Tableau User Guide: How to Navigate CBD Tableau Dashboards
For Program Directors, Program Administrators and Competency Committee Members

Learning Objective:
  a) Program Directors, Program Administrators, CBME Leads and Competency Committee (CC) Chairs and Members will learn how to read, understand, and utilize the functions and features of Tableau dashboards to help inform trainee progress and promotion decisions.

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Logging in and Accessing the Tableau Dashboard

• If accessing the Tableau server from a computer outside of the University of Toronto network, you will require a link to the U of T Virtual Private Network (VPN) to sign-in. To access the VPN, please refer to the following link for detailed instructions on how to do so: https://isea.utoronto.ca/services/vpn/utorvpn/users/

• Go to the Tableau Server using the following website: https://analytics.utbi.utoronto.ca/

• To log in to the Tableau Server, enter your UTORid and password and click “log in”. You will be directed to the main Tableau homepage.

Note: If you do not know your UTORid and/or password, please email PGME.MedEdHelp@utoronto.ca with your full name, an alternate method of communication (e.g. second email address or phone number that receives text messages (SMS)), date and month of birth date and your associated program to request this information.

• On the left-hand side of the main homepage, click “Explore”
• Click on your program folder to open the dashboard.

Note: A link to your program’s refreshed Tableau dashboard will be emailed to you, approximately a week prior to your Competence Committee meeting. You may alternatively access the dashboard using this link and logging in with your UTORid and password once connected to VPN.

Navigating the Cohort Overview

• You will be defaulted to the Cohort Overview display, as indicated by the first tab at the top of the page. This is a high-level display that shows the performance of all trainees who are being assessed in each cohort of your program. This view allows you to compare the performance of trainees against their peers.

• The first chart provides a Performance Overview, tracking your residents’ progress in completing the overall entrustment and contextual variable targets set for each EPA (see screenshot below).

A- At the top of the dashboard, there are filters to view the Performance Overview by stage of residency and/or PGY levels. 

Note: These filters can be customized as per program’s request.

B- This legend indicates whether entrustment and/or contextual variable targets have been achieved or are in progress.
• A green highlighted cell indicates that both the overall entrustment and contextual variable targets have been achieved for the given EPA.
• A yellow highlighted cell indicates that either the overall entrustment, contextual variable or both targets are in progress for the given EPA.
• An empty cell indicates that no assessments have been completed for the given EPA.

**Note:** As noted on the dashboard, the internal PGME guideline where >50% of entrusted EPA assessments must be completed by University Appointed Faculty, is not coded in Tableau. Instead, this information can be visualized under the **Assessments and Entrustments by EPA** bar graph, below the Performance Overview display.

**C-** The Reference: EPA Targets table to the right displays the required number of entrustments and contextual variable targets for each EPA, as determined by your program. Some dashboards display an EPA Code filter, which allows you to view the required targets for the selected EPA separately.

**D-** If there are any Assessees who have not yet completed any EPAs, their names will be included as a footnote below the table. They will not appear on the Performance Overview chart.

- Hovering over an EPA within the Performance Overview chart will display the following information (as seen below):
  - **A-** Assessee Name
  - **B-** EPA code and title
  - **C-** Number of observations and if targets have been met
  - **D-** Number of times the trainee has been entrusted for the EPA and if targets have been met
  - **E-** Whether or not all contextual variable targets have been achieved

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If you require assistance, please do not hesitate to contact the Elentra Help Desk at: [PGME.MedEdHelp@utoronto.ca](mailto:PGME.MedEdHelp@utoronto.ca)
**Note:** Observations (**C**) and/or contextual variable (**E**) fields will only be included on the dashboard if applicable to the program.

- Below the Performance Overview chart is the **Assessments and Entrustments by EPA** bar graph (see screenshot on next page). This graph displays the following information:

  A- The grey bar indicates the total number of EPA assessments completed by the trainee
  B- The dark blue bar indicates the total number of entrusted EPAs
  C- The turquoise bar indicates the total number of EPAs entrusted by a University Appointed Faculty
  D- To the right of the chart there are 5 standard filters which can be used to view EPA completion by a stage of residency, given EPA, specific Type of Assessor and a specified date range

  **Note:** Additional filters can be added as per program’s request.
Hovering over each bar will display the following information:

- Assessee Full Name
- EPA Code*
- Number of assessments completed/entrusted in total/entrusted by University Appointed Faculty

*Note: When the EPA Code filter is set to “(All)”, Tableau will automatically display an asterisk (*) instead of listing them all (see screenshot to the right).

- The program name and data collection date range can be found at the bottom of all dashboards (see below)

![Sample Dashboards (5-Jul-18 to 03-Feb-19)](image)

For any enquiries regarding the Post MD Analytics Tableau Server, please email mededhelp.postmd@utoronto.ca

**Navigating the Trainee Overview**

- Utilize the tabs at the top of the dashboard to access the Trainee Overview dashboard

![Trainee Overview dashboard](image)

- The Trainee Overview displays information on EPA and contextual variable target completion by resident.
- The filters at the top allow you to filter by resident and stage of residency (see screenshot below).
Similar to the Cohort Overview, the Trainee Overview allows you to visualize EPA completion progress and the *entrustment and contextual variable targets*.

**EPA 01 Targets**

<table>
<thead>
<tr>
<th>EPA Code</th>
<th>EPA Title</th>
<th>Observations (Target)</th>
<th>Observations</th>
<th>Entrustments (Target)</th>
<th>Entrustments</th>
<th>Entrusted by Facility</th>
<th>Clinical Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>Recognizing the unstable/critically ill patient, mobilizing the healthcare team and supervision, and initiating basic life support</td>
<td>5</td>
<td>6</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>Clinical context targets achieved</td>
</tr>
<tr>
<td>D2</td>
<td>Performing and documenting focused histories and physical exams, and providing preliminary management of cardiac emergency department presentations</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>Clinical context targets NOT achieved</td>
</tr>
<tr>
<td>D3</td>
<td>Reassessing communication of information between the patient in the emergency department, caregivers, and members of the healthcare team to organize care and disposition of the patient</td>
<td>4</td>
<td>11</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>No clinical context targets</td>
</tr>
</tbody>
</table>

**Reference:**

EPA Code: D1

# of observations: 5

# of entrustments: 2

Clinical context targets:

- At least 1 of each:
  - altered neurologic status
  - cardiac arrest/resuscitation
  - respiratory distress
  - shock
  - unstable hemodynamic status
Achievement by target criteria

- Next, you will see the **Achievement by target criteria** table. In this table, you will find a more granular view of the EPA observation and/or entrustment targets, the total number achieved, total number entrusted by faculty and the clinical context.

**Note:** Observation targets will only be present on the dashboard if it is applicable to your program.

**Note:** Any fields with targets achieved will be highlighted green, while targets in progress will be highlighted yellow.

**Note:** The clinical context column will only appear for programs with contextual variable targets.

<table>
<thead>
<tr>
<th>EPA Code</th>
<th>EPA Title</th>
<th>Observations (target)</th>
<th>Observations</th>
<th>Entrustments (target)</th>
<th>Entrustments</th>
<th>Entrusted by Faculty</th>
<th>Clinical Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>Initiating and assisting in resuscitation of critically ill patients</td>
<td>7</td>
<td>10</td>
<td>5</td>
<td>7</td>
<td>6</td>
<td>Clinical context target achieved</td>
</tr>
<tr>
<td>P2</td>
<td>Assessing and managing patients with uncomplicated urgent and non-urgent emergency department presentations</td>
<td>5</td>
<td>87</td>
<td>2</td>
<td>17</td>
<td>15</td>
<td>Clinical context target achieved</td>
</tr>
<tr>
<td>P3</td>
<td>Contributing to the shared work of the emergency department health care team to achieve high quality, efficient and safe patient care</td>
<td>3</td>
<td>6</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>Clinical context target achieved</td>
</tr>
<tr>
<td>P4</td>
<td>Performing basic procedures</td>
<td>20</td>
<td>16</td>
<td>10</td>
<td>8</td>
<td>8</td>
<td>Clinical context target NOT achieved</td>
</tr>
</tbody>
</table>
Assessment details by EPA

- Further down on the Trainee Overview dashboard, you will find the **Assessment details by EPA** tables.
- This section displays the total number of assessments completed for various contextual variable response options.

*Note: Programs can customize this section by request, to visualize contextual variables best suited for their programs (e.g. to view contextual variables with required targets).*

A- The **grey bar** indicates how many times an assessment was **completed** for a specific contextual variable response.

B- The **blue bar** indicates how many times an assessment was **entrusted** for a specific contextual variable response.

To the left, you will find an EPA Code filter that can be used to view contextual variables by a specific EPA (see below).
Below the ‘Assessment details by EPA’ is the **Sparkline Graph**. This graph models the overall entrustment rating progress of EPAs over time for an individual trainee.

- Each completed assessment is signified by a dot.

**A.-** The **reference line** helps differentiate between Entrusted (those on or above the line, shown in **blue**) and non-Entrusted (those below the line, shown in **grey** and **red** above) assessments.

**B.-** An assessment is coded with Entrustment, if it is given the rating of Competent or Proficient. Non-entrusted assessments are those rated as Support, Direction, or Intervention.

**C.-** The horizontal axis shows the **date of encounter** for each completed assessment.

Hovering over each assessment will display the following information:

- Assessee Full Name
- Whether the assessment received an Entrustment rating or not
- Date of encounter
- EPA Code
- Type of Assessor
- Assessor Full Name
Note: Applying the filter in the Assessment details by EPA section will also apply to the Sparkline Graph. For example, if the EPA Code filter is set to D2, then only D2 assessments will appear on the sparkline graph.
The last section of the Trainee Overview dashboard displays the **Feedback and Comments** (i.e. from the comments section found at the end of each form) provided by the assessor of each EPA assessment that was completed.

The **Feedback and Comments** table will show the following information:

- EPA Code
- Date of Encounter
- Strengths
- Actions or areas for improvement
- Contextual Variable #1
- Contextual Variable #2
- Overall Rating

**Note:** The contextual variables in this section can be customized for each program by request.

<table>
<thead>
<tr>
<th>EPA Code</th>
<th>Date of encounter</th>
<th>2 - 3 Strengths</th>
<th>2 - 3 Actions or areas for improvement</th>
<th>Type of Case/Procedure</th>
<th>Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>July 14, 2018</td>
<td>Safe learning environment established, as evidenced by the willingness of junior trainees to participate in dialogue and questions. Good use of recent cases to illustrate teaching points...</td>
<td>Audience included nurses, and can think of certain areas that need to be addressed. For example, the CAMs are done by nursing staff. How should they apply these results in reality? (i.e., a positive CAMs.)</td>
<td>Cardiorespiratory arrest</td>
<td>SMHC</td>
</tr>
<tr>
<td></td>
<td>July 14, 2018</td>
<td>Aware of possible contraindications for cholesterol inhibitors; made appropriate recommendations regarding community support and follow-up plan.</td>
<td>Consolidating knowledge regarding contraindications for cholesterol inhibitors to identify relative and absolute contraindications.</td>
<td>Unstable dysrythmias</td>
<td>SMHC</td>
</tr>
<tr>
<td></td>
<td>July 23, 2018</td>
<td>- Organized - Excellent base of medical knowledge related to common geriatric syndromes such as osteoprosis, polypharmacy, mood disorder that Amy is able to apply to the patient in front of her...</td>
<td>Would be useful to add a bit more about anxiety: common presentations in elderly, assessment tools (e.g., FAQT) and initial treatment approach</td>
<td>Altered neurological status</td>
<td>SMHC</td>
</tr>
<tr>
<td></td>
<td>August 29, 2018</td>
<td>Advocated for patient and family; provided clear feedback on atypical presentations in older adults.</td>
<td>No information entered</td>
<td>Altered neurological status</td>
<td>SHSC</td>
</tr>
<tr>
<td></td>
<td>September 2, 2018</td>
<td>1. Recognized changes in MDCA score over time. 2. Accurate interpretation of results.</td>
<td>None identified</td>
<td>Shak</td>
<td>SHSC</td>
</tr>
<tr>
<td></td>
<td>September 10, 2018</td>
<td>1. Comprehensive history with excellent detail on cognition 2. Thorough and accurate physical examination</td>
<td>1. Minor areas of neurological exam require perfection 2. Continue to learn details about various cognitive domains</td>
<td>Respiratory distress</td>
<td>SMHC</td>
</tr>
</tbody>
</table>

**Note:** When clicking on the comments, your browser will open to Elentra and you will be prompted to enter your UTORid log-in information.

**Note:** The EPA filter used in the **Assessment details by EPA graph** will apply to the **Comments** table, as well (similar to the sparkline graph).