# Hospital Health information management system GUIDELINES FOR THE USERS

# **Designed for**

# PRIMARY MEDICAL CARE INSTITUTIONS

Patient Registration, Clinical Data Entry, and Pharmacy Operations



#### AN INTERVENTION OF

THE PROJECT TO IMPROVE IMPLEMENTATION OF DIGITAL HEALTH INFORMATION MANAGEMENT SYSTEM FOR NCD IN PRIMARY MEDICAL CARE INSTITUTIONS IN MATARA DISTRICT.

## Introduction

## GUIDELINES FOR HOSPITAL HEALTH INFORMATION MANAGEMENT SYSTEM USERS

In an era defined by technological advancement, the Healthcare industry has experienced a paradigm shift with the integration of electronic medical records (EMR) and electronic health records (EHR). In Sri Lanka, this transformation was started with the Hospital Health Information Management System (HHIMS), an Electronic Medical Records System that has revolutionized primary healthcare settings in Primary Health care Institutions (PMCI).

A project was initiated with the aim of improving the implementation of a Digital Health Information Management System in selected PMCIs in the Matara District. One of the objectives was to improve the implementation of the digital health system in these selected institutions. As part of this initiative, a booklet containing user guidelines for HHIMS was prepared and delivered as one of the project's key deliverables. Developing a user guide to HHIMS is an essential resource to empower healthcare professionals in getting full use of HHIMS.

The HHIMS in Sri Lanka is a multifaceted digital health information management system in patient care. With functionalities ranging from patient registration to clinical data entry, pharmacy operations, and lab operations. This user guide will help healthcare practitioners to navigate through the essential steps in the usage of HHIMS.

This is specifically tailored to address the unique needs of health staff in PMCIs. It offers step-by-step instructions for utilizing HHIMS effectively in the areas of patient registration, clinical data entry, and pharmacy operations.

The expertise of industry professionals, healthcare administrators, and HHIMS specialists have been drawn upon to compile this user guide. Each module is crafted with pictorial guidance to ensure that you can easily use HHIMS in your daily healthcare operations.

## CONTENT

Module	Topic No.	Topic	Page No.
	1101	Introduction	2
1. PATIENT REGISTRATION	1	How to connect to HHIMS	4
	2	Registering a new patient	5
	3	Creating a patient visit	6
	4	Patient's overview	7
2. CLINICAL DATA ENTRY	5	Record OPD Visit information	8
	6	Ordering a laboratory investigation	8
	7	Issuing a Prescription	10
	8	Ordering a clinical or surgical procedure	12
	9	Recording allergies	13
	10	Recording the history of the patient	15
	11	Recording the examination findings	15
	12	Ordering an injection	16
	13	Referral management	17
3. PHARMACY OPERATIONS	14	Dispensing Drugs	18
	15	Pharmacy Statistics	19

## 1. How to connect to HHIMS

- 1) Turn on your computer and open a web browser.
- 2) In the browser's address bar, type the server IP address that was provided to you, and then press the enter key.
- 3) Your system manager will give you a user-name and password. Think of these as your personal signature that proves it's really you using the computer. So, always use your own user-name, and remember to log out when you're done using the computer. This is how things are usually done with computers. (Figure 1)
- 4) You can move from one box to the next by pressing the tab key on your keyboard.
- 5) Select your workstation E.g., OPD, Clinic
- 6) On the login screen, there are boxes where you need to enter your user-name and password. After filling them in, click the blue login button.

HHIMS Version 3.0 × +			• - • ×
← → C ▲ Not secure   http:// these loss/index	.php/login	Q	\star 🐵 🛪 💿 E
🔢 Apps 🚹 Daily worklist 💾 Jaffna 💾 chchi 🖡	Vavuniya 🙌 Mannar 🙌 Mullaitivu 🙌 Kaluwa	nchikudy 🚼 Hospital details 🙀 Trinco 😵 Ceylinco 🐵 Internet Services	» 🔠 Reading list
			Â
Enter your user IP		Enter Name of the Institution	
	PMCU		
	Login Makadura		
		Enter User Name	
	User name		
	Password		
	OPD ~	Enter Password	
	GFB T		
	Log in		
		Fast	
What is HHIMS		From a single-user laptop in a doctor's practice to a multi-user network in a large hospital	
HHIMS Foss is a Free and Open Source Hospital Health Informatio system, a pharmacy management system and a laboratory information	tion system. The system has been developed by the ICT	faster than you can write, and show it on the screen quicker than you can find the patient's User friendly	3 old card.
Agency of Sri Lanka in partnership with the Ministry of Health, Sri L equally at home in the out-patient clinic, the ward, the pharmacy an		<ul> <li>Oser menuty</li> <li>The secret of the system is simplicity. After the half-day training course, even new comp</li> </ul>	uter users are able to enter
reports and statistics.		patient information, and choosing from lists such as diseases, drugs or villages takes entry.	
		Affordable	
		The software license is free. The only costs are for hardware, installation and training.	



7) Add users such as Admin, Doctor, Lab. Tec., Nurse, Pharmacist, ECG Tec. Etc. (Figure 2)

Home Preferences New Patient	Search Appoi	ntments Pharmacy	Laboratory	Procedure Room	Clinic Wa	ds Rep	orts Admission Refers	Notifications	Clinic Refers ECC	B Police Registr	DICON	Log Ou
System Tables	Complaints	Add new									0	
Add/Edit Users	COMPID	ICPCCode		Name			ICDCode	Remar	ks isNotify	Active		
Add/Edit Group		ICFCC006		Hame			ICDCODE	Kennar		Active	_	
Add/Edit Post						_ L_		L				
Add/Edit Occupation	867			pain right side					0 1			
Permission allocation	866		forearm	pain right side					0 1			
Add/Edit Visit Type	865		abscess	in mouth					0 1			
Add/Edit Workstation Type	864		menorrh	agia					0 1			
Add/Edit OPD Room	863		cough sp	utum burning sensa	tion of abdome	n			0 1			
Add/Edit Procedure Room	862		whitish d	ischarge					0 1			
Add/Edit Pharm. counter	861		stomach	burning					0 1			
Add/Edit Menu	860		body act	es following accider	nt				0 1			
Add/Edit Institutions	859		MSP						0 1			
Add/Edit Clinic	858		burning						0 1			

Figure 2: Home page of user group

## 2. Registering a new patient

#### 1) Registration Process

- Before a patient can receive care or visit the clinic, they must be registered.
- The system assigns a unique number called PHN (Personal Health Number) to each patient for identification.
- PHN will be visible on all screens and printed forms.

#### 2) Avoid Duplicate Registration

- $\circ$   $\;$  Do not register a patient more than once.
- If a patient is already registered, their details will appear on the right side of the screen when you type their name.
- $_{\odot}$   $\,$  Always check these details before creating a new entry.

## 3) Field Explanations

When you register a new patient following information should be submitted. (Table
 1)

Table 1: Information needed in new patient registration

	Factor	Guidance to fill
1	National ID	The patient's national identification number.
2	Title	The form of address used in official documents.
3	Name	The patient's first name.
4	Other Name/Initials	Any other names or initials used by the patient.
5	Gender	Type 'F' for female or 'M' for male.

6	Civil Status	Choose from the drop-down list.
7	Ethnicity/Race	Choose from the drop-down list.
8	Blood Group	Select the patient's blood group from the
		drop-down list.
9	Age	Enter the patient's age
10	Date of Birth	Enter the date in YYYY/MM/DD format. If
		the exact date is unknown, enter the age.
11	Contact Telephone	Enter the patient's home or mobile phone
		number.
12	Address 1 and Address 2	Enter the patient's standard addresses.
13	Village	Type a few letters to look up villages,
		District, Division, and GN Division.
14	Guardian Name	Enter the name of the patient's guardian.
15	Guardian Relationship	If the guardian's name is entered, specify
		their relationship to the patient.
16	Remarks	Enter any additional patient information.

#### 4) Important Notes

- $\circ~$  Avoid entering both Age and Date of Birth; choose one.
- You can store patient information such as their home or mobile phone number, addresses, and guardian details.

## 5) Saving and Cancelling

- Click "Save" to store the new patient record or any changes made to an existing record.
- $\circ$   $\,$  Click "Cancel" to exit the screen without saving changes.

## 3. Creating a patient visit

In HHIMS, doctors can easily pick their seat in the system. Here's how it works:

- 1. When a doctor logs in at an OPD workstation, they will see a welcome page.
- 2. On this page, the doctor can choose their assigned OPD room.

- Once they've selected their room, they can begin calling patients right away by clicking the "Start calling patients" button or by pressing CTRL+F.
- 4. If they choose the latter, a small search box will appear. The doctor can then scan a patient's health card using a barcode scanner.
- 5. After scanning, the system will take them to the patient's overview screen.

Commands	Patient overview							
Create a OPD Visit	Full N	ame:	Mr. D.T. So	marathna		PHN:	0267-011731-2	Ed
Give an Admission	Gende	HT.	Male	maratima		NIC:		
Clinic management*	Date of	f birth:	12/09/1979	0		Address:	NI- 00/00	
Give an appointment	Age:		44v	0			No. 22/66 Kakanadura	
H Add History			Married				Matara	
Add Allergy	Civil S		D.J. Samar	athi			iviala a	
Add Examination		ian info:	041xxxxxx					
Attach File	Conta	ct Numbers:	04 188888			Ethnicity / Race:		
Nursing notes								
Prints	Previous OPD visits				History			
Print patient slip	2021-06-03 OPD	99999		Mr.Nisanthan				
Print patient card	2021-06-04 OPD	Fever.		Mr.Nisanthan	Allergies			c
Print patient summary	2021-05-27 Clinic	Fever,		Mr.Nisanthan				
Print nursing notes	2021-03-04 OPD	Fever.		Mr.Nisanthan	Medication h	istory		C
	2021-03-03 OPD		ever/heart disease.	Mr.Nisanthan	2019-08-28 B	B cream multidose	For 3 days	1 nocte
Generic Modules	2020-07-03 OPD	Fever.		Mr.Nisanthan	Latest lab re	elte		c
	2020-01-02 OPD		discussion rfe/demand					
	2019-12-06 OPD	Fever,	discussion nerdemand	Mr.Nisanthan	2021-08-04	BIOCHEMISTRY	Pending	
	2019-10-15 OPD	Fever,		Mr.Nisanthan	2021-06-04	BIOCHEMISTRY	Pending	
	2019-10-15 OPD	Fever,		Mr.Nisanthan	2021-05-27	FSH,LH,Prolactin	Pending	
	2019-08-28 0PD	Fever,		Mr.Nisanthan	2021-03-04	Full blood count	Updated	
	Previous admissions			6	2021-03-04	S.Cre, S.Cho,	Available	
					2021-03-04	Full blood count	Updated	
	Clinic visits				2021-02-18	Full blood count	Available	
	2021-06-04 13:31:22 VP/0	PD Abr	normal urine test NOS,	Mr. Nisanthan Opened	Patient nursi	ing notes		c
	2020-07-04 10:35:48 MED	ICAL CLINIC B Fee	ver,	Mr. Nisanthan Opener				
	Examinations			6		d to the patient record		6
	Picture Archiving and Co	mmunication Syst	tem Digital Results		Injections			c
	Rabies Details				Injury Survei	illance		
					Trauma			6

Figure 3: Patient overview screen.

## 4. Patient overview

This section provides a complete record of a patient's interactions with the hospital. Doctors can access detailed information about the patient, including personal data, medical history, allergies, past OPD visits, previous admissions, clinic visits, and injection details. (Figure 3) Doctors can make better decisions by reviewing the patient's medical history. To see more about a previous visit, just click on the relevant row. A new screen will open up with more details about that specific visit.

## 5. Record OPD Visit information

To document a patient's visit, use the 'create an OPD visit' command found on the left side of the patient overview page.(Figure 4) When creating a visit, doctors have various options all in one place, including prescribing medications. They can also choose things like lab tests, injections, treatments, EGC, DICOM, or referring the patient to a clinic or for admission. Doctors can even note any food or drug allergies for that patient.

PD visit								
*Date and time of visit	2021-10-04 08:26:08							
* Onset Date	2020-12-11							
*Doctor	Mr.Nisanthan	Mr.Nisanthan Y						
*Visit Type	OPD	OPD 🗸						
*Complaint / Injury	Fever,	Fever,						
ICD								
۲LI	⊖Yes <sup>●</sup> No							
Remarks	Any remarks							
	Fields marked with an as	sterisk must be filled						
	H Save Cancel							
	Lab order	Prescription	Treatment					
	Allergies	History	Examination					
	Give injection	Refer to admission	Refer to clinic					
	ECG	DICOM	Rabies					
	Injury Surveilance	Refer to JMO						

Figure 4: OPD visit

## 6. Ordering laboratory Investigations

On this screen, doctors can easily order lab tests for a patient's OPD visit. They can select tests from a dropdown list and even unselect any tests they don't want to order. When they're ready, just click the 'create order' button. (Figure 5)

omplaint / Injuries : Teeth/gum disease,	Onset Date : 2021-10-04		Visit type : OPD		
	Doctor : Mr.Akila Wijesingl	he			
order Date: 2021-10-04	Priority:		Test group:		
	Normal	~	MULTIPLE BIOCHEMIS	STRY TESTS	~
	Back to visit		Select BIOCHEMISTRY Corona		
b ordered for this visit	Multiple Lab Orders		ECG FBS mg % Full blood count Lipid profile		
b ordered for this visit Available tests	Multiple Lab Orders		FBS mg % Full blood count	TRY TESTS	
Available tests           Serum Electrolytes         MUI	LTIPLE BIOCHEMISTRY TEST	-	FBS mg % Full blood count Lipid profile MULTIPLE BIOCHEMIS PPBS mg % Urine Sugar		
Available tests Serum Electrolytes MUI CRP MUI	LTIPLE BIOCHEMISTRY TEST	S	FBS mg % Full blood count Lipid profile MULTIPLE BIOCHEMIS PPBS mg % Urine Sugar B	acteriology	
Available tests Serum Electrolytes MUI CRP MUI test4 MUI	LTIPLE BIOCHEMISTRY TEST LTIPLE BIOCHEMISTRY TEST LTIPLE BIOCHEMISTRY TEST	'S 'S	FBS mg % Full blood count Lipid profile MULTIPLE BIOCHEMIS PPBS mg % Urine Sugar B B	acteriology iochemistry	
Available tests       Serum Electrolytes     MUI       _CRP     MUI       test4     MUI	LTIPLE BIOCHEMISTRY TEST	'S 'S	FBS mg % Full blood count Lipid profile MULTIPLE BIOCHEMIS PPBS mg % Urine Sugar B B	acteriology	

Figure 5: ordering Laboratory Investigations

You can also order multiple lab tests by clicking the 'Multiple Lab Orders' button. When the new screen appears, simply hold down the 'Ctrl' key on your keyboard while selecting the tests you want.

Home Preferences Search Appo	intments Clinic Reports Admission Refers Notifications Clinic Refers Registry Log Out
Mr. TEST / Male / 39Yrs 5Mths	9Dys / / Jaffna 0267-011731-2
♣New Lab Order(s)	
* OrderDate	2021-10-04 06:38:25
* Lab Order	ESR FBS Full blood count hCG PPBS RBS S.Cre S.Cre, S.Cho, Total Cholesterol Urine Full Report
Priority	Normal
Remarks	Any Remarks Multiple tests can be selected using Ctrl
	Fields marked with an asterisk must be filled

## 7. Issuing a Prescription

There are 3 options in selecting drugs

- a) Select by name
- b) Select by favorite drugs list
- c) Select by favorite group
- a) Select by Name

This is the usual way doctors prescribe medications. When a doctor clicks on 'Prescription,' this screen appears. If the doctor chooses a drug by its name, some windows will pop up on the right side of the drug. (Figure 6)

For each drug, doctors can pick the dose, how often it should be taken, and for how long. Then, they need to click 'Add' to put them on the prescription.

The default values for these drugs are shown in gray, and these are set by the pharmacist in the clinical drug table. Doctors can see all the added drugs on the screen and remove them by clicking the 'Delete' option

Prescription will use OPD stock								
Complaint / Injuries : Fever,	On	set Date : 202	0-12-11	Visit t	ype : OPD			
Status : Draft	Do	ctor : Mr.Nisar	nthan	Presc	ribe Date : 2021-	10-04 19:22:20		
Name	Dose		Frequency		Period		Dose Comment	Delete Print
Amoxycillin syrup-Liquid-125mg/5ml	5ml	~	tds		✓ For 3 da		-	8
BB cream multidose-Other- Back to visit	1	~	nocte		✓ For 3 da	ays 🗸	-	Print
Name Amoxycillin-250mg-Capsule-			Dose 2	Frequency tds	Dose Comment	For 3 days	_	
Acyclovir-200mg-Tablet-		<b>^</b>	1/4	Once a day 🔺	After Meal ^	For 1 day	-	
amitryptyline-25mg-Tablet-		Â	1/3	bd	Before Mea	For 2 days	`	
amitryptyline-25mg-Tablet- Amoxicillin-125mg-Tablet-		Î						
amitryptyline-25mg-Tablet- Amoxicillin-125mg-Tablet- Amoxycillin-250mg-Capsule-		Î	1/3 1/2	bd tds qds nocte	Before Mea	For 2 days For 3 days For 4 days For 5 Days		
amitryptyline-25mg-Tablet- Amoxicillin-125mg-Tablet- Amoxycillin-250mg-Capsule- Amoxycillin-500mg-Capsule-			1/3 1/2 2/3 3/4 1	bd tds qds nocte STAT	Before Mea	For 2 days For 3 days For 4 days For 5 Days For 6 days		
amitryptyline-25mg-Tablet- Amoxicillin-125mg-Tablet- Amoxycillin-250mg-Capsule- Amoxycillin-500mg-Capsule- Amoxycillin syrup-125mg/5ml-L			1/3 1/2 2/3 3/4 1 1 1/4	bd tds qds nocte STAT SOS (for Hig	Before Mea	For 2 days For 3 days For 4 days For 5 Days For 6 days For 1 week	+ADD	
amitryptyline-25mg-Tablet- Amoxicillin-125mg-Tablet- Amoxycillin-250mg-Capsule- Amoxycillin-500mg-Capsule- Amoxycillin syrup-125mg/5ml-L amoxycyllin-125mg-Tablet-	.iquid-		1/3 1/2 2/3 3/4 1	bd tds qds nocte STAT	Before Mea	For 2 days For 3 days For 4 days For 5 Days For 6 days	+ADD	
amitryptyline-25mg-Tablet- Amoxicillin-125mg-Tablet- Amoxycillin-250mg-Capsule- Amoxycillin-500mg-Capsule- Amoxycillin syrup-125mg/5ml-L amoxycyllin-125mg-Tablet- Azithromycin-250mg/5ml-Liquid	.iquid-		1/3 1/2 2/3 3/4 1 1 1/4 1 1/2	bd tds qds nocte STAT SOS (for Hig STAT & REP	Before Mea	For 2 days For 3 days For 4 days For 5 Days For 6 days For 1 week For 10 day: For 2 week For 3 week	+ADD	
amitryptyline-25mg-Tablet- Amoxicillin-125mg-Tablet- Amoxycillin-250mg-Capsule- Amoxycillin-500mg-Capsule- Amoxycillin syrup-125mg/5ml-L amoxycyllin-125mg-Tablet- Azithromycin-250mg/5ml-Liquid azithromycin-250mg-Tablet-	.iquid-		1/3 1/2 2/3 3/4 1 1 1/4 1 1/2 1 3/4 2 2 1/4	bd tds qds nocte STAT SOS (for Hig STAT & REP SOS 5 H EOD	Before Mea	For 2 days For 3 days For 4 days For 5 Days For 6 days For 1 week For 10 day: For 2 week For 3 week For 1 mont	+ADD	
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amitryptyline-25mg-Tablet- Amoxicillin-125mg-Tablet- Amoxycillin-250mg-Capsule- Amoxycillin-500mg-Capsule- Amoxycillin syrup-125mg/5ml-L amoxycyllin-125mg-Tablet- Azithromycin-250mg/5ml-Liquid azithromycin-250mg-Tablet- azithromycin-250mg-Tablet- Azithromycin Syrup-200mg/5ml	.iquid- J- I-Liquid-		1/3 1/2 2/3 3/4 1 1 1/4 1 1/2 1 3/4 2 2 1/4 2 1/2	bd tds qds nocte STAT SOS (for Hig STAT & REP SOS 5 H EOD mane	Before Mea	For 2 days For 3 days For 4 days For 5 Days For 6 days For 1 week For 10 day: For 2 week For 3 week For 1 mont For 5 week	+ADD	

Figure 6: Select by Name

#### b) Select by favorite drugs list

To create a list of your favorite drugs, go to the 'Preference' menu and select the drugs you want to appear in your 'My Favorites' section when prescribing. These selected favorite drugs won't show up under the general drug list. This way, doctors can save time by easily choosing drugs from their favorite list instead of going through the entire list of available drugs. (Figure 7)

linical Tables			nic Refers Registry Log Out		
	My Drug Management				
omplaints	Type To Filter				
ly Drug List					
	Add to Drug Name Favourite				
pplication Tables	Acyclovir-Tab	let-800mg			
D 10	ACYCIO				
MR	Allopurinol-Ta				
lage	amitryptyline-				
	Amlodipine-Ta	ablet-5mg		for the second second	
		apsule-250mg	Select drugs for the	tavorite group	
	Amoxycillin-C	apsule-500mg			
		yrup-Liquid-125mg/5ml			
	amoxycyllin-T				
	atenolol-Table				
		Liquid-250mg/5ml Tablet 250mg			
		Admission Refers Notifications Clim		000003-8	-0
Home Preferences Search Ap Mrs. Ajantha / male / Prescription will use OPD stock	/ 3Yrs 1Mths 25Dys / / Mar	· · · · · ·		000003-8 Allergies	
Mrs. Ajantha / male / Prescription will use OPD stock	/ 3Yrs 1Mths 25Dys / / Mar	nmunai South and E	0357-		
Mrs. Ajantha / male / Prescription will use OPD stock	/ 3Yrs 1Mths 25Dys / / Mar	· · · · · ·		Allergies - NO DATA -	_
Mrs. Ajantha /male/	/ 3Yrs 1Mths 25Dys / / Mar	nmunai South and E Onset Date : 2020-12-11	0357-	Allergies - NO DATA - Commands	_
Ars. Ajantha / male / Prescription will use OPD stock mplaint / Injuries : Fever,	/ 3Yrs 1Mths 25Dys / / Mar	Onset Date : 2020-12-11 Doctor : Mr.Nisenthan	0357- Visit type : OPD	Allergies - NO DATA - Commands 2 Patient overview	
Irs. Ajantha / male / rescription will use OPD stock mplaint / Injuries : Fever, k to visit	/ 3Yrs 1Mths 25Dys / / Mar k	Onset Date : 2020-12-11 Doctor : Mr.Nisenthan	0357-	Allergies - NO DATA - Commands ▲ Patient overview ▲ Refer to admission	
Irs. Ajantha / male/ rescription will use OPD stock mplaint / Injuries : Fever, k to visit y name My Favourite Grou	/ 3Yrs 1Mths 25Dys / / Mar k	Onset Date : 2020-12-11 Doctor : Mr.Nisanthan Selected drugs	0357- Visit type : OPD	Allergies - NO DATA - Commands Patient overview Refer to admission Refer to Clinic	
Irs. Ajantha / male / rescription will use OPD stock mplaint / Injuries : Fever, k to visit y name My Favourite Grou by Favourite	/ 3Yrs 1Mths 25Dys / / Mar k	Onset Date : 2020-12-11 Doctor : Mr.Nisanthan Selected drugs	0357- Visit type : OPD s will appear here	Allergies - NO DATA - Commands 2 Patient overview 2 Refer to admission 2 Refer to Clinic H Add History	
Irs. Ajantha / male / rescription will use OPD stock mplaint / Injuries : Fever, k to visit y name My Favourite Grou by Favourite Acyclovir-800mg-Tablet	/ 3Yrs 1Mths 25Dys / / Mar k	Acyclovir-200mg-Ta	0357- Visit type : OPD s will appear here	Allergies - NO DATA - Commands Patient overview Refer to admission Refer to Clinic H Add History Add Allergy	
Irs. Ajantha / male / rescription will use OPD stock mplaint / Injuries : Fever, kto visit y name My Favourite Grou y Favourite Acyclovir-800mg-Tablet Amlodipine-5mg-Tablet	/ 3Yrs 1Mths 25Dys / / Mar k	Onset Date : 2020-12-11 Doctor : Mr.Nisenthen Selected drugs round Acyclovir-200mg-Ta amitryptyline-25mg-	Usit type : OPD S will appear here ablet- Tablet-	Allergies - NO DATA - Commands ▲ Patient overview ▲ Refer to admission ▲ Refer to Clinic H Add History ▲ Add Allergy ④ Add Examination	
Irs. Ajantha / male / rescription will use OPD stock mplaint / Injuries : Fever, kto visit y name My Favourite Grou by Favourite Acyclovir-800mg-Tablet Amlodipine-5mg-Tablet	/ 3Yrs 1Mths 25Dys / / Mar k	Onset Date : 2020-12-11 Doctor : Mr.Nisanthan Selected drugs Acyclovir-200mg-Ta amitryptyline-25mg- Amoxicillin-125mg-	0357- Visit type : OPD s will appear here ablet- -Tablet- Tablet- Tablet-	Allergies • NO DATA - Commands • Patient overview • Refer to admission • Refer to Clinic H Add History • Add Allergy • Add Allergy • Add Allergy	
Irs. Ajantha / male / rescription will use OPD stock mplaint / Injuries : Fever, k to visit y name My Favourite Grou by Favourite Acyclovir-800mg-Tablet Amlodripine-5mg-Tablet	/ 3Yrs 1Mths 25Dys / / Mar k	Acyclovir-200mg-Ta Amoxicilin-125mg- Amoxicilin-125mg- Amoxicilin-250mg-	0357- Visit type : OPD s will appear here	Allergies - NO DATA - Commands Patient overview Refer to admission Refer to Clinic H Add History Add Adlergy C Add Examination all Order ECG New Order Lab	
Ars. Ajantha / male / rescription will use OPD stock mplaint / Injuries : Fever, ktovisit by name My Favourite Grou ty Favourite Acyclovir-800mg-Tablet Amiodipine-5mg-Tablet	/ 3Yrs 1Mths 25Dys / / Mar k	Onset Date : 2020-12-11 Doctor : Mr.Nisenthen Selected drugs Acyclovir-200mg-Ta Amoxycillin-25mg- Amoxycillin-50mg Amoxycillin-500mg	Usit type : OPD S will appear here bblet- Tablet- Tablet- Capsule- g-Capsule-	Allergies - NO DATA - Commands Patient overview Refer to admission Refer to Clinic H Add History Add Allergy C Add Examination all Order ECG New Order Lab III Treatments	
Mrs. Ajantha / male / Prescription will use OPD stock mplaint / Injuries : Fever, ck to visit	/ 3Yrs 1Mths 25Dys / / Mar k	Onset Date : 2020-12-11 Doctor : Mr.Nisanthan Selected drugs Acyclovir-200mg-Ta amitryptyline-25mg- Amoxycillin-250mg- Amoxycillin syrup-1	Visit type : OPD S will appear here ablet- Tablet- Capsule- g-Capsule- g-Capsule- 25mg/5ml-Liquid-	Allergies - NO DATA - Commands ▲ Patient overview ▲ Refer to admission ▲ Refer to Clinic H Add History ▲ Add Allergy ④ New Order Lab 圖 下reatments	
Irs. Ajantha / male / rescription will use OPD stock mplaint / Injuries : Fever, kto visit y name My Favourite Grou by Favourite Acyclovir-800mg-Tablet Amlodipine-5mg-Tablet	/ 3Yrs 1Mths 25Dys / / Mar k	Onset Date : 2020-12-11 Doctor : Mr.Nisenthen Selected drugs Acyclovir-200mg-Ta Amoxycillin-25mg- Amoxycillin-50mg Amoxycillin-500mg	0357- Visit type : OPD S will appear here ablet- Tablet- Tablet- Capsule- g-Capsule- 25mg/5ml-Liquid- Tablet- Tablet-	Allergies - NO DATA - Commands Patient overview Refer to admission Refer to Clinic H Add History Add Allergy C Add Examination all Order ECG New Order Lab III Treatments	

Figure 7: Selecting from favorite drugs list

#### c) Select by favorite group

HHIMS provides an easy way to prescribe drugs. Doctors can make it even more convenient by creating 'My Favorite Groups' for each patient's condition when they create a visit.

When a doctor clicks 'Add' next to 'List to My Favorite,' a little window pops up where they can give a name to the group. Clicking this button creates the favorite group (Figure 8)

Home Preferences Search Appointment	s Clinic Reports Ad	mission Refers Notifications	Clinic Refers Registry Log Out	
Mr. Samantha '/ male / 3Yrs 1Mt	hs 25Dys / / Manmun	ai South and E		0357-000003-8
Prescription will use OPD stock				
Complaint / Injuries : Fever,	Onset Date : 20	20-12-11	Visit type : OPD	
Status : Draft	Doctor : Mr.Nisa	anthan	Prescribe Date : 2021-10-04 19:22:2	0
# Name	Dose	Frequency	Period	Dose Delete Print
1 Amoxycillin syrup-Liquid-125mg/5ml	5ml 🗸	tds	✓ For 3 days ✓	- 🛞 🗆
2 BB cream multidose-Other-	1 ~	nocte	✓ For 3 days ✓	- 🛛 🖸
	avorite gro	up here		Print Send to pharmacy Discard
By name My Favourite Group 3			+	Add above list to My favourites
My Favourite		Name		
Acyclovir-800mg-Tablet Amlodipine-5mg-Tablet		<ul> <li>Acyclovir-200mg amitrvptvline-25</li> </ul>		A

Figure 8: Selection by favorite group

Home Preferences Search Appointments Prescription will use OPD stock	s Clinic Reports Admissi	10.29.4.98 says Name of the list? Fever,	Doctor Test as	orite group name
	Onset Date : 2020-12           Doctor : Mr.Nisantha           Dose         Free           5ml         v           1         v	quency Period	Cancel Dose Comment -	- NO DATA - Commands Patient overview Refer to admission Refer to Clinic H Add History Add Allergy C Add Examination
By name My Favourite Group 3 My Favourite Acyclovir-800mg-Tablet Amlodipine-5mg-Tablet atended 50mg Tablet	Â	Name Acyclovir-200mg-Tablet- amitryptyline-25mg-Tablet-	Send to pharmacy Discard + Add above list to My favourites	ul Order ECG ♦ New Order Lab Treatments ✓ Order an Injection © DICOM Ø Nursing notes

Figure 9: favorite group Name

Once the group is created, you can see it under 'My Favorite Groups.' It's a good idea to give the group a name that relates to the drug and the patient's condition. If another patient comes in with the same condition, you can easily prescribe all the drugs in that group by selecting the group name and then clicking 'Prescribe All.' This can help reduce patient waiting times. (Figure 10)

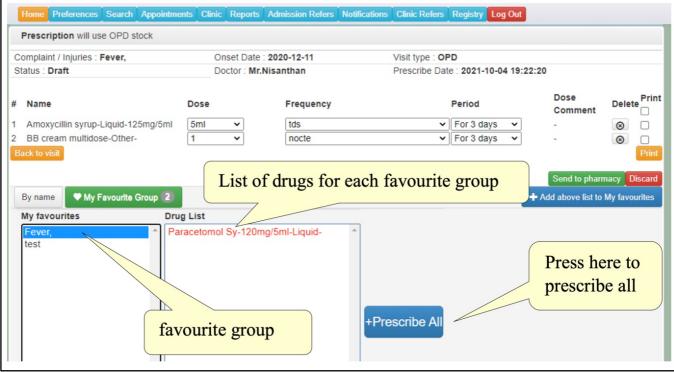


Figure 10: Favorite group

## 8. Ordering a Clinical or Surgical Procedure

To see all the active treatment procedure, click on the 'Treatment' button. You can choose the one you need and send to the procedure room. If you want to select more than one treatment, hold down the 'Ctrl' key. To add new treatments, go to the 'Preference' menu and find the 'treatment table' under the 'clinical table'. (Figure 11)

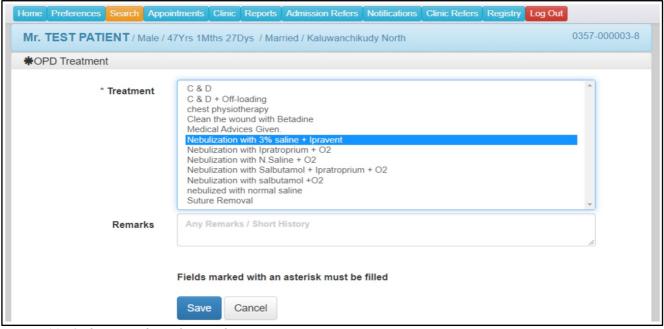


Figure 11: Ordering a clinical procedure

## 9. Recording Allergies

Patient's allergies can be added to his/her record to pop up in the screen. Details of allergies which may be related food or drug can be added. In order to popup an alert on the screens, you should select status as current. (Table 12)

Home Preferences Search Appoi	ntments Clinic Reports	Admission Refers	Notifications Clinic Refers	Registry Log Out	
Mr. TEST PATIENT / Male / 4	7Yrs 1Mths 27Dys / Ma	rried / Kaluwanchiku	dy North		0357-000003-8
Allergy					
^ Allergy	Allergy				
Status	●Current ○Past				
Remarks	Any remarks				11
	Fields marked with an Save Cancel	n asterisk must be	filled		

Figure 12: Recording the allergies of the patient

If the doctor tries to prescribe a drug that's in the patient's allergy record, a warning message will pop up. This way, the doctor can choose a different drug to add to the prescription. (Table 13)

Home Preferences Search Appointments	Reports OPD Refers Notifications Clinic Refers	Log Out	
Ms.ABC XYZ / Female / 35Yrs 3Mths 4Dy	s / Single / Colombo	0000-000475-4	
Prescription will use Counter1 stock			Allergies
omplaint / Injuries : Fever,	Onset Date : 2017-08-31	Visit type : OPD New	Amoxcillin Current
	Doctor : Dr.Abc		500mg
ick to visit			Commands
Allergy	Warning		
Amoxcillin 500mg amitryptyline-Tab	s Amoxcillin 500mg in the list o	fallergies	

Figure 13: Allergy worming

## **10.** Recording the History of the patient

You can document the patient's history here. If you know the exact date, you can enter it. You can also include the relevant ICD code. (Table 14)

Home Preferences Search	Appointments	Clinic Reports	Admission Refers	Notifications	Clinic Refers	Registry	Log Out	
Mr. TEST PATIENT / M	ale / 47Yrs 1M	ths 27Dys / Mar	rried / Kaluwanchik	udy North				0357-000003-8
History								
Date / Age / Ye	ar Date	or Age or period	1					
IC	D							
Remar	ks Any r	remarks						
	Fields		n asterisk must be	ə filled				

Figure 14:Recording the History of the patient

## 11. Recording the examination findings

During the visit, the doctor can input examination findings General examination, cardiovascular system including blood pressure, Respiratory system examination findings, Neurological examination findings, Abdominal examination findings, and more. (Figure 15)

Home Preferences Search Appointm	ents Clinic Reports Admission Refers Notifications Clinic Refers Registry Log Out	
		57-000003-8
Examination		
* Examination date	2021-10-05	
Weight in Kg	1	j l
Height in m		
BMI	Calculate	
BP	ÓI	
General Examination		
Neck		
Abdomen		
Abdolleti		4
Neurological Findings		
Temperature	Su	
Remarks		
		6
	Fields marked with an asterisk must be filled	
	Save Cancel	

Figure 15: Recording the Examination findings

## 12. Ordering an injection

You can order injections by using the 'Give an Injection' command. If you need to add multiple injections, just hold down the 'Ctrl' key on your keyboard. Once you select and save the injection, it will appear in the Procedure room for the nurses to administer. To add new injections, go to the 'Preference' menu and find the 'injection table' under the 'clinical table'. (Figure 16)

Home Preferences Search App	ointments Clinic Reports Admission Refers Notifications Clinic Refers Registry	Log Out
Mr. TEST PATIENT / Male /	47Yrs 1Mths 27Dys / Married / Kaluwanchikudy North	0357-000003-8
♣OPD Patient injection order		
* Injection	ARV Inj. 0.1ml (each) I/D to both deltoids stat - 0.1ml - B12 1ml IM Injection EOD for 3 days B12 1ml IM Injection EOD for 5 days IM - Tetanus Toxoid (FULL COURSE) IM IM - Tetanus Toxoid (SINGLE COURSE) - 0.5ml - IV - Hydrocortisone 100mg - 100mg - IV - Hydrocortisone 200mg - 200mg - IV IV - Hydrocortisone 400mg - 400mg - IV	*
Status	Pending	~
remarks	Any remarks	4
	Fields marked with an asterisk must be filled	

Figure 16: Ordering Injections

## 13. Referral Management through HHIMS

In certain situations, an OPD doctor might need to send a patient to a clinic or for admission. Likewise, a clinic doctor may need to refer a patient to another clinic or for admission. It's important to record these details in the patient's record.

HHIMS makes it easy to do this by using the 'Refer to admission' or 'Refer to clinic' command. After the referral is made, the system will show this on the screen, allowing for further processing. (Figure 17)

Full Name: Gender: Date of birth: Age: Civil Status: Guardian info: Contact Numbers:	Mr. D.T. Somarathna Male 12/09/1979 44y Married D.J. Samanthi 041xxxxxx	HIN: NIC: Address:	0357-000003-8 No. 22/66 Kakanadura Matara
Refering OPD information			
Type: OPD Date & Tim	e of visit: 2021-10-05 07:06:19	Onset Date: 2020-06-1	19 Doctor: Mr.Nisanthan
Complaint: Fever, Notify: NO		ICD:	
Remarks:		CreatedBy: Mr. Nisant	han Last Access By: Mr. Nisanthan
Refering Clinic Information			
Date & Time of Visit:		Onset Date:	
2021-10-05 07:09:53		2020-06-19	
Complaint:		Doctor:	
Fever,		Mr.Nisanthan	~
Clinic:			
Select ~			
Select			
ANC			
Medical Clinic			
Pediatric Clinic			1
Surgical Clinic			
	Refer	to Clinic	

Figure 17: Referral Management through the system

# 14. Dispensing drugs

## 1. Selection of the Department

- Pharmacists should choose their department as either OPD or Clinic when logging into the system.
   (Figure 18)
- The system will then display relevant information specific to the selected department.

User name	
Password	
OPD	~
OPD Clinic Inward	

10.29.4.98 say				
You are logged	is as 'Pharm'. rected to 'Prescrip	tion' Patient (	DHN7	
lou will be real	rected to Prescrip	Alon Patienti		
I				
			ОК	Cancel

Figure 18': choose the department and enter the PHN

#### 2. Dispensing Drugs

- Upon logging into HHIMS, a screen will appear with options for patient card handling.
- Pharmacists can either scan the patient card using a barcode scanner or manually enter the Patient Health Number (PHN). (Figure 18)
- The system will then redirect to a page displaying the ordered prescriptions for that patient.

## 3. Prescription Details

- Pharmacists can view the ordered drugs along with their respective quantities to be dispensed.
- Additionally, they can access details of any complaints entered by the doctor.

## 4. Dispensing Process

 If the drugs are ready to be dispensed to the patient, the pharmacist can simply click on the "Dispense" button to proceed to the next prescription.

Pharmacy Log Out Mr. TEST PATIENT DE	NTAL / Male / 2	20Yrs 11	Mths 6Dys / M	arried / Moc	or Street			0361-	014149-5	Allerg		Current	
OPD Prescription dispens	ing OPD stock in u	se								Order	s for th	nis Visit	
Complaint / Injuries : Cough, Status : Pending			e : 2021-01-09 Nishath Moha	imed		/isit type : OP Prescribe Date	D e : 2021-01-09 1	3:24:10				Prescription C Prescription	
# Name           1         Acetazolamide-250mg	Formulation Tablet	Dose 1	Frequency bd	Dose Cor	mment •	Period For 3 days	Quantity 6	0 in stock	Print	JMO	Referra	ls	
			Dispense	Print	Back to lis	t							

Figure 18: Dispensing the drugs

#### 5. Patient Information

• Supplementary patient information will be available on the right side of the screen for reference and context.

# 15. Pharmacy Statistics

The Pharmacy module provides various useful reports to streamline pharmacists' work. These statistics can also serve administrative purposes.

- 1. Daily drugs Dispensed
- 2. Drugs requested from the pharmacy
- 3. Uncountable drugs dispensed
- 4. Daily Drugs Dispensed

- 5. Drugs Stock log
- 6. Number of Daily Prescription
- 7. Current Stok balance