Module 5: Case Viewer V2

Case Viewer Overview

The MPOG Case Viewer application displays individual case data just as an anesthesia information management system (AIMS) would display.

1. Open the MPOG Application Suite. Click on “Case Viewer V2 (Beta).”
2. Upon opening, the home screen below will display. To open a case using a MPOG patient ID, MPOG Case ID, or MRN, simply paste the ID number under “Find a Specific Case” or under “Find a Case” in left side bar. You can also browse for cases by using one or more filters listed under “browse for cases”. Filter shortcuts are commonly searched for case types, date range or recent cases that you have opened. Users can also import or copy/paste a case list if interested in viewing multiple cases.
CPT code- Users can enter a specific CPT code to filter cases by CPT

MPOG Concept ID – Users can use the concept ID numbers to find cases that use those concepts. Without other filters, searching by MPOG Concept ID can be slow and may time out. Consider adding a date range filter.

Opened Date Range- This will generate a list of cases that the user previously opened during that time period.

Primary Surgical Service - allows users to search by the primary surgical service associated with each case

Procedure Text- Searches for matches in the Procedure Text field associated with a case (eg. CABG)

Registry Data- Searches for cases that also have data from MSCQ, NSQIP, STS Adult Cardiac, STS Congenital Heart, STS General Thoracic

Surgery Date Range- Find cases that occurred between given dates

Multiple filters may be applied at a time to narrow down a case list. The “Search Results” pane will automatically update a list of cases as filters are added.
3. **Using the Case List**: Enter a list of MPOG Case IDs in the box, one per line, and click “Import”. A case will open.

Boxes appear along the bottom of the left hand column to scroll between cases. If a case number is known (ex: you want to go to case 50 of 100), use the box to type the desired case number.
4. To search cases by filter, click the filter name and supply any necessary information. For example, to find a General Surgery case from September, click “Primary Surgical Service” and choose General from the dropdown box.
5. Next, filter down to September cases by clicking “Surgery Date Range” and specifying 9/1/2019 to 9/30/2019. After these filters are applied, you can see General Surgery cases in September in the Search Results Pane to the Right.

6. Double click on a case in the Search Results pane to open. Case viewer will open to the “Chart” Tab. PHI has been removed for the purposes of this guide.
7. The Case Viewer will open with the case information for the case selected. PHI has been removed and labels replaced to indicate the type of information available in the Case Viewer header.

   a. The white header at the top of the screen provides basic demographic information:

      1) MPOG Case ID                                  6) Height/Weight
      2) Institution                                    7) ASA Class
      3) Procedure                                      8) Surgical Service
      4) Patient Name and MRN                            9) Admission Status
      5) Patient demographics (Age/Sex/Race)            10) Room Name

   b. The left side pane allows users to toggle between different views: Chart, Record Search, Administrative, H&P, Outcomes, and Labs. The current tab is highlighted in a lighter blue.

   c. The tab across the top shows which case you have open. Users may open up to 4 cases at a time.
Chart View

8. Within the Case Viewer, you can view physiologic data such as heart rate and blood pressure readings in graphical format. A key is available to the left of the graph. Use the click-boxes to toggle on and off different monitors as needed. This top section of the chart is “frozen”, meaning that as you scroll down to see more data, the graph will always remain on the top. Use the “[-]” buttons to expand and collapse sections as needed.

9. This top frozen section also shows a timeline representation of key times in the case: Anesthesia start to End, In room to Out of Room, and length of the Surgery. Staff sign in/out times are also represented in the same timeline way below.

10. The grey column to the left divides the case data into the following sections:

1) Bolus Meds
2) Bolus Inputs
3) Outputs
4) Physiologic (Physio)
5) 
6) Ventilator
7) Labs
8) Notes

Scroll through the sections by either hovering over the grey bar and using the scroll wheel on your mouse OR using the scroll bar to the right. Use the “[-]” buttons to expand and collapse sections as needed.
11. Information available in the body of the chart is arranged to match the chronological timeline listed across the top of the view. To view more information, hover the mouse pointer over the flow sheet and use the scroll bar to scroll in or out. “Zoom Out” and “Zoom In” buttons are also available in the upper right corner.

12. To scroll left to right, click anywhere in the flowsheet and drag mouse left or right.

13. Tick marks on the flowsheet let users know that more information is available if you scroll in.
14. Any of the section header that are blue can be clicked and the information will be expanded on the right.

15. This box gives users another view of the information in chronological order. Here, users can see what the original variable was and what MPOG Concept it is mapped to. This is useful when trying to determine mis-mappings. Use the scroll bar along the bottom of the yellow box to see more information. Use the “X” in the right hand corner to close the box.

16. Click on any of the blue text in the box to drill down further. For example, clicking the first “100mg” value for Lidocaine shows the view to the right.
17. The side box view can be especially helpful when reviewing notes if users wish to see them in a chronological order list that is similar to some EHRs. The note information is also available in the body of the flowsheet.
18. The “Sections” menu in the upper right corner allows users to add and remove sections from the body of the chart as needed. The MPOG Measure related sections (PONV, GLU, NMB, TRAN, TEMP, BP, CARD, AKI, PUL, and SUS) pull in a summary section of all relevant variables to complete chart review on those measures.

For example, the PONV section summarizes PONV relevant information such as anti-emetics given, anesthetic gases used, and PONV and smoking history and risk factors. While this information is available elsewhere in the chart, this view quickly summarizes and puts the information into one place.
19. The “Preset” menu in the upper right corner shows users preset views of the chart based on their choice. For example, choosing “Surgery Duration” zooms the chart to show the times between surgery start and end. Users can see the rest of the chart by zooming in or out or clicking and dragging as usual.
**Record Search**

Record search is the next view available on the left pane.

Users can search relevant information and temporarily save that information together in the “shopping cart” to the right using the “+” and remove information from the shopping cart using the “X”.

As more information is added to the “shopping cart” it is arranged in chronological order.

Users can utilize Record Search to look at information relevant to their chart evaluation in one location.
Administrative
The Administrative view has information regarding Demographics, Professional Fee Billing, Location Hierarchy, and Hospital Discharge Billing. PHI has been removed for the purposes of this guide.
H&P

The H&P View shows perioperative assessment data. Similar to in Chart view, any blue text can be clicked to show more information in the right yellow pane.
Outcomes
The Outcomes view shows documented outcomes and mortality if available. The blue text in this view also remains clickable to reveal more information in the yellow right pane.

Labs
The Labs view shows labs in clinical groupings and chronological order. This information is also available in the Chart view, however some users may find this view useful depending on the purposes of their chart review. The blue shading in the header shows the day of surgery.

Clicking on the lab name on the right will show all labs in that category in the right hand yellow pane. Clicking a lab value itself will give more information about that lab value.
Table View

Table view displays all data submitted to MPOG central that was documented for a particular case regardless of if it was mapped to an MPOG concept or not. The dropdown menu allows to view data in specific storage tables.
Preferences
The preferences option on the bottom of the left pane lets users turn on/off PHI viewing and deleted record information