



## **Dotmark Medical Solutions (DMS) Lab Manual**

*"Easy, Quick and Efficient"*

At DMS we strive to facilitate and streamline all your enterprise needs to achieve excellent care delivery and clinical productivity.

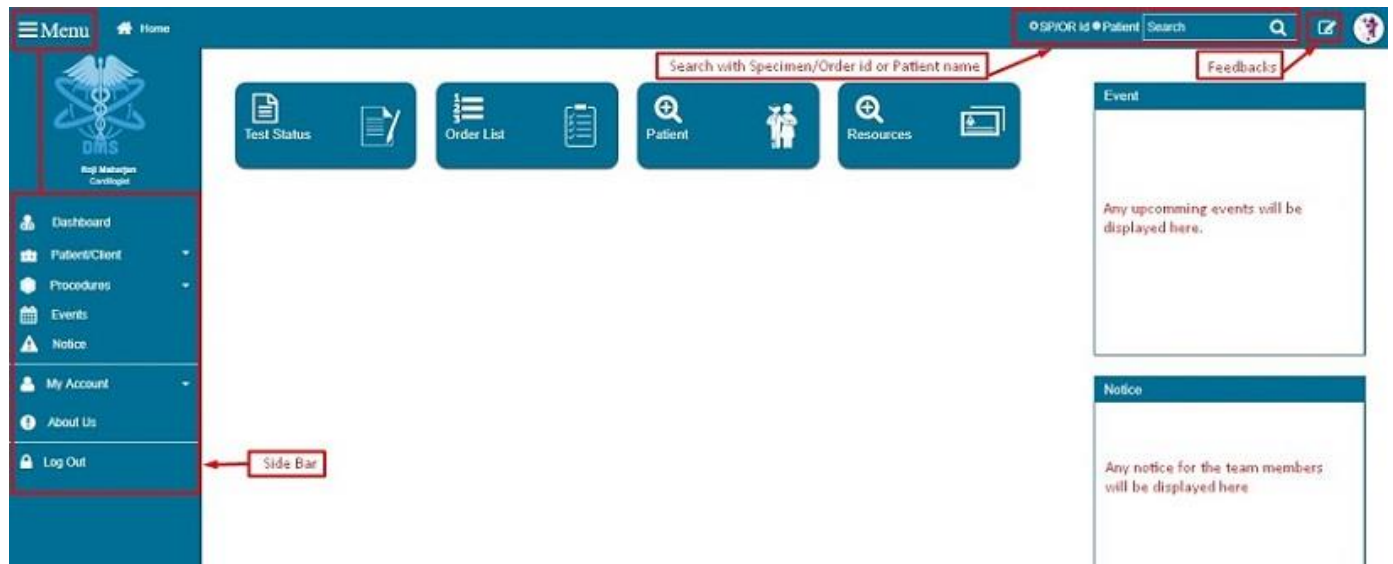
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# Introduction

After logging in, you will be directed to DMS dashboard. DMS dashboard contains tools that can be used for many purposes. These all will be discussed in this manual.



Click on the icon on the top-right corner of the screen to view options related to the user account.

Clicking log out will sign you off from the session and redirect you to the log in page.



## Feedbacks

Feedbacks for improving DMS, error reporting and additional comments can be sent. Press feedback icon on the top right corner next to the Search bar and fill up the form.

## Feedbacks

Name	<input type="text" value="Your Name"/>
Feedback Type	<div>Please Select ▼</div>
Feedback	<div><div>Your Feedback</div><div></div></div>
<div><div>Save</div><div>Cancel</div></div>	

## Events and Notices

Upcoming events and notices can be easily added to the dashboard. On the side bar scroll down, find **Events** and **Notice**. Click on them and fill up the form as required and post it on the dashboard.

**NOTE:** Every account holder can view this on their dashboard and could be super useful, so it should be properly utilized.

These messages will be posted for certain time only. **From** and **To** indicates start date and end date respectively of that message.

Add Events

Start Time

Start Time

End time

End Time

Venue

Venue

Description

Add Event

List of Events

Start time	Venue	Description	End Date	Action
No data available in table				

## Add Notice

From	<input type="text" value="Start Time"/>	
To	<input type="text" value="End Time"/>	
Description	<input type="text"/>	
<input type="button" value="Add Notice"/>		

## List of Notice

Start time	Venue	Description	End Date	Action
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# Searching an Existing Patient/Order

Patients search can be done from the search bar as shown in the image below.

SP/OR Id Patient a

[Help] 1 - 0 of

Name	Sex	Phone	Citizenship/Passport number	DOB	ID	PID	View Report
Manish kumar Awale	Male			2008-01-10	111200000019	19	
Anup Belbase	Male	01-895623	1265/7	1981-12-14	111200000001	1	View Report
Bipul Chhetri	Male			1993-01-03	111200000014	14	
d d	Male			2018-01-15	111200000022	22	
Sajal Dhungana	Male	9812345698	J8369854	1992-11-10	111200000023	23	
Dsfds Dsfds	Female			1999-12-30	111200000012	12	
Sunil is gamal	Male			1974-01-17	111200000025	25	
Alish Ciri	Male		123467	1991-05-25	111200000011	11	
Suraj Bahadur Gurung	Male			1992-12-14	111200000008	8	

The below image displays search through a specimen id. Search done by specimen id will navigate to the test report page where details of the can be viewed and updated.

SP/OR Id Patient SP001141

Procedure List Form

Patient	Encounter	Date	Procedure Name
Alis Khadka(25yrs/M)	2018-02-27	2018-02-27	Amylase

Report

Reported	Ext Time Collected	Specimen	Specimen Type	Status
2018-02-27 11:00	2018-02-27 14:20	SP001141	Serum	Specimen Collected

Update

Result and recommendations

Code: bcm-amyl1

Name: Amylase

Abnormal: [Dropdown]

Value: [Text]

Units: [Text]

Range: [Text]

Source File Path: Choose Files No file chosen

Lab Test Method: Kinetic

# Dashboard

## Test Status

This displays list of all tests (with their respective date) that are pending, has been sent for processing and list of other options from the dropdown as shown below. Select the required option from the **Status** to view the list on the selected status. Selected list can be printed from the printer icon or can also be exported to CSV (an Excel format list).

Status: Pending

Pending

Specimen Collected

Sent to Internal Lab

Sent to External Lab

Report Received

Reviewed

Canceled

Error

Today

←

→

Monday, Jan 29, 2018

Export to CSV

🖨

Order Details

Status

Patient	Encounter	Date	Procedure	Test Name	Status	Payment
Nabin One	2018-01-29	2018-01-29	Transparency	Transparency	Due	
Jay Yadav	2018-01-29	2018-01-29	Stool R/E	All types of parasites	Due	
Jay Yadav(0y 0m 1d/F)	2018-01-29	2018-01-29	Stool R/E	Color	Due	

Status: Sent to Internal Lab

Pending

Specimen Collected

Sent to Internal Lab

Sent to External Lab

Report Received

Reviewed

Canceled

Error

Today

←

→

Monday, Jan 29, 2018

Export to CSV

🖨

Order Details

Specimen Details

Status



Patient	Encounter	Date	Procedure	Test Name	ID	Type	Collected Date	Status	Payment
Jay Yadav	18-01-29	2018-01-29	Stool R/E	All types of parasites	SP000511	Stool	2018-01-30	Sent to Internal Lab	Due
Jay Yadav	18-01-29	2018-01-29	Stool R/E	Color	SP000511	Stool	2018-01-30	Sent to Internal Lab	Due
Jay Yadav(0y 0m 1d/F)	2018-01-29	2018-01-29	Stool R/E	consistency	SP000511	Stool	2018-01-30	Sent to Internal Lab	Due
Jay Yadav(0y 0m 1d/F)	2018-01-29	2018-01-29	Stool R/E	mucus	SP000511	Stool	2018-01-30	Sent to Internal Lab	Due
Jay Yadav(0y 0m 1d/F)	2018-01-29	2018-01-29	Stool R/E	RBCs	SP000511	Stool	2018-01-30	Sent to Internal Lab	Due

Previous

1



Next

This **Status** section has to be updated by the lab technician. This is done to keep track of the test which will also be displayed in the Procedure List of the patient. Search the patient from the search bar, click on the patient to go to the Procedure list section.

Status: Pending	Today	 	Monday, Jan 29, 2018		Export to CSV	
Patient Details			Order Details		Status	
Patient	Encounter	Date	Procedure	Test Name	Status	Payment
Nabin One(0y 0m 20d/M)	2018-01-29	2018-01-29	Transparency	Transparency		Due
Jay Yadav(0y 0m 1d/F)	2018-01-29	2018-01-29	Stool R/E	All types of parasites		Due
Jay Yadav(0y 0m 1d/F)	2018-01-29	2018-01-29	Stool R/E	Color		Due
Jay Yadav(0y 0m 1d/F)	2018-01-29	2018-01-29	Stool R/E	consistency		Due
Jay Yadav(0y 0m 1d/F)	2018-01-29	2018-01-29	Stool R/E	mucus		Due
Jay Yadav(0y 0m 1d/F)	2018-01-29	2018-01-29	Stool R/E	RBCs		Due
						Previous 1 Next


## Order List

This displays patient's procedure order list of the selected date. One procedure order can have multiple tests. For example, a patient has been given procedure order for testing his/her stool and blood. So, in this case, the patient will have two tests in one order. He/she can also have multiple order in one day. As shown in the image below.

Order List			Today	←	→	Export to CSV	Monday, Jan 29, 2018		
Patient	Encounter	Date							
Suraj Singh Thakuri(25yrs/)	1326	2018-01-29							
Nabin One(0y 0m 21d/)	1321	2018-01-29							
Jay Yadav(0y 0m 2d/)	1327	2018-01-29							
Ram lal Jagat(34yrs/)	1329	2018-01-29							
Ram lal Jagat(34yrs/)	1329	2018-01-29							

Previous 1 Next

Multiple test of a single patient is displayed in the image below.

Today		 		Tuesday, Mar 20, 2018				Export to CSV			
Patient Details				Order Details				Status			
Patient		Date	Group	Procedure		Test Name		Status	Payment		
Nobody Rock(20yrs/M)		2018-03-20		Urea		Urea			Paid		
Nobody Rock(20yrs/M)		2018-03-20		Cholesterol		Cholesterol			Paid		
Nobody Rock(20yrs/M)		2018-03-20		Urine Culture and Sensitivity		Urine Culture and Sensitivity			Paid		
									Previous <div>1</div> Next		

Click on a patient to see the details of the patient, his/her order details and the status of the procedure order.

Today

←

→

Tuesday, Feb 27, 2018

Export to CSV

Print

Patient Details

Order Details

Status

Patient	Date	Group	Procedure	Test Name	Status	Payment
Alis Khadka(25yrs/M)	2018-02-27		Amylase	Amylase	Due	

Export in Excel format

Previous

1

Next

Again, click on the patient to view the following screen.

Use the barcode icon to print the barcode of the patient's procedure order. Copy or scan the specimen id (SPxxxxxx) and place it under the **Specimen** and select the status of the specimen. **Status** provides information regarding what is going to happen with that specimen. Hit submit after everything is completed as described.



Procedure List Form back

Patient	Encounter	Date	Procedure Name
Alis Khadka(25yrs/M)	2018-02-27	2018-02-27	Amylase

Report

Reported	Ext Time Collected	Specimen	Specimen Type	Status
2018-02-27 11:00	2018-02-27 14:10	SP001141	Serum	

[Submit](#)

Click this to view and print patient's barcode

Print

Total: **1 sheet of paper**

[Print](#) [Cancel](#)

☐ e.g. 1-5, 8, 11-13

Layout: Portrait


Submitting the form will redirect user to the following screen, which will be used in the near future to provide update on the specimen's test.

Procedure List						
Patient Details		Order Details			Status	
Patient	Order Date	Group	Procedure	Test Name	Test Status	Payment
Alis Khadka(25yrs/M)	2018-02-27		Platelets	Platelets	Sent to Internal Lab	Due

Previous 1 Next

Future user should click on the patient to follow up with the process on the following screen.

Enter the new updates with the test and press update to save the record.

Alis Khadka(25yrs/M)		2018-02-27	2018-02-27	Amylase	
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### Report

Reported	Ext Time Collected	Specimen	Specimen Type	Status	
<input type="text" value="2018-02-27 11:00"/>	<input type="text" value="2018-02-27 14:20"/>	<input type="text" value="SP001141"/>	Serum	<input type="text" value="Specimen Collected"/>	<input type="button" value="Update"/>

### Result and recommendations

<p>Code <input type="text" value="bcm-amyl1"/></p> <p>Name <input type="text" value="Amylase"/></p> <p>Abnormal <input type="text" value=""/></p> <p>Value <input type="text" value=""/></p> <p>Units <input type="text" value=""/></p> <p>Range <input type="text" value=""/></p> <p>Source File Path <input type="button" value="Choose Files"/> No file chosen</p> <p><small>(Multiple files can be uploaded at one time by selecting them using CTRL-Click or SHIFT-Click.)</small></p> <p>Lab Test Method <input type="text" value="Kinetic"/></p> <p>Status <input type="text" value=""/></p> <p>Possible Result <input type="text" value=""/></p>	<p>Facility <div style="border: 1px solid #ccc; padding: 5px; height: 40px; background-color: #f9f9f9;">Supplier Facility Name</div></p> <p>Comments <div style="border: 1px solid #ccc; padding: 5px; height: 60px; background-color: #f9f9f9;">Comments on result and recommendation</div></p> <p>Notes <div style="border: 1px solid #ccc; padding: 5px; height: 60px; background-color: #f9f9f9;">Additional notes here if any</div></p> <p style="text-align: right;"><input type="button" value="Submit"/></p>
--	--

## Patient

Shows list of all patients. Please note that lab department are not allowed to view patient demographic page.

# Patient/Client

## Patient

This shows the list of all patients.

## Patient Education

Search any information on the web from here.

Web Search - Patient Education Materials

Search in Medline

Generic category of the search.

search bar

Submit

Please input search criteria above, and click Submit to view results. (Results will be displayed in a pop up window)

## Chart tracker

Track patients with this function. Enter the **Patient ID** to view the information.

# Procedures

## Providers

A hospital can have multiple departments handling various procedure order. These will be mentioned here.

Providers		
Refresh	Add New	
Name	NPI	Protocol
Laboratory	internal	DL
Laboratory	external	DL
Radiology	internal	DL
Radiology	external	DL

## Configuration

Configuration controls all the tests that the Hospital conducts internally or externally.

These tests can be categorized into groups, procedure order or other as required. Different topics will have different forms and their contents.

The basic concept of this configuration, starting with creating a group is as follows:

- Press **Add Top Level** to add new test as shown in the image below.

Types of Orders and Results				
Configuration	Group Orders	Lab Test Method		
Name	Order	Code	Description	
+ Biochemistry			Biochemistry	[Edit] [Add]
+ Haematology			Haematology	[Edit] [Add]
+ Immunology			Immunology	[Edit] [Add]
+ Microbiology			Microbiology	[Edit] [Add]
+ Parasitology			pst-logy	[Edit] [Add]
test1		Local Hospital Code	Description of the lhis test.	[Edit] [Add]
Add Top Level				

- Select **Group** in which you want to create multiple **Procedure Order** and its related **Discrete Results**.
- To create a package of multiple procedure order and its different tests, you can use **Order Group** and combine different tests of different procedure orders to a single packaged order with a discounted price.

Add / Edit

Procedure Type: ▼

Name:

Description:

Sequence:

Group  
Procedure Order  
Discrete Result  
Recommendation  
Order Group

Save Cancel

- Selecting **Group** shows the following form. Fill the form to create a group type and press save.

Add / Edit

Procedure Type: Group ▼

Name: Blood Group

Description: Description of blood group.

Sequence: 0

Save Cancel

- This will save the file in the **Configuration** page. You can also edit this group or add different procedure orders using the **Add** button.

DMS  
Raj Maharjan  
Cardiologist

Dashboard  
Patient/Client  
Procedures  
Providers  
Configuration  
Load Compendium  
Batch Results  
Electronic Reports

Types of Orders and Results

Configuration Group Orders Lab Test Method

Name	Order	Code	Description	
+ Biochemistry			Biochemistry	[Edit] [Add]
<span style="border: 1px solid red; padding: 2px;">+ Blood Group</span>			Description of blood group.	<span style="border: 1px solid red; padding: 2px;">[Edit] [Add]</span>
+ Haematology			Haematology	[Edit] [Add]
+ Immunology			Immunology	[Edit] [Add]
+ Microbiology			Microbiology	[Edit] [Add]
+ Parasitology			pst-logy	[Edit] [Add]
test1		Local Hospital Code	Description of the this test.	[Edit] [Add]

Add Top Level

Edit group or  
Add different tests to that group.

- Now, we need to add some procedure order to that group. Keep in mind that you can also simply create procedure order instead of making a group and adding it in.
- Selecting **Procedure Order** shows the following form. Please go through the form to know what to enter in the corresponding fields.

Procedure Type: Procedure Order ▼

Name: Acid Test

Description: Checking acid in the blood.

Summary: This is the overall summary of the test which can be viewed in the printed sheet of the patient report.

Sequence: 0

Order From: Laboratory ▼

Identifying Code: Local Hospital Code 1

Standard Code: International code for this test

Body Site: Arm ▼

Specimen Type: Blood ▼

Administer Via: Injection ▼

Laterality: Left ▼

Taxes: ☐ HST ☐ TINC ☒ VAT

Is Refundable: ☒

Fee: with no tax Only positive values are allowed

[Save](#) [Cancel](#)

- We have successfully added a procedure to the group "Blood Group".

Types of Orders and Results				
Configuration Group Orders Lab Test Method				
Name	Order	Code	Description	
• Biochemistry			Biochemistry	[Edit] [Add]
- Blood Group			Description of Blood Group	[Edit] [Add]
Acid Test		Local Hospital Code 1	Checking acid in the blood.	[Edit] [Add]
• Haematology			Haematology	[Edit] [Add]
• Immunology			Immunology	[Edit] [Add]
• Microbiology			Microbiology	[Edit] [Add]
• Parasitology			pst-logy	[Edit] [Add]
test1		Local Hospital Code	Description of the this test.	[Edit] [Add]
<a href="#">Add Top Level</a>				

- Adding **Discrete Result** to that procedure follows the same process. The below form shows discrete result being added to the same group (Blood Group).

## Add / Edit

**Procedure Type:** Discrete Result ▼  
**Name:**   
**Description:**   
**Sequence:**   
**Identifying Code:**   
**Default Units:** mg/dl ▼  
**Default Range:**   
**Possible Value:**   
**Followup Services:**   
**Lab Test Method:** Enzymetric  
GOD/POD  
Humaclo  
ICT  
Lonselective ▼  
**Taxes:** ☐ HST ☐ TINC ☒ VAT  
**Is Refundable:** ☐  
**Fee:**   
Save Cancel

Types of Orders and Results				
Configuration    Group Orders    Lab Test Method				
Name	Order	Code	Description	
• Biochemistry			Biochemistry	[Edit] [Add]
• Blood Group			Description of Blood Group.	[Edit] [Add]
Acid Test		Local Hospital Code 1	Checking acid in the blood.	[Edit] [Add]
before food		Hospital identifying code	Blood test before food intake of a patient	[Edit] [Add]
• Haematology			Haematology	[Edit] [Add]
• Immunology			Immunology	[Edit] [Add]
• Microbiology			Microbiology	[Edit] [Add]
• Parasitology			pst-logy	[Edit] [Add]
test1		Local Hospital Code	Description of the this test.	[Edit] [Add]
<span>Add Top Level</span>				

- Order group simple creates a package of selected tests/orders with a combined price. The image below shows multiple tests being added to a package.

**Add / Edit**

Procedure Type:

Name:

Description:

Identifying Code:  Code exists.

Taxes: ☒ HST ☐ TINC ☐ VAT

Is Refundable: ☐

Fee:  Only positive values are allowed

Orders:

Same Specimen: ☒ Yes ☐ No

**Selected tests**

- ()test1 -Blood
- (Biochemistry)Calcium -Serum
- (Biochemistry)Chloride -Serum
- (Biochemistry)CPK - NAC (Creatine Phosphokinase) -Serum

**Choose if individual test should have unique specimen id or not.**

**Select different test from here to create an order group.**

Specimen id are unique for each test but if multiple tests are selected and grouped in **Order Group** then the user can select whether the specimen id for that group should have same specimen id or multiple individual specimen id from the "Yes" or "No" choice.

## Load Compendium

Lab do not have access to this section.

## Batch Result

## Electronic Reports

## Lab Documents

# Events

This topic is described in the Introduction section.

# Notice

This topic is described in the Introduction section.



# My Account

## Password

Change your password here.

### Password Change

Have you forgotton your password ? Please choose a new one here.

Full Name :	Roji Maharjan
Username :	roji
Current Password :	<input type="password"/>
New Password :	<input type="password"/>
Repeat New Password :	<input type="password"/>

Save

Customise your password here.

## Authorizations

## Address Book

Most of the details of different departments in the hospital will be stored here.

## Office Notes:

Any users can add notes here. These notes will be stored here, and anyone can come here and view these notes.

## Configure Tracks

Doctors update this section to keep records of varieties of tests like blood pressure test in different timings, its normal state for person of certain type and other in-depth details for other members to view. These records will be stored in the encounter history. Accessing this information from the **Encounters**, graph of that record will be displayed. This graph also can be printed if required.

# About Us

Provides information about DMS.