

Evaluations are conducted based on the guidelines of good design for Electronic Health Records established by NIST. Problems are categorized into 19 categories based on the tables for principles of good design established by NIST.

8 categories that might lead to use error:

Patient identification error; Mode error; Data accuracy error; Data availability error; Interpretation error; Recall error; Feedback error; Data integrity error

11 categories that are violating the 10 usability heuristics for UI design:

Visibility of system status; Match between system and real world; User control and freedom; Consistency and standards; Help with recognize, diagnose, and recover from errors; Error prevention; Recognition rather than recall; Flexibility and minimalist design; Aesthetic and minimalist design; Help and documentation; Pleasurable and respectful interaction with the user

Menu

Patient identification error

- [Patient name not displayed on the page when add new patient. \(Patient identification error\)](#)
- [If a patient information is opened \(or just added\), the name of the patient will be displayed on the screen while the nurse try to enter the next patient's information. \(Patient identification error\)](#)
- [After added Leyi Cui \(2\) as a new patient, the previous opened patient Angel Cui \(1\)'s profile got automatically closed. \(Patient identification error; feedback error\)](#)
- [When phy2 opens the same patient information as phy1, there is no protections from simultaneous data entry. \(Patient identification error\)](#)
- [A physician can login to the same account in two different tabs to work on two patients' information at the same time. \(Patient identification error\)](#)
- [Patient finder does not automatically update if a new patient is added or if previous patient's information is changed, need manual update. \(Patient identification error; data accuracy error: accurate information not automatically displayed; feedback error\)](#)

Mode error

- [View-only mode not working \(Mode error; data integrity error\)](#)
- [Weird state and unclear transitions between state in message: active vs inactive \(Mode error\)](#)
- [Button does not respond \(Aesthetic and minimalist design; mode error\)](#)

Data accuracy error

- [No error validation in entering SSN when entering in wrong SSN formats \(essential patient info identifier\) \(Data accuracy error; match between system and the real world\)](#)

- If selected one title from menu, then types in the correct title in the free text box, the previously selected title is still highlighted when type allergies or add medications. (Data accuracy error)
- Be able to add appointment to the past and to the long future without warning triggered (Data accuracy error; error prevention)
- Information does not save when switch between “patient” tab and “provider” tab and no warnings triggered (Data accuracy error; error prevention)
- Enter message in free form (Data accuracy error; pleasurable and respectful interaction with the user)
- Form automated value update work in one direction but not the other (Data accuracy error; feedback error)
- Missing fields not shown all at the same time. No highlights on required fields when entering prescriptions. Not enough required fields (Data accuracy error; error prevention; feedback error)
- No error preventions on number entry for medicine quantity (Data accuracy error; error prevention; feedback error)
- Patient finder does not automatically update if a new patient is added or if previous patient's information is changed. need manual update. (Patient identification error; data accuracy error; accurate information not automatically displayed; feedback error)

Data availability error

- Cannot read previously sent messages (Data availability error; Recognition over recall; recall error)

Interpretation error

- SSN shown as S.S. in the add patient page (Interpretation error)

Recall error

- Very few required fields in entering patient's information (Recognition rather than recall; recall error)
- Today's date not clearly shown on Calendar (Recognition rather than recall; recall error)
- Cannot read previously sent messages (Data availability error; Recognition over recall; recall error)

Feedback error

- Form automated value update work in one direction but not the other (Data accuracy error; feedback error)
- Missing fields not shown all at the same time. No highlights on required fields when entering prescriptions. Not enough required fields (Data accuracy error; error prevention; feedback error)
- No error preventions on number entry for medicine quantity (Data accuracy error; error prevention; feedback error)

- After added Leyi Cui (2) as a new patient, the previous opened patient Angel Cui (1)'s profile got automatically closed. (Patient identification error; feedback error)
- Missing fields highlights not shown at the same time; No hints on required fields in interface design; Not enough required fields (Data accuracy error; error prevention; feedback error)

Data integrity error

- View-only mode not working (Mode error; data integrity error)

Visibility of system status

- Interface design not consistent with add patient interface and edit patient basic information interface (Visibility of system status)
- Inconsistent and bad design on navigating back to previous level (Visibility of system status)

Match between system and the real world

- No error validation in entering SSN when entering in wrong SSN formats (essential patient info identifier) (Data accuracy error; match between system and the real world)

User control and freedom

- No enable recovery (User control and freedom; aesthetic and minimalist design; consistency and standards; pleasurable and respectful interaction with the user)

Consistency and standards

- Inconsistent selection types: drop-down menu vs display menu (Aesthetic and minimalist design; consistency and standards)
- Inconsistent design for different pages (Aesthetic and minimalist design; consistency and standards)
- Duplicate refresh button (Aesthetic and minimalist design; consistency and standards)
- Inconsistent design with searching and adding patient: others vs message center (Aesthetic and minimalist design; consistency and standards)
- Button not noted hitable (Aesthetic and minimalist design; consistency and standards)
- Inconsistent windows opening logic that may force the user to switch to another page without manually save information on current page (Aesthetic and minimalist design; consistency and standards)
- Risks clear the prescriptions instead of save because of inconsistent design (Aesthetic and minimalist design; consistency and standards)
- No enable recovery (User control and freedom; aesthetic and minimalist design; consistency and standards; pleasurable and respectful interaction with the user)

Help with recognize, diagnose, and recover from errors

- [Bad warnings format \(Help user recognize, diagnose, and recover from errors\)](#)

Error prevention

- [Wrong requirement displayed: insurance highlighted in red as required fields, but they are not actually required by the system. \(Error prevention\)](#)
- [Be able to add appointment to the past and to the long future without warning triggered \(Data accuracy error; error prevention\)](#)
- [Information does not save when switch between “patient” tab and “provider” tab and no warnings triggered \(Data accuracy error; error prevention\)](#)
- [Missing fields highlights not shown at the same time; No hints on required fields in interface design; Not enough required fields \(Data accuracy error; error prevention; feedback error\)](#)
- [No error preventions on number entry for medicine quantity \(Data accuracy error; error prevention; feedback error\)](#)

Recognition rather than recall

- [Very few required fields in entering patient's information \(Recognition rather than recall; recall error\)](#)
- [Today's date not clearly shown on Calendar \(Recognition rather than recall; recall error\)](#)
- [Cannot read previously sent messages \(Data availability error; Recognition over recall; recall error\)](#)

Flexibility and minimalist design

- [No function keys for high-frequency commands \(Flexibility and minimalist design\)](#)

Aesthetic and minimalist design

- [Incomplete grey hint messages displayed \(Aesthetic and minimalist design\)](#)
- [Display badly designed and unnecessary warnings in add patient page \(Aesthetic and minimalist design\)](#)
- [Inconsistent selection types: drop-down menu vs display menu \(Aesthetic and minimalist design; consistency and standards\)](#)
- [Inconsistent design for different pages \(Aesthetic and minimalist design; consistency and standards\)](#)
- [Problems with display and only display the current date \(Aesthetic and minimalist design\)](#)
- [Duplicate refresh button \(Aesthetic and minimalist design; consistency and standards\)](#)
- [Inconsistent design with searching and adding patient: others vs message center \(Aesthetic and minimalist design; consistency and standards\)](#)
- [Button not noted hitable \(Aesthetic and minimalist design; consistency and standards\)](#)

- [Click on + Create A Dated Reminder opens both View Log and Create A Dated Reminder windows that overlap with each other \(Aesthetic and minimalist design\)](#)
- [Inconsistent windows opening logic that may force the user to switch to another page without manually save information on current page \(Aesthetic and minimalist design; consistency and standards\)](#)
- [Button does not respond \(Aesthetic and minimalist design; mode error\)](#)
- [Risks clear the prescriptions instead of save because of inconsistent design \(Aesthetic and minimalist design; consistency and standards\)](#)
- [No enable recovery \(User control and freedom: aesthetic and minimalist design; consistency and standards; pleasurable and respectful interaction with the user\)](#)

Help and documentation

- [Only text in tutorial \(help function\) \(Help and documentation\)](#)

Pleasurable and respectful interaction with the user

- [No enable recovery \(User control and freedom: aesthetic and minimalist design; consistency and standards; pleasurable and respectful interaction with the user\)](#)
- [Enter message in free form \(Data accuracy error; pleasurable and respectful interaction with the user\)](#)

Problems

Patient name not displayed on the page when add new patient. (Patient identification error)

Gender Identity: Unassigned Sexual Orientation: Unassigned

External ID: S.S.: Unassigned

License/ID: Marital Status: Unassigned

User Defined:

Billing Note:

Previous Names:

Contact

Address: [Placeholder] Address Line 2: [Placeholder]

City: [Placeholder] State: Unassigned

Postal Code: [Placeholder] Country: Unassigned

County: Unassigned

Emergency Contact: [Placeholder]

Home Phone: [Placeholder]

Mobile Phone: [Placeholder]

Trusted Email: [Placeholder]

Additional Addresses

MISC

Add

If a patient information is opened (or just added), the name of the patient will be displayed on the screen while the nurse try to enter the next patient's information. (Patient identification error)

Calendar Finder Flow Recalls Messages Patient Fees Procedures Reports Miscellaneous Popups

Angel Cui (1) ×
DOB: 2023-06-06 Age: 0 month

Search by any demographic

Select Encounter (0) +

Calendar Message Center Search or Add Patient Visit History

Search or Add Patient

Who

Contact

Address: [Placeholder] Address Line 2: [Placeholder]

City: [Placeholder] State: Unassigned

Postal Code: [Placeholder] Country: Unassigned

County: Unassigned

Emergency Contact: [Placeholder]

Home Phone: [Placeholder]

Mobile Phone: [Placeholder]

Trusted Email: [Placeholder]

Additional Addresses

MISC

Add

Angel Cui is the previously entered patient's name. Now, when adding another patient B, the name of the previous patient is still displayed on the interface.

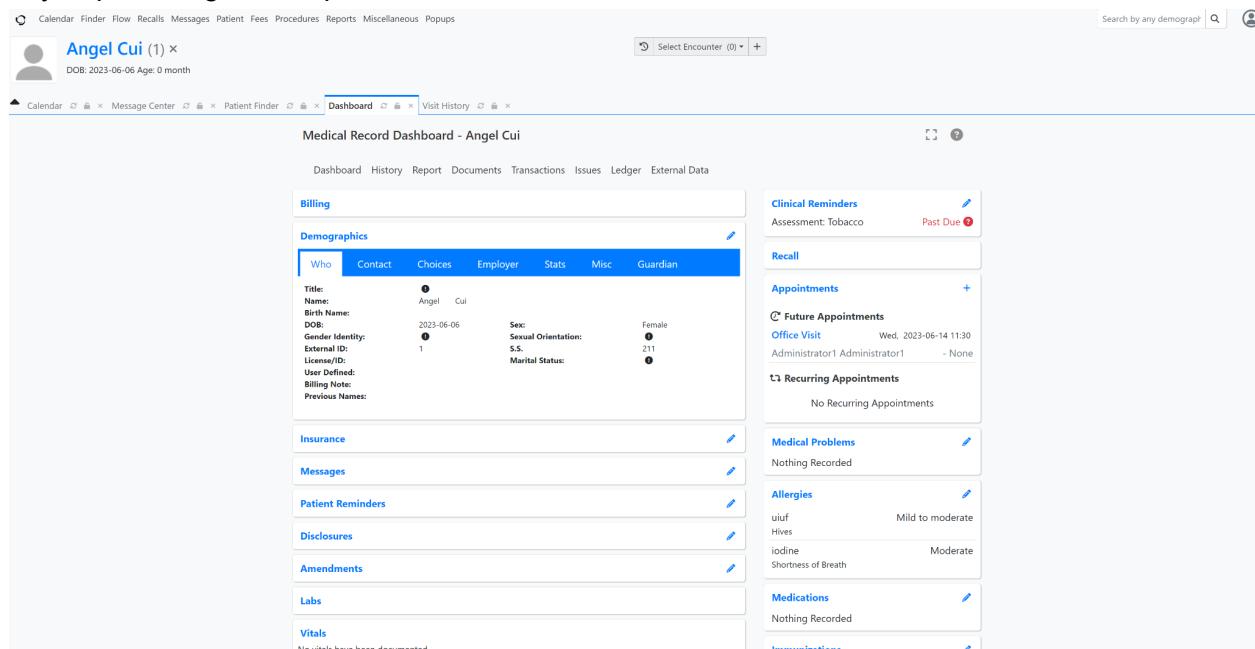
After added Leyi Cui (2) as a new patient, the previous opened patient Angel Cui (1)'s profile got automatically closed. (Patient identification error; feedback error)

Previously opened patient profile automatically closed without notification.

When phy2 opens the same patient information as phy1, there is no protections from simultaneous data entry. (Patient identification error)

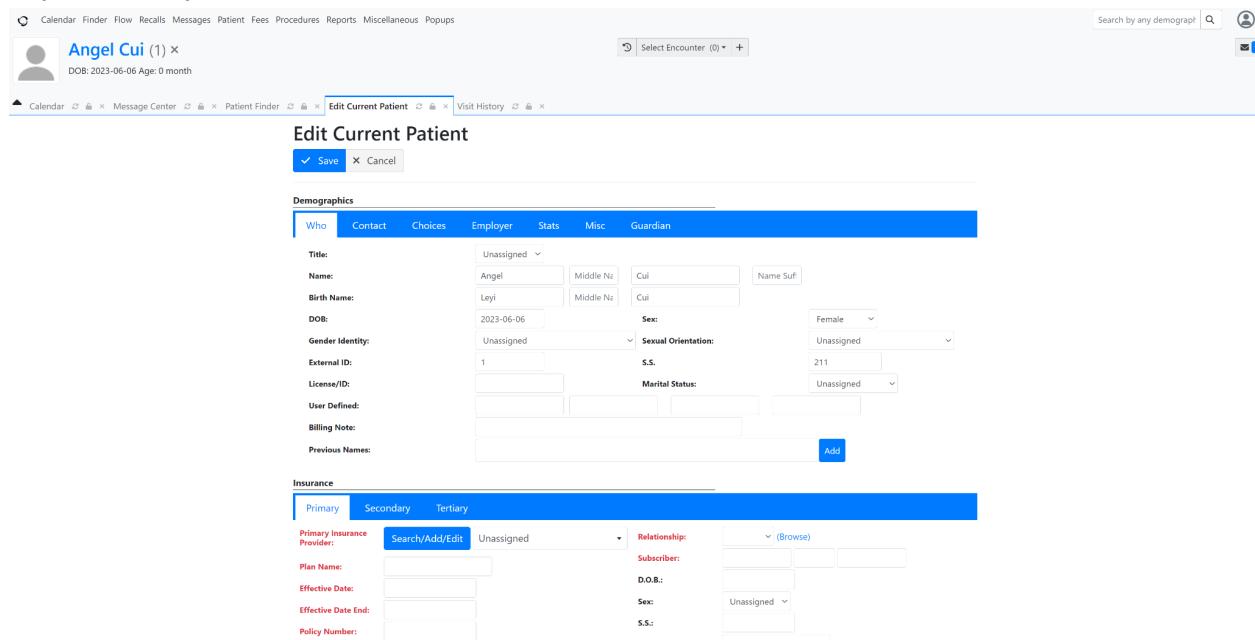
Phy1 opens Angel Cui's profile:

Phy2 opens Angel Cui's profile:



The screenshot shows the Medical Record Dashboard for patient Angel Cui. At the top, there is a navigation bar with links to Calendar, Finder, Flow, Recalls, Messages, Patient, Fees, Procedures, Reports, Miscellaneous, and Popups. A search bar at the top right allows searching by demographic. Below the navigation is a header showing the patient's name, "Angel Cui (1)", DOB: 2023-06-06, and Age: 0 month. The main dashboard area is titled "Medical Record Dashboard - Angel Cui" and contains several sections: Billing, Demographics, Insurance, Messages, Patient Reminders, Disclosures, Amendments, Labs, and Vitals. On the right side, there are panels for Clinical Reminders (Assessment: Tobacco, Past Due), Recall, Appointments (Future Appointments: Office Visit on Wed, 2023-06-14 at 11:30 AM), Recurring Appointments (None listed), Medical Problems (Nothing Recorded), Allergies (uuf, Hives, iodine, Shortness of Breath), and Medications (Nothing Recorded).

Phy1 adds Leyi Cui as birth name:



The screenshot shows the "Edit Current Patient" screen for Angel Cui. The top navigation bar and search bar are identical to the previous dashboard. The main form is titled "Edit Current Patient" with "Save" and "Cancel" buttons. The "Demographics" section is active, showing fields for Who, Contact, Choices, Employer, Stats, Misc, and Guardian. The "Who" tab is selected, displaying the patient's information: Title (Unassigned), Name (Angel Cui), Birth Name (Leyi Cui), DOB (2023-06-06), Gender Identity (Unassigned), External ID (1), License/ID (Unassigned), User Defined (Unassigned), Billing Note (Unassigned), and Previous Names (Unassigned). The "Contact" tab is also visible. Below the demographics is an "Insurance" section with tabs for Primary, Secondary, and Tertiary. The Primary tab is selected, showing fields for Primary Insurance Provider (Search/Add/Edit), Plan Name (Unassigned), Effective Date (Unassigned), Effective Date End (Unassigned), Policy Number (Unassigned), Relationship (Unassigned), D.O.B. (Unassigned), Sex (Unassigned), S.S. (Unassigned), and Subscriber Address (Unassigned).

Phy2 changes Angel Cui's DOB to 2003-02-07:

Calendar Finder Flow Recalls Messages Patient Fees Procedures Reports Miscellaneous Popups

Angel Cui (1) ×
DOB: 2023-06-06 Age: 0 month

Select Encounter (0) +

Search by any demographic

Edit Current Patient

Save Cancel

Demographics

Who	Contact	Choices	Employer	Stats	Misc	Guardian
Title:	Unassigned					
Name:	Angel	Middle N:	Cui		Name Suf:	
Birth Name:		Birth First Name:		Middle N:	Birth Last Name:	
DOB:	2003-02-07			Sex:	Female	
Gender Identity:	Unassigned			Sexual Orientation:	Unassigned	
External ID:	1			S.S.:	211	
License/ID:				Marital Status:	Unassigned	
User Defined:						
Billing Note:						
Previous Names:	<button>Add</button>					

Insurance

Primary	Secondary	Tertiary
Primary Insurance Provider: Search/Add/Edit Unassigned	Relationship: (Browse)	
Plan Name:	Subscriber:	
Effective Date:	D.O.B.:	
Effective Date End:	Sex:	Unassigned
Policy Number:	S.S.:	
	Subscriber Address:	

Phy1 saves first:

Calendar Finder Flow Recalls Messages Patient Fees Procedures Reports Miscellaneous Popups

Angel Cui (1) ×
DOB: 2023-06-06 Age: 0 month

Select Encounter (0) +

Search by any demographic

Dashboard Visit History

Medical Record Dashboard - Angel Cui

Dashboard History Report Documents Transactions Issues Ledger External Data

Billing

Demographics

Who	Contact	Choices	Employer	Stats	Misc	Guardian
Title:	Angel Cui					
Name:	Angel Cui					
Birth Name:	Leyi Cui					
DOB:	2023-06-06			Sex:	Female	
Gender Identity:	Unassigned			Sexual Orientation:	Unassigned	
External ID:	1			S.S.:	211	
License/ID:				Marital Status:	Unassigned	
User Defined:						
Billing Note:						
Previous Names:	<button>Add</button>					

Insurance

Messages

Patient Reminders

Disclosures

Amendments

Labs

Vitals

Clinical Reminders
Assessment: Tobacco Past Due

Recall

Appointments

Future Appointments
Office Visit Wed, 2023-06-14 11:30
Administrator1 Administrator1 - None

Recurring Appointments
No Recurring Appointments

Medical Problems
Nothing Recorded

Allergies
uiuf Mild to moderate
Hives
iodine Moderate
Shortness of Breath

Medications
Nothing Recorded

Phy2 saves:

Medical Record Dashboard - Angel Cui

Clinical Reminders

- Measurement: Weight Past Due
- Examination: Pap Smear Past Due
- Assessment: Tobacco Past Due

Recall

Appointments

Future Appointments

- Office Visit Wed, 2023-06-14 11:30 Administrator1 Administrator1 - None

Recurring Appointments

- No Recurring Appointments

Medical Problems

- Nothing Recorded

Allergies

- uiuf Mild to moderate
- Hives
- iodine Moderate
- Shortness of Breath

Medications

Patient's information on Phy1's window does not get automatically refreshed:

Medical Record Dashboard - Angel Cui

Clinical Reminders

- Assessment: Tobacco Past Due

Recall

Appointments

Future Appointments

- Office Visit Wed, 2023-06-14 11:30 Administrator1 Administrator1 - None

Recurring Appointments

- No Recurring Appointments

Medical Problems

- Nothing Recorded

Allergies

- uiuf Mild to moderate
- Hives
- iodine Moderate
- Shortness of Breath

Medications

Weird error when refreshing Phy1 and Phy2's patient dashboard:

Warning

Warning: Undefined array key "csrf_token_form" in D:\setup\htdocs\openemr\interface\patient_file\summary\demographics_save.php on line 21
Authentication Error

Information saved as Phy2 last saved (DOB changed, birth name not recorded)

A physician can login to the same account in two different tabs to work on two patients' information at the same time. (Patient identification error)

Phy1 logged in in tab 1:

The screenshot shows the OpenEMR Medical Record Dashboard for a patient named Angel Cui. The dashboard includes sections for Calendar, Finder, Flow, Recalls, Messages, Patient Fees, Procedures, Reports, Miscellaneous, and Popups. A sidebar on the right provides links for Physician, Settings, Change Password, MFA Management, About OpenEMR, and Logout.

Try log in Phy1 in tab 2:

The screenshot shows the OpenEMR Login page. It features the OpenEMR logo and the text "The most popular open-source Electronic Health Record and Medical Practice Management solution." Below the logo are fields for Username (set to "phy1"), Password (redacted), and Language (set to "Default - English (Standard)"). A blue "Login" button is centered below these fields.

Success, no warnings triggered:

The screenshot shows the OpenEMR Medical Record Dashboard again, this time for the same patient, Angel Cui. The calendar for June 2023 is displayed, showing a booking for "Wednesday, June 14, 2023" from 1:30 PM to 2:00 PM, assigned to "Administrator1 Administrator1". The sidebar on the right remains the same as in the first screenshot.

Patient finder does not automatically update if a new patient is added or if previous patient's information is changed, need manual update. (Patient identification error; data accuracy error: accurate information not automatically displayed; feedback error)

Before add a new patient:

The screenshot shows a Patient Finder interface with a search bar at the top. Below it is a table with columns: Full Name, Home Phone, SSN, Date of Birth, and External ID. Two entries are listed:

Full Name	Home Phone	SSN	Date of Birth	External ID
Cui, Angel			2023-06-06	1
Cui, Leyi			2023-06-04	2

Below the table, there are links for "Open in New Browser Tab" and "Search with exact method". A message indicates "Showing 1 to 2 of 2 entries". At the bottom right, there are "Previous", "1", and "Next" buttons.

After add a new patient C, Chris; the new patient is now shown in the patient finder because the page is not automatically updated:

The screenshot shows the same Patient Finder interface after adding a new patient. The table now contains three entries:

Full Name	Home Phone	SSN	Date of Birth	External ID
Cui, Angel			2023-06-06	1
Cui, Leyi			2023-06-04	2
C, Chris			2001-02-07	3

The interface remains largely the same with search and navigation buttons.

Manually refresh:

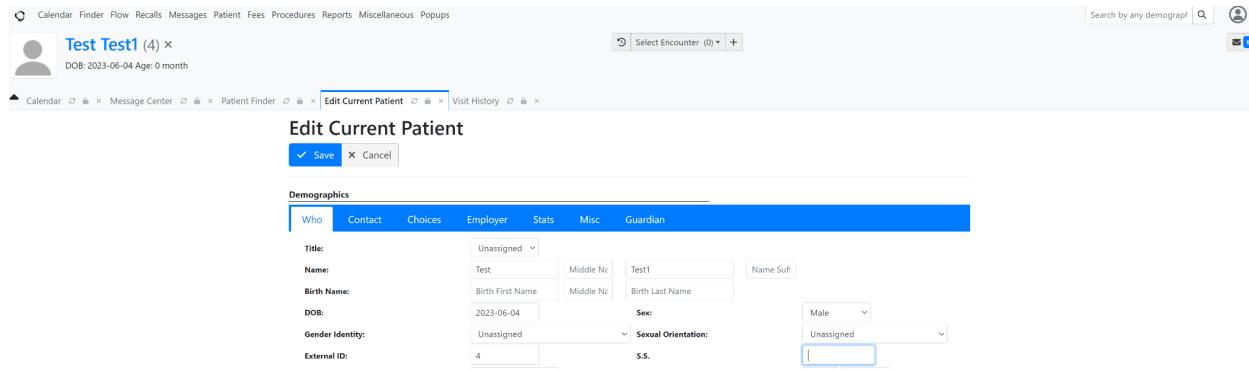
The screenshot shows the Patient Finder interface after a manual refresh. The table displays the same three entries as the previous screenshot:

Full Name	Home Phone	SSN	Date of Birth	External ID
Cui, Angel			2023-06-06	1
Cui, Leyi			2023-06-04	2
C, Chris			2001-02-07	3

The interface includes search and navigation features at the bottom.

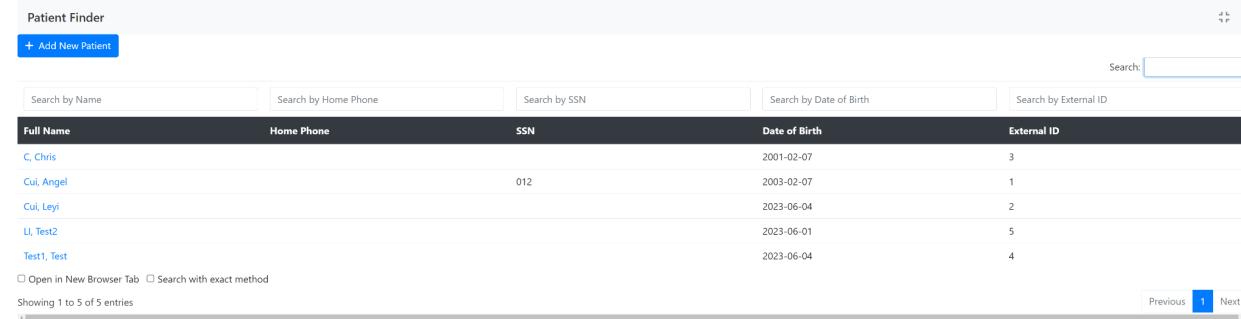
No error validation in entering SSN when entering in wrong SSN formats (essential patient info identifier) (Data accuracy error; match between system and the real world)

When entering SSN information, there is no assistant on number entry in correct SSN format (xxx-xxx-xxxx).



The screenshot shows the 'Edit Current Patient' interface. In the 'Demographics' tab, under the 'Who' section, the SSN field contains the value '4'. Other fields like Name, Birth Name, DOB, Gender Identity, and External ID are also visible.

The system allows to enter a maximum of 10 digits for SSN. No warning triggered if enter less than 9 digits, no warning triggered if enter more than 10 digits (the later entered digits got cutted out without warning)



Full Name	Home Phone	SSN	Date of Birth	External ID
C. Chris			2001-02-07	3
Cui, Angel		012	2003-02-07	1
Cui, Leyi			2023-06-04	2
Li, Test2			2023-06-01	5
Test1, Test			2023-06-04	4

If selected one title from menu, then types in the correct title in the free text box, the previously selected title is still highlighted when type allergies or add medications. (Data accuracy error)

The screenshot shows a medical software interface. On the left, a sidebar for 'Angel Cui' displays basic information like DOB and allergies. The main area is an 'Add/Edit Issue' dialog for an 'Allergy'. It includes a dropdown of common allergens and a text input for a specific title ('uiuf'). The 'Begin' and 'End' fields are empty.

Be able to add appointment to the past and to the long future without warning triggered (Data accuracy error; error prevention)

Information does not save when switch between “patient” tab and “provider” tab and no warnings triggered (Data accuracy error; error prevention)

Enter some information for patient:

an X

Patient	Provider
Category:	Title:
Office Visit	Office Visit
Facility:	Billing Facility:
Your Clinic Name Here	Your Clinic Name Here
Patient:	
Cui, Angel	
Provider:	
Administrator1, Administrator1	
<input type="radio"/> All day event Date: 2023-06-13 <input checked="" type="radio"/> Time 10 45 duration 15	
<input type="checkbox"/> Repeats every <input type="button" value="▼"/> day <input type="button" value="▼"/> until date	
<input type="checkbox"/> Days Of Week: <input type="checkbox"/> Su <input type="checkbox"/> Mo <input type="checkbox"/> Tu <input type="checkbox"/> We <input type="checkbox"/> Th <input type="checkbox"/> Fr <input type="checkbox"/> Sa	
Status:	Room Number:
* Reminder done	Room 2
Comments:	
<input type="button" value="Save"/> <input type="button" value="Find Available"/> <input type="button" value="Delete"/> <input type="button" value="Cancel"/> <input type="button" value="Create Duplicate"/>	

Switch to Provider without save the patient page:

Patient

Provider

Category: In Office Title: In Office

Facility: Your Clinic Name Here Billing Facility: Your Clinic Name Here

Provider: Administrator1, Administrator1

All day event Date: 2023-06-13 Time 10 45 duration 0

Repeats every day until date

Days Of Week: Su Mo Tu We Th Fr Sa

Pref Cat: -- None --

Comments:

Save **Find Available** **Delete** **Cancel** **Create Duplicate**

Switch back to Patient, nothing stored:

X

Patient	Provider
---------	----------

Category: Title:

Office Visit Office Visit

Facility: Billing Facility:

Your Clinic Name Here Your Clinic Name Here

Patient:
Click to select

Provider:
Administrator1, Administrator1

All day event Date: 2023-06-13 Time 10 45 duration 15

Repeats every day until date

Days Of Week: Su Mo Tu We Th Fr Sa

Status: Room Number:
- None

Comments:

Save Find Available Delete Cancel Create Duplicate

Enter message in free form (Data accuracy error; pleasurable and respectful interaction with the user)

The screenshot shows a 'Create New Message' window. At the top, there are dropdown menus for 'Type' (set to 'Insurance') and 'Status' (set to 'New'). A 'Patient' field contains 'C, Chris;'. Below these, a 'To:' field has 'Physician, Physician' selected. The main body of the message contains the text: 'Hi, you need to correct your insurance information.' At the bottom left is a blue 'Send message' button, and at the bottom right is a 'Cancel' button.

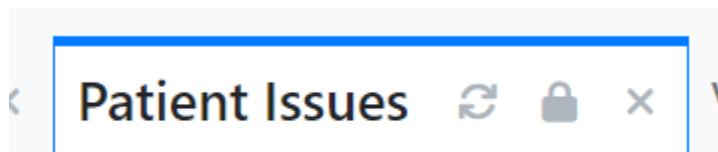
SSN shown as S.S. in the add patient page (Interpretation error)

The screenshot shows the 'Edit Current Patient' page. In the 'Demographics' tab, under the 'Who' section, there is a field for 'SSN' which contains 'S.S.'. Other demographic fields include 'Title: Unassigned', 'Name: Test', 'Birth Name: Test First Name', 'Middle Name: Test1', 'Birth Last Name: Test1', 'Name Suffix: Unassigned', 'DOB: 2023-06-04', 'Gender Identity: Unassigned', 'External ID: 4', 'Sex: Male', and 'Sexual Orientation: Unassigned'.

View-only mode not working (Mode error; data integrity error)

For every tab, there is a refresh button and a lock button for entering and leaving the read-only mode. However, with lock mode selected, users can still enter or change information.

Patient Issues locked:



Add medications

Chris C (3) x
DOB: 2001-02-07 Age: 22

Medical Issues - Chris C

Dashboard History Report Documents Transactions Issues Ledger External Data

Medications + Add

Title	Begin	End	Coding (click for education)
Norvasc			

Add/Edit Issue

Referred by:

Comments:

Outcome:
Unassigned

Destination:

Medication Usage:
Home/Community

Medication Request Intent:
Order

Medication Dosage Instructions:

Modify Date: 2023-06-13 21:50

Comments Enc

Save

Information still saved

Chris C (3) x
DOB: 2001-02-07 Age: 22

Medical Issues - Chris C

Dashboard History Report Documents Transactions Issues Ledger External Data

Medications + Add

Title	Begin	End	Coding (click for education)	Status	Occurrence	Referred By	Modify Date	Comments	Enc
Norvasc				Active	Unknown or N/A		2023-06-13 21:50		<input type="button" value="Edit"/>
Metformin				Active	Unknown or N/A		2023-06-13 22:36		<input type="button" value="Edit"/>

Weird state and unclear transitions between state in message: active vs inactive (Mode error)

Sent a message:

Messages, Reminders, Recalls

Messages Reminders Recalls

My Messages

Create New Message

Type: Referral Status: New Patient: Cui, Angel; Clear

To: Administrator1, Administrator1 Clear

I refer you to physician 2.

Send message Cancel

Nothing displayed in Active Messages Mode (the default mode):

Messages, Reminders, Recalls

Messages Reminders Recalls

My Messages

		Patient	Type	Date	Status	Show All Active Messages Show Inactive		
+ Add New	From	Patient	Type	Date	Status	0 of 0		
						0 of 0		

Nothing displayed in Inactive Message mode:

Messages, Reminders, Recalls

Messages Reminders Recalls

My Messages

		Patient	Type	Date	Status	Show All Show Active Inactive Messages		
+ Add New	From	Patient	Type	Date	Status	0 of 0		
						0 of 0		

Message displayed on Show All mode:

Messages, Reminders, Recalls

Messages Reminders Recalls

My Messages

		Patient	Type	Date	Status	All Messages Show Active Show Inactive												
+ Add New	From	Patient	Type	Date	Status	2 of 2												
<table border="1"> <tr> <td>Physician2, Physician2</td> <td>Cui, Angel</td> <td>Referral</td> <td>2023-06-13 22:18</td> <td>New</td> </tr> <tr> <td>Physician2, Physician2</td> <td>C, Chris</td> <td>Insurance</td> <td>2023-06-13 22:16</td> <td>New</td> </tr> </table>						Physician2, Physician2	Cui, Angel	Referral	2023-06-13 22:18	New	Physician2, Physician2	C, Chris	Insurance	2023-06-13 22:16	New	2 of 2		
Physician2, Physician2	Cui, Angel	Referral	2023-06-13 22:18	New														
Physician2, Physician2	C, Chris	Insurance	2023-06-13 22:16	New														
						2 of 2												

Switching around three mode is not clearly visible for users.

Interface design not consistent with add patient interface and edit patient basic information interface (Visibility of system status)

Add patient:

The screenshot shows a top navigation bar with links like Calendar, Finder, Flow, Recalls, Messages, Patient, Fees, Procedures, Reports, Miscellaneous, and Popups. On the right is a search bar 'Search by any demographic' with a magnifying glass icon and a user profile icon. Below the navigation is a patient summary for 'Angel Cui (1)' with a small profile picture, DOB: 2023-06-06, and Age: 0 month. To the right is a button to 'Select Encounter (0)' with a plus sign. The main area has tabs for Calendar, Message Center, Search or Add Patient (which is selected), Visit History, and a search bar.

Search or Add Patient

This is a form titled 'Who' with a 'Contact' tab selected. It contains fields for Address, Address Line 2, City, State, Postal Code, Country, Emergency Contact, Home Phone, Mobile Phone, Trusted Email, Mother's Name, Emergency Phone, Work Phone, and Contact Email. Below this is a section for 'Additional Addresses' which is currently set to 'NONE'. There are also tabs for 'Choices', 'Employer', 'Stats', and 'Misc'.

Edit patient information:

Edit Current Patient

This is a detailed edit form for 'Angel Cui'. The 'Demographics' tab is active, showing fields for Title (Unassigned), Name (Angel, Middle N: Cui, Name Suf), Birth Name (Birth First Name, Middle N, Birth Last Name), DOB (2023-06-06), Sex (Female), Gender Identity (Unassigned), Sexual Orientation (Unassigned), External ID (1), S.S. (SSN), Marital Status (Unassigned), License/ID, User Defined, Billing Note, and Previous Names. Below this is an 'Insurance' tab with tabs for Primary, Secondary, and Tertiary, and a 'Primary Insurance' dropdown.

Inconsistent and bad design on navigating back to previous level (Visibility of system status)

After add allergies, the way to go back to patient dashboard is to hit the Dashboard button on the selection bar:

Medical Issues - Angel Cui

Dashboard History Report Documents Transactions Issues Ledger External Data

Allergies [+ Add](#)

Title	Begin	End	Coding (click for education)	Status	Occurrence	Reaction	Verification Status	Referred By	Modify Date	Comments	Enc
uiuf				Active	Late Recurrence (2-12 Mo)	Hives	Refuted		2023-06-06 23:03		Edit

Searching for appointments:

Searching for appointments

[Return to calendar](#)

Inconsistent and bad design on workflow (Visibility of system status)

On the report page right now:

Enter documents page:

The way of going back (the hint said “go back” when cover over the icon) is not consistent with other pages and also not intuitively designed:

Documents ↵

Go back to which level is also not clearly noted. Click on the button take the user directly to the patient dashboard instead of going back to the previous level (report page):

Another example of inconsistency:

Rule	Passive Alert Patient Setting	Passive Alert Practice Default Setting	Active Alert Patient Setting	Active Alert Practice Default Setting
Adult Weight Screening and Follow-Up	On	On	Default	Off
Measure Blood Pressure	Default	Off	Default	Off
Cancer Screening: Colon Cancer Screening	Default	On	Default	Off
Cancer Screening: Mammogram	Default	On	Default	Off
Cancer Screening: Pap Smear	Default	On	Default	Off

No enable recovery (User control and freedom; aesthetic and minimalist design; consistency and standards; pleasurable and respectful interaction with the user)

No “undo”, “clear all” in information entry.

Bad and inconsistent design on “go back”, “save”, “quit without save (cancel)”.

No “save” for clinical reminders:

Rule	Passive Alert Patient Setting	Passive Alert Practice Default Setting	Active Alert Patient Setting	Active Alert Practice Default Setting
Adult Weight Screening and Follow-Up	On	On	Default	Off
Measure Blood Pressure	Default	Off	Default	Off
Cancer Screening: Colon Cancer Screening	Default	On	Default	Off
Cancer Screening: Mammogram	Default	On	Default	Off
Cancer Screening: Pap Smear	Default	On	Default	Off

Save and cancel sometimes on the top of the screen sometimes at the bottom:

Edit Current Patient

Save Cancel

Demographics

Who Contact Choices Employer Stats Misc Guardian

Title: Unassigned

Name: Test Middle N_o Test1 Name Suf_o

Birth Name: Birth First Name Middle Na Birth Last Name

DOB: 2023-06-04 Sex: Male

Gender Identity: Unassigned Sexual Orientation: Unassigned

External ID: 4 S.S.

License/ID:

User Defined:

Billing Note:

Previous Names:

Add

Insurance

Primary Secondary Tertiary

Primary Insurance Provider: Search/Add/Edit Unassigned Relationship: (Browse)

Plan Name: Subscriber:

Effective Date: D.O.B.:

Effective Date End: Sex: Unassigned

Policy Number: S.S.:

Subscriber Address:

Test Test1 (4) DOB: 2023-06-04 Age: 0 month

Medical Issues - Test Test1

Allergies + Add

Title	Begin	End	Coding (click for education)
None			

Add/Edit Issue

Occurrence: Unknown or N/A

Severity: Unassigned

Reaction: Unassigned

Verification Status: Unconfirmed

Referred By:

Comments:

Outcome: Unassigned

Destination:

Save Cancel

Bad warnings format (Help user recognize, diagnose, and recover from errors)

Add prescriptions:

By clicking on Search Web API

Add/Edit Save [Back](#)

Currently Active

Starting Date
2023-06-15

Provider
Physician Physician

Drug Use Default Use RxNorm Use RxCUI
advil
[\(Search Web API\)](#)

on line65 |

Quantity

Medicine Units

Directions
 in

Warning: Undefined variable \$dosageInstructions in D:\setup\htdocs\openemr\library\classes\Prescription.class.php on line 447

List

[Download \(PDF\)](#) [View Printable Version \(HTML\)](#) [Download \(Fax\)](#) [Check All](#) [Clear All](#)

	Drug	RxNorm	Created Changed	Dosage	Qty.	Unit	Refills	Provider	
<input type="checkbox"/>	Edit ibuprofen 200 MG Oral Tablet [Advil]	153008	2023-06-15 2023-06-15	2 in tablet q.3h	100	2 mg	20	Physician Physician	Delete

[Add](#) [Quit](#)

Add insurance:

Warning: Undefined array key "ins" in
D:\setup\htdocs\openemr\interface\practice\ins_search.php on line 234

Warning: Undefined array key "ins" in
D:\setup\htdocs\openemr\interface\practice\ins_search.php on line 235

Warning: Undefined array key "ins" in
D:\setup\htdocs\openemr\interface\practice\ins_search.php on line 236

Id:

Name:

Attention:

Address1:

Address2:

City/State:

Zip/Country: USA

Phone:

Payer ID:

Payer Type: Other HCFA

X12 Partner: -- None --

CQM Source of Payment: -- None --

Search for appointments:

Notice: Only variables should be assigned by reference in D:\setup\htdocs\openemr\interface\main\calendar\modules\PostCalendar\pnuser.php on line 445

Searching for appointments

[Return to calendar](#)

Keywords:

AND In: Any Category

Between:

 06/13/2023 06/20/2023

For

 Administrator1, Administrator1 At All Facilities

 Search

Warning: Undefined variable \$viewtype in D:\setup\htdocs\openemr\interface\main\calendar\modules\PostCalendar\pnuserapi.php on line 1280

Notice: Only variables should be assigned by reference in D:\setup\htdocs\openemr\interface\main\calendar\modules\PostCalendar\pnuser.php on line 445

Searching for appointments

[Return to calendar](#)

Keywords:

AND In: Any Category

Between:

 06/13/2023 06/20/2023

For

 Administrator1, Administrator1 At All Facilities

 Search

Date-Time	Provider	Category	Patient
2023-06-13 10:45 am	Administrator1 Administrator1 	In Office	
2023-06-14 11:30 am	Administrator1 Administrator1 	Office Visit	Cui; Angel

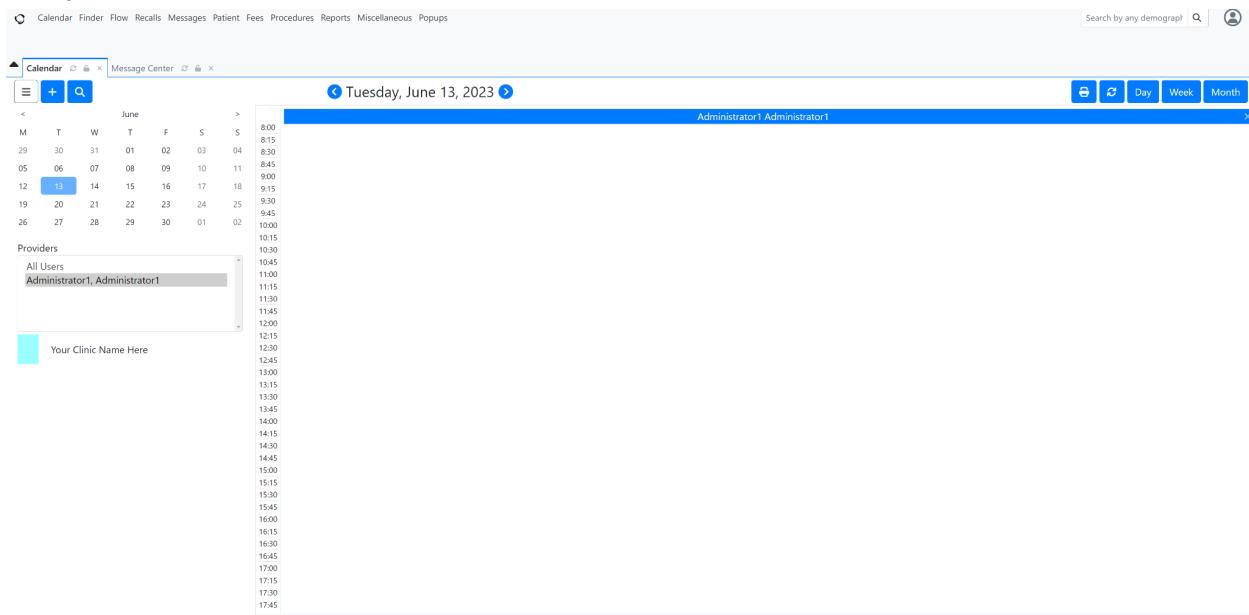
Perhaps happened because of errors in the installation process. More information is needed.

Very few required fields in entering patient's information (Recognition rather than recall; recall error)

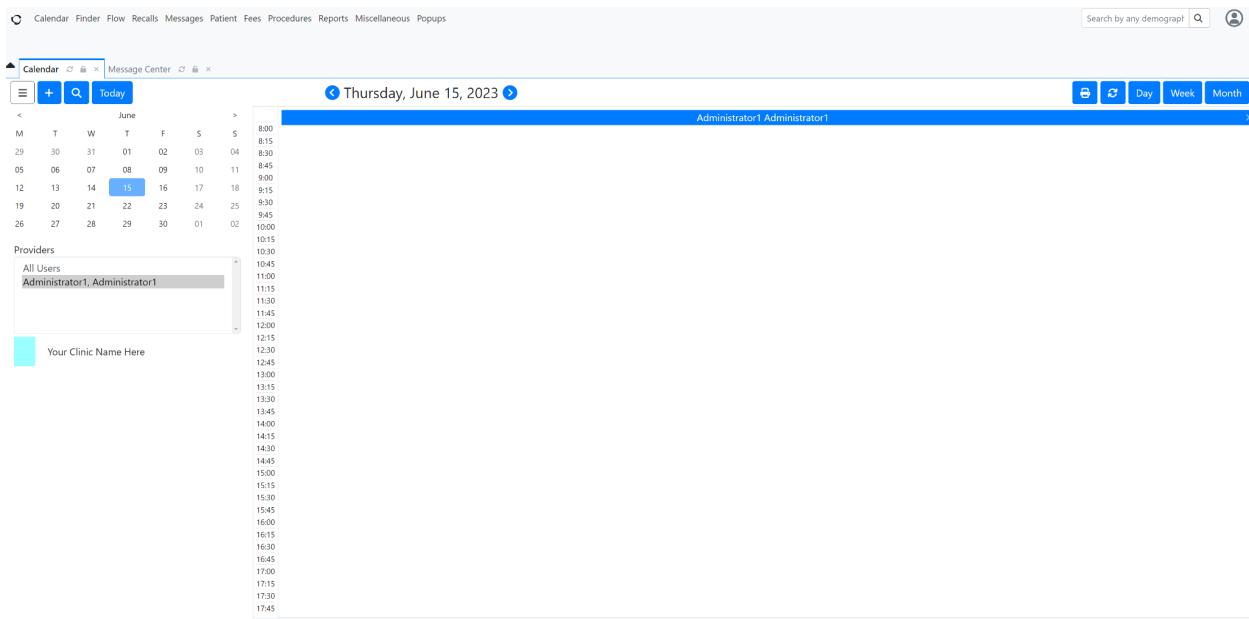
Only requires name, DOB, sex.

Today's date not clearly shown on Calendar (Recognition rather than recall; recall error)

Today:



Change the date:



Wrong requirement displayed: insurance highlighted in red as required fields, but they are not actually required by the system. (Error prevention)

No warnings triggered if no insurance information is entered when saving the patient's profile.

Insurance

Primary Insurance Provider: Unassigned		<input type="button" value="Search/Add Insurer"/>
Plan Name:	<input type="text"/>	Subscriber: <input type="text"/> <input type="text"/> <input type="text"/>
Effective Date:	<input type="text"/>	Relationship: <input type="button" value="Browse"/>
Policy Number :	<input type="text"/>	D.O.B.: <input type="text"/>
Group Number :	<input type="text"/>	S.S.: <input type="text"/>
Subscriber Employer (SE):	<input type="text"/>	Sex: <input type="button" value="Unassigned"/>
SE Address :	<input type="text"/>	Subscriber Address Line 1: <input type="text"/>
Subscriber Address Line 2:	<input type="text"/>	SE City: <input type="text"/>
City:	<input type="text"/>	SE State: <input type="button" value="Unassigned"/>
State:	<input type="button" value="Unassigned"/>	SE Zip Code: <input type="text"/>
Zip Code:	<input type="text"/>	SE Country: <input type="button" value="Unassigned"/>
Country :	<input type="button" value="Unassigned"/>	Subscriber Phone: <input type="text"/>
Co-Pay: <input type="text"/>	Accept Assignment:	<input type="button" value="YES"/>
Secondary Insurance Provider: Unassigned		<input type="button" value="Search/Add Insurer"/>
Plan Name:	<input type="text"/>	Subscriber: <input type="text"/> <input type="text"/> <input type="text"/>

No function keys for high-frequency commands (Flexibility and minimalist design)

Incomplete grey hint messages displayed (Aesthetic and minimalist design)
 Middle Na; Name Suf:

Name:	First Name	Middle Na	Last Name	Name Suf
Birth Name:	Birth First Name	Middle Na	Birth Last Name	

Display badly designed and unnecessary warnings in add patient page
(Aesthetic and minimalist design)

Display unnecessary warnings (orange highlight & !) on not required fields such as Middle Name, Name Suffix, and Title:

Title:	Unassigned			
Name:	First Name	Middle Na	Last Name	Name Suf

Display warnings (orange highlight & !) once a field is clicked but no information is entered:

Title:	Unassigned			
Name:	First Name	Middle Na	Last Name	Name Suf

Display partial warnings (only !) if click the boxes with warnings again:

Title:	Unassigned			
Name:	First Name	Middle Na	Last Name	Name Suf

Weird warnings display logic:

[Enter birthday] -> {orange & !} -> [Click again] -> {no warning} -> [click again] -> {orange}

If the info is entered after a box became {orange & !}, the box still remain {orange & !}, needs to click again to clear the warnings:

Title:	Unassigned			
Name:	Angel	Middle Na	Cui	Name Suf

Unnecessary redundant ways of display warnings {orange & !}. What does each of them represents is not clear through interacting with the interface.

Inconsistent selection types: drop-down menu vs display menu (Aesthetic and minimalist design; consistency and standards)

Provider:	<input type="text" value="Unassigned"/>	Provide Since Date:	<input type="text"/>
Referring Provider:	<input type="text" value="Unassigned"/>		
Pharmacy:	<input type="text"/>		
HIPAA Notice Received:	<input type="text" value="Unassigned"/>	Allow Voice Message:	<input type="text" value="Unassigned"/>
Leave Message With:	<input type="text"/>	Allow Mail Message:	<input type="text" value="Unassigned"/>
Allow SMS:	<input type="text" value="Unassigned"/>	Allow Email:	<input type="text" value="Unassigned"/>
Allow Immunization Registry Use:	<input type="text" value="Unassigned"/>	Allow Immunization Info Sharing:	<input type="text" value="Unassigned"/>
Allow Health Information Exchange:	<input type="text" value="Unassigned"/>	Allow Patient Portal:	<input type="text" value="Unassigned"/>
Prevent API Access:	<input type="checkbox"/>	CMS Portal Login:	<input type="text"/>
Immunization Registry Status:	<input type="text" value="Unassigned"/>	Immunization Registry Status Effective Date:	<input type="text"/>
Publicity Code:	<input type="text" value="Unassigned"/>	Publicity Code Effective Date:	<input type="text"/>
Protection Indicator:	<input type="text" value="Unassigned"/>	Protection Indicator Effective Date:	<input type="text"/>
Care Team (Provider):	<input type="text"/>	Care Team Status:	<input type="text" value="Active"/>
Care Team (Facility):	<input type="text"/>	Patient Categories:	<input type="text" value="Unassigned Group I Group II Group III"/>

Inconsistent design for different pages (Aesthetic and minimalist design; consistency and standards)

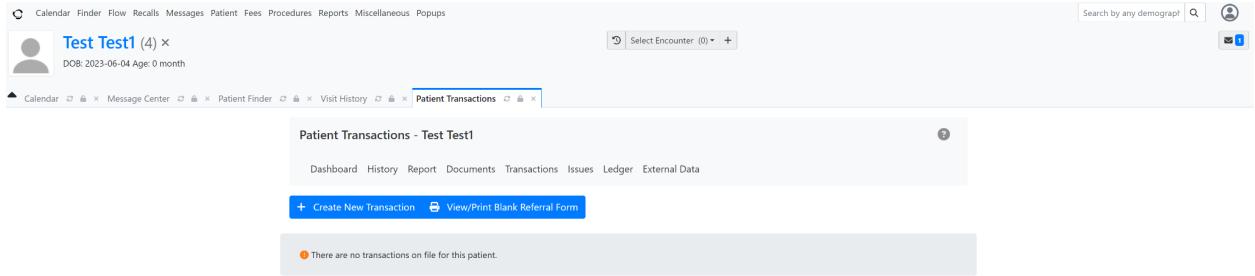
Change of display size for different pages:

The screenshot shows a medical software interface with a header bar containing navigation links like Calendar, Finder, Flow, Recalls, Messages, Patient, Fees, Procedures, Reports, Miscellaneous, and Popups. Below the header is a patient summary section for "Test Test1 (4)" with details: DOB: 2023-06-04, Age: 0 month. To the right is a search bar and a "Select Encounter" dropdown.

The main content area has a breadcrumb navigation: Calendar > Message Center > Patient Finder > Visit History > Patient Issues. The current view is "Medical Issues - Test Test1".

Below the navigation, there are several sections with tables:

- Medical Problems:** A table with columns: Title, Begin, End, Coding (click for education), Status, Occurrence, Verification Status, Referred By, Modify Date, Comments, Enc. One row is shown with "None" selected.
- Allergies:** A table with columns: Title, Begin, End, Coding (click for education), Status, Occurrence, Reaction, Verification Status, Referred By, Modify Date, Comments, Enc. One row is shown with "None" selected.
- Medications:** A table with columns: Title, Begin, End, Coding (click for education), Status, Occurrence, Referred By, Modify Date, Comments, Enc. One row is shown with "None" selected.
- Medical Devices:** A table with columns: Title, Begin, End, Coding (click for education), Status, Occurrence, Referred By, Modify Date, Comments, Enc. One row is shown with "None" selected.
- Surgeries:** A table with columns: Title, Begin, End, Coding (click for education), Status, Occurrence, Referred By, Modify Date, Comments, Enc. One row is shown with "None" selected.



Problems with display and only display the current date (Aesthetic and minimalist design)

Hover over 22 and leave:



< June >

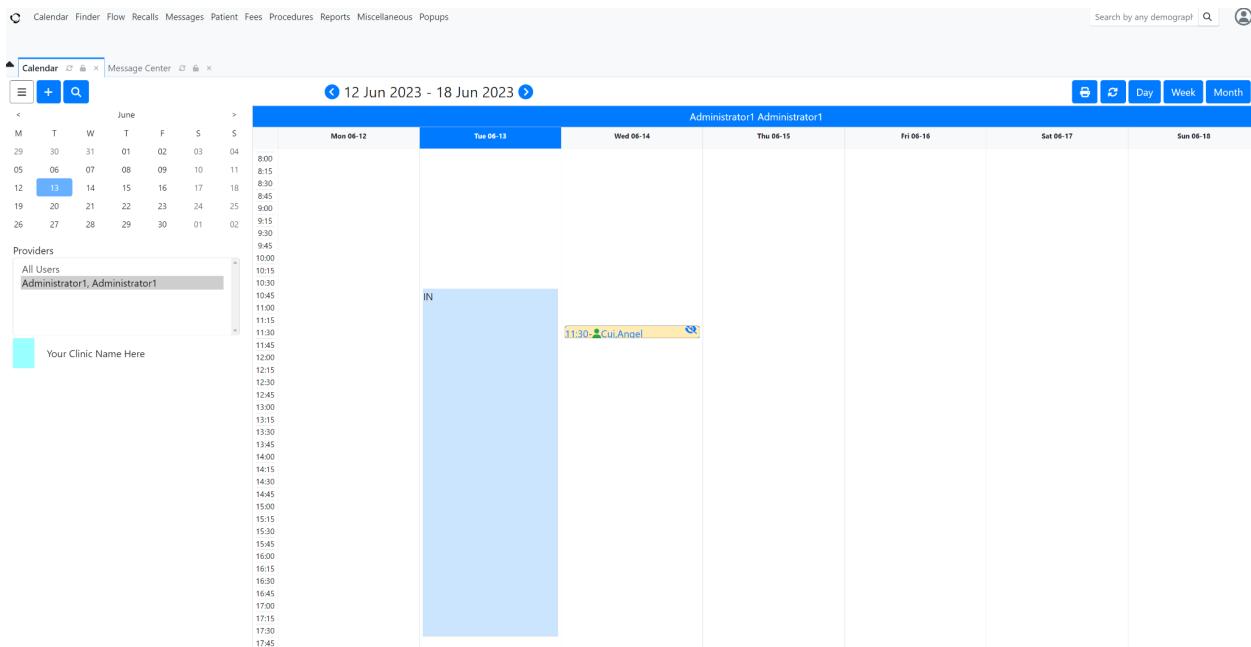
M	T	W	T	F	S	S
29	30	31	01	02	03	04
05	06	07	08	09	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	01	02

Hover over 22 and then move to 08:

< June >

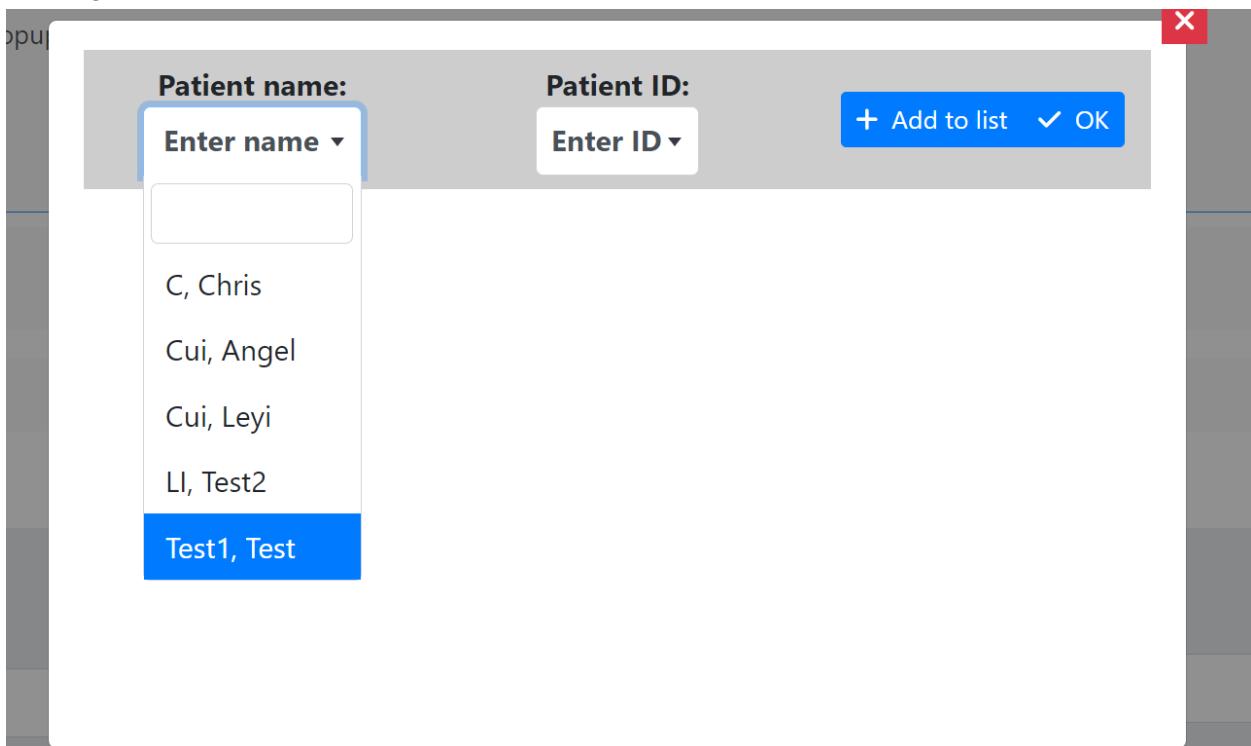
M	T	W	T	F	S	S
29	30	31	01	02	03	04
05	06	07	08	09	10	11
12	13	14	15	Go to Jun 08, 2023		
19	20	21	22	23	24	25
26	27	28	29	30	01	02

Duplicate refresh button (Aesthetic and minimalist design; consistency and standards)



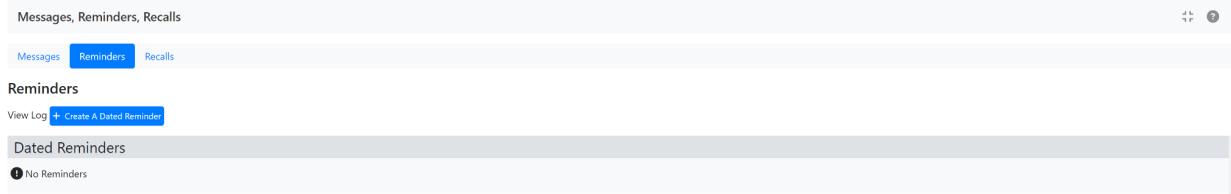
Inconsistent design with searching and adding patient: others vs message center (Aesthetic and minimalist design; consistency and standards)

Message center:



Button not noted hitable (Aesthetic and minimalist design; consistency and standards)

The View Log is a clickable button



A screenshot of a 'Dated Message Log' dialog box. The title bar says 'Dated Message Log' with a close button. The main area is titled 'Filters' and contains the following fields:

- 'Date The Message Was Sent':
 - 'Start Date:' input field
 - 'End Date:' input field
- 'Sent By, Leave Blank For All:' dropdown menu showing 'Myself'
- 'Sent To, Leave Blank For All:' dropdown menu showing 'Myself'
- Checkboxes for 'Processed' and 'Pending'
- A 'Refresh' button at the bottom left.

Click on + Create A Dated Reminder opens both View Log and Create A Dated Reminder windows that overlap with each other (Aesthetic and minimalist design)

Dated Message Log

Filters

Date The Message Was Sent

Start Date: [Input Field]

End Date: [Input Field]

Sent By, Leave Blank For All:
Myself

Sent To, Leave Blank For All:
Myself

Processed Pending

Refresh

ID	To	Patient	Message	Due Date
----	----	---------	---------	----------

Close the Dated Message Log window:

neous

Send a Reminder

Link To Patient: [i](#)

Click to select patient

Send to:
([ctrl] + click to select multiple recipients)

Myself
Administrator1 Administrator1
Physician Physician

Select all

[i](#) Each recipient must set their own messages as completed.

Due Date: 2023-06-13 Select a Time Span: -- Select a Time Span

OR

Priority: Low Medium High

Type Your message here:

Maximum characters : 160

Characters Remaining: 160

[Send This Message](#)

Messages You have sent Today

ID	To	Patient	Message	Due Date
----	----	---------	---------	----------

Inconsistent windows opening logic that may force the user to switch to another page without manually save information on current page (Aesthetic and minimalist design; consistency and standards)

Weird windows opening logic: sometimes open on the same tab (calendar search for appointment), sometimes open in a new tab (message center recalls add New Recall or open Recall Board)

Open Recall Board the tab will replace New Recall:
Open New Recall

If I add some information to New Recall for Cui, Angel

Wanted to see if there were recalls for this patient before, go back to Message Center and hit Recall Board

Now able to see the Recall Board, but the New Recall board is replaced automatically.
Enter New Recall again, the information was saved (unreasonable workflow)

Button does not respond (Aesthetic and minimalist design; mode error)

The + Add Recall button is not responding to the click. Click on it triggers no reactions. Recall is not saved.

Calendar Finder Flow Recalls Messages Patient Fees Procedures Reports Miscellaneous Popups

Search by any demographic

[New Recall](#)

New Recall

Create a reminder to schedule a future visit.

Name	Cui, Angel
DOB	2023-06-06 - 0 years old
Recall When	<p>Last Visit: 2023-06-14</p> <input type="radio"/> plus 1 year <input type="radio"/> plus 2 years <input type="radio"/> plus 3 years
Date:	<input type="text"/>
Recall Reason	
Provider	Administrator1, Administrator1
Facility	Your Clinic Name Here

Address	Address
	City
	State
	ZIP Code
Home Phone	
Mobile Phone	
SMS OK	<input checked="" type="radio"/> YES <input type="radio"/> NO
AVM OK	<input checked="" type="radio"/> YES <input type="radio"/> NO
E-Mail	
E-mail OK	<input checked="" type="radio"/> YES <input type="radio"/> NO

[+ Add Recall](#)

* N.B. Demographic changes made here are recorded system-wide.

Only text in tutorial (help function) (Help and documentation)

Hard for users to follow the instructions



ADD A NEW RECALL :

Click on the New Recall button to open a new recall scheduling page.

It contains a left and right section.

Click on the Name text box on the left section to bring up the patient finder pop-up.

Search and select a patient and click OK.

If the patient has any demographic data entered in openEMR it will automatically populate the relevant fields on the right sections.

Fill in any missing details or edit existing information. This will be saved in the patient's demographics page in openEMR.

The last visit date will automatically be filled.

If the patient is being added to the recall list on the day of the visit it would reflect the current date.

If the patient is calling back to be added to the list the last visit may be in the remote past. Be aware that the 1,2,3 plus years are calculated and

[X Close](#)

Cannot read previously sent messages (Data availability error; Recognition over recall; recall error)

There is no way to enter and read a previously sent message. Only basic information is shown.

Messages, Reminders, Recalls

Messages Reminders Recalls

My Messages

Create New Message

Type:	Status:	Patient:
Referral	New	Cui, Angel;
To:	Administrator1, Administrator1	
I refer you to physician 2.		

Send message **Cancel**

Messages, Reminders, Recalls

Messages Reminders Recalls

My Messages

From	Patient	Type	Date	Status
Physician2, Physician2	Cui, Angel	Referral	2023-06-13 22:18	New
Physician2, Physician2	C, Chris	Insurance	2023-06-13 22:16	New

+ Add New **Delete**

All Messages Show Active Show Inactive

2 of 2

Form automated value update work in one direction but not the other (Data accuracy error; feedback error)

Update value in Quantity will automatically update the value in the second box in Refills. However, update value in the second box in Refills does not automatically update value in Quantity and no warnings triggered.

Currently Active

Starting Date
2023-06-15

Provider
Physician Physician

Drug Use Default Use RxNorm Use RxCUI
ibuprofen 200 MG Oral Tablet [Advil]
(Search Web API)

Quantity
109

Medicine Units
2 mg

Directions
2 in tablet By Mouth q.3h

Refills
00 # of tablets: 10

Notes

Add to Medication List
 No Yes

Clear Back Quit

Risks clear the prescriptions instead of save because of inconsistent design (Aesthetic and minimalist design; consistency and standards)

The screenshot shows a software interface for adding or editing a prescription. At the top, there's a header with 'Add/Edit' and a blue 'Save' button with a checkmark icon. Below it is a 'Currently Active' checkbox which is checked. To the right of the checkbox are three empty checkboxes for 'E-Prescription?', 'Checked Drug Formulary?', and 'Controlled Substance?'. The main form area contains fields for 'Starting Date' (set to 2023-06-15), 'Provider' (set to 'Physician Physician'), and 'Drug' selection. The 'Drug' section includes radio buttons for 'Use Default' (selected), 'Use RxNorm', and 'Use RxCUI', and a dropdown menu showing 'ibuprofen 200 MG Oral Tablet [Advil]' with a '(Search Web API)' link. Below these are fields for 'Quantity' (100), 'Medicine Units' (2 mg), and 'Directions' (2 tablets, in tablet form, By Mouth, q.3h). There are also fields for 'Refills' (20) and '# of tablets:' (100). A 'Notes' text area is present, though empty. At the bottom, there's a 'Add to Medication List' section with radio buttons for 'No' and 'Yes', and a large empty text input field. The bottom right features standard buttons: 'Clear', 'Back', and 'Quit'.

Save button not visible when finishing entering prescriptions. Risks clear the whole form instead of save it.

Missing fields highlights not shown at the same time; No hints on required fields in interface design; Not enough required fields (Data accuracy error; error prevention; feedback error)

Add/Edit Save [Back](#)

Currently Active

Starting Date

E-Prescription?
Checked Drug Formulary?
Controlled Substance?

Provider

Drug Use Default Use RxNorm Use RxCUI

(Search Web API)

Quantity

Medicine Units

Directions in

Refills # of tablets:

Notes

Add to Medication List
 No Yes

Enter quantity:

Add/Edit Save [Back](#)

Currently Active

Starting Date
2023-06-15

E-Prescription?
 Checked Drug Formulary?
 Controlled Substance?

Provider
Physician Physician

Drug Use Default Use RxNorm Use RxCUI

[\(Search Web API\)](#)

Quantity
0

Medicine Units

Directions
 in

Refills
 # of tablets:

Notes

Add to Medication List
 No Yes

Not enough required fields for prescriptions (Enter a prescription with no drug name is acceptable):

Drug	RxNorm	Created Changed	Dosage	Qty.	Unit	Refills	Provider
<input type="checkbox"/> Edit		2023-06-15 2023-06-15	2			0	Physician Physician

No error preventions on number entry for medicine quantity (Data accuracy error; error prevention; feedback error)

Enter 0 as quantity is fine

Drug	RxNorm	Created Changed	Dosage	Qty.	Unit	Refills	Provider
<input type="checkbox"/>  Edit		2023-06-15 2023-06-15	2		0	Physician	 Delete