Requirement Document

iCarePro Health

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ISSUED BY
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REPRESENTATIVE
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1. Introduction

The purpose of iCarePro EMR is to develop a market competitive EMR solution that is fully HIPAA compliant. iCarePro EMR will be providing a way to store and maintain standard clinical data that will be gathered about a patient. It will help streamline many of the functions integral for running the clinical practice. iCarePro EMR helps in increasing the revenue, can easily be accountable, and helps in the hectic procedure of billing patients. Reimbursements can happen at faster rates It will eradicate all the paperwork and the strain of storing all the paperwork.

2. Flow Chart diagrams

All the flow charts related to the iCarePro can be found under link. Flow has been designed for better understanding of the project.

Flow charts link: (iCarePro flow chart)

3. Practice Registration

Practice registration will consist of two parts, Initial request form & Practice registration form. In the first part, practice will submit the initial request form, which will be verified by the system administrator, upon confirmation the Practice registration form (PRF) will be sent to practice in order to complete the registration process.

Once practice registration form (PFR) is submitted, system administrator will review the form, upon approval Practice account will be generated in the systema and practice will be notified via email along with login credentials.

Access workflow diagram for practice registration. (Practice Registration Workflow)

Practice Initial Request Form

Practice will fill the initial request form to submit their query registration query to iCarePro

- Practice Name
- First Name
- Last Name
- Phone Number
- Email
- Role

When practice submits the initial form our team (iCarePro) will send the detailed registration form via email link.

Practice registration form (PRF)

Practice will fill the detail form in order to get the practice registered with iCarePro

Contact Person

- First Name
- Middle Name
- Last Name
- Phone Number
- Email (Professional email)
- Role

Address Information

- Address Line 1
- Address Line 2
- Country
- State
- City
- Zip Code
- Google Location picker

Legal Information

- Tax ID
- Practice NPI (National Provider Identifier Standard)
- Practice Taxonomy (identifying the provider type and area of specialization for health care providers)
- Billing Attn (Name)
- Facility ID (Facility Identification Number)
- OID (ISO Object Identifier)
- CLIA Number (Clinical Laboratory Improvement Amendment

Consent Form

- Privacy Policy
- Terms and Condition
- Other Forms

Attach Documents

- Add documents for practice

4. Doctors Registration

Doctor registration will be processed under the practices, as each practice will be registered and managing their doctors within their administrative dashboard.

Doctors' registration will start with the Doctor Registration Form (DRF), as this form will be generated and filled into the system by the practice administrator / Staff (based on rights). Once the Doctor Registration Form (DRF) is submitted, doctors will receive the confirmation email of registration along with a Know Your Customer (KYC) link in order to verify their identity.

Upon KYC verification is completed, the system administrator will be notified and based on the KYC result, the system administrator will confirm the account registration. This doctor will receive a welcome email along with login credentials.

Access workflow diagram for doctor registration. (Doctor Registration Workflow)

Access workflow diagram for doctor dashboard. (Doctor Dashboard)

Doctor Registration Process

1st Step: Registration Form

Personal / Contact Information

- Suffix (Mr. / Mrs)
- First Name
- Middle Name
- Last Name
- Gender
- Primary Phone Number
- Secondary Phone Number
- Primary Email
- Secondary Email
- DOB
- SSN Number
- Driving License Number

- Material status
- Specialization

Residential Information Address

Current Address

- Address line 1
- Address line 2
- Country
- State
- City
- Zip Code

Hometown Address

- Address line 1
- Address line 2
- Country
- State
- City
- Zip Code

Educational Qualifications

This information will be added multiple

No	Degree	Board / Institution	Year From	Year To	Division / CGPA

Professional Experience

This information will be added multiple

No	Job Description	Year From	Year To	Organization

Legal Information

- Federal Tax Id
- DEA Number
- NPI
- Taxonomy
- State License Number

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Step 2: Doctor KYC verification

Once doctor registration is completed, the doctor is notified via the provided Email and SMS regarding the KYC verification process.

KYC will proceed by using a third party Tool / Library (Shufti Pro). Once doctor KYC is completed, system administrators will be notified in both of the cases, either (successful / rejection) of KYC. Based on the status of the KYC system, the administrator will take action, either they send another link to verify the KYC again if rejected, and will send login credentials to the doctor in case of successful KYC.

Upon sending credentials to the doctor will complete the doctor registration process into the system. Furthermore, doctors can create their appointment slots or appointments as per need.

Setup slots for appointments:

Doctors are now required to set up their appointment slots, in order to get the appointment booked by (Practice / Patient), the same generated slots will be used by them to book the appointment for the doctor.

For generating the appointment slots, the following pattern will be used.

- Slots From date
- Slots To date
- Working hours From
- Working hours To
- Slot Time
- Working day (Selection for week days)
- Off Dates

- Slot From and Slot to will identify the dates regarding creation of slots
- Working hours from and to identify the doctor availability in terms of time for the day
- Working days will be considered as the availability of the doctor in terms of available days in the week
- Off dates will mark the day off in the slots, based on the need to doctor.

Setup Fee for appointments:

Doctors will set up their appointment fee according to them. The same appointment fee will be charged by the clinic or practice to the patient at the appointment check-in.

5. Patient Registration

Patients can be registered in the system by two ways, either they can create an online account or they can be registered in the system by a Practice doctor / staff.

Case 1: Patient Register via online (Self registration)

From an online portal, patients can register with very basic information by providing their Phone, Name and email address. Through these steps patients will land on the dashboard and will be able to see or book their appointments. Rest of the information can be filled out in stages or doctors can fill in based on their appointments or desired need.

Access workflow diagram for Online Patient Registration. (Online Patient Registration)
Access workflow diagram for Patient Registration. (Patient Registration)

Case 2: Patient Register by Practice Staff / doctor

The Practice Staff / doctor will register the patient with the minimum required information asked on (Identification, Contact, Demographics, Additional Info, Emergency Contact, Next to Kin, Employment, Guardian, Privacy).

At first the Staff / doctor will add the patient's phone number and fetch the records, if the record exists then it will be auto-filled, else it will be filled by the Staff / doctor.

Once a patient is registered, the system will create an account for the patient which contains every information of the patient along with the patient profile which contains (Allergy, Vaccine, Medical Problem, Family history, Social History, Surgical history, implantations).

All above information of the patient will be added in as parts, as none of the information is not required.

Below are the fields that will be used in order to complete the patient information. This can be done either by the Patient through an online portal or by Staff / doctor.

Identification

- Legal Last Name
- Legal First Name
- First Name Used
- Middle Name
- Suffix ↓
- Previous Last Name
- Previous First Name
- Legal Sex
- Dob
- SSN
- Mothers Maiden Name
- Preferred Name

Contact

- Address Line 1
- Address Line 2
- Zip Code
- City
- State
- Country
- Home Phone
- Consent To Text
- Work Phone
- Patient Email
- Contact Preference

Demographics

- Language
- Race
- Ethnicity
- Marital Status
- Sexual Orientation
- Gender Identity
- Assigned Sex At Birth
- Pronouns
- Homebound
- Family Size
- Income Per Year
- Agricultural Worker
- Homeless Status
- School Based Health Center Patient
- Veteran Status
- Public Housing Patient

Emergency Contact

- Patients relationship
- Last name
- First name
- Middle name
- Suffix
- Dob
- Address Line 1
- Address Line 2
- Zip code
- City
- State
- Country
- Ssn
- Phone
- Email

Next to Kin

- Patients relationship
- Last name
- First name
- Middle name
- Suffix
- Dob
- Address Line 1
- Address Line 2
- Zip code
- City
- State
- Country
- Ssn
- Phone
- Email

Employment

- Patients relationship
- Last name
- First name
- Middle name
- Suffix
- Dob
- Address Line 1
- Address Line 2
- Zip code
- City
- State
- Country
- Ssn
- Phone
- Email

Guardian

- Patients relationship
- Last name
- First name
- Middle name
- Suffix
- Dob
- Address Line 1
- Address Line 2
- Zip code
- City
- State
- Country
- Ssn
- Phone
- Email

Privacy

- Notices on file
- Consent to call
- Patient notes

All the above information can be added to the system in stages as per need by the doctor or when the problem occurs. Apart from that, the system will maintain the complete profile of the patient i.e (Allergy, Vaccine, Medical Problem, Family history, Social History, Surgical history, implantations).

6. Appointments

Appointments can be created by the following (Practice / Doctor / Patient) in the system. Appointment is the way where a doctor will generate the e-prescription for the patient. Every appointment will be generated based on the availability of the doctor for selected date, date and time for each doctor related to their appointment scheduling will already have been set up into their profile, either by themselves or by staff.

Appointments will be created based on the following criteria.

- Each practice will create appointments related to doctor available in their practice
- Practice will schedule the appointment by the date/time suggested by the doctor

Appointments scheduling form will consist of following

- Practice Name (Selected by default, if practice or doctor is booking)
- Doctor Name (Select by default if doctor is booking)
- Patient Name (Select)
- Date (Picker)
- Time (Picker)
- Disease Category
- Appointment Type
- Appointment Note

Once an appointment is scheduled, each appointment will be assigned a unique id as appointment reference number for patient understanding. Patients related to this appointment will be notified by Email or SMS or Call with the appointment details.

7. Patient E-Prescription

Patient e-prescription will be generated against the appointment, and will always be managed by Practice staff and doctors. E-prescription will contain the data related to vitamins (vitals), medicines, lab tests and procedure recommended by the doctor during the examination / check-up.

Upon patient visit to clinic / hospital staff will mark the patient as check-in to the patient regarding his appointment, which will also notify the doctor for the arrival of the patient in the clinic. Staff will monitor the vitals of the patient and add them to the record against the appointment, which will be reviewed by the doctor at the time of examination.

Access workflow diagram for e-prescription. (E-Prescription)

Vitals Forms

- BP
- BMI
- Ht
- Wt
- HR
- Inhaled O2 Concentration
- Pulse
- RR
- TWC
- Pain
- Scale
- Note

Once patient vitals are collected and passed to the doctor, then the doctor will review the vitals and generate the e-prescription. Doctor is supposed to add following in the e-prescription based on his examination with the patient

Add E-prescription

- Add Meds (Medicine Name, Quantity (2 Tabs), Potency (mg / ml), Dosage(In take in a day), Time (Before/after meal), Duration(No of Days)
- Add Medical Test (Test Name)
- Add Procedure (Procedure Name)
- Review Notes

Once e-prescription is generated, then the appointment will be marked as closed and passed to the billing department for the final consolidation. Patient will receive the e-prescription over the email and the same will appear in the patient portal.

8. Insurance Claim

Currently the system will not have any auto insurance verification process, all the insurance will be verified manually.

Access workflow diagram for Insurance Claim. (Insurance Claim)

Insurance claims will work in the system in two ways,
Case 1: Patient did not have the insurance
Case 2: Patient has the insurance

Case 1: Patient did not have the insurance

If the patient did not have the insurance, then the patient will be charged with the full amount as suggested/setup by the doctor.

Case 2: Patient has the insurance

If the patient has insurance, then staff will enter the insurance details (Policy Number) and add the adjustable amount for the patient. This adjustable amount will be consolidated in the billing record for the patient.

9. Employee/Staff Management

Practice will be allowed to create the staff to manage the system. Practice will have to pre-define the departments and roles before creating any employee in the system.

Access Flow chart diagram for Employee / Staff Management (HR Management)

Create Department

- Create Department
- Employee Type

Create Role

- Create Role
- Assign Rights to Role

Register Employee / Staff

For the registration of employees, following data will be required to add

Personal Details

- First Name
- Middle Name
- Last Name
- Phone number
- Email
- Gender
- Dob
- SSN
- Select Department
- Select Role

Once an employee gets registered in the system, the system will send an email to the staff on the email address with login information. Same login information is used to get a login. Upon first login the system will ask the staff to enter the new password.

10. Subscription Model

Subscription module will control all the ongoing subscriptions into the system. Subscription module allows to create different types of subscriptions and identify the limitation for each type.

Access Flow chart diagram for Subscription Model (Subscription Model)

Creating subscription

- Subscription Name
- Type
- Set Parameters
- Access Checklist
- Price

Manage Subscription offer

- Select Subscription
- Offer type
- Offer validity
- Preview

Manage Subscription Status

Subscription status allows the system to Active / Deactivate the subscriptions. Upon deactivating the active subscriptions, will not affect those who have already bought that subscriptions.