Medsphere CareVue

High-Risk Medication Co-Signature

Configuration and User Notes

Medsphere®

Table of Contents

Table of Figures

Introduction

The new High-Risk Medication Co-Signature functionality alerts the nurse of high risk/high alert medications that require/recommend a witness on the Virtual Due List (VDL) and Cover Sheet; the functionality also prompts for witness credentials in the administration workflow.

The High-Risk Medication Co-Signature icon (⚠️) appears in the **Wit** column on the **Cover Sheet**, **Unit Dose, IVP/IVPB** and **IV** tabs to alert the user of high risk/high alert medication administration and require/recommend a second signature from licensed personnel. When the user hovers the cursor over the icon, the message **High Risk/High Alert – Witness Required/Recommended** displays.

The witness provides an independent double check for a high risk/high alert medication in BCMA. The BCMA application automatically prompts for witness credentials before the medication can be administered and allows for to an optional comment in the patient record. The witness name, the date/time witnessed, and optional witness comments are stored in the medication log.

Highlights

- High risk/high alert drugs associated with an orderable that has been flagged as recommending/requiring a witness are now easily identified on the BCMA VDL and **Cover Sheet**.
- A new **Wit** column added to the **Cover Sheet** tab and all medication tabs on the VDL now display the high risk/high alert icon when a witness is recommended/required for the administration.
- A new BCMA **Witness Sign-On** dialog for administrations recommending/requiring a witness automatically captures witness credentials and optional comments from the administration workflow. If a user was previously prompted for quantity and units, the dialog displays the quantity and units to be administered.
- Witness information is stored in the medication log, displayed on the **Medication Log** report, and prints additional details in the audit log.
- High risk/high alert medications with a **Required to Witness** flag cannot be documented as given/infusing without a witness.
- High risk/high alert medications with a **Recommended to Witness** flag can be documented as given/infusing without a witness.

User Restrictions for Co-Signing

The following information details user restrictions for co-signing high-risk medications.

- Users with the **PSB NO WITNESS**, **PSB READ ONLY** or **PSB STUDENT** security key cannot witness the administration of a high-risk medication.
- Users with the **PSB INSTRUCTOR** key that are currently logged on with a student holding the **PSB STUDENT** key cannot witness the administration of a high-risk medication.
- Users with the **PSB INSTRUCTOR** key may witness so long as they are not a primary instructor currently signed on with and monitoring a user with the **PSB STUDENT** key.
- The administering nurse cannot also act as witness for a high-risk medication administration; the system prevents administration if access and verify codes for both nurse and witness are the same.

Defining High Risk/High Alert Medications

Local site policy dictates which high risk/high alert medications receive a **Recommended to Witness** versus **Required to Witness** flag in BCMA.

Your nursing and pharmacy staff will work together to assign a witness HR order code in their local **PHARMACY ORDERABLE ITEM** (#50.7) file, which controls whether a witness is required or recommended for a particular medication.

The four qualifying codes are as follows:

Code	Witness Required/Recommended
Code 0/Null:	Not a high risk/high alert drug (default)
Code 1:	High risk/high alert – Not required to witness in BCMA (Pharmacy use only)
Code 2:	**High risk/high alert – Recommended to witness in BCMA**
Code 3:	**High risk/high alert – Required to witness in BCMA**

Note: All drugs associated with an orderable flagged with a Code 2 or Code 3 display the high risk/high alert icon and hover text in BCMA; they also display the witness sign-on prompt in the administration workflow.

```
SCHEDULE TYPE:
SCHEDULE:
HIGH RISK/HIGH ALERT: ?
     Choose High Risk/Alert level for this Orderable Item.
     Choose from:
        0        NOT HIGH RISK/ALERT
        1        HIGH RISK/ALERT-NO WITNESS REQUIRED IN BCMA
        2        RECOMMEND WITNESS IN BCMA-HIGH RISK/ALERT
        3        WITNESS REQUIRED IN BCMA-HIGH RISK/ALERT
HIGH RISK/HIGH ALERT:
```

Figure 1: Pharmacy orderable file

New Icon Added to Icon Legend

The High-Risk Medication Co-Signature icon (⚠) appears on the VDL to indicate that medications require or recommend a witness before administration.
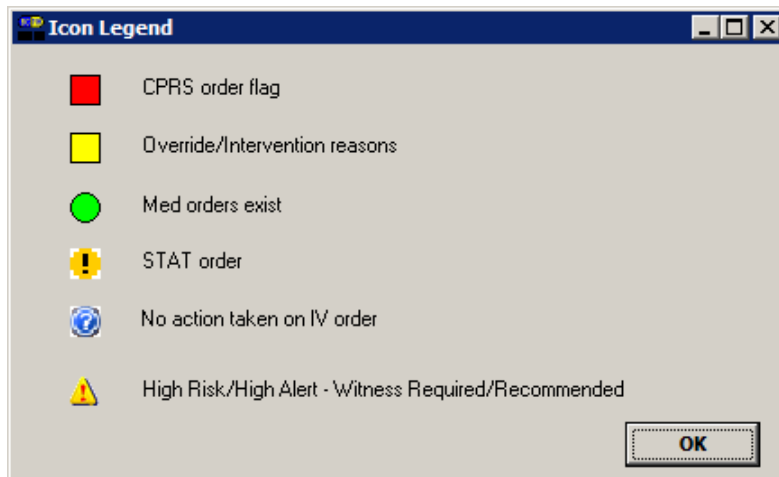

Figure 2: Icon Legend

"Wit" Column Added to the VDL

A new **Wit** column for witness has been added to the left of the active medication in the VDL. If the alert

icon (⚠️) appears in the **Wit** column on the **Cover Sheet**, **Unit Dose**, **IVP/IVPB** and **IV** tabs, it alerts the user to a high risk/high alert medication that either requires or recommends a witness during administration.

Users can sort icons in the **Wit** column by clicking on the column heading or by selecting the **Due List** menu > **Sort by** > **Witness**.

The system automatically prompts for witness sign-on, determines if the witness is authorized and stores the information in the patient record so that the process is integrated into administration workflow.

Figure 3: Wit column on the VDL

Figure 4: Hover Text on the cover sheet

Figure 5: Hover text on the VDL

BCMA Witness Sign-on Dialog

The **BCMA Witness Sign-On** dialog displays last in the administration workflow, just before the give/infuse action.

The following administration information is displayed at the top of the dialog:

- Medication (Orderable Item)
- Scheduled Admin Time
- Schedule Type

- Dosage/Infusion Rate
- Units Per Dose
- Last Action, if applicable
- Bag ID or N/A
- Quantity and Units Documented, if applicable
- Medication Route
- Special Instructions/Other Print Info
- Dispense Drugs/Medications/Solutions
- If previously prompted for quantity and units, the **BCMA Witness Sign-on** dialog displays the quantity and units to be administered.

The following information displays at the bottom of the **Witness Sign-On** dialog in a group entitled Witness Sign-On:

- Witness Access Code field
- Witness Verify Code field
- If a witness is **recommended,** users see this message: This drug is a high risk/high alert medication that *recommends* a second signature from licensed personnel for administration.
- If a witness is **required**, users see this message: This drug is a high risk/high alert medication that *requires* a second signature from licensed personnel for administration.
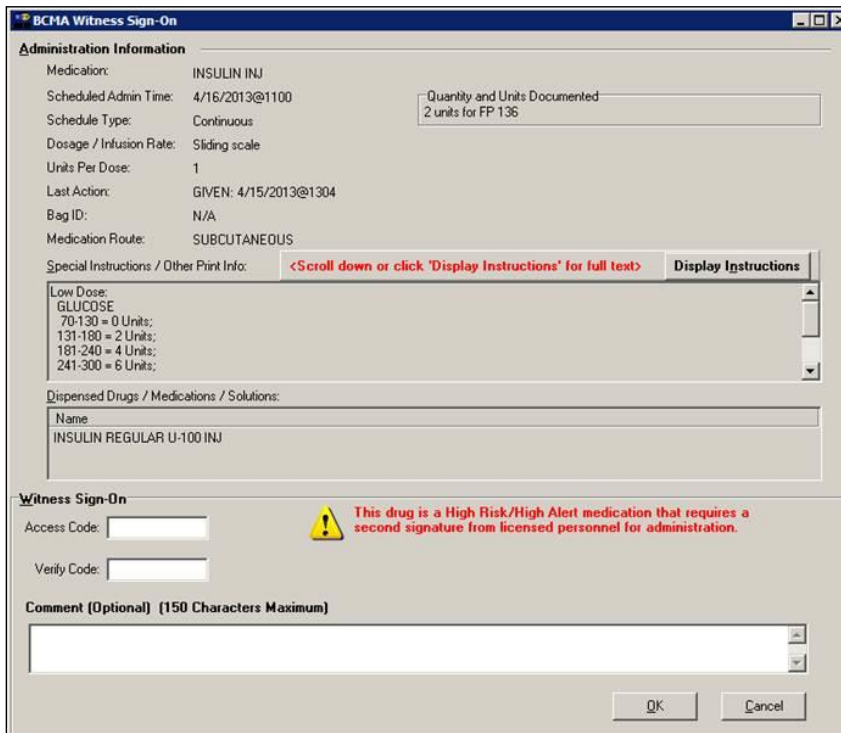
Figure 6: BCMA Witness Sign-On dialog

High Risk/High Alert Drugs; Witness Required

When a medication is flagged with a Code 3 (witness required), the BCMA **Witness Sign-On** dialog displays last in the administration workflow. The administering nurse must designate a witness to perform

the independent double check according to site policy for high risk/high alert administrations.

Witness steps for BCMA Witness Sign-On dialog:

1. Review the administration information and enter access and verify codes.

2. Enter an optional comment of up to 150 characters and click OK.

3. Click OK to complete the administration or click Cancel to display the Order Administration Cancelled confirmation dialog; click OK to acknowledge cancellation and return to the VDL.

> **Note:** The prompt for changing the user verify code is not supported.

Figure 7: BCMA Witness Sign-On dialog: High risk/high alert admin, witness required

If witness sign-on credentials are valid:

- User is returned to the VDL.
- The administration is marked as given or infusing.

  Note: The **High Risk/High Alert Drug** code values for each medication/additive/solution are included in the order. The Witness IEN, Date/Time, Optional Comment and Witness HR Order Code (the highest value of all **High Risk/High Alert Drug** code values in the order), are predetermined and stored. The **Witnessed?** flag is set to Yes, indicating the administration was witnessed.

If witness sign-on credentials are blank:

- BCMA displays the following message.

Figure 8: Message displayed when user tries to proceed with witness access and verify codes

- Click OK to clear the error and return to the **BCMA Witness Sign-On** dialog to retry. Administration will not continue until the witness enters valid access and verify codes.
- Click **C**ancel to display the **Order Administration Cancelled** dialog, then click OK to acknowledge the cancellation and to return to the VDL.

High Risk/High Alert Drugs with a Recommended Witness

When a medication is flagged with a Code 2 (witness recommended), the **BCMA Witness Sign-On** dialog displays last in the administration workflow. The administering nurse must designate a witness to perform the independent double check according to local site policy for high risk/high alert administrations.

Witness steps for BCMA Witness Sign-On dialog:

1. Review administration information and enter access and verify codes.

2. Enter an optional comment of up to 150 characters and click OK.

3. Click OK to complete administration or click Cancel to display the Order Administration Cancelled confirmation dialog; clicks OK to acknowledge cancellation and return to the VDL.
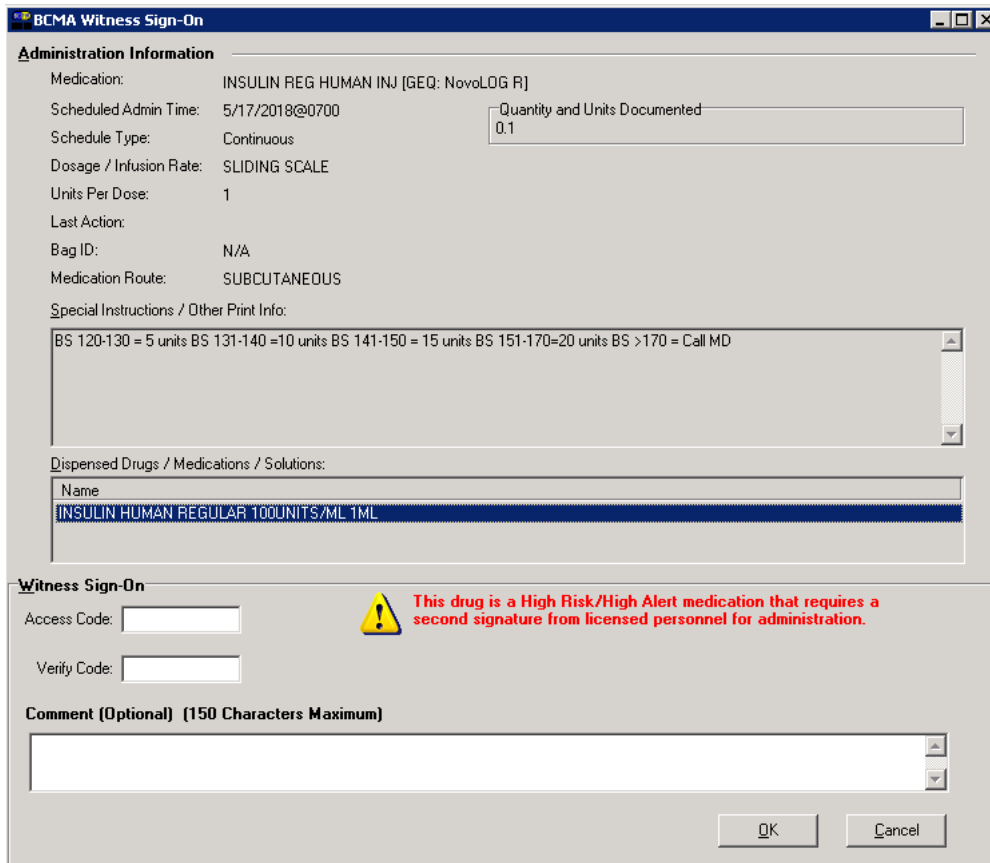
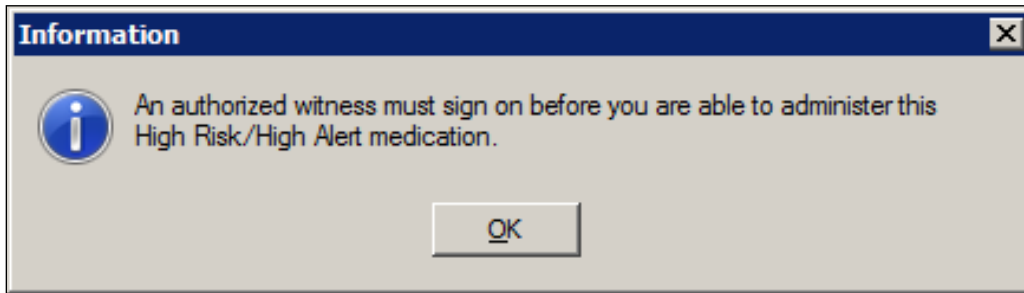*Figure 9: BCMA Witness Sign-On dialog: High risk/high alert admin w/ recommended witness*

If witness sign-on credentials are valid:

- User is returned to the VDL.
- The administration is marked as given or infusing.

Note: The **High Risk/High Alert Drug** code values for each medication/additive/solution are included in the order. The Witness IEN, Date/Time, Optional Comment and Witness HR Order Code (the highest value of all **High Risk/High Alert Drug** code values in the order), are predetermined and stored. The **Witnessed?** flag is set to Yes, indicating the administration was witnessed.

If witness sign-on credentials are invalid:

- An error message displays the reason the credentials were not validated. Click OK to clear the error and return to the **BCMA Witness Sign-On** dialog.

    Note: See the Error Messages for Witness Validation section below for all witness sign-on error messages.

- Click Cancel to display the **Order Administration Cancelled** confirmation dialog, then click OK to acknowledge the cancellation and to return to the VDL.

High Risk/High Alert Drugs; Witness Recommended but Not Provided

When a medication is flagged with a Code 2 (witness recommended), the **BCMA Witness Sign-On** dialog displays last in the administration workflow.

Witness steps for BCMA Witness Sign-On dialog:

1. Leave the access and verify codes blank and click OK. BCMA displays the following message.
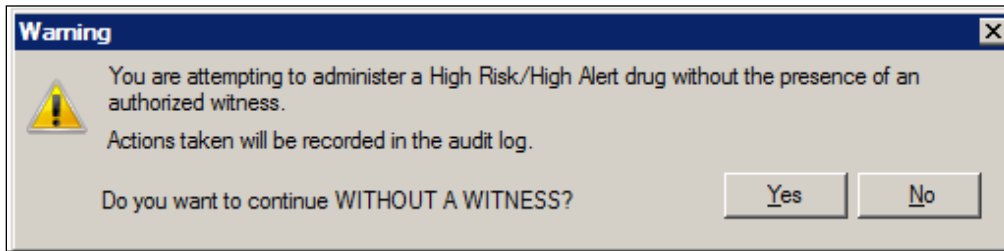
Figure 10: Warning message—attempting to administer a high-risk drug without a witness

2. Click No to return to the **BCMA Witness Sign-On** dialog and enter witness credentials.

3. Click Yes to return to the **BCMA Witness Sign-On** dialog and acknowledge the message. The **Access Code** and **Verify Code** fields are grayed out, and the **OK** button is disabled.
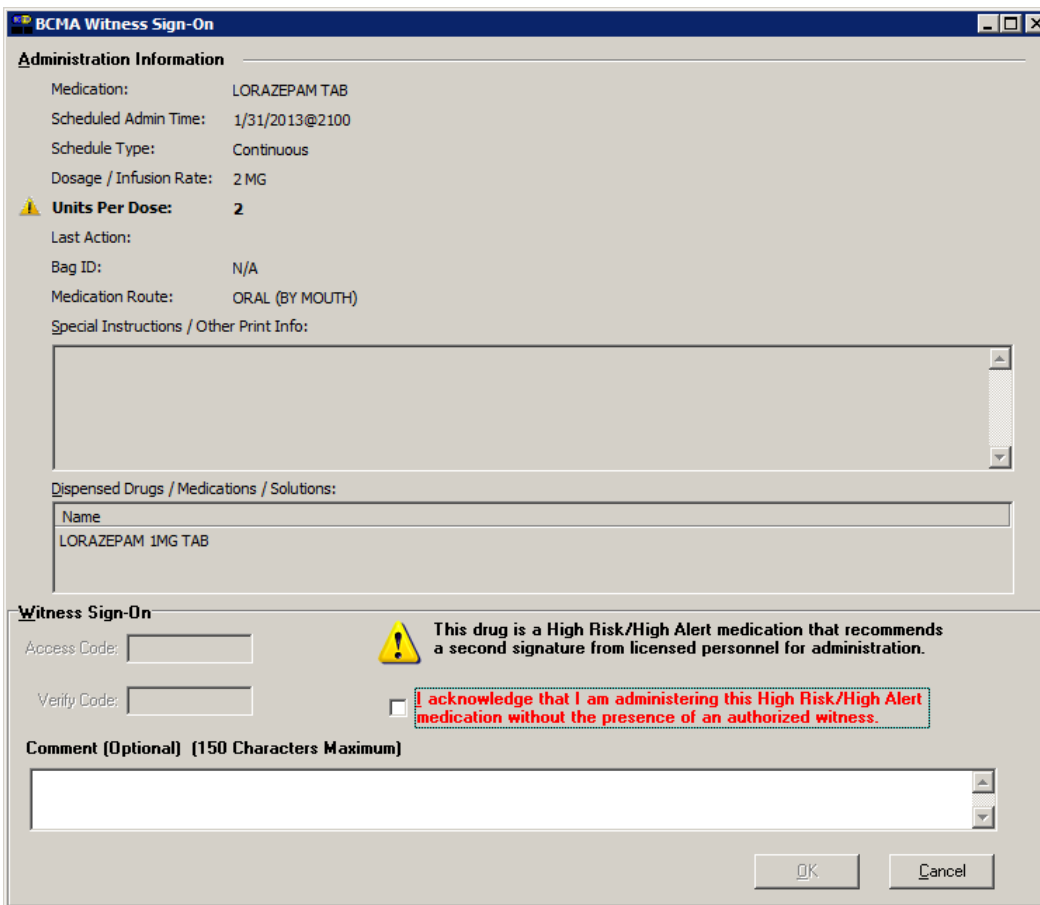
Figure 11: BCMA Witness Sign-On dialog: High risk/high alert medication w/o witness

4. Read the acknowledgement message--I acknowledge that I am administering this High Risk/High Alert medication without the presence of an authorized witness--and check the box. The OK button is enabled only after the acknowledgment checkbox is completed.

5. Enter an optional comment of up to 150 characters and click OK.

6. Select one of the following:

- Click OK to complete administration and return to the VDL. The administration is marked as given or infusing.
- Clicks Cancel to display the **Order Administration Cancelled** dialog; click OK to acknowledge the cancellation and to return to the VDL.
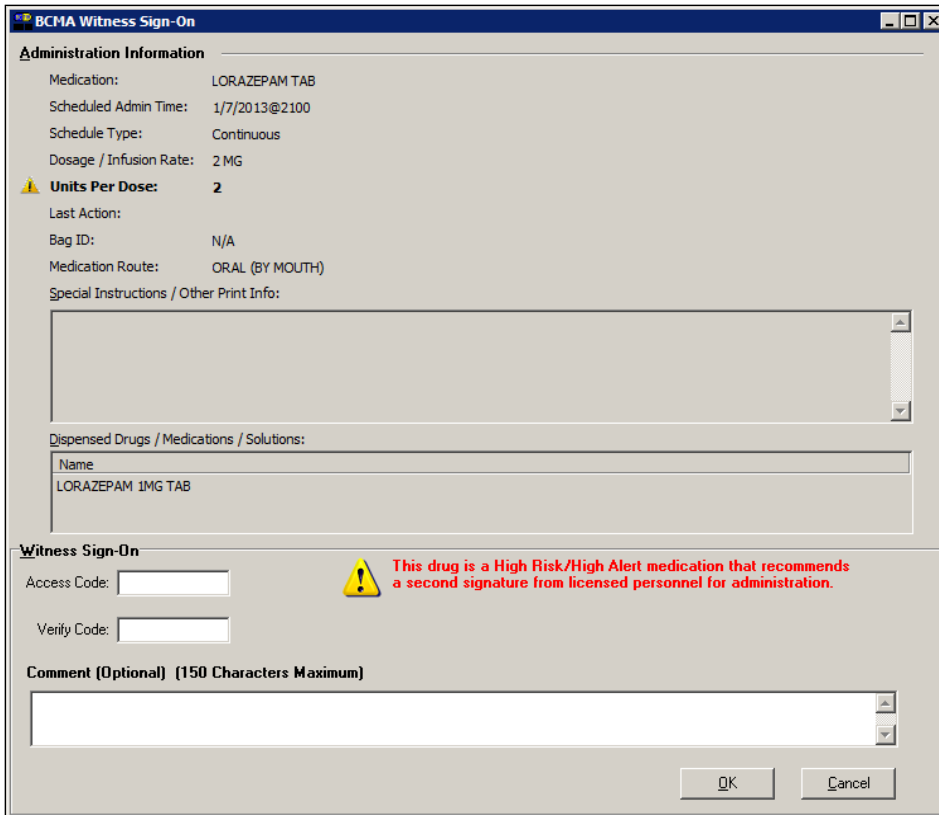
Error Messages for Witness Validation

BCMA authenticates witness credentials based on witness access and verify codes, security keys, and primary and secondary menu options. The conditions are checked in the sequence outlined below such that if more than one condition is applicable to the witness, the first matching condition determines the error message displayed. Administration workflow does not continue until the witness enters a valid access and verify code demonstrating authority to be a witness.

To cancel administration, click Cancel to display the **Order Administration Cancelled** dialog, then click OK to acknowledge the cancellation and to return to the VDL.

1. **If witness access and verify codes are not valid:**

   - BCMA displays the following message. \

Figure 12: Error message—witness credentials not valid

   - Click OK to clear the error and return to the **BCMA Witness Sign-On** dialog.

2. **If the witness is a student holding the PSB STUDENT key and is attempting to witness for self or any other user:**

   - BCMA displays the following error message.
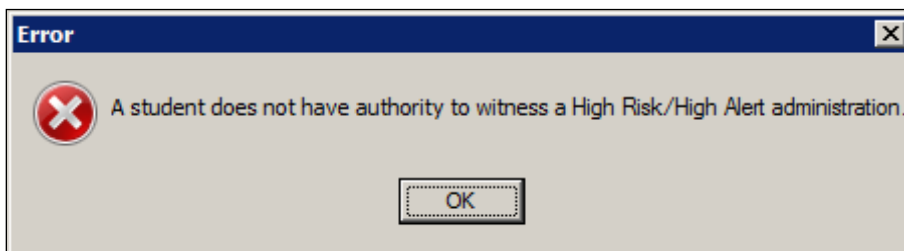
Figure 13: Error message—student tries to sign on as witness

   - Click OK to clear the error and return to the **BCMA Witness Sign-On** dialog.

3. **If the witness holds the PSB NO WITNESS key and is unauthorized to witness high risk/high alert administrations:**

   - BCMA displays an error message: You do not have authority to witness a High Risk/High Alert administration.
   - Click OK to clear the error and return to the **BCMA Witness Sign-On** dialog.

Note: The **PSB NO WITNESS** security key is assigned to BCMA users who are not authorized to witness high risk/high alert administrations, e.g., unlicensed assistive personnel and respiratory therapists.

Figure 14: Error message—user with PSB NO WITNESS key tries to sign on as witness

4. **If the witness is a read-only user holding the PSB READ ONLY key:**

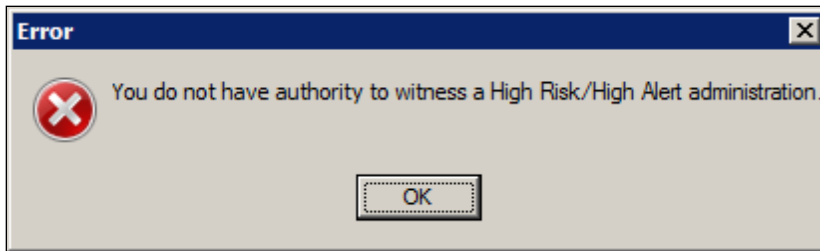   - BCMA displays the following error message.
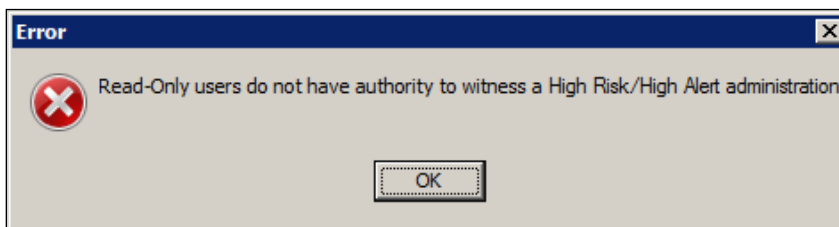
Figure 15: Error message—user with PSB READ ONLY key tries to sign on as witness

   - Click OK to clear the error and return to the **BCMA Witness Sign-On** dialog.

5. **If the witness holds the PSB INSTRUCTOR key and is currently logged on with a student holding the PSB STUDENT key:**

   - BCMA displays an error message: An instructor monitoring a student does not have authority to witness a High Risk/High Alert administration.
   - Click OK to clear the error and return to the **BCMA Witness Sign-On** dialog.

   Note: Users holding the PSB INSTRUCTOR key may serve as a witness, if they are not the primary instructor that is currently signed on with a user holding the PSB STUDENT key for the purpose of monitoring that student.

Figure 16: Error message—instructor logged in with students attempts to sign on as witness

6. **If the witness access and verify codes are the same as the administering nurse user:**

   - BCMA displays the following error message.

Figure 17: Error message—current user attemtps to witness own administration

- Click OK to clear the error and return to the **BCMA Witness Sign-On** dialog.

7. **If the user does not have the PSB GUI CONTEXT – USER menu option assigned to their primary or secondary menu:**
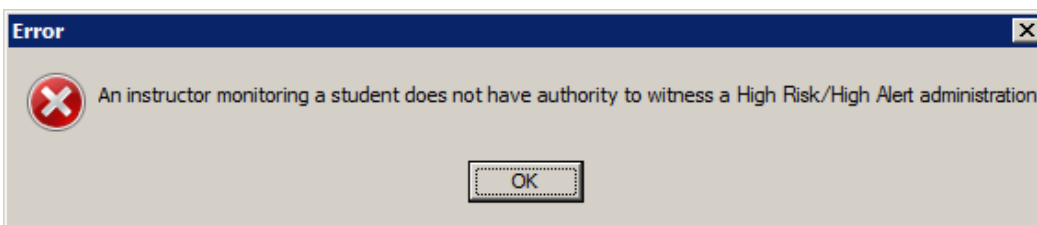
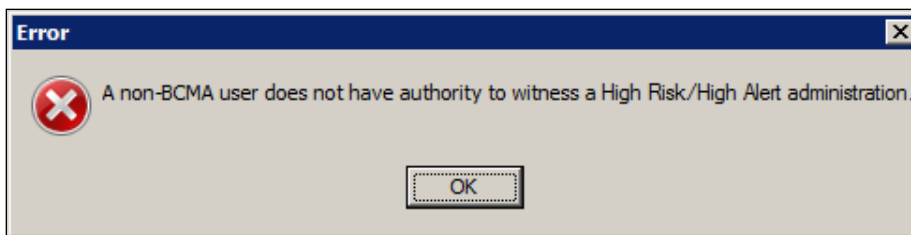- BCMA displays the following error message.

Figure 18: Error message—non-BCMA user attempts to sign on as witness

- User clicks **OK** to clear the error and return to the BCMA Witness Sign-On dialog.

Witness Information Stored in Medication Log

The **Medication Log** report stores witness information—name, date/time witnessed and optional witness comment—for high risk/high alert medication administrations if the user includes comments on the **Witness sign-on** dialog. The witness information is captured in the **Comments** and **Audits** sections of the Medication Log.

If the user chooses to include comments on the **Medication Log Report** dialog, the report includes the following witness information:

- For witnessed high risk/high alert administrations marked as Recommended or Required: Witness Last Name, Witness First Name, Witnessed Date@Time and Optional Comment.
- For not witnessed high risk/high alert administrations marked as Recommended to Witness: Witnessed?: No and Optional Comment.
- For high risk/high alert administrations marked as Given then later marked as Undo Given, prior witness information and any witness comments are removed from the body of the Med Log report.

Witness information is included in the Audits section of the **Medication Log** report if the user selects Include Audits on the **Medication Log Report** dialog.

```
----------------------------------------------------------------------------------------
  BECKY'S CLINIC
01/09/13 13:47  METHADONE [20 MG Q8H PO]          RKW    01/09/13 13:47
                                                         Given
1/3/13 10:07>                                            METHADONE 10MG TAB         2.00    1.00 TAB
               Comments:     <No Comments>
               Witnessed by: BCMA,NURSE MGR on 1/9/13@13:47
6/24/13 12:00<
               Audits:       01/09/13 13:47  RKW    Field: ACTION DATE/TIME Set to 'JAN 09, 2013@13:47:43'.
                             01/09/13 13:47  RKW    Field: ACTION STATUS Set to 'GIVEN' by 'RKW'.
                             01/09/13 13:47  RKW    Field: WITNESS DATE/TIME Set to 'JAN 09, 2013@13:47:43'.
                             01/09/13 13:47  RKW    Field: ADMIN WITNESSED BY Set to 'BCMA,NURSE MGR'.
                             01/09/13 13:47  RKW    Field: WITNESS HR ORDER CODE Set to 'WITNESS REQUIRED IN BCMA-HIGH
                                                    RISK/ALERT'.
                             01/09/13 13:47  RKW    Field: WITNESSED? Set to 'YES'.
                             01/09/13 13:47  RKW    Field: DOSES GIVEN Set to '1'.
                             01/09/13 13:47  RKW    Field: UNIT OF ADMINISTRATION Set to 'TAB'.
----------------------------------------------------------------------------------------
```

Figure 19: Medication Log Report