# Creating Pursuit Lists and Alerts for Patients With Comorbid Type 2 Diabetes Mellitus and Established Cardiovascular (CV) Disease

Boehringer Ingelheim

Lilly

According to the National Institutes of Health, **2 out of 3 adults** with type 2 diabetes will die from a **CV event**.

## CAN YOU IDENTIFY THESE PATIENTS IN YOUR SYSTEM?

National Institute of Diabetes and Digestive and Kidney Diseases, US Department of Health and Human Services. Bethesda, MD: National Institutes of Health; 2008.

In an effort to provide population management solutions for patients with established CV disease and comorbid type 2 diabetes, a Pursuit List and a disease-specific alert can be powerful tools. This brochure details the steps required to create a Pursuit List and an alert for patients with established CV disease and comorbid type 2 diabetes in Epic, Cerner, Allscripts, and GE Centricity.

### Instructions

- These instructions are created specifically for patients with type 2 diabetes in Epic, Cerner, Allscripts, and GE Centricity and will not work for other conditions, treatments, therapeutic areas, or on other electronic health record (EHR) systems.

- While the creation of Pursuit Lists and alerts can usually be accomplished in minimal time, it is recommended that the resulting list of patients and alerts be incorporated in the organization's clinical workflow and business and clinical practices.

### 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 set-up (customization) for each individual EHR system vary. Boehringer Ingelheim shall not be responsible for revising the implementation instructions it provides to any customer in the event that 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.

Epic provides several options to create a Pursuit List. *SlicerDicer* could be considered a self-service solution to run the query to find patients with established CV disease and comorbid type 2 diabetes.

## Pursuit List
### Create the Patient Population
1. Open *SlicerDicer* and **click New**.
2. **Select the patient cohort** of interest by clicking the drop-down icon.
3. For further refinement, **use the settings** icon to narrow the patient cohort.

### Criteria Selection
1. **Click Add Criteria**.
2. **Click the All tab** to see all available criteria if the diagnoses are not available in the favorites selection.
3. **Select Diagnoses**.
   - Type 2 diabetes [ICD-10 group E11]
   - CV disease
     - Myocardial infarction [ICD-10 groups I21, I22]
     - Single and/or multivessel coronary artery disease [ICD-10 group I25]
     - Unstable angina [ICD-10 group I20.0]
     - Ischemic or hemorrhagic stroke [ICD-10 groups I63.9 and I61.9]
     - Heart failure [ICD-10 group I50]
     - Peripheral artery disease [ICD-10 group I73.9]
4. **Select Include** and **click OK**.
5. **Add additional criteria** to further refine the query.

### Finalize and Outreach Options
1. Finalize the Pursuit List to show a total count of patients meeting the inclusion criteria.
2. Pursuit List reports can be exported to RWB using a customized RWB template or leveraging the 82101 template.

## Alert
One of Epic's clinical decision support tools, the *Best Practice Advisory (BPA)*, may be created or customized to align with the health system's clinical preferences and workflow. A *BPA* creates a reminder for clinical staff and displays suggested follow-up recommendation(s) to the end user.

1. **Create the base, criteria, and diagnoses grouper** records to build the *BPA*.
2. **Select a unique name**, for example, type 2 diabetes and established CV disease.
3. The display name further clarifies the objective of the *BPA*, for example: This patient has comorbid type 2 diabetes and established CV disease. Please consider appropriate treatment given the patient's risk profile.
4. The diagnoses groupers can be created with the ICD-10. To avoid duplication, verify if none are available. Given the prevalence of type 2 diabetes and CV disease, existing grouper records may be available because they may be used for other *BPA* records.
5. If required, **leverage the following ICD-10 codes**:
   - Type 2 diabetes [ICD-10 group E11]
   - CV disease
     - Myocardial infarction [ICD-10 groups I21, I22]
     - Single and/or multivessel coronary artery disease [ICD-10 group I25]
     - Unstable angina [ICD-10 group I20.0]
     - Ischemic or hemorrhagic stroke [ICD-10 groups I63.9 and I61.9]
     - Heart failure [ICD-10 group I50]
     - Peripheral artery disease [ICD-10 group I73.9]
6. **Complete the criteria and base records** linking the diagnoses groupers.
7. **Create the desired criteria and restrictions** to apply (for example, age restrictions, selection, etc).
8. **Create a Follow-Up Action**, for example, a link to a SmartSet of choice with appropriate treatment selection or alternative medication and/or other action item.
9. **Release the record** when satisfied to allow testing.
10. Once satisfactory testing has been completed, release for broader use.

There are a few options available to create the patient Pursuit List in Cerner. One of the options is to create a dynamic Worklist as it is a popular and user-friendly choice not requiring administrative privileges.

## Pursuit List
1. **Select Create Worklist from the Action List** menu.
2. S**elect a unique name** to define the Pursuit List. For example, patients with type 2 diabetes and established CV disease.
3. **Select the groups, providers, domains,** and **locations** to include in the query.
4. **Select the desired types** of relationships.
5. Click Next.

### Criteria Selection
1. **Select the desired population criteria** (such as age restrictions).
2. **Select the Conditions tab** and Select Diabetes, Ischemic Heart Disease, Stroke, Heart Failure, and other conditions suggesting established CV disease. Select AND to identify comorbid conditions.
3. **Click Next** to get to the summary view.

### Finalize and Outreach Options
1. Finish the Pursuit List. The names of patients will appear.
2. The list can be exported for additional outreach and/or other clinical actions.
3. If desired, additional columns may be added to add additional data elements.

## Alert
One of Cerner's clinical decision support solutions, *Discern Alert*, can be created and/or customized to align with the health system's clinical preferences and workflow. A Discern Alert creates a reminder for the clinical staff and displays suggested follow-up recommendation(s) to the end user.

1. **Open DiscernDev.exe** to start creating or customizing an alert for patients with established CV disease and comorbid type 2 diabetes mellitus (EKM).
2. **Complete the desired name** and other parameters and keep in testing status.
3. **Create the Evoke parameters** on open chart with a diagnosis rule. Select the desired criteria and restrictions and clinical event to apply.
4. **Add the Logic parameters** (diagnoses) and leverage and chain the following ICD-10 codes:
   - Type 2 diabetes [ICD-10 group E11]
   - CV disease:
     - Myocardial infarction [ICD-10 groups I21, I22]
     - Single/multivessel coronary artery disease [ICD-10 group I25]
     - Unstable angina [ICD-10 group I20.0]
     - Ischemic or hemorrhagic stroke [ICD-10 groups I63.9, I61.9]
     - Peripheral artery disease [ICD-10 group I73.9]
     - Heart failure [ICD-10 group I50]
5. **Add the Action parameters**. Select the alert type (for example, from the ALERT-FLEX template group) and add the logic section created in the previous step.
6. **Add "This patient has comorbid type 2 diabetes and established CV disease".** Please consider appropriate treatment given the patient's risk profile".
7. **Activate and release** the new alert after satisfactory testing has been completed.

There are 3 steps to complete the query to find patients with established CV disease and comorbid type 2 diabetes in Allscripts.

1. Select a new Pursuit List name.

2. Complete the search criteria for the Pursuit List.

3. Set up the Pursuit List to make it available for general use and outreach options.

## Pursuit List

1. **Open TWAdmin** and **select the Population Management Tab or Patient Query Tab** (depending on version of Allscripts).

2. **Click Manage Queries** and **Create a New Query** using a new name, respecting the organization's naming conventions.

3. **Click the plus (+) sign** to launch the Allscripts Clinical Rules Editor.

4. The Allscripts Clinical Rules Editor will use the new name to indicate the new query.

### Criteria Selection

1. **Select Demographic** and set the Age Range between the desired age range (for example, 18 and 100 years). **Select Include** and click OK.

2a. **Select Diagnoses** of type 2 diabetes and high-risk CV disease.

   • Type 2 diabetes categorized [ICD-10 group E11]

   • CV disease categorized

   - Myocardial infarction [ICD-10 groups I21, I22]

   - Single and/or multivessel coronary artery disease [ICD-10 group I25]

   - Unstable angina [ICD-10 group I20.0]

   - Ischemic or hemorrhagic stroke [ICD-10 groups I63.9 and I61.9]

   - Heart failure [ICD-10 group I50]

   - Peripheral artery disease [ICD-10 group I73.9]

2b. **Select Include** and click OK.

3. **Select the Desired Time Range** (for example, 2 years).

4. **Click Save and Return** to return to the query management workspace.

5. The **Query Result View** will indicate the Patient Count.

6. To generate the **Pursuit List**, **select Add a Profile** and then **Start the Pursuit List Export**.

### Outreach Options

1. Results can be viewed and exported to Excel if desired.

2. A Patient Action Set can now be created and associated with the Pursuit List.

3. Patients can be potentially reached via a letter, email, phone, and/or the patient portal.

4. Finally, Tasks and Reminders can be created for the Patient List if desired.

There are 3 steps to complete the patient Pursuit List.

1. Access the tool to complete the inquiry.

2. Complete the search criteria for the Pursuit List.

3. Release the Pursuit List to end users.

## Pursuit List

1. **Open GE Centricity** and c**lick on Charts tab**.

2. **Open the Quality and Reporting** area of the Chart module.

3. **Select the Inquiry tab** to launch a new Target List query.

### Criteria Selection

1. **Enter Patients** in the Find box and enter Diagnosis is type 2 diabetes [ICD-10 group E11], in the Where box. **Select Combine**.

2. **Add high-risk CV disease**.

   • Myocardial infarction [ICD-10 groups I21, I22]

   • Single and/or multivessel coronary artery disease [ICD-10 group I25]

   • Unstable angina [ICD-10 group I20.0]

   • Ischemic or hemorrhagic stroke [ICD-10 groups I63.9 and I61.9]

   • Heart failure [ICD-10 group I50]

   • Peripheral artery disease [ICD-10 group I73.9]

3. **Add additional ICD-10 diagnoses** as desired by the organization [I48.0, I48.1, I48.2, I48.91].

4. **Add Clinical Date** on or after (insert date 2 years ago, may be modified at the discretion of the customer).

5. **Click Manage Queries** and **Create a New Query** using a new, unused name according to the organization's naming conventions.

6. **Check** the **Active Patients Only box**.

**The proposed inclusion criteria for the patient Pursuit List may be modified by the customer. We encourage the clinical review committee to review the proposed data elements to assure alignment with the organization's goals.**

Boehringer
Ingelheim

Lilly