**Mississippi Department of Mental Health (DMH)**

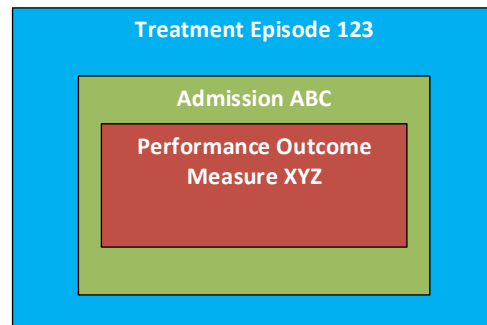**Technical Assistance Note:**
**Performance Outcome Measure Association and Deletion**
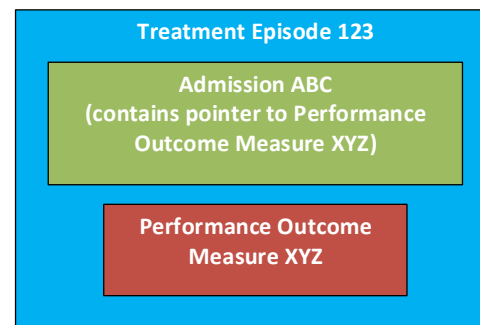
Last Revision Date: 8/6/2020

**Background**: Performance Outcome Measures are unique in the Data Warehouse in that they can be associated with one of several "parent" objects (e.g. Admissions and Discharges as well as the Treatment Episode itself). This creates some complexity about how a Performance Outcome Measure may be associated, un-associated, and deleted; this document describes those actions.

**Data Structure:**

A Performance Outcome Measure can be created as a sub-entity of an Admission, a Discharge, or a Treatment Episode. Regardless of where a Performance Outcome Measure exists in the XML, the Data Warehouse creates it as a sub-entity of the Treatment Episode. If it was created under an Admission or a Discharge, it is associated to that Admission or Discharge, but exists as a Sub-Entity of the Treatment Episode. In other words: Even if you create a Performance Outcome Measure as part of an Admission, it's stored at the "root" of the Treatment Episode.

| Treatment Episode 123 | Treatment Episode 123 |
|---|---|
| **Admission ABC**<br><br>**Performance Outcome Measure XYZ** | **Admission ABC**<br>**(contains pointer to Performance Outcome Measure XYZ)**<br><br>**Performance Outcome Measure XYZ** |

**What was sent**                                   **How it is stored**

From an XML perspective, the following pseudocode fragment would create a Performance Outcome Measure in the Treatment Episode, associated to Admission A1.

This XML sends the Performance Outcome Measure as part of the Admission. Note that the Performance Outcome Measure is in blue.

```
<ProviderTreatmentEpisode>
        <SourceRecordIdentifier>123</SourceRecordIdentifier>
        <ProviderSourceRecordIdentifier>P789</ProviderSourceRecordIdentifier>
        <Admission>
                <SourceRecordIdentifier>A1</SourceRecordIdentifier>
                <PerformanceOutcomeMeasures>
                        <PerformanceOutcomeMeasure>
                                <SourceRecordIdentifier>POM101</SourceRecordIdentifier>
                                <POM_data_1>uiop</POM_data_1>
                                <POM_data_2>hjlk</POM_data_2>
                        </PerformanceOutcomeMeasure>
                </PerformanceOutcomeMeasures>
        </Admission>
</ProviderTreatmentEpisode>
```

This version of the XML sends the Performance Outcome Measure as part of the Treatment Episode, but references it in the Admission. Note that the Performance Outcome Measure is in blue and the reference to it is in yellow.

```
<ProviderTreatmentEpisode>
        <SourceRecordIdentifier>123</SourceRecordIdentifier>
        <ProviderSourceRecordIdentifier>P789</ProviderSourceRecordIdentifier>
        <PerformanceOutcomeMeasures>
                <PerformanceOutcomeMeasure>
                        <SourceRecordIdentifier>POM101</SourceRecordIdentifier>
                        <POM_data_1>uiop</POM_data_1>
                        <POM_data_2>hjlk</POM_data_2>
                </PerformanceOutcomeMeasure>
        </PerformanceOutcomeMeasures>
        <Admission>
                <SourceRecordIdentifier>A1</SourceRecordIdentifier>
                <PerformanceOutcomeMeasures>
                        <PerformanceOutcomeMeasure>
                        <SourceRecordIdentifier>POM101</SourceRecordIdentifier>
                        </PerformanceOutcomeMeasure>
                </PerformanceOutcomeMeasures>
        </Admission>
</ProviderTreatmentEpisode>
```

**SENDING EITHER OF THE ABOVE XML FRAGMENTS WOULD DO THE SAME THING:** Create a Performance Outcome Measure at the root of Treatment Episode that is linked to the Admission.

**Why is this important?**

From a submission perspective, it doesn't matter – you can submit the Performance Outcome Measure at the root of the Episode and link it to Admission(s) or Discharge(s) or you can create a Performance Outcome Measure inside an Admission or Discharge and the Data Warehouse will automatically create it in the root of Treatment Episode and link it to the place you created it. The way that a Performance Outcome Measure is stored becomes relevant during deletions, because you **must delete a Performance Outcome Measure from the root of the Treatment Episode to actually delete the object**. Deleting the Performance Outcome Measure from the Admission or Discharge only deletes the association to that object, but does not delete the Performance Outcome Measure itself.

Using the above example, if we sent:

```
<ProviderTreatmentEpisode>
      <SourceRecordIdentifier>123</SourceRecordIdentifier>
      <ProviderSourceRecordIdentifier>P789</ProviderSourceRecordIdentifier>
      <Admission>
            <SourceRecordIdentifier>A1</SourceRecordIdentifier>
            <PerformanceOutcomeMeasures>
                  <PerformanceOutcomeMeasure>
                        <SourceRecordIdentifier>POM101</SourceRecordIdentifier>
                        <POM_data_1>uiop</POM_data_1>
                        <POM_data_2>hjlk</POM_data_2>
                  </PerformanceOutcomeMeasure>
            </PerformanceOutcomeMeasures>
      </Admission>
</ProviderTreatmentEpisode>
```

Then we have created POM101 at the root of the Treatment Episode, with an association to Admission A1.

If we want to **delete the Performance Outcome Measure entirely**, we would send

```xml
<ProviderTreatmentEpisode>
      <SourceRecordIdentifier>123</SourceRecordIdentifier>
      <ProviderSourceRecordIdentifier>P789</ProviderSourceRecordIdentifier>
      <PerformanceOutcomeMeasures>
            <PerformanceOutcomeMeasure action="delete">
                  <SourceRecordIdentifier>POM101</SourceRecordIdentifier>
            </PerformanceOutcomeMeasure>
      </PerformanceOutcomeMeasures>
</ProviderTreatmentEpisode>
```

If we want to **only delete the association from this Performance Outcome Measure to the Admission**, we would send

```xml
<ProviderTreatmentEpisode>
      <SourceRecordIdentifier>123</SourceRecordIdentifier>
      <ProviderSourceRecordIdentifier>P789</ProviderSourceRecordIdentifier>
      <Admission>
            <PerformanceOutcomeMeasures>
                  <PerformanceOutcomeMeasure action="delete">
                        <SourceRecordIdentifier>POM101</SourceRecordIdentifier>
                  </PerformanceOutcomeMeasure>
            </PerformanceOutcomeMeasures>
      </Admission>
</ProviderTreatmentEpisode>
```

Remember: When deleting an association, only send the Source Record Identifier; do not send any other data or sub-entities.