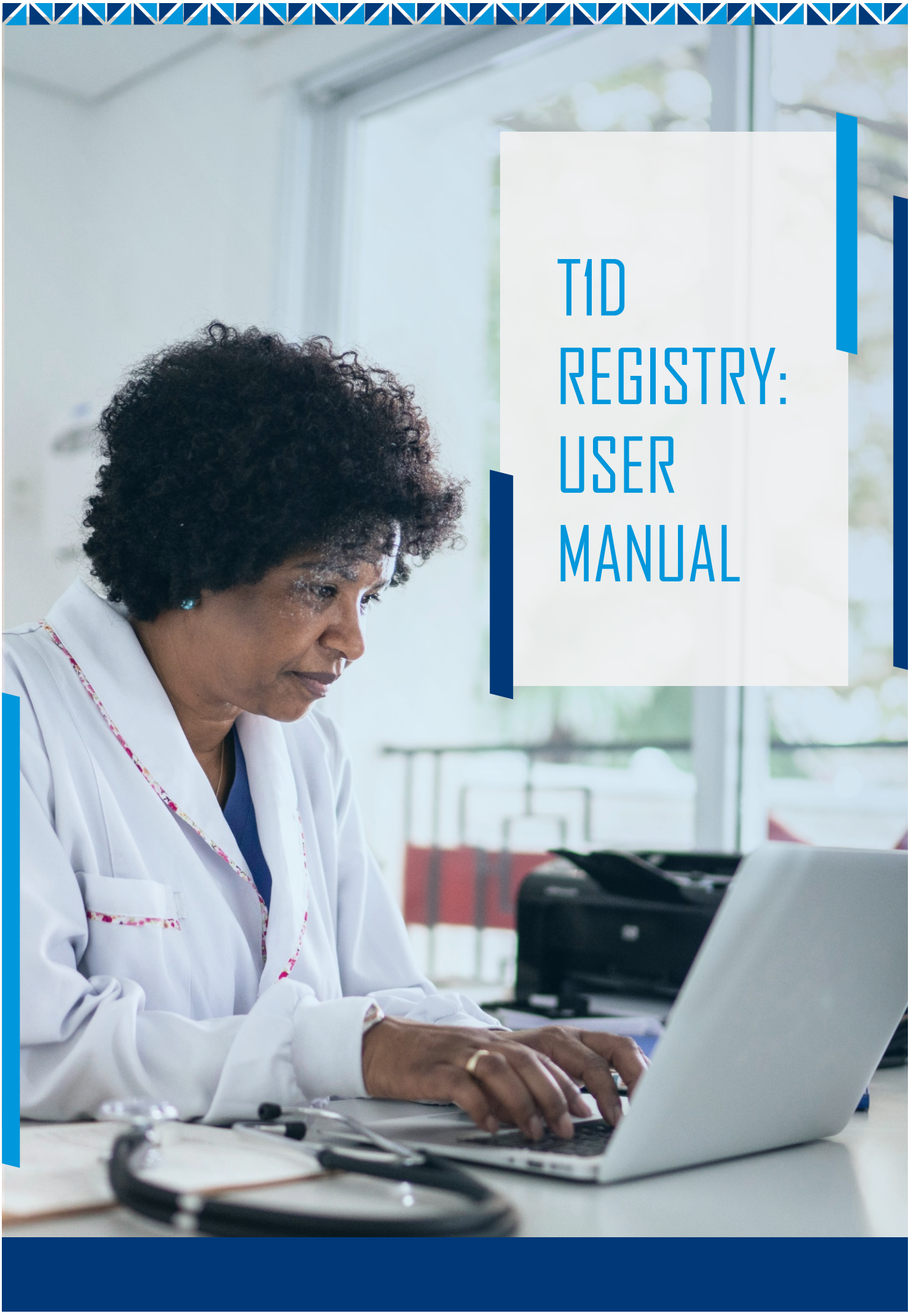


T1D REGISTRY: USER MANUAL

TABLE OF CONTENTS

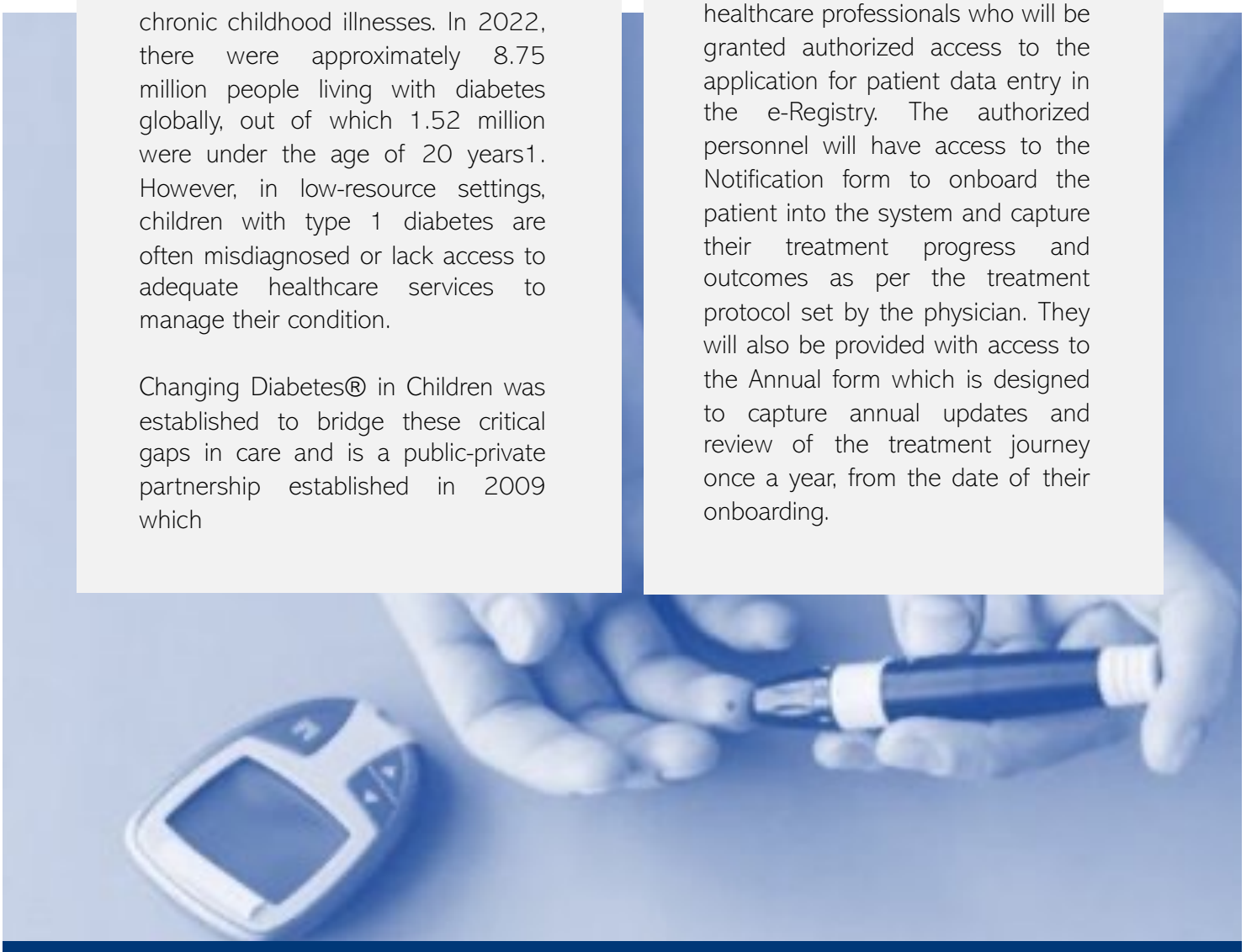
T1D: BACKGROUND AND STEP BY STEP INSTRUCTIONS

Type 1 diabetes (T1D, often referred to as childhood diabetes) is a lifelong, autoimmune condition which impairs the body's ability to produce insulin. If left undiagnosed or untreated, excess glucose causes damage to organs which can result in severe health complications and, ultimately, in premature death. There is currently no prevention or cure, and the only effective long-term treatment is multiple daily injections of insulin.

T1D is one of the most common chronic childhood illnesses. In 2022, there were approximately 8.75 million people living with diabetes globally, out of which 1.52 million were under the age of 20 years1. However, in low-resource settings, children with type 1 diabetes are often misdiagnosed or lack access to adequate healthcare services to manage their condition.

Changing Diabetes® in Children was established to bridge these critical gaps in care and is a public-private partnership established in 2009 which provides comprehensive care for children and young people living with type 1 diabetes in low- and middle-income countries. This includes free life-saving medicine and supplies for persons up to 25 years of age2. This e-Registry will help in the efficacy of data collection and reporting and aims to improve the quality of life and healthcare experience of children and young people affected by T1D.

This manual is designed for healthcare professionals who will be granted authorized access to the application for patient data entry in the e-Registry. The authorized personnel will have access to the Notification form to onboard the patient into the system and capture their treatment progress and outcomes as per the treatment protocol set by the physician. They will also be provided with access to the Annual form which is designed to capture annual updates and review of the treatment journey once a year, from the date of their onboarding.



T1D USER MANUAL

GETTING STARTED

Welcome aboard the T1D e-Registry!

Getting started is easy and we have laid out some guidelines to support you through the

process. Should you require any additional information or resources, the Appendix section has a repository at your disposal that can enhance your experience of navigating the application.

To get started, you must paste the application link into your preferred web browser (Google Chrome, Microsoft Edge or Safari). Once you have accessed the application page, enter your secure, authorized credentials into the appropriate fields (Fig 1). Please note that the default credentials that automatically populate are test credentials and SHOULD NOT be used to capture patient data.

Application link: https://cdicuat.imonitorplus.com/cdicv6/

Post authorization, the application will display a progress bar as it syncs data and sets up for your use. Once the process is completed (usually takes a second or two) you will be redirected to your homepage which acts as a control center for you to carry out your tasks in the unit. (Fig 2)

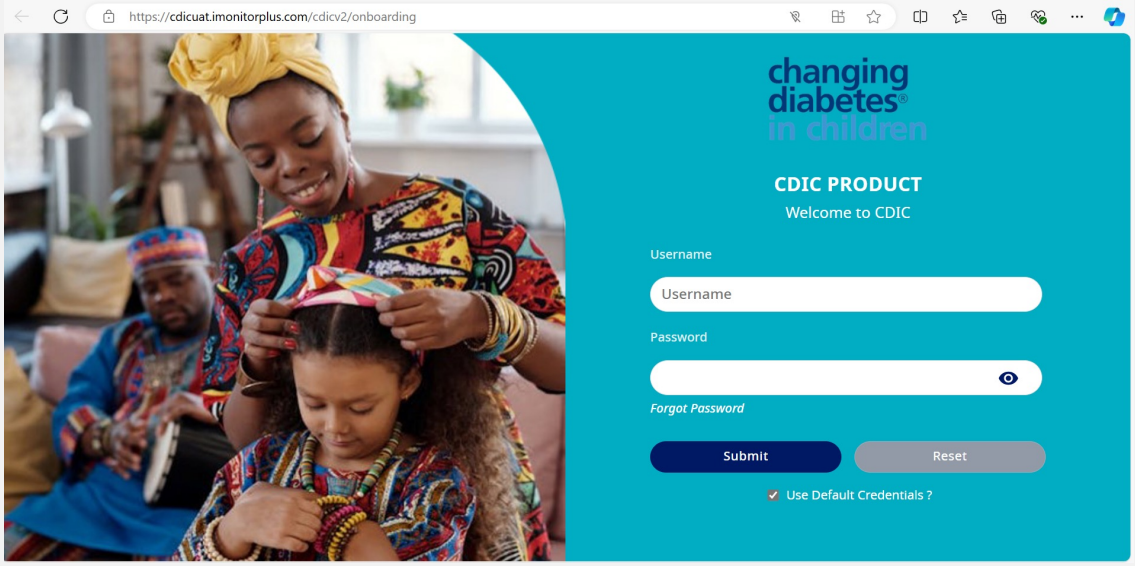


Fig 1.

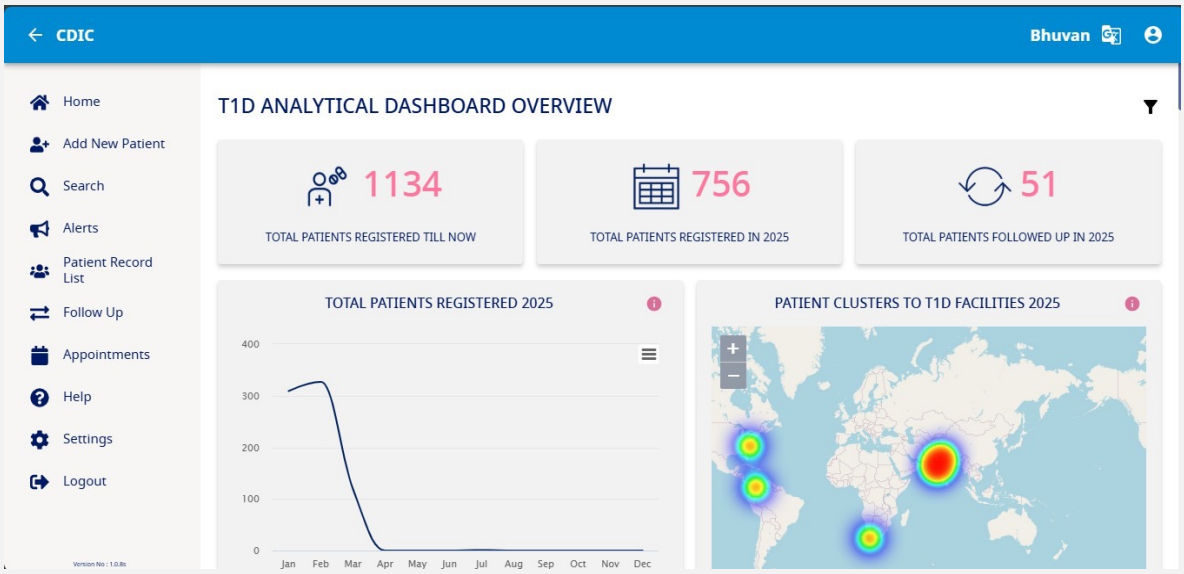

CDIC
Bhuvan
Home
Add New Patient
Search
Alerts
Patient Record List
Follow Up
Appointments
Help
Settings
Logout
T1D ANALYTICAL DASHBOARD OVERVIEW
1134
TOTAL PATIENTS REGISTERED TILL NOW
756
TOTAL PATIENTS REGISTERED IN 2025
51
TOTAL PATIENTS FOLLOWED UP IN 2025
TOTAL PATIENTS REGISTERED 2025
400
300
200
100
0
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
PATIENT CLUSTERS TO T1D FACILITIES 2025

Fig 2.

UNDERTANDING USER INTERFACE

1. THE HOMEPAGE

The homepage is designed to allow you to seamlessly navigate through the two form types and search for your patients with ease. Let's delve into the sections that you will be using most frequently and explore the capabilities of each. To start with, let's take a look at the options available on the header of the application.
The image above of the homepage has three icons marked out in blue which allow you to carry out the following actions -

APPLICATION HEADER LAYOUT

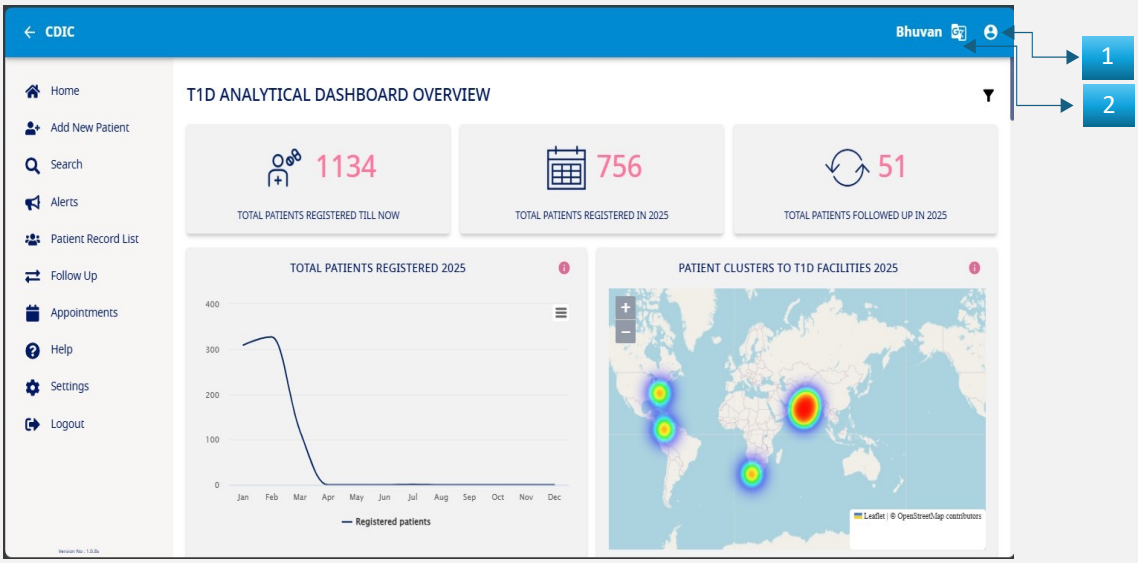


Fig 3.

The image above of the homepage has three icons marked out in blue which allow you to carry out the following actions -

1. Language change – Should you wish to change the language at any given point, select the preferred option from the dropdown list and the system will reflect the change.

2. Profile Options –
    a. Setting – Resetting the password.
    b. Logout – When you have completed the data entry for the day and want to close your session, click on the logout icon at the top right corner of the header. You will be logged out.

NAVIGATION MENU

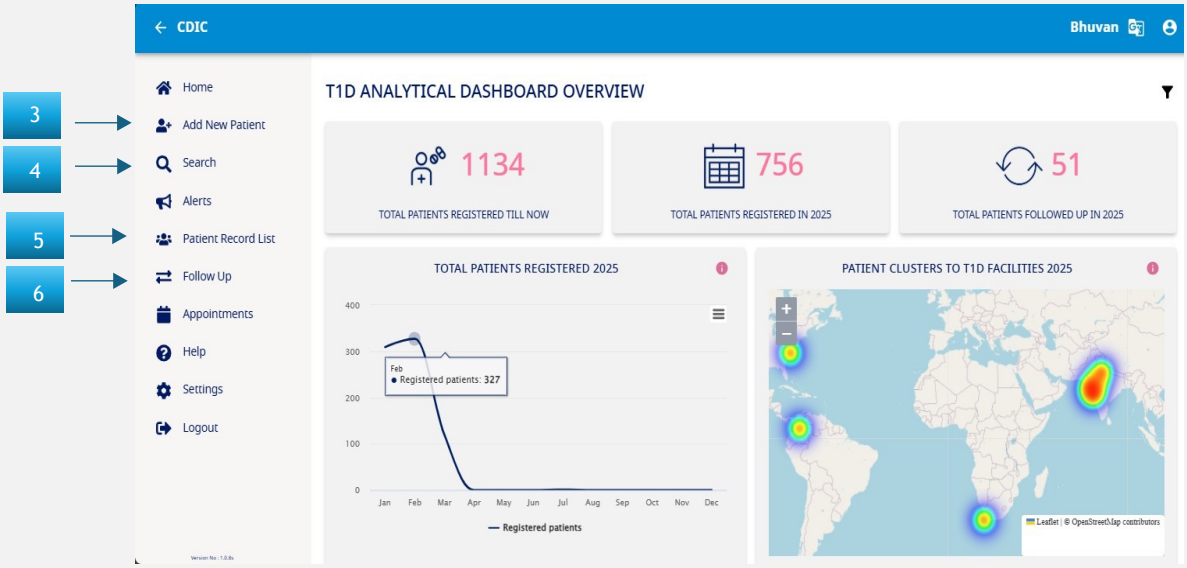


Fig 4. – Home Page

Now let's take a look at some of the features that you will be using most often to capture the patient data and complete the entry in the Type 1 Diabetes Registry e-Registry.

3. Add New Client – Click on this button in the side menu to onboard a new patient into the system. This follows the Notification form requirements and will be covered in detail in the succeeding sections

4. Search – This functionality allows you to quickly search for an onboarded patient via their unique information like Name or UID

5. Patient Record List – This functionality allows you to view the list of patients you have onboarded and quickly jump to edit or add new information as required. Further details are in the succeeding sections. Please note that this feature is also available as an option in the sidebar menu too.

6. Follow Up – This feature is used to capture the details related to the Annual form and is used once a year (from the date of onboarding the patient in the system)

2. NEW PATIENT DATA ENTRY

2.1 ADD NEW PATIENT

This section is designed to onboard the patient and capture primary details related to the due course of treatment and can be accessed via "Add New Patient" option in the sidebar menu. In successive appointments, the updated details are captured in a "New Visit" allowing for continuity of the record. Let us delve into the various sections of this feature.

I. Add a New Patient and Search

1. Click on "Add New Patient"
2. This will open a search section of the application (see image below Fig 5)
3. Confirm no duplicity of records by completing a search in the medical records database via
    a. Profile Page (parameters like Name, DOB)
    b. UID

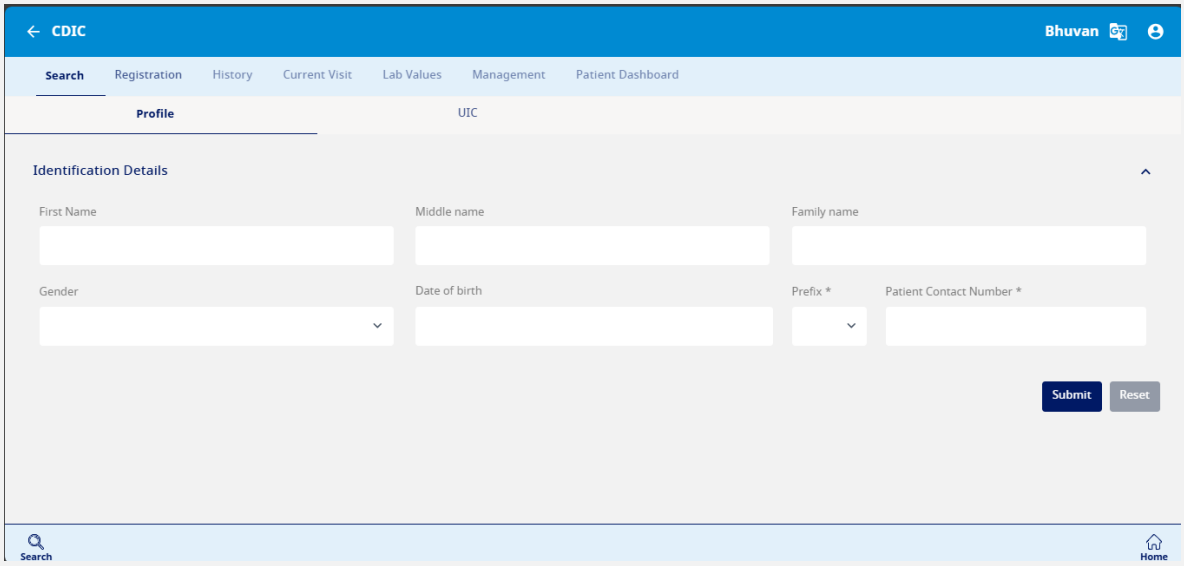


Fig 5.

2.2 REGISTRATION

This section is designed to capture data related to the identification of the patient and the contact details.

1. Initiate the registration process by filling in details in various sections (example: demographic details)
2. For fields like Date of Registration and Date of Birth, the calendar will pop-up and you can switch between years by clicking on the year at the top left corner of the pop-up box
3. To choose between the months, use the '<' and '>' buttons on either side of the pop-up box
4. Click on the desired date in the calendar when you have finished steps 2 & 3
5. The selected date will be displayed in the field
6. For fields like Gender, Region Type, Nationality, Religion, Race, Language and Ethnicity that have a dropdown, click on the field and the menu list will be displayed
7. Click on the desired option and it will reflect in the field
8. Once done, click on the 'Submit' button below to complete the registration stage (Fig 6: Submit registration details)

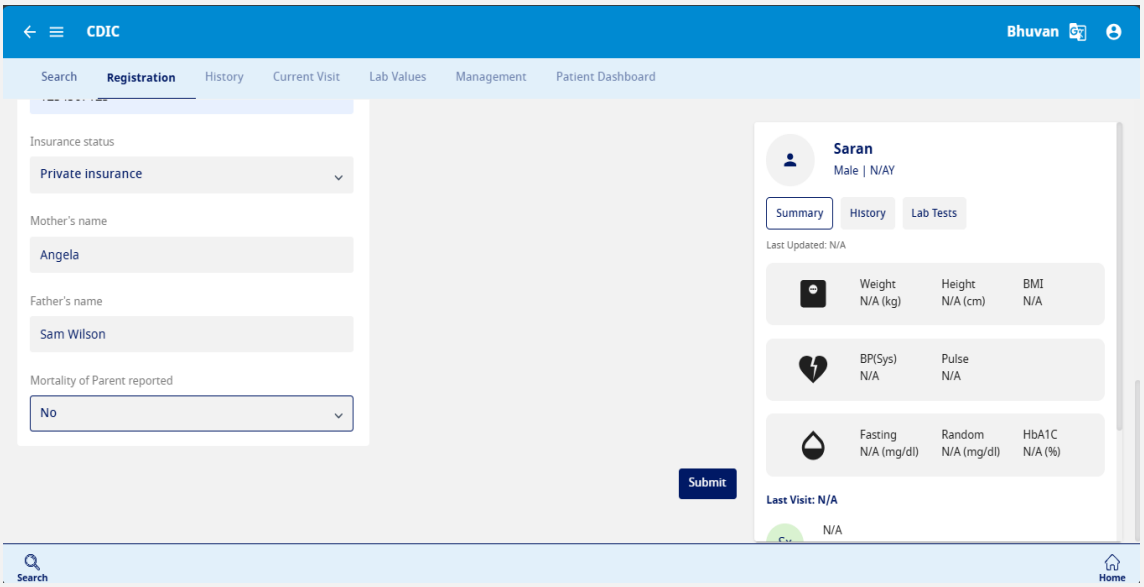
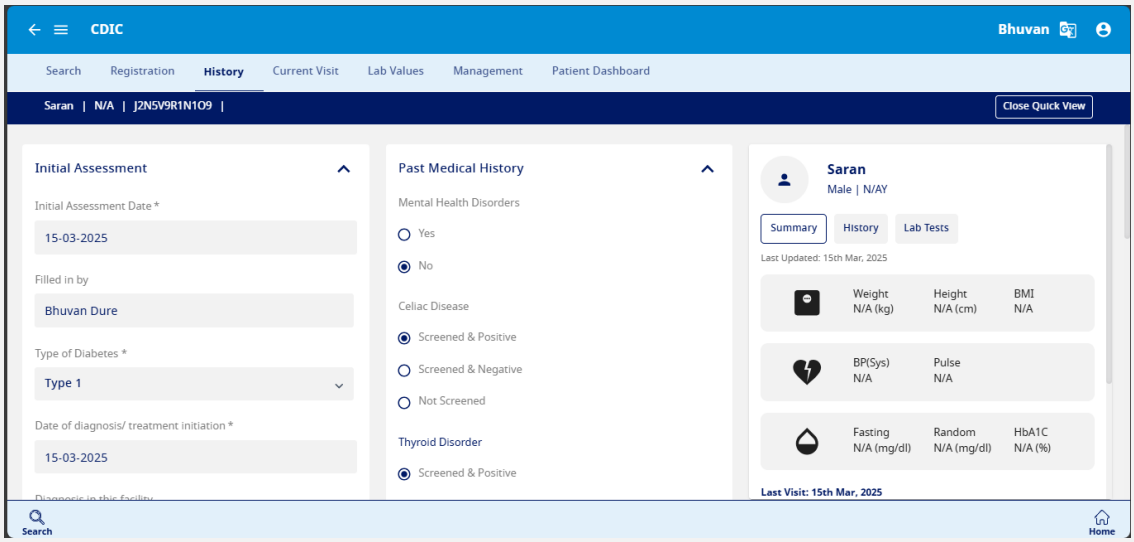


Fig 6. - Submit Registration Details

2.3 HISTORY

This section is used to record the Initial assessment, Past Medical History, Family History and Social History (see Fig 7)

1. Initial Assessment - The initial assessment includes the date of assessment, filled in by the user, along with key details such as the type of diabetes, date of diagnosis or treatment initiation, and diagnosis at the facility. It also captures the entry point at the time of diagnosis, presence of diabetic ketoacidosis (DKA), signs and symptoms at diagnosis, other relevant symptoms, and any prior operations.
2. Past Medical History – This section allows user to record for mental health disorders, celiac disease, thyroid disorders, and other potential health risks.
3. Family History - This section captures the Family T1D history and Family history for other diseases.
4. Social History - This section captures key demographic and lifestyle factors, including
   the patient's education level, parental education levels, household size, and annual income. It also assesses smoking habits, weekly alcohol consumption, dietary patterns, and physical activity levels from the past week.
5. Notes – For doctor to record any important information for the patient.

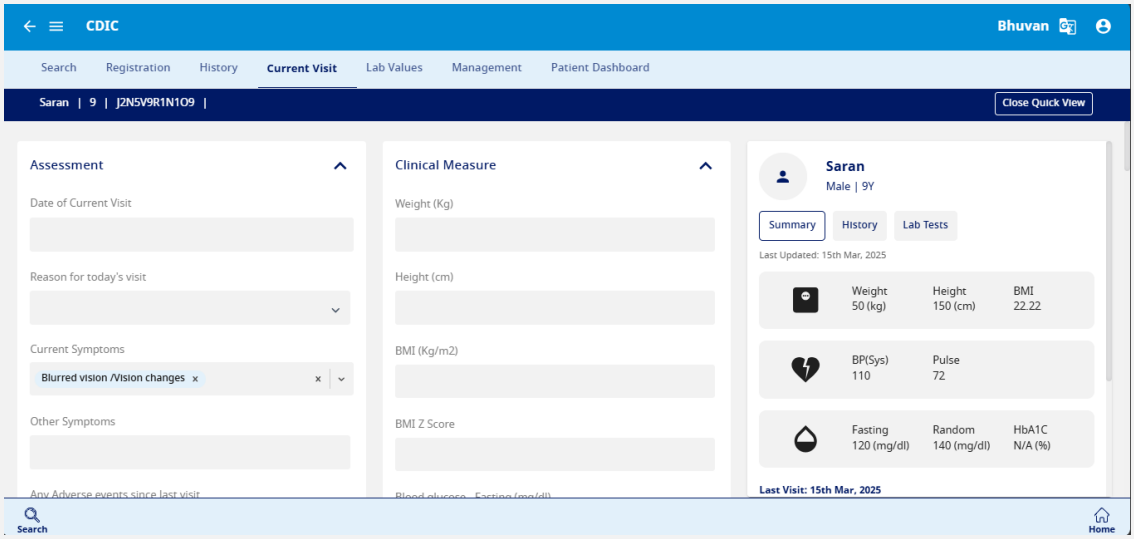


(Fig 7 - History)

2.4 CURRENT VISITS

This section is designed to capture data related to Assessment, Complications and Clinical measures (Fig 8)

1. **Assessment** - Enter the date and reason for today's visit, along with current and other symptoms. Record any adverse events since the last visit. If an emergency visit occurs, provide the date, reason, and admission details, including ICU requirements. For glucose monitoring, specify whether a continuous glucose sensor is in use and upload or manually enter CGM data using the logbook function.
2. **Complications** - Indicate whether the patient has experienced any complications, including foot ulcer, myocardial infarction (MI), or cerebrovascular accident (CVA) by selecting Yes, No, or Unknown as applicable.
3. **Clinical Measure** - Record the patient's weight, height, blood glucose levels (fasting, random, and glycemia), blood pressure (systolic and diastolic), pulse rate, Tanner pubertal stage, and urine ketones test results. BMI and BMI Z score are automatically calculated by the system based on entered weight and height.

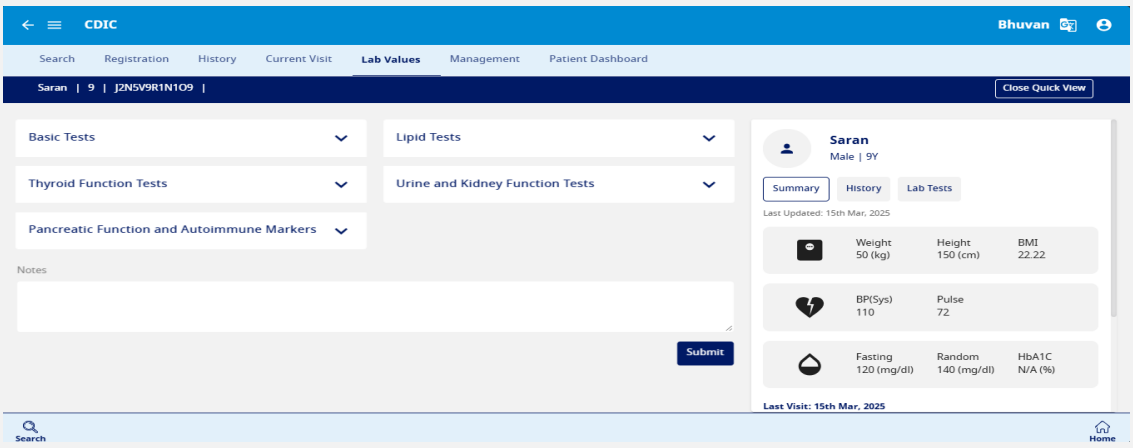


(Fig 8: Current Visit)

2.5 LAB VALUES

This section is designed to capture data related to the lab investigation information related to the patient with T1D comprising of Basic tests, Thyroid Function tests, Pancreatic Function and Auto Immune Markers, Lipid Tests and Urine and Kidney Function Tests. (Fig 9)

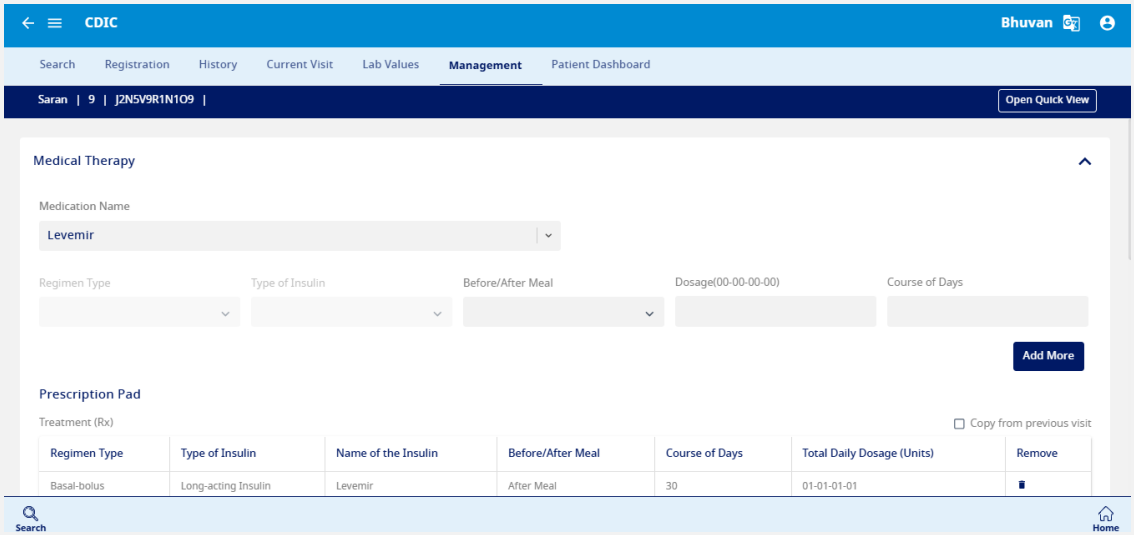
1. Basic Tests: Record laboratory values for HbA1C, fasting blood glucose, and 2-hour postprandial blood glucose. Enter Complete Blood Count (CBC) parameters, including hemoglobin, RBC, WBC, platelets, neutrophils, lymphocytes, monocytes, eosinophils, and basophils. If conducting an Oral Glucose Tolerance Test (OGTT), document blood glucose levels at fasting (zero sample), 30 min, 60 min, 90 min, 120 min, 150 min,
2. and 180 min.
3. Thyroid Function Tests - Record thyroid function test results, including TSH, Free T4, Thyroid Peroxidase Antibody (IU/ml), and Antithyroglobulin Antibody levels.
4. Pancreatic Function and Auto-Immune Markers - Record the C-Peptide and Pancreatic Antibodies.
5. Lipid Tests - Record the patient's Total Cholesterol, LDL Cholesterol, HDL Cholesterol, and Triglyceride levels in mg/dL.
6. Urine and Kidney Function Tests – Record the Urine Creatinine and Microalbuminuria test for nephropathy.



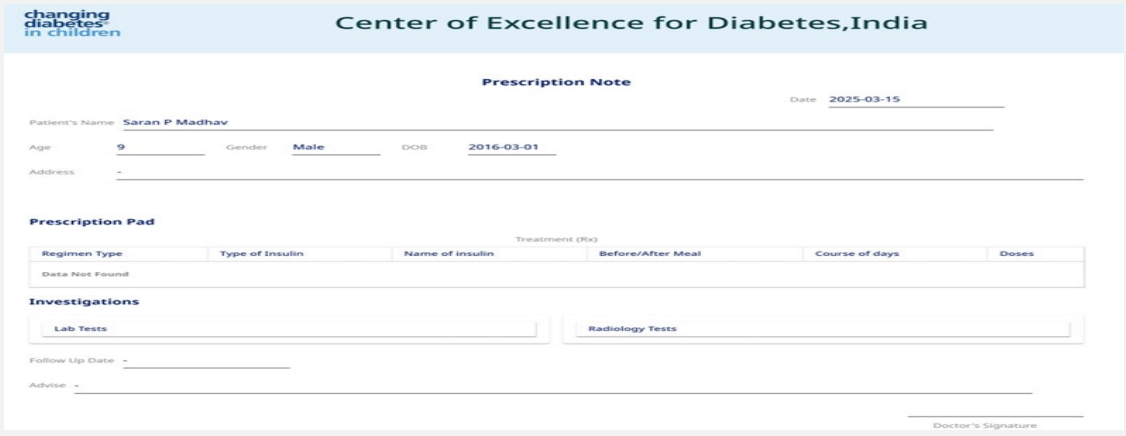
(Fig 5: Lab Values)

2.6 MANAGEMENT

1. This section is designed to capture data related to Medical therapy and Outcome (Fig 10). The prescription can be printed from this section. (Fig 11)
2. Medical Therapy - Enter the medication name, regimen type, and type of insulin prescribed. Specify whether it is taken before or after meals, the dosage (00-00-00- 00 format), and the course duration in days.
3. Outcome – Can record if there are any changes in the status of the patient.



(Fig 10: Management)



(Fig 11: Sample Prescription)

2.7 PATIENT DASHBOARD

The Patient Dashboard provides a comprehensive summary of the patient's medical records, enabling easy tracking of health status and treatment progress.(Fig 12 to 14)

1. Patient Information & Contact Details

Displays basic demographic details, including name, age, gender, date of birth, region, address, and contact details of the patient and guardian. It also records date of enrollment, religion, national ID number, insurance status, education level, household income, and parental mortality status to provide a holistic patient profile.

2. Appointment & Visit History

- Shows upcoming visits and the last recorded visit date.

- Displays appointment history, though currently no details are found for this patient.

3. Basic Lab Values & Health Metrics

Tracks key health indicators with the latest test results and dates, including:

- HbA1C – Glycaemic control monitoring
- Blood Glucose Levels (Fasting & Random) (mg/dL) – Indicates blood sugar fluctuations
- Blood Pressure (Systolic/Diastolic) (mmHg) – Indicates cardiovascular health
- BMI – Assesses body weight in relation to height
- Total Cholesterol & Triglycerides (mg/dL) – Lipid profile assessment
- TSH – Evaluates thyroid function

4. Health Trends & Monitoring

Graphical representations and trend charts for:

- HbA1C levels over time
- Glucose fluctuations (fasting & random)
- Blood pressure monitoring
- BMI trends

5. Risk Factors

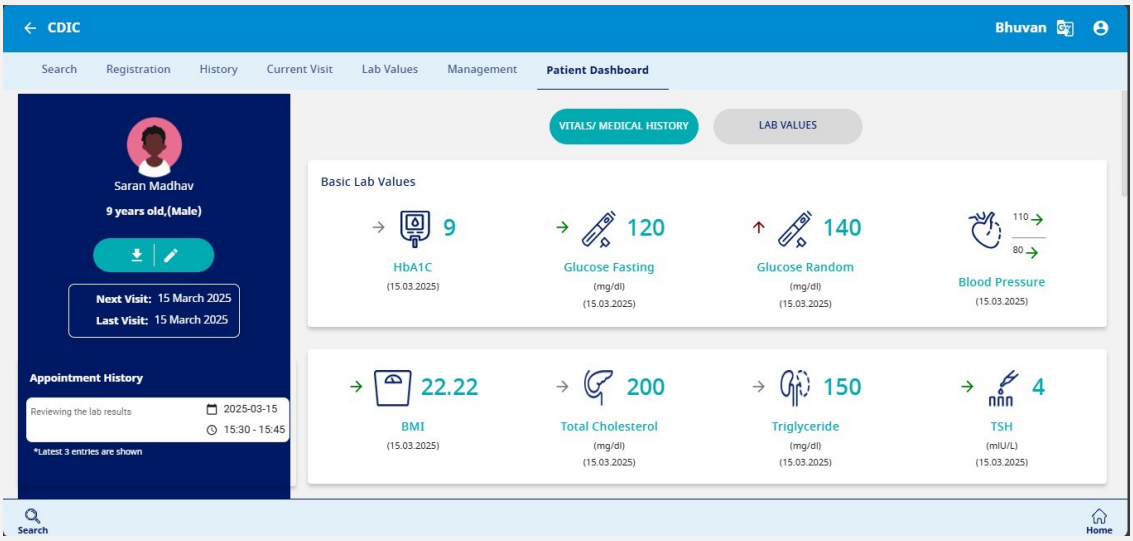
Identifies potential health risks that may impact the patient's condition:

- Smoking history
- Alcohol consumption
- Celiac disease
- Mental health disorders

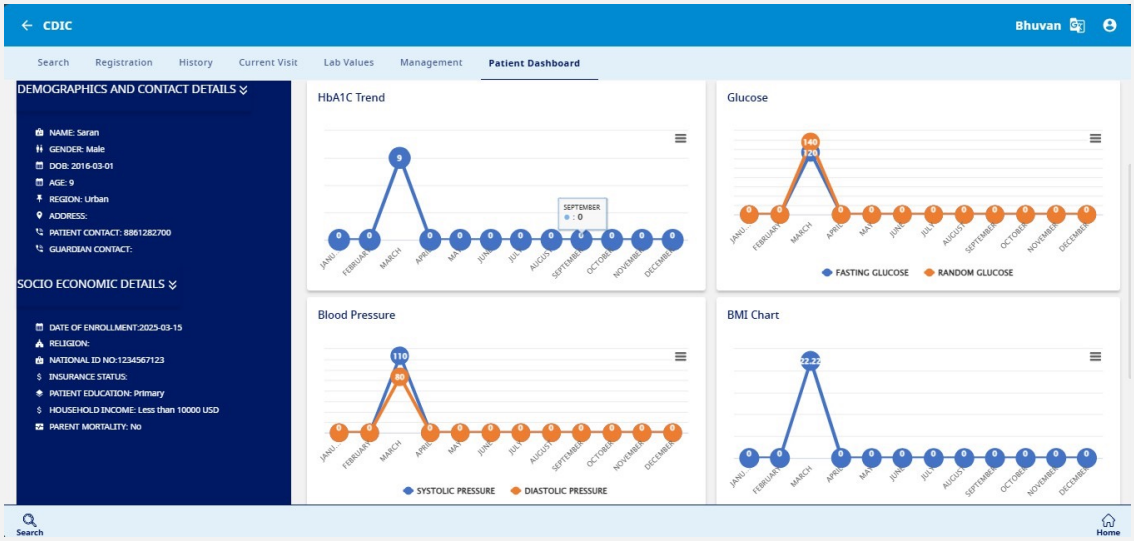
6. Complications Tracking

Monitors diabetes-related and other complications, including:

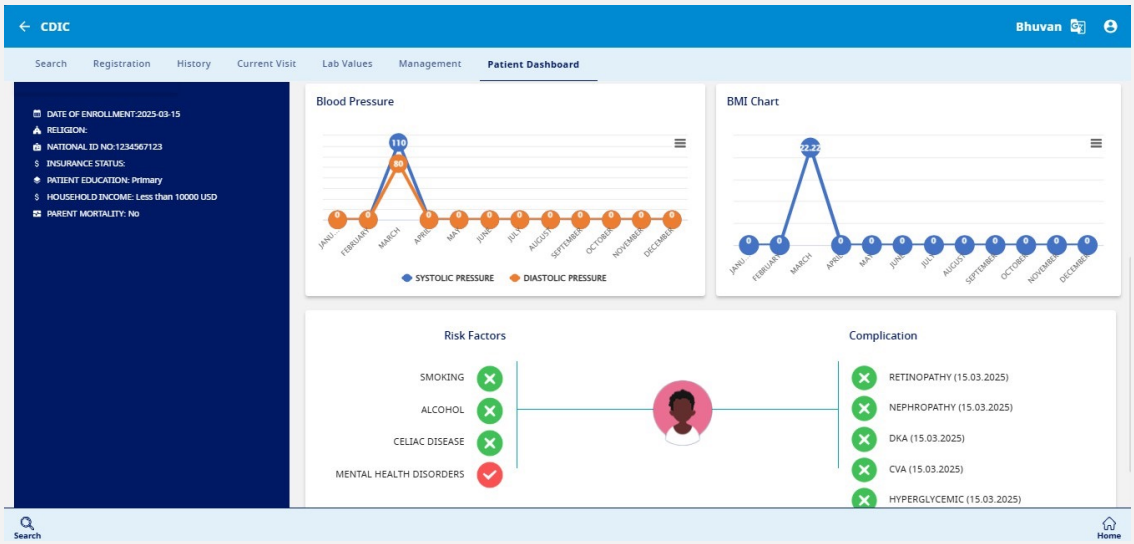
- Retinopathy (eye damage due to diabetes)
- Nephropathy (kidney disease)
- Diabetic Ketoacidosis (DKA)
- Cerebrovascular Accident (CVA – Stroke)
- Hyperglycaemia (high blood sugar levels)



(Fig 12: Patient Dashboard 1/3)



(Fig 13: Patient Dashboard 2/3)

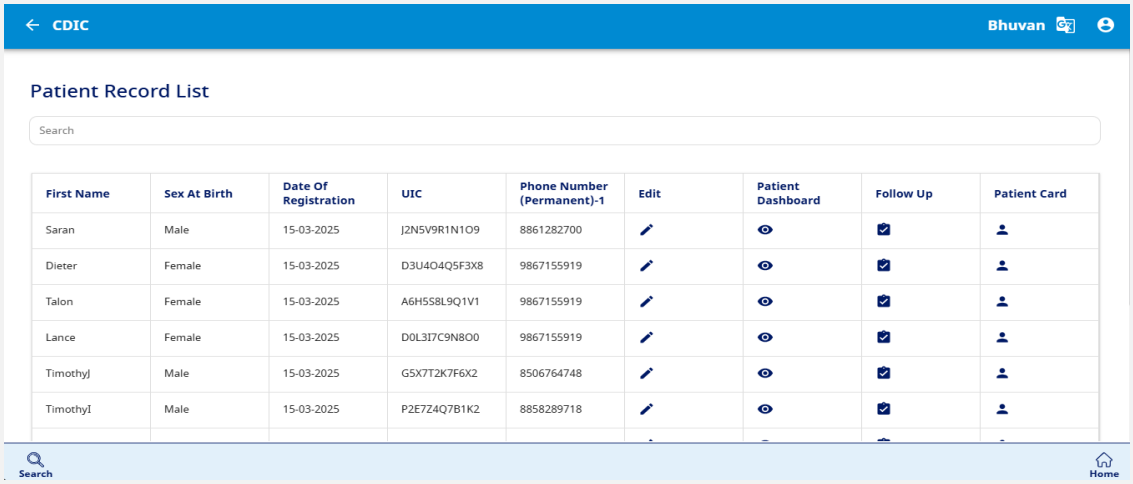


(Fig 14: Patient Dashboard 3/3)

3. MANAGING RECORDS

In the due course of treatment, it is anticipated that the patient will be visiting the facility once in three months to review and update their treatment plan. New information related to their treatment can be recorded in the Patient Record List section(Fig 15). Click on the patient record list button on the homepage or select the option from the side menu

1. Use the search bar to pull the pertinent patient record from the database.
2. Click on the edit option (pencil icon) to enter new information related to that patient
3. For changes related to the Registration section, update the new information in the
   field and it will be reflected in the database (example: insurance status, number of people in household)
4. For recording the new information related to the clinical data, start recording from the field – Date of current visit and follow the variables listed in this section.
5. The fields will start from the blank values so you can enter new information.
6. When done, click on Submit.
7. Follow steps 5-7 for each stage till you reach the Patient Dashbaord section.
8. Post a review, you can export the case report as a pdf by clicking on the 'Download Summary' button
9. Click on the home icon at the bottom of the screen to be redirected to the Homepage



(Fig 15: Patient Record List)

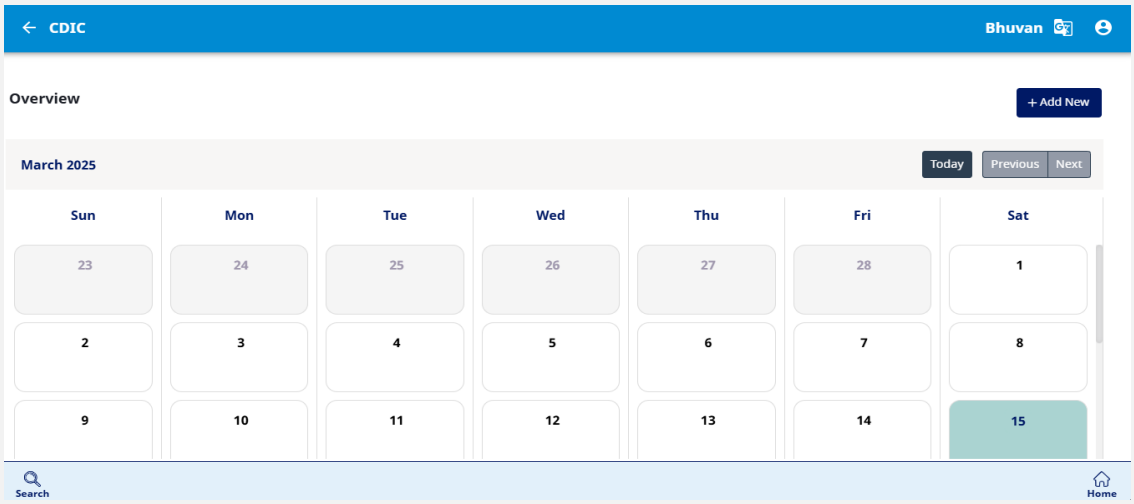
4. FOLLOW UP

This section lists all patients due for follow-up, ordered chronologically from the most recent pending visit to the latest scheduled date.

Clicking on the patient record, the tab opens up to indicate the details of the patient such as Name, Date of registration and UIC number and Patient contact Number. Upon clicking "Follow up" the continuum of care details from Current visit>Lab values>Management> and Patient Dashboard can be accessed and updated for the latest visit.

5. APPOINTMENT

This section opens the calendar to view the appointments fixed with the patients. Appointment can also be fixed from this column by clicking on the "Add New" tab. (Fig 16)



(Fig 16: Appointment)

6. AI USE CASES

A. AI Voice to Text Command followed by extraction of relevant data.

This feature allows Faster documentation and reduction of fatigue from prolonged data entry in the e-registry. The user can simply record observations/ advice/ education notes while talking to the caregiver/patient or even later while uploading the details in the e-registry.

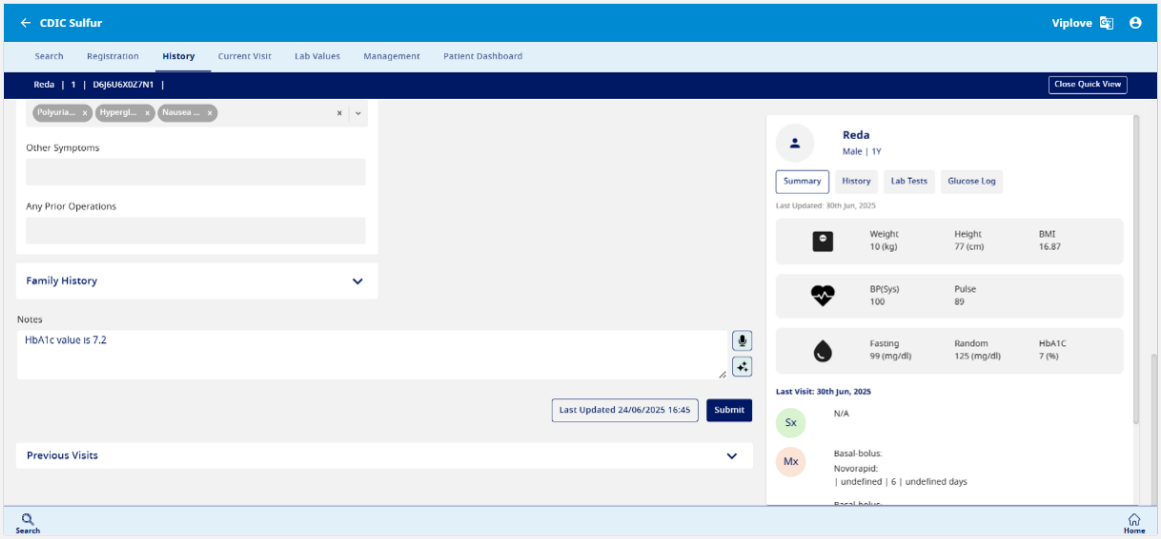


Fig. 17.

Steps:

1. Click on the 'Mic icon' (A)
2. Allow browser microphone permission (first time only).
3. Voice recording begins, add lab values you wish to add or any other relevant notes
4. After dictation, click on the AI analyze icon (B)
5. Review suggested values (text & numbers).
6. Accept, Edit, or Reject each suggestion.
7. Save to update the visit record.

B. Add Templates in Prescription Pad

This features helps to streamline repetitive data entry by allowing users to create templates of the commonly prescribed drugs in prescription and pre-select these templates whenever needed.

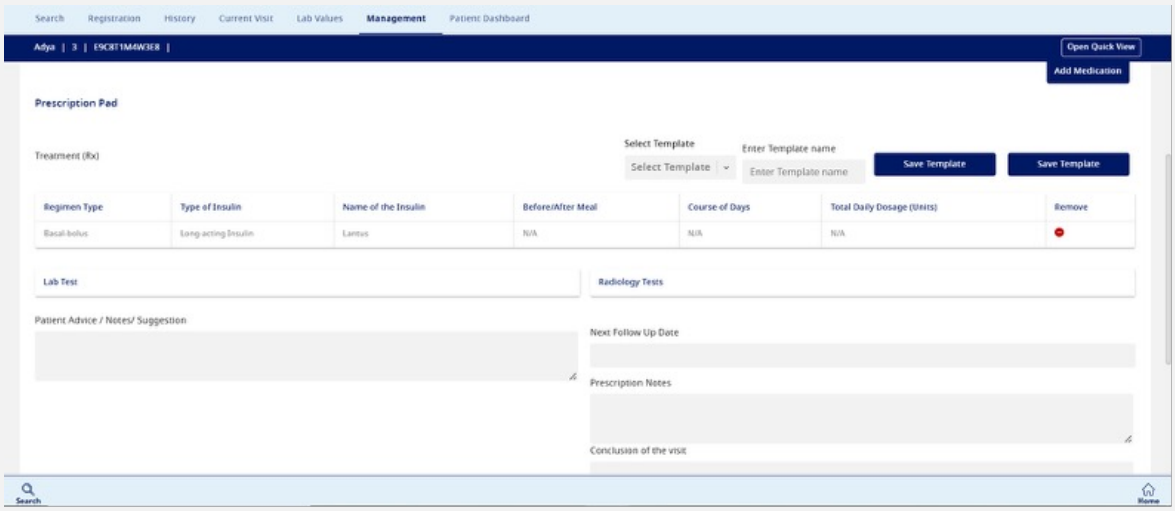


Fig. 18.

Steps to add a new template:

1. Open Management Page → Prescription Pad
2. Click on 'Add Medication' from top right corner.
3. Fill in the prescription pad.
4. You will be able to see the field- Enter Template Name, choose any relevant name for the template.
5. This should be followed by clicking on 'Save Template'.

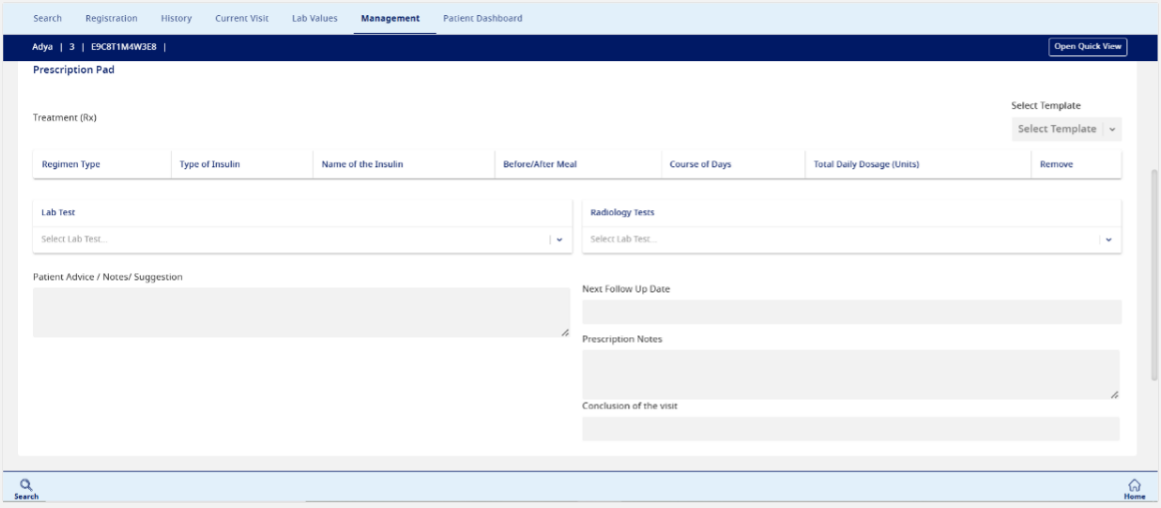


Fig. 19.

Steps to select a saved template:

1. Open Management Page → Prescription Pad
2. Click on 'Select Template' from top right corner.
3. You will be able to view and select from the list of all your saved templates.

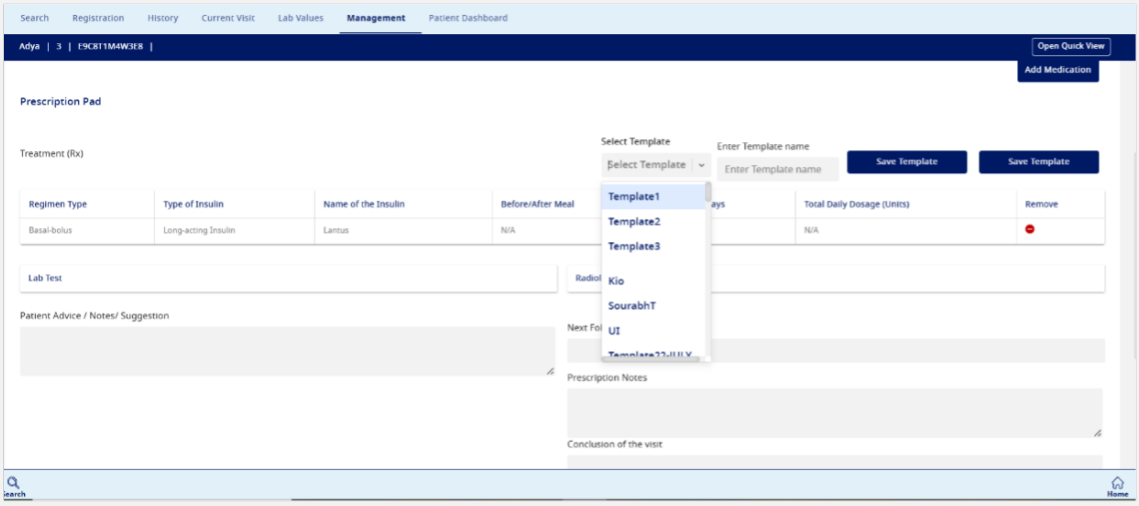

Search
Registration
History
Current Visit
Lab Values
Management
Patient Dashboard
Adya | 3 | E9C8T1M4W3E8 |
Open Quick View
Add Medication
Prescription Pad
Treatment (Rx)
Select Template
Select Template
Enter Template name
Enter Template name
Save Template
Save Template
Regimen Type
Type of Insulin
Name of the Insulin
Before/After Meal
Total Daily Dosage (Units)
Remove
Basal-bolus
Long-acting Insulin
Lantus
N/A
N/A
Template1
Template2
Template3
Kio
SourabhT
UI
Lab Test
Patient Advice / Notes/ Suggestion
Prescription Notes
Conclusion of the visit
Home

Fig. 20.

BEST PRATICES & TIPS

Efficient and accurate data entry is crucial for maintaining the integrity and usability of the T1D e-Registry. Follow these best practices to ensure smooth operations and high-quality patient records.

1. Data Entry Best Practices

- Ensure Accuracy: Always verify patient information before submitting entries. Double-check for errors in names, dates, and numerical values.
- Consistent Formatting:
    - Capitalize the first letter of names and match the spelling to official government-issued IDs.
- Avoid Duplication: Before registering a new patient, use the search function to confirm they are not already in the system.
- Complete Information: Fill in all required fields to maintain a comprehensive medical record for each patient.

2. Security & Compliance

- Maintain Confidentiality: Never share your login credentials. Each user must access the system with their authorized credentials only.
- Secure Logout: Always log out after completing data entry to prevent unauthorized access to patient records.
- Use Authorized Credentials: Do not use the default test credentials for entering real patient data.

3. System Navigation Tips

- Use Quick Search: Utilize the search function by entering a patient's Name or UID to locate records efficiently.
- Regularly Update Records: Each patient visit should be recorded with updated details, including new clinical data, lab values, and treatment adjustments.
- Leverage Dashboard Insights: Monitor patient progress using the visual trends and health indicators provided on the dashboard.

4. Efficient Appointment & Follow-Up Management

- Check Follow-Up Listings: The follow-up section displays patients due for check-ups—prioritize these to maintain continuity of care.
- Schedule Appointments in Advance: Use the appointment calendar to track upcoming visits and avoid missed follow-ups.

5. Troubleshooting & Support

- Syncing Issues: If the system takes longer than expected to sync, refresh the page or check your internet connection.
- Technical Support: If you encounter system errors or need guidance, refer to the
  Appendix or contact the support team for assistance.