Instructions for Creating or Modifying a COPD Flowsheet

in the Epic Electronic Health Record (EHR) System

Boehringer Ingelheim

Contents

Boehringer
Ingelheim

Overview

Instructions

Boehringer Ingelheim has developed instructions that may assist healthcare providers in creating or optimizing a chronic obstructive pulmonary disease (COPD) flowsheet in the Epic electronic health record (EHR) system. These instructions can be used only for the Epic EHR system and will not work for other EHR systems.

Considerations

- The customer shall be solely responsible for implementation, testing, and monitoring of the instructions to ensure proper orientation in each individual EHR system

- Capabilities, functionality, and setup (customization) for individual EHR systems will vary. Boehringer Ingelheim shall not be responsible for revising the implementation instructions it provides to any customer in the event that the customer modifies or changes its software or the configuration of its EHR system after such time, as the implementation instructions have been initially provided by Boehringer Ingelheim

- While Boehringer Ingelheim tests its implementation instructions on multiple EHR systems, the instructions are not guaranteed to work for all available EHR systems, and Boehringer Ingelheim shall have no liability thereto

- While EHRs may assist providers in identifying appropriate patients for consideration of assessment and treatment, the decision and action should ultimately be decided by a provider in consultation with the patient, after a review of the patient's records to determine eligibility, and Boehringer Ingelheim shall have no liability thereto

- The instructions have not been designed to and are not tools and/or solutions for meeting Meaningful Use and/or any other quality/accreditation requirement

- All products are trademarks of their respective holders, all rights reserved. Reference to these products is not intended to imply affiliation with, or sponsorship of, Boehringer Ingelheim and/or its affiliates

Background

The ability to document and track patient data over time, using structured data, can be managed using flowsheets. While many flowsheets are available in EHRs, and clinical staff has access to these resources, there may be a need for a new or optimized COPD flowsheet.

Boehringer Ingelheim has created instructions for the Epic EHR system to create or optimize a COPD flowsheet.

Epic Flowsheet

A documentation flowsheet or review flowsheet may be created to provide a COPD-specific flowsheet to end users. Below are the steps to complete a COPD-specific flowsheet setup:

Suggested Content for COPD Flowsheet Rows

Spirometry Assessment

- FEV1 (%PRED)
- Post bronchodilator (FEV/FVC)
- COPD exacerbations in last year
- Eosinophil count

COPD Symptom Assessment

- Cough assessment
- Phlegm assessment
- Chest tightness
- Walking on an incline
- Home activities
- Confident leaving home
- Sleeping soundly
- Energy level
- Assessment score

GOLD Recommendation Staging

- GOLD grade
- Group

GOLD=Global Initiative for Chronic Obstructive Lung Disease.

Boehringer Ingelheim

Epic Flowsheet (cont'd)

Create the Flowsheet

1. Access the flowsheet build tool by clicking the **Epic Icon → Tools → Patient Care Tools → Doc Flowsheet Builder**

2. Create **Flowsheet ROWS.** Suggested content for flowsheet rows listed above

3. To create the flowsheet rows for **Spirometry Assessment:**

FEV1

- Enter a unique Display name for the flowsheet row; for example: FEV1
- Complete the flowsheet row as follows:
  - Enter **FEV1** as the Display name on the General form
  - Select the numeric value type and set the form Min/Max to **0% and 100%**
  - Set the row type to **Data**
  - **Save** the record and **Release This Version**

Post Bronchodilator (FEV/FVC)

- Enter a unique Display name for the flowsheet row; for example: FEV/FVC
- Complete the flowsheet row as follows:
  - Enter unique name as the Display name on the General form
  - Select the Numeric value type and set the form Min/Max to **0 L/min and 800 L/min** (a Warning Min/Max may be set as desired)
  - Set the row type to **Data**
  - **Save** the record and **Release This Version**

COPD Exacerbations in Last Year

- Enter a unique Display name for the flowsheet row; for example: Exacerbations
- Select the **Custom List** value type and set the Custom List values to **0 through 99** in the Custom List tab
- Set the row type to **Data**
- **Save** the record and **Release This Version**

Boehringer
Ingelheim

Epic Flowsheet (cont'd)

Create the Flowsheet (cont'd)

3. To create the flowsheet rows for **Spirometry Assessment** (cont'd):

   ### Eosinophil Count
   - Enter a unique Display name for the flowsheet row; for example: Eosinophil Count
   - Select the **Custom List value type** and set the Custom List values to **0 through 9999** in the Custom List tab
   - Set the row type to **Data**
   - **Save** the record and **Release This Version**

4. To create the flowsheet rows for **COPD Symptom Assessment:**
   The following steps can be repeated to create the flowsheet rows for Cough Assessment, Phlegm Assessment, Chest Tightness, Walking on an Incline, Home Activities, Confident Leaving the Home, Sleeping Soundly, and Energy Level
   - Enter a unique Display name for the flowsheet row; for example: Cough Assessment
   - Complete the flowsheet row as follows:
     - Enter a unique Display name on the General form
     - Set the Custom List value type to **Custom List form**
     - Set the Custom List values from **0 through 5** in the Custom List tab
     - Set the row type to **Data**
     - Save the record and **Release This Version**

   ### Assessment Score
   - Select **the Custom Formula Row type** and **Numeric Value Type**
   - Click the **Formula Page tab** and enter a **Custom Formula** using braces around each of the previously created COPD Symptom Assessment rows; for example: **[ID of Cough Assessment row]+[ID of Phlegm Assessment row]+**, etc

5. To create the flowsheet rows for **GOLD Recommendation Staging**:
   - Enter a unique Display name for the flowsheet row; for example: GOLD Grade
   - Complete the flowsheet row as follows:
     - Enter **GOLD Grade** in the Display name on the General form
     - Set the row type to **Data** and the Value Type to **Custom Lis**t
     - Set the Custom List values to **Stage I Mild, Stage II Moderate, Stage III Severe, Stage IV Very Severe** in the Custom List table
     - **Save** the record and **Release This Version**
   - Enter a unique Display name for the flowsheet row; for example: Group
   - Complete the flowsheet row as follows:
     - Enter Group in the Display name on the General form
     - Set the row type to **Data** and the Value Type to **Custom List**
     - Set the Custom List values to **A (Bronchodilator), B (LABA or LAMA), or C (LAMA) and D (LAMA or LAMA+LABA or ICS+LABA)** in the Custom List table
     - **Save** the record and **Release This Version**

Boehringer Ingelheim

Create The Flowsheet (cont'd)

6. Create three Flowsheet GROUPS:

   Spirometry Assessment

   COPD Symptom Assessment

   GOLD Recommendation Staging

   - On the General form, enter a unique **Display name** for each of the flowsheets **(Spirometry Assessment, COPD Symptom Assessment, and GOLD Recommendation Staging)**

   - Select Flowsheet Group in the Row Type field

   - In the Group form, enter the previously created rows

     – **Spirometry Assessment:**
       FEV1 (%PRED)
       Post bronchodilator (FEV/FVC)
       COPD exacerbations in last year
       Eosinophil count

     – **COPD Assessment (CAT Score):**
       Cough assessment
       Phlegm assessment
       Chest tightness
       Walking on an incline
       Home activities
       Confident leaving the home
       Sleeping soundly
       Energy level
       Assessment score

     – **GOLD Recommendation Staging**
       GOLD grade
       Group

7. Create a **FLOWSHEET TEMPLATE** to hold the flowsheet rows and flowsheet groups
   - Enter a unique Display name for the flowsheet template; for example: COPD Flowsheet

   - Enter the flowsheet group (created in step 6 above) and rows in the Group/Row field

8. Release the new flowsheet in Clinical Administration by clicking the **Flowsheets → Flowsheet Utilities → Flowsheet Releaser**

Epic® is a registered trademark of Epic Systems Corporation.

Boehringer Ingelheim