



Beta Presentation

Electronic Laboratory User's Guide 2.0

The Capstone Experience

Team Henry Ford Innovations

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*From Students...
...to Professionals*

Fall 2025

Project Overview

- Catalog of laboratory test procedures
- Modern, cross-platform application
- Compatible with existing systems
- Easily maintainable



Team Member's Technical Tasks

Technical Tasks Assigned

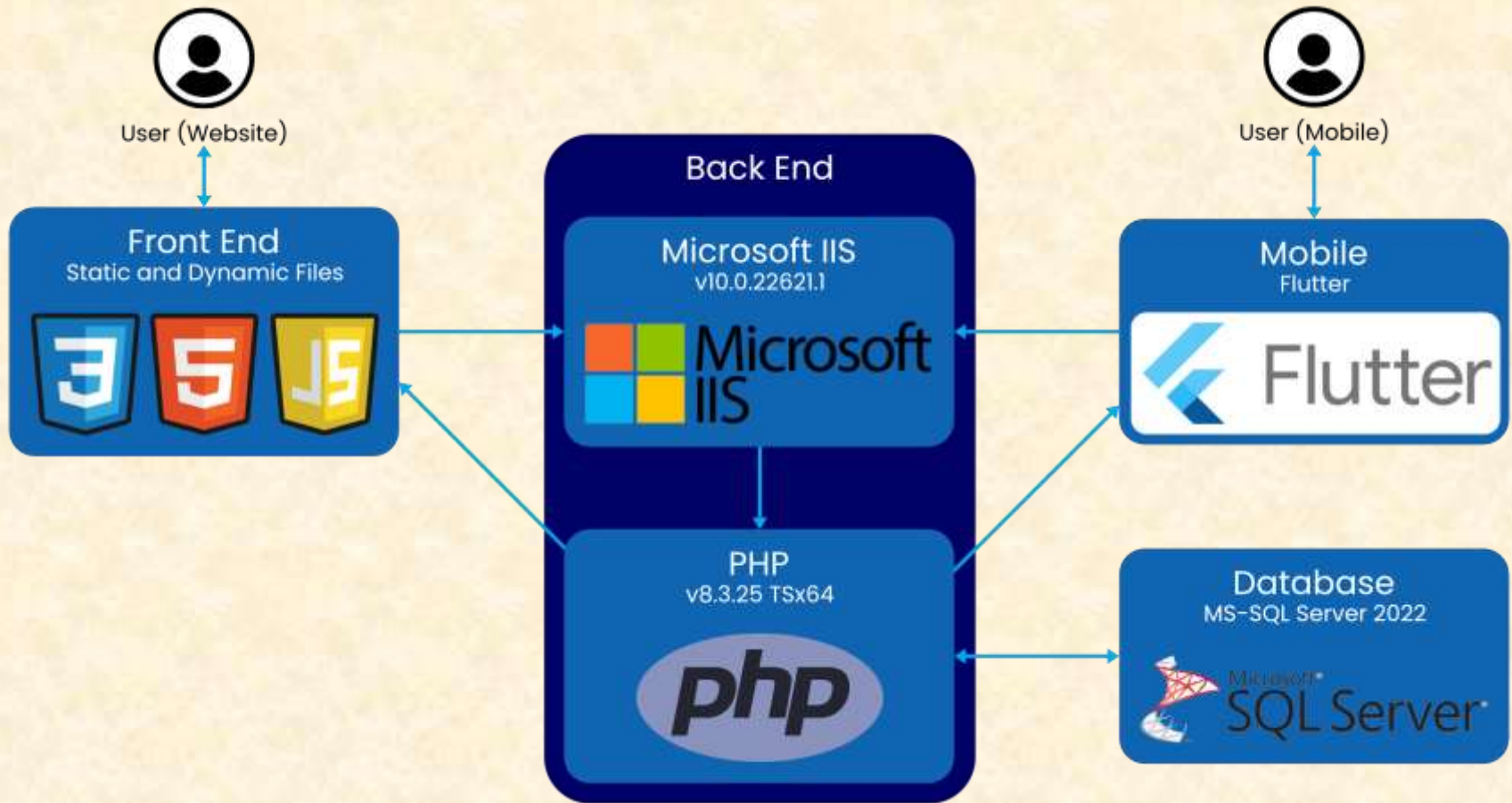
- Rocco Camilletti
 - Login API and authentication system
 - Lab test details editor
 - Narrative page search utility
- Cole Current
 - Search API and search suggestions feature
 - Laboratory management utility
 - Lab test creation utility
- Ashton Kushner
 - Lab test details page
 - Lab test details modification API
 - Administration panel
- Rafid Munjid
 - Integrated APIs into Flutter app
 - Bookmarks system
 - Recently viewed/view history feature
- Elijah Porter
 - Integration with Microsoft Entra ID
 - Narrative page visual editor
 - Search history component
- Andrew Roth
 - LIS Upload
 - Lab test changes APIs and pages
 - Reference range integration on test details page

Technical Tasks Completed

- Rocco Camilletti
 - Login API and authentication system
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System Architecture



Home/Search Page

The screenshot shows a web browser window displaying the Henry Ford Health Pathology Lab User's Guide. The page has a dark blue header with the Henry Ford Health logo and navigation links. A dark blue sidebar contains a list of menu items. The main content area features a welcome message, a search bar, and a search history section. On the right, there are two sidebars: one for Test Catalog Changes and another for the Latest Lab Newsletter.

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Home Reference Contact Login

Administrative Info ▾ Tissue/Cytology Lab Specimens ▾ Blood/Body Fluid Lab Specimens ▾ Forms and Supplies ▾ Result Reporting ▾

Home

Welcome to the Pathology Lab User's Guide

We are pleased to present the *Laboratory User's Guide (eLUG)*. The purpose of the guide is to provide information about our laboratories and a comprehensive test catalog with information regarding specimen collection and handling.

We value your suggestions and look forward to working with you. Please feel free to call us or members of our **Laboratory Customer Service Center** at (313) 916-LABS (5227), if you need assistance.

In the event of a Downtime, test requisitions can be found [here](#).

Search (Test Code, Name, or Alias): Performing Lab:

Search History (Clear)
Searched for "Test" in All Labs
Searched in All Labs

Test Catalog Changes

November 2025
October 2025
September 2025
August 2025
July 2025
June 2025
[View More...](#)

Latest Lab Newsletter

Stay updated with the latest news and updates from the Department of Pathology and Laboratory Medicine.

[Read Newsletters](#)



Search Results Page

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Home Reference Contact Login

Administrative Info Tissue/Cytology Lab Specimens Blood/Body Fluid Lab Specimens Forms and Supplies Result Reporting

Home > Results

Catalog Test Search Results

Search (Test Code, Name, or Alias): Performing Lab:

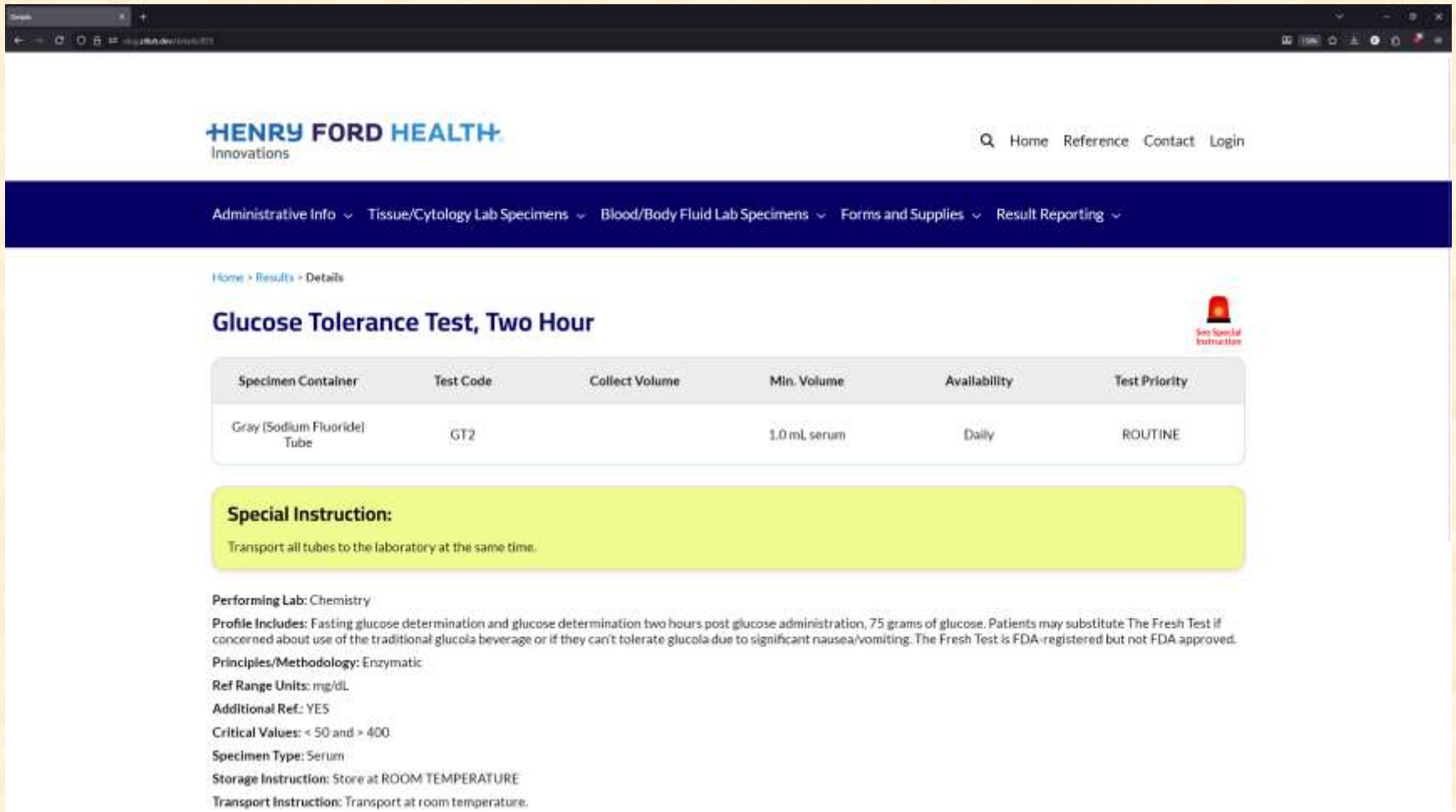
A B C D E F **G** H I J K L M N O P Q R S T U V W X Y Z #

Found 11 results for "glucose"

TEST NAME	ALIAS	CODE	PROFILE
Glucose Tolerance OB75		GTOB75	Fasting glucose determination and glucose determination one and two hours post glucose administration, 75 grams of glucose. Patients may substitute The Fresh Test if concerned about use of the traditional glucola beverage or if they can't tolerate glucola due to significant nausea/vomiting. The Fresh Test is FDA-registered but not FDA approved.
Glucose Tolerance Test, Two Hour		GT2	Fasting glucose determination and glucose determination two hours post glucose administration, 75 grams of glucose. Patients may substitute The Fresh Test if concerned about use of the traditional glucola beverage or if they can't tolerate glucola due to significant nausea/vomiting. The Fresh Test is FDA-registered but not FDA approved.
Glucose Tolerance Test, OB	Glucose tolerance test for gestational diabetes	GTOB	Glucose determination one hour post dosing, 50 grams of glucose. Patients may substitute The Fresh Test if concerned about use of the traditional glucola beverage or if they can't tolerate glucola due to significant nausea/vomiting. The Fresh Test is FDA-registered but not FDA approved.
Glucose Tolerance Test, One Hour		GTT1	Glucose determination one hour post dosing, 50 grams of glucose. Patients may substitute The Fresh Test if concerned about use of the traditional glucola beverage or if they can't tolerate glucola due to significant nausea/vomiting. The Fresh Test is FDA-registered but not FDA approved.



Lab Test Details Page



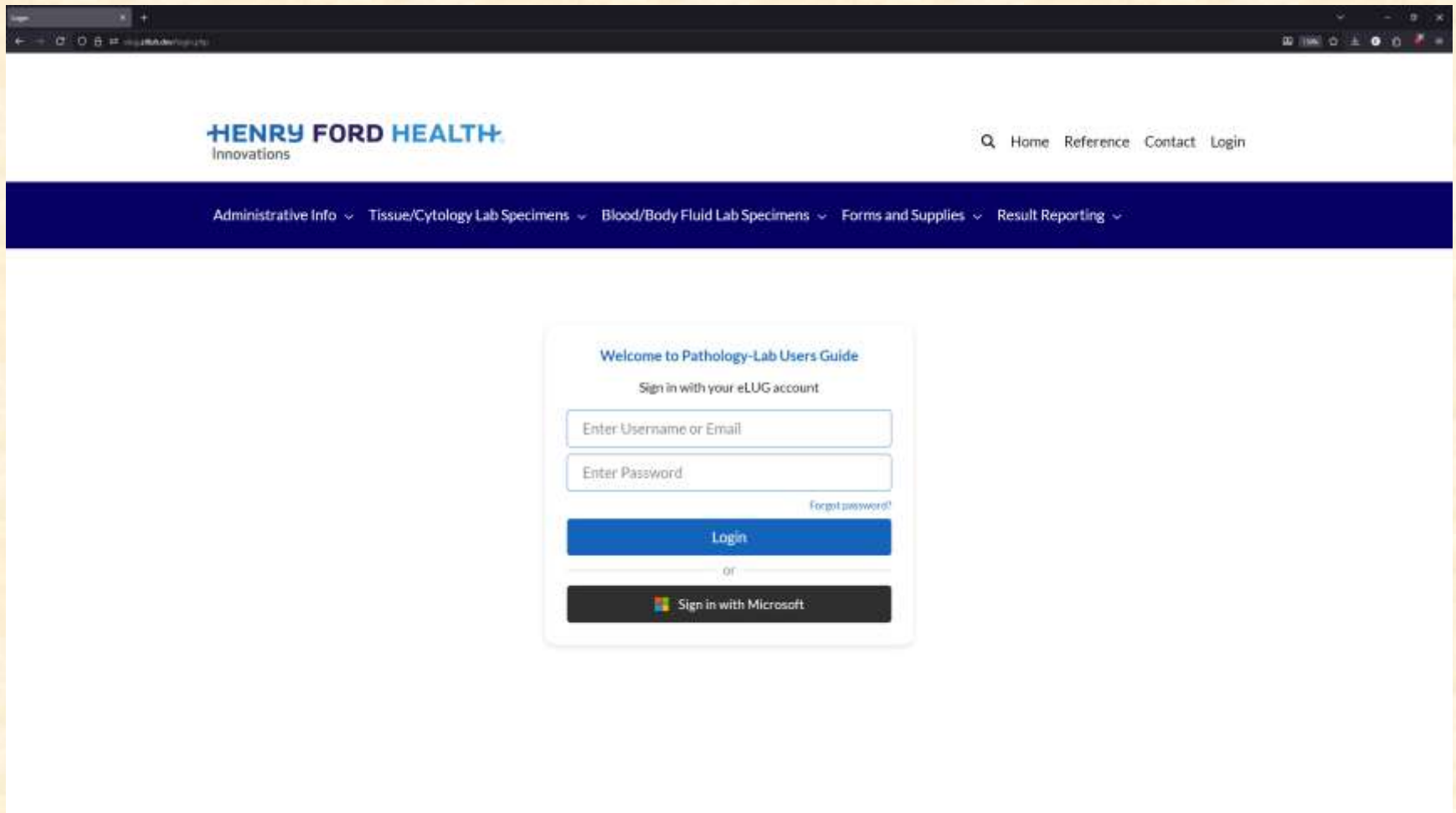
The screenshot displays the Henry Ford Health eLUG Beta Presentation interface. At the top, the Henry Ford Health logo is visible on the left, and navigation links for Home, Reference, Contact, and Login are on the right. Below the header, a dark blue navigation bar contains dropdown menus for Administrative Info, Tissue/Cytology Lab Specimens, Blood/Body Fluid Lab Specimens, Forms and Supplies, and Result Reporting. The main content area shows the breadcrumb trail Home > Results > Details. The test title "Glucose Tolerance Test, Two Hour" is prominently displayed, accompanied by a red warning icon and the text "See Special Instruction". A table provides key test parameters:

Specimen Container	Test Code	Collect Volume	Min. Volume	Availability	Test Priority
Gray (Sodium Fluoride) Tube	GT2		1.0 mL serum	Daily	ROUTINE

Below the table, a yellow box highlights the "Special Instruction: Transport all tubes to the laboratory at the same time." Further down, detailed information is provided for the Performing Lab (Chemistry), Profile Includes (fasting and two-hour post-glucose determination), Principles/Methodology (Enzymatic), Ref Range Units (mg/dL), Additional Ref. (YES), Critical Values (< 50 and > 400), Specimen Type (Serum), Storage Instruction (Store at ROOM TEMPERATURE), and Transport Instruction (Transport at room temperature).



Authentication Screen



The screenshot displays the authentication interface for the Henry Ford Health eLUG Beta. At the top, the Henry Ford Health logo is on the left, and navigation links for Home, Reference, Contact, and Login are on the right. A dark blue horizontal bar contains a list of menu items: Administrative Info, Tissue/Cytology Lab Specimens, Blood/Body Fluid Lab Specimens, Forms and Supplies, and Result Reporting. The main content area features a central login box with the heading 'Welcome to Pathology-Lab Users Guide' and the instruction 'Sign in with your eLUG account'. This box includes input fields for 'Enter Username or Email' and 'Enter Password', a 'Forgot password?' link, a blue 'Login' button, and an alternative 'Sign in with Microsoft' option.

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Home Reference Contact Login

Administrative Info ▾ Tissue/Cytology Lab Specimens ▾ Blood/Body Fluid Lab Specimens ▾ Forms and Supplies ▾ Result Reporting ▾

Welcome to Pathology-Lab Users Guide

Sign in with your eLUG account

Enter Username or Email

Enter Password

[Forgot password?](#)

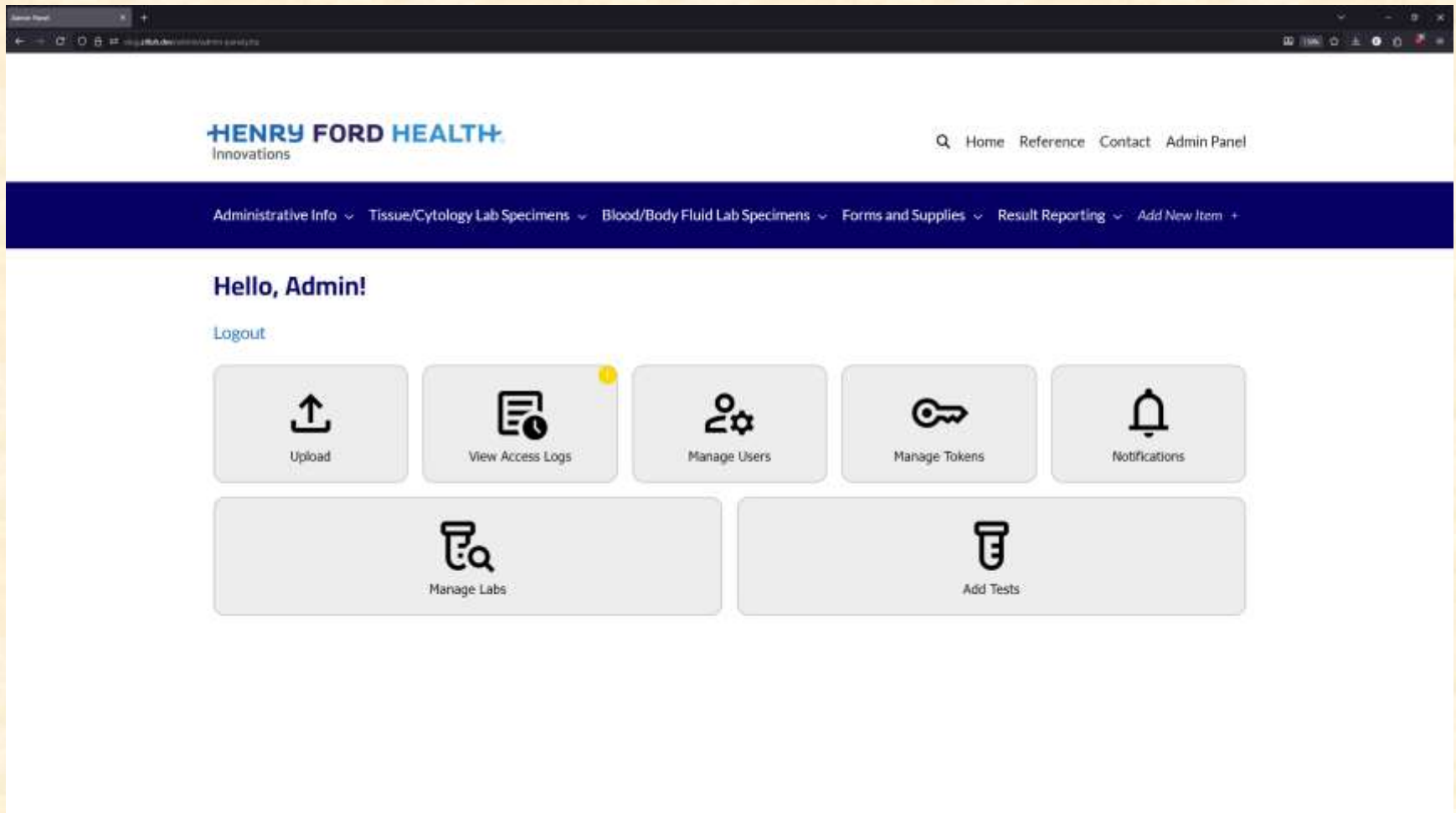
Login

or

 Sign in with Microsoft



Admin Panel



Narrative Page Creator

The screenshot shows a web browser window displaying the Henry Ford Health eLUG interface. A modal titled "Add New Narrative Item" is open in the center. The modal contains the following elements:

- Title:** "Collecting Specimens" (text input field)
- Is it a directory?:** ☐ (checkbox)
- URL:** "collecting-specimens" (text input field)
- Buttons:** "Cancel" (red) and "Create" (blue)

The background of the interface is blurred, showing the Henry Ford Health logo and navigation links.



Narrative Page Editor

The screenshot displays a web browser window with the URL www.henryford.com/innovations/eLUG. The page header features the Henry Ford Health logo and navigation links: Home, Reference, Contact, and Admin Panel. A dark blue navigation bar contains the following menu items: Administrative Info, Tissue/Cytology Lab Specimens, Blood/Body Fluid Lab Specimens, Forms and Supplies, Result Reporting, and Add New Item. The main content area is titled 'Fresh Samples' and contains a 'Page Content' editor with a rich text toolbar. The document text is as follows:

Internal Sites:

Fresh surgical samples (without fixative/formalin) should be delivered to Surgical Pathology immediately after removal from patient.

Fresh samples should be delivered on a saline moistened Telfa pad or gauze and in a properly labeled container with at least (2) patient identifiers and site/source of the sample. Sample should also be labeled, "Fresh tissue for _____ work-up."

A requisition must accompany the specimen and should be labeled as STAT.

Periphery Sites:

Fresh surgical samples (without fixative/formalin) should be delivered to Surgical Pathology as soon as possible after removal from patient. It is imperative to deliver the sample within 1-2 hours to avoid autolysis and to get the best results.

Fresh samples should be delivered on a cold saline-moistened Telfa pad or gauze and in a properly labeled container with at least (2) patient identifiers and site/source of the sample. Specimen container should be labeled, "Fresh tissue for _____ work-up."

A requisition must accompany specimen and should be labeled as STAT.

To prevent autolysis of fresh samples (without fixative) or drying out quickly, it is important to keep them cold (2°C to 6°C).

IF TRANSPORT OF FRESH SPECIMEN IS DELAYED OR IF FRESH SPECIMENS ARE COMING FROM OFFSITE LOCATIONS:

1. Place the specimen on a cold saline-moistened Telfa pad or gauze, place the sample in a properly labeled container.
2. Place the specimen container in a biohazard specimen bag.
3. Place the biohazard bag on an ice pack or ice (do not use dry ice). Do NOT allow the container or specimen itself to come in contact with ice, because as it melts, the water may enter the specimen container.

Notes:

To prevent small samples, such as needle core biopsies, from drying out quickly, place on Telfa pad or gauze, wet the pad or gauze with cold (2°C to 6°C) saline, (pH 7.0-7.4).



Lab Test Details Editor

The screenshot shows a web browser window displaying the Henry Ford Health Innovations website. The main content area is titled "Test Editor" and contains several tabs: "Basic Info", "Ordering" (which is selected and highlighted in blue), "Specimen", "Instructions", "Reference Ranges", "Availability", and "Review". Below the tabs are "Reset" and "Submit" buttons. The "Ordering" tab contains the following fields:

- Orderable:** Radio buttons for "Yes" (selected) and "No".
- Resultable:** Radio buttons for "Yes" (selected) and "No".
- Profile Includes:** A text area containing the text: "Culture and identification of both aerobic and anaerobic organisms including HACEK (Haemophilus sp., Actinobacillus sp., Cardiobacterium sp., Eikenella sp., and Kingella sp.), antimicrobial susceptibility on bacterial isolates. Extended incubation culture (14 days) identification of organisms, antimicrobial susceptibility on bacterial isolates."
- Test Requisition:** A text field containing "Microbiology/Molecular Biology Request Form".
- Ref Range Units:** A text field containing "Ref Range Units".
- Critical Values:** A text field containing "Initial positive culture".
- Ref Range:** A text field containing "No growth".

At the bottom of the form are "Prev" and "Next" buttons.



Access Logs Page

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Home Reference Contact Admin Panel

Administrative Info Tissue/Cytology Lab Specimens Blood/Body Fluid Lab Specimens Forms and Supplies Result Reporting Add New Item

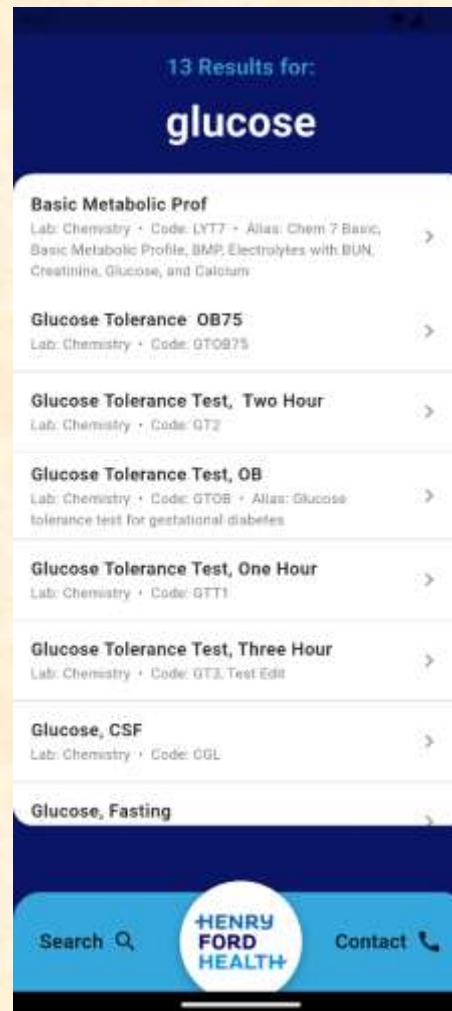
Access Logs

All Actions Date: mm/dd/yyyy Filter Reset Show/Hide IP Clear Risks

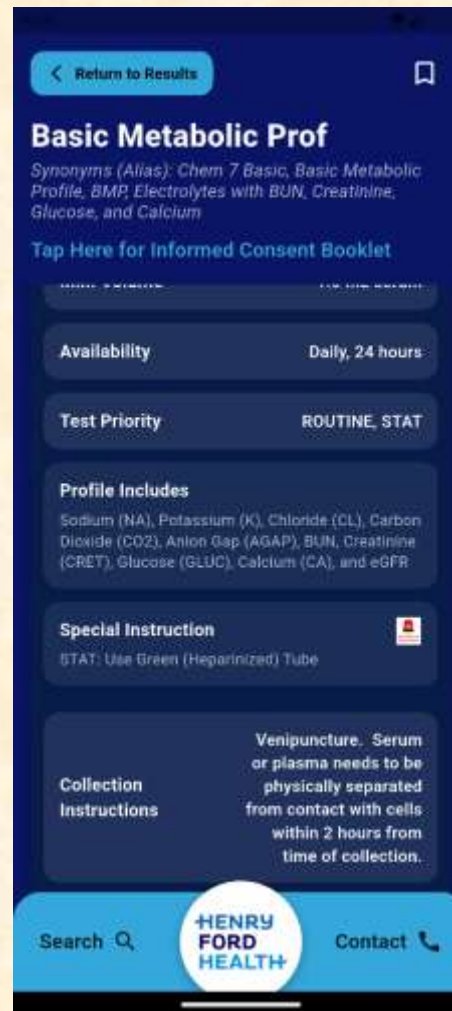
Username	Action	Log Time
Elijah Porter	access admin panel	2025-11-10, 18:27:25
Elijah Porter	access admin panel	2025-11-10, 18:27:14
Elijah Porter	Edited narrative page cytology-specimens/fresh-samples	2025-11-10, 18:26:41
admin	Deleted page with filename = /pages/cytology-specimens/molecular-testing/DELETED	2025-11-10, 18:24:38
Elijah Porter	access admin panel	2025-11-10, 18:16:33
admin	Archived page with filename = pages//result-reporting//archiving-files.json	2025-11-10, 18:02:51
admin	access admin panel	2025-11-10, 18:02:30
admin	access admin panel	2025-11-10, 18:01:39
admin	Edited narrative page /result-reporting//archiving-files	2025-11-10, 18:01:29
admin	Archived page with filename = pages//result-reporting//archiving-files.json	2025-11-10, 18:00:41
admin	login	2025-11-10, 17:47:21
admin	access admin panel	2025-11-10, 17:47:12



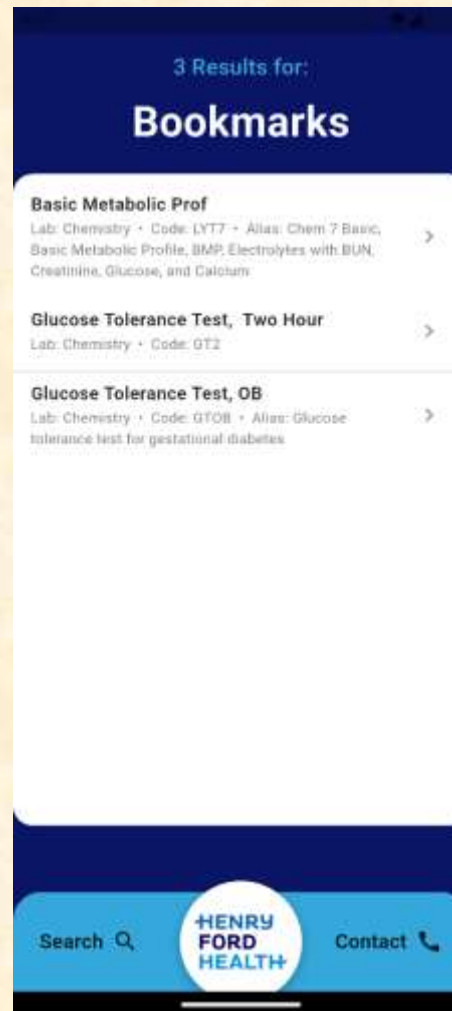
Mobile Search Page



Mobile Test Details Page



Mobile Bookmarked Tests



What's left to do?

- Features
- Stretch Goals
 - System for change requests
 - Smarter search algorithm
- Other Tasks
 - Remove need for .php file extensions
 - Fix narrative page parsing
 - Recycle bin/archived search filter



Questions?

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