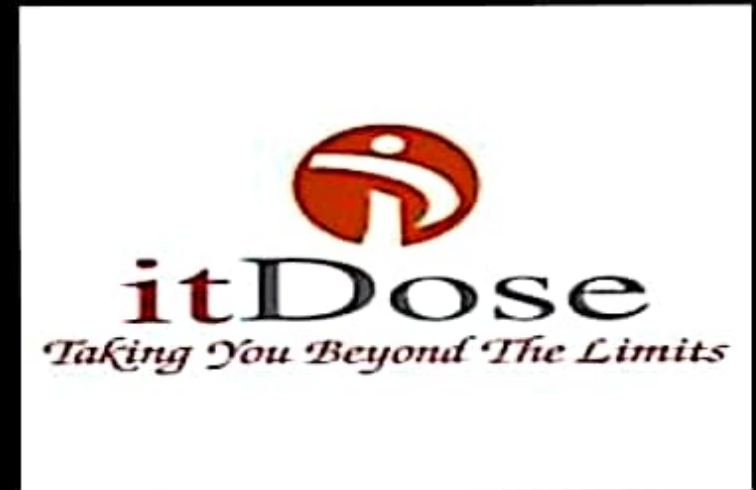# ITDOSE INFOSYSTEM PVT. LTD.

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INTRODUCTION :

LABORATORY INFROMATION SYSTEM VERSION (6.0).

INTRODUCTIONS

LABORATORY INFORMATION SYSTEM

A laboratory information system (LIS) is computer software that processes, stores and manages data from all stages of medical processes and tests.

Physicians and lab technicians use laboratory information systems to coordinate varieties of inpatient and outpatient medical testing, including hematology, chemistry, immunology and microbiology. Basic laboratory information systems commonly have features that manage patient check in, order entry, specimen processing, result entry and patient demographics. An LIS tracks and stores clinical details about a patient during a lab visit and keeps the information stored in its database for future reference.

A closely related technology to LIS is a laboratory information management system (LIMS), but there are differences between the two software types. An LIS is a healthcare system that holds clinical data. By comparison, an LIMS can be deployed in healthcare, too, but it is also used in non-medical settings, including in environmental testing laboratories, pharmaceutical laboratories and water treatment plants. An LIMS can be used as a Web tool or installed on a personal computer or device and stores and manages captured data, as well as producing reports from that data.

The electronic data capture process of an LIMS or LIS can reduce time spent and cut errors associated with the transcribing process.

Maintenance of laboratory information systems took on added importance with the introduction of the meaningful use program. The program is overseen by the Centers for Medicare & Medicaid Services and consists of sets of criteria split into stage 1, stage 2 and stage 3. Participating healthcare providers that successfully prove their electronic health record (EHR) systems or EHR modules -- such as an LIS -- satisfy program criteria are eligible for incentive payments. If an LIS is tested and certified to meet meaningful use criteria or other health IT certification standards, it is defined as an EHR module.

Some meaningful use reporting measures that could involve an LIS include the electronic submission of lab test results to public health agencies and the incorporation of clinical lab test results into a certified EHR system.

By Sudhanshu

Content Screen's
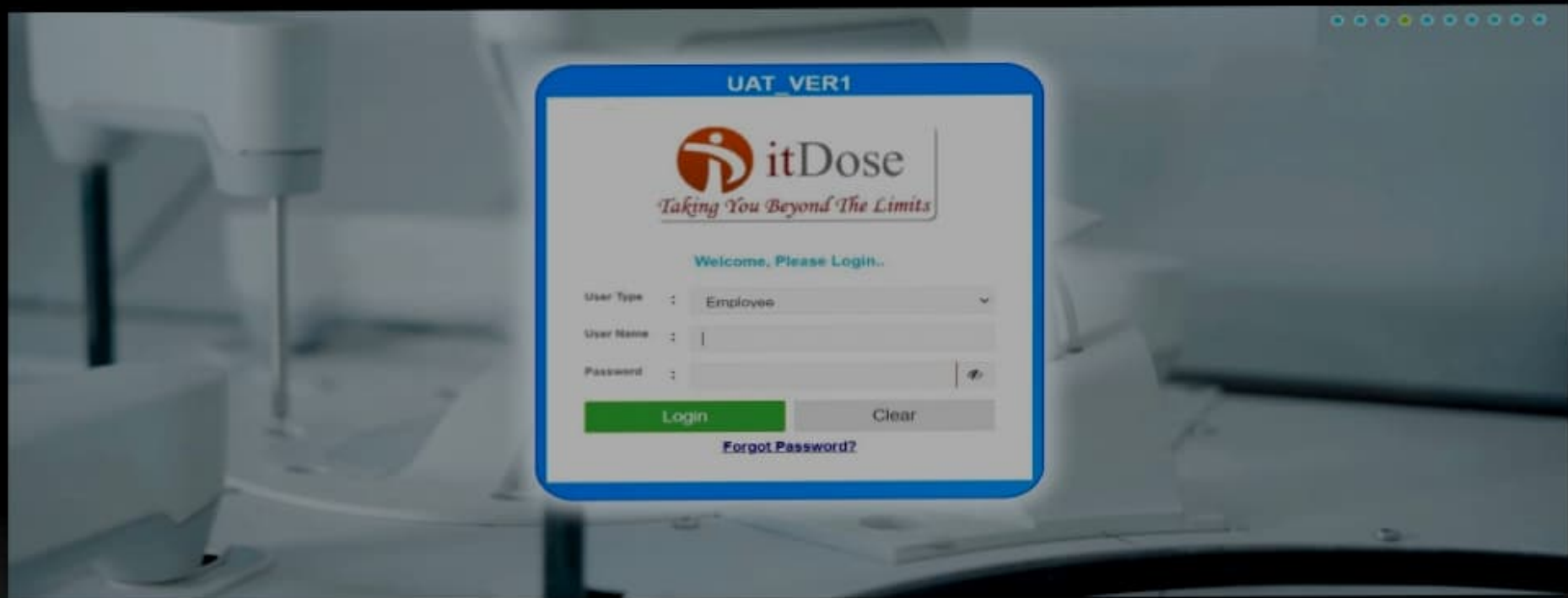
- LOGIN.
- REGISTRATION.
- SAMPLE COLLECTION.
- LABORATORY.
- RESULT ENTRY.
- DISPATCH REPORT.
- LABORATORY MASTER

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- How to patients Registration done !
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- Discuss the various steps about registration patients !
- Payments Methods !
- Sample collection process !
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- Department Receive !
- Sample Rejection !
- How to patients result entry in the LIS software !
- Print the patients reports !
- Investigation Manager !
- Formula Master !
- Investigation Template !
- Outsource Lab Investigation Master !
- Interpretation !
- Package Master !
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Login

➢Login means a login and password that allows access to the Service. Sample 1. User-Login means a unique username and associated password provisioned to an identifiable individual to permit them to access the Services.

➢Login screen allow you to enter and access the module features assign by the administrator.

Role's and Departments.

➢Have look the role and departments in the below of attached images :
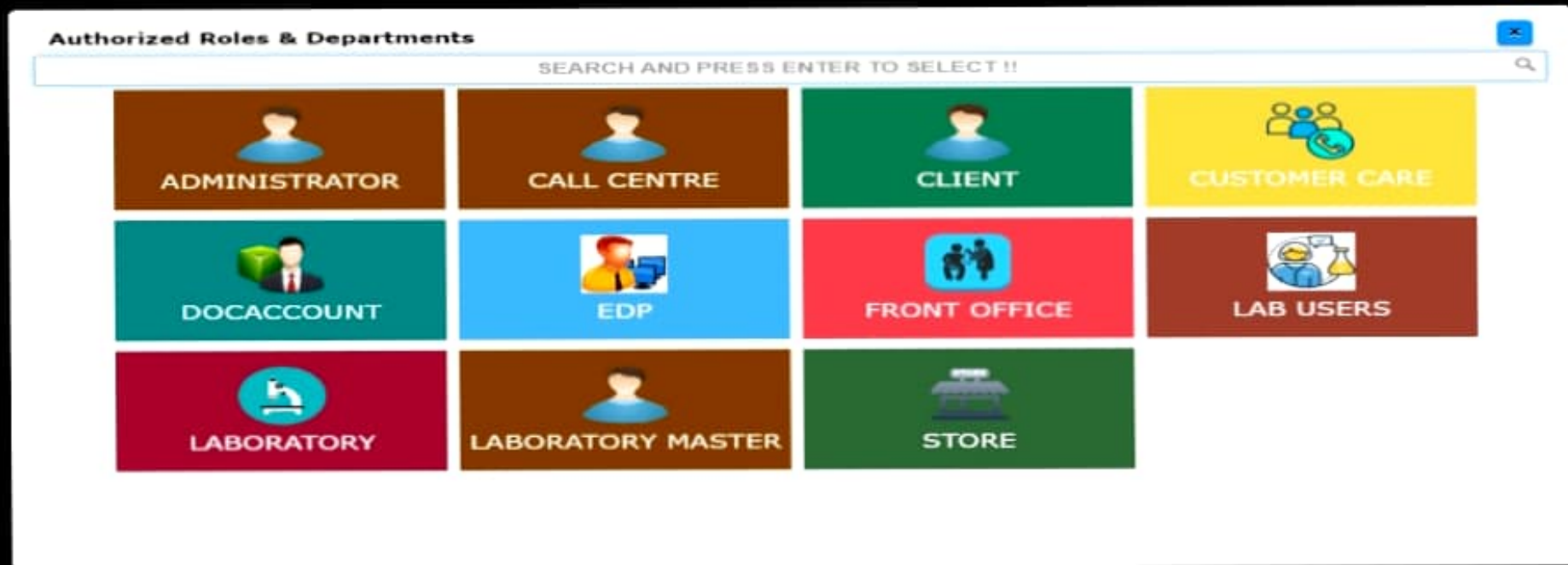
➢Different Type of roles are arranged by the administer for the employee .
After login you would be able to see the particular that are given to you

LABORATORY

➢In the laboratory screen, you will do the sample collection of the patients,
After that you will do the sample received of the patients,
Then you will do that departments received of the patients, after the following
Steps have been successfully completed then you will go the result entry
screen.

Sample Management ▾
  ▶ Sample Collection
  ▶ Department Receive
  ▶ Sample Receive Area
Sample Processing ▾
  ▶ Result Entry
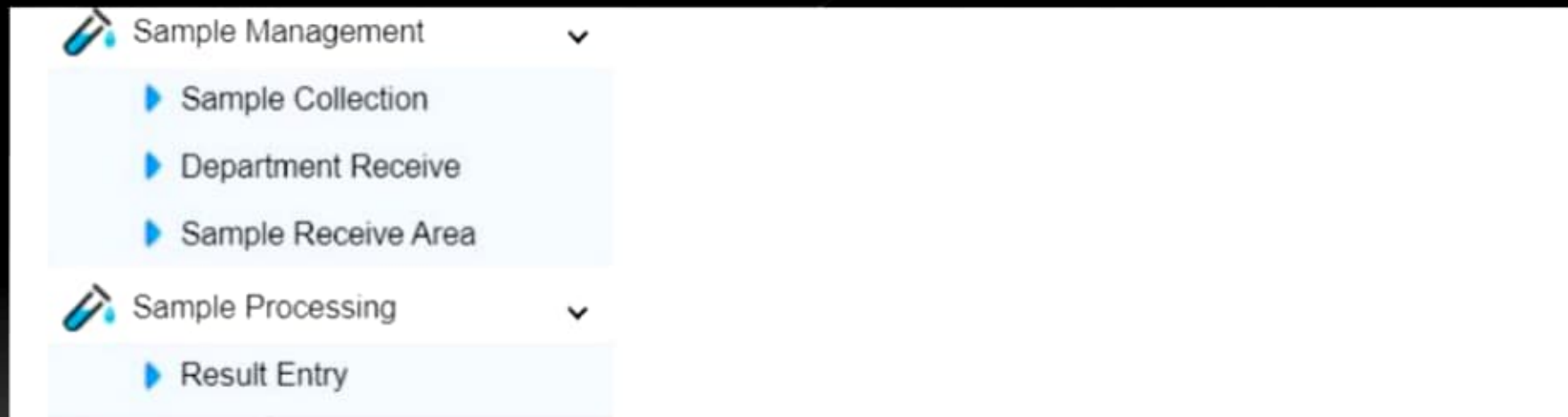
➢Sample Collection.
➢Sample Receive Area.
➢Department Receive Area.

Sample Management :

➤From the submenu go through the sample management and you will be able to see three main points . Sample collection, Sample Receive Area, Department Receive. Like as below.

> Sample Management ⌄
> ▶ Sample Collection
> ▶ Department Receive
> ▶ Sample Receive Area
> Sample Processing ⌄
> ▶ Result Entry
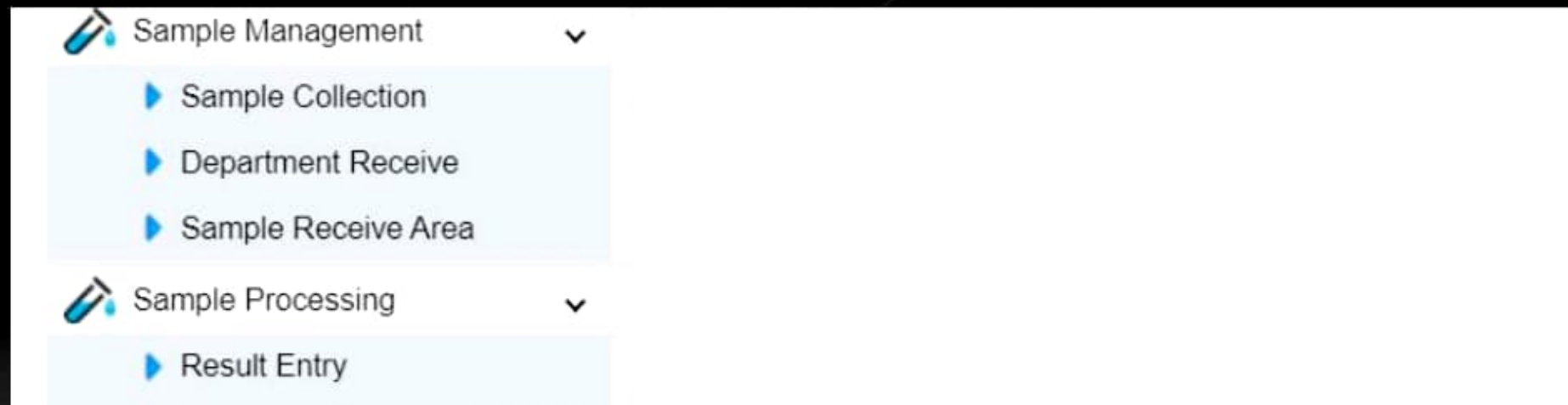
➤We going to discussed about these three topics step by step.

Sample Collection's

➢Here the screen come for the sample collection of the patient .After the registration of the patient . Sample collection is necessary of the sample to check whether the sample is collected or not.

➢First of all you click one the patients visit id number and then selected the patient, and add the SIN number (barcode), after that you can click the right corner blue coloured button (collect). Now you can see the screen with the sample collection successfully collected popup messages.

➢At the Top you see the different Search Filter Options. Not all the option is mandatory but the date option you have to select with In the data you want. Here we describe all about the filter options.

➢1 :- The first is the search by reference number .First choose the refer no type like visit no. Reg. no, Barcode no That you have select the Type and enter the number in the text box.

➢2:- Select the center for which center you want to search the tests.

➢3:- Search the patient by rate type . The rate type that are chosen while registration . Just select one of the type and the patient are come in the result..

➢4:- Here also the department option available select the department like, Bio Chemistry, Pathology.

➢5:- Here is the option to search the result according to user wise just select the user in the list.

➢6:- In that option You can search according to the sample status . Like sample received, not collected or collected .

➢7:- This is the date selection option In between you want the result. Just as the right side there is the selection of the test. For which particular test you want to search the patients . Just select the test and the patient registered with this come.

➢8:- After apply the filter just hit the search button and the result come under.

➢9:- Patient Detail:- Here in the section the result will show according to the search and the some details about the patient are show. In between there is the select option available. Just select the particular patient for which you want to collect the sample.

➢10:- Sample Detail:- In this the sample detail of the particular selected patient is show with the sample name investigation name and the barcode no. just select by click on the checkbox given there and collect the sample for that patient By just clicking the collect button.

Sample Receive Area !

> Here the screen come for the sample receive of the patient .After the sample collection of the patient . Sample receive is necessary to check whether the sample is received in lab or not

> **The screen you see above is for the sample receive area(SRA)**

> 1 :-Here First one you see is the option to enter the barcode or sin no of the sample.

> 2:- Hit the search button and the detail of that sample come.

> 3:- In House means the sample is in the lab or inside the center.

> 4:- Pending Barcode

> 5:-If want to Reject the sample just click on the reject button And enter the reason and reject the sample.

> 6:- In this some detail is motioned about the sample like barcode no and test name

> 7:- This show the sample that are collected but not received

Department Received !

> Here the screen come for the department receive of the sample .Department receive is necessary to check whether the sample is received by the particular department or not.

Department Received Steps :

➤ This the department Received screen At the Top you see the different Search Filter Options. Not all the option is mandatory but the date option you have to select with In the data you want. Here we describe all about the filter options.

➤ In the Search section there is many filters available like panel search , department search , test search or search By the machine type. And search the data by applying filter.

➤ These three are the color coding that show which sample is received or pending or rejected.

➤ In the patient detail section there is some detail about the patient just check the checkbox for which you want to receive the sample for.

➤ And receive the sample by click on the receive button . You can multiple check the patient and receive the sample in one time.

Sample Rejection's !

➤ Here the screen come for the rejection of the sample. We reject the sample in many of the cases . For example:- If the sample is not accurate . if sample is not as much sufficient to make a test.

➤Just enter the reason of the sample rejection or select one of the type that of the rejection and click on the reject sample button . And the sample is reject.

Result Entry !

➤ **Now we come on the Result entry part .Patient Lab search Here we search the patient that are registered in our LIS after the sample receive . And the result of the patient and print the report which are give to the patient.**

Result Entry Steps :

➢ At the Top you see the different Search Filter Options. Not all the option is mandatory but the date option you have to select with In the data you want. Here we describe all about the filter options.

➢The first is the search by reference number .First choose the refer no type like visit no. Reg. no, Barcode no That you have select the Type and enter the number in the text box.

➢Search the patient by rate type . The rate type that are chosen while registration . Just select one of the type and the patient are come in the result. Beside from this There are many other option available like Just at the right side choose one form the type like All patient, pending result as this type are also mention as the color code . Here also the department option available select the department like, Bio Chemistry, Pathology.

➢This is the date selection option In between you want the result. Just as the right side there is the selection of the test. For which particular test you want to search the patients . Just select the test and the patient registered with this come.

➢Tat Type:- Select the Tat Type from the dropdown list.

➢Color code:- There are different color code given below Its actual a search filter option just click on the color for that test you want to search just click and the registered patient belong to that type come like those whose only result done or approved test.

➢This is the last option here you see the preferred result after the search or filter option. All the patient come with details and a link you see under the UHID No. Just click on the UHID no and you redirect to the next screen.

Result Entry !

> **After selection of the patient for which the test has to enter we come on that screen. Here we enter the result for the preferred observation . Min And the max reading show at the right side and also the unit.**

Result Entry Observations :

➤ The different observation is show that are tag with this test Enter the reading here .

➤(+) This indicate the help menu .

➤You add a help from here as a result.

➤In comment enter the Comment that display at the last of the report

Result Entry Colour :

➢ Example of the abnormal value. There are different color code given to you which help you to recognize the thing in a easy way like if result is high or low the observation color become yellow or pink.

DISPATCH !

➢ Goto the Front office screen and find the submenu by the name of Dispatch.
➢ The menu is basically used to print the report after the result entry done.
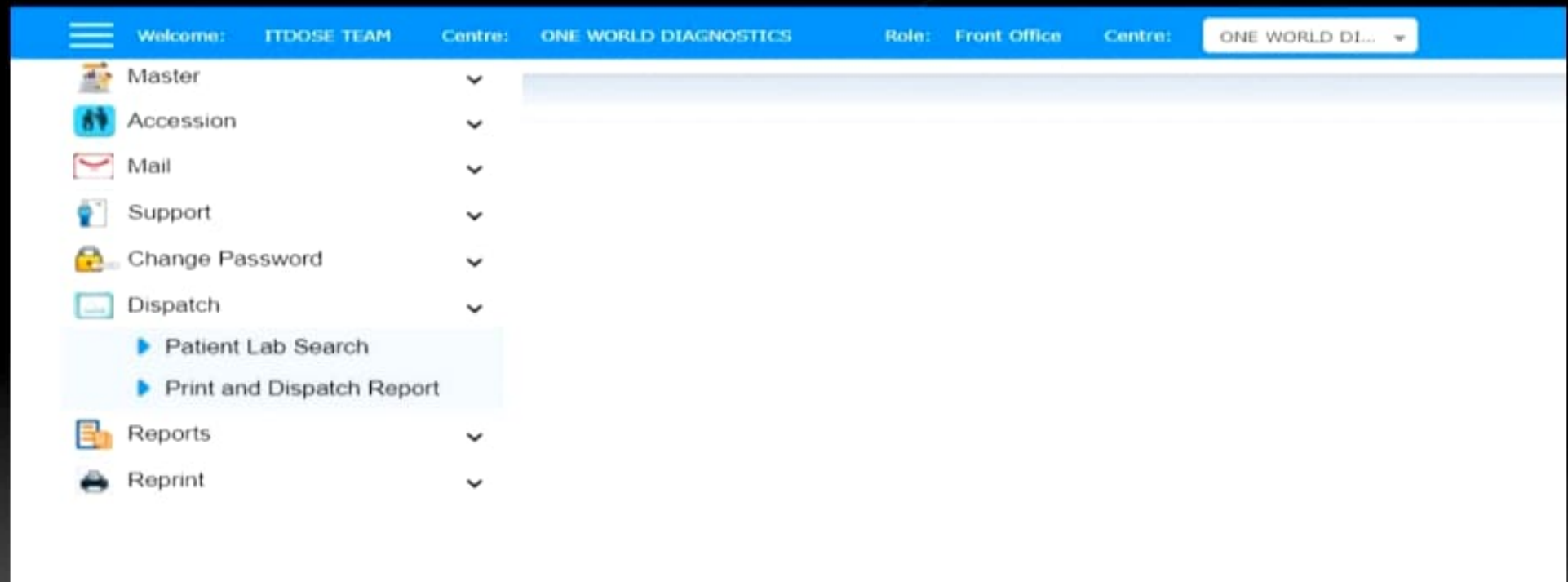
DISPATCH !

> In this screen you can search the patients report and check what is the status of the reports you can easily recognise by the help of colours codings..

Print Reports !

➤ There is the sample print of the print lab report of the patient. Have a look please.

Patient Name	: Mr.AMAR KUMAR BAIDYA	Collected	: 17/Sep/2022 12:09PM
Age/Gender	: 64 Y 0 M 0 D /Male	Received	: 17/Sep/2022 12:09PM
UHID	: A171.0000000198	Reported	: 17/Sep/2022 12:59PM
Mobile No	: 8910374352	Status	: Final Report
Ref Doctor	: Dr.R. PAUL	Visit Id	: 171205
Client Code	: OWDC0171	Barcodeno	:220915913
Patient ID Proof	:		Scan this code to view your orignal report

DEPARTMENT OF HAEMATOLOGY

Test Name	Result	Unit	Bio. Ref. Interval	Method
Platelet Count				
Platelet count	1.15	Lakhs/cumm	1.5-4.5	Electrical Impedance
PRIMARY SAMPLE : WB - EDTA				
EQUIPMENT USED : XN550				

*** End Of Report ***

Dr Arindam Das
M.B.B.S, M. D. (PATH)
Consultant Pathologist

CONDITIONS OF LABORATORY TESTING & REPORTING

1. The identity or details of the customer is not verified by the laboratory and it is assumed that sample/specimen given by the patient name mentioned in the test booking slip or invoice or TRF is same as declared by the patient.	7. Laboratory may ask for repeat sample to come to final result due to insufficient sample,quality of sample or even for any other technical issue
2. Test results are dependent on the quality of the specimen received in the laboratory.(Applicable only for outside sample)	8. Any query pertaining to this report may be directed to the helpline or through email given below.
3. Laboratory investigation is only a tool to facilitate in arriving at a final diagnosis and should be clinically correlated by the Referring physician.	9. Images in the report are created by electronic processing. Opams Health Care makes no expression or implied warranties or representations with respect to it and takes no responsibility for the authenticity, quality and size of the images, it may cause due to technical issue
4. Report delivery may get delayed due to unavoidable circumstances; inconvenience is deeply regretted.	10. Test results are not valid for medico-legal purposes.
5. Partial reproduction of the reports are not permissible.	11. Test results may show inter laboratory variations.
6. Opams Health care confirms that all tests have been performed or assayed with highest Quality standards, clinical safety & technical integrity.	