

# OpenELIS Maternal Screen Follow-up Web Portal User Guide

The OpenELIS Web Portal has been redesigned to be more responsive; it can now be used easier on tablets, laptops, and cell phones.

## Logging in

- Go to the State Hygienic Laboratory at The University of Iowa’s web site at [www.shl.uiowa.edu](http://www.shl.uiowa.edu) .
- Click on the green **Test Results** button on the left-hand side.
- Click on the green **OpenELIS** button.
- Login using your username and password. (This is a secure site. Your username and password are encrypted as they are sent for authorization.)
- If you use a shared computer, please click **Logout** on the **Account** menu and then close the browser after completing your session.
- Supported desktop web browsers are recent versions of: Firefox, Chrome, Opera, Safari, and Microsoft Edge (version 15 and above). Mobile browser compatibility includes Apple iPhone and iPad and Android devices.

## Account Menu

- The **Account** menu ([See Figure 1.](#)) in the top right corner of the **Home** page displays the name and username of the user.
- There are links to logout of the web portal and to change the user’s password.
- The user can adjust the font size of the screen text and change the Display Mode (Dark, Calm, Lite).
- There are also links to related forms and user guides.

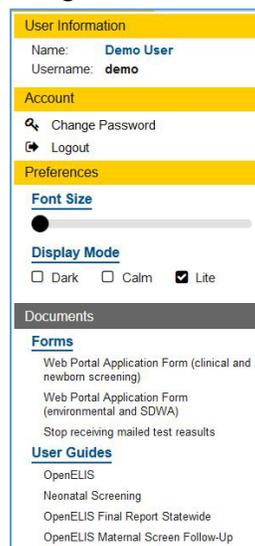


Figure 1 Account Menu

## Buttons and Menus

- The **Home** page of the OpenELIS Web Portal contains a button for each module for which you have been assigned permissions. The **Follow-Up** menu also lists these modules. You can open a module by clicking on its button or selecting it from the Follow-Up menu. ([See Figures 2 - 3.](#))



Figure 2 Module Buttons

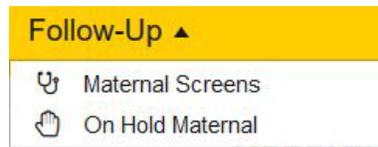


Figure 3 Follow-Up Menu

## News

- The red badge above the newspaper icon  displays the number of news articles that are available pertaining to the laboratory and the web portal. Click on this icon to display the articles.

## Help Text

- A **Help** button  located in the lower right corner of each screen will display helpful information regarding the use of that screen.

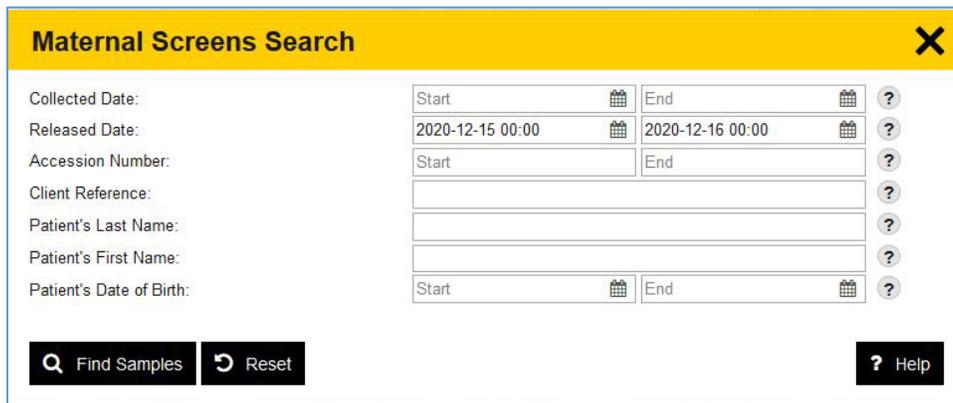
## Follow-Up Menu

The Follow-Up menu contains the two query functions that are used by Maternal Screening follow-up staff to search for Maternal Screens: **Maternal Screens** and **On Hold Maternal**. The Maternal Screens module is used to search for maternal screens in any status. The On Hold Maternal module is used to search for maternal screens that are in On Hold status.

## Searching for Maternal Screens in Any Status

- Click on the **Maternal Screens** button (or select it from the Follow-up menu).
- You only need to enter information in one field to conduct a search for maternal screen samples. Example fields include: **Collected Date**, **Released Date**, **Accession Number**, or **Patient's Last Name**. (See Figure 4.)
- It is recommended that you click in a date field and use the calendar when entering a date to eliminate any formatting errors. Clicking on the word "TODAY" at the bottom of the calendar will insert the current date (or date and time). You can also type the dates if you prefer. All dates have the format of YYYY-MM-DD. **Released Date** also includes the time in the format of YYYY-MM-DD HH:MM.
- You may also narrow your search by entering information in multiple fields. For example, to find all of the samples for patient Jane Doe who was born on May 3, 1985 enter DOE in the **Patient's Last Name** field, JANE in the **Patient's First Name** field, and 1985-05-03 in the **Patient's Date of Birth** Start field. (See Figure 5.)

- The system supports wild card searches in the following fields: **Client Reference**, **Patient's First Name**, and **Patient's Last Name**. To use this search method add an \* at the beginning and/or end of your search term. Below are two examples:
  - To see a list of samples for a patient whose last name starts with the letters "SCHM", enter SCHM\* in the **Patient's Last Name** field. Matches would include: SCHMIDT, SCHMITT, SCHMITZ, etc.
  - To see a list of samples for a patient whose first name ends with the letters "JO", enter \*JO in the **Patient's First Name** field. Matches would include: BETTY JO, BETTYJO, JO, etc.
- Enter the **Patient's Date of Birth** in the Start field to search by that information. To search by a range of dates enter a Start date and an End date.
- Click on the Tool Tip  to the right of each field to view information about the use and format of that field.
- Click the **Find Samples** button to display a list of samples that match your search criteria. The **Reset** button clears all of the search fields.

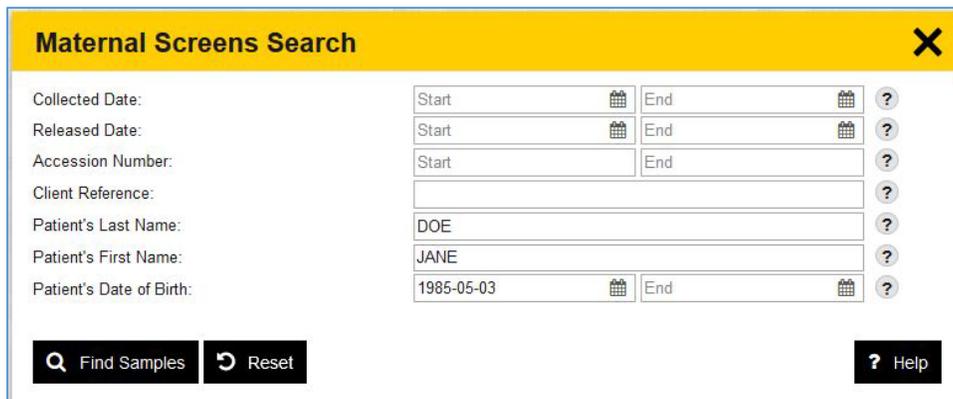


**Maternal Screens Search** [X]

|                          |                                  |                                  |     |
|--------------------------|----------------------------------|----------------------------------|-----|
| Collected Date:          | Start [calendar icon]            | End [calendar icon]              | [?] |
| Released Date:           | 2020-12-15 00:00 [calendar icon] | 2020-12-16 00:00 [calendar icon] | [?] |
| Accession Number:        | Start                            | End                              | [?] |
| Client Reference:        |                                  |                                  | [?] |
| Patient's Last Name:     |                                  |                                  | [?] |
| Patient's First Name:    |                                  |                                  | [?] |
| Patient's Date of Birth: | Start [calendar icon]            | End [calendar icon]              | [?] |

[Find Samples] [Reset] [Help]

Figure 4 Searching by a Released Date Range



**Maternal Screens Search** [X]

|                          |                            |                     |     |
|--------------------------|----------------------------|---------------------|-----|
| Collected Date:          | Start [calendar icon]      | End [calendar icon] | [?] |
| Released Date:           | Start [calendar icon]      | End [calendar icon] | [?] |
| Accession Number:        | Start                      | End                 | [?] |
| Client Reference:        |                            |                     | [?] |
| Patient's Last Name:     | DOE                        |                     | [?] |
| Patient's First Name:    | JANE                       |                     | [?] |
| Patient's Date of Birth: | 1985-05-03 [calendar icon] | End [calendar icon] | [?] |

[Find Samples] [Reset] [Help]

Figure 5 Searching by a Patient's Last Name, First Name, and Date of Birth

## Viewing Final Reports

- A list of samples that match your search criteria will be displayed on the next screen. (See Figure 6.)
- Final Reports can only be generated for samples that are in a status of "Completed" . To view all reports of the completed samples that are listed, click the **Select All** button, and then the **Run Report** button.
- To view specific reports, check the boxes in front of their **Accession Numbers**, and then click the **Run Report** button.
- The PDF reports of the selected samples will pop up. You may view, save, or print your PDF reports.
- The following are descriptions of each column on this screen.

**Accession Number:** The lab number assigned to the sample by the laboratory.

**Collected Date:** The date (and time if submitted) that the sample was collected. All dates and times have the format of YYYY-MM-DD HH:MM.

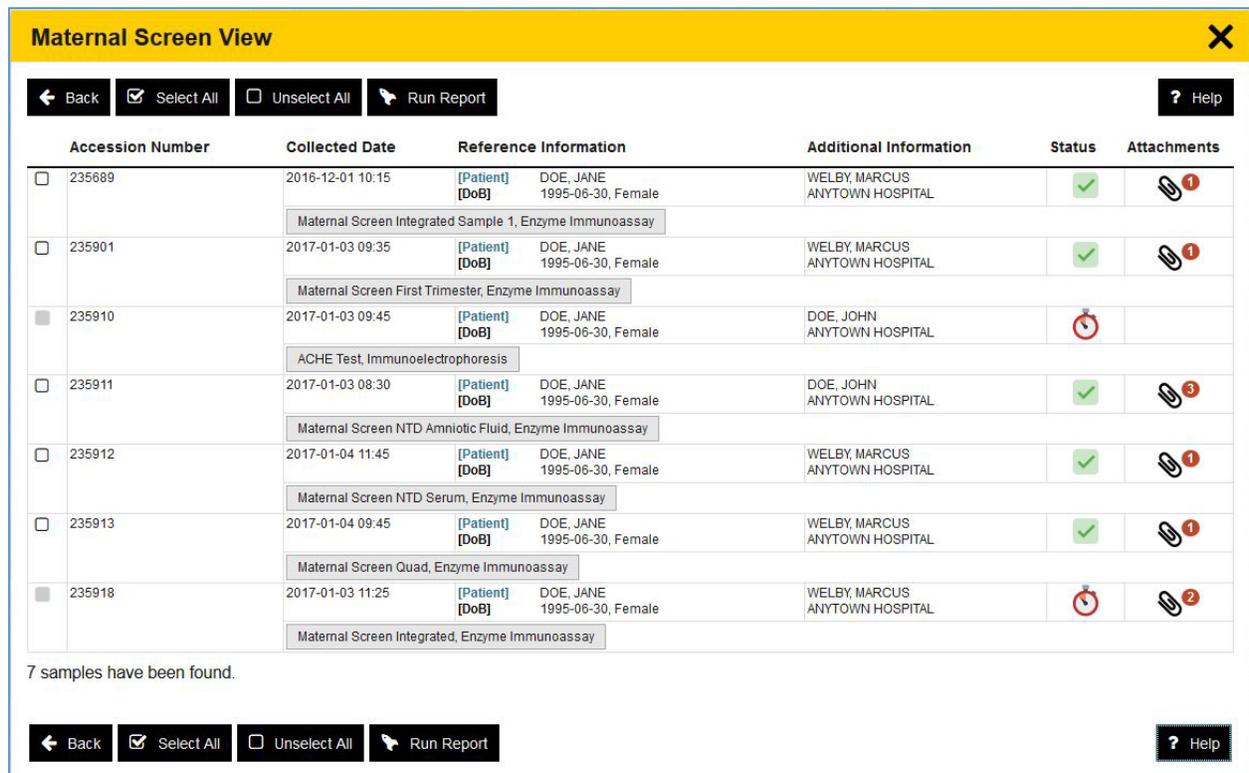
**Reference Information:** This information can be helpful in identifying a sample. The patient's name, date of birth (DoB), and gender are usually displayed for maternal screen samples.

**Additional Information:** This information can also be useful in identifying a sample. The health care provider's name (if submitted) and the submitting organization are displayed for maternal screen samples.

**Status:** The sample's status is shown here. "In Progress"  samples have one or more tests that are not yet complete. "Completed"  samples have finished testing and all of their results are available on the Final Report.

**Attachments:** The number of documents attached to each sample (if any) are shown in this column in a red circle. First, click on the paper clip icon to display the list of attachments. (See Figure 7.) Next, click on the name of the attachment that you want to display. Attachments may include the test request form (begins with the prefix "TRF"), original and subsequent versions of final reports (begin with the prefix "FinalReport"), copies of email correspondence, send-out lab reports, and laboratory instrument output.

**To access the Maternal Screen Scenario Generation Module:** Click the test name for the sample that you would like to generate a scenario. See [Using the Maternal Screen Scenario Generation Module](#) for additional instructions.



| Accession Number  | Collected Date   | Reference Information                           | Additional Information            | Status  | Attachments   |
|---|------------------|---|-----------------------------------|---|---|
| <input type="checkbox"/> 235689                         | 2016-12-01 10:15 | [Patient] DOE, JANE<br>[DoB] 1995-06-30, Female | WELBY, MARCUS<br>ANYTOWN HOSPITAL |  |  1 |
| Maternal Screen Integrated Sample 1, Enzyme Immunoassay |                  |   |                                   |   |   |
| <input type="checkbox"/> 235901                         | 2017-01-03 09:35 | [Patient] DOE, JANE<br>[DoB] 1995-06-30, Female | WELBY, MARCUS<br>ANYTOWN HOSPITAL |  |  1 |
| Maternal Screen First Trimester, Enzyme Immunoassay     |                  |   |                                   |   |   |
| <input type="checkbox"/> 235910                         | 2017-01-03 09:45 | [Patient] DOE, JOHN<br>[DoB] 1995-06-30, Female | DOE, JOHN<br>ANYTOWN HOSPITAL     |  |   |
| ACHE Test, Immunoelectrophoresis                        |                  |   |                                   |   |   |
| <input type="checkbox"/> 235911                         | 2017-01-03 08:30 | [Patient] DOE, JANE<br>[DoB] 1995-06-30, Female | DOE, JOHN<br>ANYTOWN HOSPITAL     |  |  3 |
| Maternal Screen NTD Amniotic Fluid, Enzyme Immunoassay  |                  |   |                                   |   |   |
| <input type="checkbox"/> 235912                         | 2017-01-04 11:45 | [Patient] DOE, JANE<br>[DoB] 1995-06-30, Female | WELBY, MARCUS<br>ANYTOWN HOSPITAL |  |  1 |
| Maternal Screen NTD Serum, Enzyme Immunoassay           |                  |   |                                   |   |   |
| <input type="checkbox"/> 235913                         | 2017-01-04 09:45 | [Patient] DOE, JANE<br>[DoB] 1995-06-30, Female | WELBY, MARCUS<br>ANYTOWN HOSPITAL |  |  1 |
| Maternal Screen Quad, Enzyme Immunoassay                |                  |   |                                   |   |   |
| <input type="checkbox"/> 235918                         | 2017-01-03 11:25 | [Patient] DOE, JANE<br>[DoB] 1995-06-30, Female | WELBY, MARCUS<br>ANYTOWN HOSPITAL |  |  2 |
| Maternal Screen Integrated, Enzyme Immunoassay          |                  |   |                                   |   |   |

7 samples have been found.

Figure 6 Maternal Screen View

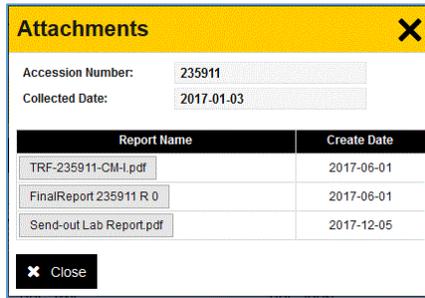


Figure 7 Sample Attachment List

## Searching for Maternal Screens in On Hold Status

- Click on the **On Hold Maternal** button (or select it from the Follow-up menu).
- This query searches for On Hold Maternal Screens by their **Received Date** at the laboratory. The default date range consists of the past 14 days, but these dates can be changed. If you are changing the default dates, it is recommended that you use the calendar in each date field to eliminate any formatting errors. Clicking on the word "TODAY" at the bottom of the calendar will insert the current date and time. The **Received Date** includes the time in the format of YYYY-MM-DD HH:MM. (See Figure 8.)



Figure 8 Searching for On Hold Maternal Screens by Received Date

- Click on the Tool Tip to the right of each field to view information about the use and format of that field.
- Click the **Find Samples** button to display a list of samples that match your search criteria. The **Reset** button clears all of the search fields.
- A list of samples with On Hold maternal screens are displayed on the next screen. (See Figure 9.)
- The following are descriptions of each column on this screen.

**Accession Number:** The lab number assigned to the sample by the laboratory.

**Collected Date:** The date (and time if submitted) that the sample was collected. All dates and times have the format of YYYY-MM-DD HH:MM.

**Reference Information:** This information can be helpful in identifying a sample. The patient's name, date of birth (DoB), and gender are usually displayed for maternal screen samples.

**Additional Information:** This information can also be useful in identifying a sample. The health care provider's name (if submitted) and the submitting organization are displayed for maternal screen samples.

**Status:** The sample's status is shown here. "In Progress" samples have one or more tests that are not yet complete.

**Attachments:** The number of documents attached to each sample (if any) are shown in this column in a red circle. First, click on the paper clip icon to display the list of attachments. (See Figure 7.) Next, click on the name of the attachment that you want to display. Attachments may include the test request form (begins with the

prefix "TRF"), original and subsequent versions of final reports (begin with the prefix "FinalReport"), copies of email correspondence, send-out lab reports, and laboratory instrument output.

**To access the Maternal Screen Scenario Generation Module:** Click the test name for the sample that you would like to generate a scenario. See [Using the Maternal Screen Scenario Generation Module](#) for additional instructions.

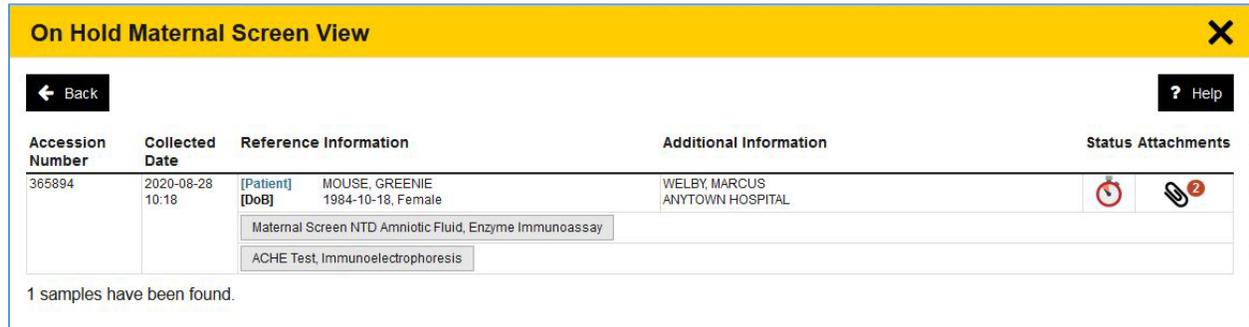


Figure 9 On Hold Maternal Screen View

## Using the Maternal Screen Scenario Generation Module

- The Maternal Screen Scenario Generation Module allows the Maternal Screening follow-up staff to examine how changes in inputted values would affect the calculated test results. If the follow-up staff member decides that this change is warranted, she can send the recommended change to the Maternal Screening laboratory for execution. The follow-up and laboratory staff can also use this screen to communicate with each other regarding a sample.
- Conduct a search for the desired sample(s). See [Searching for Maternal Screens in Any Status](#) or [Searching for Maternal Screens in On Hold Status](#) for directions on how to conduct a search.
- After the Maternal Screen sample listing has been displayed, click the test name on a sample to open the Maternal Screen Scenario Generation Module. This module will be loaded with the patient, sample, and test result information. (See [Figure 10.](#))

**Maternal Screens Generation Module**
✕

← Back

**PATIENT INFORMATION**

|             |              |                |           |
|-------------|--------------|----------------|-----------|
| Last Name:  | Gender:      | Phone #:       | State:    |
| MOUSE       | Female       | 319/555-5555   | IA        |
| First Name: | Race:        | Address:       | Zip Code: |
| YELLOW      | White        | 387 24TH ST NW | 59999-    |
| Birth Date: | Ethnicity:   | City:          |           |
| 1998-03-15  | Non Hispanic | ANYTOWN        |           |

**SAMPLE INFORMATION**

|                   |                  |                        |                 |
|-------------------|------------------|------------------------|-----------------|
| Accession Number: | Collected Date:  | Provider Last Name:    | Address:        |
| 97341             | 2021-01-13       | WELBY                  | 1000 MEDICAL ST |
| Status:           | Received Date:   | Provider First Name:   | City:           |
| Completed         | 2021-01-14 09:09 | MARCUS                 | ANYTOWN         |
| Client Reference: | Entered Date:    | Provider Phone Number: | State:          |
| 7260098           | 2021-01-15 15:03 | 319/777-7777.          | IA              |
| Released Date:    | Organization:    | Zip Code:              |                 |
|                   | ANYTOWN HOSPITAL | 52999                  |                 |

**RESULT INFORMATION**

|       |                      |         |                    |
|-------|----------------------|---------|--------------------|
| Test: | Maternal Screen Quad | Method: | Enzyme Immunoassay |
|-------|----------------------|---------|--------------------|

| MATERNAL SCREEN RESULTS TABLE |                  |               |                |               |                | NOTES |
|-------------------------------|------------------|---------------|----------------|---------------|----------------|-------|
| Analyte                       | Value            | Unit          |                |               |                |       |
| Birth                         | 1998-03-15       |               |                |               |                |       |
| Egg Donor                     | No               |               |                |               |                |       |
| Egg's Age                     |                  |               |                |               |                |       |
| Maternal Age At Delivery      | 23.2             | years         |                |               |                |       |
| Maternal Weight               | 115.0            | lbs           |                |               |                |       |
| Maternal Race Black           | No               |               |                |               |                |       |
| Number of Fetuses             | 1                |               |                |               |                |       |
| Insulin Dependent Diabetic    | No               |               |                |               |                |       |
| Family History of NTD         | No               |               |                |               |                |       |
| LMP                           | 2020-09-07       |               |                |               |                |       |
| Ultrasound                    | 2020-12-16       |               |                |               |                |       |
| CRL                           |                  |               |                |               |                |       |
| BPD                           | 29               | mm            |                |               |                |       |
| Weeks & Days                  |                  |               |                |               |                |       |
| Analyte                       | Value            | Determined By |                |               |                |       |
| Initial Gestational Age       | 134 days (19w1d) | Ultrasound    |                |               |                |       |
| Gestational Age               | 134 days (19w1d) | Ultrasound    |                |               |                |       |
| Analyte                       | Value            | Determined By | Result         | Screen Cutoff | Interpretation |       |
| AFP MoM                       | 0.86             | Ultrasound    | 51.85          | NTD >= 2.2    | Neg            |       |
| Estriol (uE3) MoM             | 0.55             |               | 0.99           |               |                |       |
| HCG MoM                       | 2.50             |               | 66469.00       |               |                |       |
| Inhibin MoM                   | 1.04             |               | 198.12         |               |                |       |
| Age Related DS Risk           | 1:1100           |               | Not Applicable |               |                |       |
| Down Syndrome (DS) Risk       | 1:130            | Ultrasound    | Not Applicable | >=1:150       | Pos            |       |
| Trisomy 18 Risk               | 1:59000          | Ultrasound    | Not Applicable | >=1:100       | Neu            |       |

📄 Recalculate

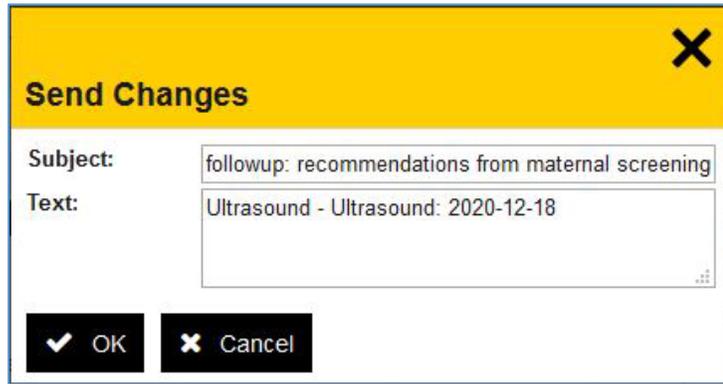
✕ Send Changes

+ Add Note

? Help

Figure 10 Maternal Screen Scenario Generation Module

- The Maternal Screening follow-up staff member can change or add inputted values in the **Maternal Screen Results Table** of the record. All dates have the format of YYYY-MM-DD.
- Click the **Recalculate** button to view how the changes in inputted values would affect the calculated test results.
- Click the **Send Changes** button if it is desired to send the recommended change to the Maternal Screening lab staff. A note window will pop-up that displays the recommended change. (See Figure 11.) The subject and text of the note can be modified as necessary.



**Send Changes** [X]

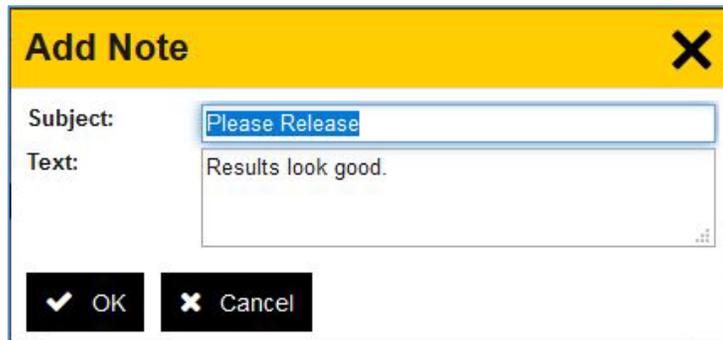
Subject: followup: recommendations from maternal screening

Text: Ultrasound - Ultrasound: 2020-12-18

[OK] [Cancel]

Figure 11 Send Changes Window

- The **Add Note** button can be used by the follow-up staff member to correspond with the laboratory staff about a sample/test. (See Figure 12.)



**Add Note** [X]

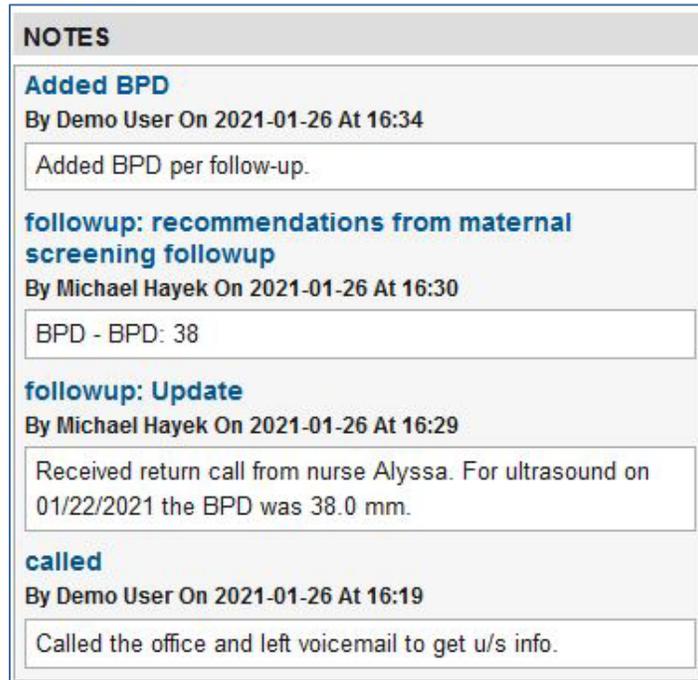
Subject: Please Release

Text: Results look good.

[OK] [Cancel]

Figure 12 Add Note Window

- These notes can be used to track the conversation between the follow-up and laboratory staff and to document any changes/decisions that were made. (See Figure 13.) Both external and internal sample and analysis notes will be displayed.



**NOTES**

**Added BPD**  
By Demo User On 2021-01-26 At 16:34  
Added BPD per follow-up.

**followup: recommendations from maternal screening followup**  
By Michael Hayek On 2021-01-26 At 16:30  
BPD - BPD: 38

**followup: Update**  
By Michael Hayek On 2021-01-26 At 16:29  
Received return call from nurse Alyssa. For ultrasound on 01/22/2021 the BPD was 38.0 mm.

**called**  
By Demo User On 2021-01-26 At 16:19  
Called the office and left voicemail to get u/s info.

Figure 13 Notes Conversation between Follow-up and Laboratory Staff

## Changing Your Password

- Click **Change Password** on the Account menu and follow the designated steps. The State Hygienic Laboratory aligns with the University of Iowa's enterprise password policy.
- Keep your new password secure. If you must write it down, be sure to keep it in a safe place.

## Questions/Help

- Questions regarding the OpenELIS Web Portal may be directed to [shl-webportalsupport@uiowa.edu](mailto:shl-webportalsupport@uiowa.edu) or to 319/335-4358.