9. Comorbidities and Past Medical History - Requirements Specification

Introduction

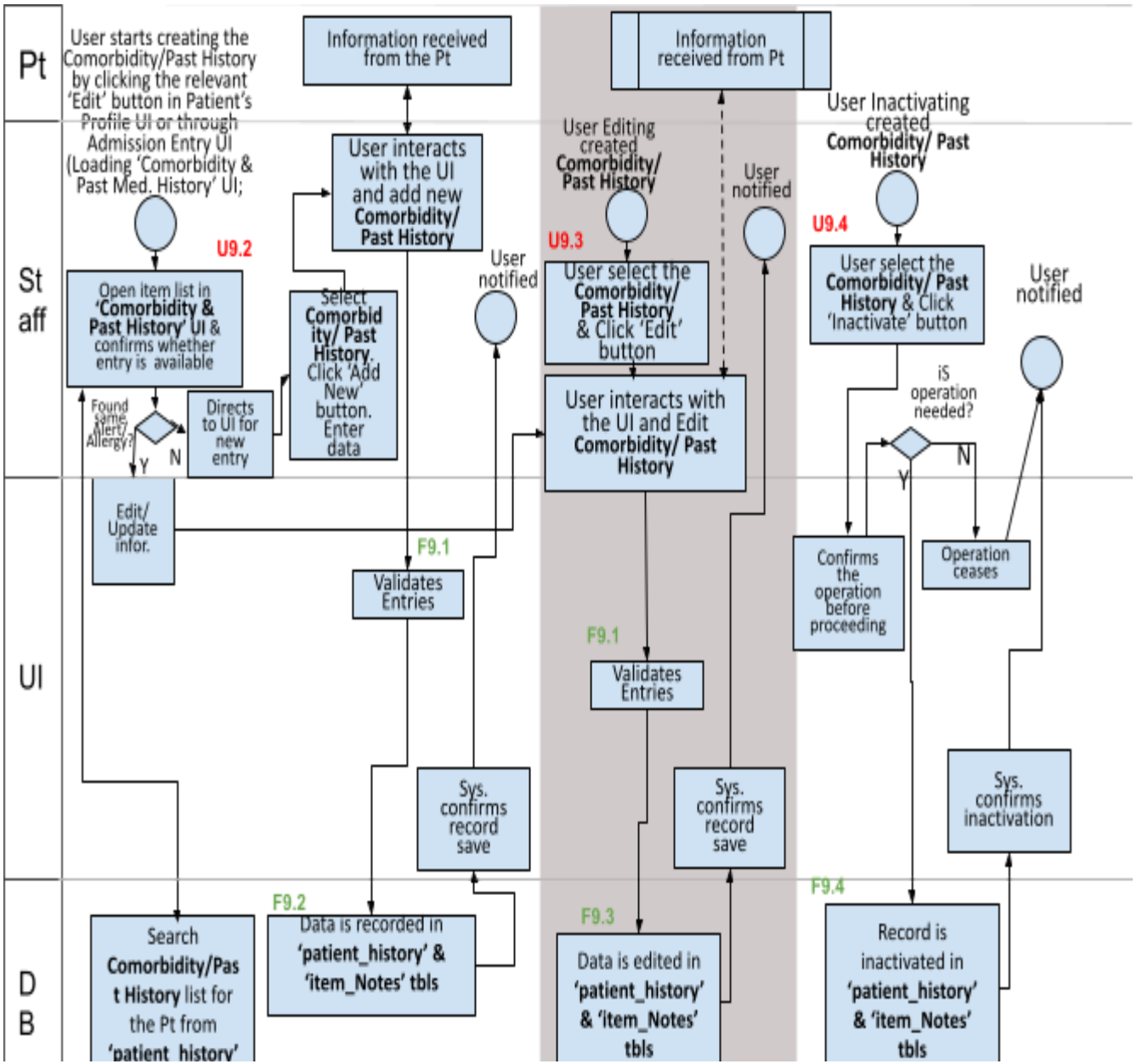
These are captured during the admission process, inward care, ED, or outpatient department. Sometimes these are flagged by the community and GPs. This information is important in the decision-making process in care and to include in the discharge communication to the community/GPs. These are entered at the admission, inward stay, outpatient direct patient communication, or as per GPs/community inputs by the clinical or ward-based clerical staff.

- There is a dedicated interface for this; '**Comorbidities & Past History**' UI (**Comorbidities_PastHistory**) which has the **'patient_history'** as the main backend table. **'Item_notes'** tbl is used to save notes related to an item (comorbidity/Past History). To list comorbidities and past conditions in relevant combos Snowmed data should be used.
- Need to upgrade old **'Add / Edit Past History'** UI in Dompe
- This should be used by all clinical and ward clerks/admin staff (Accessibility is available in the 'Group_Permission' tbl link to DB Schema ; goto 'Group_Permission' sheet)

Needed additional functions

- This should be captured into the patient profile with the date (not into the episode) as special information related to the patient.
- These entries should be auto-populated from past records.
- Should be validated during entries (drop-down lists).
- Should be used in decision-making in other modules (Special care for stroke patients with hypercholesteraemia).
- May need communication/integration with already available clinical systems and MHR
- The interface should facilitate entry of new comorbidity/past history for the Pt, if there is already an entered same comorbidity/past history for the same Pt that should be flagged to the user.
- Auto-filling, dropdown menus should be provided to validate entries and improve user-friendliness.
- This data might receive from other care providers or MHR electronically. In that case, that data should be obtained from different sources through an API/direct entry.
- Once executing user actions (U9.1 - U9.4) always should check for the accessibility and privileges of the user (User Access Level) (Accessibility is available in the 'Group_Permission' tbl link to DB Schema ; goto 'Group_Permission' sheet)
- Any change in the data (through F9.2- F9.4) of the main table should be recorded in the system log with Date, Time, User Name, Table, Field & Change
- Consumer entered Patient Comorbidities & Past Medical History data should be shown in this UI. Consumer data recorded in **'patient_history_CI'** tbl (which has more or less the same fields as per 'Patient_history' tbl).
- Further consumer should be able to validate provider entered Comorbidities & Past Medical History data and flagged into this UI (as 'Confirmed' or marked as 'Wrong')
- Further, correction of these entries as per consumer validation should be enabled. Consumer App gets provider data from the **'patient_history'** tbl to be checked by the consumer.
- In this comparison another field in the **'patient_history'** ('Consumer_Checked' field) captures whether the consumer marks the record as 'Wrong' or 'Confirmed' as correct. Last Update date of the both consumer and provider entries should be taken into account in flagging mismatch.

Application Process - Create/Edit/Inactivate Comorbidities & Past Medical Issues of a patient



User Functions

U9.1 - Loading - Comorbidity_PastHistory

U9.2 - Create the new Comorbidity_PastHistory

U9.3 - Edit Comorbidity_PastHistory

U9.4 - Inactivate Comorbidity_PastHistory

System/DB Functions

F9.1 - Validating entries in creating a Comorbidity_PastHistory

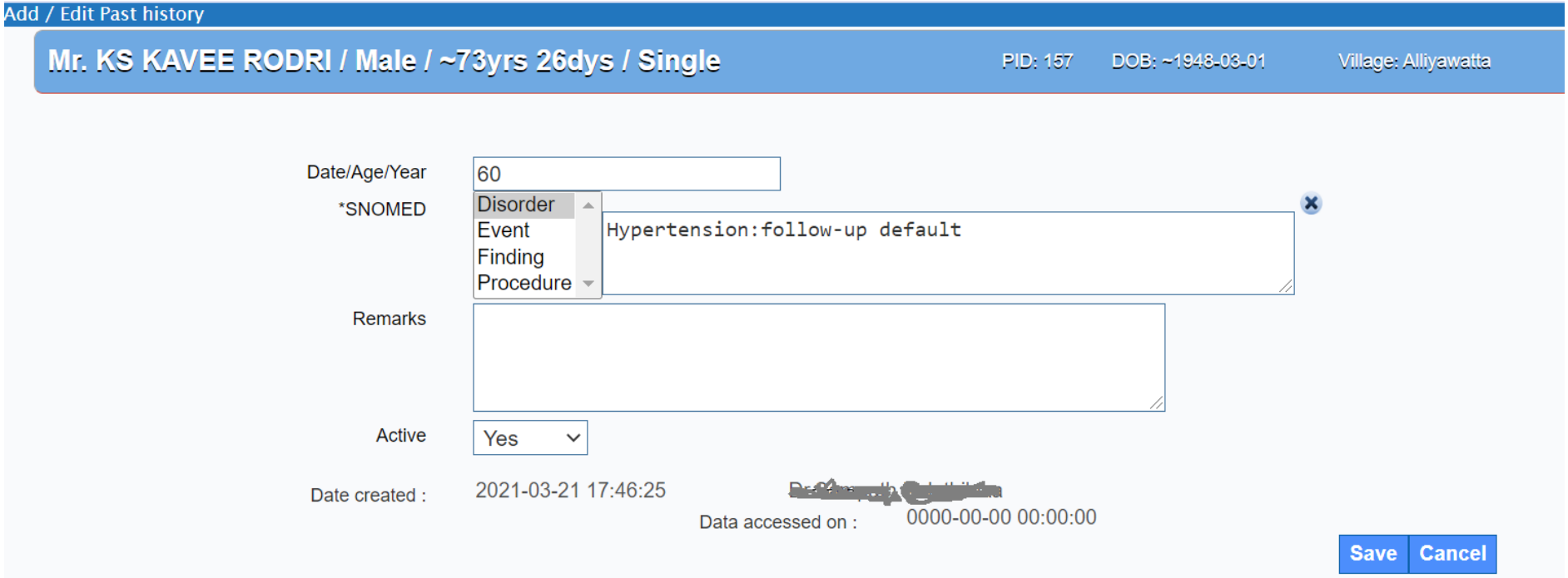
F9.2 - Creating a Comorbidity_PastHistory

F9.3 - Edit Comorbidity_PastHistory

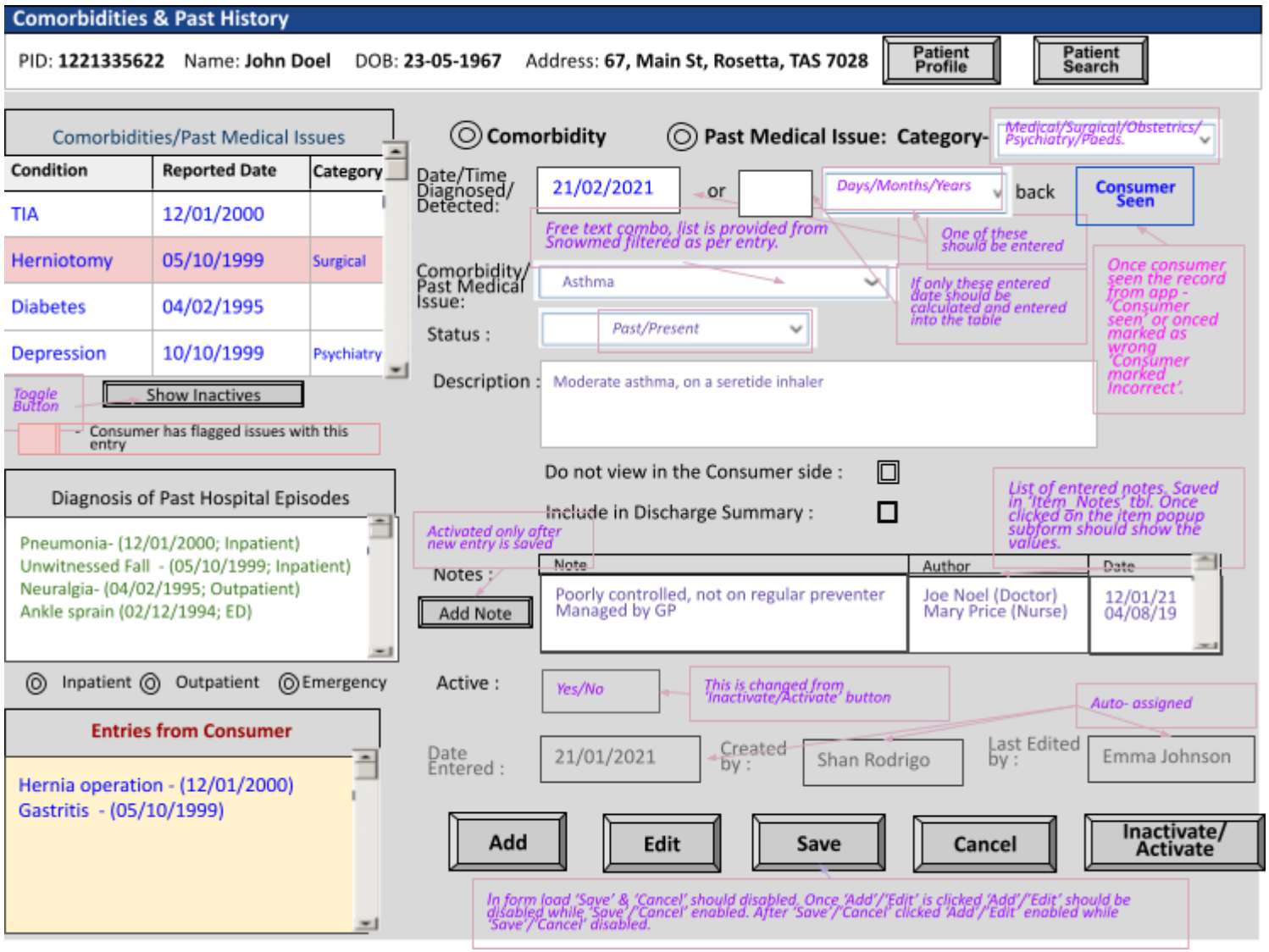
F9.4 - Inactivate Comorbidity_PastHistory

Current UI

'Add / Edit Past History'



Suggested UI Improvements (Name: 'Comorbidities & Past History' → Comorbidities_PastHistory)



Diagnosis of Past Medical Episode

- Popup menu (once the cursor moves over the item) should show the details of the episode; Date start/End, Primary Dx, Secondary Dx, Admitted consulted/DR seen, Outcome. Once clicked → direct to relevant episodes.
- This is just a viewer, data is obtained from past episodes.

Highlighting with Pink in the Comorbidities/Past Medical Issues list

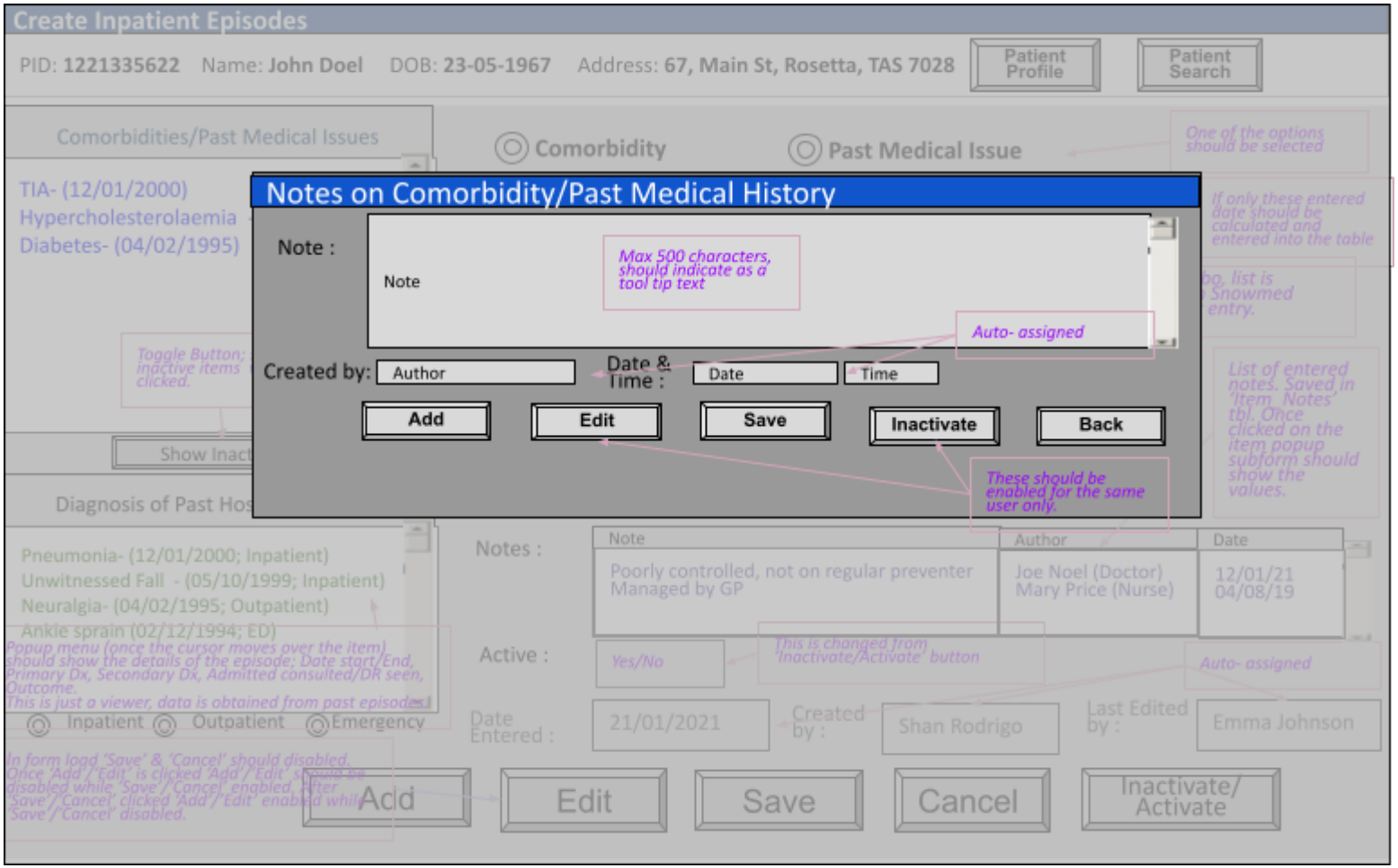
- Comorbidities/Past Medical Issues marked as 'Wrong' by the consumer (as per text 'Wrong' in the 'Consumer_Checked' field for the record in 'patient_history' tbl) should be highlighted in 'pink' in this list.
- Moving the cursor over them should show the comment from the consumer ('Consumer_Comment' field for the past medical issue (record) in 'patient_history' tbl).

Entries from Consumer

- Data from 'patient_history_CI' tbl.
- Once clicked on an item should show a pop-up menu with the details of the entry and button to copy consumer entry into this provider end.

Adding/Viewing Notes

- When the ‘Add Note’ button is clicked this should appear with blank input for add new.
- When a Note from the note list is clicked it should view the whole note as below and the provision for the user who entered the note should be able to edit/inactivate (Thus user name should be checked when trying to edit/update; except for Sys. Admin.).
- Once saved the Note should be recorded in ‘Item_Notes’ table filling fields as follows; Note_ID (auto increment), NPID (Pt ID), Item_ID (ALERGYID, PATHISTORYID, etc.), Table_ID (tbl of the items), UI_ID, Note_Body, CreateDate, CreateUser, CreateTime, LastUpDate, Active



Consumer side entry

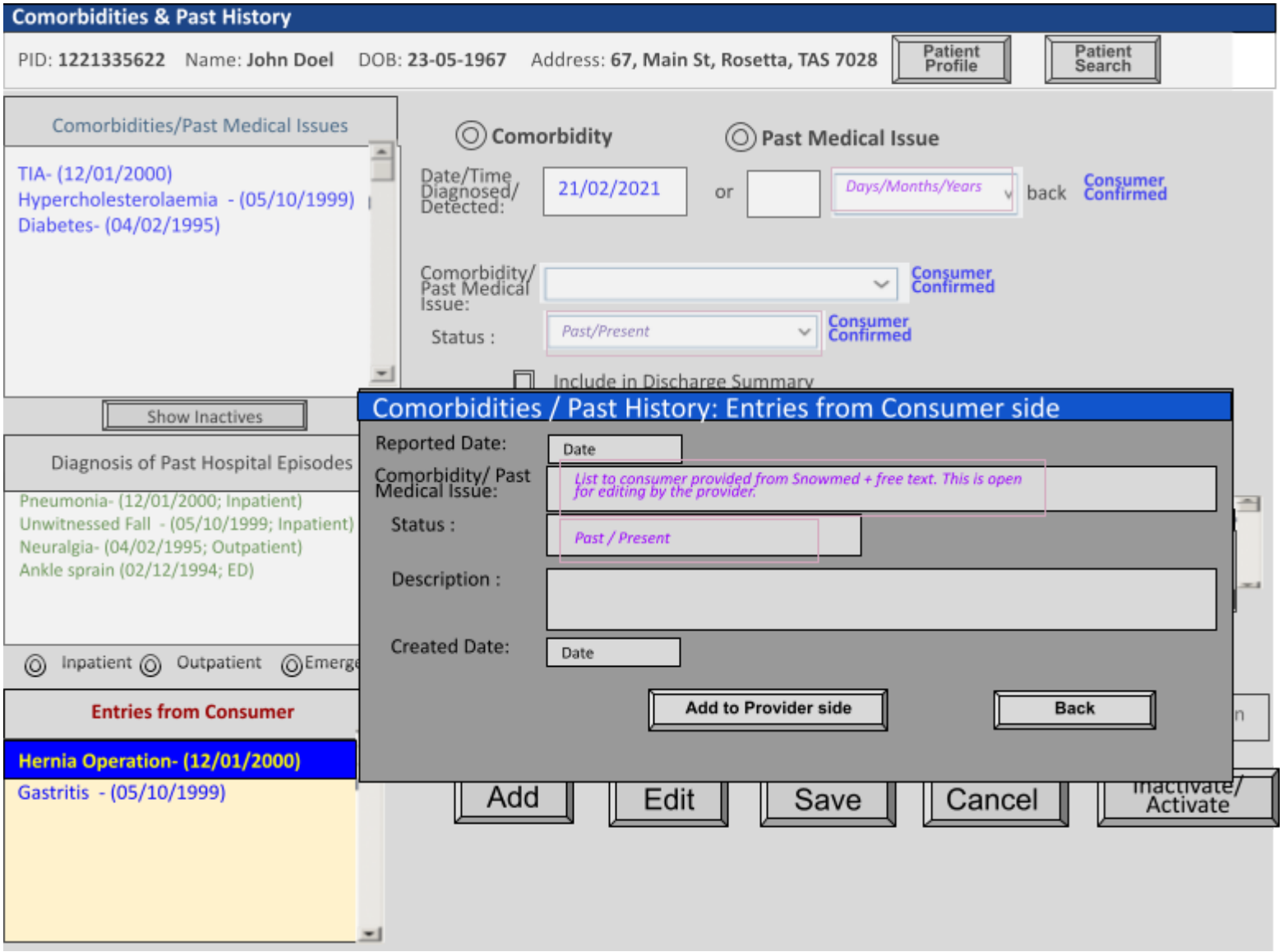
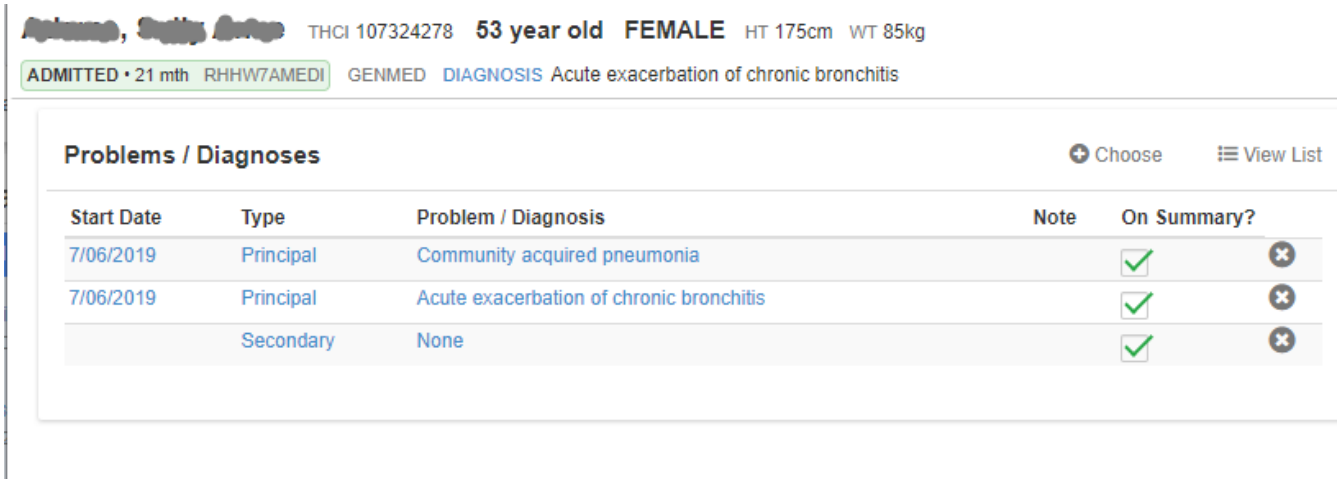


Table: patient_history, table ID: 35 (modify table) **Blue - Using old fields** | **Red - New field** | **Black- Not using fields**

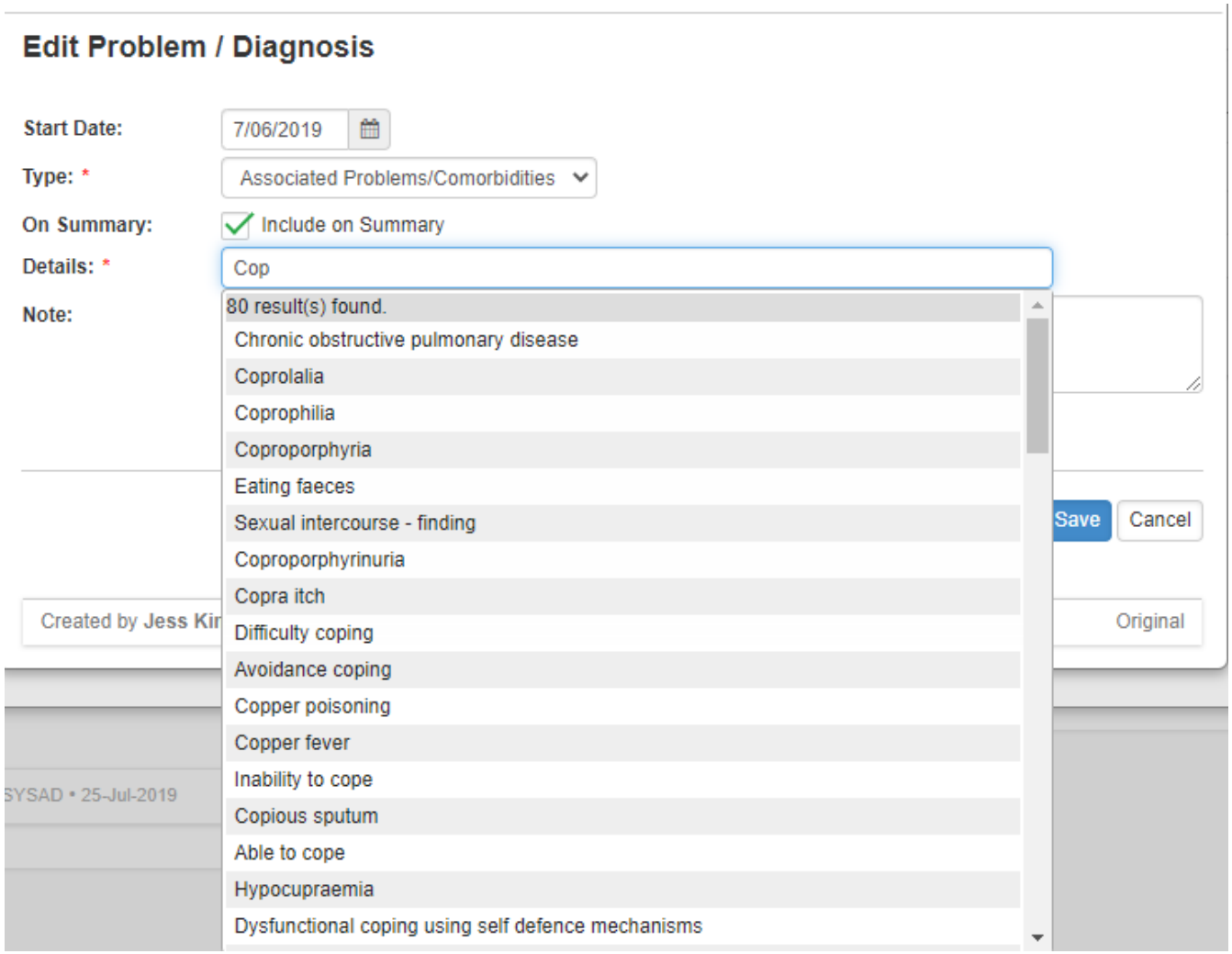
Table_ID	Table_Name	Field_Name	Field_ID	Type	Type_Txt	Size	Null	Key	Default	Extra	Comment	Add_Entry	Auto_Fill	Default_val	Add_Entry_Order	Add_Entry_Section	Missing_Item	
35	patient_history	PATHISTORYID	35_1	int(11)	int	11	NO	PRI	NULL	auto_increment								
35	patient_history	PID	35_2	int(11)	int	11	YES		NULL									
35	patient_history	NPID	35_3	varchar(20)	varchar	20	YES		NULL		Patient Hospital ID							
35	patient_history	History_Type	35_4	varchar(50)	varchar	50	YES		NULL		Comorbidity/Past History							
35	patient_history	SNOMED_Code	35_5	varchar(20)	varchar	20	YES		NULL									
35	patient_history	SNOMED_Text	35_6	varchar(200)	varchar	200	YES		NULL									
35	patient_history	History_Name	35_7	varchar(200)	varchar	200	No		NULL		Comorbidity/Past History Name							
35	patient_history	History_Category	35_18	varchar(20)	varchar	20	No		NULL		Medical/Surgical/Obstetrics/Psychiatry/Paeds.							
35	patient_history	Detected_Date	35_8	Date			YES		NILL		Diagnosed/Detected date							
35	patient_history	Description	35_9	varchar(500)	varchar	500	YES		NULL		Description							
35	patient_history	Remarks	35_10	varchar(200)	varchar	200	NO		NULL									
35	patient_history	Status	35_18	varchar(10)	varchar	10	NO		'Present'		'Past/Present'							

35	patient_history	CreateDate	35_11	datetime	datetime		YES		NULL									
35	patient_history	CreateUser	35_12	varchar(200)	varchar	200	YES		NULL									
35	patient_history	LastUpDate	35_13	datetime	datetime		YES		NULL									
35	patient_history	LastUpDateUser	35_14	varchar(200)	varchar	200	YES		NULL									
35	patient_history	Active	35_15	tinyint(1)	tinyint	1	YES		1									
35	patient_history	HistoryDate	35_16	varchar(50)	varchar	50	YES		NULL									
35	patient_history	O_PID	35_17	varchar(100)	varchar	100	YES		NULL									
35	patient_history	Not_view_consumer	35_18	tinyint(1)	tinyint	1	YES		NULL		Whether enable view by the consumer							
35	patient_history	Consumer_Checked	35_19	varchar(10)	varchar	10	YES		NULL									
35	patient_history	Consumer_Check_Date	35_20	datetime	datetime		YES		NULL									
35	patient_history	Consumer_comment	35_21	varchar(250)	varchar	250	YES		NULL									
35	patient_history	Include_Discharge_Summary	35_22	tinyint(1)	tinyint	1	YES		NULL		Include in discharge summary							

Examples
HCS




[redacted] THCI 107324278 53 year old FEMALE HT 175cm WT 85kg
Edit Problem / Diagnosis
Start Date: 7/06/2019
Type: * Associated Problems/Comorbidities
On Summary: Include on Summary
Details: * Chronic obstructive pulmonary disease
Note:
View Record and History
Save
Cancel
Created by Jess Kingston on 15-Mar-2021 13:24
Original


Edit Problem / Diagnosis
Start Date:
7/06/2019
Type: *
Associated Problems/Comorbidities
On Summary:
Include on Summary
Details: *
Cop
Note:
80 result(s) found.
Chronic obstructive pulmonary disease
Coprolalia
Coprophilia
Coproporphyria
Eating faeces
Sexual intercourse - finding
Coproporphyrinuria
Copra itch
Difficulty coping
Avoidance coping
Copper poisoning
Copper fever
Inability to cope
Copious sputum
Able to cope
Hypocupraemia
Dysfunctional coping using self defence mechanisms
Save
Cancel
Created by Jess Kir
Original
SYSAD • 25-Jul-2019

Problem / Diagnosis

Start Date	7/06/2019
Type	Principal
Include on Discharge Summary	✔ Include on Discharge Summary
Problem / Diagnosis	Community acquired pneumonia
Note	

Created by **Jess Kingston** on **15-Mar-2021 13:24** Original

Actions

- Modify
- View History
- Add Problem/Diagnosis
- View List
- Add Task...
- 0 Tasks
- Delete