10d. Family History - Requirements Specification

Introduction

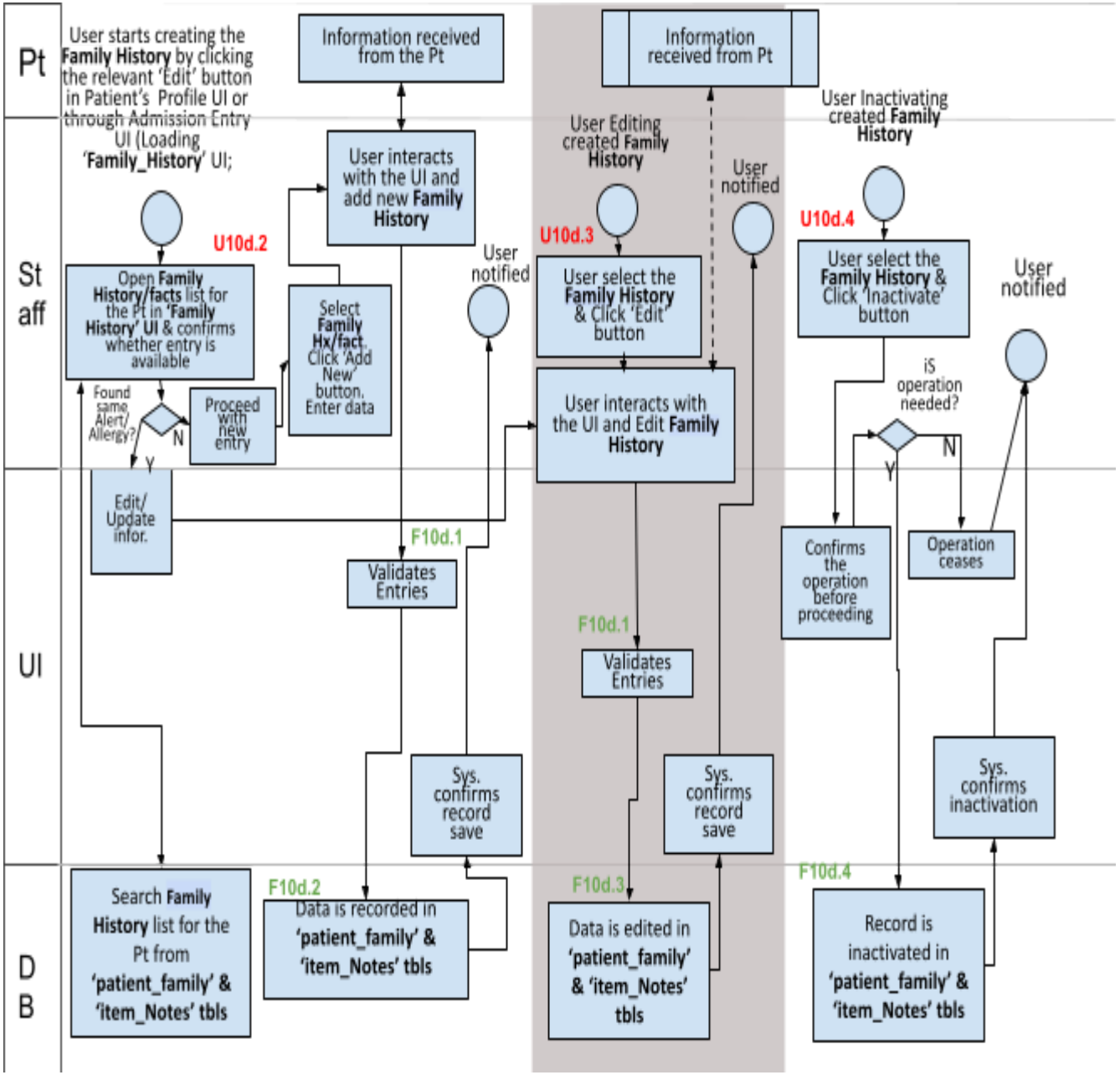
This information is captured during the admission process, inward care, ED, or outpatient department. Sometimes also flagged by the community and GPs. This is important in the decision-making process in care and to include in the discharge communication to the community/GPs. These are entered at the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

- There is a dedicated interface for this; '**Family History**' UI (**Family_History**) which has the **'patient_family'** as the main backend table. **'Item_notes'** tbl is used to save notes related to an item (Family History/fact).
- To list Family history items → **'PatientFacts_ItemList'** tbl is used
  (SQL: "SELECT * FROM **PatientFacts_ItemList WHERE** UI_ID=**'10d' AND GROUP BY item_name"**)
- Description labels also taken from **'PatientFacts_ItemList'** tbl
- DropdownList for Descriptions is taken from the **'PatientFacts_ComboItems'** tbl
- 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.
- Should be validated during entries (drop-down lists) and free text should also be allowed
- Should be used in decision-making in other modules (Special care for patients with family history of ischemic heart disease).
- May need communication/integration with already available clinical systems and MHR
- The interface should facilitate entry of new family history/facts of the Pt, if there is already an entered same family history/fact 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 be received 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 (U10d.1 - U10d.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 F10d.2- F10d.4) of the main table (**'patient_family'**) should be recorded in the system log with Date, Time, User Name, Table, Field & Change
- Consumer entered Patient's Family history/facts should be shown in this UI. Consumer data recorded in **'patient_family_CI'** tbl (which has more or less the same fields as per 'Patient_family' tbl; see below).
- Further, consumer should be able to validate provider entered family history/facts 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_family'** tbl to be checked by the consumer.
- In this comparison another field in the **'patient_family'** ('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 Family History of a patient



User Functions

U10d.1 - Loading - **Family_History**

U10d.2 - Create the new **Family History**

U10d.3 - Edit **Family History**

U10d.4 - Inactivate **Family History**

System/DB Functions

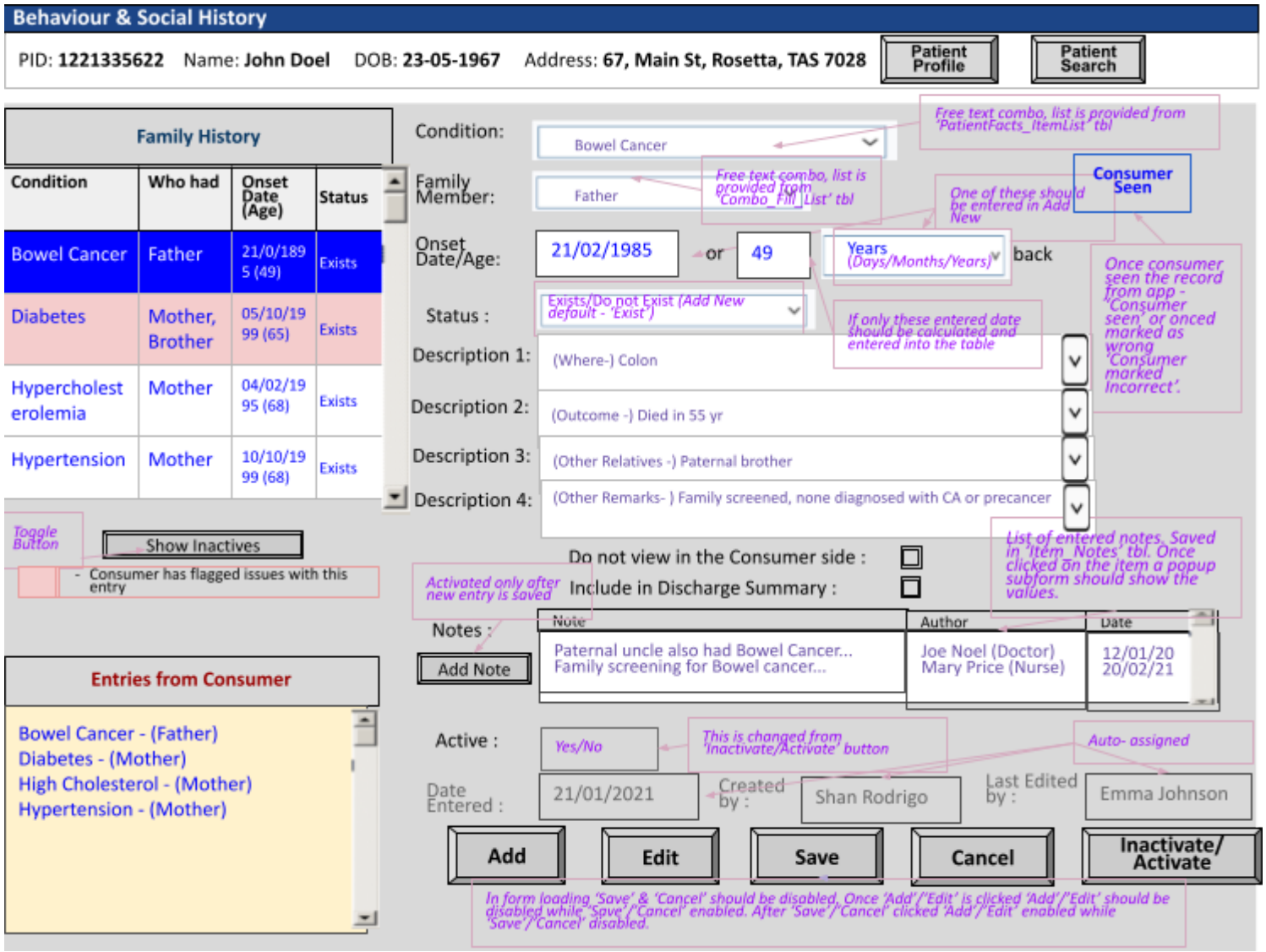
F10d.1 - Validating entries in creating a **Family History**

F10d.2 - Creating a **Family History**

F10d.3 - Edit **Family History**

F10d.4 - Inactivate **Family History**

Suggested UI Improvements (Name: Family History - 'Family_History')



Getting values of Family History

- Once the History item is clicked; its values should be viewed in the textboxes.
- 4 X Descriptions should show values according to the data of the **'patient_familyl' tbl (see below)** (Description1_Label→ label name for Desc. 1, Description1_value→ value for that description)
- **'PatientFacts_ItemList' tbl (see below)** data is used to check whether a relevant description text box is needed or not. Ex: if Description4_Label is blank, visibility of both Description 4 label and the relevant textbox should be false.
- Description combos dropdown lists may get items from 'PatientFacts_ComboItems' tbl (see below). These list items should grow as per free text entries of the users.

Highlighting Items with Pink when issues with the entry notice by consumer

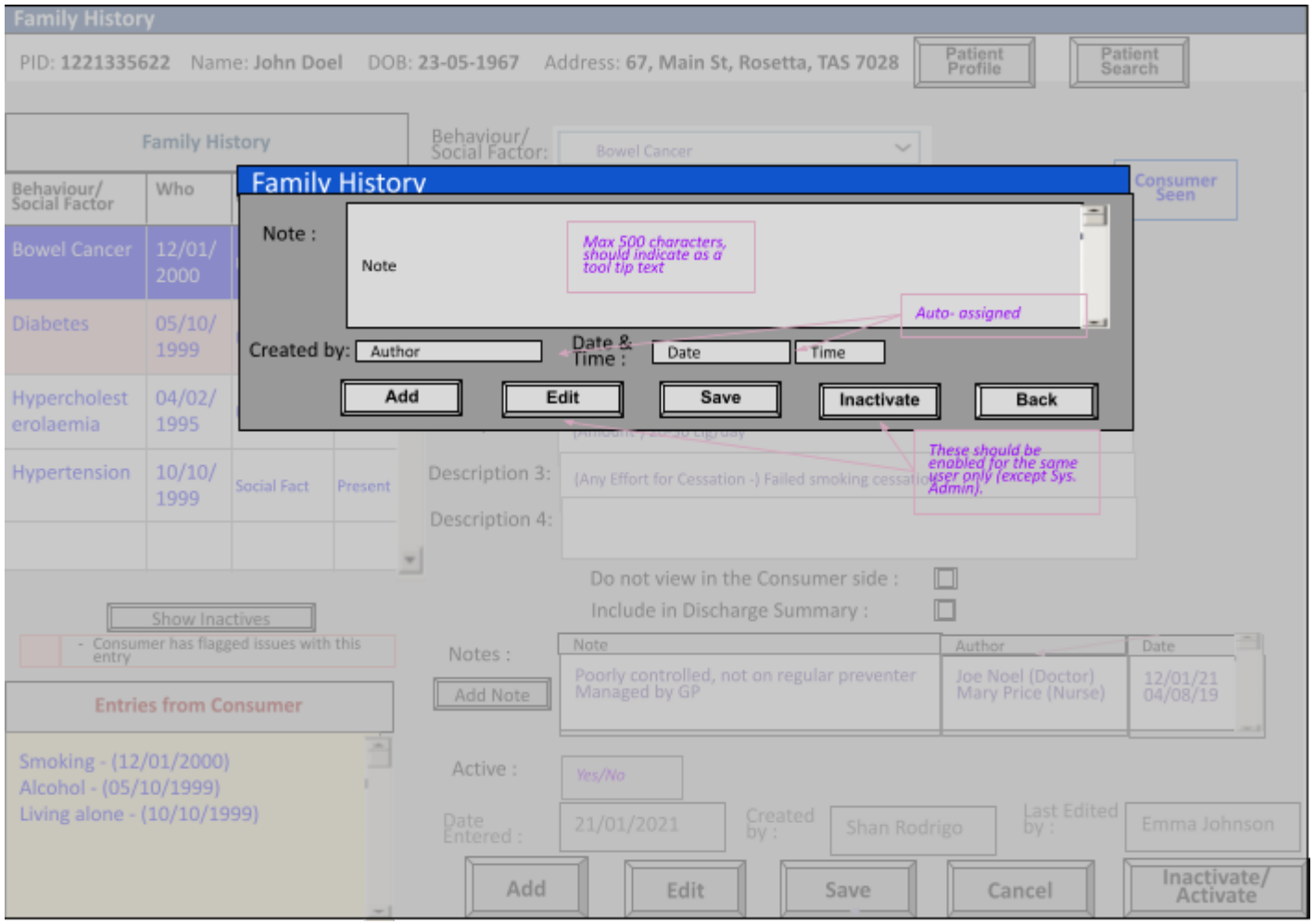
- When a Family History item is marked as 'Wrong' by the consumer (as per text 'Wrong' in the 'Consumer_Checked' field for the record in 'patient_family' tbl) should be highlighted in 'pink' in this list.
- Moving the cursor over the item should show the comment from the consumer ('Consumer_Comment' field for the past medical issue (record) in 'patient_history' tbl).

Entries from Consumer

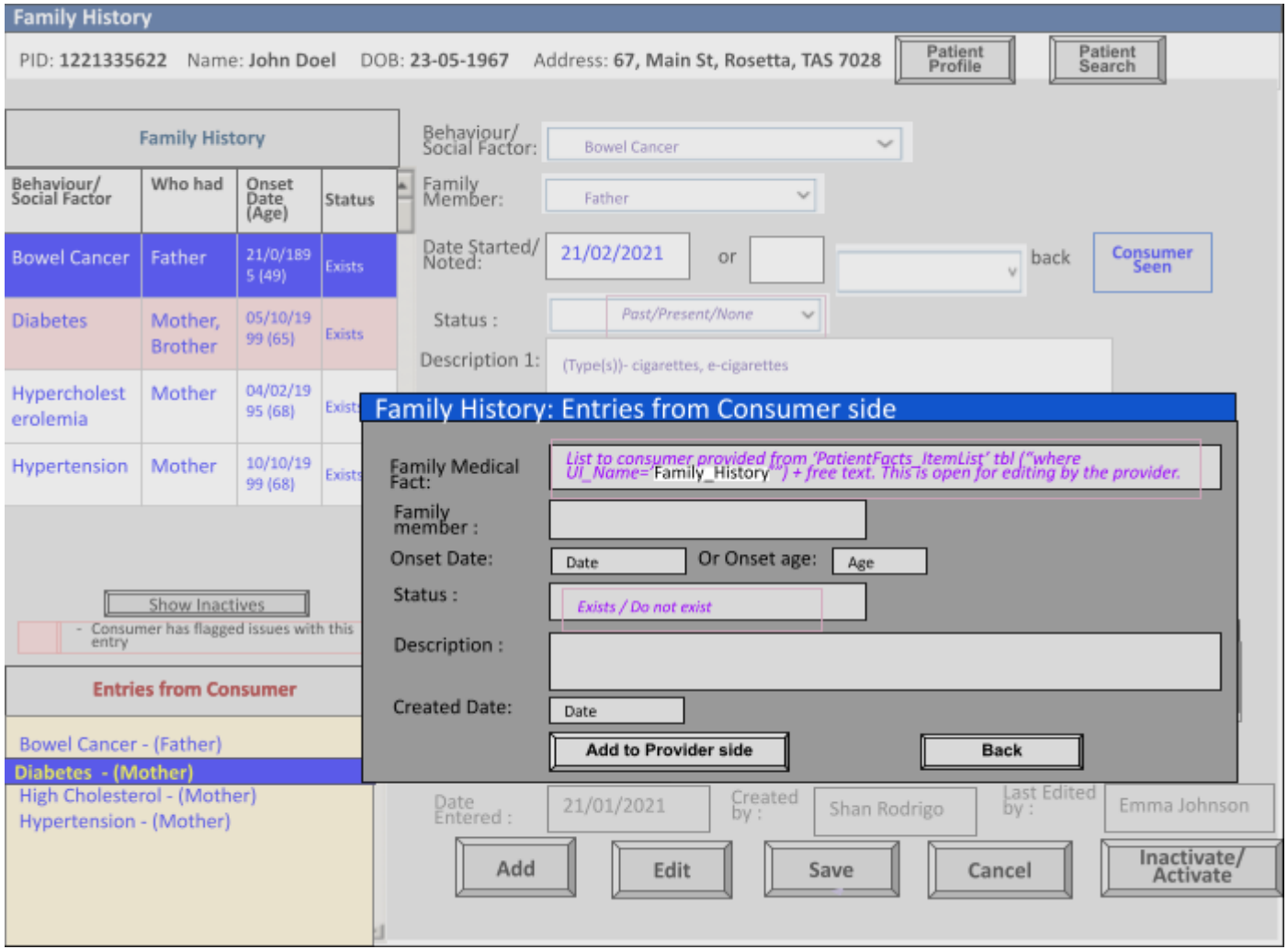
- Data from 'patient_family_CI' tbl.
- Once clicked on an item, should show a pop-up menu with the details of the entry and button to copy consumer entry into this provider view (see below).

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 the fields as follows; Note_ID (auto increment), NPID (Pt ID), Item_ID (ALERGYID, PATFAMILYID, etc.), Table_ID (tbl of the items), UI_ID, Note_Body, CreateDate, CreateUser, CreateTime, LastUpDate, Active



Consumer side entry



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Once the entry from the consumer is clicked details should appear in subform like this.

Table: patient_family, table ID: 79 (New table)

#	Column	Type	Collation	Attributes	Null	Default	Extra
1	PATFAMILYID	int(11)			No	*None*	AUTO_INCREMENT
2	NPID	varchar(20)	utf8_general_ci		No	*None*	
3	Family_Condition_Name	varchar(200)	utf8_general_ci		No	*None*	
4	Family_Member	varchar(50)	utf8_general_ci		Yes	*NULL*	
5	Effective_Date	date			Yes	*NULL*	
6	Description1_Label	varchar(50)	utf8_general_ci		Yes	*NULL*	
7	Description1_Value	varchar(500)	utf8_general_ci		Yes	*NULL*	
8	Description2_Label	varchar(50)	utf8_general_ci		Yes	*NULL*	
9	Description2_Value	varchar(500)	utf8_general_ci		Yes	*NULL*	
10	Description3_Label	varchar(50)	utf8_general_ci		Yes	*NULL*	
11	Description3_Value	varchar(500)	utf8_general_ci		Yes	*NULL*	
12	Description4_Label	varchar(50)	utf8_general_ci		Yes	*NULL*	
13	Description4_Value	varchar(500)	utf8_general_ci		Yes	*NULL*	
14	Status	varchar(15)	utf8_general_ci		No	Present	
15	CreateDate	datetime			Yes	*NULL*	
16	CreateUser	varchar(200)	utf8_general_ci		Yes	*NULL*	
17	LastUpDate	datetime			Yes	*NULL*	
18	LastUpDateUser	varchar(200)	utf8_general_ci		Yes	*NULL*	
19	Active	tinyint(1)			Yes	1	
20	Not_view_consumer	tinyint(1)			Yes	0	
21	Consumer_Checked	varchar(10)	utf8_general_ci		Yes	*NULL*	
22	Consumer_Checked_Date	datetime			Yes	*NULL*	
23	Consumer_comment	varchar(250)	utf8_general_ci		Yes	*NULL*	
24	Include_Discharge_Summary	tinyint(1)			No	1	

Patient Facts Item list (Table : 'PatientFacts_ItemList') table ID: 76 (This data is used to show description labels and their combos in patient facts UIs)

item_id	UI_ID	UI_Name	type	item_name	Description1_Label	Description2_Label	Description3_Label	Description4_Label	Get_Value_From	Explained_Term
15	10d	Family_History		Diabetes	Type	Complications	Other relatives	Other Remarks		Diabetes
16	10d	Family_History		Hypertension	Complications	Other relatives	Other Remarks			High Blood Pressure
17	10d	Family_History		Hypercholesterolaemia	Complications	Other relatives	Other Remarks			Increased cholesterol
18	10d	Family_History		Bleeding disorder	Type	Complications	Other relatives	Other Remarks		Uncontrolled bleeding
19	10d	Family_History		Bowel cancer	Where	Outcome	Other relatives	Other Remarks		
20	10d	Family_History		Lung cancer	Management	Outcome	Other relatives	Other Remarks		
21	10d	Family_History		Breast cancer	Management	Outcome	Other relatives	Other Remarks		
22	10d	Family_History		Ovarian cancer	Management	Outcome	Other relatives	Other Remarks		
23	10d	Family_History		Uterine cancer	Management	Outcome	Other relatives	Other Remarks		
24	10d	Family_History		Lung cancer	Management	Outcome	Other relatives	Other Remarks		
25	10d	Family_History		Brain cancer	Management	Outcome	Other relatives	Other Remarks		
26	10d	Family_History		Pancreatic cancer	Management	Outcome	Other relatives	Other Remarks		
27	10d	Family_History		Mental Disorders	Condition	Complications	Other relatives	Other Remarks		Mental Health Issues

Combo list items for Patient Facts (Table : 'PatientFacts_ComboItems') table ID: 77(This data is used to fill the dropdown lists of description combos. In addition to available these combo items the list should grow as per inputs of the user; adding user entries for relevant descriptions into this table. Thus every new entry will be available in the relevant description combo for subsequent entries)

Combo_Item_id	UI_ID	item_name	Description	Description_Label	Combo_Item
27	10d	Diabetes	Description1	Type	I
28	10d	Diabetes	Description1	Type	II
29	10d	Diabetes	Description2	Complications	Nephropathy
30	10d	Diabetes	Description2	Complications	Retinopathy
31	10d	Diabetes	Description2	Complications	Neuropathy
32	10d	Diabetes	Description2	Complications	Limb amputation
33	10d	Hypertension	Description1	Complications	On & off headache
34	10d	Hypertension	Description1	Complications	Past stroke
35	10d	Hypercholesterolaemia	Description1	Complications	Ischaemic heart disease
36	10d	Hypercholesterolaemia	Description1	Complications	Peripheral vascular disease
37	10d	Bleeding disorder	Description1	Type	Haemophilia
38	10d	Bleeding disorder	Description1	Type	Factor VIII deficiency
39	10d	Bleeding disorder	Description1	Type	Factor IX deficiency
40	10d	Bleeding disorder	Description2	Complications	Internal bleeding
41	10d	Bleeding disorder	Description2	Complications	Hospitalisation
41	10d	Bowel cancer	Description1	Where	Small bowel
44	10d	Bowel cancer	Description1	Where	Colon
45	10d	Bowel cancer	Description1	Where	Rectum
46	10d	Bowel cancer	Description1	Where	Anus
47	10d	Mental Disorders	Description1	Condition	Depression
48	10d	Mental Disorders	Description1	Condition	Schizophrenia
49	10d	Mental Disorders	Description1	Condition	Bipolar disorder
50	10d	Mental Disorders	Description1	Condition	OCD
51	10d	Mental Disorders	Description1	Condition	Eating disorder
52	10d	Mental Disorders	Description1	Condition	Personality disorder

Table: patient_family_CI, **table ID: 80** (New table) **Consumer end Family History information table**

#	Column	Type	Collation	Attributes	Null	Default	Extra
1	PATFAMILYID	int(11)			No	*None*	AUTO_INCREMENT
2	CI_ID	int(11)			No	*None*	
3	Family_Condition_Name	varchar(200)	utf8_general_ci		No	*None*	
4	Family_Member	varchar(50)	utf8_general_ci		Yes	*NULL*	
5	Effective_Date	date			Yes	*NULL*	
6	Description1_Label	varchar(50)	utf8_general_ci		Yes	*NULL*	
7	Description1_Value	varchar(500)	utf8_general_ci		Yes	*NULL*	
8	Description2_Label	varchar(50)	utf8_general_ci		Yes	*NULL*	
9	Description2_Value	varchar(500)	utf8_general_ci		Yes	*NULL*	
10	Description3_Label	varchar(50)	utf8_general_ci		Yes	*NULL*	
11	Description3_Value	varchar(500)	utf8_general_ci		Yes	*NULL*	
12	Description4_Label	varchar(50)	utf8_general_ci		Yes	*NULL*	
13	Description4_Value	varchar(500)	utf8_general_ci		Yes	*NULL*	
14	Remarks	varchar(250)	utf8_general_ci		Yes	*NULL*	
15	Status	varchar(15)	utf8_general_ci		No	Present	
16	CreateDate	datetime			Yes	*NULL*	
17	CreateUser	varchar(200)	utf8_general_ci		Yes	*NULL*	
18	LastUpDate	datetime			Yes	*NULL*	
19	LastUpDateUser	varchar(200)	utf8_general_ci		Yes	*NULL*	
20	Active	tinyint(1)			Yes	1	
21	Share	tinyint(1)			No	1	