

Chapter 6: Data Diagnostics

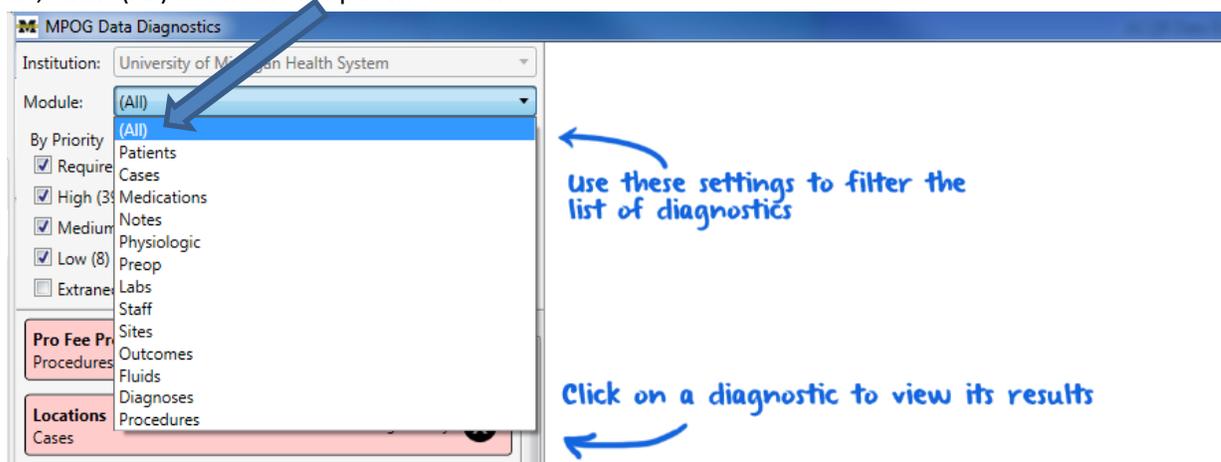
Data Diagnostics Background

ASPIRE sites may contribute information from various sections of an EHR: preoperative, intraoperative, and postoperative notes and physiologic data, demographic information, laboratory values, and procedure codes. Two separate strategies are employed to improve data quality and ensure data accuracy. First, data diagnostics are used by technical and clinical staff to detect systematic errors with data extraction, transformation, or mappings. Diagnostic visualizations represent specific pass/failure thresholds to determine compliance at a macro level. Second, clinicians at each site are required to manually validate between 5 and 20 cases per month to ensure that the data that have been extracted into MPOG matches the original EHR information utilizing the Case Validator utility (see Chapter 7: Case by Case Validation module). This module reviews the Data Diagnostic application. **Data Diagnostic review and attestation is required for all sites before uploading to the Central MPOG database. All funded sites are required to conduct this attestation process on a monthly basis.**

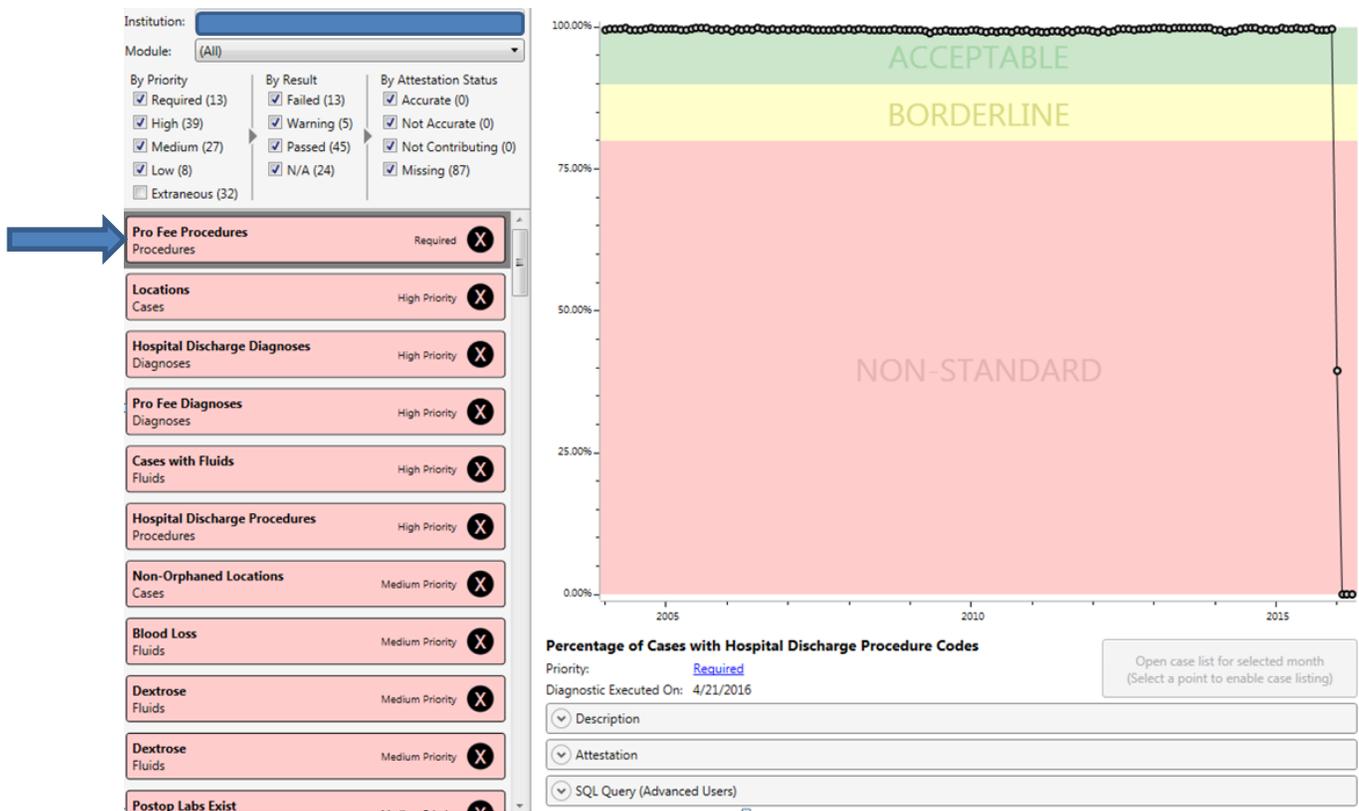
1. Access Data Diagnostics on the MPOG Suite



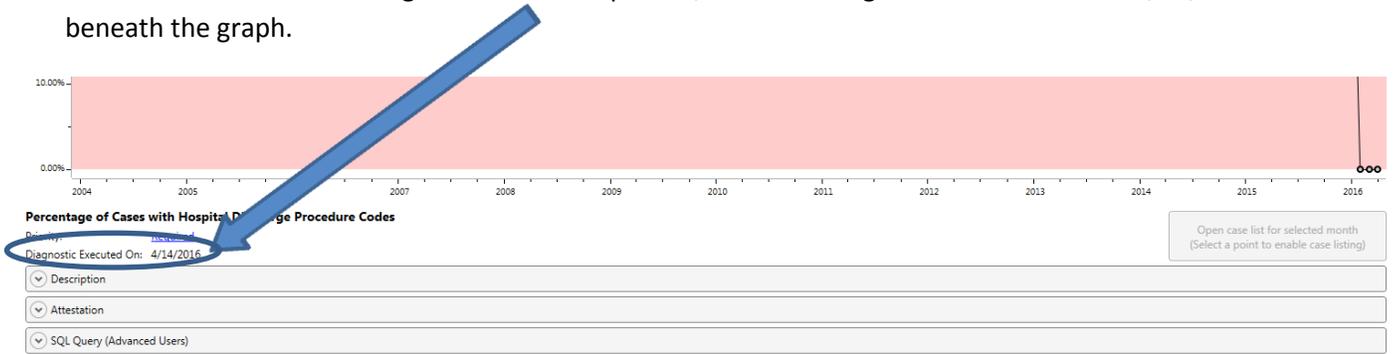
- Your institution/site should be defaulted in the top field. Select a module to filter the diagnostic list to accommodate the type of data to review. If planning to review all data diagnostics for the monthly attestation process, click "(All)" from the dropdown menu.



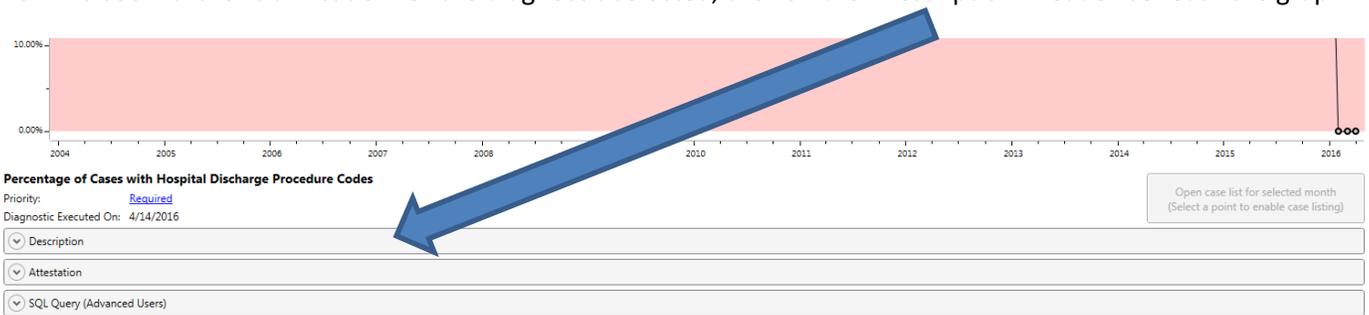
- Click on the name of the Data Diagnostic in the left column to display the graphical results on the right. For example, Pro Fee Procedures are highlighted in the left column, the diagnostic displays the percentage of cases with hospital discharge procedure codes by month. If your site does not submit billing data, the graph will display 0% of cases have Pro Fee Procedure codes. According to the diagnostic shown below, this site has Pro Fee Procedure codes in the database for 99-100% of cases through January 2016 at which point there are Pro Fee Procedure codes for 0% of the cases in the database.



- To understand when the Diagnostic was last updated, view the 'Diagnostic Executed On: XX/XX/XXXX' date listed beneath the graph.



- To seek further clarification for the diagnostic selected, click on the "Description" header beneath the graph:



- Clicking on the Description will expand the box to display the definition of the Data Diagnostic shown.

Percentage of Cases with Hospital Discharge Procedure Codes

Priority: [Required](#)
 Diagnostic Executed On: 4/14/2016

Use this chart to verify that professional fee procedure codes have been successfully imported. If this percentage is low, check your extract.

- Beneath the description is an Attestation section. Click on the arrow next to Attestation to open.

Use this chart to verify that professional fee procedure codes have been successfully imported. If this percentage is low, check your extract.

Current Attestation	Comment	Previous Attestations
<input type="checkbox"/> Data Accurately Represented The results of this diagnostic accurately represents the data from our documentation systems.		04/11/16 Data Accurately Represented
<input type="checkbox"/> Data Not Accurately Represented The results of this diagnostic are not representative of data from our documentation and needs to be		03/02/16 Data Accurately Represented
<input type="checkbox"/> Not Contributing Data We are unable to contribute data for this content area.		02/19/16 Data Not Accurately Represented
		01/18/16 Data Not Accurately Represented
		12/14/15 Data Not Accurately Represented
		10/21/15 Data Accurately Represented
		09/23/15 Data Not Accurately Represented

8. In the Attestation section, the site Anesthesia Clinical Quality Reviewer (ACQR) or Quality Champion has the opportunity to review the diagnostic and determine if the data accurately represents the documentation present at the site (either in the EMR or billing software). If the site is not submitting data for the content area measured in the diagnostic (i.e. billing data), the option of “Not Contributing Data” should be selected. For the purpose of this example, “Data Accurately Represented” would be chosen since the data reflects the documentation for the cases that have been loaded to date. Click the box next to the attestation selection that most represents the analysis conducted on the Data Diagnostic under review. When the Data Diagnostic application is updated the following weekend, the current attestation will move to the Previous Attestation box on right side of the screen with an associated date.

Attestation

Current Attestation

- Data Accurately Represented**
The results of this diagnostic accurately represents the data from our documentation systems.
- Data Not Accurately Represented**
The results of this diagnostic are not representative of data from our documentation and needs to be
- Not Contributing Data**
We are unable to contribute data for this content area.

Comment

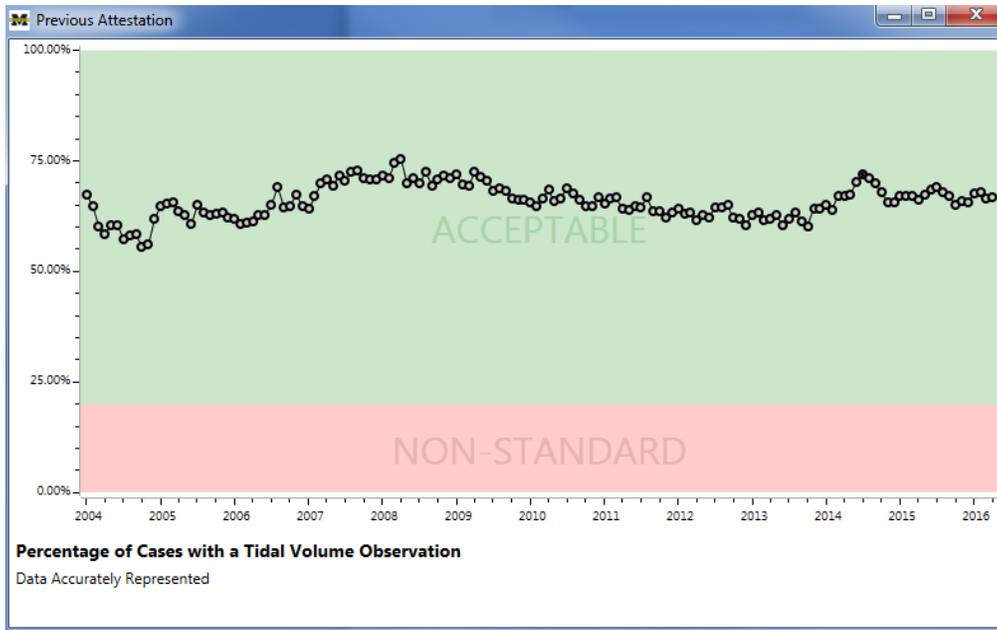
Previous Attestations

- 04/11/16 Data Accurately Represented
- 03/02/16 Data Accurately Represented
- 02/19/16 Data Not Accurately Represented
- 01/18/16 Data Not Accurately Represented
- 12/14/15 Data Not Accurately Represented
- 10/21/15 Data Accurately Represented
- 09/23/15 Data Not Accurately Represented

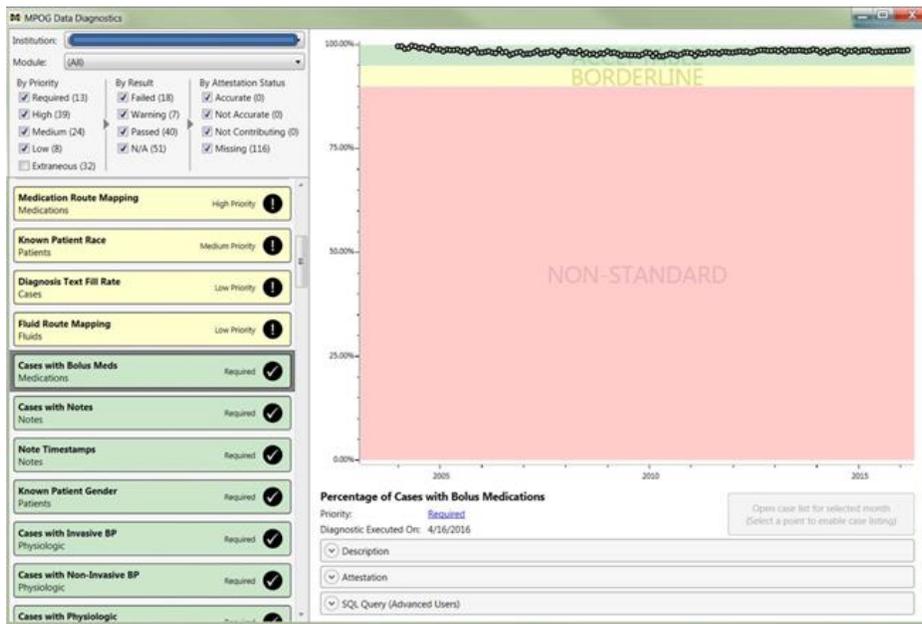
9. To view diagnostic graphs from a previous attestations, double-click on the row of the attestation to review and a new screen should display with the previous graph.



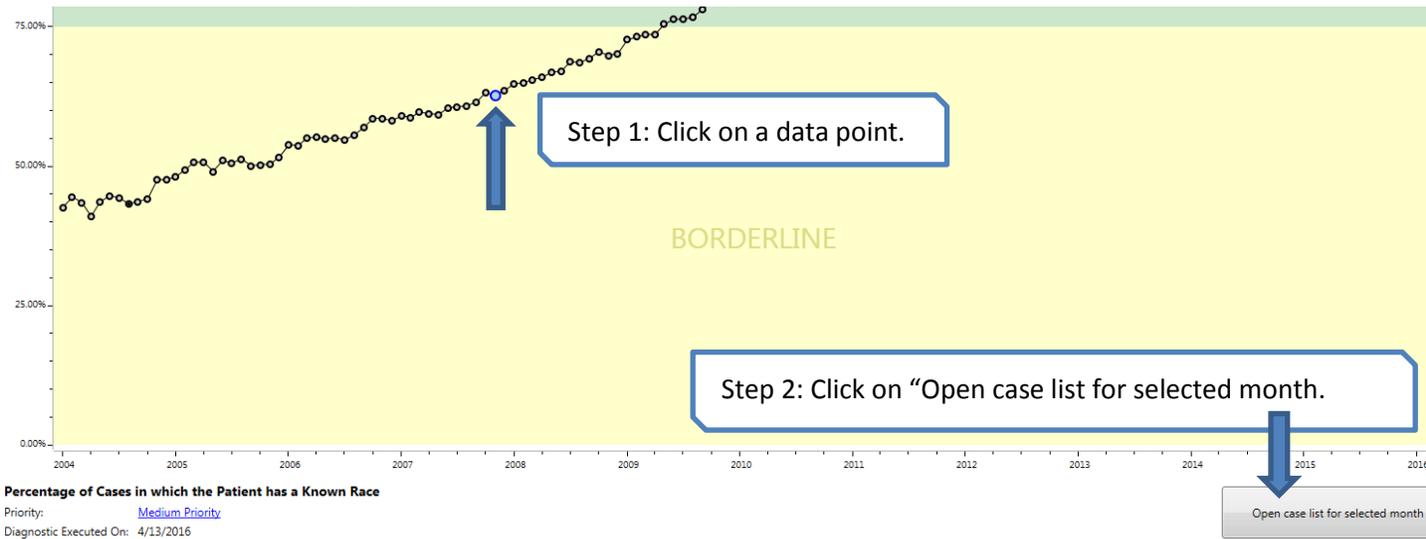
10. Previous attestation graph will display in a new window:



11. When attesting to diagnostics, it is important to conduct further investigation if the data is not accurately represented (gaps in the data or values are higher or lower than expected). To assist Quality Champions or ACQRs with this analysis, the Coordinating Center has established thresholds for many of the diagnostics that are reflective of common practice across many sites. Thresholds are indicated by the terms: Acceptable, Borderline, and Non-standard sections highlighted in green, yellow and red accordingly.



12. If you are below the threshold, with data in the 'Borderline' or 'Non-standard' areas of the graph, please verify the accuracy of the data. If not accurate, investigate further with the site technical team to identify if extract or mapping issues exist. Click on the data point associated with the time period in question and select 'Open case list for selected month' to display a list of cases for that time period.



13. Click on the row for the case to review (selecting a row highlighted in red will show a case that is missing the data evaluated in the diagnostic). Click on "Open Case" to conduct further investigation in Case Viewer. By reviewing several cases in this way, it may be possible to determine if a mapping issue exists. Contact the QI Coordinators at ASPIRE/MPOG to identify next steps to improving the data quality.

Percentage of Cases in which the Patient has a Known Race

The selection has 4,082 cases available

MPOG Case ID	Has Race?
	Yes
	No
	Yes
	Yes
	Yes
	No
	Yes
	Yes
	Yes
	No
	Yes
	Yes
	Yes

Open Case Cancel

Step 1: Highlight row for case to review.

Step 2: Select "Open Case" to open in Case Viewer.

14. Diagnostics that are labeled by priority type. A definition for each priority type is listed below. These definitions are also available when clicking on the priority type

Percentage of Cases with Hemoglobin or Potassium Labs - 30 Days Post

Priority: [Medium Priority](#) ←
Diagnostic Executed On: 4/20/2016

Step 1: Click on the Priority type for definition.

Percentage of Cases with Hemoglobin or Potassium Labs - 30 Days Post

Priority: [Medium Priority](#)
Diagnostic Executed On:
Description
Attestation

Medium priority diagnostics must be attested to and generally should pass. Failure to pass these diagnostics is acceptable but usually not recommended if otherwise possible.

Step 2: A definition window will present with the priority definition.

Diagnostic Priority Definitions (* indicated monthly attestation required):

***Required:** A required diagnostic MUST be passed before submission to MPOG.

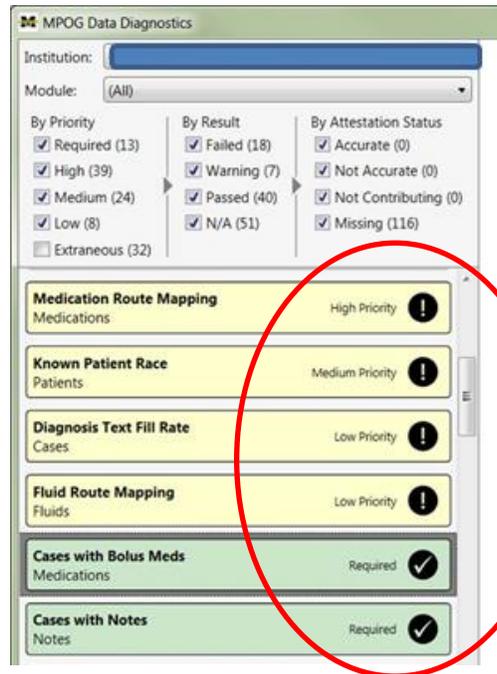
***High Priority:** High priority diagnostics must be attested to and it is strongly recommended that any detected issues are fixed prior to submission. Failure to pass these diagnostics can severely impact the quality assessment and research capabilities of your institution.

***Medium Priority:** Medium priority diagnostics must be attested to and generally should pass. Failure to pass these diagnostics is acceptable but usually not recommended if otherwise possible.

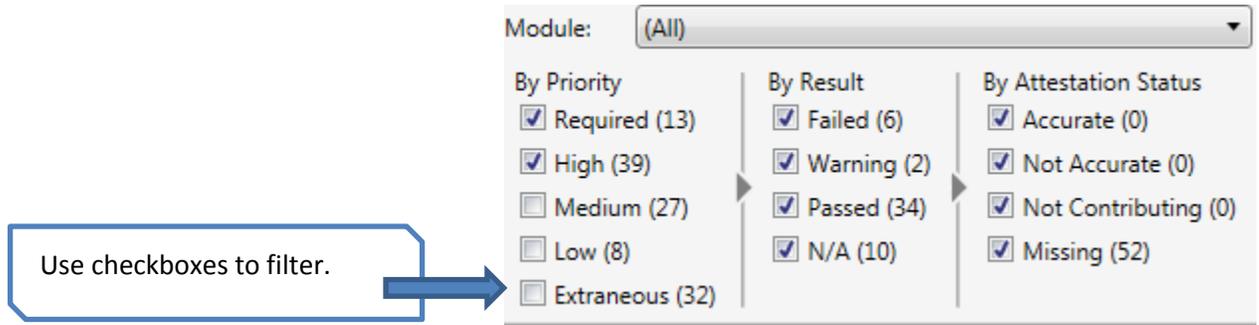
Low Priority: Low priority diagnostics are for low impact areas of the MPOG database.

Extraneous Priority: Extraneous diagnostics are meant purely as supplemental information. Reviewing them is not required and they are hidden by default.

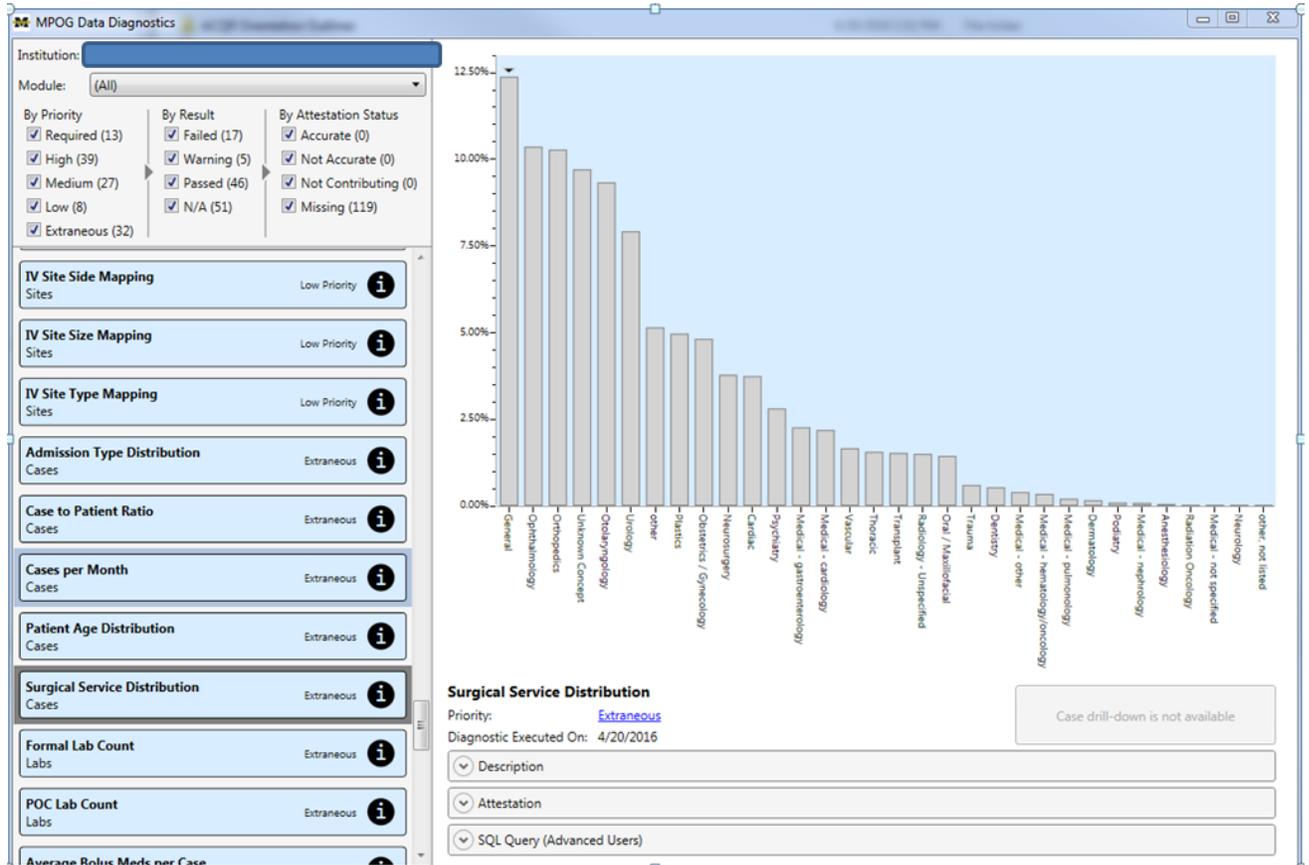
15. Priority type for each diagnostic is easily viewed on the right side in each diagnostic.



16. Filters can be applied by Priority, Result, or Attestation Type. Filtering allows the user to limit the number of diagnostics listed and improve the selection process for tailored and purposeful review of the data.



17. Finally, by clicking on “Extraneous” in the Priority filter list, a list of diagnostics that are helpful to understand site case mix and demographic types with populate at the bottom of the diagnostic list and coded blue. Blue diagnostics indicate that thresholds do not exist because every site differs in terms of case mix and patient population. It is important to verify that the diagnostic reflects your site case mix, population, practice, and distribution. See example of an extraneous diagnostic below:



18. An ASPIRE QI Coordinator will be available either on site or via web conference to conduct the first review of data diagnostics with the site.

For questions or comments, please contact:

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