretations that were submitted as part of that result.

Summary of Interpretations

Case: Stress Case 1
Interpretations: Stress Echo

Creator Responses | Individual Responses | **Categorical Summary** | Outliers

Number of Responses: 8

	Name	Date
1	Alice Archer	8 / 8 / 2014
2	Billy Branch	8 / 13 / 2014
3	Elinor Elliott	8 / 6 / 2014
4	Francis Forrest	8 / 11 / 2014
5	Helga Hawley	8 / 5 / 2014
6	Melvina MacDonald	8 / 11 / 2014
7	May McKenzie	8 / 6 / 2014
8	Monica Meyer	8 / 12 / 2014

View Search

User Interpretation Results Search

Form

Search user interpretations

Criteria

Including Excluding

All At Least One

Interpretation

1 Post: Distal LAD Akinetic

2 Post: LAD Severely hypokinetic

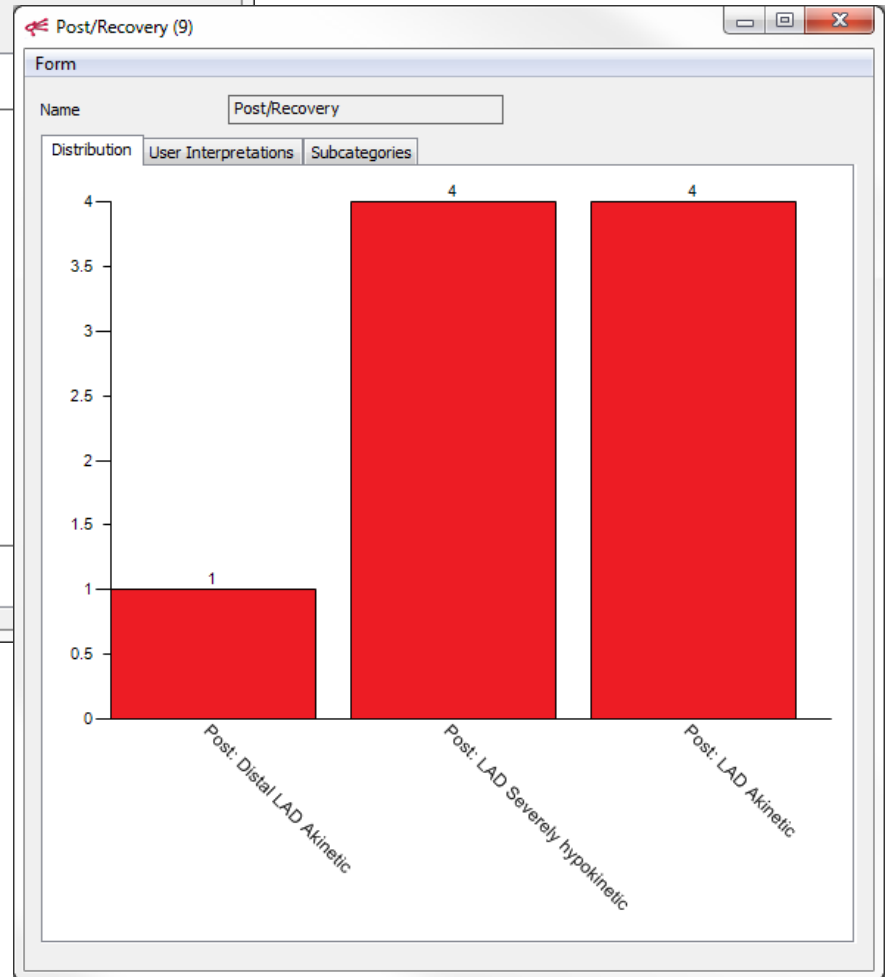
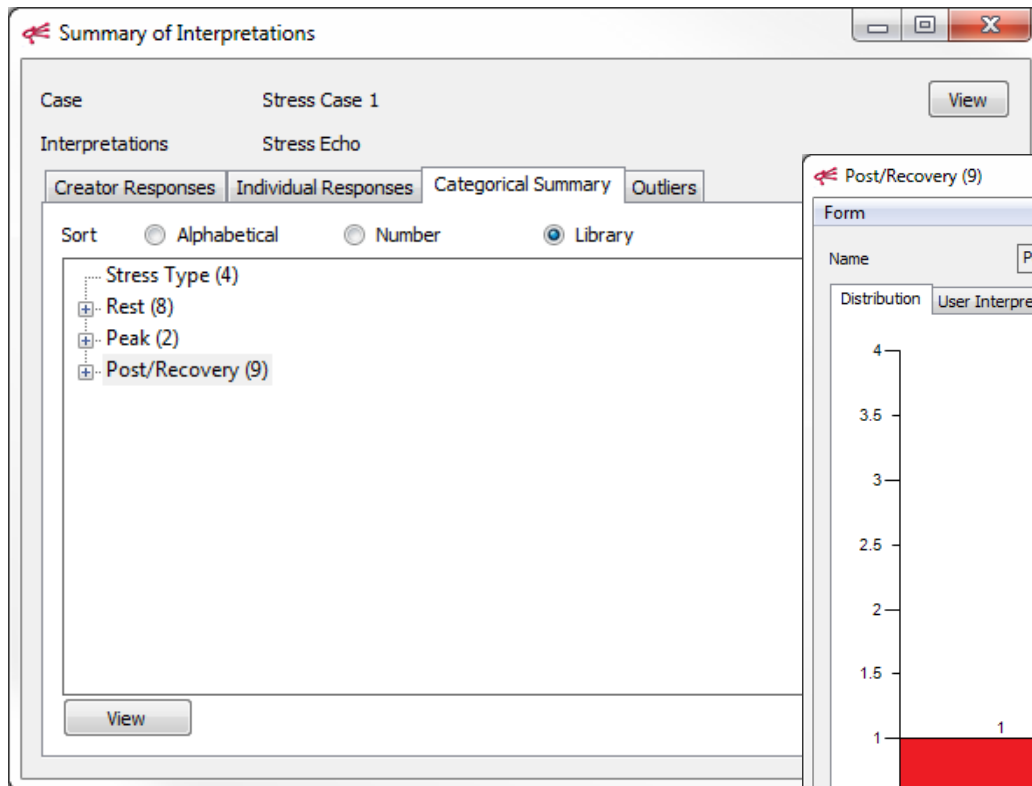
Add Remove

User Results

	Name	Date
1	Elinor Elliott	8 / 6 / 2014
2	Melvina MacDonald	8 / 11 / 2014
3	Monica Meyer	8 / 12 / 2014

View

On that same tab, we can search for particular types of results by clicking the **Search** button. From here we can specify what types of user results we want to include. In this examples, we want to find all users who specified neither “Post: Distal LAD Akinetic” nor “Post: LAD Severely hypokinetic,” and we find there are three users who did just that.



For a higher-level summary, we move to the **Categorical Summary** tab where we can see how the users' interpretations are distributed across the available categories.

The image shows two overlapping software windows. The background window is titled "Summary of Interpretations" and displays data for "Stress Case 1". It has tabs for "Creator Responses", "Individual Responses", "Categorical Summary", and "Outliers". The "Outliers" tab is active, showing a table with three rows:

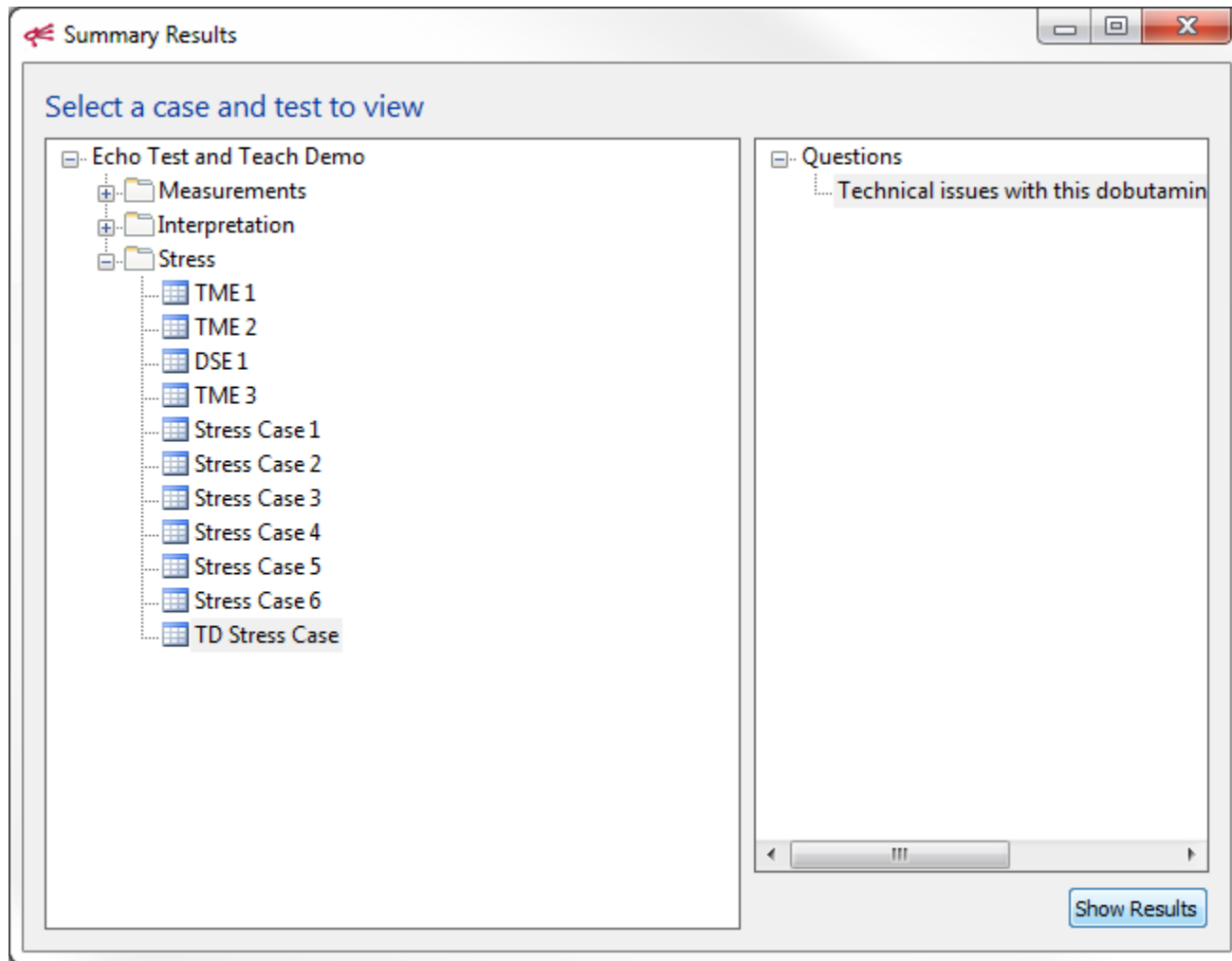
	Interpretation	Number of Outliers
1	Treadmill	4
2	Rest: No wall motion abnormalities	1
3	Post: Distal LAD Akinetic	7

The foreground window is titled "Outliers: Rest: No wall motion abnormalities". It shows a "Form" with the following details:

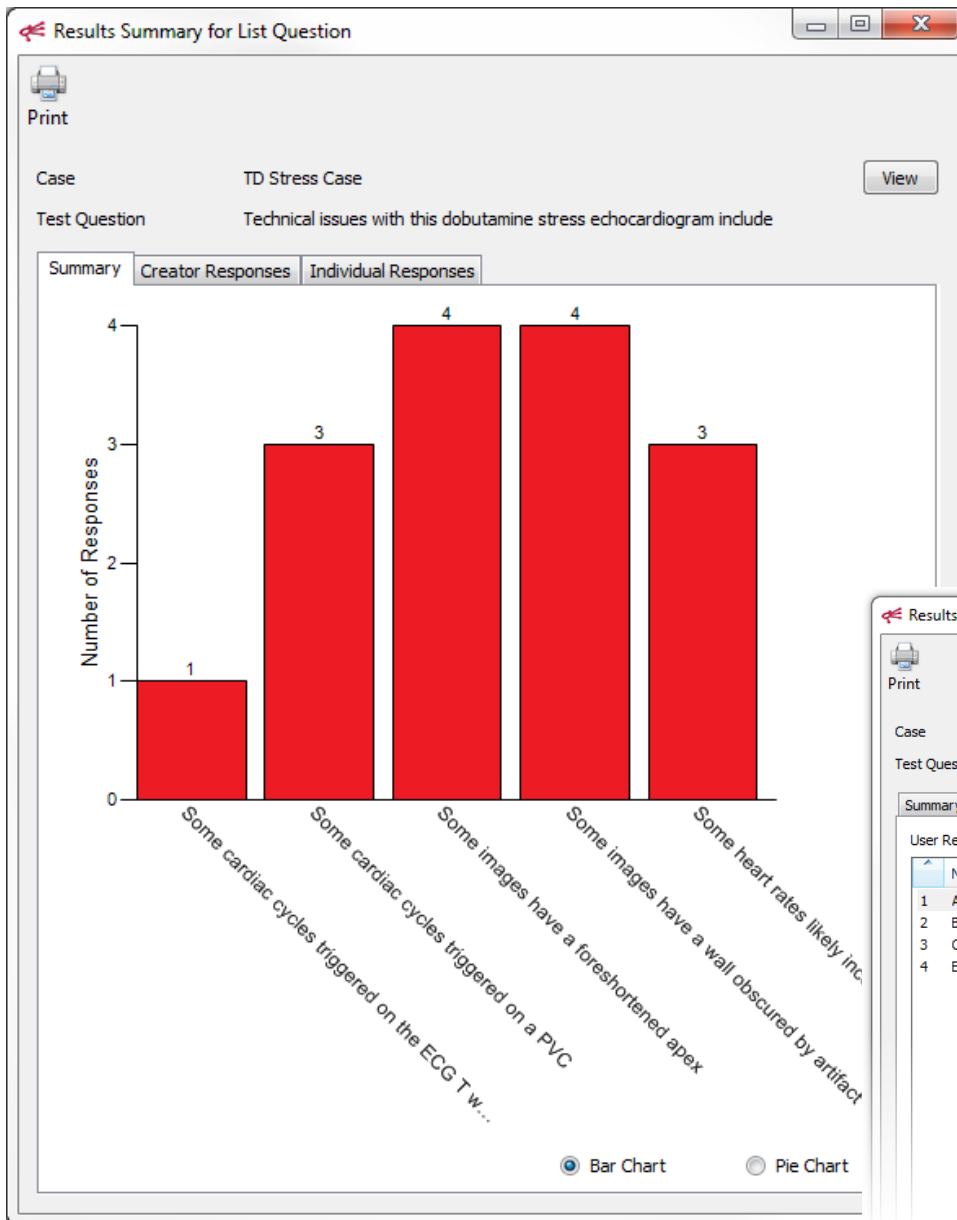
- Form title: **Rest: No wall motion abnormalities**
- Number of Outliers: 1
- Outliers table:

	Name	Date
1	Elinor Elliott	8 / 6 / 2014

Lastly, much like with the measurement summaries, we can get a report on the outliers for each interpretation entered by the creator. On the summary window, we get a list of the creator's interpretations and the number of users who did not provide that interpretation or an alternative that was deemed close enough. Highlighting any of the rows and clicking **View** brings up a list of the users who are deemed outliers for that interpretation.



Lastly, we can look at the summary report for a case with a test question. Just like the previous reports, we select the question and click **Show Results** to compile the report...



The report includes a summary of the distribution of answers, as well as the creator's specified answers and a report on what answers each individual gave.

Using the radio buttons at the bottom, we can alternate between a bar chart and a pie chart.

Results Summary for List Question

Print

Case TD Stress Case View

Test Question Technical issues with this dobutamine stress echocardiogram include

Summary **Creator Responses** Individual Responses

User Results

	Name	Date	Answer(s)
1	Alice Archer	3 / 13 / 2011	Some cardiac cycles triggered on the ECG T wave ; So...
2	Betty Boone	3 / 13 / 2011	Some cardiac cycles triggered on a PVC ; Some images ...
3	Carlton Clapp	3 / 13 / 2011	Some images have a foreshortened apex ; Some image...
4	Ellie Eaton	3 / 13 / 2011	Some cardiac cycles triggered on a PVC ; Some images ...