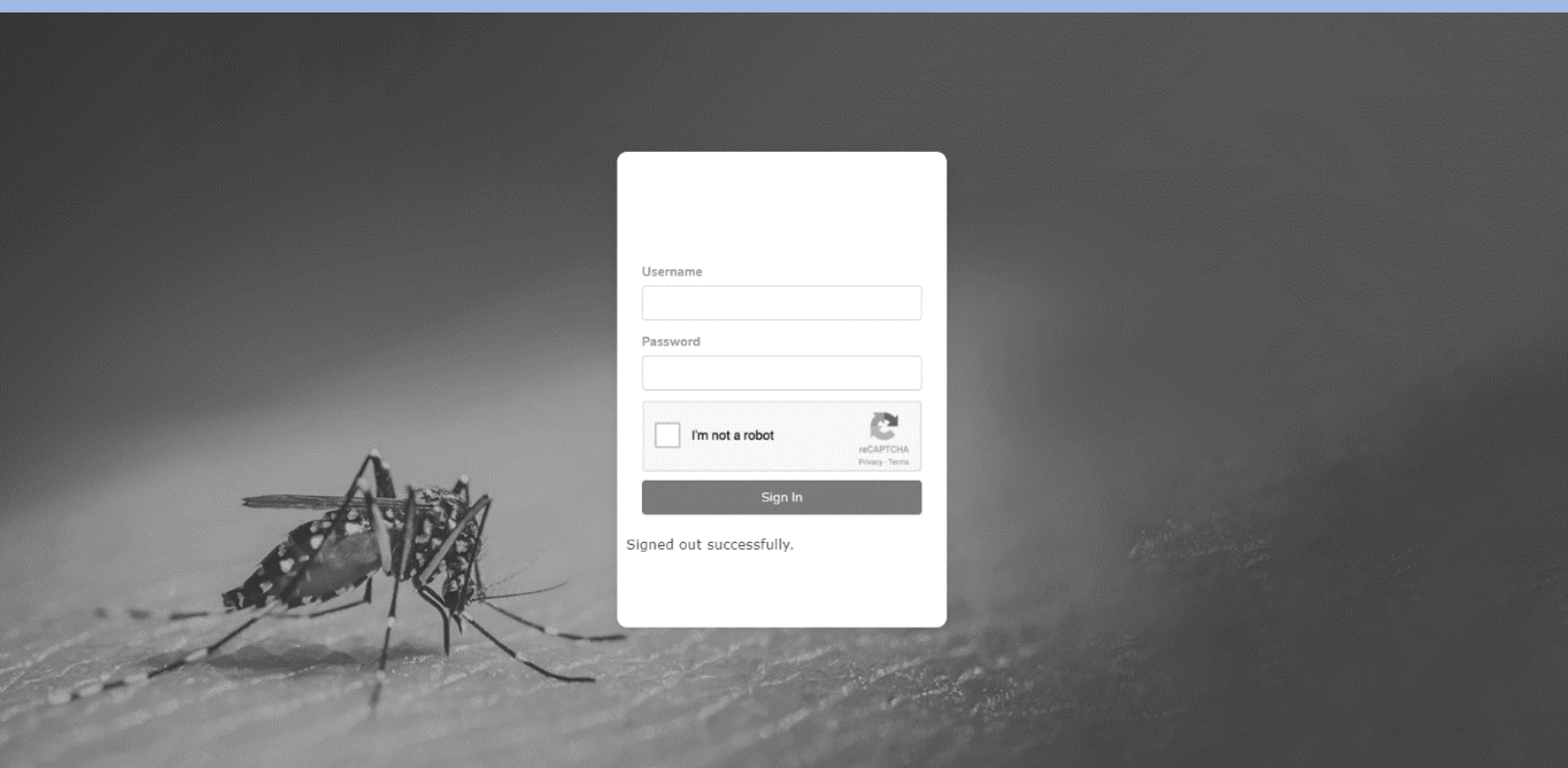


# Dengue Activity Tracking System

## USER MANUAL



**PUNJAB INFORMATION TECHNOLOGY BOARD**

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This manual is for users who have been designated to enter and monitor patient record related to dengue in hospitals, labs and GPs. Below is the detail of rights provided to following users of the system;

- Admin
- Hospital
- Lab

## 1. Admin User

Admin user has following features;

- Admin panel
- Dashboard
- Dengue related Activities
- Patient record and listing from hospitals, labs and GPs
- Reports
- Maps

### 1.1 Admin Panel

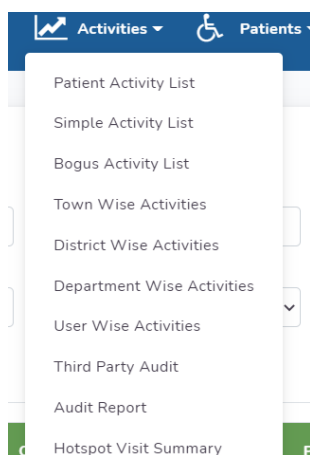
Admin Panel can be used to add/edit districts, towns, departments, hotspots, mobile users, hospitals, web users.

### 1.2 Dashboard

Dashboard contains important graphs related to different indicators.

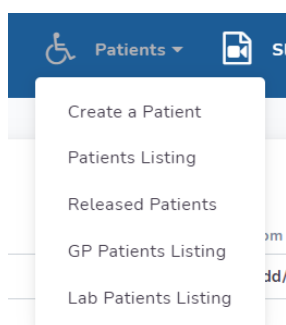
### 1.3 Dengue related Activities

It contains listing of dengue related activities depending on indicators as mentioned in image below;



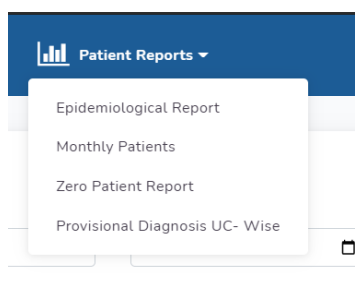
### 1.4 Patient record and listing from hospitals, labs and GPs

It contains option to add patient and listing of patients as mentioned in image below;



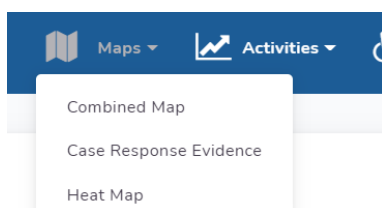
### 1.5 Reports

It contains different reports as mentioned in image below;



### 1.6 Maps

It contains different maps as mentioned in image below;



# Patient Reporting

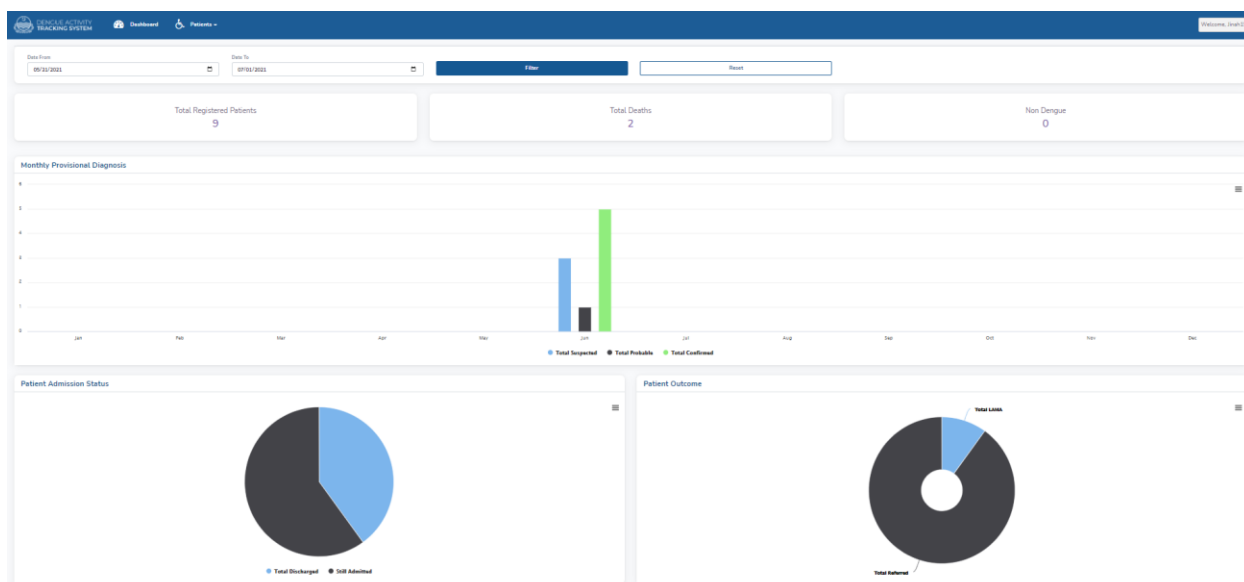
## 2. Hospital User

Users can login by entering username and password provided by PITB or respective department on login page. After login, two main tabs will be available;

- Dashboard
- Patient

### 2.1 Dashboard

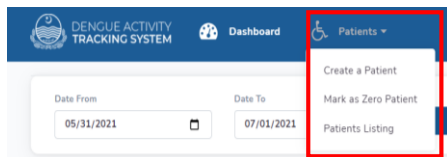
By default, **Dashboard** appears, and can also be accessed from dashboard tab on main menu as shown in image below. Dashboard contains important graphs related to different indicators.



### 2.2 Patient

**Patient Tab** contains following sub-tabs as shown in image below;

- Create Patient
- Mark as Zero
- Patients Listing



## 2.2.1 Create a patient

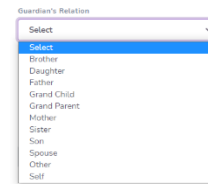
By clicking on **Create a patient**, patient entry form related to hospital opens. It has different sections. Fields with asterisk mark are mandatory to be filled.

- First section is *patient demographics* that contains demographical information of the patient as shown in image below;

This section contains following fields;

1. Patient CNIC: CNIC should be unique otherwise system will not allow entry against that particular CNIC in the system. If patient is *released* from patient listing or patient outcome status is *closed* from section clinical information in patient form than particular patient can be entered in the system with previously added CNIC. **\*Detail is mentioned in section released patients and clinical information.**
2. Hospital Name: Particular hospital related user will see same hospital's name in this field in disabled form.
3. Patient Name: Patient name should be entered in this field
4. Father/Husband Name: Father or husband name should be entered in this field.
5. Gender: Dropdown of gender contains; male, female and other as shown in image on the right;

6. Phone Number: Contact number of the patient should be entered in this field.
  7. Guardian's Relation: Relation of the guardian should be entered in this field in case CNIC is entered of the guardian otherwise select self from dropdown as shown in image on the right;
  8. Age: Age should be entered in this field.
  9. Age in Months: If patient's age is less than 1 year than this field will appear to be filled.
  10. Guardian's Contact Number: Guardian's contact number should be entered in this field.
  11. Reporting Date: Date should be selected from calendar on which patient came to the hospital.
- Second section is related to *addresses (current, permanent & workplace)* as shown in image below;



This section contains following fields;

#### I. Current Address:

1. Address: Current house/street number of the patient should be entered in this field.
2. District: Patient's current district should be selected from dropdown in this field.
3. Town/Tehsil: Patient's current town should be selected from dropdown in this field.
4. UC: Patient's current UC should be selected from dropdown in this field.

#### II. Permanent Address:

1. Address: Permanent house/street number of the patient should be entered in this field.
2. District: Patient's permanent district should be selected from dropdown in this field.

3. Town/Tehsil: Patient's permanent town should be selected from dropdown in this field.
4. UC: Patient's Permanent UC should be selected from dropdown in this field.

### III. Workplace Address:

1. Address: Workplace building/street number of the patient should be entered in this field.
2. District: Patient's workplace district should be selected from dropdown in this field.
3. Town/Tehsil: Patient's workplace town should be selected from dropdown in this field.
4. UC: Patient's workplace UC should be selected from dropdown in this field.

- Third section is related to *Clinical Information* as shown in image below;

This section contains following fields;

1. Date of onset of fever: That date when patient started having fever should be entered in this field from calendar.
2. Fever Lasting for: That date till when patient had fever should be entered in this field from calendar.
3. Fever: This field will be by default yes but can be changed if duration of fever is more than 10 days and less than 2 days.
4. Previous H/O Dengue Fever: Yes/no selection is provided in this field.
5. Appearance of Associated Symptoms: Yes/no selection is provided in this field. If this option is selected as yes then field, *provision diagnosis* is auto-selected as suspected.
5. Provisional Diagnosis: Provisional diagnosis should be selected from dropdown in this field as mentioned in image on the right;



6. Patient Outcome: Patient outcome should be selected from dropdown in this field as mentioned in image;
7. Patient Condition: This field appears in case provisional diagnosis is confirmed. Patient condition should be selected from dropdown in this field as mentioned in image;
- Fourth section is related to *CBC and HCT Information* as shown in image below;

**CBC and HCT Information**

HCT First Reading % (mm3)	HCT First Reading Date	WBC First Reading (mm3)	WBC First Reading Date	Platelets First Reading (mm3)	Platelets First Reading Date
<input type="text"/>	<input type="text" value="mm/dd/yyyy"/>	<input type="text"/>	<input type="text" value="mm/dd/yyyy"/>	<input type="text"/>	<input type="text" value="mm/dd/yyyy"/>
<input type="text"/>	<input type="text" value="mm/dd/yyyy"/>	<input type="text"/>	<input type="text" value="mm/dd/yyyy"/>	<input type="text"/>	<input type="text" value="mm/dd/yyyy"/>
<input type="text"/>	<input type="text" value="mm/dd/yyyy"/>	<input type="text"/>	<input type="text" value="mm/dd/yyyy"/>	<input type="text"/>	<input type="text" value="mm/dd/yyyy"/>

Presence of One or More Warning Signs \*

Yes ☐ No ☐

This section contains following fields;

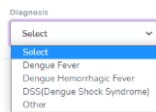
1. HCT First Reading: Reading of first HCT should be entered in this field.
2. HCT First Reading date: HCT First reading date should be entered in this field from calendar.
3. WBC First Reading: Reading of first WBC should be entered in this field.
4. WBC First Reading date: First WBC reading date should be entered in this field from calendar.
5. Platelets First Reading: Platelets First reading should be entered in this field.
6. Platelets First Reading date: First Platelets reading date should be entered in this field from calendar.
7. HCT second Reading: HCT second reading should be entered in this field.
8. HCT second Reading date: Second HCT reading date should be entered in this field from calendar.
9. WBC second Reading: WBC second reading should be entered in this field.
10. WBC second Reading date: Second WBC reading date should be entered in this field from calendar.
11. Platelets second Reading: Platelets second reading should be entered in this field.
12. Platelets second Reading date: Second Platelets reading date should be entered in this field from calendar.

13. HCT third Reading: Reading of third HCT should be entered in this field.
  14. HCT third Reading date: HCT third reading date should be entered in this field from calendar.
  15. WBC third Reading: Reading of third WBC should be entered in this field.
  16. WBC third Reading date: WBC third reading date should be entered in this field from calendar.
  17. Platelets third Reading: Reading of third Platelets should be entered in this field.
  18. Platelets third Reading date: Platelets third reading date should be entered in this field from calendar.
  19. Presence of one or more warning signs: Yes/no selection is provided in this field.
- Fifth section is related to *Lab and diagnostic Information* as shown in image below. One of the test result should be positive in case provisional diagnosis is confirmed and no test result should be positive in case provisional diagnosis is probable.

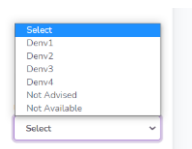
The screenshot shows the 'Lab and Diagnostic Information' section of the system. It contains several dropdown menus and checkboxes. The 'PCR' dropdown is open, showing options: 'Select', 'Positive', 'Negative', 'Not Prescribed', and 'Awaited'. The 'Create Dengue Patient' button is highlighted with a red box.

This section contains following fields;

1. Advised tests: This appears in case provisional diagnosis is selected as probable. One test should be ticked in this field.
2. NS1: This field contains dropdown with values as mentioned in field PCR in image above.
3. PCR: This field contains dropdown with values as mentioned in field PCR in image above.
4. IGM: This field contains dropdown with values as mentioned in field PCR in image above.
5. IGG: This field contains dropdown with values as mentioned in field PCR in image above.
6. Diagnosis: This field contains dropdown with values as mentioned in image below;



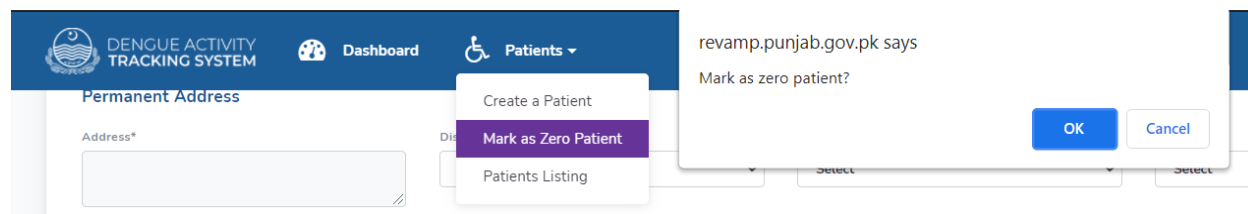
7. Dengue Virus Type: This field contains dropdown with values as mentioned in in image below;



8. Create Dengue Patient: By clicking this button, form will be saved and starts appearing in the patient listing.

### 2.2.2 Mark as Zero

If no patient has been reported by a particular hospital on any specific day/date. Then go to **mark as zero**, a dialogue appears with below mentioned message. An entry will be saved in *zero patient listing* when above mentioned message is saved with “Ok button”.



### 2.2.3 Patient Listing

It contains all the patients’ record that have been reported by a hospital. By clicking on **patient listing**, listing will appear as mentioned in image below. Search filters have been provided to make data filtering easy. In *action* column of listing, two options are available; edit – to edit data and release – to close the case of that particular patient (patient outcome changes to closed upon click on release button). Report can also be extracted by using *export to excel* button.

**DENGUE ACTIVITY TRACKING SYSTEM** Dashboard Patients Welcome, Jinah1!

**Patients** [Export to Excel](#)

CNIC:  Name:  ID:  Date From:  Date To:  Provisional Diagnosis:

Status:  Outcome:  Hospital:

[Filter](#) [Reset](#)

Sr No.	Patient ID	Patient name	Father/Husband name	Age	Gender	CNIC/Guardian's CNIC	Guardian's Relation	Patient contact	Relation contact	Entry Date	Hospital	Address	District	Tehsil	UC	Residence House Tagged	Perm ad
1	298	Amna	khan	16	Female	87346-3899482-2	Self	03033383749		17/06/2021	Jinnah Hospital, Lahore City, Lahore	Lahore	Lahore	Allama Iqbal Town		true	Lah
2	294	Kamran	Akmal	23	Male	38927-5239752-3	Self	03339999999		14/06/2021	Jinnah Hospital, Lahore City, Lahore	Lahore street 10	Lahore	Nishtar Town	Attari Saroba		Lahc stre

**DENGUE ACTIVITY TRACKING SYSTEM** Dashboard Patients Welcome, Jinah1!

**Patients** [Export to Excel](#)

CNIC:  Name:  ID:  Date From:  Date To:  Provisional Diagnosis:

Status:  Outcome:  Hospital:

[Filter](#) [Reset](#)

nanent ouse gged	Workplace address	Workplace district	Workplace tehsil	Workplace UC	Workplace Tagged	Date of onset	Fever last for	Fever	Previous dengue fever	Associated Symptoms	Provisional diagnosis	Other diagnosed fever	Patient status	Patient condition	Patient outcome	Reporting Date	Created By	Action
	Lahore.																	
	L	Lahore	Lahore Cantonment Board	LCB10				true	true	true	Suspected		In Process	Critical	Admitted	18/05/2021	jinah1	<a href="#">Release</a> <a href="#">Edit</a>
								true	true	true	Probable		In		Outpatient	18/05/2021	jinah1	<a href="#">Release</a>

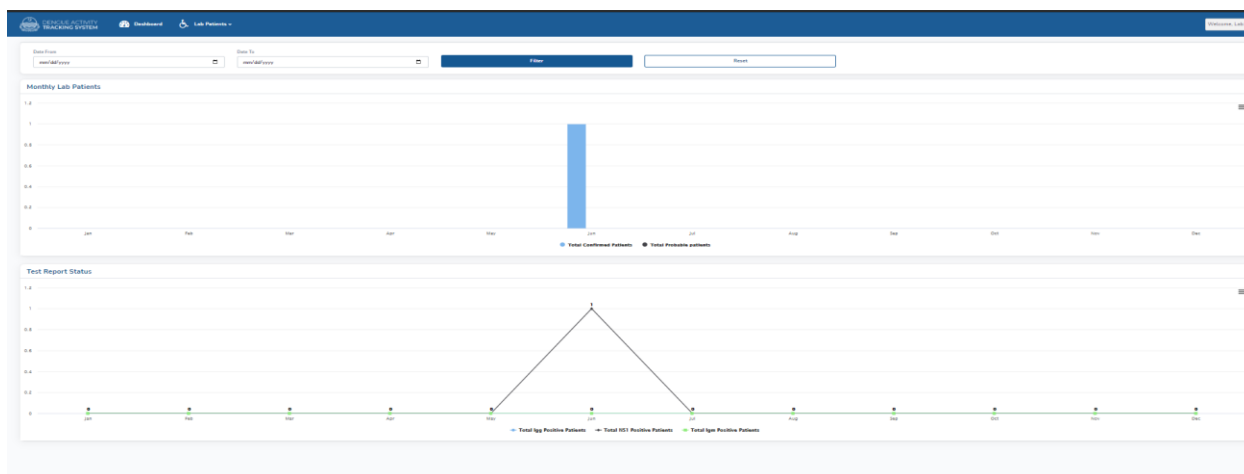
### 3. Lab User

Users can login by entering on login page, system generated username and password. After login, two main tabs will be available;

- Dashboard
- Lab Patient

#### 3.1 Dashboard

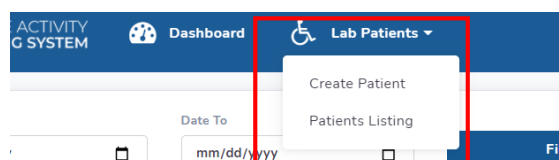
By default, **Dashboard** appears and can also be accessed from dashboard tab on main menu as shown in image below. Dashboard contains important graphs related to different indicators.



### 3.2 Patient

**Lab Patient Tab** contains following sub-tabs as shown in image below;

- Create Patient
- Patients Listing



#### 3.2.1 Create patient

By clicking on **Create patient**, patient entry form opens related to lab. It has different sections. Fields with asterisk mark are mandatory to be filled.

- First section is *patient demographics* that contains demographical information of the patient as shown in image below;

The screenshot shows the 'Add New Lab Patient' form. The 'Patient Demographics' section is highlighted with a red box. It contains the following fields: 'Lab' (with a dropdown menu showing 'Test Lab one'), '\* Patient Name', '\* Father / Husband Name', '\* Gender' (with a dropdown menu showing '-Select-'), '\* Age' (with a dropdown menu showing '-Select-'), '\* Relationship' (with a dropdown menu showing '-Select-'), '\* Cnic', '\* Contact no', and 'Guardian's Contact Number'.

This section contains following fields;

1. Lab: Particular lab related user will see same lab's name in this field in disabled form.
2. Patient Name: Patient name should be entered in this field
3. Father/Husband Name: Father or husband name should be entered in this field.
4. Gender: Dropdown of gender contains; male, female and other as shown below in image;
5. Age: Age should be entered in this field.
6. Relationship: Relation of the guardian should be entered in this field in case CNIC is entered of the guardian otherwise select self from dropdown as shown in image below;

7. CNIC: CNIC should be unique otherwise system will not allow entry against that particular CNIC in the system. If patient is *released* from patient listing or patient outcome status is *closed* from section clinical information than particular patient can be entered in the system with previously added CNIC.
8. Guardian's Contact Number: Guardian's contact number should be entered in this field.
  - Second section is related to *addresses (current, permanent & workplace)* as shown in image below;

This section contains following fields;

#### IV. Current Address:

1. Address: Current house/street number of the patient should be entered in this field.

2. District: Patient's current district should be selected from dropdown in this field.
3. Town/Tehsil: Patient's current town should be selected from dropdown in this field.
4. UC: Patient's current UC should be selected from dropdown in this field.

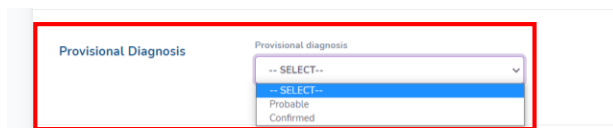
V. Permanent Address:

1. Address: Permanent house/street number of the patient should be entered in this field.
2. District: Patient's permanent district should be selected from dropdown in this field.
3. Town/Tehsil: Patient's permanent town should be selected from dropdown in this field.
4. UC: Patient's Permanent UC should be selected from dropdown in this field.

VI. Workplace Address:

1. Address: Workplace building/street number of the patient should be entered in this field.
2. District: Patient's workplace district should be selected from dropdown in this field.
3. Town/Tehsil: Patient's workplace town should be selected from dropdown in this field.
4. UC: Patient's workplace UC should be selected from dropdown in this field.

- Third section is related to *Provisional diagnosis* as shown in image below;



This section contains following field;

1. Provisional Diagnosis: Provisional diagnosis should be selected from dropdown as mentioned in image above.

- Fourth section is related to *CBC and HCT Information* as shown in image below;

**CBC and HCT Information**

HCT First Reading % (mm3)	HCT First Reading Date	WBC First Reading (mm3)	WBC First Reading Date	Platelets First Reading (mm3)	Platelets First Reading Date
HCT Second Reading	HCT Second Reading Date	WBC Second Reading	WBC Second Reading Date	Platelets Second Reading	Platelets Second Reading Date
HCT Third Reading	HCT Third Reading Date	WBC Third Reading	WBC Third Reading Date	Platelets Third Reading	Platelets Third Reading Date

This section contains following fields;

20. HCT First Reading: Reading of first HCT should be entered in this field.
21. HCT First Reading date: HCT First reading date should be entered in this field from calendar.
22. WBC First Reading: Reading of first WBC should be entered in this field.
23. WBC First Reading date: First WBC reading date should be entered in this field from calendar.
24. Platelets First Reading: Platelets First reading should be entered in this field.
25. Platelets First Reading date: First Platelets reading date should be entered in this field from calendar.
26. HCT second Reading: HCT second reading should be entered in this field.
27. HCT second Reading date: Second HCT reading date should be entered in this field from calendar.
28. WBC second Reading: WBC second reading should be entered in this field.
29. WBC second Reading date: Second WBC reading date should be entered in this field from calendar.
30. Platelets second Reading: Platelets second reading should be entered in this field.
31. Platelets second Reading date: Second Platelets reading date should be entered in this field from calendar.
32. HCT third Reading: Reading of third HCT should be entered in this field.
33. HCT third Reading date: HCT third reading date should be entered in this field from calendar.
34. WBC third Reading: Reading of third WBC should be entered in this field.
35. WBC third Reading date: WBC third reading date should be entered in this field from calendar.
36. Platelets third Reading: Reading of third Platelets should be entered in this field.
37. Platelets third Reading date: Platelets third reading date should be entered in this field from calendar.



- Fifth section is related to *Lab and diagnostic Information* as shown in image below. One of the test result should be positive in case provisional diagnosis is confirmed and no test result should be positive in case provisional diagnosis is probable.

This section contains following fields;

1. NS1: This field contains dropdown with values as mentioned in field PCR in image above.
2. PCR: This field contains dropdown with values as mentioned in field PCR in image above.
3. IGM: This field contains dropdown with values as mentioned in field PCR in image above.
4. IGG: This field contains dropdown with values as mentioned in field PCR in image above.
5. Create Dengue Patient: By clicking this button, form will be saved and starts appearing in the patient listing.

## 2.2.2 Patient Listing

It contains all the patients' record that have been reported to that particular lab. By clicking on *patient listing*, listing will appear as mentioned in image below. Some filters have been provided to make data filtering easy. In *action* column of listing, option to edit is available. Report can also be extracted by using *export to excel* button.

Sr. No.	Patient ID	Lab Name	Patient name	Father/Husband name	Age	Gender	CNIC	CNIC Type	Patient contact	Entry Date	Relation contact	Address	District	Tehsil	Uc	Per Ad
1	64	Test Lab	Ramza	test	12	Male	19010-0000111-	Self	12312431234	18/06/2021		L	Lahore	Lahore Cantonment		L