

1. Patient list will keep same status tabs but remove “Count number of patients” for all tabs
 - a. Search Patient (Change from “All Patient”)
 - i. The purpose of this tab is for the registration user to search for the existing patient to create VN, if they cannot find the patient profile in this tab > it means that patient profile not yet exist, the user will have to create new patient
 - ii. This tab will display all patient that has been searched, created and create visit today
 - iii. Change “Patient ID” to “HN”
 - iv. Remove Employee ID column in Search Patient page
 - v. Remove Employee ID from Search in selection
 - vi. Add “Phone Number” in Search in selection, if the Phone Number in Search in was ticked the system can be searching patient from Phone Number that recorded in the patient info with format 066 767 6767
 - vii. Add “Title” in Search in selection
 - viii. On search in function combine Citizen ID , Passport and Non TH ID to the same
 - ix. Change Search in selection from Patient ID to HN
 - x. Remove count number of patient
 - xi. Other logic, keep same as V2.0
 - xii. If click to create V.N but the patient has an appointment the system should check duplicate before creating and show pop-up confirmation “The patient has an appointment today, do you want to create visit from appointment?”
 1. If clicked “Yes” the system will go to Payor profile page and visit detail will fill in info from appointment made
 2. If clicked “Cancel” will be cancelled to add
 - xiii. If click to create V.N but the patient still has an open visit in the same day the system should check duplicate before creating and show pop-up confirmation “The patient has visit today, do you want to create new VN ?”
 1. If clicked “Yes” the system will be follow the registration flow
 2. If clicked “Cancel” will be cancelled to add
 - b. Mass Add will have some change as details below
 - i. Patient name will be Auto fill in as below
 1. Thai name “ผู้ป่วยยืนยันตัวตนไม่ได้” and will follow the running number of patient eg.

- a. If the Number of patient = 5 the patient name will show
 - i. ผู้ป่วยยืนยันตัวตนไม่ได้1
 - ii. ผู้ป่วยยืนยันตัวตนไม่ได้2
 - iii. ผู้ป่วยยืนยันตัวตนไม่ได้3
 - iv. ผู้ป่วยยืนยันตัวตนไม่ได้4
 - v. ผู้ป่วยยืนยันตัวตนไม่ได้5
2. Eng name “Patient can’t identify” will be same logic with Thai Name
 - i. Patient can’t identify1
 - ii. Patient can’t identify2
 - iii. Patient can’t identify3
 - iv. Patient can’t identify4
 - v. Patient can’t identify5
3. The patient's name can be input as text and number
4. The patient's name can be editing even the system default
- ii. Add field Avg.Age next to Number of patient field if the fill was filled and click added the Avg.Age will fill in the column for all patients that do Mass add
- iii. Add column Avg.Age next to Last name field
- iv. Add column Triage next to Avg.Age as dropdown selection as below list
 1. Not Urgent will show as green
 2. Urgency will show as yellow
 3. Resuscitation will show as red
- v. Add column Patient Type
 1. ผื่นสีทอง-ขาว will show as white
 2. ผื่นสีทอง-เขียว will show as green
 3. ผื่นสีทอง-เหลือง will show as yellow
 4. ผื่นสีทอง-แดง will show as red
 5. ผื่นสีทอง-ดำ will show as black
- vi. Add icon print Infront of delete icon
 1. When select print Patient Label will have the
 - a. Patient Info & ID Card will have the detail as below
 - i. VN
 - ii. HN
 - iii. Patient name and Last name
 - iv. Citizen ID

- v. Age
 - vi. Barcode HN
 - b. Barcode sticker
 - c. Guide slip
 - d. OPD Card Sticker
 - vii. When click create VN the system will go to visit detail page
 1. Payor for this visit will default as self-pay
 2. Visit detail will default as below
 - a. Arrive by : Other
 - b. Visit type : ได้รับการส่งตัวจากบริการ EMS
 - c. Department : อุบัติเหตุฉุกเฉิน
 - d. Station : อุบัติเหตุฉุกเฉิน
 - e. Doctor : Don't need to default can let it's blank
 - f. Date and time : Default as create time
 - g. Priority : Default as Emergency
 - h. The default data can be edit
 3. After save and create VN the patient will show in Checked In page and have Mass label and the color will follow by Triag
- c. Appointment
 - i. Change "Patient ID" to "HN"
 - ii. Add Station column
 - iii. Add search by Station function
 - iv. Add Filter by Station function
 - v. Add function for multi selection
 1. The purpose for this function is for the user to multi select appointment of the same Station to create visit in bulk
 2. We will only allow multi selection for same Station only
 3. If select multi patients "Create VN" button will be active
 4. When user click "Create VN" will show pop-up "Confirm Bulk V.N." to confirm VN creation "Do you want to Confirm the V.N. creation?", and patient name will show in checked-in tab
 5. Visit detail will default info as below
 - a. Arrive by will be default as "Walk"
 - b. Visit type will be default as "Appointment"
 - c. Department = as per the appointment detail
 - d. Station will be default as the station that the user was selected in an appointment

- e. Doctor will be default as the doctor who selected in an appointment
 - f. Date and time will stamp from the actual time that user create visit
 - g. Select Priority will be default as “Normal”
- 6. The payer will default as previous visited for each patient
- 7. If the patients who has appointment register at KIOSK the visit will sync to the system and Visit detail will default info as below list
 - a. Payor for this visit will be check from KIOSK and send update to the system
 - b. Arrive by will be default as “Walk”
 - c. Visit type will be default as “Walk in (KIOSK)”
 - d. Department ??
 - e. Station will be default as the station that the user was selected in an appointment
 - f. Doctor will be default as the doctor who selected in an appointment
 - g. Date and time will stamp from the actual time that user create visit
 - h. Select Priority will be default as “Normal”
 - i. If the visit already created but the patient goes to checked in at KIOSK the payor will sync detail to Payor for this visit
- d. Checked-in
 - i. Update patient list column as per figma design
 - ii. Add QN – QN is generated at the same time of VN creation
 - 1. The logic for QN number is taking the last 4 digits of the VN number
 - iii. Add “Service type” column next to “Visit Type”
 - iv. Change the 3 dots action option
 - 1. Keep “Edit” button when select Edit can be edit patient Basic info, Payor Profile, Payor for today visit, Visit detail, Document and Consent letter
 - 2. Remove Edit Plan from 3 dot
 - 3. Add “Reprint” function, once select allow the user to reprint
 - a. Visit slip
 - b. OPD card sticker

- c. Keep Delete button in the same logic
 - e. Completed
 - i. Update patient list column as per figma design
 - ii. Add “Service type” column next to “Visit Type”
- 2. Change layout for registration page to have 5 tabs in page
 - a. Basic Info tab: Add more fields as below
 - i. The patient register can do by Manual and integration with Smar card reader
 - 1. The smart card reader integration will auto fill in the list below
 - a. Citizen ID
 - b. คำนำหน้า / Title
 - c. ชื่อจริง / First Name
 - d. ชื่อกลาง / Middle Name
 - e. นามสกุล / Last Name
 - f. Gender
 - g. Date of Birth
 - h. Blood Group
 - i. Religion
 - j. Address will auto fill in Registered Address and Present Address and will separate fields as below
 - i. House Number
 - ii. Moo
 - iii. Road
 - iv. Alley /Trok
 - v. Sub-district (Tambon / Kwaeng)
 - vi. District (Amphoe)
 - vii. Province (City)
 - viii. Postal Code
 - ii. Change date of birth to be mandatory field
 - iii. Add check box Unknown ID
 - iv. Add new function Auto Generate ID if tick Unknown and after save The ID will be Autogenerate and add to the Citizen ID field by prefix ID **010741** and follow with running number 7 digits “**010741**xxxxxxx” and when the patient has the real ID user will be untick on Unknown ID then ID will be able to edit later
 - v. Update Marital Status drop down list follow the list below

1 = Single

2 = Married

3 = Widowed

4 = Divorced

5 = Separated

6 = Monk

9 = Not specified

- vi. When the user adds new patient by using ID card reader the Ethnicity and nationality should be auto fill in and default as Thai
 - vii. When select Ethnicity and nationality if select Ethnicity as Thai the Nationality should be Thai too but if change Nationality the Ethnicity shouldn't change
 - viii. Change the Occupation to be drop down list
 - ix. Remove fields Employee ID, Branch's Employee, Employee Position, Employee Information, Type of employee and register unit
 - x. Add camera function for take a photo and record in patient profile
 - xi. If the Deceased toggle is on will pop-up death record page detail same as V2
 - xii. If the patients recorded deceased will show Death info icon and can click to see the detail
 - xiii. Conceal Patient will keep same future as V2
- b. Contact Info section:
- i. Make the Phone number as Mandatory field
 - ii. Add Office Telephone to Phone type drop down list
- c. Address :
- i. Under the Address will have 2 types of address format
 - 1. Present Address tab
 - 2. Registered address button
 - ii. Change the address input fields to be separate fields as below for Present Address and Registered address
 - 1. House No : Record as Numeric format and will be mandatory
 - 2. Moo : Record as Numeric format
 - 3. Road : Record as Free text
 - 4. Alley /Trok : Record as Free text
 - 5. Sub-district (Tambon / Kwaeng) : Search from DB and will be mandatory
 - 6. District (Amphoe) : Search from DB and will be mandatory

7. Province (City) : Search from DB and will be mandatory
8. Postal Code : Search from DB and will be mandatory
9. Country : Search from DB and will be mandatory
10. Add new drop down filed “สถานะบุคคล” has the list in drop down

as below list

- มีชื่อในทะเบียนบ้านและอาศัยอยู่จริง
- มีชื่อในทะเบียนบ้านแต่ไม่ได้อยู่อาศัย
- ไม่มีชื่อในทะเบียนบ้านแต่มาอยู่อาศัย
- บุคคลนอกเขต
- ไม่มีที่พักอาศัย / คนเร่ร่อน

11. All fields will be mandatory fields

12. If input Postal Code the Province (City) and District (Amphoe) should be auto fill in

13. Add check box Same as Registered Address :

- If tick box Same as Registered Address the Present address will be copy from Registered Address

- If untick box Same as Registered Address the Present address will be blank field to be input

14. Registered Address will be the button can click to see the detail inside as address detail format

15. The address from ID card reader should be auto fill in Registered Address

d. Add new Next of kin section to registration page will have the input fields as below

i. Can be searched if Father/Mother is the patient that record in the system should be link info to show. If Father/Mother isn't recorded in the system can be input as free text

ii. The input fields

1. Title : Mandatory
2. First Name : Mandatory
3. Middle Name
4. Last Name : Mandatory
5. Citizen ID
6. Mobile number : Mandatory
7. Other Will be free text

- iii. If Next Of Kin is the patient that recorded in the system, there should be clicked to see their info
 - iv. On the bottom will have the action button as list below
 - 1. Cancel : Will be Cancelled
 - 2. Save : Will be save info
- e. Payer profile tab
 - i. Self pay will be default same as V2.0
 - ii. Insurance same as V2.0
 - iii. Corporate contract same as V2.0
 - iv. Payer type field if selected some value can be remove
 - v. Add select for this visit on the payor
 - vi. When tick select payor for this visit will display on the Payor for this visit section
 - vii. On the bottom will have the action button as list below
 - 1. Cancel : Will be Cancelled
 - 2. Save : Will be save info
- f. Visit Create
 - i. Left and Right layout section
 - 1. Left – show Payer selected for this visit
 - a. The payer selected will display on Visit Detail tab in Payor for this visit and can be edit
 - b. Can check the patient right by NHSO integration
 - c. If the payor type is Government will add more fields
 - i. Add Right Number field can send from NSHO integration
 - ii. Add Start date and End date for Payer type Government but don't need to be the mandatory field
 - iii. The Start date and End date will send from NSHO integration
 - iv. Add the Approve Code as free text under Auth Code
 - d. The payors can be edit, add and delete
 - e. If the patient using the payor from previous visit and edit some info should be update info to Payor profile
 - f. If the user try to add more payor in the visit detail that the patient already has in Payor profile (but the user didnt check the select for this VN) > the system should

- check duplicate by the Payor Name and Payor Plan should be exactly same for both fields and show pop-up confirmation “The patient already has this Payor, do you want to add Payor for this visit?”
- i. If clicked “Yes” the payor will add
 - ii. If clicked “Cancel” will be cancelled to add
 - g. The new payors that apply to patient visit will be update on Payor profile too
2. Right – Adding visit detail to create visit and generate VN, sending patient to station
- ii. 1 time registered will be 1 VN only, even the patient has been registered for 2 department still created only 1 visit
 1. If the registration selects 2 department or 2 stations, the patient name will get sent to those 2 nurse stations simultaneously
 2. If the patient come to hospital on the same day and the visit is already closed, when the user makes the new register will get a new V.N.
 3. The VN number will show last 4 digits from the Visit number generated in column VN on patient list page
 - iii. We will allow the user to create future visit (current version 2.0 doesn't allow)
 1. Users select future date, system will not allow for the user to select past date
 2. We will create the VN same logic as selecting today date, but it will be the VN of the future date
 3. The patient's name will get sent to the selected station accordingly but will only display if
 - a. That date arrives
 - b. The nurse filter for those future date
- Fig jam link for future visit flow:
<https://www.figma.com/board/R3CH6M3O7atOdlSorGB0T0/Future-Visit?node-id=3-12&t=X1IHsN3PvCGg21zD-0>
- iv. Arrive by – same dropdown list as per current 2.0 version
 - v. Visit type field – update with new dropdown list
 1. มารับบริการเอง (Walk-in)
 2. มารับบริการตามนัดหมาย (Appointment)

3. ได้รับการส่งต่อจากสถานพยาบาลอื่น (Refer-in)
 4. ได้รับการส่งตัวจากบริการ EMS (EMS)
- vi. Priority – update selection list in this sequence
1. Normal
 2. Emergency
 3. Accident
- g. The action on the bottom will be different in case of existing patient and new patient
- i. For new patient will have button as below
 1. Cancel : Is cancelled to create
 2. Save : To only create patient HN
 3. Save & Create VN : To create patient HN and visit
 4. When clicked Save & Create VN the system will be auto created VN and checked-In patient, the patient's name will be sent to the selected department, station and doctor (optional)
 5. After clicked Save button will be still stay in the page
 - ii. For the existing patient will have button as below
 1. Cancel : Is cancelled to create
 2. Update : To only update patient detail
 3. Update & Create VN : To update patient detail and create VN
 4. When clicked Update & Create VN the system will be auto created VN and checked-In patient, the patient's name will be sent to the selected department, station and doctor (optional)
 5. After clicked Update button will be still stay in the page
 - iii. For the patient that update the patient detail or visit only will show only Cancel and Update button
- h. Document tab will have fields as below
- i. Document name will be free text and mandatory
 - ii. Document type will be dropdown list and mandatory
 - iii. Add Identification Number field will be recording as free text
 - iv. Add Exp. Date filed can select from calendar
 - v. Upload Document will keep as the existing feature
 - vi. Add filter by Document Type on document tab
 - vii. The uploaded document can be Download, Print, Edit and Delete
- i. Consent letter
- i. Create the page only waiting for Hospital to confirm the content
- j. Other condition

- i. If the data is already input and then user clicks to cancel without save, have to show confirmation to leave the page. “The data is not saved yet, are you sure to Cancel”

Impact Analysis:

1. Understanding the scope:

What is being enhanced, changed, or added?

- a. Address, occupation field changes
- b. Changing the Patient ID to HN
- c. Changing the VN number display
- d. To create future visit
- e. Support for multiple stations within a single visit
- f. Adding phone number and title in search

2. Impact of the changes:

a. For address, occupation field changes, below are the places where it will impact in the prints on both the **English and Thai** versions.

- OPD Nurse -> Print -> Patient Basic Info
- OPD Nurse -> Print -> Patient Info Id Card
- OPD Nurse -> Patient Order -> Narcotic Drug form report (while ordering the narcotic item)
- Invoice receipt
- IPD receipt
- OPD receipt
- Food sanitation form
- In_House_Lab
- IPD_Nutrition_Meal
- IPD_Supply_Request
- Out_lab_vajira
- ProedureReqeust
- Billing -> OPD Billing -> Summary Order print (for Citizen id usage)

b. For changing the Patient ID to HN, below are the places where it will impact in the prints on both the **English and Thai** versions.

- OPD Nurse -> Print -> Patient Basic Info
- OPD Nurse -> Print -> Patient Info Id Card
- Billing -> OPD Billing -> Summary Order print
- OPD Nurse -> Print -> Guide Slip
- OPD Nurse -> Print -> OPD Card sticker

- OPD Nurse -> Visit Summary Print (Visit summary print is across billing which needed to be addressed)
 - OPD Nurse -> Certificate & forms -> Consent form Print
 - OPD Nurse -> Certificate & forms -> MEA Physical Therapy print
 - OPD Nurse -> Certificate & form prints.
 - OPD Nurse -> Patient Order -> Medication Sticker Print
 - OPD Nurse -> Patient Order -> Non-Formulary Drug Print (When ordering the non-formulary item)
 - IPD Nurse -> Progress Note Print
 - IPD Nurse -> Emar Print
- c. Changing the VN number display will impact on all the prints across the whole application.
- d. On the below point as mentioned in the document, it has to be discussed further for understanding. As of now we only have future appointment creation but not future visit creation.

“We will allow the user to create future visit (current version 2.0 doesn’t allow)”

<https://www.figma.com/board/R3CH6M3O7atOdlSorGB0T0/Future-Visit?node-id=3-12&t=X1lHsN3PvCGg21zD-0>

- e. At present, the system supports only **one station per visit**. Introducing support for **multiple stations within a single visit** would have significant implications across the entire **patient's journey**. This change would affect the full **visit lifecycle**—from registration and clinical workflows to diagnostics, order processing, and finally billing. Given its impact, this change must be carefully assessed to ensure consistency, traceability, and compliance across all downstream systems.

This change will need a complete workflow to understand and analyze.

- f. Adding the phone number and title in search functionality – need to know will this be added to any other page search. Will have an impact accordingly.

3. Dependencies: (To be analyzed and updated by dev team)

Any shared services/APIs?

Are master data changes needed?

Will it affect data migration or require data model changes?

Is it connected to user roles/permissions?

4. Impact on Non-Functional areas:

Performance

Security

Compliance

Audit logs

5. Testing: (QA team to write the test cases before starting development)

Test cases

Regression testing

UAT