



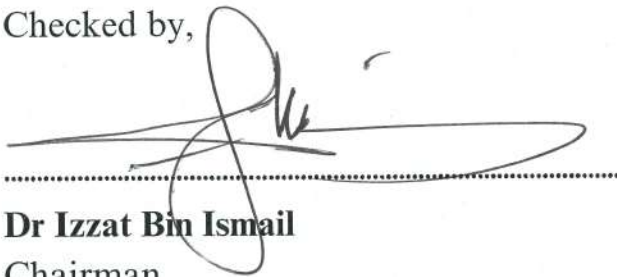
USER ACCESS CONTROL POLICY (UACP)



OCTOBER 2023



Checked by,



Dr Izzat Bin Ismail

Chairman

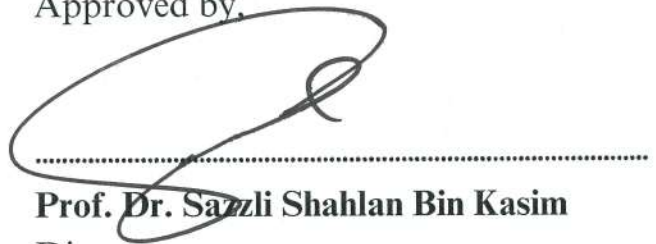
Medical Record Committee

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Date: 27/9/2023

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USER ACCESS CONTROL POLICY (UACP)

1.0 BACKGROUND

An Electronic Medical Record (EMR) is digitally documented information about the health of an identifiable individual, recorded by a doctor or other healthcare professionals. It contains history, physical examination, investigations, diagnosis, treatment and other sensitive data that is needed to ensure continuity of care for the patient among healthcare providers. The patient has the right to expect that there will be no disclosure of all or any of the information to persons without the patient-provider relationship unless he/she gives permission. Therefore, there is a responsibility on the part of custodians and users of the medical record to ensure that confidentiality of medical records is maintained at all times. This is done by having a clear User Access Control Matrix.

1.1 Background of UniMEDS

As the healthcare industry is constantly evolving and profoundly growing, the technology too was impacted as the conventional paper-based medical records are no longer relevant and incapable to manage the large amount of patient data day by day. In spite of that, this conventional method has been replaced with Open Electronic Medical Records (OpenEMR), with the aim to facilitate and smoothen the health facility business operations. The implementation of the EMR is designed not only to provide patient's medical histories, and patient's information but also to expedite the processing time to access their health information.

With the innovation to improve the current system, a dedicated team of system developers from Information Technology, UiTM Sg Buloh Campus, has been formed and responsible to design the new hospital operating system. Hence, in the year of 2015, the OpenEMR has been rebranded to a more efficient hospital operating system called University Medical System (UniMEDS). UniMEDS which is currently executed at PPUiTM Sg. Buloh has been enhanced with featured modules which cover inpatient management, clinic's appointment schedule, order management, clinical documentation, pharmacy and so forth.

In 2017, management has decided to expand the UniMEDS's service to be executed at another UiTM's health facility which is PPUiTM Selayang. Throughout this period, an integration using HL7 has been adopted for seamless communication and exchange of electronics health information. This integration helped streamline the data sharing of radiological imaging and laboratory results and increased the efficiency in the delivery of healthcare services within the organization.

In 2020, UniMEDS made significant progress by developing and deploying its own mobile application, representing UniMEDS's dedication towards user's experience. The mobile apps aimed to bridge the gap between patients and healthcare providers, fostering better communication, improved accessibility, and ultimately, more efficient and personalized care.

Continuing the momentum, in 2021, UiTM Puncak Alam achieved another significant milestone by inaugurating its distinguished healthcare facilities known as Hospital Al-Sultan UiTM Puncak Alam (HASA). To bolster the healthcare services provided at HASA, both UniMEDS and its corresponding mobile application have been effectively implemented and deployed. Since then and up to the present, UniMEDS has been consistently updating its platform to ensure the delivery of the best possible services for patients.

2.0 PURPOSE OF USER ACCESS CONTROL POLICY

The purpose of the user access control policy is defined as per following:

- To determine the level of access and permissions granted to each user.
- To maintain the confidentiality of electronic patient information.
- To enforce user access control policy and ensure adherence to rules and regulatory compliance.
- Serves as a written statement and guidance for all levels of users outlining their access rights in order to prevent unauthorized individuals from viewing, modifying, or sharing sensitive data.

3.0 SCOPE AND CONTEXT OF USER ACCESS CONTROL

This policy applies to all individuals who are given access to the Hospital Information System, including Clinical/Medical staff, Clinical Support staff, Postgraduate students (which directly treat patients), and any appointed administrative and financial staff.

The reason for access can be any or all data management processes including

- Generate
- Capture
- View
- Retrieve
- Store/ save
- Transfer/ export
- Analyze
- Copy
- Printing

4.0 TYPE OF INFORMATION

This policy addresses information about a single patient as well as the group of patients cared for in HASA.

4.1 Individual patient data

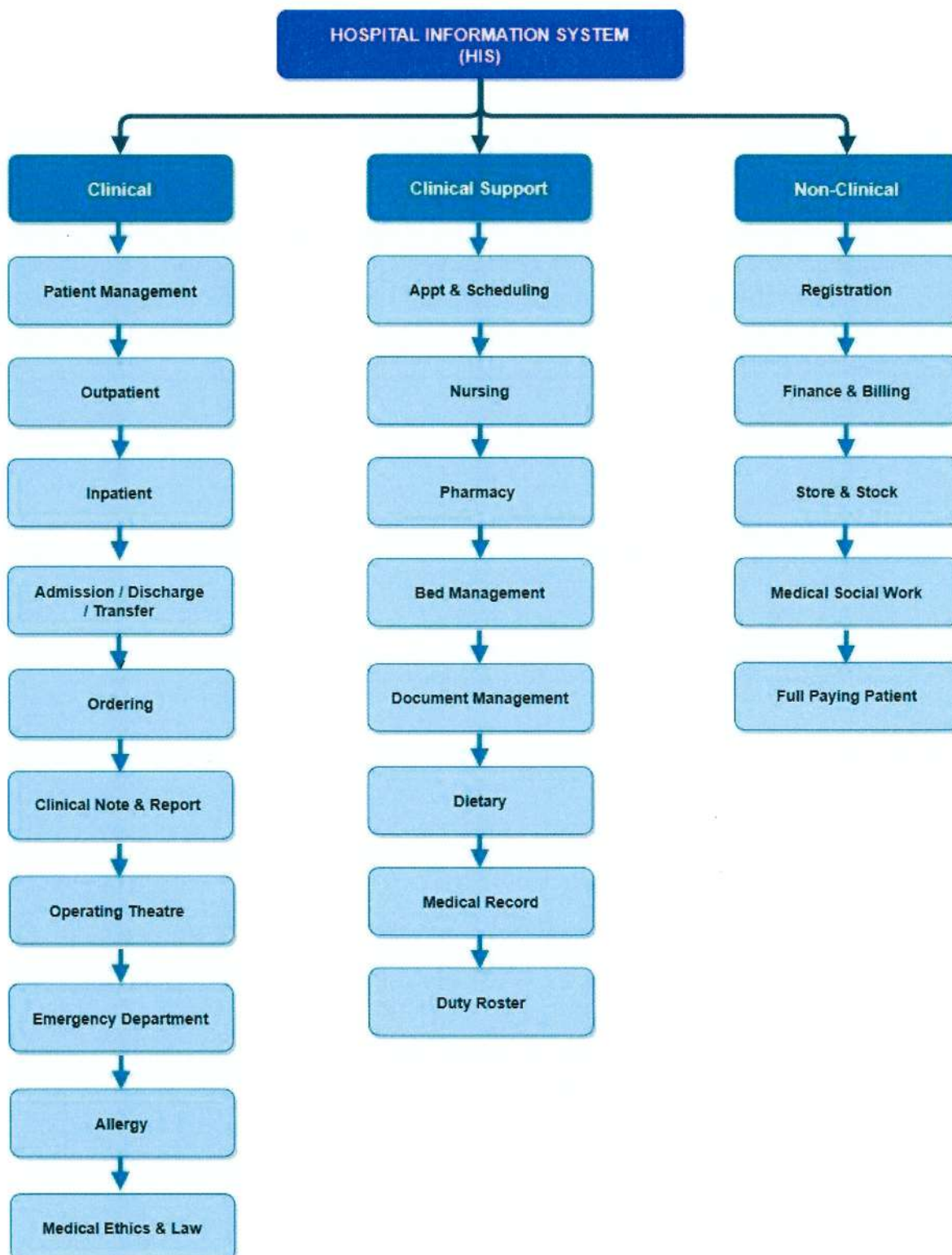
The main bulk of the data is data that makes up the Electronic Medical Record (EMR). The EMR contains information pertaining to a patient's health and illness and its management. The scope of information covered by this policy also encompasses other data regarding the patient that is obtained in order to facilitate the provision of patient care services including data regarding identity, demographics, payment methods and data required for communications. Summaries and medical reports are also individual patient data.

4.2 Aggregated patient data

Data of a group of patients when put together is termed as aggregated data and is also subject to user access control. These data include:

- Registries
- Extracted and analyzed clinical data
- Reports prepared for external agencies
- Prevalence and incidence of diseases
- Utilization review information for example: Bed occupancy Rate(BOR) and length of stay (LOS)

5.0 LIST OF MODULES (Diagram)



6.0 MANAGEMENT AND ADMINISTRATION OF USER ACCESS CONTROL

6.1 Categorization of users

Patient data is used not only by care providers but also other professionals. Users of the EMR belong to two categories:

No.	Users	Type of User	Purpose of access
1	Primary users	Clinical	Use for purposes of managing the patient's health and disease
2	Secondary users	i) Clinical Support ii) Non- Clinical	Use of data of one or more patients for purposes other than managing the patient's current health problem

6.2 User responsibility

- i. Individual staff shall keep their personalized user access ID and password confidential and use them to log into the system to access the modules permitted in their job functions.
- ii. It is the responsibility of the staff to access only to EMR of patients who are under their care. Any attempt to access another patient's EMR to obtain information without a legitimate reason is considered "snooping" in which make up an act of breaching patient's confidentiality and privacy.

6.3 User Access Request

- i. The system used across departments, must obtain written permission from the Hospital Al-Sultan Abdullah UiTM Management/Committee.
- ii. The system used by certain departments only must obtain written permission from the Head of Department.
- iii. User Accounts are only created for staff who are directly involved with the work process.
- iv. Special privileges must be obtained with the permission and approval of the Hospital Al-Sultan Abdullah UiTM Management/Committee.

- v. Special access rights are granted only after approval and must be withdrawn after the related tasks are completed.
- vi. Clinical system access rights are limited to staff working at Hospital Al-Sultan Abdullah UiTM only, unless obtaining clear written approval from the Hospital Al-Sultan Abdullah UiTM Management/Committee.

6.4 User identification and authentication

- i. The user account created must be unique and in accordance with the standards set at the UiTM level and easily recognizable based on the username.
- ii. Special access rights may not be granted until approval is given and must be revoked after the related tasks are completed.
- iii. Users are responsible for the account as soon as confirmation of acceptance is made.
- iv. Sharing accounts among users is prohibited. The account holder will be held liable in the event of a breach of the rules arising from the sharing of the account.
- v. Account ownership is not a person's absolute right and it is subject to UiTM rules. Accounts can be withdrawn if they violate the rules.
- vi. ICT System Administrator may freeze and terminate the account for the following reasons: -
 - Transfer of work areas
 - Transfer to another agency.
 - Retirement
 - Terminated of service
- vii. Clinical systems such as HIS, PhIS, LIS, PACS and Billing have additional conditions for user accounts as the system information is confidential and may be exposed to medico legal.
- viii. Limit system access to five (5) attempts. If it fails, system will prompt message to reset password.

6.5 Password management

- i. Users must memorize and keep their passwords secret. Users are prohibited from writing/recording passwords in any media to avoid being known and misused by others.
- ii. Passwords must be changed at least once every 6 months
- iii. The minimum password length is 6 characters which consist of a combination of uppercase, lowercase, numbers, and special characters.
- iv. Inform the Head of Infostructure Department, Hospital Al-Sultan Abdullah UiTM, if the password is compromised or suspected of being compromised. Change your existing password immediately.
- v. Passwords should not be displayed during input, in reports or other media and should not be encoded in the program.
- vi. Avoid to reuse the current passwords or last previous password.

6.6 Data management

- i. Users are not allowed to access unrelated data without permission.
- ii. Users of the application system must maintain the integrity of the information and do not share it with unrelated parties.
- iii. Information from the system cannot be taken out from Hospital Al-Sultan Abdullah UiTM either in physical or digital form except with the approval of the Hospital Al-Sultan Abdullah UiTM Management / Committee.
- iv. Applicants need to fill out form for a data request which is involved with patient information.
- v. The form must be complete with the required patient data information with the approval of the Hospital Al-Sultan Abdullah UiTM Management / Committee.
- vi. The owner and user of the system is responsible for the data quality of the system being used.

6.7 Audit Trail

The system is inclusive of an audit trail feature that will be performed by the system administrator. Audit tracks record the activities that take place in the system in chronological order and to allow inspection and reconstruction to be conducted. The audit trail contains the following information:

- Records of each transaction activity.
- Audit trail information contains staff identity, resources used, information changes, dates and times of activities, networks and applications used.
- Staff access activities on the system either legally or otherwise.
- Information of abnormal system activity or activity that does not have security features.
- The system administrator shall review the audit trail records from time to time and prepare reports if necessary. This will be able to help detect abnormal activity earlier.
- Audit tracks should also be protected from unauthorized damage, loss, deletion, forgery and modification.

7.0 GRADES OF CONFIDENTIALITY OF DATA

Due consideration given to the degree of confidentiality of medical information and certain additional precautions may be taken to safeguard their confidentiality. The following are considered as **highly confidential data**:

- i. Data of medico-legal cases (murder, rape, assault, child abuse, drug abuse, litigation against a care provider or the institution)
- ii. Data of patients with certain diseases, for example STD, Psychiatric conditions, HIV infection and AIDS
- iii. Data of persons which might be of public interest.
- iv. Data of patients if known to others may cause embarrassment or harm to him/her

7.1 Information safety, security and confidentiality

- i. All information related to an individual patient shall be treated as private and confidential. Only authorized personnel are allowed access to patient information within the context of their roles and job functions on "Need to Know" basis.
- ii. Access to contents of Patient Records in hard copy or EMR format shall only be allowed when a visit is opened or upon receipt of a request by authorized

personnel for administrative purposes. For more detail on access to EMR, please refer to GHOP HUITM 4.10.5 – General conditions for access of Electronic Medical Record in a facility.

- iii. The doctors who no longer serve with HASA are not allowed to access patient medical records. If they need to access patient records, approval from the Hospital Director is required.

8.0 USER ACCESS CONTROL MATRIX

Options in standard operating environment

- i. R - Read
- ii. W - Write
- iii. N - No access

8.1 User Access Control Matrix for Patient/Client Module

Module / Submodules	Features	User Roles	User Access						
			1	2	3	4	5	6	7
Patient/Client	Patient Dashboard:	Receptionist Clerk	R	R	R	N	R	R	R
	1 Demographic- Patient Detail	Clerk	W	W	W	N	R	W	N
	2 Demographic - Next of Kin	Ward Clerk	R	R	N	N	R	N	N
		Department Clerk	R	R	N	N	R	R	R
	3 Demographic – Billing	Medical Record Clerk	W	R	N	R	R	R	R
		Medical Record Officer	R	R	N	R	R	R	R
	4 Clinical Data	Medical Record Coder	W	R	R	R	R	R	R
	5 Report	Dietitian	R	R	R	R	R	N	N
		Doctor	R	R	R	R	R	N	N
	Patient New:	Staff Nurse	R	R	R	R	R	N	N
	6 New Patient	Ward Nurse	R	R	R	R	R	N	N
	7 New Patient Emergency	Science Officer	R	R	N	R	N	N	N
		MLT Department	R	R	N	R	N	N	N
		Finance Officer	W	W	W	N	R	W	W
		Finance Assistance Officer	W	W	W	N	R	W	W
		MSW Officer	R	N	N	R	N	N	N
		MSW Assistant Officer	R	N	N	R	N	N	N
		Speech Therapist	R	R	N	N	N	N	N
		Occupational Therapist	R	R	N	N	N	N	N
		Physiotherapist	R	R	N	N	N	N	N
		Radiographer	R	R	N	N	N	N	N
		Pharmacist Officer	R	R	N	R	R	N	N
		Pharmacist Assistant Officer	R	R	N	R	R	N	N

Module / Submodules	Features	User Roles	User Access				
			1	2	3	4	5
Patient/Client: Visit	1 Appointment Visit 2 Create Visit 3 Visit List 4 Current 5 Visit History	Clerk	W	W	W	N	N
		Ward Clerk	N	N	N	N	N
		Department Clerk	R	N	W	N	N
		Medical Record Clerk	N	N	R	N	N
		Medical Record Officer	R	N	N	N	N
		Medical Record Coder	R	N	N	N	N
		Dietitian	R	N	R	N	N
		Staff Nurse	R	N	R	N	N
		Ward Nurse	R	N	R	N	N
		Finance Officer	W	W	W	R	R
		Finance Assistant Officer	W	W	W	R	R

Module / Submodules	Features	User Roles	User Access		
			1	2	3
Patient/Client: Emergency Department	1 Triage Dashboard 2 Create Triage 3 List	Clerk	R	N	R
		Doctor	W	W	W
		Dietitian	R	R	R
		Staff Nurse	R	N	R
		Ward Nurse	R	N	R
		Science Officer	R	N	R
		MLT Department	N	N	R
		Medical Assistant	R	N	N
		Research Assistant	R	N	N
		Optometrist	N	N	R
		Audiologist	N	N	R
		Speech Therapist	N	N	R
		Occupational Therapist	N	N	R

Module / Submodules	Features	User Roles	User Access		
			1	2	3
		Physiotherapist	N	N	R
		Counseling Officer	N	N	R
		Radiographer	N	N	R
		Medical Record Officer	R	N	R
		Medical Record Coder	R	N	R

Module / Submodules	Features	User Roles	User Access	
			1	2
Patient/Client: Order	Prescriptions: 1 Prescriptions 2 History	Doctor	W	W
		Dietitian	N	R
		Medical Record Officer	N	R
		Medical Record Coder	N	R
		Staff Nurse	N	R
		Ward Nurse	N	R
		Pharmacist Officer	N	R
		Pharmacist Assistant Officer	N	R

Module / Submodules	Features	User Roles	User Access				
			1	2	3	4	5
Patient/Client: Order	Pathology: 1 Create New 2 Previous Order 3 Set Appointment 4 Specimen Collection 5 Status	Doctor	W	R	N	W	R
		Staff Nurse	N	N	W	W	R
		Ward Nurse	N	N	W	W	R
		Medical Assistant	N	N	W	W	R
		Research Assistant	N	N	W	W	R
		MLT Department	N	N	W	W	R

Module / Submodules	Features	User Roles	User Access	
			1	2
Patient/Client; Order	Transfusion Medicine: 1 Transfusion Status 2 Transfusion Log	Doctor	W	W
		Staff Nurse	R	W
		Ward Nurse	R	W

Module / Submodules	Features	User Roles	User Access		
			1	2	3
Patient/Client Order	Radiology: 1 Create New 2 Set Appointment 3 Status	Doctor	W	N	R
		Staff Nurse	R	W	R
		Ward Nurse	R	W	R

Module / Submodules	Features	User Roles	User Access		
			1	2	3
Patient/Client Order	NICL: 1 Create New 2 Status 3 History	Doctor	W	R	R
		Staff Nurse	N	R	R
		Ward Nurse	N	R	R

Module / Submodules	Features	User Roles	User Access				
			1	2	3	4	5
Patient/Client Order	Respiratory: 1 Create New 2 Status 3 Set Appointment 4 Arrive Patient 5 Update Status	Doctor	W	R	N	N	N
		Staff Nurse	N	R	W	N	N
		Ward Nurse	N	R	W	N	N
		MLT Department	N	R	W	W	W
		Medical Assistant	N	R	W	N	N
		Research Assistant	N	R	W	N	N
		Physiotherapist	N	R	W	N	N

Module / Submodules	Features	User Roles	User Access	
			1	2
Patient/Client: Clinical Notes	1 SOAP	Medical Record Clerk	R	R
	2 Speech Dictation	Medical Record Officer	R	R
		Medical Record Coder	R	R
		Dietitian	W	W
		Doctor	W	W
		Staff Nurse	R	R
		Ward Nurse	R	R
		Science Officer	N	R
		Medical Assistant	R	R
		Research Assistant	R	R
		Optometrist	W	W
		Audiologist	W	W
		Speech Therapist	W	W
		Occupational Therapist	W	W
		Physiotherapist	W	W
		Counseling Officer	R	R
		Radiographer	R	R
		Pharmacist Officer	R	R
		Pharmacist Assistant Officer	R	R

Module / Submodules	Features	User Roles	User Access				
			1	2	3	4	5
Patient/Client: Notes	1 Medical Assistant	Medical Record Clerk	R	R	R	R	R
		Medical Record Officer	R	R	R	R	R
	2 MLT	Medical Record Coder	R	R	R	R	R
	3 Nurse	Doctor	R	R	R	R	R
	4 Radiographer	Staff Nurse	R	R	W	R	R
	5 Research Assistant	Ward Nurse	R	R	W	R	R
		MLT Department	R	W	R	R	R
		Medical Assistant	W	R	R	R	R

Module / Submodules	Features	User Roles	User Access				
			1	2	3	4	5
		Radiographer	R	R	R	W	R
		Research Assistant	R	R	R	R	W

Module / Submodules	Features	User Roles	User Access	
			1	2
Patient/Client: Visit Form	Referral Counselling: 1 Create New 2 Referral List	Doctor	W	W
		Staff Nurse	R	R
		Ward Nurse	R	R
		Counselling Officer	W	R

Module / Submodules	Features	User Roles	User Access	
			1	2
Patient/Client: Visit Form	Referral Clinical Ethics: 1 Create New 2 Referral List	Medical Record Officer	N	R
		Medical Record Coder	N	R
		Doctor	W	R

Module / Submodules	Features	User Roles	User Access	
			1	2
Patient/Client: Visit Form	Referral MSW: 1 Create New 2 Upload Quotation	Doctor	W	W
		Staff Nurse	N	W
		Ward Nurse	N	W

Module / Submodules	Features	User Roles	User Access		
			1	2	3
Patient/Client: Visit Form	1 Referral Letter	Doctor	W	W	W
	2 Rehab Referral Letter	Staff Nurse	R	R	W
	3 Vitals	Ward Nurse	R	R	W
		Medical Assistant	N	N	W

Module / Submodules	Features	User Roles	User Access		
			1	2	3
		Research Assistant	N	N	W
		Optometrist	N	R	N
		Audiologist	N	R	N
		Speech Therapist	N	R	N
		Occupational Therapist	N	R	N
		Physiotherapist	N	R	N
		Counselling Officer	R	R	N

Module / Submodules	Features	User Roles	User Access			
			1	2	3	4
Patient/Client: Clinical Report	NICL: 1 DSE 2 ECHO 3 TEE / TOE 4 NICL Report	Medical Record Clerk	R	R	R	R
		Medical Record Officer	R	R	R	R
		Medical Record Coder	R	R	R	R
		Dietitian	N	N	N	R
		Doctor	R	R	R	R
		Staff Nurse	N	N	N	R
		Ward Nurse	N	N	N	R
		MLT Department	W	W	W	R
		Medical Assistant	N	N	N	R
		Research Assistant	N	N	N	R

Module / Submodules	Features	User Roles	User Access
Patient/Client: Clinical Report	ICL: Angiogram	Medical Record Clerk	R
		Medical Record Officer	R
		Medical Record Coder	R
		Doctor	R
		MLT Department	W

Module / Submodules	Features	User Roles	User Access			
			1	2	3	4
Patient/Client: Clinical Report	O&G: 1 Labour Summary 2 Urogynae Questionnaire 3 Urogynae Report 4 Lactation	Medical Record Clerk	R	R	R	N
		Medical Record Officer	R	R	R	N
		Medical Record Coder	R	R	R	N
		Doctor	W	W	W	W
		Staff Nurse	W	N	N	W
		Ward Nurse	R	N	N	W
		MLT Department	R	R	R	N

Module / Submodules	Features	User Roles	User Access
Patient/Client: Clinical Report	OTMS: Operation Notes	Doctor	R
		Staff Nurse	R
		Ward Nurse	R

Module / Submodules	Features	User Roles	User Access
Patient/Client: Clinical Report	Endoscopy: OGDS	Doctor	R
		Staff Nurse	R
		Ward Nurse	R

Module / Submodules	Features	User Roles	User Access								
			1	2	3	4	5	6	7	8	9
Patient/Client: Clinical Report	Rehabilitation Medicine: 1 Rehab Clinical Note 2 Rehab CRP	Medical Record Clerk	R	R	R	R	R	R	R	R	R
		Medical Record Officer	R	R	R	R	R	R	R	R	R
		Medical Record Coder	R	R	R	R	R	R	R	R	R
		Doctor	W	W	W	W	W	W	W	W	R
		Staff Nurse	W	W	W	W	W	W	W	W	R

Module / Submodules	Features	User Roles	User Access								
			1	2	3	4	5	6	7	8	9
	3 Rehab NCS Note	Ward Nurse	N	N	N	N	N	N	N	N	R
	4 Referral Letter	Rehabilitation Technician	W	W	W	W	W	W	W	W	R
	5 Wound Note	Speech Therapist	W	W	W	W	W	W	W	W	R
	6 MMSE	Occupational Therapist	W	W	W	W	W	W	W	W	R
	7 Asia Chart	Physiotherapist	W	W	W	W	W	W	W	W	R
	8 MOCA	Medical Assistant	N	N	N	N	N	N	N	N	R
	9 View Previous Note	Research Assistant	N	N	N	N	N	N	N	N	R

Module / Submodules	Features	User Roles	User Access		
			1	2	3
Patient/Client: Clinical Report	Hemodialysis: 1 Create / Edit 2 Report 3 Graph	Medical Record Clerk	N	R	R
		Medical Record Officer	N	R	R
		Medical Record Coder	N	R	R
		Dietitian	N	R	N
		Doctor	W	W	W
		Staff Nurse	W	W	W
		Ward Nurse	N	R	N
		Medical Assistant	N	R	N
		Research Assistant	N	R	N

Module / Submodules	Features	User Roles	User Access			
			1	2	3	4
Patient/Client: Clinical Report	Pathology: 1 View 2 Covid Screening Result	Medical Record Clerk	R	R	R	R
		Department Clerk	N	N	R	N
		Medical Record Officer	R	R	R	R
		Medical Record Coder	R	R	R	R
	Radiology: 3 View	Dietitian	R	R	R	R

Module / Submodules	Features	User Roles	User Access			
			1	2	3	4
	Respiratory: 4 View	Doctor	R	R	R	R
		Staff Nurse	R	R	R	R
		Ward Nurse	R	R	R	R
		Science Officer	R	R	R	R
		MLT Department	R	R	R	R
		Rehabilitation Technician	R	R	R	R
		Medical Assistant	R	R	R	R
		Research Assistant	R	R	R	R
		Speech Therapist	R	R	R	R
		Occupational Therapist	R	R	R	R
		Physiotherapist	R	R	R	R
		Radiographer	R	R	R	R
		Pharmacist Officer	R	R	R	R

Module / Submodules	Features	User Roles	User Access		
			1	2	3
Patient/Client: Clinical Report	Psychology: 1 New Assessment 2 View Assessment 3 Assessment List	Medical Record Clerk	N	N	R
		Medical Record Officer	N	N	R
		Medical Record Coder	N	N	R
		Doctor	W	W	W
		Staff Nurse	N	N	R
		Medical Assistant	N	N	R
		Research Assistant	N	N	R

Module / Submodules	Features	User Roles	User Access					
			1	2	3	4	5	6
Patient/Client: Appointment	Clinic / Discipline: 1 Create / New 2 New Referral 3 Search / View 4 Holiday Setup 5 Clinic Schedule 6 Priority Rules	Medical Record Clerk	N	N	R	N	N	N
		Medical Record Officer	N	N	R	N	N	N
		Medical Record Coder	N	N	R	N	N	N
		Dietitian	W	W	R	W	W	W
		Staff Nurse	W	W	R	N	N	N
		Ward Nurse	W	W	R	N	N	N
		Radiographer	W	W	R	W	W	W

Module / Submodules	Features	User Roles	User Access				
			1	2	3	4	5
Patient/Client: Appointment	Haemodialysis: 1 Create / New 2 Search / View 3 Holiday Setup 4 Limitation Setup 5 Department Schedule	Medical Record Clerk	N	R	N	N	N
		Medical Record Officer	N	R	N	N	N
		Medical Record Coder	N	R	N	N	N
		Staff Nurse	W	R	W	W	W
		Ward Nurse	N	R	N	N	N

Module / Submodules	Features	User Roles	User Access					
			1	2	3	4	5	6
Patient/Client: Appointment	Rehabilitation: 1 Create / New 2 New Referral 3 Search / View 4 Holiday Setup 5 Limitation Setup 6 Department Schedule	Department Clerk	W	W	R	W	W	W
		Medical Record Clerk	N	N	R	N	N	N
		Medical Record Officer	N	N	R	N	N	N
		Medical Record Coder	N	N	R	N	N	N
		Staff Nurse	W	W	R	W	W	W
		Ward Nurse	N	N	R	N	N	N

Module / Submodules	Features	User Roles	User Access				
			1	2	3	4	5
Patient/Client: Appointment	CentRE: 1 Create / New 2 Search / View 3 Holiday Setup 4 Limitation Setup 5 Department Schedule	Medical Record Clerk	N	R	N	N	N
		Medical Record Officer	N	R	N	N	N
		Medical Record Coder	N	R	N	N	N
		Staff Nurse	W	R	N	N	N
		Ward Nurse	N	R	N	N	N
		Science Officer	W	R	W	W	W

Module / Submodules	Features	User Roles	User Access					
			1	2	3	4	5	6
Patient/Client: Appointment	NICL: 1 Create / New 2 New Referral 3 Search / View 4 Holiday Setup 5 Limitation Setup 6 Department Schedule	Department Clerk	W	W	R	N	N	N
		Medical Record Clerk	N	N	R	N	N	N
		Medical Record Officer	N	N	R	N	N	N
		Medical Record Coder	N	N	R	N	N	N
		Staff Nurse	W	W	R	N	N	N
		Ward Nurse	N	R	R	N	N	N
		MLT Department	W	W	R	W	W	W

Module / Submodules	Features	User Roles	User Access				
			1	2	3	4	5
Patient/Client: Appointment	ICL: 1 Create / New 2 Search / View 3 Holiday Setup 4 Limitation Setup	Department Clerk	W	R	N	N	N
		Medical Record Clerk	N	R	N	N	N
		Medical Record Officer	N	R	N	N	N
		Medical Record Coder	N	R	N	N	N
		Staff Nurse	W	R	N	N	N
		Ward Nurse	N	R	N	N	N

Module / Submodules	Features	User Roles	User Access				
			1	2	3	4	5
	5 Department Schedule	MLT Department	W	R	W	W	W

Module / Submodules	Features	User Roles	User Access					
			1	2	3	4	5	6
Patient/Client: Appointment	Respiratory Lab:	Medical Record Clerk	N	N	R	N	N	N
	1 Create / New	Medical Record Officer	N	N	R	N	N	N
	2 New Referral	Medical Record Coder	N	N	R	N	N	N
	3 Search / View	Staff Nurse	N	N	R	N	N	N
	4 Holiday Setup	Ward Nurse	N	N	R	N	N	N
	5 Limitation Setup	MLT Department	W	W	R	W	W	W
	6 Department Schedule							

Module / Submodules	Features	User Roles	User Access					
			1	2	3	4	5	6
Patient/Client: Appointment	Radiology:	Department Clerk	W	W	R	N	N	N
	1 Create / New	Medical Record Clerk	N	N	R	N	N	N
	2 New Referral	Medical Record Officer	N	N	R	N	N	N
	3 Search / View	Medical Record Coder	N	N	R	N	N	N
	4 Holiday Setup	Staff Nurse	W	W	R	W	W	W
	5 Limitation Setup	Ward Nurse	N	N	R	N	N	N
	6 Department Schedule	Radiographer	W	W	R	W	W	W

Module / Submodules	Features	User Roles	User Access			
			1	2	3	4
Patient/Client: Appointment	External Referral: 1 New List 2 Search / View	Medical Record Clerk	N	R	N	R
		Medical Record Officer	N	R	N	R
		Medical Record Coder	N	R	N	R
	FPP Referral: 3 New FPP List 4 Search / View	Doctor	W	R	W	R
		Staff Nurse	W	R	W	R
		Ward Nurse	W	R	W	R

Module / Submodules	Features	User Roles	User Access					
			1	2	3	4	5	6
Patient/Client: ADT	ADT: 1 Admission Form	Clerk	W	N	N	N	N	N
		Ward Clerk	R	N	N	N	N	N
	Discharge Summary: 2 New 3 Amend 4 Medical Record 5 Print 6 List	Department Clerk	W	N	N	N	N	N
		Medical Record Clerk	R	N	N	R	R	R
		Medical Record Officer	R	N	N	W	R	R
		Medical Record Coder	R	N	N	W	R	R
		Dietitian	N	N	N	N	R	R
		Doctor	N	W	W	W	R	R
		Staff Nurse	N	N	N	N	R	R
		Ward Nurse	R	N	N	N	R	R
		Finance Officer	R	N	N	N	N	N
		Finance Assistant Officer	R	N	N	N	N	N
		Medical Assistant	R	N	N	N	N	N
		Research Assistant	R	N	N	N	N	N
		Pharmacist Officer	N	N	N	N	N	R
		Pharmacist Assistant Officer	N	N	N	N	N	R

Module / Submodules	Features	User Roles	User Access				
			1	2	3	4	5
Patient/Client: Inpatient	Bed Management: 1 Bed Assignment 2 Bed Update 3 Patient List 4 Bed Reservation 5 Bed List	Receptionist Clerk	N	N	N	N	R
		Clerk	W	W	N	N	R
		Ward Clerk	N	W	N	W	R
		Medical Record Clerk	N	N	N	N	R
		Medical Record Officer	N	N	N	N	R
		Medical Record Coder	N	N	N	N	R
		Dietitian	N	N	N	N	R
		Doctor	N	N	N	N	R
		Staff Nurse	N	N	N	W	R
		Ward Nurse	N	W	W	W	R
		Science Officer	N	N	N	N	R
		MLT Department	N	N	N	N	R
		Finance Officer	W	W	N	N	R
		Finance Assistant Officer	W	W	N	N	R
		Radiographer	N	N	N	N	R

Module / Submodules	Features	User Roles	User Access		
			1	2	3
Patient/Client: Inpatient	Meal Management: 1 Order List (FPP) 2 Order List 3 Order Report	Ward Clerk	W	W	R
		Department Clerk	N	N	R
		Dietitian	W	W	R
		Ward Nurse	W	W	R
		ASO Dietitian	W	W	R

Module / Submodules	Features	User Roles	User Access		
			1	2	3
Patient/Client: Inpatient	Prescription Management: 1 Prescription 2 Patient List 3 Presc Accept	Doctor	W	N	N
		Ward Nurse	N	W	W

Module / Submodules	Features	User Roles	User Access	
			1	2
Patient/Client: Inpatient	Procedure Department: 1 Patient List 2 Department	Ward Clerk	R	N
		Medical Record Officer	R	N
		Medical Record Coder	R	N
		Doctor	R	N
		Ward Nurse	W	N

Module / Submodules	Features	User Roles	User Access			
			1	2	3	4
Patient/Client: Inpatient	WRB Parameter: 1 Ward 2 Room 3 Bed 4 Room Type	Staff Nurse	W	W	W	R

Module / Submodules	Features	User Roles	User Access				
			1	2	3	4	5
Patient/Client: Inpatient	Clinical Notes: 1 Admission Adult 2 Admission Paediatric 3 Continuation Sheet 4 MDT Notes	Medical Record Clerk	R	R	R	R	R
		Medical Record Officer	R	R	R	R	R
		Medical Record Coder	R	R	R	R	R
		Dietitian	N	N	W	W	R
		Doctor	W	W	W	W	R
		Staff Nurse	N	N	N	N	R

Module / Submodules	Features	User Roles	User Access				
			1	2	3	4	5
	5 View	Ward Nurse	N	N	N	N	R
		Medical Assistant	N	N	N	N	R
		Research Assistant	N	N	N	N	R
		Pharmacist Officer	N	N	N	N	R
		Pharmacist Assistant Officer	N	N	N	N	R

Module / Submodules	Features	User Roles	User Access	
			1	2
Patient/Client: Inpatient	Nursing Notes: 1 Nursing Assessment 2 View	Medical Record Clerk	N	R
		Medical Record Officer	N	R
		Medical Record Coder	N	R
		Doctor	N	R
		Ward Nurse	W	W

Module / Submodules	Features	User Roles	User Access
Patient/Client: Document Management	Documents	Module is accessible to all users based on their department.	W

8.2 User Access Matrix for Module QMS Module

Module / Submodules	Features	User Roles	User Access		
			1	2	3
QMS	1 Check In	Clerk	W	W	W
	2 Patient Tracking	Department Clerk	W	W	W
		Staff Nurse	W	W	W
	3 Queue List	Ward Nurse	W	W	W

Module / Submodules	Features	User Roles	User Access		
			1	2	3
		Science Officer	W	W	W
		MLT Department	W	W	W
		Finance Officer	W	W	W
		Finance Assistant Officer	W	W	W
		Pharmacist Officer	W	W	W
		Pharmacist Assistant Officer	W	W	W
		Radiographer	W	W	W

8.3 User Access Matrix for Module OTMS Module

Module / Submodules	Features	User Roles	User Access
OTMS: OT Dashboard	View Dashboard	Modules are accessible to all users based on their roles.	R

Module / Submodules	Features	User Roles	User Access			
			1	2	3	4
OTMS: OT Management	1 OT Booking	Ward Clerk	R	R	R	N
	2 OT SSSL	Doctor	W	W	W	N
	3 Operation Record	Staff Nurse	R	W	R	N
	4 OT Time Record	Ward Nurse	R	W	R	N

Module / Submodules	Features	User Roles	User Access				
			1	2	3	4	5
OTMS: Report	Operation Theater: 1 Booking Report	Ward Clerk	R	N	R	R	R
		Medical Record Clerk	R	R	R	R	R

Module / Submodules	Features	User Roles	User Access				
			1	2	3	4	5
	2 SSSL Report	Medical Record Officer	R	R	R	R	R
	3 Operation Report	Medical Record Coder	R	R	R	R	R
	4 OT Time Report	Doctor	R	R	R	R	R
		Staff Nurse	R	R	R	R	R
	5 Statistics Report	Ward Nurse	R	R	R	R	R
		Medical Assistant	R	R	R	R	R
		Research Assistant	R	R	R	R	R

Module / Submodules	Features	User Roles	User Access
OTMS: Report	O&G: LSCS Report	Medical Record Clerk	R
		Medical Record Officer	R
		Medical Record Coder	R
		Doctor	W
		Staff Nurse	R
		Ward Nurse	R

8.4 User Access Matrix for Nursing Module

Module / Submodules	Features	User Roles	User Access			
			1	2	3	4
Nursing	Inpatient:	Ward Nurse	R	W	W	N
	1 Daily Census					
	Shift Report:					
	2 View					
	3 Add/Edit					
	Parameter:					
	4 Leaders Setup					

8.5 User Access Matrix for Fees Module

Module / Submodules	Features	User Roles	User Access							
			1	2	3	4	5	6	7	8
Fees	1 Fee Sheet	Clerk	W	W	W	W	W	W	N	N
	2 Checkout									
	3 Payment									
	4 Deposit	Finance Officer	W	W	W	W	W	W	W	W
	5 Refund									
	6 Edit Receipt									
	7 Cancel Receipt	Finance Assistant Officer	W	W	W	W	W	W	W	W
	8 Cancel Refund									

Module / Submodules	Features	User Roles	User Access		
			1	2	3
Fees: Price Lists	1 Public	Clerk	W	W	W
	2 Full Paying Patient	Finance Officer	W	W	W
	3 Perkeso	Finance Assistant Officer	W	W	W
		Pharmacist Officer	R	R	R
		Pharmacist Assistant Officer	R	R	R

Module / Submodules	Features	User Roles	User Access				
			1	2	3	4	5
Fees: Pending Lists	1 Pre-Discharge	Clerk	W	W	W	W	W
	2 Registration Fees						
	3 Unbilled	Finance Officer	W	W	W	W	W
	4 Amount Due						
	5 GL Verification		W	W	W	W	W

Module / Submodules	Features	User Roles	User Access	
			1	2
Fees: Interim Billing	1 Bill / Invoice	Clerk	W	W
	2 Payment	Finance Officer	W	W
		Finance Assistant Officer	W	W

Module / Submodules	Features	User Roles	User Access	
			1	2
Fees: Panel UiTM	1 Generate Batch Report	Finance Officer	W	W
	2 Batch Report List	Finance Assistant Officer	W	W

Module / Submodules	Features	User Roles	User Access
Fees: Parameter	Fees Markup	Finance Officer	W
		Finance Assistant Officer	N

8.6 User Access Matrix for Fees @ Shop Module

Module / Submodules	Features	User Roles	User Access				
			1	2	3	4	5
Fees @ Shop	1 Fee sheet	Clerk	W	W	W	W	N
	2 Checkout	Finance Officer	W	W	W	W	W
	3 Payment		W	W	W	W	W
	4 Edit Receipt	Finance Assistant Officer	W	W	W	W	W
	5 Cancel Receipt		W	W	W	W	W

Module / Submodules	Features	User Roles	User Access
Fees @ Shop: Pending List	Amount Due	Clerk	W
		Finance Officer	W
		Finance Assistant Officer	W

Module / Submodules	Features	User Roles	User Access						
			1	2	3	4	5	6	7
Fees @ Shop: Over the Counter (OTC)	OTC: 1 New Transaction	Clerk	W	W	W	W	R	R	N
	2 Payment Receipt	Finance Officer	W	W	W	W	R	R	W
	3 Cancel OTC Receipt	Finance Assistant Officer	W	W	W	W	R	R	N
	Reports: 4 Cancelled OTC Receipts	Pharmacist Officer	N	N	N	N	W	W	N
	Stocks: 5 Stock Registration	Pharmacist Assistant Officer	N	N	N	N	W	W	N
	6 Stock List								
	Parameter: 7 Fees Markup								

Module / Submodules	Features	User Roles	User Access		
			1	2	3
Fees @ Shop: Report	1 Invoice List	Clerk	W	W	W
	2 Front Office Receipt	Finance Officer	W	W	W
	3 Cancelled Receipts	Finance Assistant Officer	W	W	W

8.7 User Access Matrix for Itemized Module

Module / Submodules	Features	User Roles	User Access						
			1	2	3	4	5	6	7
Itemized Billing	Public Patient: 1 New Entry	Clerk	R	N	W	R	N	R	N

Module / Submodules	Features	User Roles	User Access						
			1	2	3	4	5	6	7
	2 Save to Patient Bill	Staff Nurse	W	W	W	W	W	W	W
	Private Patient:	Ward Nurse	W	W	W	W	W	W	W
	3 Register Patient	Science Officer	W	W	W	W	W	W	W
	4 New Entry								
	5 Generate Quotation	MLT Department	W	W	W	W	W	W	W
		Finance Officer	W	W	W	W	W	W	W
	Research:								
	6 New Entry	Finance Assistant Officer	W	W	W	W	W	W	W
	7 Generate Invoice	Radiographer	W	W	W	W	W	N	N
		Pharmacist Officer	W	W	N	N	N	N	N
		Pharmacist Assistant Officer	W	W	N	N	N	N	N

8.8 User Access Matrix for Full Paying Patient Module

Module / Submodules	Features	User Roles	User Access		
			1	2	3
Full Paying Patient	1 Register 2 New Claim 3 MMA Fees	Doctor	W	W	R

Module / Submodules	Features	User Roles	User Access	
			1	2
Full Paying Patient: Claim List (Specialist)	1 All 2 Interim Bill	Doctor	W	R

Module / Submodules	Features	User Roles	User Access	
			1	2
Full Paying Patient: Manage FPP Specialist	1 New 2 List	Finance Officer	W	W
		Finance Assistant Officer	R	R

Module / Submodules	Features	User Roles	User Access			
			1	2	3	4
Full Paying Patient: Claim List (Finance)	1 All	Staff Nurse	W	N	N	N
	2 MMA Fees	Ward Nurse	R	N	N	N
	3 Payment Distribution	Finance Officer	N	W	W	R
	4 Interim Bill	Finance Assistant Officer	N	R	R	R

Module / Submodules	Features	User Roles	User Access		
			1	2	3
Full Paying Patient: Report	1 Front Office Receipts	Clerk	R	R	R
	2 Amount Due	Medical Record Clerk	R	R	R
	3 Specialist	Medical Record Officer	R	R	R
		Medical Record Coder	R	R	R
		Doctor	N	N	R
		Finance Officer	R	R	R
		Finance Assistant Officer	R	R	R

8.9 User Access Matrix for Store & Stocks Module

Module / Submodules	Features	User Roles	User Access						
			1	2	3	4	5	6	7
Store & Stock	Barcode: 1 Disposables	Department Clerk	R	R	N	N	N	R	R
	Floor Stock: 2 List 3 Request	Dietitian	R	N	N	N	N	N	N
	Emergency Trolley: 4 List 5 Request	Staff Nurse	R	W	W	W	W	N	N
	Store: 6 List	Ward Nurse	N	W	W	W	W	N	N
	Item: 7 List	Pharmacy Store Officer	R	N	N	N	N	W	W
		Pharmacy Store Assistant Officer	R	N	N	N	N	W	W

Module / Submodules	Features	User Roles	User Access					
			1	2	3	4	5	6
Store & Stock: Stock	Par Level: 1 Set Par Level 2 View Par Level 3 Edit Par Level	Staff Nurse	N	R	N	N	R	N
		Pharmacist Officer	W	W	W	W	W	W
	Buffer Level: 4 Set Buffer Level 5 View Buffer Level 6 Edit Buffer Level	Pharmacist Assistant Officer	N	R	N	N	R	N
		Pharmacy Store Officer	W	W	W	W	W	W
		Pharmacy Store Assistant Officer	N	R	N	N	R	N

Module / Submodules	Features	User Roles	User Access						
			1	2	3	4	5	6	7
Store & Stock: Stock	Stock Process:	Department Clerk	W	R	N	N	N	W	R
	1 Add	Staff Nurse	N	N	W	N	N	W	R
	2 View								
	3 Request Stock	Ward Nurse	N	N	W	N	N	W	R
	4 Process								
	5 Distribute	MLT Department	N	N	W	N	N	N	R
	6 Stock Out								
	7 Request Status	Pharmacist Officer	N	W	W	W	W	N	R
		Pharmacist Assistant Officer	N	W	W	N	W	N	R
		Pharmacy Store Officer	W	W	W	W	W	R	R
		Pharmacy Store Assistant Officer	W	W	W	N	W	R	R

8.10 User Access Matrix for Pharmacy Module

Module / Submodules	Features	User Roles	User Access									
			1	2	3	4	5	6	7	8	9	10
Pharmacy	1 Inventory	Department Clerk	W	N	N	N	N	N	N	N	N	N
	2 Destroyed											
	3 Verify											
	4 Partial	Pharmacist Officer	W	W	W	W	W	W	W	W	W	W
	5 Bill											
	Medication	Pharmacist Assistant Officer	W	W	W	W	W	W	W	W	W	W
	6 Copy											
	Grouping	Pharmacy Store Officer	W	W	W	W	W	W	W	W	W	W
	7 Kuota Drugs											
	8 SUPriM	Pharmacy Store Assistant Officer										
	9 Clinic Drugs		W	W	W	W	W	W	W	W	W	W
	10 Drug Price											

Module / Submodules	Features	User Roles	User Access	
			1	2
Pharmacy: TDM	1 TDM Level	Pharmacist Officer	W	W
	2 TDM Report	Pharmacist Assistant Officer	R	R

Module / Submodules	Features	User Roles	User Access		
			1	2	3
Pharmacy: VAS	1 Registration	Department Clerk	W	N	N
	2 Processing	Pharmacist Officer	W	W	W
	3 One Off	Pharmacist Assistant Officer	W	W	W
		Pharmacy Store Officer	W	W	W
		Pharmacy Store Assistant Officer	W	W	W

Module / Submodules	Features	User Roles	User Access					
			1	2	3	4	5	6
Pharmacy: Inpatient	1 Verify	Pharmacist Officer	W	W	W	W	W	W
	2 Dispense							
	3 Set Frequency	Pharmacist Assistant Officer	W	W	N	N	N	N
	4 Set Diluent							
	5 Set Department	Pharmacy Store Officer	W	W	N	N	W	W
	6 Set Emergency Trolley	Pharmacy Store Assistant Officer	W	W	N	N	N	N

Module / Submodules	Features	User Roles	User Access				
			1	2	3	4	5
Pharmacy: Inpatient	Inventory:	Pharmacist Officer	W	W	W	W	W
	1 Compare						
	2 Floor Stock List	Pharmacist Assistant Officer	N	W	W	W	W
	3 Floor Stock Req						
	4 Emergency Trolley List	Pharmacy Store Officer	N	N	N	N	N
	5 Emergency Trolley Req	Pharmacy Store Assistant Officer	N	N	N	N	N

8.11 User Access Matrix for Reports Module

Module / Submodules	Features	User Roles	User Access						
			1	2	3	4	5	6	7
Reports	Client:	Medical Record Officer	R	R	R	R	R	N	R
	1 List								
	Item Barcode:								
	2 Print A4 Template	Medical Record Coder	R	R	R	R	R	N	R
	3 Print A4 Template (OT)								
	4 Print Barcode	Dietitian	R	R	R	R	N	N	N
	Inpatient:								
	5 Bed Occupancy Report	Staff Nurse	R	R	R	R	N	W	N
	Infection Prevention & Control (IPC):								
	6 View	Ward Nurse	R	R	R	R	N	N	N
	Admission & Discharge Information								
	7 View								

Module / Submodules	Features	User Roles	User Access									
			1	2	3	4	5	6	7	8	9	10
Reports: Financial	1 Invoice List	Clerk	R	R	R	R	R	R	R	R	R	R
	2 Sales by Item											
	3 Front Office											
	4 Receipts											
	5 Exemption List											
	6 Registration Fees	Finance Officer	R	R	R	R	R	R	R	R	R	R
	7 Deposit List											
	8 Interim List											
	9 Refund List	Finance Assistant Officer	R	R	R	R	R	R	R	R	R	R
	10 Cancelled Receipt											
	11 Cancelled Refund											

Module / Submodules	Features	User Roles	User Access												
			1	2	3	4	5	6	7	8	9	10	11	12	13
Reports: Pharmacy	1 List	Department Clerk	R	R	R	R	R	R	R	R	R	R	R	R	R
	2 Drug Usage														
	3 Dispense Activity														
	4 Drug Expiry	Pharmacist Officer	R	R	R	R	R	R	R	R	R	R	R	R	R
	5 Drug Cost														
	6 Dispense by Clinic														
	7 Transactions	Pharmacist Assistant Officer	R	R	R	R	R	R	R	R	R	R	R	R	R
	8 Prescribe by Doctor														

Module / Submodules	Features	User Roles	User Access														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	
	9 Facility Drugs	Pharmacy Store Officer	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
	10 Patient by Clinic																
	11 Stock Status	Pharmacy Store Assistant Officer	R	R	R	R	R	R	R	R	R	R	R	R	R	R	
	12 Quota																
	13 Shop																
	14 Floor Stock																

Module / Submodules	Features	User Roles	User Access					
			1	2	3	4	5	6
Pharmacy: Inpatient	Inpatient:	Pharmacist Officer	R	R	R	R	R	R
	1 Admission Statistics							
	2 Drug Usage	Pharmacist Assistant Officer	R	R	R	R	R	R
	3 Drug Cost							
	4 Transaction Statistics	Pharmacy Store Officer	R	R	R	R	R	R
	5 Prescription Records							
	6 Dispense by Ward	Pharmacy Store Assistant Officer	R	R	R	R	R	R

8.12 User Access Matrix for Sales Module

Module / Submodules	Features	User Roles	User Access								
			1	2	3	4	5	6	7	8	9
Sales	1 Price Lists	Clerk	W	N	W	W	W	W	W	W	W
	Sales Markup:										
	2 Parameter										
	Quotation:										

Module / Submodules	Features	User Roles	User Access								
			1	2	3	4	5	6	7	8	9
	3 Generate 4 Lists Delivery Order: 5 Lists Invoice: 6 Generate 7 Lists Receipt: 8 Lists Research: 9 Invoice Lists	Finance Officer	W	W	W	W	W	W	W	W	W
		Finance Assistant Officer	W	W	W	W	W	W	W	W	W

Module / Submodules	Features	User Roles	User Access			
			1	2	3	4
Sales: Private Patient	1 Pending Invoice	Clerk	W	W	W	W
	2 Generate Group Invoice	Finance Officer	W	W	W	W
	3 Invoice Lists 4 Group Invoice Lists					
		Finance Assistant Officer	W	W	W	W

8.13 User Access Matrix for Panel Clinic Module

Module / Submodules	Features	User Roles	User Access
Panel Clinic	Patient Lists	Department Clerk	R
		Finance Officer	R
		Finance Assistant Officer	R

8.14 User Access Matrix for CDL Module

Module / Submodules	Features	User Roles	User Access							
			1	2	3	4	5	6	7	8
CDL	1 Status	Department Clerk	R	W	W	N	N	N	N	W
	2 Arrive Sample Inhouse									
	3 Arrive Sample Outsource									
	4 Reject Test	PPK CDL	R	W	W	N	N	N	N	W
	5 Complete Test									
	6 Complete with Result									
	7 Validate Result	MLT Department	W	W	W	W	W	W	W	W
	8 Print Sticker LABID									

Module / Submodules	Features	User Roles	User Access						
			1	2	3	4	5	6	7
CDL	Transfusion Medicine:	Science Officer	R	R	R	W	W	W	W
	1 Request Log								
	2 Transfusion Status								
	Microbiology:	MLT Department							
	3 Result Status								
	Report:		R	R	R	W	W	W	W
	4 Pending List – All								
	5 Pending List – Outsource								
	6 Reject List								
	7 List of Test								

8.15 User Access Matrix for Radiology Module

Module / Submodules	Features	User Roles	User Access				
			1	2	3	4	5
Radiology	1 Set Appointment	Department Clerk	W	W	R	R	N
	2 Arrive Patient						
	3 Status	Doctor	N	N	R	W	W
	Report:						
	4 Queue	Radiographer	W	W	R	N	N
	5 Prelim List						

8.16 User Access Matrix for Respiratory Module

Module / Submodules	Features	User Roles	User Access		
			1	2	3
Respiratory	Bronchoscopy:	Medical Record Clerk	N	N	R
	1 Create New	Medical Record Officer	N	N	R
	2 List	Medical Record Coder	N	N	R
	Report:				
	3 List	Doctor	W	R	R
		MLT Department	W	R	R

8.17 User Access Matrix for NICL Module

Module / Submodules	Features	User Roles	User Access			
			1	2	3	4
NICL	1 Verification	Department Clerk	R	R	R	R
	2 Status					
		Doctor	W	R	W	R
	Report:					
	3 Queue	MLT Department	W	R	W	R
	4 List					

8.18 User Access Matrix for Psychiatry Module

Module / Submodules	Features	User Roles	User Access
Psychiatry	Referral Counselling List	Staff Nurse	R
		Ward Nurse	R
		Doctor	R
		Counselling Officer	W

8.19 User Access Matrix for Bariatric Module

Module / Submodules	Features	User Roles	User Access						
			1	2	3	4	5	6	7
Bariatric	New Case:	Doctor	W	W	W	W	W	W	W
	1 First Consultation								
	2 Pre-Op Investigation								
	3 Pre-Op Consultation								
	4 Pre-Op Plan								
	Follow-Up:								
	5 Vitals								
	6 Investigation								
	7 Consultation								

8.20 User Access Matrix for Endoscopy Module

Module / Submodules	Features	User Roles	User Access	
			1	2
Endoscopy	1 OGDS	Doctor	W	R
	2 View			

8.21 User Access Matrix for MSW Module

Module / Submodules	Features	User Roles	User Access						
			1	2	3	4	5	6	7
MSW	1 Application	Department Clerk	W	R	R	R	W	W	R
	2 Screening								
	3 Socioeconomic Assessment	MSW Officer	W	W	W	W	W	W	R
	4 JTKP Decision								
	5 Other Agency Decision	MSW Assistant Officer	W	W	W	W	W	W	R
	6 Acceptance								
	7 Report								

8.22 User Access Matrix for Medical Ethics & Law Module

Module / Submodules	Features	User Roles	User Access
Medical Ethics & Law	CECS List	Medical Record Clerk	R
		Medical Record Officer	R
		Medical Record Coder	R
		Doctor	W

8.23 User Access Matrix for Medical Record Module

Module / Submodules	Features	User Roles	User Access	
			1	2
Medical Record	1 ICD-10	Medical Record Clerk	W	W
	2 Inpatient – Daily Census	Medical Record Officer	W	W
		Medical Record Coder	W	W

Exception Access

Exception access refers to user access which is granted to specific users for specific modules in UniMEDS. Unlike general access for a group of users, exception access allows only designated users to access a particular module. This action is controlled by System Administrator by using user's staff ID.

9.0 USER ACCESS ROLE DEFINITION

No.	Designation	Definition
1.	Receptionist Clerk	A non-health care worker who is managing customer service inquiries in regards to inpatient ward information.
2.	Clerk	A non-health care worker who is tasked with administrative and financial duties at a health facility. This role is responsible for both patient registration and billing.
3.	Ward Clerk	A non-health care worker who is tasked with administrative duties at hospital's ward.
4.	Department Clerk	A non-health care worker who is tasked with administrative duties at hospital's department.
5.	Medical Record Clerk	A non-health care worker who is tasked with administrative duties at Patient Information Department.
6.	Medical Record Officer	A person who has undergone training in management of medical records works in a medical record office of a health facility.
7.	Medical Record Coder	Certified clinical coder who has undergone training in clinical coding (ICD-10 for diagnosis coding and ICD-9CM for procedure coding)
8.	Doctor	<p>Is a group which consist of the following roles:</p> <ul style="list-style-type: none"> • Consultant – An NSR Certified Medical Practitioner after general postgraduate program and having privileges, who is responsible for the overall care of the patient and the maintenance of adequate documentation in the patient's medical record. • Specialist – The Medical Practitioner who has completed general postgraduate program who is not NSR certified. He/she is accountable to a named Consultant for the care of both inpatients and outpatients and shall be responsible for advising, supervising and teaching the junior Medical Staff in the Department, in addition to his/her clinical responsibilities. • Medical Officer – A graduate from recognised medical institutions and registered with the Malaysian Medical Council or Malaysian Dental Council. • Psychiatrist – Means a registered medical practitioner with qualifications, training and experience in the discipline of psychiatry recognized by the Director General.

No.	Designation	Definition
		<ul style="list-style-type: none"> • Psychologist – Means an individual who is trained and registered as a Clinical Psychologist to deal with research and clinical application of psychological principles for the recognition, assessment, diagnosis, treatment, rehabilitation and prevention of cognitive, emotional, behavioral and learning disorders to enhance subjective well-being, mental health and life functioning. • Dental Officer – A registered dental practitioner who is licensed to practice dentistry under the provision of the Dental Act 1971. • Houseman – The Practitioner who is undergoing pre-registration training upon graduation. The post is to be held for two years and is on a rotational basis through various departments as laid down by the Ministry of Health regulations. He/she shall be accountable to a named member of the Consultant, Specialist, Medical Officer of the Department in which he/she is rotating at the time. The Director of the Hospital shall hold administrative responsibility for the Houseman. • Post Graduate Doctor – Practitioner who is undergoing training in recognized Postgraduate program. • Pathologist – A medical professional specializing in researching, diagnosing, and analyse bodily fluids and tissue samples, perform laboratory tests, and provide pathology reports to assist in disease study, diagnosis, and treatment. • Radiologist – A medical doctor that specialize in diagnosing and treating injuries and diseases using medical imaging (radiology) procedures.
9.	Dietitian	An individual who is trained and registered as a Dietitian to perform nutrition assessment and diagnosis; prescribe medical nutrition therapy; monitor, evaluate and document the nutrition care of individuals and groups requiring diet intervention and rehabilitation; provide diet counseling to individuals and caregivers; manage food services including therapeutic diets; and promote wellness in the community and provide consultation to related industries.
10.	ASO Dietitian (Assistant Science Officer)	Work with Dietitians on food and nutrition while assessing, diagnosing and treating dietary and nutritional problems.
11.	Medical Assistant	Medical assistant is a health care professional who is perform routine clinical and administrative duties under the direct supervision of a physicians.

No.	Designation	Definition
12.	Research Assistant	Research assistants support primary researchers in the collection of data and information through lab studies, surveys, and other means.
13.	Staff Nurse	<p>A person who is admitted to the general part of the Malaysian Nursing Board and who has undergone a three (3)-year Diploma or Degree in Nursing Programme at a recognised college of nursing or university and passed the Nursing Board Examination.</p> <p>Main functions of the nurse are to give holistic treatment to the patients in the health facilities such as general wards, operation theaters, outpatient departments and specialist clinics.</p>
14.	Ward Nurse	<p>A person who is admitted to the general part of the Malaysian Nursing Board and who has undergone a three (3)-year Diploma or Degree in Nursing Programme at a recognised college of nursing or university and passed the Nursing Board Examination.</p> <p>Main functions of the nurse are to give holistic treatment to the patients in the health facilities such as general wards, operation theaters, inpatient departments and specialist clinics.</p>
15.	Science Officer (SO)	A person, who has undergone training, received a degree qualification in a scientific field and working in a health facility. They included Biochemist, Microbiologist, Physicist, Genetics, Entomologist, Embryologist, Forensic, Food Nutrition & Biomedical.
16.	Medical Laboratory Technologist (MLT) Department	An individual who is trained and registered as a Medical Laboratory Technologist to perform routine and complex laboratory investigations in various disciplines of pathology.
17.	Radiographer	An individual who is trained and registered as a Diagnostic Radiographer to acquire and interpret medical images using ionising radiation and other imaging modalities for medical diagnostic and interventional purposes.
18.	Optometrist	Healthcare professional who has undergone training and obtained qualification.
19.	Audiologist	An individual who is trained and registered as an Audiologist to provide a comprehensive array of professional services related to the prevention of hearing loss, audiologic

No.	Designation	Definition
		identification, assessment, diagnosis and intervention of persons with impairment of auditory and vestibular functions.
20.	Physiotherapist	An individual who is trained and registered as a Physiotherapist to promote, prevent, analyze, make physiotherapy diagnosis, carry out physiotherapy treatment, intervene, habilitate and rehabilitate any form of physical conditions and disabilities to restore optimum movement and functional abilities.
21.	Occupational Therapist	An individual who is trained and registered as an Occupational Therapist to prevent, promote, make occupational therapy diagnosis and provide occupational therapeutic interventions for individuals who are physically and / or psychosocially impaired to enhance performance through engagement and participation in activities of daily living, work and leisure.
22.	Speech Therapist	An individual who is trained and registered as a Speech-Language Therapist managing individuals with speech, language, voice, communication, feeding and swallowing disorders through appropriate speech-language pathology modalities of screening, assessment, diagnosis, intervention, therapy, counseling, consultation, prevention and education.
23.	Rehabilitation Technician	A professional who helps nurses and physical therapists in treating patients with physical disabilities.
24.	Counseling Officer	Healthcare personnel who has undergone degree qualification.
25.	Pharmacist Officer	A person who is professionally qualified and licensed by the Pharmacy Board Malaysia to prepare and dispense medicinal drugs.
26.	Pharmacist Assistant Officer	Individuals who possess a Diploma in Pharmacy hired by HUiTM to work as part of a pharmacy team under the direction of a registered pharmacist.
27.	Pharmacy Store Officer / Pharmacy Store Assistant Officer	A person who is part of pharmacy team and tasked with store and stock duties at Pharmacy Department.
28.	Medical Social Work Officer / Medical Social Work Assistant Officer	A person who is trained and registered as a Medical Social Work Officer to conduct assessment and intervention; manage biopsychosocial problems and provide consultation to individuals, their family members or caregivers.

No.	Designation	Definition
29.	Finance Officer / Finance Assistant Officer	Individuals who are in charge of overseeing and managing the financial transactions of the hospital.
30.	<i>Pembantu Perawatan Kesihatan (PPK)</i>	A person who has completed a brief healthcare training program and provides support services for Staff Nurses and Assistant Medical Officers.
31.	System Administrator	A person who is employed to maintain and operate a computer system and/or network. System administrators may be members of an information technology (IT) department. System administrator is accessible to all modules in UniMEDS.