

# TIBCO® Health Essentials Cloud

## Analytics User's Guide

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## Business Intelligence User Roles and Privileges

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This chapter describes the two sets of Business Intelligence (BI) user roles and privileges that are available in TIBCO® Health Essentials Cloud.

### In this chapter:

- Protected Health Information (PHI) Roles
  - No Protected Health Information (PHI) Roles
  - User Role Comparison
- 

### Protected Health Information (PHI) Roles

#### Business Analyst With ePHI Access (BA\_PHI)

This role is identified in WS02 as *WF\_BUSINESS\_ANALYST\_PHI*. Users with this role are authorized to view ePHI and enabled to:

- View all content in the TIBCO® Health Essentials Cloud workspace.
- Copy that content to the *Site\_PHI* workspace.
- Edit existing content or create new content in the *Site\_PHI* workspace.
- Publish content in the *Site\_PHI* workspace.

#### Business User With ePHI Access (BU\_PHI)

This role is identified in WS02 as *WF\_BUSINESS\_USER\_PHI*. Users with this role are authorized to view ePHI and can view all content published in the *Site\_PHI* workspace.

### No Protected Health Information (PHI) Roles

#### Business Analyst With No ePHI Access (BA\_NO\_PHI)

This role is identified in WS02 as *WF\_BUSINESS\_ANALYST\_NO\_PHI*. Users with this role are not authorized to view ePHI and enabled to:

- Can view only the content in the *NO\_PHI* folder in the TIBCO® Health Essentials Cloud workspace.

- Can copy that content to the *Site\_NO\_PHI* workspace.
- Can edit existing content or create new content in the *Site\_NO\_PHI* workspace.
- Can publish content in the *Site\_NO\_PHI* workspace.

**Business User With No ePHI Access (BU\_NO\_PHI)**

This role is identified in WSO2 as *WF\_BUSINESS\_USER\_NO\_PHI*. Users with this role are authorized to view ePHI and can view all content published in the *Site\_PHI* workspace.

**User Role Comparison**

The following table shows the workspace name, folder name, and access privileges for each user role.

Workspace Name	Folder Name	User Role			
		BU_PHI	BU_NO_PHI	BA_PHI	BA_NO_PHI
Omni Health Essentials	Basic_Reports_PHI	No Access	No Access	Read/Copy	No Access
Omni Health Essentials	Basic_Reports_NO_PHI	No Access	No Access	Read/Copy	Read/Copy
Omni Health Essentials	Dashboards_PHI	No Access	No Access	Read/Copy	No Access
Omni Health Essentials	Dashboards_NO_PHI	No Access	No Access	Read/Copy	Read/Copy
Site_PHI	Any Folder	Read	No Access	Create	No Access
Site_NO_PHI	Any Folder	No Access	Read	No Access	Create

## Workspaces

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This chapter describes the workspaces that are provided with TIBCO® Health Essentials Cloud.

**In this chapter:**

- [Omni Health Essentials](#)
  - [Site\\_NO\\_PHI](#)
  - [Site\\_PHI](#)
- 

### Omni Health Essentials

This workspace contains Business Intelligence (BI) content (reports and dashboards) that is built and managed by the TIBCO® Healthcare product team and delivered to all Health Essentials Cloud customers. Customers can reuse these BI assets by copying them to their workspace, but cannot edit or change the content in this workspace.

### Site\_NO\_PHI

This is a dedicated customer workspace, where their workforce members with elevated privileges and appropriate HIPAA clearance, can access, collaborate, and share BI content that contains ePHI.

### Site\_PHI

This is a dedicated customer workspace, where its workforce members who do not have appropriate HIPAA clearance, can only access, collaborate, and share content that **does not** contain ePHI.





# Chapter 3

## Inpatient Executive Dashboard

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This chapter describes the Inpatient Executive Dashboard that is provided with TIBCO® Health Essentials Cloud.

### In this chapter:

- [Overview](#)
  - [Implementation Considerations](#)
- 

### Overview

The Inpatient Executive Dashboard provides an executive summary of inpatient encounters aggregated from different data sources. It contains volume metrics on inpatient admissions, average length of stay and discharge days.

#### Target Users

- CXOs
- Department Managers
- Utilization Managers
- Operations Managers

#### Use Case

Identify utilization trends and patterns in an inpatient facility or a group of inpatient facilities.

#### Metrics



For more information on the metrics that are provided by the Inpatient Executive Dashboard, see the metrics catalog file that is attached to this PDF for your reference.

### Accessing

*How can I access this dashboard?*

This dashboard is only accessible to users with the *BA\_PHI* or *BA\_NO\_PHI* user role.

#### Navigation Path

Omni Health Essentials -> Dashboards -> NO\_PHI -> Inpatient Executive Dashboard

### Running

*How do I run this dashboard?*

Right-click the dashboard shortcut and select *Run* from the menu.

### Copying

*Can I copy it into my workspace?*

Either the *BA\_PHI* or *BA\_NO\_PHI* user role can copy the dashboard shortcut and paste it in the corresponding *Site\_PHI* or *Site\_NO\_PHI* workspace.

### Publishing

*Can I publish this dashboard for other users?*

Either the *BA\_PHI* or *BA\_NO\_PHI* user role can publish the dashboard for other users with *BU\_PHI* and *BU\_NO\_PHI* roles in the corresponding *Site\_PHI* or *Site\_NO\_PHI* workspace.

## Implementation Considerations

This section describes the prerequisites for the Inpatient Executive Dashboard.

### Preparing and Loading the Input Data Set

Customers must provide the following input data sets:

- Encounter
- Facility

### Configuring User Roles

Customers must configure security privileges for different users. In order to access the Inpatient Executive Dashboard, the CSO must provision users with the following roles:

- BA\_PHI.** Users who can copy reports from the *Omni Health Essentials* workspace and edit those reports or create new content in the *Site\_PHI* workspace.
- BA\_NO\_PHI.** Users who can copy reports from the *Omni Health Essentials* workspace and edit those reports or create new content in the *Site\_NO\_PHI* workspace.
- BU\_PHI.** Users who can view and run reports published by *BA\_PHI* user roles in the *Site\_PHI* workspace.

- ❑ **BU\_NO\_PHI.** Users who can view and run reports published by *BA\_NO\_PHI* user roles in the *Site\_PHI* workspace.



## Outpatient Executive Dashboard

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This chapter describes the Outpatient Executive Dashboard that is provided with TIBCO® Health Essentials Cloud.

**In this chapter:**

- [Overview](#)
  - [Implementation Considerations](#)
- 

### Overview

The Outpatient Executive Dashboard provides an executive summary of outpatient encounters aggregated from different data sources. This dashboard contains volume metrics on sick visits, well visits, and chronic visits.

**Target Users**

- Practice Managers
- Utilization Managers
- Operations Managers

**Use Case**

Identify utilization trends and patterns in an outpatient facility or a group of outpatient facilities.

**Metrics**

For more information on the metrics that are provided by the Outpatient Executive Dashboard, see the metrics catalog file that is attached to this PDF for your reference.

### Accessing

*How can I access this dashboard?*

This dashboard is only accessible to users with the *BA\_PHI* or *BA\_NO\_PHI* user role.

**Navigation Path**

Omni Health Essentials -> Dashboards -> NO\_PHI -> Outpatient Executive Dashboard

### Running

*How do I run this dashboard?*

Right-click the dashboard shortcut and select *Run* from the menu.

### Copying

*Can I copy it into my workspace?*

Either the *BA\_PHI* or *BA\_NO\_PHI* user role can copy the dashboard shortcut and paste it in the corresponding *Site\_PHI* or *Site\_NO\_PHI* workspace.

### Publishing

*Can I publish this dashboard for other users?*

Either the *BA\_PHI* or *BA\_NO\_PHI* user role can publish the dashboard for other users with *BU\_PHI* and *BU\_NO\_PHI* roles in the corresponding *Site\_PHI* or *Site\_NO\_PHI* workspace.

## Implementation Considerations

This section describes the prerequisites for the Outpatient Executive Dashboard.

### Preparing and Loading the Input Data Set

Customers must provide the following input data sets:

- Encounter
- Facility
- Custom Relationship



For more information on the Custom Relationship data set, see the Custom Relationship input file specification that is attached to this PDF for your reference.

### Configuring User Roles

Customers must configure security privileges for different users. In order to access the Outpatient Executive Dashboard, the CSO must provision users with the following roles:

- BA\_PHI.** Users who can copy reports from the *Omni Health Essentials* workspace and edit those reports or create new content in the *Site\_PHI* workspace.
- BA\_NO\_PHI.** Users who can copy reports from the *Omni Health Essentials* workspace and edit those reports or create new content in the *Site\_NO\_PHI* workspace.

- BU\_PHI.** Users who can view and run reports published by *BA\_PHI* user roles in the *Site\_PHI* workspace.
- BU\_NO\_PHI.** Users who can view and run reports published by *BA\_NO\_PHI* user roles in the *Site\_PHI* workspace.

## Configuring Metric Targets

Customers must configure the outpatient metric targets by updating the *oce\_tgt\_id\_1* values for the four records highlighted below in the Custom Relationship data set, and load them through the Gateway.

Column Name	Total Visits	Sick Visits	Well Visits	Chronic Visits
<i>oce_rel_id</i>	OPT-1	OPT-2	OPT-3	OPT-4
<i>oce_rel_name</i>	Outpatient-VisitTarget	Outpatient-VisitTarget	Outpatient-VisitTarget	Outpatient-VisitTarget
<i>oce_rel_type</i>	one-one	one-one	one-one	one-one
<i>oce_src_type</i>	VisitType	VisitType	VisitType	VisitType
<i>oce_src_id</i>	Total	Sick	Well	Chronic
<i>oce_tgt_type_1</i>	TargetPerFacilityPerDay	TargetPerFacilityPerDay	TargetPerFacilityPerDay	TargetPerFacilityPerDay
<i>oce_tgt_id_1</i>	15	3	2	2
<i>oce_tgt_type_2</i>				
<i>oce_tgt_id_2</i>				
<i>oce_tgt_type_3</i>				
<i>oce_tgt_id_3</i>				
<i>oce_tgt_type_4</i>				
<i>oce_tgt_id_4</i>				
<i>oce_tgt_type_5</i>				
<i>oce_tgt_id_5</i>				
<i>oce_record_status_code</i>	A	A	A	A
<i>oce_created_by</i>	(system or user ID that created this record)	(system or user ID that created this record)	(system or user ID that created this record)	(system or user ID that created this record)
<i>oce_last_modified_date</i>	(date time when this record was modified)	(system or user ID that created this record)	(system or user ID that created this record)	(system or user ID that created this record)







# Chapter 5

## Care Metrics Dashboard

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This chapter describes the Care Metrics Dashboard that is provided with TIBCO® Health Essentials Cloud.

### In this chapter:

- [Overview](#)
  - [Implementation Considerations](#)
- 

### Overview

The Care Metrics Dashboard provides a rolling 12 month view of eight Electronic Clinical Quality Measures (eCQM) for a cohort of patient population. The eCQM metrics included in this dashboard are:

- Use of Aspirin or Another Antithrombotic (CMS164v7)
- Pneumococcal Vaccination Status for Older Adults (CMS127v7)
- Colorectal Cancer Screening (CMS130v7)
- Controlling High Blood Pressure (CMS165v7)
- Falls:Screening for Future Fall Risk (CMS139v7)
- Breast Cancer Screening (CMS125v7)
- HbA1c Poor Control greater than 9% (CMS122v7)
- Body Mass Index (BMI) Screening and Follow-Up Plan (CMS069v7)

### Target Users

- Care Managers
- Department Managers
- Clinical Quality Champions
- Physician Champions
- Regulatory Compliance and Reporting

### Use Case

Track performance of measures against goals, identify areas of concern, and take necessary actions to course correct and move the needle in the right direction.

### **Metrics**



For more information on the metrics that are provided by the Care Metrics Dashboard, see the metrics catalog file that is attached to this PDF for your reference.

### **Accessing**

*How can I access this dashboard?*

This dashboard is only accessible to users with the *BA\_PHI* role in the *Omni Health Essentials* workspace. If the *BA\_PHI* user copies and publishes this report in the *Site\_PHI* workspace, then *BU\_PHI* users can also access this report in the *Site\_PHI* workspace.

### **Running**

*How do I run this dashboard?*

Right-click the dashboard shortcut and select *Run* from the menu.

### **Copying**

*Can I copy it into my workspace?*

Only *BA\_PHI* users can copy this dashboard to the *Site\_PHI* workspace.

### **Publishing**

*Can I publish this dashboard for other users?*

Only *BA\_PHI* users can publish this dashboard for other *BU\_PHI* users in the *Site\_PHI* workspace.

## **Implementation Considerations**

This section describes the prerequisites for the Care Metrics Dashboard.

### **Preparing and Loading the Input Data Set**

Customers must provide the following input data sets:

- Patient
- Encounter
- Facility

- Clinical Events
- Custom Relationship



For more information on the Custom Relationship data set, see the Custom Relationship input file specification that is attached to this PDF for your reference.

## Configuring User Roles

Customers must configure security privileges for different users. In order to access the Care Metrics Executive Dashboard, the CSO must provision users with the following roles:

- BA\_PHI.** Users who can copy reports from the *Omni Health Essentials* workspace and edit those reports or create new content in the *Site\_PHI* workspace.
- BU\_PHI.** Users who can view and run reports published by *BA\_PHI* user roles in the *Site\_PHI* workspace.

## Configuring Metric Targets

Customers must configure the care metric targets by updating the *oce\_tgt\_id\_1* values for the eight records highlighted below in the Custom Relationship data set, and load them through the Gateway.

Part 1

Column Name	Colorectal Cancer Screening	Use of Aspirin or Another Antithrombotic	Pneumococcal Vaccination Status for Older Adults
oce_rel_id	MT-1	MT-2	MT-3
oce_rel_name	CareMetrics-MeasureTarget	CareMetrics-MeasureTarget	CareMetrics-MeasureTarget
oce_rel_type	one-one	one-one	one-one
oce_src_type	<a href="#">t_metric_summary.metric_code</a>	<a href="#">t_metric_summary.metric_code</a>	<a href="#">t_metric_summary.metric_code</a>
oce_src_id	CMS_130_CCS	CMS_164_IVD	CMS_127_ASA
oce_tgt_type_1	MeasureTarget	MeasureTarget	MeasureTarget
oce_tgt_id_1	75	75	75
oce_tgt_type_2			
oce_tgt_id_2			
oce_tgt_type_3			
oce_tgt_id_3			
oce_tgt_type_4			
oce_tgt_id_4			
oce_tgt_type_5			
oce_tgt_id_5			
oce_record_status_code	A	A	A
oce_created_by	(system or user ID that created this record)	(system or user ID that created this record)	(system or user ID that created this record)
oce_last_modified_date	(date time when this record was modified)	(system or user ID that created this record)	(system or user ID that created this record)

## Part 2

Column Name	Controlling High Blood Pressure	HbA1c Poor Control greater than 9%	Falls: Screening for Future Fall Risk
oce_rel_id	MT-4	MT-5	MT-6
oce_rel_name	CareMetrics-MeasureTarget	CareMetrics-MeasureTarget	CareMetrics-MeasureTarget
oce_rel_type	one-one	one-one	one-one
oce_src_type	t_metric_summary_metric_code	t_metric_summary_metric_code	t_metric_summary_metric_code
oce_src_id	CMS_165_CBP	CMS_122_DPC	CMS_139_FRA
oce_tgt_type_1	MeasureTarget	MeasureTarget	MeasureTarget
oce_tgt_id_1	75	45	75
oce_tgt_type_2			
oce_tgt_id_2			
oce_tgt_type_3			
oce_tgt_id_3			
oce_tgt_type_4			
oce_tgt_id_4			
oce_tgt_type_5			
oce_tgt_id_5			
oce_record_status_code	A	A	A
oce_created_by	(system or user ID that created this record)	(system or user ID that created this record)	(system or user ID that created this record)
oce_last_modified_date	(system or user ID that created this record)	(system or user ID that created this record)	(system or user ID that created this record)

## Part 3

Column Name	Body Mass Index (BMI) Screening and Follow-Up Plan	Breast Cancer Screening
oce_rel_id	MT-7	MT-8
oce_rel_name	CareMetrics-MeasureTarget	CareMetrics-MeasureTarget
oce_rel_type	one-one	one-one
oce_src_type	t_metric_summary_metric_code	t_metric_summary_metric_code
oce_src_id	CMS_069_BMI	CMS_125_BCS
oce_tgt_type_1	MeasureTarget	MeasureTarget
oce_tgt_id_1	75	75
oce_tgt_type_2		
oce_tgt_id_2		
oce_tgt_type_3		
oce_tgt_id_3		
oce_tgt_type_4		
oce_tgt_id_4		
oce_tgt_type_5		
oce_tgt_id_5		
oce_record_status_code	A	A
oce_created_by	(system or user ID that created this record)	(system or user ID that created this record)
oce_last_modified_date	(system or user ID that created this record)	(system or user ID that created this record)

## Patient Journey Report

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This chapter describes the Patient Journey Report that is provided with TIBCO® Health Essentials Cloud.

### In this chapter:

- [Overview](#)
  - [Implementation Considerations](#)
- 

### Overview

The Patient Journey Report provides a holistic 360-degree view of a patient's clinical history, giving users a single view of all data aggregated from different data sources under a single patient master record. This report consists of three tabs:

- Care Summary Page.** Provides a high-level overview of a patient's care journey. It includes:
  - Patient demographics (name, age, and gender).
  - Patient identifiers (SSN and MRNs).
  - Patient contact addresses, phone numbers, and email addresses.
  - A consolidated list of a patient's preferred providers and care providers.
  - A list of recent encounters and encounter patterns.
  - An up-to-date list of chronic conditions, medications, and vaccines.
- Encounter Summary Page.** Provides an encounter view and summary of care provided in a clinical encounter. Encounter details include type of encounter, facility where it occurred, when it occurred, discharge disposition, length of stay, and so on. Users can also drill down to the clinical facts associated with each encounter that include diagnoses (problems), procedures, diagnostic observations (laboratory results), vital sign observations, medications, and immunizations.

- ❑ **Care Metrics Summary Page.** Provides a single view of care compliance with eight eCQM measures that are either preventative, process-based, or outcomes-based. The information chart shows a set of yes/no check boxes corresponding to a 12-month period of time when the patient is eligible and compliant/non-compliant with a measure specification. Care managers can use this chart to identify the care gaps that are currently open or those care gaps that might put the patient at risk in the near future. Care managers can assess the care gaps and make adjustments to the patient's care plan to proactively close those gaps. The list of care measures available are:
  - ❑ Use of Aspirin or Another Antithrombotic (CMS164v7)
  - ❑ Pneumococcal Vaccination Status for Older Adults (CMS127v7)
  - ❑ Colorectal Cancer Screening (CMS130v7)
  - ❑ Controlling High Blood Pressure (CMS165v7)
  - ❑ Falls:Screening for Future Fall Risk (CMS139v7)
  - ❑ Breast Cancer Screening (CMS125v7)
  - ❑ HbA1c Poor Control greater than 9% (CMS122v7)
  - ❑ Body Mass Index (BMI) Screening and Follow-Up Plan (CMS069v7)

## Accessing

*How can I access this report?*

This report is only accessible to users with the *BA\_PHI* role in the *Omni Health Essentials* workspace. If the *BA\_PHI* user copies and publishes this report in the *Site\_PHI* workspace, then *BU\_PHI* users can also access this report in the *Site\_PHI* workspace.

## Running

*How do I run this report?*

Right-click the report shortcut and select *Run* from the menu.

**Note:** In order to run a patient's Patient Journey Report, the user must be associated with a list of attributed patients. For more information on how to define and upload a list of attributed patients for a user, see the implementation considerations.

## Copying

*Can I copy it into my workspace?*



Only *BA\_PHI* users can copy this report to the *Site\_PHI* workspace.

## Publishing

*Can I publish this report for other users?*

Only *BA\_PHI* users can publish this report for other *BU\_PHI* users in the *Site\_PHI* workspace.

## Implementation Considerations

This section describes the prerequisites for the Patient Journey Report.

### Preparing and Loading the Input Data Set

Customers must provide the following input data sets:

- Patient
- Provider
- Encounter
- Facility
- Clinical Events
- Custom Relationship



For more information on the Custom Relationship data set, see the Custom Relationship input file specification that is attached to this PDF for your reference.

### Configuring User Roles

Customers must configure security privileges for different users. In order to access the Patient Journey Report, the CSO must provision users with the following roles:

- BA\_PHI.** Users who can copy reports from the *Omni Health Essentials* workspace and edit those reports or create new content in the *Site\_PHI* workspace.
- BU\_PHI.** Users who can view and run reports published by *BA\_PHI* user roles in the *Site\_PHI* workspace.

### Attribute Patients to Users

In order to access a patient's Patient Journey Report, the user must be associated with a list of attributed patients. This relationship can be defined by uploading records of relationship type *PatientJourney-PatientList* through the custom relationship file.

The following are the steps to create a patient list:

1. CSO creates an account for the end user (for example, *bob\_smith*) and assigns the user to the role *BU\_PHI*.
2. CSO approves a list of patients that the end user can access through the Patient Journey.
3. Data analyst prepares a custom relationship data set that ties the patient's primary ID (which is the same as *oce\_primary\_id* loaded in the *Patient* data set) with the end user ID. These records must have the following values:
  - a. A unique identifier for *oce\_rel\_id*
  - b. *oce\_rel\_name* = PatientJourney-PatientList
  - c. *oce\_src\_type* = UserId
  - d. *oce\_src\_id* = (replace with *user\_id*)
  - e. *oce\_tgt\_type\_1* = patient:oce\_primary\_id
  - f. *oce\_tgt\_id\_1* = (replace with patient's *oce\_primary\_id*)
  - g. *oce\_record\_status\_code* = A

The following example illustrates how to attribute two different patients (Patient A with *oce\_primary\_id* = A11, and Patient B with *oce\_primary\_id* = B55), to an end user whose *user\_id* is *bob\_smith*.

Column Name	Patient A11 associated with end user bob_smith	Patient B55 associated with end user bob_smith
oce_rel_id	PJ-1	PJ-2
oce_rel_name	PatientJourney-PatientList	PatientJourney-PatientList
oce_rel_type	one-many	one-many
oce_src_type	Userid	Userid
oce_src_id	bob_smith	bob_smith
oce_tgt_type_1	patient.oce_primary_id	patient.oce_primary_id
oce_tgt_id_1	A11	B55
oce_tgt_type_2		
oce_tgt_id_2		
oce_tgt_type_3		
oce_tgt_id_3		
oce_tgt_type_4		
oce_tgt_id_4		
oce_tgt_type_5		
oce_tgt_id_5		
oce_record_status_code	A	A
oce_created_by	OMNI	OMNI
oce_last_modified_date	2021-01-01	2021-01-01

