

# BLIS-KENYA V2.5

A joint initiative of C4G @ Georgia Tech, the CDC,

@iLabAfrica - Strathmore University, Association of Public

Health Laboratories (APHL) and participating countries

## Standard Operating Procedures (SOP)

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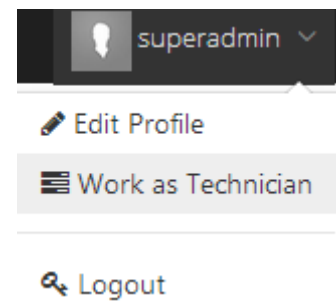
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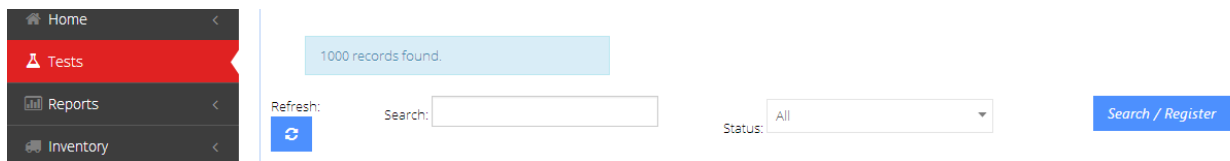
# Patient Registration

To register a patient, login as an administrator

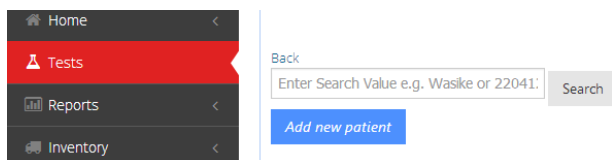
On the on the top right of the screen click your **username** (**superadmin** in this case) and click **Work as Technician** from the drop down




Click **Tests** on the side bar menu and click Search/Register



Click **Add new patient**



Enter the Patient Name, Gender and either Date of Birth or Age

 Add new patients ×

Registration Number \*


Patient Name \*

Gender \*

☒ Male

☐ Female

Date of Birth



Age

Years ▼

Submit

Cancel

Click **Submit**

# Sample Collection


## Receive Request

If you don't see the request among the listed, SEARCH for the patient using the PATIENT NUMBER or the PATIENT NAME as captured below. Press 'Enter' after giving the search value

Refresh:  Search:  Status:

Specimen ID	Date Ordered	Patient No	Visit No	Patient Name	Specimen Type	Test	Order Stage	Status
	2014-03-14 10:58:57	257054	496716	Reyna Tessman (F 44)		BS for mps	In-patient	<span>Not Recieved</span> <span>Receive request</span>


Receive the request using the 'Receive request' button on the far right of the row to get the following display


 Specimen Registration | Lab No: 20140523-9 ×

Tests Requested	Requesting Clinician	Date Requested
BS for mps	Emelina Davisson	2014-03-14 10:58:57

Specimen Type \*

Tests \*

Lab Receipt Date \*  

Lab receipt time \*  

Physician

Patient details

<u>Registration Number</u>	971
<u>Name</u>	Felix Watson
<u>Gender</u>	F
<u>Age</u>	44 Years
<u>Date of Birth</u>	07-12-1969

\* Mandatory Field

Submit Cancel

After submitting the details using 'Submit' button, the following will appear to confirm successful submission

Specimen ID	Date Ordered	Patient No	Visit No	Patient Name	Specimen Type	Test	Order Stage	Status
	2014-03-14 10:58:57	257054	496716	Reyna Tessman (F 44)		BS for mps	In-patient	<span>Not Collected</span> <span>Accept</span> <span>View Details</span>

## Accepting a Specimen

Once you have received the request, you'll need to check the specimen for acceptance.

Specimen ID	Date Ordered	Patient No	Visit No	Patient Name	Specimen Type	Test	Order Stage	Status	
	2014-03-14 10:58:57	257054	496716	Reyna Tessman (F 44)		BS for mps	In-patient	Not Collected	<a href="#">Accept</a> <a href="#">View Details</a>

If acceptable, press the 'Accept' button to be directed to the following page.

Specimen ID	Date Ordered	Patient No	Visit No	Patient Name	Specimen Type	Test	Order Stage	Status	
	2014-03-14 10:58:57	257054	496716	Reyna Tessman (F 44)		BS for mps	In-patient	Pending	<a href="#">Start Test</a> <a href="#">View Details</a>

You'll get the specimen number in the format: PAR-0001. PAR identifies the laboratory section the specimen shall be worked on and 0001 represent the actual specimen identifier. Label the specimen with that specimen number provided. Sort the specimens ready for dispatch to the sections.

## Rejecting a Specimen

A specimen may fall short of the standards required for a test, might be unlabeled, insufficient or due to other reasons. If so, search for the specimen and on the corresponding row of the specimen, press the 'Reject' button.

Specimen ID	Date Ordered	Patient No	Visit No	Patient Name	Specimen Type	Test	Order Stage	Status	
CLI-1336		257054	487335	Felix Watson (F 44)	Whole Blood	Blood sugar	Out-patient	Not Collected	<a href="#">Accept</a> <a href="#">Reject</a> <a href="#">View Details</a>

Fill in the form appropriately and submit it using the 'submit' button

Specimen Rejection Form

Page Help

Specimen Rejection | Lab No. 20140523-11 | Cancel

Patient ID

971

Patient Number

20140523-10

Patient Name

Felix Watson (F 44)

Specimen Type

Whole Blood

Tests

Blood sugar

Reasons for Rejection

Person Talked To

Submit

Back

You have successfully rejected the specimen as captured below.

Specimen ID	Date Ordered	Patient No	Visit No	Patient Name	Specimen Type	Test	Order Stage	Status	
CLI-1342	2014-05-26 13:45:15	257054	487335	Felix Watson (F 44)	Whole Blood	Blood sugar	Out-patient	Rejected	<a href="#">View Details</a> <a href="#">Print Report</a>

# Testing

## Starting a Test

Search for the patient, test or specimen OR filter using the dropdown under 'Status' select box for 'Pending'.

Specimen ID	Date Ordered	Patient No	Visit No	Patient Name	Specimen Type	Test	Order Stage	Status	
PAR-1335	2014-05-23 16:04:34	257054	496716	Felix Watson (F 44)	Whole Blood	BS for mps	In-patient	Pending	<a href="#">Start Test</a> <a href="#">View Details</a>

Click on the 'Start test' button

The status will change to 'Started' as captured

Specimen ID	Date Ordered	Patient No	Visit No	Patient Name	Specimen Type	Test	Order Stage	Status	
PAR-1335	2014-05-23 16:04:34	257054	496716	Felix Watson (F 44)	Whole Blood	BS for mps	In-patient	Started	<a href="#">Enter Results</a> <a href="#">View Details</a>

Proceed to perform the test

## Entering Test Results

Once through with the tests and results are out, Search the patient or specimen. Go to the corresponding row and click on 'Enter results' A pop-up form will be provided to be filled in appropriately.

✎ Results form - BS for mps ×

BS for mps:  

Result Interpretation

Summary

Specimen details

Type

Whole Blood

Specimen Number

PAR-1335

Patient details

Felix Watson (F 44 Years)

Visit number

496716

Lab Receipt Date

23-05-2014

Tests

BS for mps

Physician

Emelina Davisson

Previous tests

Type	Lab Receipt Date	Status	
BS for mps	23-05-2014	Results Pending	<a href="#">Details</a>
Blood sugar	23-05-2014	Not Collected	<a href="#">Details</a>

Send to Sanitas

Cancel

Once done, submit the results using the 'Submit' button to get the following confirmation

Specimen ID	Date Ordered	Patient No	Visit No	Patient Name	Specimen Type	Test	Order Stage	Status	
PAR-1335	2014-05-23 16:04:34	257054	496716	Felix Watson (F 44)	Whole Blood	BS for mps	In-patient	Tested	<a href="#">Edit</a> <a href="#">Verify</a> <a href="#">View Details</a>


## Editing Test Results

Search for the patient, test or specimen OR simply filter using the dropdown under 'Status' select box for 'Tested'.

Refresh:  Search:  Status:

Specimen ID	Date Ordered	Patient No	Visit No	Patient Name	Specimen Type	Test	Order Stage	Status
CLI-1336	2014-05-26 09:15:06	257054	487335	Felix Watson (F 44)	Whole Blood	Blood sugar	Out-patient	<span>Tested</span> <a href="#">Edit</a> <a href="#">Verify</a> <a href="#">View Details</a>

On the corresponding row, click on 'Edit' to open a pop-up form with pre-filled data  
Update the results as appropriate and save the changes by using the 'submit' button.

 Results form - BS for mps

BS for mps:

Positive

Result Interpretation

-

### Summary

#### Specimen details

Type	Whole Blood
Specimen Number	PAR-1335
Patient details	Felix Watson (F 44 Years)
Visit number	496716
Lab Receipt Date	23-05-2014
Tests	BS for mps
Physician	Emelina Davisson

#### Previous tests

Type	Lab Receipt Date	Status	
BS for mps	23-05-2014	Completed	<a href="#">Details</a>
Blood sugar	23-05-2014	Not Collected	<a href="#">Details</a>

#### Test results

Test Name	Results	Remarks	Entered by
BS for mps	Positive	-	antony

Send to Sanitas

Cancel

## Results Verification


Specific heads of lab sections are assigned results verification privileges.

Refresh:  Search:  Status:

Specimen ID	Date Ordered	Patient No	Visit No	Patient Name	Specimen Type	Test	Order Stage	Status	
CLI-1336	2014-05-26 09:15:06	257054	487335	Felix Watson (F 44)	Whole Blood	Blood sugar	Out-patient	Tested	<a href="#">Edit</a> <a href="#">Verify</a> <a href="#">View Details</a>

To verify results, press the ‘Verify’ button and the following pop-up will be displayed

Press the ‘Verify result’ button to verify


 Test Result: Blood sugar ×

Results

Test Name	Results	Remarks	Entered by	Specimen TT	Test TT	Verified by	
Blood sugar	Normal	-	jerome	0 d 00 hrs 00 min	0 d 00 hrs 00 min	<a href="#">Verification Pending</a>	<a href="#">✓Verify result</a>

Close

The name of the one who has verified will be displayed under ‘Verified by’

 Test Result: Blood sugar ×

Results

Test Name	Results	Remarks	Entered by	Specimen TT	Test TT	Verified by	
Blood sugar	Normal	-	jerome	0 d 00 hrs 00 min	0 d 00 hrs 00 min	<a href="#">antony</a>	<a href="#">✓Verify result</a>

Close

Close to see the verified status

CLI-1336	2014-05-26	257054	487335	Felix Watson (F 44)	Whole Blood	Blood sugar	Out-patient	Verified	<a href="#">View Results</a> <a href="#">View Details</a>
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## Full Haemogram Test on celltac F machine

Search for the visit number or (patient number or patient name)

Click **start test** and perform the test

On the celltac F machine; press **Print Results** button to send the results from the Celltac F machine to the computer

On the computer;

HAE-1346   2014-05-28   261290   496709   Christopher Brown (M 41)   Whole Blood   Full Haemogram   In-patient   **Started**   **Enter Results**   **View Details**

Click **Enter results** to get the results entry pop-up

To enter results sent from the celltac F machine, Click **Read results** button

**Results form - Full Haemogram**

**Read results**

WBC:  (4.0-9.0)  $\times 10^9/\mu\text{L}$

Neu#:  (42.0-85.0)

Lym#:  (11.0-49.0)

**Summary**

**Specimen details**

Type	Whole Blood
Specimen Number	HAE-1346
Patient details	Christopher Brown (M 40 Years)
Visit number	496709
Lab Receipt Date	28-05-2014

The results will be loaded as shown

**Results form - Full Haemogram**

**Read results**

WBC:  (4.0-9.0)  $\times 10^9/\mu\text{L}$

Neu#:  (42.0-85.0)

Lym#:  (11.0-49.0)

**Summary**

**Specimen details**

Type	Whole Blood
Specimen Number	HAE-1346
Patient details	Christopher Brown (M 40 Years)
Visit number	496709
Lab Receipt Date	28-05-2014

Scroll to the bottom of the pop-up and Click **Send to Sanitas** button to submit the results

Result Interpretation

**Send to Sanitas** **Cancel**



## Culture and sensitivity test

### LAB CONFIGURATION SET UP BY THE SYSTEM ADMINISTRATOR

On the side menu Click **Test catalog** and under it Click **Test Types**

Test Catalog		10 records per page	Search:	
#	Test	Lab Section	Action(s)	
1.	ALAT	BIOCHEMISTRY	<a href="#">Edit</a>	<a href="#">Delete</a>
2.	Albumin	SEROLOGY	<a href="#">Edit</a>	<a href="#">Delete</a>
3.	Alkaline Phosphate	BIOCHEMISTRY	<a href="#">Edit</a>	<a href="#">Delete</a>

Search for the test name (in this case; **HVS for culture and sensitivity**) by typing all or part of it and press **Enter**

10 records per page

Search: HVS for culture and sensitivity

#	Test	Lab Section	Action(s)
51.	HVS for culture and sensitivity	MICROBIOLOGY	<a href="#">Edit</a> <a href="#">Delete</a>

Click **Edit** and scroll down to **Show culture worksheet?** Option

Show culture worksheet?	<input type="checkbox"/>
Cost to Patient	0 / 0 Ksh
<a href="#">Submit</a> <a href="#">Cancel</a>	


Check the **Show culture worksheet?** Box to load the drugs and check appropriately

Show culture worksheet?	<input checked="" type="checkbox"/>
Compatible Drugs * [7]	<input checked="" type="checkbox"/> AMPICILLIN <input checked="" type="checkbox"/> PENICILLIN
Cost to Patient	0 / 0 Ksh
<a href="#">Submit</a> <a href="#">Cancel</a>	

Click submit to save

## LAB TECHNICIAN'S GUIDE

Search for the visit number or (patient number, patient name or test)

Refresh:  Search:  Status:

Specimen ID	Date Ordered	Patient No	Visit No	Patient Name	Specimen Type	Test	Order Stage	Status	
MIC-1347	2014-05-28 12:18:50	259419	495860	Augustine Mcglamery (F 58)	High Vaginal Swab	HVS for culture and sensitivity	In-patient	Pending	<a href="#">Start Test</a> <a href="#">Reject</a> <a href="#">View Details</a>

Click **start test** and start performing the test

Specimen ID	Date Ordered	Patient No	Visit No	Patient Name	Specimen Type	Test	Order Stage	Status	
MIC-1347	2014-05-28 12:18:50	259419	495860	Augustine Mcglamery (F 58)	High Vaginal Swab	HVS for culture and sensitivity	In-patient	Started	<a href="#">Enter Results</a> <a href="#">View Details</a>

Click **Enter Results** to open the results entry form

For the Observations and work-up; add the observation and click **save** on the right of the entry to save it

Date	Initials	Observations and work-up	Action
just now	arthur	moderate candida	
Just now	arthur	<input type="text"/>	<a href="#">Save</a>

Enter other values available at the time and (scroll down to see) click **Send to Sanitas** to save the whole form

[Send to Sanitas](#)
[Cancel](#)

After which you will see the status of **tested** for that entry

Specimen ID	Date Ordered	Patient No	Visit No	Patient Name	Specimen Type	Test	Order Stage	Status	
MIC-1347	2014-05-28 12:18:50	259419	495860	Augustine Mcglamery (F 58)	High Vaginal Swab	HVS for culture and sensitivity	In-patient	Tested	<a href="#">Edit</a> <a href="#">Verify</a> <a href="#">View Details</a>

To enter additional observations and values click **Edit**, and after changing and/or entering new values, click **Send to Sanitas** to save

# External Quality Assessment (EQA)

**EQA sample** should be treated as a **patient sample** with **EQA** as **patient name**.

Register EQA as a patient

Patient Name \*

Gender \* ☒ Male ☐ Female

Date of Birth

Age

< June 2014 >

Su	Mo	Tu	We	Th	Fr	Sa
25	26	27	28	29	30	31
1	2	3	4	5	6	7

Enter the specimen in the page that is loads on submission

Specimen Type \*

Tests \*

Lab Receipt Date \*

Lab receipt time \*

Physician

Referral sample ☐ Referred Out ☐ Referred In

## Patient details

<u>Registration Number</u>	978
<u>Name</u>	Eqa
<u>Gender</u>	M
<u>Age</u>	
<u>Date of Birth</u>	04-06-2014

\* Mandatory Field

[Add Another Specimen »](#)

[Receive the specimen](#), [start the test](#) and enter results of the test

These results are then available for retrieval to be sent to the Proficiency Testing Provider

Received evaluation result from Proficiency Test Provider should be kept by paper based filing