

Connected Care System

An Overview of Integrated Healthcare Management

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Introduction

Connected Care is a digital healthcare platform that streamlines hospital operations, patient management, doctor consultations, lab tests, and insurance processing, ensuring efficient and connected medical services.

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- Admin Module
- Hospital Module
- Doctor Module
- Patient Module
- Lab Module
- Insurance Module
- existing system and proposed system
- future enhancements

Existing System

Fragmented Data Management

Paper-Based Prescription Management

Manual Appointment Scheduling

Doctor-Patient Communication Gaps

Limited Insurance Integration

Slow Lab Report Sharing

Proposed System

Enhanced Doctor-Patient Communication

Centralized Data Management

Digital Prescription System

Automated Appointment Booking

AI-Powered Chatbot Support

Integrated Insurance Processing

Smart Blood/Organ Donation Matching

Admin and Hospital Secure System Monitoring

Instant Lab Report Access

MODULES

- **Admin Module**
- **Hospital Module**
- **Doctor Module**
- **Patient Module**
- **Lab Module**
- **Insurance Module**

Admin Module

Acts as the central control hub for managing hospitals, doctors, labs, and system settings.

Facilitates secure login for administrators.

Enables management of hospitals, doctors, patient,insurance ,labs and complaint managment

Offers system monitoring and comprehensive reporting for transparency.

Hospital Module

The Hospital Module manages all hospital-level operations, including patient management, doctor scheduling, donor matching, and insurance processing. It ensures smooth day-to-day operations while remaining integrated with the centralized system.

Doctor Module

The Doctor Module allows doctors to manage patient consultations, view and update medical records, prescribe treatments, and check laboratory reports. It is designed to support doctors in delivering high-quality care efficiently.

Patient Module

Empowers patients with access to their records, appointments, and prescriptions.

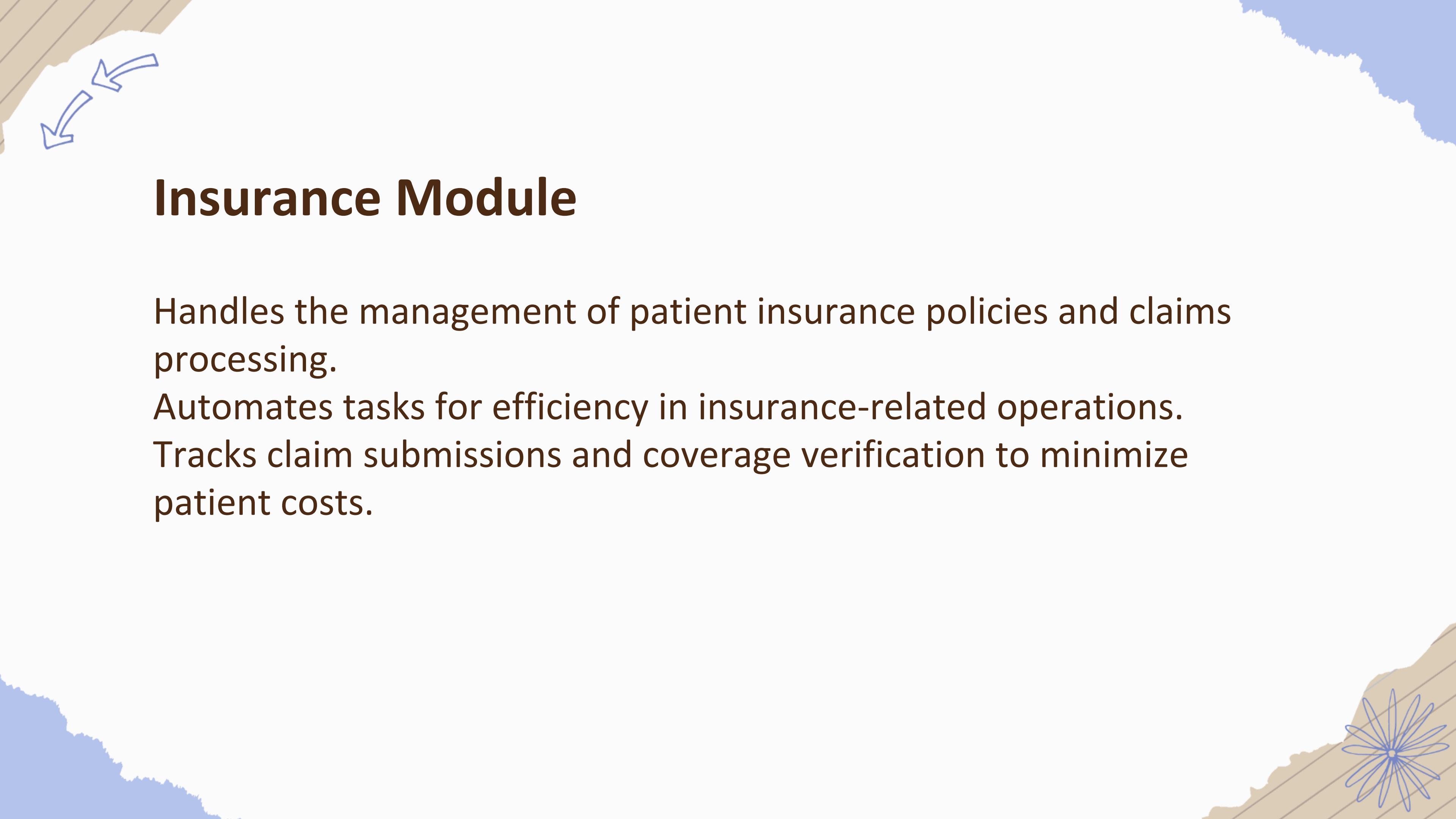
Facilitates appointment booking and doctor selection based on preference.

Allows patients to track insurance claims and access lab results.

Chatbot

Lab Module

The Lab Module manages laboratory-related processes such as receiving test requests from doctors, conducting tests, generating reports, and sharing them with patients and doctors.



Insurance Module

Handles the management of patient insurance policies and claims processing.

Automates tasks for efficiency in insurance-related operations.

Tracks claim submissions and coverage verification to minimize patient costs.

Table Design

Login

Attribute	Data type	Constraints	Description
ID	IntegerField	Primary Key	Login Id
email	EmailField	Not Null	Email of Login
password	CharField	Not Null	Password of the Login
usertype	CharField	Not Null	Type of user Login
status	IntegerField	Not Null	Store the status

Table Design

Hospital Register

Attribute	Data type	Constraints	Description
ID	IntegerField	Primary Key	Login Id
name	CharField	Not Null	Name of the Hospital
address	CharField	Not Null	Address of the Hospital
dist	CharField	Not Null	District of Hospital
city	CharField	Not Null	City of the Hospital
contact	CharField	Not Null	Contact number of the Hospital
loginid	IntegerField	ForeignKey	Store the Login id

Table Design

Patient Register

Attribute	Data type	Constraints	Description
ID	IntegerField	Primary Key	Login Id
name	CharField	Not Null	Name of the Patient
address	CharField	Not Null	Address of the Patient
gender	CharField	Not Null	Gender of the Patient
age	CharField	Not Null	Age of the Patient
contact	CharField	Not Null	Contact number of the Patient
pr_number	IntegerField	Not Null	ID of the Patient
loginid	IntegerField	ForeignKey	Store the Login id

Table Design

Doctor Register

Attribute	Data type	Constraints	Description
ID	IntegerField	Primary Key	Login Id
uploaded_image	ImageField	Not Null	Image of the Doctor
name	CharField	Not Null	Name of the Doctor
gender	CharField	Not Null	Gender of the Doctor
age	CharField	Not Null	Age of the Doctor
specification	CharField	Not Null	specification
exp	CharField	Not Null	experience of the
qualif	CharField	Not Null	Qualification of the
contact	CharField	Not Null	Contact number of
con_fee	IntegerField	Not Null	Fee of the Doctor
hosp_name	CharField	ForeignKey	Hospital name of the
loginid	IntegerField	ForeignKey	Store the Login id

Table Design

Appointment

Attribute	Data type	Constraints	Description
ID	IntegerField	Primary Key	Login Id
pat_id	CharField	ForeignKey	Store the patient id
doc_id	CharField	ForeignKey	Store the Doctor id
hosp_id	CharField	ForeignKey	Store the Hospital id
book_date	DateField	Not Null	Booking date
book_time	TimeField	Not Null	Booking time
cancel	CharField	Not Null	Cancel the Appointment
pres	CharField	Not Null	Prescription adding
curr_date	DateTimeField	Not Null	Current date
url	CharField	Not Null	Store the Url
status	IntegerField	Not Null	Store the Status

Table Design

Prescription

Attribute	Data type	Constraints	Description
ID	IntegerField	Primary Key	Login Id
appointment	IntegerField	ForeignKey	Store the app_id
medicine_name	CharField	Not Null	Store the medicine name
time_of_day	CharField	Not Null	Time of the Medicine
before_or_after_food	CharField	Not Null	Before or after food
start_date	DateField	Not Null	Start Date
end_date	DateField	Not Null	End Date

Table Design

Payment

Attribute	Data type	Constraints	Description
ID	IntegerField	Primary Key	Login Id
app_id	IntegerField	ForeignKey	Store the app_id
card_name	CharField	Not Null	Store the Card name
card_number	IntegerField	Not Null	Store the Card number
exp	IntegerField	Not Null	Expiration Date
CVV	IntegerField	Not Null	CVV number
amt	IntegerField	Not Null	Payment amount

Table Design

Lab Register

Attribute	Data type	Constraints	Description
ID	IntegerField	Primary Key	Login Id
hosp_id	IntegerField	ForeignKey	Store the hosp_id
loc	CharField	Not Null	Store the Location
name	CharField	Not Null	Name of the Lab
loginid	IntegerField	ForeignKey	Store the Login id

Table Design

Lab test

Attribute	Data type	Constraints	Description
ID	IntegerField	Primary Key	Login Id
app_id	IntegerField	ForeignKey	Store the app_id
lab_id	IntegerField	ForeignKey	Store the Lab id
curr_date	CharField	Not Null	Store current date
report_given	TextField	Not Null	Adding Lab report
test_details	CharField	Not Null	Test details add
status	IntegerField	Not Null	Status for lab test payment
card_name	CharField	Not Null	Card name for payment
card_number	IntegerField	Not Null	Card number for payment
exp_date	CharField	Not Null	Expire date of the card
cvv	IntegerField	Not Null	Cvv number
test_prices	IntegerField	Not Null	Each test price
total_price	IntegerField	Not Null	Total price

Table Design

Insurance

Attribute	Data type	Constraints	Description
ID	IntegerField	Primary Key	Login Id
inc_id	IntegerField	Not Null	Store the inc_id
agent_name	CharField	Not Null	Store the Agent Name
contact	IntegerField	Not Null	Contact number of Insurance
loginid	IntegerField	ForeignKey	Store the Login id

Table Design

Ins_taken

Attribute	Data type	Constraints	Description
ID	IntegerField	Primary Key	Login Id
category	CharField	ForeignKey	Store the category
scheme_name	CharField	Not Null	Store the Scheme name
details	CharField	Not Null	Details of the Insurance
type	CharField	Not Null	Insurance Type cash payment or cashless
amount	IntegerField	Not Null	Amount of the Insurance

Table Design

Ins_pat

Attribute	Data type	Constraints	Description
ID	IntegerField	Primary Key	Login Id
category	CharField	ForeignKey	Store the category
scheme_name	CharField	Not Null	Store the Scheme name
details	CharField	Not Null	Details of the Insurance
type	CharField	Not Null	Insurance Type cash payment or cashless
amount	IntegerField	Not Null	Amount of the Insurance

Table Design

Donation

Attribute	Data type	Constraints	Description
ID	IntegerField	Primary Key	Login Id
name	CharField	ForeignKey	Store the name of the donar
address	CharField	Not Null	Store the address of donar
blood_group	CharField	Not Null	Store the Blood group
phone_number	IntegerField	Not Null	Phone number of the donar
organ_name	CharField	Not Null	Organ name
acknowledgment	FileField	Not Null	Submit the acknowledgment
submitted_at	DateTimeField	Not Null	Submitting time

Table Design

Recipient

Attribute	Data type	Constraints	Description
ID	IntegerField	Primary Key	Login Id
name	CharField	ForeignKey	Store the name of the recipient
contact	IntegerField	Not Null	Store the contact of recipient
email	CharField	Not Null	Store the email address
blood_group	CharField	Not Null	Store the Blood group
organ_needed	CharField	Not Null	Organ name
location	CharField	Not Null	Location of the recipient
submitted_at	DateTimeField	Not Null	Submitting time

Table Design

OrganMatch

Attribute	Data type	Constraints	Description
ID	IntegerField	Primary Key	Login Id
recipient	CharField	ForeignKey	Store the recipient details
donor	IntegerField	ForeignKey	Store the donar details
matched_at	DateTimeField	Not Null	Store the matched time

Table Design

Complaint

Attribute	Data type	Constraints	Description
ID	IntegerField	Primary Key	Login Id
patient	CharField	ForeignKey	Store the Patient id,name
subject	CharField	Not Null	Store the Subject of complaint
message	CharField	Not Null	Store the Message of complaint
submitted_at	CharField	Not Null	Complaint submitted date
response	CharField	Not Null	Response from the admin

Index Page

The image shows a screenshot of a medical website's index page. At the top left is a logo consisting of a blue cross inside a circle followed by the word "Medical.". To the right of the logo is a horizontal navigation bar with five items: "Home", "Doctor Register", "Hospital Regiser", "Patient Register", and "Insurance Regiser". On the far right of the navigation bar is a blue rectangular button labeled "Login". Below the navigation bar is a large banner image. The banner features a male doctor with a beard and glasses, wearing a white coat and a stethoscope, smiling. To his right, a woman and a young child are partially visible, also smiling. The background of the banner has a light blue gradient with white wavy lines. On the left side of the banner, there is a thin blue horizontal line above the text "COMMITTED TO SUCCESS". Below this text is a large, bold, dark blue headline that reads "WE CARE ABOUT YOUR HEALTH". Underneath the headline is a smaller, dark blue subtext that says "Find doctors, book consultations, and manage schedules effortlessly". At the bottom left of the banner is a blue button with the text "Appointment" and a right-pointing arrow. The bottom of the page includes a dark footer bar with various icons and text, including "29°C", "ENG", "11:09 AM", and a battery icon.

Medical.

Home Doctor Register Hospital Regiser Patient Register Insurance Regiser Login

— COMMITTED TO SUCCESS

**WE CARE ABOUT
YOUR HEALTH**

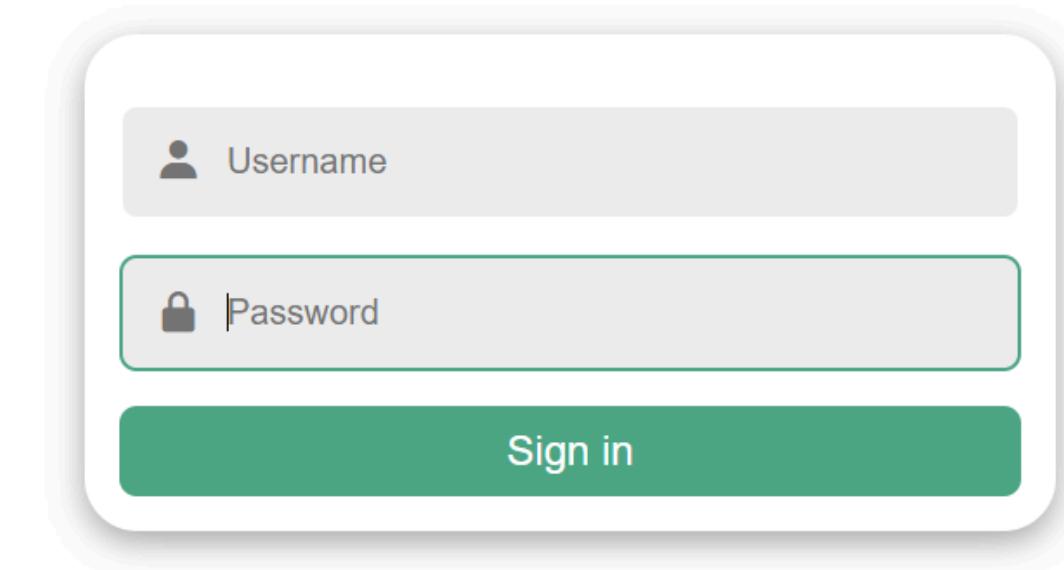
Find doctors, book consultations, and manage schedules effortlessly

Appointment →

29°C ENG 11:09 AM

Login page

Welcome



Username

Password

Sign in

Hospital Main page

Connected Call

- hai_doc1 Hospital
- Dashboard
- Profile edit
- Lab register
- Insurance
- Insurance Track
- Our Doctors
- Our Patient
- All Patient
- Donation
- Donation
- Match Donation

Search

Appointment Insurance Notification hai_doc1

Registered Patients 30

Doctors in Hospital 3

Insurance Requested 15

Insurance Approved 13

Worldwide Sales

Show All

Year	USA	UK	AU
2016	15	10	10
2017	30	35	25
2018	55	40	45
2019	65	58	55
2020	60	70	65
2021	80	75	70
2022	95	75	60

Salse & Revenue

Show All

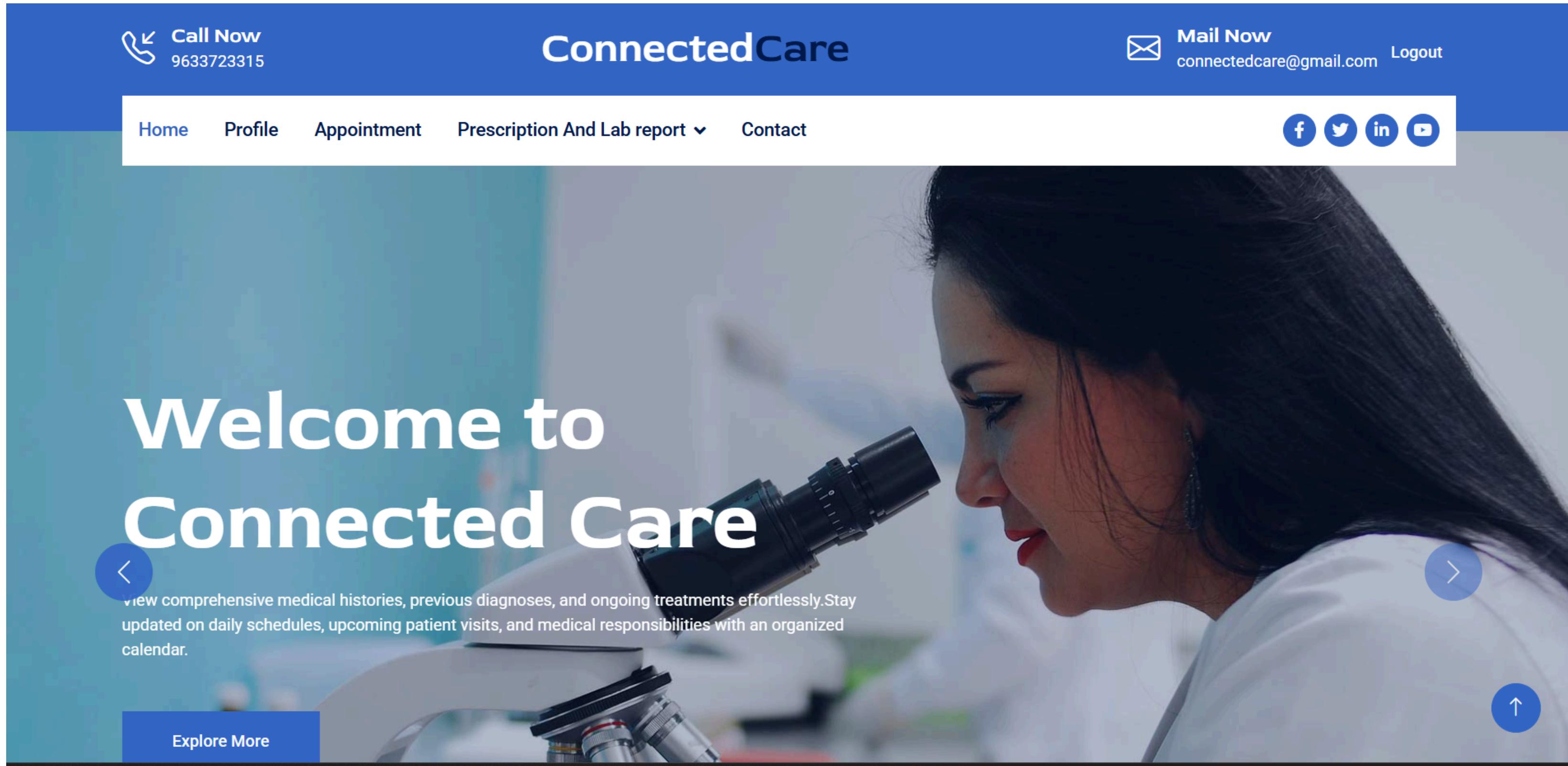
Year	Salse	Revenue
2016	100	10
2017	130	30
2018	170	55
2019	130	50
2020	190	70
2021	180	65
2022	270	90

Recent Sale

Show All

Image	Doctor Name	Specialization	Experience	Qualification	Contact	Consultation Fee

Doctor page



ConnectedCare

Call Now
9633723315

Mail Now
connectedcare@gmail.com

Logout

Home Profile Appointment Prescription And Lab report ▾ Contact

f t in y

Welcome to Connected Care

< >

Explore More

view comprehensive medical histories, previous diagnoses, and ongoing treatments effortlessly. Stay updated on daily schedules, upcoming patient visits, and medical responsibilities with an organized calendar.

Patient Main page



We Are Here For Your Care

Best Care & Better Doctor

Connected Care brings all your medical needs to one platform, empowering you with easy access to doctors, appointments, prescriptions, and insurance claims. Whether you're booking a consultation or checking lab results, everything is just a few clicks away.



Insurance Main Page

[Logout](#)[Schemes](#)[Hospital Verified](#)[Profile](#)[Contact Us](#)[Call Me \(+55\) -66 99 88](#)

Managing Medical Expenses & Insurance Claims



Contact Us and Get An Appointment.

HEA L



Lab Main Page

[Logout](#)[Home](#)[Doctor Request](#)[Our Reports](#)[Profile](#)[Contact Us](#)[Call Me 9633723315](#)

A Guide To Ensuring Quality Laboratory Consumables.

[+ Contact Us](#)

Have A Nice Day Save Jone!



future enhancements

IoT-Based Healthcare Monitoring – Integrate wearable devices for real-time health tracking and automated alerts.

AI-Powered Diagnosis Support – Implement machine learning algorithms to assist doctors in diagnosing conditions based on patient history and test results.

AI-Based Health Risk Prediction – Use AI models to assess patient data and predict potential health risks or disease patterns.

Conclusion

Connected Care revolutionizes healthcare by integrating hospitals, doctors, labs, insurance providers, and patients into a unified digital ecosystem. By automating processes, enabling real-time data access, and enhancing patient engagement, it improves efficiency, accessibility, and coordination across medical services.

Thank you!