UPLOAD OF DRUGS AND APIs STEPS

Step 1: Upload APIs

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| API NAME | SIDE EFFECTS | CONTRAINDICATIONS | PREGNANCY STATUS | LACTATION STATUS | DRUG ALTERNATIVES | MEDICATION COUNSELING |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

Step 2: Upload Drugs

|  |  |  |  |
| --- | --- | --- | --- |
| DRUG NAME | MANUFACTURER | DOSAGE FORM |  |
| Cilzec |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Step 3: Relate drugs to apis

This aspect will be done by the admin on the dashboard

|  |  |  |  |
| --- | --- | --- | --- |
| DRUG NAME | API A & Strength | API B & Strength FORM | API C & Strength |
| Cilzec | select API | select API | select API |
| enter Strength | enter Strength | enter Strength |
| Valvas | select API | select API | select API |
| enter Strength | enter Strength | enter Strength |

DRUG INTERACTION TABLE UPLOAD

Step 1: Select API A from dropdown

Step 2: Select multiple API B from dropdown

Step 3: Download combination template

Step 4: Fill the template as shown below

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| API A ID | API A Name | API B ID | API B NAME | Remark | Mechanism |
| 1 | Lumefantrine | 2 | Ampicillin | Contraindicated | API A inhibits absorption of API B |
|  |  |  |  | Severe Interaction, use alternative |  |
|  |  |  |  | Monitor Closely |  |

Some key agreements on what should enter the software in selected areas

1. Family and social history

A dropdown menu showing a list to select from

Multiple sexual partners

Unprotected sex

Alcohol intake

Etc

See ta ble below

|  |
| --- |
| FSH |
| select behavior (e.g., alcohol) |
| enter brief description if applicable |
| select behavior |
| enter brief description |

Omeh to submit a list for the dropdown menu

1. Patients medical status such as pregnancy, lactation, Renal problem, Heart problems, etc as captured previously under ‘Biodata section’ will now be moved to ‘Present & Past Medical Review’ section
2. Review of System (ROS). Standardized questions available as dropdown menu and, a column for comments will be inserted for each review areas.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Circulatory | | Respiratory | Neuromuscular | etc |  |  |  |
| Dropdown menu | Comments |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

1. Under Laboratory, a dropdown menu for microbiology investigations as well. There should be a column in front document result
2. Standardized diagnosis terminologies for selection. A space underneath to provide additional description where necessary. Blank spaces also to type in diagnosis not on the list. Omeh should generate the list

|  |
| --- |
| Diagnosis |
| select diagnosis (e.g., hypertension) |
| enter brief description if applicable (e.g., severe) |
| select behavior |
| enter brief description |

1. Disclaimer for using the ‘Medication planning table’ will be include in the SW in two phases.

In phase-1 (during roll out of the software), there will be a general statement that encourages the user to check other resources for a more comprehensive details if he/she feels there is a need for more

About 6mths-1year post roll out, additional disclaimer is inserted under the ‘Medication planning table’ in red font with a check box before the user can progress further. He/she will be check the box indicating that he /she realizes that the content of the table is not adequate and may chose to check other resources when there s a perceived need to do so

1. Logistics module should have 2 sub-modules. Sub -module A deals with inventory management at the store level. Procurement from suppliers are entered in here. Submodule B will deal with inventory management at the dispensing point. Data entry that the module will handle essentially will deal with issuance of drugs to clients and receipt of drugs from store or directly from the suppliers. It maintains balance of stock as well
2. Topical preparations will not have API contents. It is not desired that they are involved in the processing of drug interaction or ADR as expected with systemically administered drugs
3. After the Medication costing table, a comprehensive receipt that includes (a) medication related counsel from ‘medication planning table, (b) sales receipt of sold items and, (c) non-medication counseling is printed for the patient
4. Run the development with PCN, ACPN & PSN of pharm foundation
5. Prescription review for Drug Therapy Problems (will be built but not activated)
6. Medication alternatives in the ‘Medication planning table will be built into the software (Omeh to provide the list for each API)
7. Work load analysis will be built for desk top download only. It will not be an online version
8. Patient assessment section: The vital signs should be separated from the biodata
9. Laboratory investigation:

* Laboratory assessment:

Hormonal/Chemistry/Hematology/Microbiology

|  |  |  |
| --- | --- | --- |
| **Lab Investigations**  **(***Drop down menu with reference values***)** | **Result** | **Inference** |
| PCV (35-54% | 53%) | Normal/Abnormal/Positive/Negative |
|  |  |  |
|  |  |  |
|  |  |  |

1. Insert pregnancy status, and lactation status to the ‘Medication planning Table’ as shown below
2. **Medication planning table**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Medication alert (*hyperlinked to the section in all medication planning table to make it self-repeatin*g) | Kidney disease | | | Previous experience of severe ADR: | | | Previous experience of ineffective medication: | | |
| Current Medication Plan | ampiclox | Drug B | Drug C | | Drug E | Drug F *(up to Drug I)* | |  | Drug Interaction |
| *This feeds into the Global client data sheet* | Drug A (*dosage*) | Drug B  (*dosage*) | Drug C  (*dosage*) | | Drug E  (*dosage*) | Drug F *(up to Drug I)* | |  |  |
| ADRs |  |  |  | |  |  | |  | *From drug interaction checker (Is it possible to hybridize the software with ‘Drug Interaction Checker?”)* |
|  |  |  | |  |  | |  |
|  |  |  | |  |  | |  |
|  |  |  | |  |  | |  |
|  |  |  | |  |  | |  |
|  |  |  |  | |  |  | |  |
| Medication alternatives |  |  |  | |  |  | |  |
|  |  |  | |  |  | |  |
|  |  |  | |  |  | |  |
|  |  |  |  | |  |  | |  |
| Disease Contraindication |  |  |  | |  |  | |  |
|  |  |  |  | |  |  | |  |
| Pregnancy Status |  |  |  | |  |  | |  |
| Lactation Status |  |  |  | |  |  | |  |
| Customized counsel for each drug (dosage form specific) |  |  |  | |  |  | |  |

1. Summary of patient assessment: It must have data field to accept inputs from **ALL** the assessment areas namely (a) Vital signs; (b) Past & present medication Hx; (c) Past and present medical history; (d) FSH; (e) laboratory findings
2. Samuel to pick the costing table from the shared excel file as designed.
3. Omeh to submit the list of analysis to be don under ANALYTICS
4. PROCEDURE FOR A SUBSCRIBER TO UPLOAD HIS INVENTORY

STEP-1: Subscriber opens the ‘Drug Master List’ in the software

STEP-2: Check all the inventory he has that are captured in the master list

STEP-3: Download the template (list of items selected). This contains the drug formulations and empty data fields to be filed by him such as product manufacturer, quantity, expiry data, batch #, mark up, etc

STEP-4: The subscriber’s **drug** inventory that are not listed on the master list will be captured on a template titled ‘DRUGS NOT FOUND ONTHE MASTER LIST’ and send to the ‘USER ADMIN” provided email address.

STEP-5: Similarly, the non-drug products not seen on the master list will be captured on ‘NON-DRUG ITEMS NOT FOUND ONTHE MASTER LIST’ and emailed to USER ADMIN” provided email address

STEP-6: the USER ADMIN responsible officer verifies the ‘DRUGS NOT FOUND ONTHE MASTER LIST’ list received and when satisfied, they are uploaded into the software using appropriate template.

STEP-7: The USER ADMIN responsible officer upload the contents of the ‘NON-DRUG ITEMS NOT FOUND ONTHE MASTER LIST’ unto the software without need for verification other than spelling errors for known items

STEP-8: Email is sent by the USER ADMIN responsible officer to the subscriber that he could now enter the items.

1. Share with Samuel Stock categories and subcategories. See examples below:

Stock Category

Drug Non-Drug

Antibiotics; analgesics; antihypertensives, etc Consumables Non-consumables

1. Security of details of clients on the web:

* Clients’ identifiers (Names, phone number, address) must not be on the web. Once a client is registered by a pharmacy, the software is designed to send an email address to the pharmacist provided email address and an SMS to the client’s provided phone number. The message contains the client’s EMR
* Folder of the client during subsequent visits is only accessible by typing in the EMR #
* In the event that the pharmacy’s phone is stolen, he can manually generate his clients’ EMR details from the mails sent to him. The clients can as well provide the EMR details

MODULES/COMPARTMENT OF THE SOFTWARE

# PMM

***Biodata***

***Vital signs***

***Assessment***

***Diagnosis***

***Treatment outcomes*** & patient feedback via SMS. Note: there is also special patient feedback

emailing system set up to obtain consent for data to be used in a study. A form requesting for educational level and economic status is to be crafted for this purpose.

***Medication planning***

***Non-medication counseling***

# SALES

***Medication costing table***

***Printing invoice***

# INVENTORY

***Store***

***Sales point***

# ANALYTICS

***Charts***

***Workload analysis***

# DATA REPOSITORY



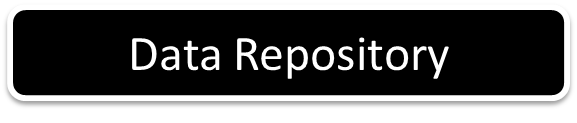
Schematic of the connections

**ANALYTICS**

***(Only receives from Repository)***

**PMM**

***(Sends data to, & receives as well from Repository)***



**SALES**

***(Sends data to, & receives as well from Repository)***

**INVENTORY**

***(Sends data to, & receives as well from Repository)***