EPIC® ELECTRONIC HEALTH RECORD (EHR) SYSTEM

For Patients With Pulmonary Arterial Hypertension

Integrating **Patient Risk Assessment** Into Your EPIC® Electronic Health Record (EHR) System

Risk assessment is important in the management of pulmonary arterial hypertension (PAH). It aids in determining patient prognosis and monitoring response to treatment, and impacts treatment decisions. If widely integrated, risk assessment can help enhance consistency and timeliness of treatment, allowing for optimal care that can ultimately improve mortality while reducing morbidity in patients with PAH.[1,2]

The 2015 European Society of Cardiology (ESC)/European Respiratory Society (ERS) pulmonary hypertension guidelines strongly recommend a comprehensive, multidimensional risk assessment be conducted regularly in patients with PAH to guide treatment decisions.[3]

The 2015 ESC/ERS guidelines recommend performing appropriate follow-up risk assessments regularly every 3-6 months.[3]

Approaches to Risk Assessment

Different approaches are used to assess risk in patients with PAH, including the use of risk variables outlined according to 2015 ESC/ERS pulmonary hypertension guidelines; risk equations (ie, French PAH Registry and National Institutes of Health [NIH] equations); or use of risk score (ie, REVEAL [Registry to Evaluate Early and Long-term PAH Disease Management] registry risk score).[1,3-6] Risk scores and equations have been developed by assessing variables collected from PAH registries to analyze the course of disease based on current treatments.[1]

Why REVEAL 2.0 and/or REVEAL Lite 2?

REVEAL 2.0, which incorporates new variables and expanded thresholds from REVEAL 1.0, was developed to improve risk discrimination. To expedite risk assessment in the clinic and to address the barriers leading to suboptimal risk assessment, a simplified risk calculator, REVEAL Lite 2, was developed. REVEAL Lite 2 is a simplified version of the REVEAL 2.0 Risk Calculator that uses 6 exclusively noninvasive and modifiable variables for routine clinical implementation. It is intended to complement rather than replace REVEAL 2.0.[7]

Risk Assessment Concerns and Barriers

A retrospective chart analysis* of patients considered low risk by gestalt showed that[8]:

11%-36%
were categorized as **intermediate risk** using various formal assessment tools (n=63 and 47, respectively)[8]

4%-28%
were categorized as **high risk** using various formal assessment tools (n=46 and 47, respectively)[8]

In a separate survey,[†] **41% (50/121) of treatment decision-makers** reported not using a formal tool to assess risk in patients with PAH[9]

▸ **90% of these decision-makers** reported that they relied on gestalt[9]

*Medical charts of 153 patients with FC II PAH were retrospectively analyzed to compare the results of risk assessment by clinical gestalt to those of the COMPERA, modified noninvasive FPHR, and REVEAL 2.0 tools.[8]

†One hundred twenty-one PAH treatment decision-makers (physicians, nurse practitioners, and physician assistants) in the United States were surveyed between February 7 and March 10, 2019, on their utilization of formal risk assessment tools in PAH management in clinical practice settings. Respondents could report using only clinical gestalt for risk assessment or choose from a number of formal risk assessment tools, including the REVEAL risk calculator, the French Pulmonary Hypertension Registry (FPHR) risk scoring system, the European Society of Cardiology (ESC)/European Respiratory Society (ERS) Guidelines for risk assessment, Comparative Prospective Registry of Newly Initiated Therapies for Pulmonary Hypertension (COMPERA) risk stratification, the Swedish Pulmonary Arterial Hypertension Registry (SPAHR) risk assessment, or another tool (unspecified). Medical writing support was funded and sponsored by Actelion Pharmaceuticals Ltd. Of treatment decision-makers surveyed, 41% (50/121) reported not using formal PAH risk assessment tools.[9,10]

Risk Assessment Concerns and Barriers (continued)

In a survey of 121 PAH treatment decision-makers, **only 59% of decision-makers reported using risk assessment tools.[9]***

Most commonly cited barriers to increased use of risk tools by subgroups[9]						
Subgroup	Lack of technology/ EMR integration n (%)	Lack of administrative/ colleague support n (%)	Clarity on which tool to use n (%)	Time constraints n (%)	Complexity of tools and scoring systems n (%)	Lack of education/ awareness/training n (%)
Use risk tools (n=71)	24 (34)	11 (15)	15 (21)	30 (42)	9 (13)	4 (6)
DON'T USE risk tools (n=46)	17 (37)	13 (28)	12 (26)	21 (46)	8 (17)	7 (15)
The lack of technology/electronic medical record integration was cited as one of the most common barriers to increased use of risk tools.						

Decision-makers suggested electronic medical record integration, online risk calculators, pop-up reminders, and automated population of risk calculators with patient data as ways to increase the use of risk assessment tools.[9]

*One hundred twenty-one PAH treatment decision-makers (physicians, nurse practitioners, and physician assistants) in the United States were surveyed between February 7 and March 10, 2019, on their utilization of formal risk assessment tools in PAH management in clinical practice settings. Respondents could report using only clinical gestalt for risk assessment or choose from a number of formal risk assessment tools, including the REVEAL risk calculator, the French Pulmonary Hypertension Registry (FPHR) risk scoring system, the European Society of Cardiology (ESC)/European Respiratory Society (ERS) Guidelines for risk assessment, Comparative Prospective Registry of Newly Initiated Therapies for Pulmonary Hypertension (COMPERA) risk stratification, the Swedish Pulmonary Arterial Hypertension Registry (SPAHR) risk assessment, or another tool (unspecified). Medical writing support was funded and sponsored by Actelion Pharmaceuticals Ltd. Of treatment decision-makers surveyed, 41% (50/121) reported not using formal PAH risk assessment tools.[9,10]

PAH Risk Assessment Solution

▶ REVEAL 2.0, which incorporates new variables and expanded thresholds from REVEAL 1.0, was developed to improve risk discrimination

▶ To expedite risk assessment in the clinic and to address the barriers leading to suboptimal risk assessment, a simplified risk calculator, REVEAL Lite 2, was developed.[7] REVEAL Lite 2 is intended to complement rather than replace REVEAL 2.0

▶ This guide provides step-by-step instructions to assist in the development and implementation of the REVEAL 2.0 and REVEAL Lite 2 risk score calculators and clinical decision support (CDS) alert to your organization's EHR

References: 1. Raina A, Humbert M. Risk assessment in pulmonary arterial hypertension. *Eur Respir Rev*. 2016;25(142):390-398. **2.** Hoffman KK, Benza RL, Kanwar M. Risk stratification in PAH. American College of Cardiology. Published online January 31, 2019. Accessed January 11, 2021. https://www.acc.org/latest-in-cardiology/articles/2019/01/31/11/10/risk-stratification-in-pah. **3.** Galiè N, Humbert M, Vachiery JL, et al. 2015 ESC/ERS guidelines for the diagnosis and treatment of pulmonary hypertension. The Joint Task Force for the diagnosis and treatment of pulmonary hypertension of the European Society of Cardiology (ESC) and the European Respiratory Society (ERS): Endorsed by: Association for European Paediatric and Congenital Cardiology (AEPC), International Society for Heart and Lung Transplantation (ISHLT). *Eur Heart J*. 2016;37(1):67-119. **4.** Humbert M, Sitbon O, Yaici A, et al. Survival in incident and prevalent cohorts of patients with pulmonary arterial hypertension. *Eur Respir J*. 2010;36(3):549-555. **5.** D'Alonzo GE, Barst RJ, Ayres SM, et al. Survival in patients with primary pulmonary hypertension. Results from a national prospective registry. *Ann Intern Med*. 1991;115(5):343-349. **6.** Benza RL, Gomberg-Maitland M, Miller DP, et al. The REVEAL registry risk score calculator in patients newly diagnosed with pulmonary arterial hypertension. *Chest*. 2012;141(2):354-362. **7.** Benza RL, Kanwar MK, Raina A, et al. Development and validation of an abridged version of the REVEAL 2.0 risk score calculator, REVEAL Lite 2, for use in patients with pulmonary arterial hypertension *Chest*. 2021;159(1):337-346. **8.** Sahay S, Tonelli A, Selej M, et al. Risk assessment in patients with functional class II pulmonary arterial hypertension: comparison of physician gestalt with ESC/ERS and the REVEAL 2.0 risk score. *PLoS One*. 2020;15(11):e0241504. **9.** Wilson M, Keeley J, Kingman M, Wang J, Rogers F. Current clinical utilization of risk assessment tools in pulmonary arterial hypertension: a descriptive survey of facilitation strategies, patterns, and barriers to use in the United States. *Pulm Circ*. 2020;10(3);1-10. **10.** Supplement: Wilson M, Keeley J, Kingman M, Wang J, Rogers F. Current clinical utilization of risk assessment tools in pulmonary arterial hypertension: a descriptive survey of facilitation strategies, patterns, and barriers to use in the United States. *Pulm Circ*. 2020;10(3);1-10.

Important Considerations

- The instructions listed in this guide are for use on the Epic® platform. Although the instructions have been tested on this EHR system, they are not guaranteed to work for all available software versions. These materials have not been reviewed or endorsed by Epic®

- The user is solely responsible for the implementation, testing, and monitoring to ensure proper orientation in the EHR system. Janssen does not take responsibility to revise these instructions as the software or recommendations change

- Capabilities vary based on each individual EHR system. Please refer to the instructions provided for potential limitations related to your system

- **Minimum Required Version of Epic®:** This guide assumes that the organization is using the **Epic® 2019 software or later**

- **Build Complexity: Easy (from 2 to 4 hours per resource).** The time estimate includes all the build steps, configuration, and testing typically required prior to implementing new changes within a specific environment

- This build guide outlines how to build a PAH Risk Assessment based on REVEAL 2.0 and REVEAL Lite 2

- REVEAL Lite 2 is a simplified version of the REVEAL 2.0 Risk Calculator that uses 6 exclusively noninvasive and modifiable variables for routine clinical implementation. It is intended to complement rather than replace REVEAL 2.0

- This build guide is not intended to replace your health system's processes or protocols

- Note that some modifications to the build may be required to accommodate use in certain areas (eg, emergency department, outpatient clinics)

- In each clinical category or clinical sub-category of the build guide, your organization may choose to place additional orders to meet the needs of its internal protocols or guidelines

- Ultimately, it is the responsibility of the healthcare provider to select a treatment based on their independent medical judgment and the needs of each individual patient

Adding the REVEAL 2.0 Calculator to the EHR

The process outlined in this resource is variable, and not all steps will apply to every health system. Any steps or settings that are not part of a health system's standard process should be excluded or modified accordingly. Any questions should be directed to the appropriate service provider. The practice is solely responsible for implementing, testing, monitoring, and ongoing operation of any EHR tools.

The steps describe how to access and/or create the REVEAL 2.0 Risk Score Calculator. The instructions are not intended to replace your health system's processes or protocols, and are not intended to be an endorsement or recommendation of Epic® or REVEAL 2.0. Any decision related to patient care should be made by their healthcare provider(s).

Depending on documentation practices, some of the data used in the risk calculator may be available in existing flowsheet rows and can be added as a new row to help inform the clinician (provided the data has been entered in an existing flowsheet). If the information within the risk calculator has been documented elsewhere in a flowsheet row, consider adding the flowsheet row to review the most recent value and minimize manual data retrieval (the existing flowsheet row can be added below the pertinent REVEAL 2.0 section, and the data will be displayed in the Last Filed column). Based on the result of the last value, select the **Custom List** selection that best matches the result to calculate the risk score in the REVEAL 2.0 question.

To avoid duplicate flowsheet rows, provide unique names for each flowsheet row. Some data elements (vital signs information) are contained in Epic®-released flowsheet rows and can be added to provide the most current values.

Note: This is mock patient data.

About the REVEAL 2.0 Calculator

The risk calculator includes two key sections and a scoring mechanism as follows:

Section 1: The questions

Each question is individually scored.

Section 2: The results

All individual results are added up to calculate the REVEAL 2.0 Risk Score.

The interpretation of the risk score results: **Low risk:** 0 to 6 | **Intermediate risk:** 7 to 8 | **High risk:** ≥9

Many abbreviations are used in the REVEAL 2.0 Risk Calculator. Below is a summary of the abbreviations:

6MWT: 6-minute walk test

BNP: brain natriuretic peptide

CTD: connective tissue disease

DLco: diffusing capacity of the lungs for carbon monoxide

eGFR: estimated glomerular filtration rate

FC: functional class

mRAP: mean right atrial pressure

NT-proBNP: N-terminal pro-brain natriuretic peptide

NYHA: New York Heart Association

PAH: pulmonary arterial hypertension

PFT: pulmonary function test

PoPH: portopulmonary hypertension

PVR: pulmonary vascular resistance

REVEAL: Registry to Evaluate Early and Long-Term Pulmonary Arterial Hypertension Disease Management

WHO: World Health Organization

Build Guide

Administrative rights are required to create the flowsheet.

1 The flowsheet build tool can be accessed by clicking the **Epic Icon > Tools > Patient Care Tools > Documentation Flowsheet Builder**

2 Create a **Flowsheet Template**. For the **Display Name**, enter *"REVEAL 2.0 PAH Risk Score Calculator"*

3 Create 2 **Documentation Flowsheet Groups** in the **Documentation Flowsheet Builder**

Flowsheet Group 1:

a **In the Group/Row field:**
  1. Enter a record name or ID in the **Create Group/Row** field

b **In the General form:**
  1. Enter the **Display Name** *"REVEAL 2.0 PAH Risk Score Calculator Questions"*
  2. Select **Flowsheet Group** in the **Row type** field

Flowsheet Group 2:

c **In the Group/Row field:**
  1. Enter a record name or ID in the **Create Group/Row** field

d **In the General form:**
  1. Enter the Display Name *"REVEAL 2.0 PAH Risk Score Calculator Score"*
  2. Select **Flowsheet Group** in the **Row type** field

Build Guide (continued)

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Administrative rights are required to create the flowsheet.

4 Create 11 **Flowsheet Rows** (to add to appropriate **Flowsheet Group**)

Row Display Name	Row Type	Value Type	Custom List	Value (Abbreviation)
Etiology	Data	Custom List	CTD-PAH	1
			PoPH	3
			Heritable PAH	2
Demographics	Data	Custom List	Males >60 years of age	2
Comorbidities	Data	Custom List	eGFR <60 mL/min/1.73 m^2, or renal insufficiency defined by clinical judgment if eGFR is not available	1
NYHA or WHO FC	Data	Custom List	FC I	-1
			FC III	1
			FC IV	2
All-cause hospitalizations in last 6 months	Data	Custom List	Yes	1
Vital Signs	Data	Custom List	Systolic blood pressure <110 mm Hg	1
			Heart rate >96 beats/min	1
6MWT	Data	Custom List	≥440 m	-2
			320 m to <440 m	-1
			<165 m	1
BNP/NT-proBNP	Data	Custom List	BNP <50 pg/mL or NT-proBNP <300 pg/mL	-2
			BNP 200 pg/mL to <800 pg/mL	1
			BNP ≥800 pg/mL or NT-proBNP ≥1,100 pg/mL	2
Echocardiogram	Data	Custom List	Pericardial effusion	1
PFT	Data	Custom List	% predicted DL$_{CO}$ <40%	1
RHC	Data	Custom List	mRAP ≥20 mm Hg within 1 year	1
			PVR <5 Wood units	-1

Complete the last **Flowsheet Row** for the **REVEAL 2.0 Risk Score**

a In the **General form** view, enter the Display Name *"REVEAL 2.0 PAH Risk Score"*

b This row is a **Custom Formula** type

c Enter **Custom Formula** in the **Row type** field

d In the **Formula** form, enter: *"Custom Formula"* add all the previously created rows from the table above [ID Row 1] + [ID Row 2] + ... + [ID Row 11] + 6

e In the **Row information** field, enter: *"REVEAL 2.0 PAH Risk Score"*

> **Low risk:** *"0 to 6"*
> **Intermediate risk:** *"7 to 8"*
> **High risk:** *"≥9"*

Note: The **Custom Formula** includes adding 6 to calculate the risk score.

Build Guide (continued)

Administrative rights are required to create the flowsheet.

5   Add the **Flowsheet Rows** from step 4 to the **Flowsheet Groups** from step 3

6   Add the **Flowsheet Groups** from step 3 to the **Flowsheet Template** from step 2

7   To add an existing **Flowsheet Row** below the REVEAL 2.0 question, access the **Documentation Flowsheet Builder**. Select **Open Template** and add any desired existing **Flowsheet Rows**; these can be Epic®-released flowsheets (for example, *"Blood Pressure [5]"* or *locally created flowsheet rows*). In the **REVEAL 2.0 Flowsheet Template**, set up the desired structure and order of the questions

The new **Flowsheet Rows** are not to be included in the **REVEAL 2.0 Risk Score Flowsheet Row**; they are for information purposes only

8   Once satisfactory testing has been completed, release for broader use
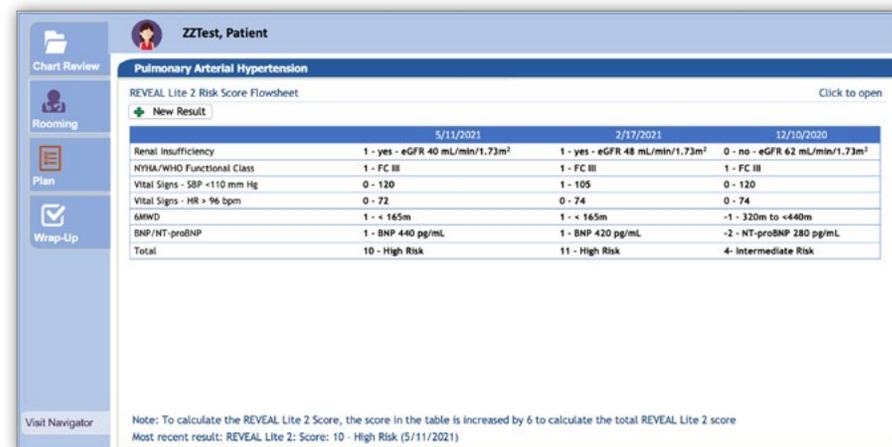
Adding the REVEAL Lite 2 Calculator to the EHR

The process outlined in this resource is variable, and not all steps will apply to every health system. Any steps or settings that are not part of a health system's standard process should be excluded or modified accordingly. Any questions should be directed to the appropriate service provider. The practice is solely responsible for implementing, testing, monitoring, and ongoing operation of any EHR tools.

The steps describe how to access and/or create the REVEAL Lite 2 Risk Score Calculator. The instructions are not intended to replace your health system's processes or protocols, and are not intended to be an endorsement or recommendation of Epic® or REVEAL Lite 2. Any decision related to patient care should be made by their healthcare provider(s).

Depending on documentation practices, some of the data used in the risk calculator may be available in existing flowsheet rows and can be added as a new row to help inform the clinician (provided the data has been entered in an existing flowsheet). If the information within the risk calculator has been documented elsewhere in a flowsheet row, consider adding the flowsheet row to review the most recent value and minimize manual data retrieval (the existing flowsheet row can be added below the pertinent REVEAL Lite 2 section, and the data will be displayed in the Last Filed column). Based on the result of the last value, select the **Custom List** selection that best matches the result to calculate the risk score in the REVEAL Lite 2 question.
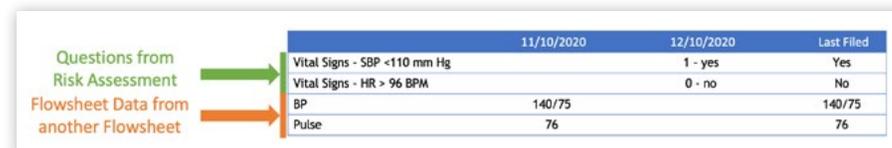
To avoid duplicate flowsheet rows, provide unique names for each flowsheet row. Some data elements (vital signs information) are contained in Epic®-released flowsheet rows and can be added to provide the most current values.

Note: This is mock patient data.

About the REVEAL Lite 2 Calculator

The risk calculator includes two key sections and a scoring mechanism as follows:

Section 1: The questions

Each question is individually scored.

Section 2: The results

All individual results are added up to calculate the REVEAL Lite 2 Risk Score.

The interpretation of the risk score results: | **Low risk:** 1 to 5 | **Intermediate risk:** 6 to 7 | **High risk:** ≥8

Many abbreviations are used in the REVEAL Lite 2 Risk Calculator. Below is a summary of the abbreviations:

6MWT: 6-minute walk test

BNP: brain natriuretic peptide

CTD: connective tissue disease

DLco: diffusing capacity of the lungs for carbon monoxide

eGFR: estimated glomerular filtration rate

FC: functional class

mRAP: mean right atrial pressure

NT-proBNP: N-terminal pro-brain natriuretic peptide

NYHA: New York Heart Association

PAH: pulmonary arterial hypertension

PFT: pulmonary function test

PoPH: portopulmonary hypertension

PVR: pulmonary vascular resistance

REVEAL: Registry to Evaluate Early and Long-Term Pulmonary Arterial Hypertension Disease Management

WHO: World Health Organization

Build Guide

Administrative rights are required to create the flowsheet.

1 The flowsheet build tool can be accessed by clicking the **Epic Icon > Tools > Patient Care Tools > Documentation Flowsheet Builder**

2 Create a **Flowsheet Template**. For the **Display Name,** enter *"REVEAL Lite 2 PAH Risk Score Calculator"*

3 Create 2 **Documentation Flowsheet Groups** in the **Documentation Flowsheet Builder**

Flowsheet Group 1

a In the **Group/Row** field
1. Enter a record name or ID in the **Create Group/Row** field

b In the **General** form
1. Enter the **Display Name** *"REVEAL Lite 2 PAH Risk Score Calculator Questions"*
2. Select **Flowsheet Group** in the **Row type** field

Flowsheet Group 2

c In the **Group/Row** field
1. Enter a record name or ID in the **Create Group/Row** field

d In the **General** form
1. Enter the Display Name *"REVEAL Lite 2 PAH Risk Score Calculator Score"*
2. Select **Flowsheet Group** in the **Row type** field

Build Guide (continued)

Administrative rights are required to create the flowsheet.

4 Create 5 Flowsheet Rows (to add to appropriate Flowsheet Group)

Row Display Name	Row Type	Value Type	Custom List	Value (Abbreviation)
Comorbidities	Data	Custom List	eGFR <60 mL/min/1.73 m², or renal insufficiency defined by clinical judgment if eGFR is not available	1
NYHA or WHO FC	Data	Custom List	FC I	-1
			FC III	1
			FC IV	2
Vital Signs	Data	Custom List	Systolic blood pressure <110 mm Hg	1
			Heart rate >96 beats/min	1
6MWT	Data	Custom List	≥440 m	-2
			320 m to <440 m	-1
			<165 m	1
BNP/NT-proBNP	Data	Custom List	BNP <50 pg/mL or NT-proBNP <300 pg/mL	-2
			BNP 200 pg/mL to <800 pg/mL	1
			BNP ≥ 800 pg/mL or NT-proBNP ≥1,100 pg/mL	2

Complete the last **Flowsheet Row** for the **REVEAL Lite 2 Risk Score**

a In the **General form** view, enter the Display Name *"REVEAL Lite 2 PAH Risk Score"*

b This row is a **Custom Formula** type

c Enter **Custom Formula** in the **Row type** field

d In the **Formula** form, enter *"Custom Formula"* add all the previously created rows from the table above [ID Row 1] + [ID Row 2] + ... + [ID Row 6] + 6

e In the **Row information** field, enter *"REVEAL Lite 2 Risk Score"*

> **Low risk:** *"1 to 5"*
> **Intermediate risk:** *"6 to 7"*
> **High risk:** *"≥8"*

Note: The **Custom Formula** includes adding 6 to calculate the risk score.

Build Guide (continued)

Administrative rights are required to create the flowsheet.

5   Add the **Flowsheet Rows** from step 4 to the **Flowsheet Groups** from step 3

6   Add the **Flowsheet Groups** from step 3 to the **Flowsheet Template** from step 2

7   To add an existing **Flowsheet Row** below the REVEAL Lite 2 question, access the **Documentation Flowsheet Builder**. Select **Open Template** and add any desired existing **Flowsheet Rows**; these can be Epic®-released flowsheets (for example, *"Blood Pressure [5]"* or *locally created flowsheet rows*). In the **REVEAL Lite 2 Flowsheet Template**, set up the desired structure and order of the questions

The new **Flowsheet Rows** are not to be included in the **REVEAL Lite 2 Risk Score Flowsheet Row**; they are for information purposes only

8   Once satisfactory testing has been completed, release for broader use

Creating a Clinical Decision Support (CDS) Alert in the EHR

The steps describe how to access and/or create a CDS Alert in the EHR

The process outlined in this resource is variable, and not all steps will apply to every health system

Any steps or settings that are not part of a health system's standard process should be excluded or modified accordingly

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The instructions are not intended to replace your health system's processes or protocols, and are not intended to be an endorsement or recommendation of Epic® or REVEAL

Any decision related to patient care should be made by their healthcare provider(s)

About the CDS Alert

An EHR Alert creates a reminder for the clinical staff and displays suggested follow-up recommendations to the end user. The CDS Alert is triggered by the patient's age and diagnosis suggesting PAH.

Suggested CDS Alert criteria

ICD-10 codes for PAH:
I27.0 Primary pulmonary hypertension
I27.20 Pulmonary hypertension, unspecified
I27.21 Secondary pulmonary arterial hypertension

Age: 18 years and older

Build Guide

Epic®'s CDS solution, a 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 the clinical staff and
displays suggested follow-up recommendations to the end user.

Step 1 – Create a Diagnosis Grouper record for Pulmonary Arterial Hypertension (PAH)

1. Access the Grouper Record Editor in **Tools > Management Console**
2. Select the **Diagnosis (EDG)** master file and select the **ICD-10 code** set
3. Add all ICD-codes for PAH (I27.0, I27.20, and I27.21) to the Diagnosis Grouper and click **Save**

Step 2 – Create the BPA Criteria Record for PAH

1. Navigate to the **Management Console** and click on **Best Practice Advisory** in the **Decision Support** menu
2. Create a **Criteria** record and enter a unique name: "*C PAH Diagnosis*"
3. On the **General Information** form, set the **Age Restrictions** from 18 to 150
4. Select **Diagnosis Groupers** from the **Criteria** menu
5. Select the Diagnosis Grouper record created in step 1 for PAH and click **Accept**

Step 3 – Create the BPA Base Record

1. Navigate to the **Management Console** and click on **Best Practice Advisory** in the **Decision Support** menu
2. Create a **Base** record and enter a unique name: "*B REVEAL 2.0*" or "*B REVEAL Lite 2*"
3. Select **Linked Criteria** from the menu and then select the previously created criteria records:
   Line 1: C PAH Diagnosis
4. Enter "*The REVEAL 2.0/REVEAL Lite 2 Risk Calculator is available to help predict mortality risk for PAH patients*"
5. Click on the **Restrictions** tab to narrow the target audience. In the **Encounter Limitation Inclusion** grid, set the **Specialty**, **Department,** and **Provider Type** (for example, **Pulmonology, Cardiology, Primary Care, Internal Medicine, Family Medicine,** etc.) and set the desired role types (for example, **clinician, nurse practitioner, physician assistant,** etc.). The selections may vary depending on how the organization was set up in the EHR. The clinical champion may add any other restrictions that may apply (lockout times for pop-up advisories, soft-stop versus hard-stop, triggering actions and the level of alert, frequency of reminders, and acknowledgment reasons)
6. Select **Follow-Up Orders** from the menu. Then select the **REVEAL 2.0 Flowsheet** or the **REVEAL Lite 2 Flowsheet** record
7. Release the record when satisfied to allow for testing
8. Once satisfactory testing has been completed, release for broader use

Note: An optional step for receiving an In Basket Message can be found on the next page.

Build Guide

Optional: The alert can be set up to create a notification to the clinician's inbox (using an In Basket Message). To set up the In Basket BPA Record, refer to steps 1 and 2 on page 19 and add in a new step 3 following the instructions below.

1. Navigate to the **Management Console** and click on **Best Practice Advisory** in the **Decision Support** menu
2. Create a **Base** record and enter a unique name: *"B REVEAL 2.0"* or *"B REVEAL Lite 2"*
3. Confirm the alert runs in the background and check the radio button **Do not display to end user**
4. Select **Linked Criteria** from the menu and then select the previously created criteria records:
   › Line 1: **C PAH Diagnosis**
5. Click on the **Restrictions** tab to narrow the target audience. In the **Encounter Limitation Inclusion** grid, set the **Specialty**, **Department**, and **Provider Type** (for example **Pulmonology, Cardiology, Primary Care, Internal Medicine, Family Medicine,** etc.) and set the desired role types (for example **clinician, nurse practitioner, physician assistant,** etc.). The selections may vary depending on how the organization was set up in the EHR. The clinical champion may add any other settings that may apply (priority, recipient extensions, and recipients, classes, and pools)
6. Select **In Basket Follow-Up** from the menu and set the criteria:
   › Set the **Frequency** as desired
   › In the **Subject** line, enter *"The REVEAL 2.0/REVEAL Lite 2 Risk Calculator is available to help predict mortality risk for PAH patients"*
   › Set the **Message Type** to **550 – Best Practice**
   › Set the **Message Priority** as desired
   › Enter the recipient(s) in the **Recipients** fields
7. Release the record when satisfied to allow for testing
8. Once satisfactory testing has been completed, release for broader use

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