MANUAL FOR THE MANAGEMENT OF DIVISIONAL HOSPITALS

2025

Directorate of Planning – Management, Development & Planning Unit
Ministry of Health, Sri Lanka

MANUAL FOR THE MANAGEMENT OF PRIMARY MEDICAL CARE UNITS

2025
MINISTRY OF HEALTH

Table of Contacts

Foreword

I am pleased to present the **Manual for the Management of Divisional Hospitals**, a vital step towards strengthening our primary health care system in Sri Lanka.

Divisional Hospitals (DHs) serve as the cornerstone of our health care delivery system, providing essential primary-level curative care to the public. These institutions play a pivotal role in ensuring equitable access to health services, particularly in underserved areas.

The primary objective of this manual is to offer comprehensive managerial guidelines and technical information to support Medical Officers in Charge (MOICs) in adopting evidence-based management practices. By implementing these practices, we aim to enhance the quality of services provided, attract more patients to these institutions, and optimize their utilization. This will also contribute to alleviating the burden on tertiary care facilities while ensuring efficient and effective care for the people.

I encourage all health care professionals to familiarize themselves with the contents of this manual and to implement its recommendations diligently. Together, we can ensure that Divisional Hospitals remain a cornerstone of accessible, high-quality health care for the people of Sri Lanka.

Dr. S. Sridharan
Deputy Director General (Planning)
January 22, 2025

LIST OF CONTRIBUTORS – SECOND EDITION

Chapter 1 Introduction	Dr. W. M. Upuli S. Wijemanne, Director Planning, Ministry Of Health Dr. G. D. N. Samarutilake, Deputy Director, Field Services - NIHS Dr. G. Paul Roshan, Medical Superintendent, BH Akkaraipattu Dr. Surupini Samuel, MO Planning
Chapter 2 General Administration and Establishment Functions	Dr.W. M. Upuli S. Wijemanne, Director Planning, Ministry Of Health Dr. G. D. N. Samarutilake, Deputy Director, Field Services – NIHS Dr. W. S. K. Kumarawansha, RDHS, Polonnaruwa Dr. Subhashini Panduwawala, DMO, DH Biyagama
Chapter 3 Management of Outpatient Department	Dr. Indika Wanninayake, RDHS, Gampaha Dr. C. S. Dunuwille, DMO, DH Pamunugama
Chapter 4 Emergency Care	Dr. Samiddhi Samarakoon, Director, NCD, Ministry of Health
Chapter 5 Ward Management	Dr. Duminda Dias, Director, BH Gampola Dr. C. S. Dunuwille, DMO, DH Pamunugama
Chapter 6 Labour Room Management	Prof. Hemantha Dodampahala, Consultant Obstetrician and Gynaecologist, President, College of Obstetricians and Gynaecologists, Dr. Chandana Jayasundara, Consultant Obstetrician and Gynaecologist, Secretary, College of Obstetricians and Gynaecologists
Chapter 7 Management of Minor Injuries/Surgeries	Dr. Kapila C. Gamage, Consultant General Surgeon, Representative of the College of Surgeons of Sri Lanka
Chapter 8 Oral Healthcare Services	Dr P. U. Gamalathge, Director, Dental Services, Ministry of Health
Chapter 9 Clinics	Dr. Janaka Somaratne, Director, DGH Nawalapitiya

	Dr. Arundika Senaratne, Consultant Community Physician – Directorate of NCD
Chapter 10 Family Medical Clinics	Dr. G. S. P. Ranasinghe, Director, Primary Care Services, Ministry of Health
Chapter 11 Outreach clinics	Dr. G. S. P. Ranasinghe, Director, Primary Care Services, Ministry of Health
Chapter 12 Laboratory Services	Dr. G. Sudath K. Dharmaratne, Deputy Director General, Laboratory Services
Chapter 13 Management of Medical Supplies	Dr. K. M. P. D. Jayasundara, Senior Registrar in Medical Administration Dr. Y. G. A. C. Senevirathne, Senior Registrar in Medical Administration Dr. Subhashini Panduwawala, DMO, DH Biyagama Mrs. R. A. D. T. Priyadarshini, SMLT, BH Diyatalawa Mrs. Nirosha Jayaratne, Development Officer, Office of DDG Laboratory Services Dr Chandana Wijesinghe, Deputy Director, TH Peradeniya Mrs. K. R. Nimali Dias, Superintendent Pharmacist, NHSL Mrs. Shirani Amarasinghe, Chief Pharmacist, TH Kalubowila Mr. Indika Kularathne, Chief Pharmacist, BH Balangoda
Chapter 14 Diet Service	Dr. Pramitha Shanthilatha, RDHS, Kurunegala Dr. Wishva Ratnayake, Registrar in Medical Administration
Chapter 15 Infection Prevention and Control	Dr. Rohini Wadanamby, President, Sri Lanka College of Microbiologists Dr. Madhumanee Abeywardena, Consultant Microbiologist Prof. Veranja Liyanapathirana, Consultant Microbiologist
Chapter 16 Sterilization Procedures	Dr. Rohini Wadanamby, President, Sri Lanka College of Microbiologists Dr. Madhumanee Abeywardena, Consultant Microbiologist Prof. Veranja Liyanapathirana, Consultant Microbiologist

Chapter 17 Sanitation	Dr. Pramitha Shanthilatha, RDHS, Kurunegala
Chapter 18 Healthcare Waste Management	Dr. Inoka Suraweera, Consultant Community Physician, Directorate of Environmental and Occupational Health
Chapter 19 Linen and Laundry Service	Dr. Pramitha Shanthilatha, RDHS, Kurunegala
Chapter 20 Medico-Legal Functions and Facilities	Dr. R. R. G. S. Amararatne, Consultant Forensic Pathologist, Vice President - College of Forensic Pathologists of Sri Lanka Prof. M. Vidanapathirana, Consultant Forensic Pathologist Dr. C. K. Rajaguru, Consultant Forensic Pathologist
Chapter 21 Ensuring Healthcare Quality and Safety	Dr. A. Dewanee Ranaweera, Deputy Director, Directorate of Healthcare Quality & Safety Dr. Nimali Wijegoonawardhana, Consultant Community Physician Dr. Himan Galappaththi, Registrar in Community Medicine Dr. Chaminda Weerakoon, RDHS, Matale Dr. Sammani Hewagama, Medical Superintendent, BH Beruwala
Chapter 22 Hospital Health Information System / Maintenance of Medical Records	Dr. Palitha Karunapema, Director, Health Information Dr. Gumindu Kulatunga, Consultant in Health Informatics Dr. U. M. Gouree Sanketha Francis, Senior Registrar in Medical Administration
Chapter 23 Digital Transformation and Management of Electronic Medical Records	Dr. Palitha Karunapema, Director, Health Information, Ministry of Health Dr. Gumindu Kulatunga, Consultant in Health Informatics
Chapter 24 Medical Ethics and Patient Rights	Prof. Anoja Fernando, Emeritus Professor, University of Ruhuna Dr. Lasitha Malalasekara, Registrar in Medical Administration
Chapter 25 Communication	Dr. B. R. K. Batuwanthudawa, Director, Health Promotion Bureau
Chapter 26 Promoting a Healthy Workplace: Health Promotion Hospital Setting	Dr. B. R. K. Batuwanthudawa, Director, Health Promotion Bureau
Chapter 27 Landscaping	Dr. Nihal Weerasooriya, PDHS, Central Province

Chapter 28 Developing a Fire Preparedness Plan	Dr. H. D. B. Herath, National Coordinator, Disaster Preparedness & Response Division Dr. Novil Wijesekara, Acting Consultant Community Physician, Disaster Preparedness & Response Division
Chapter 29 Community Participation in the Management of Hospitals	Dr. Chintha Jayasinghe, Consultant Community Physician, RDHS, Gampaha
Chapter 30 Referral Services Development	Dr. D. M. P. Rajapaksha, Registrar in Medical Administration
Chapter 31 Emergency/Disaster (Mass casualty) Preparedness	Dr. H. D. B. Herath, National Coordinator, Disaster Preparedness & Response Division Dr. Novil Wijesekara, Acting Consultant Community Physician, Disaster Preparedness & Response Division
Chapter 32 Rehabilitation	Dr. U. M. Gouree Sanketha Francis, Senior Registrar in Medical Administration
Chapter 33 Palliative Care Services	Dr. Thejaka Siriwardena, Registrar in Medical Administration

REVIEW COMMITTEE 2023

Dr. Asela Gunawardena	Director General of Health Services
Dr. S. Sridharan	Deputy Director General, Planning
Dr. Susie Perea	Deputy Director General, PHS II
Dr. Champika Wickramasinghe	Deputy Director General, NCD
Dr. G. Sudath K. Dharmaratne	Deputy Director General, Laboratory Services
Dr. G. Wijesuriya	Deputy Director General, MS II
Dr. Kamal Jayasinghe	Former Deputy Director General, Medical Supplies Division
Dr. W.M. Upuli S. Wijemanne	Director, Planning, Ministry of Health
Dr. Anil Samaranayake	Director, International Health, Ministry of Health
Dr. Thilina Wanigasekara	Director, Organization & Development, Ministry of Health
Dr.Vindiya Kumarapeli	Director Policy Analysis & Development, Ministry of Health
Dr. P. U. Gamalathge	Director, Dental Services , Ministry of Health
Dr. Samiddhi Samarakoon	Director, Non Communicable Diseases, Ministry of Health
Dr. Nihal Weerasooriya	Provincial Director of Health Services, Central Province
Dr. Anoja Rodrigo	Director, Teaching Hospital, Ratnapura
Dr. Duminda Dias	Director, Base Hospital, Gampola
Dr Pramitha Shanthilatha	Regional Director of Health Services, Kurunegala
Dr. IndikaWanninayake	Regional Director of Health Services, Gampaha
Dr. G. D. N. Samarutilake	Deputy Director, Field Services, NIHS
Dr. Chandana Wijesinghe	Deputy Director, TH Peradeniya

Dr A. Dewanee Ranaweera	Deputy Director, Directorate of Healthcare Quality & Safety
Dr. Maleesha Mallawaarchchi	Medical Superintendent, BH Meerigama
Dr. C. K. Rajaguru	Consultant Forensic Pathologist
Dr. Duminda Ariyaratne	Consultant Surgeon, National Hospital of Sri Lanka
Dr. Rohini Wadanamby	President, Sri Lanka College of Microbiologists
Dr. Madhumanee Abeywardena	Consultant Microbiologist
Prof. Veranja Liyanapathirana	Consultant Microbiologist
Dr. Malkanthi Galhena	Consultant Family Physician
Dr. Inoka Suraweera	Consultant Community Physician, Environmental and Occupational Health Directorate
Dr. Madhava Gunasekera	Consultant Community Physician, Planning Unit
Dr. Chintha Jayasinghe	Consultant Community Physician, RDHS Gampaha
Dr. Novil Wijesekara	Acting Consultant Community Physician, Disaster Preparedness & Response Division
Mr. D. R. S. Fernando	CFO III, Ministry of Health
Dr. K. M. P. D. Jayasundara	Senior Registrar in Medical Administration
Dr. Y. G. A. C. Senevirathne	Senior Registrar in Medical Administration
Dr. Nalin Premadasa	Senior Registrar in Medical Administration
Dr. Gayan Ariyadasa	Senior Registrar in Community Medicine, Health Promotion Bureau
Dr. Lasitha Malalasekara	Registrar in Medical Administration
Dr. D. M. P. Rajapaksha	Registrar in Medical Administration
Dr C. S. Dunuwille	DMO – DH Pamunugama
Dr Subhashini Panduwawala	DMO, DH Biyagama
Dr. D. R. Kahangamage	DMO, DH Athurugiriya

Dr. Kumara Wanigatunga	DMO, DH Talangama
Dr. M. G. H. Alwis	DMO, DH Divulapitiya
Dr. Kumari Gunarathne	DMO, DH Dompe
Dr. Surupini Samuel	MO Planning, Planning Unit
Dr. Sisira Karunarathna	MO Planning, Planning Unit
Dr. V. Bhavithra	MO Planning, Planning Unit
Dr. Chithira Seneviratne	MO, Health Informatics, Planning Unit
Mr. Indika Kularathne	Chief Pharmacist, BH Balangoda
Mr. D. K. K. Bandara	Divisional Pharmacist, Polonnaruwa

LIST OF CONTRIBUTORS – FIRST EDITITION - 1994

1.	Dr. (Mrs.) S. Abeyratne	Director/Dental Services, Ministry of Health
2.	Dr. L. B. L. D. Alwis	J.M.O. Colombo
3.	Dr. Dennis J. Aloysius	Family Physician Past President Organization of Professional Associations
4.	Dr. S. D. Athukorale	Bacteriologist, General Hospital, Colombo
5.	Dr. A. M. S. Beligaswatte	Director, General Hospital, Kandy
6.	Mr. H. E. Caldera	AO, Victoria Memorial Eye Hospital, Colombo
7.	Mrs. N. C. De Costa	Director/Nursing (Education), Ministry of Health
8.	Mr. W. G. D. Egodawatte	Addl. DDG (F), Ministry of Health
9.	Dr. N. Fernando	DPDHS, Badulla
10.	Dr. (Mrs.) M. R. R. Fernando	Pathologist, General Hospital, Colombo
11.	Dr. D. R. Gabadage	DMO Homagama
12.	Dr. Ananda Gunasekera	M.S. General Hospital, Kurunegala
13.	Dr. W. G. Gunawardena	M.S. General Hospital, Colombo South
14.	Mrs. D. M. Jayakody	Special Grade Nursing Officer, Castle Street Hospital for Women, Colombo
15.	Dr. (Mrs.) W. S. Jayakuru	Epidemiologist, Epidemiology Unit, Colombo
16.	Mr. R. P. Leeladasa	AO, Castle Street Hospital for Women, Colombo
17.	Mr. H. A. Liyanage	AO, General Hospital, Colombo
18.	Mr. Thusitha Malalasekara	Publicity Officer, Health Education Bureau
19.	Dr. Ajith Mendis	Director Medical Supplies Division, Ministry of Health
20.	Dr. S. W. Pathinayake	DPDHS, Matara
21.	Dr. Reggie Perera	DDGHS (M.S.), Ministry of Health
22.	Dr. R. M. M. Rajamanthree	DPDHS, Kurunegala
23.	Mr. Mahinda Samarasekera	Director / Transport, Ministry of Health

24.	Mrs. S. A. B. Senadheera	CNO, General Hospital, Colombo
25.	Mrs. M. Suriyarachchi	Director Nursing, Medical Services, Ministry of Health
26.	Dr. V. M. Velummylum	Director / Medical Services, Ministry of Health
27.	Mr. S. Vigneswaran	Electrical Engineer, General Hospital, Colombo
28.	Mrs. K. Vithana	Special Grade Nursing Officer, General Hospital, Colombo
29.	Mr. Tilak Wickremasekera	Director Administration (Medical Services), Ministry of Health
30.	Dr. (Mrs.) H. Wijemanne	Programme Officer, (PHC) UNICEF
31.	Mr. K. A. D. C. Wijenayake	Special Grade Nursing Officer, General Hospital, Colombo

CHAPTER 1
INTRODUCTION

1.1 Background / History

In the early 19th century, hospitals were established in major cities to provide curative services to citizens. Over time, basic health services were extended to rural areas through mobile clinics and temporary health care centers. Some of these centers were eventually converted into permanent facilities, known as Central Dispensaries (CD), where both curative and preventive services were provided to rural communities. These dispensaries primarily offered basic curative services to the local population. Later, depending on health care demand, some of these CDs were upgraded to Rural Hospitals (RH), Maternity Homes (MH), and Peripheral Units (PU).

RHs, CDs, and MHs (now referred to as Primary Medical Care Units – PMCU) were generally managed by Registered Medical Officers (RMO) or Assistant Medical Officers (AMO). District Hospitals, which offered inpatient facilities, were established to deliver more comprehensive curative services. A Medical Officer was appointed as the Medical Officer-In-Charge (MOIC), who served as the administrative head of these hospitals. This role became widely known as the District Medical Officer (DMO).

According to the General Circular Letter No. 02-61/2005 dated May 11th, 2005, on Hospital Re-Categorization by the Ministry of Healthcare, Nutrition, and Uva-Wellassa Development, all District Hospitals, Rural Hospitals, and Peripheral Units were renamed as Divisional Hospitals (DH). The primary function of these institutions was to provide primary-level curative health care to patients in need.

During the 20th century, Sri Lanka's health care system underwent significant improvements alongside advancements in medical science. The introduction of new medical technologies and the recruitment of more clinical specialists in both government and private health care institutions led to enhanced levels and quality of clinical care. As a result, larger hospitals began to attract more patients, leaving smaller institutions underutilized.

Base Hospitals (BH) were established as secondary care institutions to provide specialized medical care. Some District Hospitals were upgraded to Base Hospitals, offering higher-level secondary health care services. Despite this, Divisional Hospitals (DH) and Primary Medical Care Units (PMCU) continue to play an essential role in Sri Lanka’s primary health care system.

1.2 Primary Healthcare Service

Primary health care (PHC), also known as 'essential health care,' is recognized as a fundamental right of the people. The Alma-Ata Declaration of 1978 identified eight key elements of PHC.

i.) Water sanitation

ii.) Promotion of food supply and nutrition

iii.) Health education about health problems, methods of preventing and controlling them

iv.) Maternal and child health, including family planning

v.) Immunization

vi.) Prevention of endemic diseases

vii.) Treatment for minor ailments and injuries

viii.) Provision of essential drugs

Of the eight components of PHC, components 1-6 are categorized as preventive services, while components 7-8 are considered curative services. Health systems worldwide have acknowledged the importance of PHC and committed to providing these services equitably. PHC has demonstrated significant returns on health care investments by improving population health and reducing the need for higher levels of care. As a result, UN agencies are now exploring ways to promote health in communities as part of development strategies, particularly for developing countries. Primary health care components are incorporated into global development programs proposed by the United Nations, and many developing countries receive support from UN agencies to strengthen, reform, or restructure their PHC systems.

1.3 Primary Healthcare Reforms

According to General Circular No. 01-18/2019, dated March 7th, 2019, on the Reorganization and Strengthening of the Primary Care Service Delivery System to achieve Universal Health Coverage, "Primary Healthcare reforms aim to develop the infrastructure of Primary Health Care Institutions (PMCI), which include all PMCUs, Divisional Hospitals (DH), and Outpatient Departments (OPD) of Base Hospitals and higher institutions, excluding Specialized Hospitals."

The government's mandate is to provide comprehensive health care services free of charge to all citizens of Sri Lanka, covering health care needs from primary to tertiary levels. The reorganization of Divisional Hospitals is crucial to encourage patient use of these institutions and to maximize the efficient use of their facilities.

The importance of primary health care was first recognized by the Sri Lankan health system in 1926 with the establishment of the first health unit in Kalutara. In 1978, the World Health Organization (WHO) launched the "Health for All by the Year 2000" initiative as a global strategy to strengthen PHC. Following this, the United Nations

introduced the Millennium Development Goals (MDGs) for 2015 and the Sustainable Development Goals (SDGs) for 2030, aimed at supporting the development of health care systems in low- and middle-income countries. Health authorities in Sri Lanka are now fully committed to implementing health care reforms to meet these SDGs.

The Ministry of Health in Sri Lanka has introduced reforms to achieve the SDG targets, outlined in the National Health Policy for 2016–2025 and the National Health Strategic Master Plan. These plans focus on preventive, curative, rehabilitative services, health administration, and human resources in health (HRH). In parallel, the World Bank has promoted the concept of 'Universal Health Coverage' (UHC) as part of the SDGs. Supporting this initiative, the Ministry of Health in Sri Lanka has developed a separate policy for health care delivery under UHC, along with the Sri Lanka Essential Health Services Package of 2019.

Volume IV of the National Health Strategic Master Plan, which focuses on health administration and HRH, proposes reforms aimed at optimizing the utilization of primary-level curative health care institutions. The proposed reform model is known as the "shared care cluster."

A "shared care cluster" is defined as a unit where a specialist care institution functions as the apex hospital, providing general specialties of care, and is linked with surrounding primary curative institutions (Divisional Hospitals and Primary Medical Care Units). Shared care involves: (a) a patient's health care being coordinated between primary and specialized services, and (b) resources within the cluster being shared to ensure optimal availability and utilization. (National Health Strategic Master Plan, Vol IV, 2016–2025, Ministry of Health).

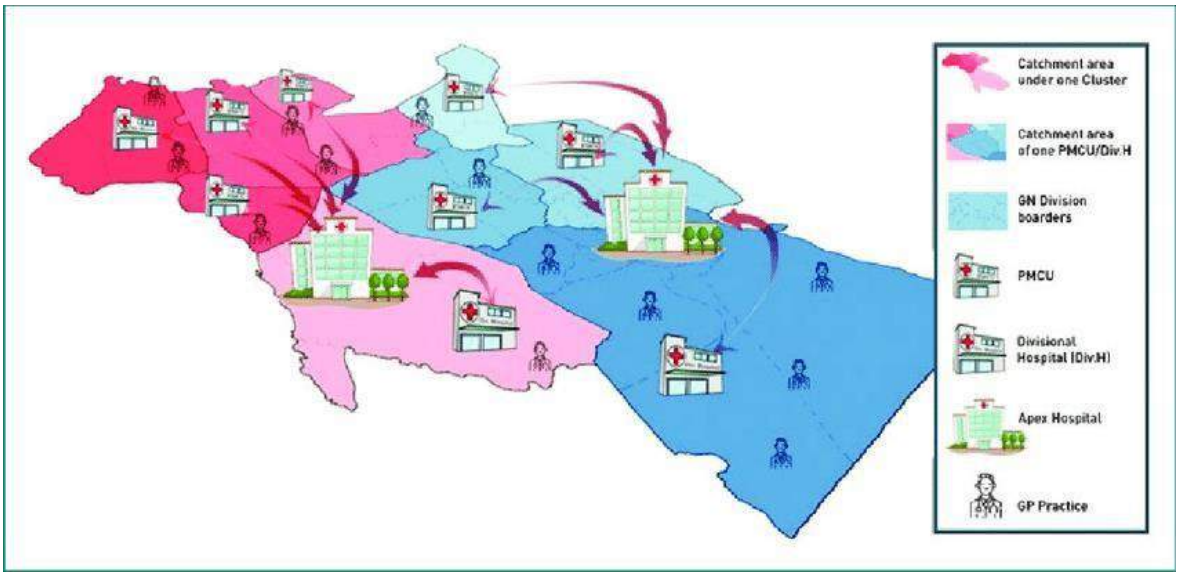


Figure 1.1: Schematic illustration of proposed shared care cluster model for curative service delivery (Ministry of Health)

1.4 Shared Care Cluster

All Divisional Hospitals (DH) and Primary Medical Care Units (PMCU) are connected to an apex hospital (Secondary or Tertiary Hospital) where specialist medical officers are available. Each primary health care provider is responsible for a defined population within a specific geographical area. Basic demographic and health data are recorded in an electronic database, with each client assigned a Personal Health Number (PHN) and a Personal Health Record (PHR). This system is referred to as population empanelment.

Individuals aged 35 years and above are screened at Healthy Lifestyle Centers (HLC). Following this screening, clients receive all primary care services at their designated institutions, and referrals to higher-level centers are made as necessary. This process is coordinated through the apex hospital assigned to the primary care institution. The shared care cluster system is structured to optimize the use of resources within the cluster.

1.5 Divisional Hospitals – Structure and Functions

Divisional Hospitals (DH) and PMCUs are managed by a Medical Officer-In-Charge (MOIC). According to General Circular Letter No. 02-59/2008, dated June 11th, 2008, on Hospital Re-Categorization by the Ministry of Healthcare and Nutrition, DHs were further classified based on bed capacity as follows:

Table 1.1: Type of Divisional Hospital and Bed Strength allocated to each type

Type of Hospital	Bed Strength
Divisional Hospital type A	More than 100
Divisional Hospital type B	50 – 100
Divisional Hospital type C	Less than 50

1.6 Facilities and Services Available at Divisional Hospitals

i) Administrative services
   - Office management

ii) Direct Patient Care Services
   - OPD services
   - Emergency Care Services (See Chapter 4) & Minor Operations

- Provision of Specialist Services
- Inward Facilities – Medical, Surgical, Pediatric and Obstetrics & Gynecology
- Facilities for emergency labor management (See Chapter 6)
- Referrals, back referrals, step down referrals
- Rehabilitation facilities
- Palliative care
- Oral Health Care Services

iii) Follow ups and Public Health Services

- Medical Clinic
- Maternal & Child Health Services (See Chapter 9)
- Healthy Lifestyle Clinic
- Mental Health
- Mithurupiyasa
- Any other clinic depending on service demand (eg: CKD clinic)
- Immunization and Vaccination Facilities
- Screening Services based on the requirement (Eg: Malaria, Filariasis)
- Health Education and Promotion Services

iv) Supportive Services

- Laboratory Services based on the level of care
- Medico-Legal Services
- Ambulance / Transport Services

v) Medical Supplies

- Pharmacy and Drug Stores

vi) Other Services

- General Stores
- Record Room
- Condemning Stores
- Patient Welfare Services etc.

The services mentioned were outlined in General Circular No. 01-18/2020, dated March 3rd, 2020, on "Facilities Offered at Different Categories of Medical Care Institutions – 2020," along with recommendations from subject matter experts. The services and facilities available at a DH vary based on the type and demand of the locality.

Standards for physical spaces have been established to enhance and optimize the services provided by DHs (Refer to General Circular No. 01-29/2018, issued on June 22nd, 2018, on "Physical Space Norms for Primary Health Care Facilities" – Annexure 1.1).

1.7 Objectives of the Manual

The general objective of this manual is to provide comprehensive managerial guidelines and relevant technical information and evidence to novice administrators appointed to DHs. This manual assists the MOIC in adopting evidence-based management practices to deliver effective health care services. The following specific objectives have been developed from key thematic managerial areas to enhance the capacities of the MOIC and the management staff.

i.) To raise awareness of governance, policies, plans, programs, projects, managerial processes, and standards relevant to DHs in Sri Lanka.

ii.) To organize, manage, and deliver standardized quality and safe medical care services by a DH (primary medical care).

References

1. Divisional Hospitals – Structure and Functions
2. Facilities and services available at Divisional Hospitals
3. National Healthcare Policy 2016 – 2025, Ministry of Health
4. National Health Strategic Master Plan Vol I – IV 2016 – 2025
5. Policy on Healthcare Delivery for Universal Health Coverage (health.gov.lk)
6. World Health Assembly 1977
7. Agenda 2015, United Nations
8. Agenda 2030, United Nations
9. Reorganizing Primary Healthcare in Sri Lanka, Ministry of Health 2017
10. Universal Health Coverage, World bank
11. Project Administration Manual – PSSP World bank
12. Project Administration Manual – HSEP - ADB
13. Sri Lanka Essential Health Service Package, Ministry of Health, 2019

CHAPTER 2
GENERAL ADMINISTRATION AND ESTABLISHMENT FUNCTIONS

2.1 Introduction

Hospitals are a group of government establishments governed by a set of predefined rules, regulations, and codes common to all state sector establishments. The Establishment Code (E-Code) and Financial Regulations (FR) are the two main guiding documents published by the Government of Sri Lanka (GOSL) for managing government establishments on a common administrative platform. Therefore, it is the responsibility of health administrators to familiarize themselves with these documents and align the functions of health institutions according to these guidelines. It is important to note that not all system gaps and uncertainties are identified and addressed by the E-Code and FR. However, these guidelines are generally supplemented by circulars, guidelines, instructions, and memorandums whenever a system gap is identified.

Divisional Hospitals (DH) are typically managed by a Grade Medical Officer designated as the Medical Officer in Charge (MOIC). MOICs of DHs are expected to develop their administrative capacities independently while seeking guidance and directives from higher health authorities. With few exceptions, all DHs fall under the administrative purview of the Regional Director of Health Services (RDHS) and the Provincial Director of Health Services (PDHS) under the provincial councils.

An office is defined as a unit established to ensure that the functions of the establishment are carried out within the provisions of the E-Code, FR, and other guiding documents issued by the provincial councils relevant to institutional administration. Office management is fundamental to achieving the desired departmental goals through good governance.

The aim of this chapter is to guide MOICs in managing DHs by organizing office functions to meet the goals of the DHs.

2.2 Office Management

MOICs are expected to plan, organize, coordinate, and control office activities to achieve the objectives of primary-level curative health care services. Office management focuses on the efficient and effective performance of office work aligned with the overall administration system. Additionally, MOICs of DHs are expected to identify managerial pathways and establish standard operational procedures (SOP) to execute hospital functions.

MOICs are responsible for conducting a situation analysis of the institution to plan and organize the service delivery system of the DH. Routine hospital data and information from all sources should be utilized to perform this analysis. The results of a thorough situation analysis provide valuable information to improve existing

systems and develop SOPs. Duties should be allocated among office staff to support hospital administration in delivering optimal care to patients.

2.3 Functions of an Office

The office of a DH can be organized into three main functions as follows:

Section A: Establishment Function

This section is responsible for carrying out managerial functions, including Human Resource Management (HRM), in accordance with the provisions outlined in the Establishment Code (E-Code). Key responsibilities include recruitment, training, performance evaluation, and staff development, ensuring that all HR practices align with regulatory standards.

Section B: Financial Management

This section is tasked with managing the financial operations of the DH according to the guidelines set forth in the Financial Regulations (FR). Responsibilities include budgeting, financial reporting, procurement, and ensuring the effective allocation of financial resources to support the hospital's objectives.

Section C: Planning

This section focuses on institutional development and management functions. It is responsible for strategic planning, program implementation, and monitoring of health care services to ensure that the DH meets its goals effectively.

The MOIC should supervise and guide office staff in the management of information and correspondence to ensure timely and efficient communication within the organization.

Section A: Establishment Function

The major office functions with regard to handling health information are given below**.**

i) Collection of data and information
ii) Arranging, recording and processing of data and information
iii) Analysis of data and information
iv) Dissemination and communication of information
v) Management of resources and safeguarding assets
vi) Sharing information with Medical Officer of Health (MOH), RDHS, PDHS and the Ministry of Health
vii) Collection of Data / Information

Modes of data / information flow:

- Written paper communications (E.g., Official letters, circulars, guidelines; non-official letters, newspaper articles, telegrams, fax, leaflets, petitions and others)
- Written electronic communications (Email, SMS, WhatsApp and other social media)
- Verbal Communication (E.g., telephone calls, TV and radio news, meetings, protests)
- IT Systems (E.g., Swastha, HHIMS, HRIMS)

All forms of data/information should be collected in an organized manner. Verbal communications should be recorded in the form of minutes for meetings or as transcripts in a communication register, depending on the circumstances. The date, time, and background information must be noted when transcribing verbal communications in a register.

The collection of data and information on a given subject is a prime responsibility of the subject officers, and MOICs should supervise the data managed by the office staff. Handling of all communications should be conducted in accordance with the provisions outlined in the managerial guidelines (E-Code, FR, training guides, and relevant circulars).

Name, signature, designation, and date should be included in all documents handled in the office.

viii) Arranging, Recording and Processing of Data / Information

All written communications should be date-stamped, signed, and registered in a log by the MOIC or a designated person appointed by the MOIC. All forms of verbal communications should be documented in the relevant registers as instructed. The next step is to compile all forms of communications according to their subjects for processing. Processing of data is a team effort, involving subject officers and relevant staff under the leadership of the MOIC.

ix) Analysis of Data / Information

Routine communications, numerical data, and other forms of communication, such as complaints and petitions, may require analysis before being communicated to the next level of management. The MOIC should initiate an institutional-level preliminary investigation if necessary or conduct content analysis before formulating responses. Analytical techniques such as frequency tables, graphs, why-why diagrams, bottleneck analysis, gap analysis, and fishbone diagrams can be used depending on the subject or issue being analyzed. All responses formulated to address issues should be thoroughly

evaluated against managerial guidelines before execution.

x) Dissemination and Communication of Data / Information

MOICs are expected to share routine data with regional, provincial, and national levels (e.g., IMMR data, injury surveillance data, HRMIS). Standard formats or electronic communication systems (software programs) are available for such communications, and the MOIC and office team must adhere to departmental guidelines and timelines.

Progress reports, survey findings, and research outcomes should be disseminated in local or international forums, journals, or conference proceedings with approval from higher authorities.

Dissemination of data or information to third parties and the mass media must comply with the provisions of the "Right to Information Act" and have proper approval from supervisors.

MOICs should communicate with supervisors to seek approval before proceeding with actions whenever necessary.

xi) Management and Safeguarding Assets

The MOIC should nominate a designated officer for the maintenance of the main inventory and officers to manage sub-inventories in various units. Deeds of the hospital land, survey plans, building plans, asset registers, mounted item registers, and records for quarters, generators, etc., should be kept in the custody of the officer nominated by the MOIC. Any losses, thefts, damages, or pilferages must be reported to the MOIC by the inventory officers. In such cases, the MOIC should take action according to the provisions outlined in the E-code, FR, and relevant laws.

2.4 Requirements for an Office

The requirements for maintaining an office at a DH are as follows:

i.) Adequate office space (Refer to Chapter 1, Annexure 1).

ii.) Record room (General and Medical)**:** Both general and medical items may be stored in the same location, but clear demarcations should be made when organizing these items.

iii.) Stationery and general item storeroom**.**

iv.) Human Resources: MOIC, Nursing Officer (NO), Development Officer (DO), Saukya Karya Sahayaka (SKS), etc. Cadre norms are revised

periodically by the Ministry of Health, typically every 5 years, and staff allocation should adhere to these norms. The skeletal file, leave records, and other administrative tasks are managed by the MOIC, who is also responsible for patient care when necessary.

v.) Equipment: Computers, printers, paper punches, staplers, PA systems, display boards, etc.

vi.) Utilities: Adequate lighting, internet connection, telephone connection (intercom and direct lines), fans, or air conditioning (AC).

The MOIC should be familiar with the types of files, registers, formats, and other printed documents required for the functioning of a DH. Some of these formats have been automated in certain institutions and can now be accessed and managed online. MOICs are advised to familiarize themselves with these materials and seek guidance from higher authorities whenever there is any uncertainty.

2.5 Model layout of an office of a Divisional Hospital

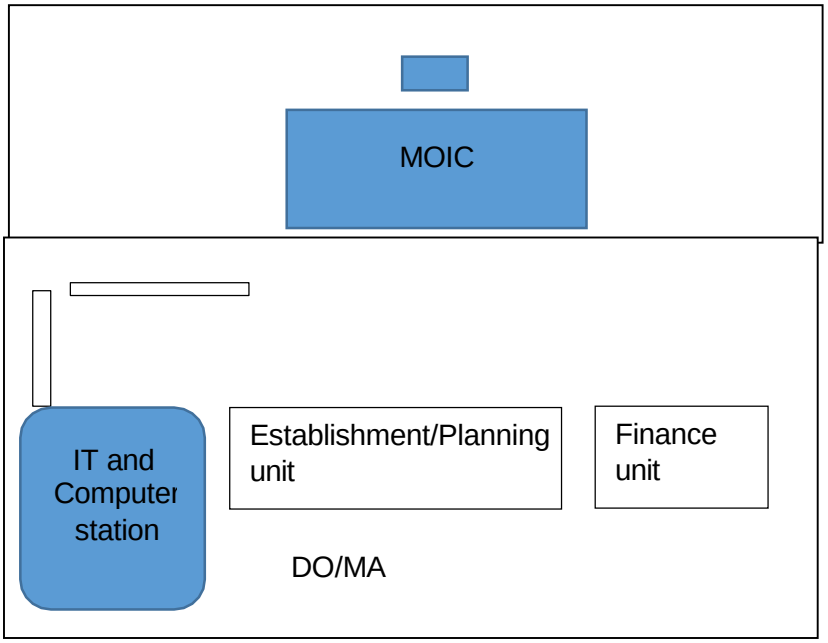


Figure 2.1: Model lay out of an office of a divisional hospital

2.6 Coding of Subjects

MOIC should assign the codes for Management Assistants or Development Officers for easy identification.

2.6.1 When Adequate Number of Management Assistants or Development Officers are Available for Each Section

Establishment: E1, E2, E3

2.7 Numbering of Files

The following format is recommended for numbering office files:

(Hospital Abbreviation)*/(Subject Officer code)*/(Main Subject abbreviation)*/(Sub Subject Abbreviation)/(File volume number)/(Year)*-(Serial number of the letter for a given date)**

*Compulsory codes

**This part is required when several letters are originated on a single day

Example: File number for MOs' transfer at Aluthgama DH:
AluDHA/E1/MO/Trans/I/2023

- The file number should be displayed in the upper right-hand corner of the document.
- The file name should be written (or printed) clearly in the middle of the front side of the document.

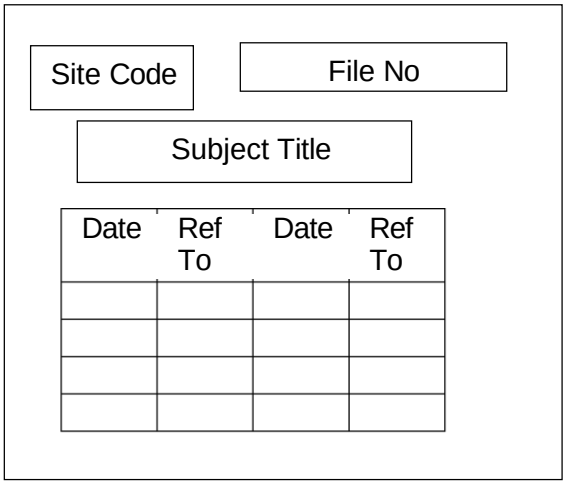


Fig 2.2: Front Side of an Office File

Inside the file, the right side should be used to compile communications in chronological order. Each page of a communication is referred to as a folio and should be numbered from the bottom upwards. Minute sheets should be affixed to the left side of the inside of the file. The minute sheet should include details of the activity, decisions taken, responsible persons, deadlines, and any other relevant information.

Following files are compulsory and should be maintained according to the departmental guidelines.

2.8 Files to be Maintained for Establishment Function

The following files should be maintained for the establishment function:

i.) Correspondence with RDHS
ii.) Personal files are at the RDHS Office. However, the skeletal files are maintained in the DH
iii.) Communication files for Staff categories – MOs, NOs, PSM, Paramedical, Junior staff etc.
iv.) Unit communication files – Requests from main units in the hospital
v.) Maintenance files
vi.) Transport (Ambulance file and other vehicles)
vii.) Correspondence with other organizations
viii.) Inquiry file
ix.) Miscellaneous file
x.) Common file
xi.) Circular file
xii.) Referral to MOIC file
xiii.) Vehicle/Transport file Ex. Ambulance

2.9 Files to be Maintained for Finance Function

The following files should be maintained for the finance function:

i.) Correspondence with MOIC/RDHS/Accountant
ii.) Budget request, expenditure and local purchase file
iii.) Personal files for equipment should be maintained in the office as well as in the respective wards/units
iv.) Miscellaneous file
v.) Common file
vi.) Circular file
vii.) Income generated from the garden/selling card board/saline bottles
viii.) Donations (items based on the requirement, never monetary donations) inventory, need to inform the RDHS about donations

2.10 Files to be Maintained for Planning

The following files should be maintained for the planning function:

i.) Annual Action Plan (AAP)
ii.) Development plan (ex 5 Year development plan)
iii.) Survey plans and building lay out plans, architectural plans
iv.) Project files (ex: PSSP, HSEP etc)
v.) Project proposal file

vi.) Training file
vii.) Healthcare Quality and safety files
viii.) Survey file
ix.) Complaint file
x.) Research file
xi.) Publication file – Annual Health Bulletin, Paper articles, Journal articles, symposia, abstracts, poster presentations etc.

Temporary files may be opened for short-term projects and should be closed once the project is completed. The MOIC has the authority to open new files for subjects that require ongoing management.

With advancements in technology, the electronic recording system may replace the conventional file system in the future, following the guidelines issued by the Ministry of Health.

2.11 List of Registers to be Maintained at the Office and Various Units/Sections

The following Registers should be maintained at DHs.

i.) Case Register in form general 31
ii.) Institutional Cadre distribution Register, MOIC has the authority to place officers in the institution based on the requirement
iii.) Register of Increments
iv.) Attendance Register
v.) Leave Register
vi.) Short leave Register
vii.) Correspondence Book (in the wards/units to communicate with the MOIC)
viii.) Index Register
ix.) Register of Employees reaching 55 years of age
x.) Register of Inward letter
xi.) Register of Outward letter
xii.) Station Leaving Register (Check in the e-code)
xiii.) Register of complaints and suggestions
xiv.) Diet Register
xv.) Donation Register
xvi.) Inventory Register
xvii.) Condemning Register
xviii.) Handing Over Taking Over Register

2.12 List of Routine Reports, Returns and Formats

Every Institution is expected to report certain events at periodic intervals to higher authorities. The information thus generated can be used to plan and monitor the activities of the institution or the area concerned.

The DHs are expected to report the following.

i) Service Reports of Minor Employees (monthly)

- Number of days on duty during the month
- Number of off days in the month
- Number of days with full pay
- Number of days with half-pay (in detail)
- Overtime to be paid
- Holiday pay due to be paid
- Payments due for duty on off days

ii) Changes of Staff Due to Transfers, Appointments, Retirements (monthly**)**

- Name of the Officer
- Designation
- Previous station
- Date of reporting / leaving the station / retirement

iii) Increments to be paid (monthly)

- Name of the officer
- Designation
- Present salary
- Increment
- Salary to be paid

iv) Bills to be settled: Food, Milk, Firewood, and Laundry (monthly)

- Institution received from/issued to
- Name of the item and the quantity
- Details of receipt, orders
- Details of issue orders

v) Loss and Damage of Stores items - FR 115 (monthly)

- Particulars of the item
- Date of loss or damage
- Present position of action taken thereto
- Value

- Write-off order in terms of financial regulations

vi) Holiday Warrants (monthly)

- Number of the warrant
- Date of issue
- Number of tickets
- Name & Designation of the person to whom the concession was granted

All these files, formats and registers should be produced to the audit examiners when demanded. MOIC and subject officers are required to provide further explanations, clarifications to audit examiners if requested.

2.13 Outbound Communications

Mostly, outbound communications are generated as routine communications, some of which are conducted online or using fixed formats with covering letters. Examples include:

i.) Reports & Returns
ii.) Redress of grievances
iii.) Investigation of complaints.
iv.) Issues identified as a result of service break down, malfunctioning
v.) Losses and theft.
vi.) Issues identified from surveys. E.g. patient satisfaction,
vii.) Issues identified from analysis of routine data.
viii.) New project proposals.
ix.) New requests
x.) Miscellaneous issues not covered in the above categories

2.13.1 Steps in Generating Effective Communication

The following steps should be adopted based on the requirements of the communication:

Step 1: Identify the officer who can provide the answer to the query.

Step 2: Identify other stakeholders who can support the officer in solving the problem and copy the letter to them.

Step 3: Determine the level at which the problem could be addressed (District level, Provincial level, or National level).

Step 4: Formulate the topic/heading properly (keeping it short and comprehensive).

Step 5: Identify previous references on the same topic or issue (if any) and indicate them underneath the topic.

Step 6: Write a concise paragraph on the background of the topic (one or two sentences). Some letters may only need one paragraph, so consider the topic and length accordingly.

Step 7: In the second paragraph, provide details of the issue.

Step 8: In the third paragraph, write the request.

Step 9: Conclude the letter with a signature and include a list of copies at the bottom of the letter.

MOIC should not violate the chain of command while communicating with higher authorities.

2.13.2 Additional Tips to Generating Effective Communication

i.) Identify the administrative hierarchy and channel of communication. This is essential when a letter is addressed to higher levels through middle-level managers and when preparing the list to copy the letter.

ii.) Attention (Atten:): This is used when a letter is written to a head of the department, but the action is to be generated by a deputy or another higher officer (e.g., requests from Medical Officers addressed to the DGHS with Attention to the DDG of Medical Services II).

iii.) Enclosure: The originator may need to send copies of primary documents that led to the generation of communications to the administrative hierarchy. A list of such references should be included under the signature of the letter.

iv.) Keep the letter short and adequately informative.

v.) One letter should be originated for a single purpose of request. Multiple requests may be combined when they fall under a single generic heading (e.g., furniture requests, equipment requests, etc.).

vi.) Aim to save paper by using half pages, emails, etc., whenever possible.

Letter Model 1: Material or Financial Requests from the Regional Level –

[Letter Heading]

Reference No:

Date:

Regional Director of Health Services

Request for Laboratory Reagents

DHA Aluthgama provides outpatient (OPD) services as well as inpatient services. The daily turnover of the OPD is about 200-250 patients, and there are 20-30 inpatient admissions. The average number of blood tests ordered is 300 per day. Currently, blood sugar tests cannot be performed due to the unavailability of Benedict's solution, which is not found in most drug stores across the country. The Medical Supplies Division (MSD) has recommended local purchase from local suppliers.

Therefore, please authorize the local purchase of the following item immediately:

- Benedict Solution 500ml bottle: 01

Dr. A.S. Perera

MOIC

DHA Aluthgama

Copy:

Secretary, Health, Western Province

Provincial Director of Health Services, Western

Letter model 2: Request for Medical Officers from the Level of Ministry of Health–

[Letter Heading]

Reference No:
Date:

Atten: Deputy Director General (Medical Services II)

Through: Regional Director of Health Services, Kalutara
Provincial Director of Health Services
Director General of Health Services

Request for Medical Officers from the Post-Intern List to Fill Cadre Positions

DHA Aluthgama provides outpatient (OPD) services as well as inpatient services. The daily turnover of the OPD is about 200-250 patients, with 20-30 inpatient admissions. Currently, there are only two qualified medical officers available to cover 24-hour duties for the entire hospital. However, according to the approved cadre, there are four cadre positions for medical officers. We have been facing a gap of two vacancies, along with service losses over the past years.

Therefore, please take early action to appoint two medical officers to DH Aluthgama from the next post-intern batch.

Dr. A.S. Perera
MOIC
DHA Aluthgama

Copy:
Secretary, Health, Western Province

Annexures

2.14 Cross Referencing

There are instances where actions related to communications concerning one subject are carried out by other subjects. For example, repair requests from medical units are initially compiled in the medical unit subject file. This communication is then referred to the maintenance subject and the purchasing subject, where the required items need to be procured from petty cash. This process is known as cross referencing of a subject and can be done in the following ways:

i.) By provision of a copy of the original communication to action subjects (Maintenance and Petty cash file/register etc.)

ii.) By referring to the subjects on a minute sheet

2.15 Handling the Daily Postal

Every communication received in the office should be date-stamped. The *Tappal* should be opened in the presence of the Head of the Institution or a designated officer. "Registered" and "Express" letters should be indicated in the top left-hand corner. The subject officer should take over the letters after signing in the register. All incoming correspondence must be recorded in the inward register. Similarly, all registered and express letters to be sent should be entered in both the outward register and the express letters register.

2.16 Orientation and In-Service Training/CME/CPD

The workforce of DHs consists of several categories of staff, some of whom have pre-service basic training (e.g., Medical Officers, Nursing Officers), while others are employed without any training (e.g., Junior Staff). Regardless of their training status, all new appointees require an orientation to the institution to understand its functions and to be educated about their roles and responsibilities. This process is known as orientation within the institutional system.

In-service training, Continuous Medical Education (CME), and Continuous Professional Development (CPD) training calendars and registers should be maintained in the office.

This training aims to upgrade the knowledge and skills of health care professionals to improve service quality. In-service training is an integral part of continuous professional development.

Benefits of in-service training include:

i.) Improved quality of service.

ii.) Increased job satisfaction, motivating staff to perform better. This training can take the form of formal classroom training or on-the-job training (in-service).

2.17 Planning for Orientation Training

i.) The MOIC should establish a committee composed of staff representatives to plan the induction training program. A learning needs assessment for each category of staff must be conducted. The committee should identify trainers from within the institution or, if necessary, seek external trainers.

ii.) Bi-monthly meetings of this committee should be held to review and reformulate training programs as needed.

2.18 Library (Other services - Change the Site)

Each DH should develop its own library, containing both local and foreign books and journals that can be utilized by medical officers, nursing officers, and other staff members. The MOIC should assign an officer to manage the library alongside their other designated duties. All DHs must register with the mailing lists of relevant entities such as the Health Education Bureau, Family Health Bureau, Epidemiology Unit, and Population Division. Funds for purchasing books for the library should be requested at the beginning of the year from the annual estimates. The library's collection should be recorded in an inventory register, with the librarian or designated person responsible for maintaining this inventory.

2.19 Transport Services

2.19.1 Ambulance Service

Ambulances are essential for transporting patients and are typically purchased using state funds or financial aid from foreign governments and international agencies. Significant amounts of money are spent annually on the maintenance and operation of these ambulances, so it is crucial to minimize expenditure on maintenance and wear and tear. The following important aspects should be considered when managing ambulance operations:

i) The officer-in-charge of the institution is responsible for the proper use and maintenance of the ambulances and must adhere to all instructions regarding their care and maintenance.

ii) All journeys must be authorized by the officer-in-charge or by an officer designated to act on their behalf.

iii) A journal must be maintained by the officer-in-charge of the ambulance, with extracts forwarded to the RDHS.

iv) The ambulance driver should maintain a daily running chart, which must be checked and signed daily by the officer-in-charge.

v) The ambulance should be clearly marked on the top left-hand corner of the windscreen with a label indicating the institution to which the vehicle is assigned.

2.19.2 Use of Ambulances

i.) To transport patients of serious illness from smaller hospitals to which the ambulance is attached directly to the Base/Provincial/Teaching Hospital.

ii.) To transport urgent maternity patients within the area served by the ambulance, to the institution to which the ambulance is attached, when summoned by a Family Health Worker.

iii.) To transport similar patients from the institution to which the ambulance is attached, to the Base/Provincial/Teaching Hospital.

iv.) To transport chronic or convalescent patients from the major institution to special institutions intended for such cases, or back to small Institutions, (back referral).

v.) To transport cases of serious injury within the area served by the ambulance to the institution to which the ambulance is attached when summoned by an officer-in-charge of the Police or by a Divisional Secretary.

Ambulance may also be used to transport patients to any other Hospital from a Teaching/Base/Provincial Hospital on the return journey: (Preferably on the return route).

Ambulance should be used only for the transport of patients in the above mentioned cases, and such transport should be done free of charge.

Ambulance should not be used for the transport of Medical personnel or for any other purpose except with the prior approval of the PDHS/RDHS.

On very urgent and special occasions, the officer-in-charge of the ambulance may authorize the transport of small quantities of drugs from the Medical Supplies Division or divisional drug stores on the return journey. These small quantities of drugs must be securely packed and stored under the seats. The driver should be strictly instructed not to load them onto the stretchers or seats under any circumstances.

With a view to minimizing the number of trips, all Drivers of Ambulances should be instructed to comply with the following instructions strictly

- Drivers should touch down at the Institutions on their way to Higher Level Hospitals and inquire whether there are patients to be transferred

to these Hospitals.(To be done only after consultation with the MOIC regarding urgency of case being transported).

- Such patients should be loaded immediately and the ambulance should be dispatched without delay.
- Similarly on its return journey, the Ambulance should transport patients from Teaching/Provincial/Base Hospital back to any other Hospital on its way, on the journey back to the Institution.

Priority: When more than one call is received at the same time for the use of Ambulance, the urgency of the case as assessed by the Medical Officer-in-charge of Ambulance shall determine priority

2.19.3 Ambulance Hires and Method of Payment

i) An ambulance may be hired to a private party for transporting a patient from one institution to another on a payment basis, with the approval of the MOIC of the institution.

ii) A fee of Rs. 200 per kilometer should be charged for each journey. This rate should be reviewed regularly, and MOICs are advised to check for updated rates or obtain approval from higher administration before hiring ambulances.

iii) Only one relative is permitted to accompany a patient in the ambulance. Once the patient is admitted to the hospital, no relative should be allowed to travel back in the ambulance, even if the mileage for the return journey has been paid.

iv) The head of the institution should ensure that the institution can manage without the ambulance for the period it is away on private hire.

v) The head of the institution must collect the hire fee in cash before the vehicle leaves the station.

2.19.4 Communicable Diseases and Disinfection of Ambulances

i) Cases of communicable diseases should not be transported by hospital ambulances, except when they occur in a government institution or when summoned by a medical officer. The ambulance must be disinfected immediately after such use.

ii) In disinfecting an Ambulance after transporting a case of infectious disease, the following should be complied with:-

- All linen used during the transport of the patient should be steamed or soaked in disinfectant for at least one hour before laundering.

- All cushion covers should be removed, seats wiped with disinfectant, and cleaned. Sun-dried cushion covers should be put on before reuse.

iii) The interior of the Ambulance should be sprayed with a suitable disinfectant solution, cleaned and dried before re-use and the disinfection should be done under the personal supervision of a responsible officer, i, e., Medical Officer, Asst. Medical Practitioner, ICNO or Public Health Inspector.

2.19.5 The Staff attached to an Ambulance

i) Ambulance Driver

ii) Ambulance Assistant - An SKS (Saukya Karya Sahayaka) may be assigned to assist with ambulance duties. There is no objection to allowing one SKS to continue working in the ambulance for a period of six months to one year.

iii) A hospital attendant or a trained SKS should accompany the patient. A female attendant or female SKS should accompany female patients. Maternity cases are best accompanied by a midwife.

2.19.6 Responsibilities of the Driver as Regards to the Maintenance of Vehicle

i) In addition to following the instructions provided in the vehicle log book, all drivers must comply with the following guidelines:

a) Daily Maintenance for Ambulances

Drivers must:

- Clean and wash the vehicle.
- Check radiator water and engine oil.
- Test brakes, lights, and steering.
- Check tyre pressure, especially when refueling.
- Start the engine and listen for unusual sounds.

Report all defects to the officer-in-charge immediately and ensure they are fixed. Document all issues in writing.

b) Weekly Maintenance for Ambulances

- Clean undercarriage, engine, springs, transmission, and steering with used engine oil. Also, clean the equipment in the vehicle.
- Check and top up oil in the:-
  - Sump
  - Gear box

- Differential
- Steering
- Clutch and brake master cylinders

- Check, clean and tighten battery terminals. Top up battery cells to required level with distilled water.
- Check for any rattles, loose bolts and nuts and unusual noises on the run.
- Clean and oil all tools and check air pressure on all wheels including the spare wheel.

ii) For new vehicles, the first service should be conducted at 1,000 km, followed by subsequent services at 5,000 km intervals. The first three services should be performed at the authorized workshops of the vehicle agents, as they may be free and in accordance with the manufacturer's guidelines.

iii) Servicing at every 2,000 to 3,000 kms.

a) Complete high pressure lubrication service at the approved service station.
b) Drain and refill sump with the correct grade of oil as per manufacturer's instructions.
c) Check battery electrolyte specific gravity.
d) Grease all greasing points and lubricate all points where grease should not be used.
e) Tighten all body bolts and nuts.
f) Get oil filter and air cleaner elements cleaned.
g) Rotate the wheels as follows: - left front wheel to right rear wheel, right rear wheel to left rear wheel; left rear wheel to right front wheel; and right front wheel to go as spare wheel.

iv) At every 10,000 kms:-

a) Drain and refill gear box and differential with new oil of correct grade.
b) Air Cleaner - remove, clean and wet with fresh oil if oil bath type.
c) Otherwise, clean element with pressurized air.

2.19.7 Vehicle Identity Card

Every departmental vehicle will receive a Vehicle Identity Card from the Head Office. The driver must keep this card and present it when required at fuel stations or to inspecting officers. The Head of the Institution should regularly monitor and supervise this process.

2.19.8 Records to be Maintained

The following records should be maintained by every officer-in-charge of a vehicle:-

i) Vehicle Log Book on Form General 267

ii) 8.1.2. - Daily Running Chart on Form General 268

iii) 8.1.3. - The Vehicle Inventory indicating the Requisition No., date of registration,

iv) 8.1.4. - Vehicle File.

These documents should be available for inspection at any time and information contained therein should be up-to-date.

2.19.9 Vehicle Log Book

i) The Log Book (Form General 267) must be kept in the personal custody of the officer-in-charge of the vehicle.

ii) The Head Office will enter the necessary vehicle information on page 7 before issuing the vehicle to an institution.

If the necessary particulars have not been entered, the officer-in-charge must promptly contact the Head Office to obtain the relevant details and record them in the log book.

iii) Officer-in-charge of a vehicle should see that all information as indicated below is recorded in the appropriate sections of the log book:-

a) Fuel consumption, with the date of verification authenticated by a Staff Officer.

b) Annual License Number.

c) Tools and Accessories Number.

d) Replacement of battery, including make, number, and date of replacement.

e) Replacement of tires, including make, number, date of replacement, and odometer reading.

f) All major and minor repairs.

g) Servicing dates and meter readings.

h) Accidents, detailing the date, place, driver's name, damage particulars, repair costs, any action taken against the driver, and the reference to the file number.

iv) Whenever a vehicle is temporarily assigned to another institution, the necessary entries should be made on page 22 of the Log Book.

v) In case of loss of the log book, it must be promptly reported to the RDHS/PDHS, detailing the circumstances of the loss. The PDHS will examine the cause and take appropriate actions to prevent future losses. A duplicate Log Book should be obtained from the Head Office.

2.20 Worker Contribution to Administration

The Hospital Management Committee (HMC) serves as a platform for all workers to contribute to system development. The MOIC can chair this forum, which aims to engage workers in administration through creative ideas. A representative from the RDHS should also be invited to the Management Committee.

In addition to the HMC, staff can participate in religious societies, welfare societies, and other groups. Community participation is encouraged through initiatives like "Suwaseva Mithuro" (Friends of Health), which supports the hospital committee.

Section B

2.21 Finance

2.21.1 Financial Management

This section serves as a guide for managing financial matters while delivering services. For further details or clarifications regarding financial management, please refer to the government Financial Regulations (FR) and related amendments, including circulars and guidelines issued by the government.

2.21.2 Expenditure from the Consolidated Fund

All regular expenditures on public services are funded through the consolidated fund managed by the Treasury. Prior to any withdrawal for expenditure, it is essential for Parliament to authorize the expenditure, and warrants must be issued by the Minister of Finance.

2.21.3 Estimates

The estimate of expenditure is a forecast of the cost of services the department intends to provide during the year. Before any money can be withdrawn from the consolidated fund, it is essential for Parliament to sanction funds for the expenditure. The department presents an estimate to Parliament for this purpose.

2.21.4 Imprest

Imprest refers to the sums advanced by the treasury to meet public expenditures. Any officer who violates the limitations set by the financial regulations may be surcharged for any unauthorized expenditure. The imprest is settled by vouchers, and MOICs are responsible for the proper preparation of vouchers, timely dispatch of vouchers, and maintaining records for the Auditor General.

2.21.5 Sub-Imprest

Provincial Directors (paying units) may issue sub-imprests to heads of institutions for the following purposes: -

i.) Cashiers at Provincial Directors Offices, MOH Offices for meeting small items of expenditure.

ii.) Defraying petty cash expenses in medical Institutions.

iii.) Refund of Hospital charges.

2.21.6 Petty Cash Imprest

i.) The amount fixed in each of the above cases will vary according to circumstances and the estimated payments during a month. The limits shall be fixed by the Provincial Director, who may consult the Chief Accountant/Dy. Secretary Finance attached to the P.C.

ii.) Heads of Institutions should maintain separate registers on a specific form for each type of sub-imprest granted. The receipt side of the registers should be entered by the Head of Institution upon receipt of the imprest. The entries on the payment side should be made as payments are realized. The supporting documents for those entries will be receipted vouchers.

iii.) The register should be balanced daily. The balance shown in the register should be verified and tallied with the cash in hand before being deposited in the safe. Vouchers for the renewal of imprest should be submitted to the Divisional/Provincial office along with supporting receipts. Petty cash issued shall be renewed at least once a month, but not later than the 25th of the month. However, the head of the institution should take action for the renewal of imprest earlier when 40% of the imprest has been spent.

iv.) The entire petty cash imprest shall be settled by the 25th of December each year unless permission has been obtained from the proper authority in advance to settle the sum during the first week of January.

2.21.7 Register of Remittances (remittances received for payment to employees and others)

A remittance register should be maintained at every institution to record all remittances received. All particulars for both receipts and payments should be posted with meticulous accuracy in detail. The Head of Institution should ensure that all pages of this register are numbered before being put into use.

i.) The maintenance of remittance registers and accounting for all remittances received are the responsibility of the Head of Institution. The duties of the officer in charge of the remittance register should be performed by the officer acting in their absence.

ii.) If the officer permanently in charge of the remittance register returns after a period of absence or leave, they should check the payments made during their absence and ensure that all receipts and payments are accurately recorded.

iii.) The remittance register should be balanced at the end of each day, including the balance brought forward from the previous day.

iv.) Every payment should be fully recorded on the payment side at the time of payment. At the end of the day, the register should be totaled. A certificate should be furnished at the time of renewal, certifying that I hold in cash on day/month/year the sum of Rs and cents as the unspent balance from the petty cash imprest entrusted to me. The balance should be carried forward to the following day. It is emphasized that the book balance should be verified daily with the actual cash in hand by the Head of Institution. Unpaid vouchers should be tallied with the unpaid amount at least once a week.

The balance is as follows:

- Imprest allowed: Rs. .....
- Paid documents sent for renewal: Rs. .....
- Paid documents in hand: Rs.....
- Balance as per petty cash book: Rs..... .

Signature: _____

Date: _____

Designation: _____

2.21.8 Miscellaneous Cash Collection Register

i.) An officer recovering money on behalf of the Government must issue a receipt for the money received, make an entry in the collection register, and ensure proper accounting. This register should be maintained in every institution to record receipts and disposals of collections for miscellaneous items such as private medical certificates, family planning items, unserviceable items, garden produce, etc.

ii.) Upon receiving cash, an official receipt on Form General 172 should be written out using double-sided carbon. The delegation of duties by the officer in charge does not absolve them of responsibility.

iii.) Cash collections should be remitted by money order or deposited in the bank, whichever is easier, either weekly or earlier. Collections of Rs. 500 or of one week, whichever is greater, should be remitted to the PDHS Office, with necessary entries made in the register.

iv.) The Head of the Institution should verify these entries against actual money orders to ensure that cash is remitted and genuine entries are made in the register. An official receipt in the form General 172 should be obtained from the PDHS Office for each remittance and filed for record. The Head should also check these receipts against actual money orders to ensure all remittances are accounted for.

2.21.9 Daily Cash Balance Statement Register

A record of the balance money in hand should be prepared at the end of each day in a register. This register should reflect the balances for petty cash, miscellaneous cash collections, postal imprest, and any other relevant funds.

2.21.10 Custody of Safe Keys

i.) Cash and other valuables must be secured in the safe. The officer in charge is responsible for their safe custody, and the keys should remain with this officer. In their absence, the head of the institution must arrange for the safe key's custody in consultation with the PDHS, D/PDHS, and RDHS.

ii.) A duplicate key must be treated with anticorrosive material and deposited at the Treasury.

iii.) If the original key is lost, it must be reported immediately to the PDHS Office.

2.21.11 Paid Documents

i.) Paid documents must always be kept under lock and key. Paid documents should be returned after completing payments, within ten working days of receipt of the remittances.

ii.) All paid documents should be forwarded to the paying unit accompanied by a memorandum stating partly paid and unpaid documents.

iii.) As the paid vouchers relating to the month have to be forwarded to the Auditor General, special attention should be paid by the heads of institutions, to return them in time.

2.21.12 Losses

i.) All losses must be reported to the Chief Accounting Officer to enable the submission of a preliminary report under FR 104 to the Auditor General.

ii.) In the event of theft, fraud, or an accident, the police must be informed immediately.

iii.) According to F.R. 104, inquiries should be initiated to determine the cause of loss or damage and assign responsibility. If the loss exceeds Rs. 500,000, a board of inquiry will be appointed by the Chief Accounting Officer (Chief Secretary in provincial councils), with a civil list officer as the Chairman. The PDHS will arrange for an inquiry upon receiving reports, and the value of the losses, along with departmental charges, will be recovered after due investigation (Departmental Charges: 50% of

the cost of drugs, 40% of the cost of surgical items, and 25% of the cost of general items; no charges for cash loss).

iv.) Head of institution should maintain a register for recording of all type of losses in order to furnish information on:

Preliminary Report under FR 104 (3)

Final Report under FR 104 (4)

Report for write off under FR 109

v.) A surcharge against an employee is not a punishment; it is a recovery for overpayment or loss to the Government for which the employee is held responsible.

vi.) If responsibility cannot be assigned to any officer, authority for write-off must be obtained from the Chief Accounting Officer. Once authorized, the loss can be removed from the books, referencing that authority.

Section C

2.22 Planning & Others

2.22.1 Planning Unit

The Medical Officer in Charge (MOIC) of a District Hospital (DH) is responsible for planning in the following key areas:

i.) Infrastructure development
ii.) Human resource development
iii.) Facility and service development
iv.) Development of quality & safe processes and systems
v.) Improvements in health care quality and patient safety
vi.) Research and Development
vii.) Trauma

2.22.2 Prerequisites to Prepare Development Plans

Hospital development should be justified with valid reasons based on evidence. Evidence can be obtained through analyzing routine hospital data, meeting minutes, requests, and complaints. Additional methods such as surveys, desk reviews, service need assessments, quality checks, audits, and research can also be conducted. Consider analyzing data in relation to the following aspects:

i.) Situation analysis
ii.) Identification of new services required
iii.) Gap analysis – identify resource gaps, infra-structure gaps, service gaps, process gaps etc.
iv.) SWOT analysis

The MOIC may seek technical support from senior experienced officers to create evidence-based development plans. Additionally, various planning tools and techniques (e.g., Cause-effect diagrams, Stakeholder Matrix, SWOT analysis, Risk maps) can be utilized with basic familiarization.

Formulate development objectives based on the expected escalation of services from the current level. Engage in open discussions with stakeholders to welcome a flow of information. Conduct feasibility studies and evaluate potential impacts on the environment, economy, culture, and social behaviors. Anticipate the project's coverage, sustainability, and benefits relative to costs. A project proposal can be developed after positive results from these assessments.

2.22.3 Writing a Project Proposal

MOICs of DHs should be able to write project proposals to develop the hospital services. Following format is suggested to develop project proposals.

i.) Background – This section contains information on circumstances under which the hospital runs and the gaps identified
ii.) Justification – strong justification should be given along with evidences, statistics and anticipated solutions
iii.) Objectives - State clearly why this project is needed and what questions are answered by this project
iv.) Proposed activities – State clearly the actions that should be done to achieve the objectives
v.) Risk assessment – Communicate possible risks and methods to overcome them
vi.) Reporting of project outputs and outcomes – state how the project out puts and outcomes are measured and reported
vii.) Additional topics – MOIC may discuss project specific special remarks, comments under this section.

2.22.4 Ongoing Projects

Currently the Primary Healthcare Strengthening Project (PSSP – a WB funded project) is operational island wide. Health Sector Enhancement Projects (HSEP – ADB funded project) are operational in Uva, Central, North Central and Sabaragamuwa provinces. GOSL also contributes to make these project a success. Following framework can be used to implement projects at DH levels.

i) Conduct Situational and Gap Analysis: Assess the current situation and identify gaps in implementing the project.
ii) Prepare the Institution: Ensure readiness to implement project objectives and deliverables, including civil works and material distribution, through activity and task plans aligned with targets.

iii) Staff Engagement**:** Hold regular discussions with staff to keep them informed and track project monitoring indicators.
iv) Realignment**:** Adjust the project if it deviates from its intended course.
v) Report Progress**:** Regularly inform the hierarchy about project progress.
vi) Service Delivery**:** Once the project is completed, the **MOIC** should take managerial responsibility to operate the project and ensure service delivery to clients.
vii) Monitoring & Evaluation: Continuously monitor and evaluate the operational status and deliverables of the project to ensure expected outcomes for clients.

This section offers essential information for novice junior administrators requiring guidance in managing Divisional Hospitals. In addition to the guidance provided here, **MOICs** should stay informed about updated departmental guidelines and other relevant directives in effect. The chapter addresses key topics that are crucial for the daily management of hospitals.

2.23 Supervision of Divisional Hospitals

This section deals with:-

i) The Philosophy of supervision
ii) Importance of planning supervision
iii) How to supervise
iv) How to ensure supervision at regular intervals
v) How to ensure effectiveness of supervision

2.23.1 What is Supervision

i.) Supervision is a supportive process.
ii.) Good performance should be acknowledged and praised.
iii.) Deficiencies or gaps should be identified, and the supervisee should be guided towards improvement before considering any punitive actions.

2.23.2 Objectives of Supervision

i.) The primary objective is to ensure the hospital functions smoothly. The term "supervision" comes from two Latin words, *super* (over) and *visum* (to see), meaning overseeing or directing activities from a higher position. For example, ensuring that patients receive courteous and prompt care.
ii.) To confirm that critical patient care activities are carried out effectively.

2.23.3 For Supervision to be Effective, it Must Be Planned

Supervise daily activities using different methods and strategies. Focus on the following:

i.) Cleanliness of toilets, wards, drains, and garden (refer to the section on Sanitation).
ii.) Availability of essential drugs (refer to the section on Drugs & Supplies).
iii.) Monitoring of patients to ensure proper care.
iv.) Proper sterilization of instruments and accurate entries in the sterilization chart (refer to the section on Sterilization Procedures).
v.) Ensure punctuality by marking red lines in all attendance registers.

2.23.4 Areas to be Supervised

Ensure the following areas are consistently supervised:

i.) Are patients and staff provided with boiled, cooled water?
ii.) Are daily ward rounds conducted in the morning, evening, and night?
iii.) Are all admissions attended to promptly, and are stamped cases seen within 15 minutes?
iv.) Are all returns submitted on time? (Refer to the section on Returns)
v.) Are health education activities effectively carried out?Is the inpatient
vi.) diseases register updated regularly?
vii.) Are notifications done promptly, and is the Notification Register properly maintained?
viii.) Supervision of dietary provisions.
ix.) Any other key areas that require the MOIC's attention. The MOIC should maintain a record of all supervision activities conducted.

Returns to be sent:

- Monthly
- Returns 5th of every month
- Inpatient Diseases Register
- 10th of every month

2.23.5 What are the Methods of Supervision

i.) Observe
- Cleanliness
- Movement of patients in the OPD and clinics

ii.) Check Records
- Entries in sterilization charts
- Patient Records (ex: BHTs, Prescriptions etc.,)
- Inpatient Diseases Register
- Notification Register

iii.) Interview

- Mothers, to find out whether urine was examined and blood pressure taken at time of admission.
- Patients, in the OPD to find out the waiting times, quality of care, pharmacy services, laboratory services
- Has the patient been told how and when to take drugs

iv.) Test Checks

- Drugs, laboratory reports, availability of services
- Whether the drugs prescribed are given at the OPD counter, and whether it is given in correct quantities
- Conducting surveys and clinical audits, research

2.24 Do's and Don'ts

i.) Do not reprimand staff in front of patients.
ii.) Do not confront staff in the presence of patients.
iii.) Do not hesitate to give praise where it is deserved.
iv.) Follow-up is essential for effective supervision.
v.) Conduct regular supervision and take satisfaction in observing improvements within the institution.

CHAPTER 3
MANAGEMENT OF OUTPATIENT DEPARTMENT

3.1. Introduction

The Outpatient Department (OPD) is a critical section of a hospital, serving more patients than the inpatient services. It handles patient assessments, investigations, treatments, and referrals, when necessary. Additionally, preventive and promotive health care services are provided, along with routine clinic follow-ups.

Patients requiring inpatient care should be promptly examined and admitted to the appropriate wards or units by the admitting Medical Officer (MO), with clear written instructions regarding their treatment. Those needing emergency care must be sent to the Emergency Room without delay (refer to Chapter 4).

The Admitting MO at the OPD should admit only patients who genuinely require inpatient care, avoiding unnecessary admissions. Medical Officers should also seek guidance and advice from Consultant Family Physicians from relevant apex hospitals (shared care cluster).

3.1.1. Services Provided by the Outpatient Department

i) Management of emergencies (Refer Chapter 4)
ii) Management of common health conditions
iii) Facilities for conducting a polyclinic including Ante-Natal Clinic (ANC), Post- Natal Clinic (PNC), Family Planning (FP), Child Health Clinic, Well Woman Clinic… etc. (General Circular No 01-18/2020)
iv) Sometimes Specialized Clinics such as Medicine, Surgery, Paediatrics, Obstetrics and Gynaecology, Psychiatry
v) Oral health care clinics
vi) Family Medical Clinic Services
vii) Referrals to higher level for specialized care
viii) Healthy Lifestyle Centre (HLC)
ix) Issuing medical certificates
x) Health education & promotion
xi) Palliative & rehabilitative services

3.2. Infrastructure Arrangements/Facilities

The following facilities are available in the OPD

3.2.1. Patient Registration Counter

The services of a minimum of two SKS are needed for this task. This section should be provided with the following: -

i) A long counter desk (for issuing of tickets and maintaining of records)
ii) Cupboards and racks to store printed forms, tickets etc.
iii) Rubber stamp with name of the institution
iv) Stamp pad & ink
v) A numbering machine and ink
vi) OPD Tickets, B.H.T. and continuation sheets
vii) Two high stools
viii) A bottle of gum
ix) A Register to maintain statistics of patients (1st visits & subsequent visits)
x) A wall clock

If the electronic health information management system is operationalized, the necessary equipment such as laptops, desktops, printers, and barcode readers should be made available at all relevant locations to ensure smooth functionality and accessibility of the system.

3.2.2. Consultation Rooms

Consultation rooms should be equipped with essential medical instruments such as blood pressure apparatus, torches, clinical thermometers, and tongue depressors. Additionally, it is preferable to have specialized equipment like auroscopes, ophthalmoscopes, and X-ray illuminators for enhanced diagnostic capabilities. A few rubber stamps should also be made available, depending on the specific requirements of the department.

3.2.3. Dispensary/Pharmacy

The OPD Dispensary operates from 8:00 a.m. to 5:00 p.m. without interruption, ensuring that patients receive their prescribed medications promptly. Based on OPD attendance, there should be an adequate number of dispensing counters staffed by Dispensers or Pharmacists.

It is the responsibility of the Dispenser/Pharmacist to maintain an organized and clean environment, ensuring that all bottles, tablet containers, ointments, and other items are properly labeled. High-alert medications and dangerous drugs must always be stored under a double lock and key for safety.

3.2.4. Dressing Room

The dressing room should be under the supervision of a Nursing Officer with the guidance and direction of the MOIC. Necessary manpower and equipment should be made available.

3.2.5. Injection Room

A separate room or designated area should be available for administering injections, equipped with essential facilities such as sterilizers, trolleys, syringes, and other necessary equipment. A sufficient number of Nursing Officers should be assigned to work in the injection room to ensure smooth operations. Additionally, an emergency tray should always be readily accessible for handling any urgent situations.

3.3. Working Hours

OPD to function from 8.00 a.m. to 12.00 Noon and 2.00 p.m. - 4.00 p.m. on Monday to Friday.

From 08.00 a.m. to 12 Noon on Saturday From

08.00 a.m. to 10 a.m. on Sunday/PH

★ OPD is open for admissions 24 hours

3.4. Admission Procedure

Patients arriving for admission, including maternity cases, should be thoroughly examined by the Medical Officer on duty. Those requiring emergency care must be directed to the Emergency Room, while routine admissions should be sent to the appropriate wards or units.

A sufficient number of SKS (Supportive Staff) should be deployed to assist in receiving patients, transporting them to the admission room, and then to the wards.

Under no circumstances should the admitting Medical Officer perform OPD duties, such as admissions, while located in the quarters.

3.5. Registers to be maintained at OPD

i) Daily Outpatient Register
ii) Hospital Admission Register
iii) Clinic Registers on first visit to each clinic.
iv) Clinic Registers on subsequent visits to each clinic.
v) Emergency Admission Register
vi) Vaccination Register
vii) Anti-Rabies Vaccination Register.
viii) Notification Register.
ix) On admission death register
x) Transfer of patients register [Transfer out & transfer in (Back transfers)]

3.6. Management of Emergencies

Accident and Emergency Care

A&E care provides following Services (General Circular No: 01-18/2020 dated 03.03.2020)

i) Identification and Stabilization of Emergency cases.
ii) Resuscitation with basic life support measures.
iii) Referral: Communication and Transportation
iv) Management of minor emergencies

A detailed description is given in chapter four.

3.7. Conclusion

Patients arriving at the OPD for treatment should be promptly attended to, ensuring minimal waiting time. Staff working in the OPD must be motivated to work in coordination to enhance efficiency. The OPD premises must always be kept clean and orderly. Supervising officers should frequently visit all sections and units within the OPD to ensure that necessary services are being provided to patients without any delay.

CHAPTER 4
EMERGENCY CARE

4.1. Introduction

Emergency management in hospitals in Sri Lanka is classified into four major categories: Level 1, Level 2, Level 3, and Level 4. All hospitals, regardless of their level, are required to develop facilities for Accident and Emergency (A&E) care. According to the *Accident and Emergency Care Policy of Sri Lanka (2014)*, Divisional Hospitals and Primary Medical Care Units fall under Level 4 emergency care. In these Level 4 hospitals, emergency care is provided in an Emergency Room. Therefore, an appropriate space within the OPD should be identified and designated for the Emergency Room to facilitate these services.

4.1.1 Operational Structure

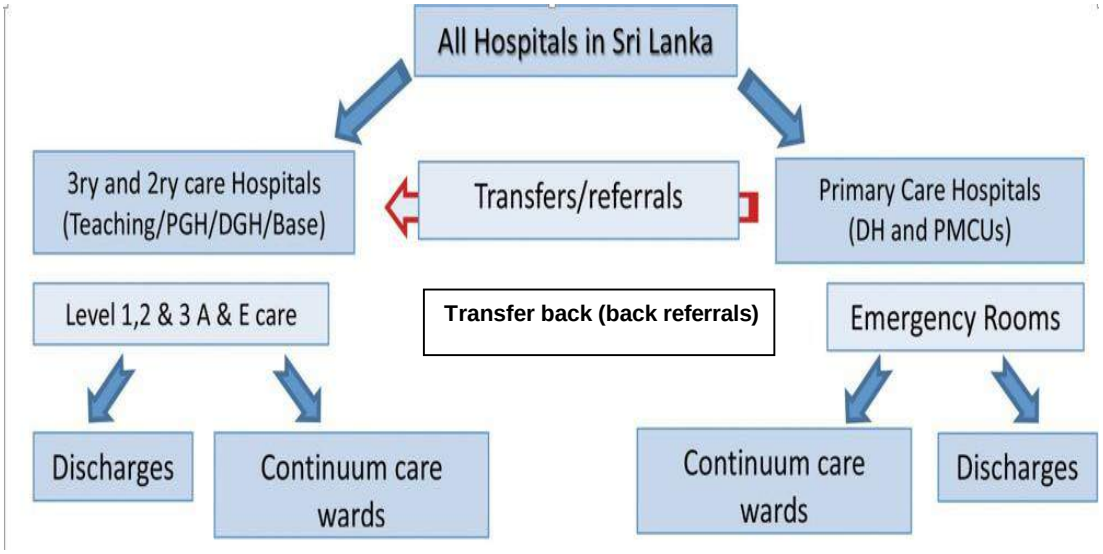


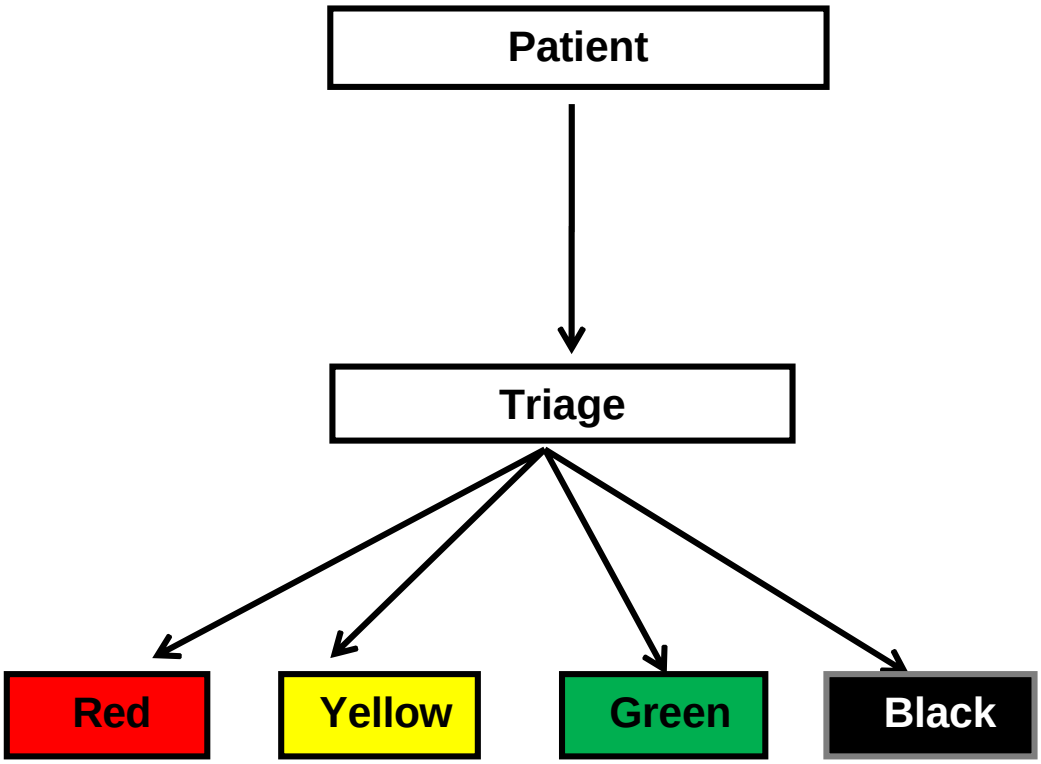
Fig 4.1 Operational Structure of Government Hospitals in Sri Lanka

The Emergency Room should operate 24 hours a day, every day of the week. All patients arriving at the Emergency Room must be promptly attended to and triaged according to the severity of their condition. Based on the triage category, patients may either be transferred to a higher level of emergency care, admitted as inpatients within the same institution if the necessary facilities are available, or discharged by the Medical Officer in Charge (MOIC).

In addition, the Emergency Room should be equipped with nebulization facilities to provide immediate respiratory care to those in need.

Adult modified triage scale

Patient Journey (Guide)



1. Red / Yellow - Resuscitation and Stabilization
   - Contact higher level of A&E care Institution
   - Transfer to the next Facility
2. Green - Treat and Discharge/admit to the ward in the same institution/transfer if necessary
3. Black - Death (Keep the deceased body in a separate place in the OPD for two hours)

ADULT MODIFIED TRIAGE SCALE

			CATEGORY 1 RED	CATEGORY 2 ORANGE	CATEGORY 3 YELLOW	CATEGORY 4 GREEN
AIRWAY			Obstructed Partially obstructed	Patent	Patent	Patent
BREATHING	Respiratory distress		Severe	Moderate	Mild	No
	Resp. Rate		≤8	9-11 or ≥ 40	21-39	12-20
	Saturation on air		≤80	81-89	90-95	>95
CIRCULATION	Hemodynamic compromise		Severe	Moderate	Mild	No
	SBP		<70	71-90	>200	91-150
	Pulse		≤40 ≥180	41-50 151-179	51-60 101-150	61-100
DISABILITY		GCS	≤8	9-12	13-14	15

4.2 Infrastructure Development in Level 4 Emergency Room

4.2.1 Minimum Requirements for Level 4 Emergency Care Services

i.) Surface Area of 500sqm
ii.) Ambulance Bay and Reception
iii.) Area for Admission and Registration
iv.) Triage
v.) Area for Disaster Events
vi.) Resuscitation Area
vii.) Treatment Area
viii.) Bed capacity
ix.) Nursing Room
x.) Poison Treatment Area-optional
xi.) Isolation Area
xii.) Area to keep Dead Bodies- from the facility
xiii.) Laboratory- From the Facility
xiv.) ECG
xv.) Drug store –from the Facility

4.2.2 Standard Human Resource for Level 4

i.) MOIC/Medical Officers
ii.) Nursing Officer
iii.) Saukya Karya Sahayaka

4.2.3. Capacity Building

Regular Emergency Care Training for all ER staff should be conducted once in 6 months

4.3. Standard Equipment for Each Level of A&E Care (Annexure 4.1- as per the A & E policy)

4.4. Standard Drug List for Each Level of A&E Care (Annexure 4.2)

4.5. Information Management at the ER

Following details should be recorded by the ER Team

i.) Number of patients attending Emergency Room

ii.) Number of patients discharged from ER

iii.) Number of patients admitted to the hospital

iv.) Number of patients transferred to other hospitals for further treatment

v.) Number of patients seen within the clinically recommended time

vi.) Number of patients who did not wait for treatment

vii.) Median waiting time for treatment

viii.) Number of patients discharged from Emergency Room within four hours

ix.) Number of deaths in the Emergency Room

4.6. Quality Indicators

4.6.1 Emergency Care Clinical Quality Indicators to be Introduced;

The five emergency care clinical quality indicators are:

- Indicator 1: Unplanned re-attendance rate
- Indicator 2: Total time in the emergency department
- Indicator 3: percentage left without being seen
- Indicator 4:Time to initial assessment
- Indicator 5:Time to treatment

4.6.2. Description of Emergency Care Clinical Quality Indicators

- Indicator 1: Unplanned re-attendance rate

  Patients who return to the same Emergency unit or a health facility within seven days of the original attendance are known as "unplanned reattenders." This rate is an important indicator of the quality of care provided during the initial visit. A high unplanned re-attendance rate may suggest issues such as inadequate treatment, misdiagnosis, or insufficient follow-up care. However, it's important to note that patients are encouraged to return if their condition worsens; therefore, not all re-attendances necessarily indicate poor care.

- Indicator 2: Total time in the emergency department

  Total time in the emergency department is measured from the moment a patient arrives and is registered in the hospital information system until the time they leave the department, whether to return home or to be admitted to a ward bed (including observation beds in the Accident and Emergency department).

- Indicator 3: Left without being seen rate

  Patients may sometimes leave the department without waiting to be seen –particularly if there is a long wait for a doctor or if the patient has been advised on alternative sources of care.

- Indicator 4: Time to initial assessment

  This is measured from the time of arrival and registration on the hospital information system to the time of initial assessment as indicated in the triage.

- Indicator 5: Time to treatment

  Measured for all patients, this is the time from arrival to seeing a doctor who will start the treatment for the patient's condition.

Standard Emergency Trolley Requirement

ON TOP OF THE TROLLEY	**2ND DRAWER - CIRCULATION**
Self-inflating reservoir bag/Ambu bag-both adult and pediatric sizes	Crystalloids-Normal Saline,0.45%Saline,Hartmann's,5%Dextrose,
Defibrillator and pads	Colloids-Hetastarch or other recommended
Multi para-monitor (5channel)	Cannula 14G, 16G, 17G, 18G, 20G, 22G
Stethoscope	Butterfly needles
Disposable& sterile gloves	IV infusion set
Sphygmomanometer-adult and pediatric cuffs	3waytaps
Torch	Syringes-1,3,5,10,20,50mls
Scissors	Tourniquets
1ST DRAWER – DRUGS	Sterile gauze
Adrenaline1:1000	Alcohol wipes
Atropine	Syringe Pump extension cords
Ephedrine	Adhesive dressing
Amiodarone	Burette sets
Lignocaine	Sterile Gauze Packs
Dobutamine	
Calcium gluconate	**3RD DRAWER - AIRWAY&BREATHING**

Potassium chloride	Laryngoscopes-normal, short handle
Midazolam and Diazepam	Blades adult-short, medium, long, extra-long AND pediatrics sizes
Hydrocortisone	Facemasks-Size1-5
Dexamethasone	Laryngeal mask, airwaysSize1-5
Dextrose-25%,50%	EndotrachealtubesSize3.5-9mm
Naloxone	Gumelastic bougie
Sodium Bicarbonate	Oropharyngeal airways
Magnesium Sulphate	Naso pharyngeal airways
Aspirin	ET tube introducer
GTN spray and Sublingual	Yankauer sucker handle and tubing
Mannitol	Magill's forceps
Phenytoin Na	NG tubes
Distilled water for injection	Nebulizers
	Nasal prongs
	Lignocaine Gel

CHAPTER 5
WARD MANAGEMENT

5.1. Introduction

Ward management in a hospital encompasses both the science and art of delivering optimal quality care to in-patients in a well-organized manner. It involves collaborating with and through others to achieve the health care organization's goals, all while efficiently utilizing limited resources in a dynamic environment. Effective ward management requires good coordination and teamwork among various categories of staff. It involves diagnostic, curative, rehabilitative, preventive and promotive aspects of patient care.

5.2. Objectives of Ward Management

i.) To provide safe and quality care to in-patients.
ii.) To support the rehabilitation for patients enabling them to improve quality of life.
iii.) To support for health promotion and preventive activities
iv.) To facilitate Continuous Medical Education (CME) & Continuous Professional Development (CPD) for health staff.
v.) To facilitate research and development.

In a Divisional Hospital, the ward team comprises Grade Medical Officers, Nursing Sisters/Masters, Nursing Officers in charge, Nursing Officers, Attendants, and Saukya Karya Sahayaka. However, the specific categories and numbers of staff may vary based on the type and level of the health care institution. The quality of patient care is influenced by effective supervision, delegation, communication, and staff motivation. Therefore, it is essential for every team member to contribute to their fullest potential in order to achieve the overall objectives of the health care facility.

5.3. Functions of the Ward

i.) Accommodate Patients: Ensure comfortable and adequate space for all patients.

ii.) Provide Appropriate Medical Care: Deliver medical care under close supervision to ensure patient safety and well-being.

iii.) Administer Medications: Provide drugs and dressings as prescribed by the Medical Officer.

iv.) Maintain Cleanliness and Privacy: Uphold high standards of cleanliness while respecting patient privacy.

v.) Ensure Ward Hygiene: Keep the ward clean and organized for optimal patient care.

vi.) Create a Welcoming Environment: Foster a pleasant, cordial, and friendly atmosphere to make the ward feel like a temporary home for patients.

vii.) Health Education Center: Serve as a center for health education, offering valuable information to patients.

viii.) Information Resource: Act as a center for information regarding the patients in the ward and related health care services. This includes:

a) Keeping health records updated.

b) Establishing an information desk in each unit for communication with patients' relatives, which is crucial for providing timely information as needed.

ix.) Staff Teaching Center: Function as a teaching center for the ongoing education and training of staff members.

5.4. In-ward Facilities (General Circular No: 01-18/2020 dated 03-03-2020)

Divisional Hospital A

- 01 Male Medical Ward
- 01 Female Medical Ward
- 01 Maternity Ward
- 01 Male Surgical Ward
- 01 Female Surgical Ward
- 01 Children's Ward

Divisional Hospital B

- 01 Male Medical and Surgical Ward
- 01 Female Medical and Surgical Ward
- 01 Maternity Ward
- 01 Children's Ward

Divisional Hospital C

- 01 Male Ward
- 01 Female Ward

5.5. Ward Management

Ward management is further described under the following headings

i.) Management of physical environment (ward & surrounding)
ii.) Patient care management
iii.) Human resource management

iv.) Management of equipment and supplies

5.5.1. Patient Care Management

i.) The environment should be clean, healthy, calm, quiet, and visually pleasing.

ii.) The nurses' station should be centrally located within the ward.

iii.) Observation bed(s) should be available.

iv.) An isolation room should be available.

v.) A changing room should be provided based on availability.

vi.) A utility room is necessary.

vii.) There should be a store room.

viii.) A treatment/procedures room should be included.

ix.) A pantry should be available.

x.) A recreation room with a library for patients should be provided.

xi.) There should be a toilet with water-sealed drainage.

xii.) A bath with shower facilities should be available.

xiii.) Wash basins with running water, along with an adequate supply of soap, should be provided to encourage handwashing.

xiv.) The ward should be well-ventilated, with doors, windows, and fans.

xv.) Washable paint should be used on the walls for easy cleaning.

xvi.) Outlets for water drainage after washing should be installed.

xvii.) Drains should be placed around the perimeter of the ward.

xviii.) Regular cleaning and color washing should be done.

xix.) Each "patient unit" should include an iron bed with a mattress, pillows, mattress cover, bottom sheet, mackintosh, draw sheet, top sheet, over-bed table, bedside locker, and, if possible, a screen around the bed. The distance between two beds should be at least 1 meter.

xx.) Providing safe and quality care is the responsibility of the staff.

In-ward care begins with the admission of the patient to the ward and continues until the patient is discharged from the hospital. A Bed Head Ticket must be properly maintained in the ward. Non-health aspects of care, such as respecting dignity, ensuring confidentiality, safeguarding autonomy, providing prompt attention, maintaining the quality of basic amenities, and facilitating access to social support—collectively referred to as health care responsiveness—must be upheld throughout patient care. Additionally, it is crucial to adhere to clinical protocols and guidelines while delivering care.

Furthermore, following 14 points from Nursing Theory by Virginia Henderson offer a comprehensive approach to patient care, focusing on physical, emotional, and social well-being:

i.) Help the patient breathe normally.

ii.) Assist the patient in eating and drinking adequately.

iii.) Support the patient in eliminating waste by all necessary means.

iv.) Aid the patient in moving and maintaining a comfortable posture.

v.) Ensure the patient gets adequate sleep and rest.

vi.) Help the patient select appropriate clothing, and assist with dressing and undressing.

vii.) Assist the patient in maintaining body temperature within a normal range.

viii.) Help the patient keep clean and well-groomed.

ix.) Ensure the patient avoids environmental hazards and does not harm others.

x.) Support the patient in expressing emotions, needs, and fears.

xi.) Assist the patient in worshiping according to their faith.

xii.) Help the patient engage in work that provides a sense of accomplishment.

xiii.) Encourage the patient to participate in recreational activities.

xiv.) Support the patient in learning, discovering, and satisfying their curiosity for normal development and health.

5.6. Regulating the Ward Environment

The Nursing Sister or Nursing Officer in charge is responsible for setting standards for their staff to follow. Essential qualities such as understanding, honesty, kindness, and encouragement should be integral to nursing care, while ensuring a pleasant, relaxing, and safe environment for patients. Additionally, it is the responsibility of the Nursing Sister or Nursing Officer in charge to ensure that patient responsiveness is consistently maintained in the ward under their supervision.

5.6.1 Determining the Nursing Needs

The most important need of the patient is responsiveness. A comprehensive assessment of the patient, both physically and mentally, along with lab results, X-rays, etc., should be conducted to determine their nursing needs. However, all care must be provided under the guidance of the MOIC.

Once the assessment is completed, it should be translated into a nursing care plan tailored to meet the patient’s needs. The plan must be continually revised according to changes in the patient's condition. The nursing care plan should be developed

based on the MOIC's advice, with the objective of restoring the patient's health to the best possible level. Patient care planning should always be individualized to address each patient's unique requirements.

5.6.2. Organizing Daily Work

Organizing the daily work in the ward is the responsibility of the Nursing Sister or the in-charge nursing officer. The following factors should be considered:

i.) The needs of the patient

ii.) The categories and the number in each category of staff available (NOs, SKS etc.) – need to maintain the adequate number of Nursing Officers and SKS in a given shift to provide optimum care to all the patients in the ward.

iii.) The level of supervision that can be carried out.

iv.) Any special tasks or events for the day.

5.6.3. Daily Routine of the Ward

i.) Day staff must take over all patients after reviewing the night report.

ii.) Patient care assignments should be based on the staff's capabilities.

iii.) Ensure beds are arranged for each patient.

iv.) Maintain ward cleanliness by sweeping and mopping in the morning around 7:00 a.m. and evening around 5:00 p.m. The MOIC has the authority to adjust cleaning frequency based on current needs, disease patterns, or situations. Cobweb removal and ward washing should be done weekly.

v.) Meals should be served under the nurse's supervision at 8:00 a.m., 11:30 a.m., and 4:30 p.m.

vi.) Tea should be served at 10:00 a.m. and 2:00 p.m.

vii.) Medical Officer's ward rounds: The nurse or Sister-in-charge must accompany the Medical Officers during ward rounds.

The Sister, Master, or in-charge nursing officer should participate in consultant or MOIC ward rounds whenever possible. When patients are sent for various examinations or tests, they should be accompanied by a hospital staff member.

5.6.4. Administration of Drugs and Injections - by nurses.

6 hourly - at 8.00 a.m. - 2.00 p.m. - 8.00 p.m. & 2.00 a.m.

Thrice daily (TDS) - at 8.00 a.m. - 2.00 p.m. - 8.00 p.m.

Twice daily (BD) - at 8.00 a.m. - 8.00 p.m.

Emergencies should be attended immediately.

5.7. Patient Discharge

i.) The patient should be informed early when discharge is planned, allowing them to make necessary arrangements for going home.

ii.) Provide advice on how to obtain and use prescribed drugs at home.

iii.) Address any questions or clarifications the patient may have.

iv.) Give advice on recommended rest, diets, and activities as per the Medical Officer's instructions.

v.) Inform the patient about follow-up clinic visits, possible complications, and symptoms that should be reported to the Medical Officer.

vi.) Ensure the patient is given a diagnosis card.

vii.) Discharge time should preferably be around 12 noon.

viii.) The patient must be handed over to relatives upon discharge.

ix.) If the patient can travel alone, they may do so after obtaining consent from the Medical Officer.

x.) If the patient cannot travel alone and no one is available to accompany them, inform the next of kin through an accepted communication channel such as a telegram or phone call.

5.8. Long Term Patients

Bed Head Ticket (BHT) of the patient who stays for more than 3 months must be renewed.

5.9 Transfer of Patients

Fill the transfer form properly and the patient should be transferred by an ambulance with a Nursing Officer and SKS and if necessary, a Medical Officer as well.

5.10. Human Resource Management

All staff members should have the duty lists. Duty rosters for nursing officers, should be prepared by the ward nursing sister / in charge nursing officer and displayed in the staff area of the ward attendants and Saukya Karya Sahayaka roster should be prepared by the overseer under the supervision of the sister or the in charge NO. Duty rosters can be made for a stipulated time period and duties can change among staff members with the approval of the Nursing Sister or the Sister in charge

5.10.1 Management of Staff

- Maintain an Attendance Register, Extra Duty Register, and Leave Register. Day and night reports must be prepared by the Nursing Officers. The midnight total should be reported by the Night Duty Nurses to the Night Sister.
- The Nursing Sister or Nurse in-charge must conduct regular supervision.
- The night supervisor (Nursing Sister and team) should perform thorough night rounds—once during the night and once in the morning as part of the night duty, with additional visits as needed.
- All registers should be submitted to the MOIC the following day for supervision and monitoring of services.

5.10.2. Ward Conferences / WIT

Ward conferences / Work Improvement Team (WIT) meetings should be held regularly in order to improve the patient care services/quality services in the ward. The Medical Officers, Nursing Sister and Nurses should participate in the ward conference/WIT to discuss on clinical care, ward management etc. The attendance and minutes of the meetings should be compiled for further references and actions.

5.10.3 Human Resources Development

i.) Orientation programs and in-service training/CME/CPD for staff should be conducted. These can be tailored to specific categories of staff. (Refer to Chapter 2 for further details).

ii.) Team building, staff motivation, and leadership programs should be organized both within units and across the institution.

5.11. Equipment and Supplies Management

The Nursing Sister or Nurse in charge must ensure the availability of proper equipment and sufficient supplies for patient care. Inadequate or insufficient equipment compromises patient safety and care quality.

All equipment must be in working order. Defective equipment still under warranty should be sent to the relevant company for repair. If the warranty has expired, repairs should be handled through the RDHS. If equipment is deemed beyond repair by a Technical Officer, it must go through the condemning process. Until an assessment is completed, faulty equipment should remain in the ward.

Each vital piece of equipment should have a file containing information such as the date of purchase, service agreement details, and repair history.

A mini autoclave should be used to provide sterilized items. When needed, Central Sterile Supplies Department (CSSD) services can be accessed from the nearest secondary care hospital. The Nurse in charge must instruct staff on proper equipment

use and their responsibilities. Additionally, it is crucial to monitor for waste or misuse, educating staff on the economical and proper use of all equipment and materials.

Ensuring adequate supplies adhering to supply chain principles such as Right Amount, Right Quality, and Right Time is essential.

i.) Setting a minimum limit for the quantity of each item to be kept in the ward.
ii.) Having a satisfactory system for replacing broken or worn-out equipment.
iii.) Making regular checks of inventories of all items.
iv.) Equipment maintenance should be carried out at given intervals
v.) Replacements need to be ordered weekly, biweekly or monthly

CHAPTER 6
LABOUR ROOM MANAGEMENT

6.1 Introduction

The maternal mortality ratio, neonatal mortality rate, and perinatal mortality rate are key indicators used to assess a country's national health status. These indicators are also part of the Sustainable Development Goals (SDGs), with a national target set for achievement by 2030. Effective labour room management plays a significant role in influencing these rates. Adhering to the "National Policy on Maternal and Child Health" is crucial in meeting the goals for maternal and child health.

6.2 Maintain Sterility of Labour Room

i) Proper Procedures
Hand washing, sterilizing instruments as per standards set.

ii) Ensuring Cleanliness
Sweeping, mopping three times a day or whenever necessary with soap and water, washing once a week (whole area) with soap water or with antiseptic lotion.

iii) Staff Discipline
Changing gowns, shoes, wearing masks, aprons. Patient to be received by one entrance and the staff should use a separate entrance if available. Aseptic technique is similar to operation theatre procedures. (sterility of labor room /separate title

6.3 Pre-admission Procedures to the Labour room

i) Review the general examination notes made on admission to the hospital.

ii) Pay particular attention to obstetric findings recorded in B.H.T., namely.

a) Past obstetrics history

b) Present obstetric history

c) Abdominal Examination

d) Presentation

e) Position

f) Engagement

g) Vaginal examination

h) Auscultation of Fetal Heart Sounds (FHS) and recording the rate

iii) Check Vital signs, temperature, pulse, respiration and blood pressure and heart sounds

iv) Evaluate lab findings, namely; urine for Sugar and Albumin, Hb % , Blood Group and Rh status , scanning records if available. (there is no requirement to carry out routine ECG and X Ray)

v) Prepare mother for labour by emptying bladder, bowels and perineal care

vi) Check cleanliness of the mother (head to toe) (maintain the hygiene of the pregnant mother)

6.4 Admission Procedures – Includes Admissions directly to ward / labour room

i) Mother is sent to Labour Room at the onset of the active phase of the first stage (cervix 5 cm or more)

ii) Proper handing over and taking over to the labor room should be carried out

iii) A delivery bed is arranged for the mother.

iv) Prepare the mother for safe delivery by checking FHS, maternal pulse, respiration, blood pressure, vaginal bleeding, abdominal examination and bladder, I.V. drip and enter necessary records in the B.H.T. and labour room admission register.

6.5 Delivery Instructions

i) Continue to evaluate the progress of labour.

ii) Monitor F.H.S. every 15 minutes, Give oxygen if F.H.S. decreases. If F.H.S. increases or F.H.S. decrease inform the M.O. or A.M.P. stat. check maternal pulse every half an hour and hourly blood pressure. If there are facilities get a CTG recording.

iii) Check contraction free interval and the duration of contractions every hour (interval between contractions should be within 2-3 minutes and the duration of contractions should be 40 seconds or above)

iv) Check increase in bloodstained vaginal discharge(Show) and active vaginal bleeding

v) Ask if she gets the urge to push, involuntary bearing down sensation.

vi) Observe bulging of perineum (ARM done if indicated).

vii) Observe presenting part (E.g. Face, Brow, Breach & Shoulder presentations)

viii) Check for vaginal opening (cervical dilatation).

ix) Ask mother to take deep breath and push down when there is uterine contraction with full dilatation of cervix with feeling of urge to push (Active phase of second stage)

x) Check crowning. Give episiotomy to Primipara and others if necessary.

Call mother by her first name throughout the delivery and explain every procedure to get her support.

xiii) Clamp the cord and after draining the placental blood toward baby, tie the cord.

xiv) Tie the Disc to Mother & Baby (ensure that same number is given to mother and baby).

xv) Separate the baby from the placenta and show the baby to mother.

Give the baby to mother to touch and feel the baby and to feed the baby with breast milk, within the first 30 minutes (Colustum)

xvi) Give Oxytocin 5u bolus IV as ordered by the Medical Officer.

After delivery of placenta observe mother for bleeding P.V. state of uterus, pulse & respiration and record, the same every 15 minutes

Episiotomy or tear to be sutured immediately by Medical Officer.

xvii) Perineal care and general care to be attended to.

xviii) Give mother a hot drink if there is no complication.

xix) Keep mother for two hours with continuing close observation in the labour room.

xx) Record time of birth, expelling of placenta in the B.H.T. and birth register.

6.6 Baby Care

i) Observe bleeding from the cord or any other place.

Apgar scoring

(i)Heart rate **(ii) Respiratory effort**

(iii) Muscle tone **(iv) Reflex irritability**

(v) Colour

ii) Look for congenital malformations

iii) Look for meconium staining

iv) Suck out Secretions SOS

v) Minimum handling of baby to avoid infection

vi) Evaluate abnormal cry or no cry

vii) Measure the Baby

- Length
- Shoulder
- Head circumference

viii) Record - Birth Marks, Sex

6.7 Transfer to Post-Natal Ward

Before handing over the mother and baby to the post-natal ward, following details should be recorded on the Bed Head Ticket.
It is worthwhile to maintain a checklist and it should include all the details.

a) Mother

i) Condition of the bladder and uterus, temperature, pulse, respiration, B.P, Disc No., whether I.V. drip is in progress.
ii) Perineal care and combing of hair to be attended to before sending the mother to the post-natal ward.
iii) Time of handing over the mother to the ward and signature of the Nurse-in- charge/midwife of the labour room, to be recorded in BHT.

b) Baby

i) Disc No., time of sending baby to the ward to be recorded.
ii) When mother and baby are sent to the post-natal ward, a midwife or nurse should accompany.
iii) Responsible handing over

c) Nurse in-charge of the post-natal ward should check the status of the mother and the baby as follows:

Mother:- State of uterus, temperature, pulse respiration, disc No., bleeding and any other observations, and the time of taking over to ward.

Baby:- Sex, bleeding, colour, secretions, disc No., time of taking over and any other observations.
All these records are to be entered on the B.H.T.

Conduct in-service education for all labour room staff annually. Conduct monthly meetings for all labour room staff.

6.8 High Risk Mothers

The below information should be displayed clearly in a prominent place in the labour room.

i) Elderly primi para
ii) Age below 16 or above 35
iii) Grand multi para

iv) Multiple pregnancy
v) Precious baby
vi) Bad obstetric history
   (a) Antepartum haemorrhage (APH)
   (b) Two consecutive abortions
   (c) Precipitated labour
   (d) Previous still birth
   (e) Past Lower Segment Caesarean Section (LSCS)
   (f) Prolonged labour
   (g) Postpartum hemorrhage (PPH), retained placenta, atonic uterus
   (h) Primary or secondary infertility
   (i) Previous low birth weight
   (j) Genetic disorders of previous children
   (k) Assisted delivery with forceps
   (l) Pregnancy complicated by medical disorders
   (m) Postpartum psychosis
   (n) History of endometriosis or hydatidiform mole

Organize an inquiry desk during visiting hours outside the labour room to keep the relatives informed of the progress of labour, as it is a right to know the relevant information of the patient.

vii) Current medical / surgical conditions
   (a) Heart disease
   (b) Diabetes
   (c) Renal disease
   (d) Past history of deep vein thrombosis
   (e) Blood disorders, D.I.C. Haemophaelia
   (f) Infective Hepatitis or Jaundice past and present
   (g) Steroid Treatment
   (h) Drug Addiction
   (i) Thyrotoxicosis
   (j) Goiter or Thyroidectomy
   (k) Tuberculosis
   (l) Psychiatric disorders
   (m) Previous surgical conditions
   (n) Infective diseases – AIDS
   (o) Height of mother less than 140 cm
   (p) Anemia or Malnutrition
   (q) Hypertension

viii) Present Obstetric History

(a) Pre eclamptic toxemia/Pregnancy Induced Hypertension (PIH)
(b) Antepartum haemorrhage (APH)
(c) Uterus large for dates or small for dates
(d) Uncertain dates or forgotten dates
(e) Hydramnios

6.9 Staffing Pattern

The Staffing Pattern in the labour room of Divisional Hospitals is generally as follows:

Sister or Nurse in-charge (Midwifery qualified) Nurses (Midwifery qualified) Midwives	Staff for Three Shifts According to work load
Attendants Ordinary Labourers Male Ordinary labourers Female Sanitary Labourer	

The number of staff required for each shift should be determined based on the workload.

CHAPTER 7
MANAGEMENT OF MINOR INJURIES / SURGERIES

7.1. Introduction
Minor surgical procedures can be successfully performed in most Divisional Hospitals across the country.

7.2. Objectives
To ensure that Medical Officers have the necessary facilities to safely conduct minor surgical procedures in a properly sterile environment.

7.3. Activities
Minor sterile rooms in Divisional Hospitals (DHs) are expected to provide two main services:

i.) Performing minor surgical procedures under local anesthesia.

ii.) Supplying sterilized surgical dressings and ensuring the sterilization of instruments, which are typically supplied by the Central Sterile Supplies Department (CSSD) in the hospital. If a CSSD facility is not available, sterilization can be carried out in the minor surgical procedure room itself.

7.4. Theatre Team
A minor surgical procedure room should operate under a trained Nursing Sister or an in-charge Nursing Officer. The staff shall consist of a Nursing Officer and *Saukya Karya Sahayaka* trained in theatre work.

Certain staff members, such as *Saukya Karya Sahayaka*, should be trained to handle high-pressure sterilizers (autoclaves), air-conditioning systems, and electric generators.

To ensure quality improvement, regular in-service training programs and group discussions should be organized under the guidance of the Sister or Nursing Officer in charge of the minor surgical procedure room. The smooth operation of the minor surgical procedure room is the responsibility of the in-charge Sister or Nursing Officer. This includes patient care, maintaining sterility, instrument maintenance, personnel coordination, and duty assignments.

7.5. Nursing Officers Attached to the Operating Theatre Should Perform Following Duties:
i.) Patient Care

ii.) Documentation

iii.) Assisting minor surgical procedures

iv.) Cleaning and Sterilization

v.) Infection Control

vi.) Building interpersonal relationships

7.6. Role of Saukya Karya Sahayaka in the Operation Theatre

Saukya Karya Sahayaka should assist theatre nursing officer in transportation of patients and equipment sanitation and related activities. Operating theatre in-charge prepares the theatre activity timetable indicating the date and time of surgical operations, sterilization of equipment and dressings, carbolization of the theatre etc. These activities should be spaced out to ease the functioning of the theatre with minimum staff.

Duty rosters for different categories of staff should be prepared well in advance according to demands of the theatre.

7.7. Infection Control Procedures

i.) Suitable sterility should be maintained in the minor surgical procedure room. Prior to the procedure, the patients should be cleaned. Isolation of these patients from septic foci is imperative to control cross infection. Separate clean trolleys should be available to transport patients to and from the minor surgical procedure room.

ii.) Ideally the minor surgical procedure room should have two compartments (the sterile compartment and the unsterile compartment) with a relative demarcation. Sterile compartment of the minor surgical procedure room houses surgical staff, suitable procedure trolley, sterile linen and equipment. Used linen, equipment and discarded materials are handled in the unsterile compartment of the minor surgical procedure room. The Saukya Karya Sahayaka is allowed inside the unsterile compartment of the minor surgical procedure room and should be confined to that compartment until the procedures are over. Good quality scrubbing lotion (7.5% povidone iodine scrub) used for hand scrubbing; 10% povidone iodine solution is used for surgical field preparation.

iii.) Clean procedures should be done early in the list and septic cases later to avoid risk of cross infection. Each member of the surgical team should maintain asepsis through-out surgery. Minor surgical procedure room should be closed immediately when a case of Tetanus or gas gangrene is detected from surgical patients or a swab from the minor surgical room environment. Minor surgical room should then be washed with detergent solution and/or TCL powder (calcium hypo chloride). Subsequent swabs are sent to prove sterility before re-opening the minor surgical room. Daily cleaning of the minor surgical room and weekly washing with detergent solution improves the quality of aseptic environment. Autoclaving process should be closely supervised.

7.8. After Each Surgery Session:

i.) Operation table is washed
ii.) Theatre floor is washed / mopped
iii.) Equipment is changed (anaesthetic mask, sucker nozzle, laryngoscope)
iv.) Surgical equipment and dressings be packeted individually to ease handling and to maintain sterility.

Periodic checks must be conducted to ensure the sterility of the minor surgical procedure room. Swabs should be taken from various locations in the room and examined at least once every six months. Additionally, monitoring the rate of post-surgical infections serves as another method of evaluating sterility. The target is to limit post-surgical infections to approximately 1 in every 100 cases.

7.9. Record Keeping

Register of every surgical procedure should be maintained.

CHAPTER 8
ORAL HEALTHCARE SERVICES

8.1 Introduction

Oral health is a vital part of health care services in Sri Lanka. Dental Surgeons (DS) stationed in hospitals across the country deliver oral health care to the population. The Oral Health Unit (OHU), located within the Outpatient Department (OPD), provides comprehensive preventive and curative oral health care services to the public.

The OHU is staffed by DS, Nursing Officers, and Attendants or Saukya Karya Sahayaka (SKS). Maintaining trained nursing and supportive staff in the OHU for a minimum of two years helps improve service productivity (refer to General Circular No. 1757 of 23/09/1981, Annexure 8.1). DS must serve a minimum of two years at a station to qualify for a transfer. For stations with a single DS, they should only be released if a suitable replacement or covering arrangement is in place.

An OHU in a Divisional Hospital should have the following basic equipment:

i.) Dental chair / Unit per Dental Surgeon
ii.) Mini autoclave or sterilizer
iii.) Dental instruments (Annexure 8.3)
iv.) Dental materials and drugs (Annexure 8.3)
v.) Furniture and hardware

New equipment required for the Oral Health Unit (OHU) should be requested through the Institutional Head and the Regional Director of Health Services (RDHS). Leave for the Dental Surgeon must be approved by the head of the institution in advance. If the Dental Surgeon needs leave for more than two days, they must inform the RDHS and arrange for relief from the nearest station, notifying the head of the institution as well.

8.2 Range of Services and Procedures

The Oral Health Unit (OHU) must focus heavily on preventive measures, including oral health promotion, disease prevention, and screenings. Services such as cleaning, fluoride application, and sealant application are key to cavity prevention. Primary oral health care providers are responsible for educating patients on proper oral hygiene practices, such as brushing and flossing, and offering counseling on tobacco cessation and healthy dietary habits.

Opportunistic screening for Oral Potentially Malignant Disorders (OPMDs) and oral cancer should be performed on all patients visiting the dental clinic, with priority given to those referred by PHC staff and self-referred individuals.

Curative services include dental pain and trauma management, extractions, simple restorations, scaling, minor oral surgery (e.g., Incision & Drainage, apicectomies), and selected root canal treatments. Appointments for these procedures should be scheduled for the afternoon sessions.

In addition to routine duties, the Dental Surgeon (DS) is expected to handle emergencies without delay and participate in health education activities within the OPD and hospital wards. The DS is also expected to attend to referrals for inpatients.

Oral health care for pregnant mothers should focus on improving their oral health and that of their young children. Care for pregnant mothers should be scheduled for at least one session per week at Divisional Hospital OHUs.

Saturday mornings are reserved primarily for children, though adults may also be treated if time allows.

Patients with needs beyond general dental care should be referred to the nearest specialist dental clinic for advanced restorative, orthodontic, or oral surgical care. Follow-up care should be conducted for cases referred back to the OHU to ensure oral health improvements according to the treatment plan.

Extreme attention must be paid to the sterilization of dental instruments. The DS should closely supervise sterilization procedures to maintain cleanliness in the clinic. Adequate time should be allocated to ensure quality care, and patients must be properly educated and informed about further treatment needs.

8.3 Record Keeping

Patient's history, a charting of the mouth and the treatment provided are recorded in the treatment card by the DS and filed/preserved for the future references.

Patient registration number, name and treatment provided should be systematically recorded in a patients register.

Daily entries should be made in the form H 1201 in triplicate. These returns have to be forwarded to the Research and surveillance unit of IOH Maharagama and Regional Dental Surgeons before 5^{th} of the following month. The third copy is to be retained in the clinic.

8.4 Duties of Dental Surgeons Appointed to the Divisional Hospitals

Dental Surgeons (DS) work under the administrative authority of the MOIC of the institution. They serve as the team leader, manager, and supervisor for all activities related to the Oral Health Unit (OHU), including patient care, duty arrangements for other staff categories, and managing public relations within the OHU.

Working Day	Duty Hours
Week days	8.00am – 12.00noon / 2.00pm -4.00pm
Saturdays	8.00am – 12.00noon

- A notice indicating duty hours should be prominently displayed for public information.
- Outside normal duty hours, the DS must be on call to attend to emergency cases, both day and night, and deliver all aspects of oral health care.
- The MOIC must be informed of the DS's whereabouts during working hours.
- A Diary H-136, in which daily arrival and departure times are recorded, must be maintained and submitted to the MOIC weekly. A similar diary should be kept at visiting stations.
- The DS should maintain a record of all work done in a dedicated register, with morning and afternoon tasks recorded separately.

- The Dental Surgeon (DS) must attend the RDHS/MOH Conference once a month, as stipulated in General Circular 3009 of 26.01.89.
- In a one-man station, the DS will act for the officer in charge in the absence of the MOIC, in accordance with General Circular 1189 of 23.9.81 (Annexure 8.2).
- The DS is responsible for preparing relevant drug and material estimates and requesting supplies from the RMSD.
- Maintenance and care of dental equipment is the DS's responsibility.
- The DS must carry out primary maintenance of dental equipment, with necessary repairs being reported to the Biomedical Engineering Unit in the RDHS office.
- Under the supervision of the DS, the Assistant Medical Practitioner, Pharmacist, or officer in charge of surgical stores shall order, receive, maintain, and supply adequate stocks of dental materials, drugs, and equipment for the OHU. Once issued to the OHU, the DS shall be responsible for maintaining them according to protocols.
- The DS shall issue medical certificates in the field of dentistry whenever necessary, in accordance with the rules laid down for issuing medical certificates.

CHAPTER 9
CLINICS

9.1 Introduction

The primary objective of conducting clinics at Divisional Hospitals is to provide safe, patient-centered, and cost-effective services while reducing overcrowding at secondary health care institutions. These clinics play a crucial role in improving patient compliance and overall health care practices within the community. The following are some of the clinics typically conducted at Divisional Hospitals:

i) General Medical Clinics

ii) Antenatal Clinics &Family Planning Clinics

iii) Well Baby and Immunization Clinics

iv) Mental Health clinic

v) Dental clinic (refer chapter 8)

vi) Healthy Lifestyle Clinic

9.2 General Medical Clinics

These clinics are arranged for adult patients who require ongoing treatment for various medical conditions. Patients are typically referred to general medical clinics from the OPD, and some may also be referred back from secondary or tertiary hospitals for follow-up care.

At these clinics, a clinic register must be maintained, with every patient being registered and assigned a registration number. Common conditions treated include:

- Diabetes
- Essential Hypertension
- Ischemic Heart Disease
- Stroke
- Dyslipidemia
- Arthritis
- Bronchial Asthma
- Thyroid Disorders

Patients are generally seen once a month by a Medical Officer, or as required by their condition. For every patient, a clinic record should be maintained to ensure continuity of care. If the patient has a personal medical record, all pertinent information on diagnosis and treatment should be documented in it.

National guidelines available to primary health care providers for managing Non-Communicable Diseases (NCDs) such as guidelines on hypertension and dyslipidemia, should be followed, ensuring that treatment protocols are aligned with the best available evidence.

9.3 Antenatal Clinic

In accordance with Circular No. 02-85/2014 dated 22-05-2014 on Antenatal Care issued by the Director General of Health Services (DGHS), it is mandatory to conduct an antenatal clinic (ANC) at every Divisional Hospital. These clinics provide shared care to mothers from one or more Public Health Midwife (PHM) areas. A Medical Officer from the hospital, along with the field PHM, conducts the ANC, while the MOIC facilitates the clinic. The ANC is held once a week, or as required in a Divisional Hospital.

Registration is mandatory for all pregnant mothers attending the clinic, with records maintained in an antenatal clinic register. When necessary, mothers are referred to higher-level care for specialized attention. Mothers identified as high-risk are referred to obstetric care at a major hospital. Based on their Expected Date of Delivery (EDD), these high-risk mothers are closely monitored by a Medical Officer or Midwife and assisted with timely admission to a major hospital to minimize labor-related complications.

At the ANC, mothers are prescribed essential medications, including vitamins and supplements, and are educated on antenatal care, delivery options, and postnatal care. Additionally, the postnatal care needs of mothers are addressed by a Medical Officer when required. Family planning methods are also offered based on the patient's needs during the antenatal clinic visit.

9.4 Well Baby Clinic and Immunization Clinic

The well baby clinic is held on a weekly basis or as required. Child Health Development Records (CHDR) are maintained in this clinic. Children identified with medical or surgical problems, as well as congenital anomalies, are referred to the relevant consultants and followed up in the well-baby clinic.

Immunization according to the National Expanded Programme on Immunization (EPI) is carried out in the clinic. Necessary steps should be taken to ensure proper cold chain management of the vaccines, and adequate training should be provided to the staff for this purpose.

9.5 Mental Health clinics

At the divisional level, mental health services are delivered by the Medical Officer/Mental Health (MOMH) or Medical Officer/Psychiatry, operating under the administrative supervision of the Regional Director of Health Services (RDHS) and clinical supervision of the consultant psychiatrist. An AMOMH or Medical Officer/Psychiatry is appointed to a Divisional Hospital to cover all primary care institutes within each Medical Officer of Health (MOH) area.

Outpatient mental health services are provided through mental health clinics, and outreach mental health clinics are conducted by the Medical Officer/Mental Health or Medical Officer/Psychiatry under the clinical supervision of the Consultant Psychiatrist. These clinics are held twice a month or once a month at a Divisional Hospital. The necessary medications are provided by the Divisional Hospital where the clinic is conducted, and it is the duty of the Medical Officer in charge of the institute to obtain the required drugs from the Regional Medical Supplies Division.

9.6 Healthy Lifestyle Centers (HLCS)

Non-communicable diseases (NCDs) are the leading cause of death in Sri Lanka, accounting for more deaths than all other causes combined. Early detection of key risk factors and provision of health guidance are crucial strategies outlined in the National NCD Policy Framework to reduce the country's disease burden. The establishment of Healthy Lifestyle Centers (HLCs) in health care institutions nationwide has been a significant achievement.

The Non-Communicable Disease Unit of the Ministry of Health in Sri Lanka initiated the Healthy Lifestyle Centers (HLCs) in 2011 to address the lack of a structured NCD screening service at the primary health care level.

9.6.1 Objective

The primary objective of the HLCs is to reduce the risk of NCDs among individuals over 35 years of age by detecting risk factors early and improving access to specialized care for those at higher risk of cardiovascular disease (CVD). Clients screened at HLCs are managed using a total-risk approach to assess their 10-year CVD risk.

9.6.2 Conduction of Healthy Lifestyle Centers

Clinic sessions should be conducted at least once a week with the participation of at least 20 clients per session. If resources permit, all HLCs should be conducted from Monday to Saturday.

To improve the male participation and to capture the working population, the duration of screening activities can be extended up to 6pm and/or open on public holidays with the permission and approval of the relevant authorities.

HLCs should be conducted by MO/RMO in the primary health care institutions and MO/Public Health, MO/Health Promotion or any other Medical Officer in other

institutions. Nursing Officer, public Health Nursing Officers, Health Education Nursing Officer, and volunteers may provide support to carry out clinic activities.

Screening, management and follow up of clients are to be carried out according to the National NCD guidelines for Primary health care providers. The primary care guidelines distributed to date are:

i) Cardiovascular risk management

ii) Management of Diabetes Mellitus

iii) Management of overweight and obesity

iv) Management of dyslipidemia

v) Management of Chronic Respiratory Diseases

vi) Management of Hypertension

9.6.3 Location

i) The HLC should be located in a designated area within the Primary Health Care institution that is easily accessible to clients and in close proximity to the Outpatient Department (OPD). It is essential that congestion at the OPD does not interfere with the activities of the HLC.

ii) There should be a name board with adequate description.

9.6.4 Space

i) There should be a minimum of two rooms in the HLC. One room should be designated for examinations and individual counseling, while the other should be used for group discussions, with sufficient space to accommodate at least 25 persons.

ii) Adequate lighting (electricity), ventilation, water supply and toilet facilities should be available.

9.6.5 Eligible Persons

Eligible persons for screening at Healthy Lifestyle Centers fall under two categories:

i) Category A: All apparently healthy individuals aged 35 years and above. An apparently healthy person is defined as someone who has not been diagnosed with any of the following conditions:

- Cardiovascular disease (including coronary heart disease and cerebrovascular disease)
- Hypertension
- Diabetes
- Cancer

- Chronic kidney disease
- Chronic liver disease
- Dyslipidemia
- Chronic respiratory disease - The individual should not be under routine follow-up for any of these conditions.

ii) Category B: Persons aged between 20 and 34 years who have any of the following risk factors:
- Smoking tobacco in the past year
- Overweight (BMI ≥ 25 kg/m²)
- Abdominal obesity (waist circumference: male > 90 cm, female > 80 cm)
- Raised blood pressure (≥ 140/90 mmHg)
- Symptoms suggestive of diabetes mellitus
- Family history of premature cardiovascular disease in first-degree relatives (male relative < 55 years, female relative < 65 years)
- Family history of diabetes mellitus in first-degree relatives
- Family history of familial dyslipidemia in first-degree relatives

9.6.6 Services Offered at HLC

i) Screening for main Risk factors
   a) Smoking, Alcohol use, Physical Activity, Unhealthy Diet

ii) Screening for Major NCDs
   a) Cardiovascular Disease, Hypertension, Dyslipidemia, Diabetes, Chronic respiratory disease, Cancer (Breast, Oral)
   b) Clinical assessments offered
   c) BMI assessment, Waist circumference, Waist/height, Blood Pressure, Oral Examination, Breast Examination, Cardiovascular disease risk assessment

iii) Investigations offered
   a) Fasting blood sugar or random blood sugar, Total cholesterol, Serum creatinine (If available)

iv) Referral to appropriate clinic/institution according the health condition

v) Lifestyle modifications

9.6.7 Referral

After screening and assessing cardiovascular risk (refer to the cardiovascular risk assessment guidelines), individuals will be advised to return to the Healthy Lifestyle Center (HLC) for a reassessment in either one year or in three years. Alternatively, they may be referred to the medical clinic within the same hospital or a higher level of care for the management of non-communicable diseases (NCDs).

9.6.8 Supervision and Monitoring

A monthly return of Healthy Lifestyle Center (HLC) services must be submitted to the Medical Officer for Non-Communicable Diseases (MO/NCD). In some institutions, the HLC utilizes an electronic health information system, with data stored on a server at the Directorate of Health Information, Ministry of Health.

HLC data should be reviewed during monthly meetings, and plans developed to address any challenges encountered in the successful operation of the clinics. Supervision of HLC activities is conducted by the MO/NCD, Regional Director of Health Services (RDHS), and officials at the national level. A visitors' record book should be maintained, and supervising officers are expected to conduct oversight at least once a month.

CHAPTER 10
FAMILY MEDICAL CLINICS

10.1 Introduction

Family medicine clinics are recognized for delivering comprehensive care to individuals and families, integrating biomedical, behavioral, and social sciences. These clinics are expected to provide services initially offered at medical clinics, antenatal clinics, family planning clinics, and mental health clinics.

The family medicine clinic is defined as a unit that delivers first-contact curative care to all family members residing in the empanelled population or drainage area of Divisional Hospitals. It addresses health care needs across the life course, catering to patients from newborns to geriatric individuals. The primary objective of family medicine clinics is to provide safe, patient-centered first-contact care.

10.2 Human Resources

i) Consultant Family Physician/Medical Officer (preferably a Diploma holder in Family Medicine)

ii) Nursing Officer

iii) Healthcare Assistant

iv) Other staff members who need to provide multidisciplinary team work. E.g., PHNO, physiotherapist etc.

The Medical Officer should get the guidance and advice from the consultant Family Physician of the relevant institution or the advice must be obtained from the Consultant Family Physician of the nearest apex hospitals (shared acre cluster approach).

10.3 Facilities

The following facilities such as infrastructure, information technology and investigation facilities should be included in the clinic setting.

Infrastructure

i) Infrastructure should be designed to preserve patient privacy and facilitate the working environment

ii) Consultation room equipped with all basic examination equipment and tools including examination bed.

iii) Proper waiting area and seating arrangements to patients.

iv) Good ventilation & lighting

v) Toilets facilities and safe drinking water

vi) Information technology

a) Electronic patient record facility is preferable

b) Paper based record keeping system

vii) Investigations

a) Laboratory facilities preferably aligned with Essential Health Services Package at the institution, in situ or cluster system,

b) ECG facilities & other diagnostic instruments.

10.4 Functions

Each patient should be registered to complete the empanelment of the population. Once an electronic patient health record system is established, each individual will be assigned a Personal Identification Number (PIN) to maintain continuity of care.

The family medicine clinic aims to provide total family care, encompassing medical, surgical, pediatric, geriatric, and psychiatric services. Referrals to the Child and Family Psychology (CFP) and other relevant specialties can be made for technical advice. Forward referrals and back referrals should be conducted appropriately.

All patients referred from the OPD or the field by the Medical Officer of Health (MOH) should be treated for their day-to-day illnesses while also undergoing screening for communicable and non-communicable diseases. If a patient requires referral to secondary or tertiary care, it should be done promptly to ensure the best outcomes.

The unit primarily focuses on curative care while also engaging in opportunistic preventive, promotive, and rehabilitative activities. Home visits by a trained medical team for patients in need are advisable. An appointment system may be established for patient convenience.

Close collaboration with Healthy Lifestyle Centers (HLC), the OPD, and other health departments of the hospital and the MOH is essential to ensure comprehensive care.

CHAPTER 11
OUTREACH CLINICS

11.1 Outreach Clinics

Outreach clinics are defined as facilities or specific locations designated to provide medical services in a single setting. In the context of Divisional Hospitals, there are two types of outreach clinics: in-situ outreach clinics and distance (or outbound) outreach clinics.

In-situ outreach clinics are conducted within the Divisional Hospital itself, while distance outreach clinics take place in the community. These clinics aim to extend health care services to populations who may face barriers to accessing care, ensuring that medical services are more accessible and convenient for patients.

11.2 In-situ Outreach Clinic

These clinics are conducted within the hospital, tailored to meet the needs of the population based on socioeconomic status and geographical features. Specialists from various disciplines, such as surgeons, pediatricians, eye surgeons, and ENT surgeons, visit to conduct these clinics.

The organization and supervision of these clinics fall under the responsibility of the Head of the Institution (HOI). The HOI is tasked with coordinating the arrangement to secure the participation of team members from the nearest secondary care institution. This involves discussions with the Head of the relevant secondary care institution, guided by the Regional Director of Health Services (RDHS).

- Consultants
- Senior Registrars/ Registrars
- Medical Officer
- Nursing Officer
- Healthcare Assistants

A designated space should be provided to deliver patient care with the necessary equipment and drugs outlined in the Essential Health Services Package at the relevant level of care. Laboratory or cluster laboratory facilities or mobile laboratory facilities should be available to conduct relevant investigations for patient care services according to the essential laboratory investigations package at the appropriate level of care. A clinic schedule should be prepared and displayed.

11.3 Distance / Out Bound Outreach Clinics

These clinics are conducted outside the hospital without disrupting the normal functions of the hospital. A specialist team, along with supportive staff, visits a predetermined location—such as a temple, church, or social gathering area—to conduct the clinics. The location should be agreed upon in consultation with the relevant authorities.

This model promotes community involvement, allowing volunteers and other sectors to engage in patient care.

11.4 Human Resources

i) Medical Officer

a) Curative care

Examine the patients and treat uncomplicated illnesses, can follow up chronic disease patients and NCD patients for continuity of care and referrals should be done to appropriate levels of care.

b) Preventive care

Necessary health promotion & disease prevention activities including screening should be conducted.

ii) Nursing Officer

Assisting in basic patient management, health promotion activities & disease prevention

iii) Healthcare Assistant

Assisting the medical team appropriately

iv) Dispenser/Pharmacist

Dispensing the medicine to the patients

The basic laboratory testing facilities and required medications should be made available by discussing with the RDHS, HOI, relevant consultants and MLTs of the respective institutions from where the support is received to carry out the outreach clinics.

CHAPTER 12
LABORATORY SERVICES

12.1 Introduction

Laboratory services provided by government hospitals vary based on resource availability and allocation. While some differences exist, Divisional Hospitals classified as type A, type B, and certain type C hospitals may have laboratory facilities, sometimes staffed by a qualified Medical Laboratory Technologist (MLT). Divisional Hospitals without MLTs will operate according to the guidelines outlined in Chapter 8 (Laboratory Services) of the Manual on Management of Primary Medical Care Units (PMCUs).

12.2 Objectives

i) To provide quality and timely laboratory reports to medical officers who are responsible for managing patients effectively at the Divisional Hospital level

ii) To facilitate efficient utilization of cluster services whenever required

12.3 Responsibilities of the Medical Officer in Charge (MOIC) of Divisional Hospitals

i) MOICs must adhere to the guidelines outlined in General Circular 02-73/2005 dated 19/05/2005 regarding the use and maintenance of laboratory equipment (see Annexure 12.1).

ii) They must ensure the rational use of laboratory investigations in government hospitals, following Health Ministry Circular D/LS/NLP/let/2010 (see Annexure 12.2).

iii) MOICs are required to attend periodic laboratory review meetings conducted at the RDHS level with the relevant laboratory staff.

iv) MOICs should take steps to avoid duplication of laboratory investigations.

v) They must maintain an equipment database, sharing the data with the RDHS, PDHS, and DDG/LS, as directed in the DGHS letter concerning the Preparation of the National Laboratory Equipment Database (DDG/LS/ED/EQ-DB/304/2022) (see Annexure 12.3).

vi) MOICs must ensure effective communication of information among wards, clinics, OPD staff, and laboratory staff to facilitate rational ordering of laboratory investigations and provide training to relevant staff to assure the quality of laboratory testing.

vii) Routine inspections of the institutional laboratory should be conducted according to the standard checklist attached to General Circular 01-14/2005 (see Annexure 12.4).

12.4. The Present State of Laboratories of Divisional Hospitals

According to the laboratory guidelines (2019), there are four levels of laboratories in accordance with the institutional level (Level 1- 4).

Level 1 - PMCUs

Level 2 - Divisional hospitals
Level 3 - Base Hospitals
Level 4 - District General Hospitals and above

However, if there is no Medical Laboratory Technologist (MLT) in a divisional hospital, it can provide level 1 laboratory service. If there is an MLT in the divisional hospital, the mode of performing laboratory investigations is different and is described in this chapter.

12.4.1. Laboratory Service Levels

i) Level 1 Laboratory Services

This is offered at the PMCUs and Divisional Hospitals where there are no Medical Laboratory Technologists (MLT). These are the basic feed-in institutions at the lowest level of primary care, which provide limited testing facilities at the point of care to the empaneled population. E.g.: using strips for capillary blood sugar, cholesterol, and urine sugar testing, or using POCT devices, etc. These feed-in institutions must arrange suitable specimen referral and transport systems to the next level. (Level 2) with the support of the relevant administrative authorities of the district/province.

ii) Level 2 Laboratory Services

Divisional Hospitals which are manned with one or more Medical Laboratory Technologists, can provide level 2 service. These Divisional Hospitals must cater to laboratory testing requirements for their empaneled population and the referral samples of feed-in institutions (PMCUs). Regional health authorities (RDHS) must ensure basic infrastructure laboratory facilities, adequate reagents and consumables supply, and basic equipment package for these hospitals. Moreover, an appropriate specimen referral and transport system has to be arranged considering the geographical terrain and the need of the population. Such clustering of laboratory services would be set up by the relevant health authorities in each district.

iii) Level 3 Laboratory Services

Base hospitals are manned by laboratory consultants with several Medical Laboratory Technologists and other laboratory staff. If a test cannot be performed in a Level 2 Divisional Hospital, such specimens should be transported to a Base Hospital (Type A/B). The prior arrangement has to be made after discussing with the relevant L3 Laboratory Consultant / SMLT before sending the specimens from the Divisional Hospital.

iv) Level 4 Laboratory Services

District General Hospitals and above provide level 4 service. If the L3 hospital has special test requirements, the specimens have to be transported to a designated L4 laboratory. It is the responsibility of both heads of the institutions to make a prior arrangement with the relevant laboratory consultants for this purpose.

Any special tests which cannot be performed at level 3 or 4 can be sent to the Medical Research Institute (MRI) which is the National Reference Laboratory of the country. In such cases, it is necessary to make sure that the particular special test is available at MRI before collecting specimens from the patients. Prior guidance should be obtained from the MRI in such instances.

12.4.2. Process of laboratory testing

The laboratory testing process has 3 main phases.

- Pre-Analytical phase
- Analytical phase
- Post-Analytical phase.

The pre-analytic testing phase occurs first in the laboratory process. This phase may include the collection of specimens with accurate labeling, handling, and appropriate transport that occur prior to the time the specimen is received in the laboratory. Substantial errors can occur during the pre-analytic phase during specimen handling and identification. Therefore, the pre-analytical phase must have rigorous control measures to avoid errors to travel further “downstream.”

The second phase is the analytical phase. This phase includes what is usually considered the "actual" laboratory testing or the diagnostic procedures, processes, and products that ultimately provide results.

The post-analytic phase is the final phase of the laboratory process. This phase culminates in the production of a final value, result, by dispatching a diagnostic pathology report to the end user.

12.4.3 Ordering Laboratory Investigations in a Divisional Hospital

The clinicians request laboratory investigations. An informative, legible properly written request form with the name and signature of the authorized person is a mandatory pre-requisite. It is also important to order necessary investigations as indicated (screening/diagnosis/monitoring the progress) of the disease. In Divisional Hospitals, laboratory investigations are generated from the following categories.

i) Self-referrals

ii) Inward patients

iii) Healthy Lifestyle Clinics (HLC)

iv) Well Woman Clinics (WWC)

v) Maternal and Child Health Clinics (MCH)

vi) Other clinics (Medical, Diabetic etc.)

Proper labeling and specimen collection into the specific container/tube is an essential requirement, hence, the standard of procedures must be well communicated by the heads of the laboratories to the nursing and medical officers.

12.4.4 Mode of Carrying Out Laboratory Investigations

The following three modes are suggested:

i) Divisional Hospitals can use one of the following methods. Point of care strips or POCT devices or semi-automated or automated analyzers. The most cost- effective method has to be implemented considering the cost per reportable test. High-end or high throughput analyzers are not recommended to use in Level 2 facilities.

ii) Divisional hospitals can collect specimens and use integrated laboratory service network/distance laboratory service and tests can be performed at the reference laboratory

iii) Divisional Hospitals can also get a mobile laboratory service by prior arrangement with the RDHS.

The in-charge MLT must maintain relevant registers and test statistics. The number of tests performed in a Divisional Hospital should be recorded daily by the MLT and the statistics should be sent to the relevant RDHS monthly. All district laboratory test statistics should be forwarded to the PDHS with a copy to DDG/Laboratory Services of the Ministry of Health quarterly. It is recommended to participate in district laboratory review meetings regularly with the participation of heads of the Institutions, laboratory Consultants, and the SMLTs.

12.5 Availability of Minimum Investigation Facilities at the Divisional Hospital Level with MLTS

12.5.1 The Basic Investigation Package

The POCT diagnostic devices with strips are available in Level 2 divisional hospitals. These are used by the non-laboratory staff. But some of the institutions are provided with POCT devices (disposable single-use cartridges/cassette/ reagent discs that contain multiple tests). The use of latter devices is not cost effective. Hence, it is recommended to use manual method /machines which are available at the laboratory to cater the test requirement.

Category	Investigation	POCT (Strips)	Manual/ Machines
Haematology	ESR	NO	YES
	FBC	NO	YES
	MP	NO	YES
	Blood picture	NO	YES
Chemical Pathology	Blood Glucose	YES	YES
	S. Creatinine	NO	YES
	ALT/AST	NO	YES
	Total Cholesterol	YES	YES
	*Lipid profile	NO	YES
	CRP	YES	YES
	*Urine Microalbumin to Creatinine ratio	NO	YES
	Troponin I/T	YES	YES
	*HbA1C	NO	YES
	UFR	NO	YES
	Urine for Bilirubin	YES	YES
	Urine for glucose	YES	YES
	Urine for Ketone bodies	YES	YES
	Urine for proteins	YES	YES
	Urine for Reducing substances	YES	YES
	Urine for urobilinogen	YES	YES

	Urine for HCG	YES	YES
	Stool Full report	NO	YES
Microbiology	AFB	NO	YES
	Urine/Stool Direct microscopy	NO	YES
	Specimens for cultures	NO	YES
Histopathology	PAP- smear	NO	YES

* It is advisable to conduct these tests at a level 3 laboratory by arranging a sample transport referral system, as these tests are not considered urgent.

12.5.2 Tests to be Conducted for Screening Purposes

Category	**Investigation**	**POCT (Strips)**	**Manual/ Machines**
Healthy Lifestyle Clinics (HLC)	Fasting Blood Glucose	YES	YES
	Urine Albumin	YES	YES
	Total Cholesterol	NO	YES
	S. Creatinine	NO	YES
Well woman clinic	Blood Sugar	YES	YES
	PAP Smear	NO	YES
Antenatal /Maternal /Child Health	Full Blood Count	NO	YES
	HIV/VDRL* samples are to be sent to district STD clinics	NO	YES
	Urine Full Report	NO	YES
	Blood Glucose	YES	YES
	Oral glucose tolerance test OGTT)	YES	YES
	Blood Grouping & Rh * sent to the nearest blood bank	NO	YES
Thalassemia Screening	FBC Details to be discussed with the nearest Thalassemia center	NO	YES

* To be sent to STD clinic, Blood Bank

12.5.3 Investigations Relevant to Detection of Communicable Diseases

Category	Investigation	POCT (Strips)	Manual/ Machines
Dengue	FBC / Platelet Count/ PCV	NO	YES
	Dengue Antigen & Antibody tests	YES	YES
Tuberculosis	Sputum for AFB	NO	YES
Malaria	Blood film for MP Rapid diagnostic Test (RDT-Ag) for Malaria if available	YES	YES

12.6 Infrastructure and Other Facilities

Infrastructure facilities include laboratory space, instruments, equipment, consumables, reagents, chemicals, specimens, reagent storage facilities, laboratory furniture, waste disposal facilities, and quality assurance facilities.

The laboratory should have an intercom telephone facility to communicate with the wards. It is also important to establish a communication facility with level 1 and 3 Laboratories.

12.6.1 Space

Space should be available to carry out biochemical investigations, hematological investigations, and microbiological investigations. Available space in the laboratory should not be separated. Separate benches in a single laboratory space can be allocated to perform a variety of tests. An adequate water supply with wash basins and other washing facilities has to be provided. Separate water storage facility to ensure a continuous/uninterrupted water supply and a separate washing area will be beneficial. (Refer to General Circular: 01- 29 / 2018 issued on 22-06-2018 on Physical space norm for Primary Health Care Facilities) - Annexure1.1

12.6.2 Basic Requirements of Laboratory Equipment of a Divisional Hospital Laboratory

i) Binocular Microscope

ii) Three-part Haematology analyzer

iii) Automated low throughput Biochemistry Analyzer or semi-automated biochemistry analyzer

iv) Centrifuge (with 16 sample positions)

v) Hot air oven (30 L Capacity)

vi) Analytical Balance (200 g. Capacity)

vii) Distiller apparatus

viii) Refrigerator with separate freezer part - Double-door domestic refrigerator

ix) Roller Mixture (Optional)

x) ESR stands / Westergren stand

xi) Haemocytometer (counting chamber)

xii) Micropipettes (fixed/ variable)

A personal file should be maintained for each of the equipment in order to optimally utilize and maintain the relevant equipment for a prolonged period.

12.6.3 Required Medical Supplies

i) Laboratory Reagents

Ready-made reagents can be used for fully automated and semi-automated biochemistry analyzers.

ii) Control Sera and Calibrators

a) Automated biochemistry analyzers require control sera for quality control and require a multi-calibrator for calibration

b) Low, normal, high-quality control samples are required for haematology analyzers

iii) Medical Supplies and Consumables

a) Gloves, syringe with needle, 70 % alcohol, cotton wool

b) Blood collecting tubes

c) Test tube rack

d) Laboratory Request forms

e) Labels for blood-collecting tubes

f) Ribbon / Toners for printers

g) Papers for report printing

iv) Chemicals and glassware

The list of chemicals and glassware essential for urine analysis and Full Blood Count, Blood Sugar, and Serum Creatinine (manual method) are available in the Annexure 12.5

v) Registers that need to be maintained in a Divisional Hospital

The following register can be used to maintain inventory and stock management purposes.

a) Laboratory Inventory Book H 311 / Institutional Inventory Register H 501

b) Chemical Register (H 287)

c) Glassware & Other Consumables Register (H 287)

d) Inventory copy for General Items (H 312)

vi) Laboratory Documents

Important laboratory documents include the quality manual, standard operating procedures (SOP), Instrument files, equipment maintenance, calibration, and quality control results for visual evaluation of shifts and trends over time.

The records of laboratory tests with patient data and test results should be maintained for reference purposes. Paper and electronic documentation can be done using specimen registers for each test/section or data storage facilities in analyzers.

12.7 Specimen Collection Procedure

i) The patient must be informed about the procedure that is about to take place.

ii) The laboratory request form should be filled out with relevant details.

iii) Confirm the client's identity and preparation for the test.

iv) Identify the correct tube and clearly label the test on the tubes.

v) Draw blood, allowing for clotting, and place it into the relevant blood collection tube(s).

vi) Write down the client's telephone number on the request form and sample registration form.

vii) Register the sample in the specimen register and mention the mode of

report delivery (transporter, courier service, or by post).

viii) Trained staff must collect samples and should know which samples to mix to prevent clotting and which samples are allowed to clot.

12.8 Referral Laboratory (Level and above)

The main tasks involved at the Divisional Hospital Laboratories are two folds

12.8.1 Tasks to be Performed for Feed-in Institutions (L1)

i) Supply management of Laboratory reagents/consumables/printed formats

ii) Issuing of different types of blood collecting tubes for feed-in institutions

iii) Defining the criteria for accepting specimens from feed-in institutions

iv) Receiving, registering, and recording client data

v) Testing of laboratory specimens (Analytical stage)

vi) Dispatching Results (Post analytical stage)

a) Reports should be issued only to authorized persons.

b) Timely release of provisional and final reports should be ensured.

c) Any test results which exceed the normal reference limit must be clearly documented, understood, and conveyed verbally, electronically, or in printed form.

12.8.2 Tasks to be Performed for Referral Laboratory (L3 and above)

i) Samples that cannot be performed at this level are to be sent to the referral laboratory using a suitable transport method

ii) Divisional Hospital Laboratory must be provided with a communication facility for this purpose. (Two-way communication will ensure the timeliness of reports and facilitate early diagnosis)

iii) The divisional hospital must liaise with the laboratory consultant in the apex hospital laboratory to ensure tier-specific diagnostic facilities.

12.9 Storage

Specimens may require proper storage facilities. Moreover, sufficient separate storage facilities are required for the storage of reagents. Glassware and chemicals must be stored safely and securely and unauthorized access to the storage area is not permitted. The majority of the reagents should be stored at +4° C refrigerator and this should not be used for storing other materials such as food.

12.10 Waste Disposal

It is recommended to adhere to the common waste disposal protocols. Proper biosafety measures should be taken in every laboratory. Please refer to the biosafety and biosecurity manual published by the Ministry of Health.

12.11 Quality Assurance

If possible, quality management systems related to POCT and Medical Laboratories, specifically ISO 22870:2016 and ISO 15189:2017 should be adopted in order to ensure the quality of the testing process.

i) Internal Quality Control

Internal Quality Control (IQC) is the monitoring of the test procedure performed in the laboratory on a daily basis. It includes analysis of specially prepared materials with known concentrations of analytes and statistical analysis day-by-day of data obtained. There is continuous evaluation of the reliability of the work of the laboratory.

ii) External Quality Assessment (EQA*)*

The term External Quality Assessment (EQA) is a method that allows for the comparison of a laboratory's testing to a source outside the laboratory. EQA programs are available at Medical Research Institute which is the national reference laboratory for different laboratory disciplines. It is advisable to enroll in the National EQA programme through the laboratory consultant in the apex hospital.

12.12 Supervision and Staff Responsibilities

Supervision should be carried out by the MOIC of the Divisional Hospital, the laboratory consultant at the nearest apex hospital, and the superintendent Medical Laboratory Technologist (MLT) at the relevant Regional Director of Health Services (RDHS) or Provincial Director of Health Services (PDHS) office. For details regarding the duties of Medical Laboratory Technologists, please refer to circular 02-17-2006, dated 20.01.2006.

Saukya Karya Sahayaka should be assigned to each laboratory in order to ensure the smooth functioning of the laboratory process and the selection of employees should be done considering the necessary skills required such as data entry capabilities and literacy skills.

12.13 General considerations

i) The medical officers of the DHs can get an opinion from the nearest laboratory consultant available in the nearest apex hospital using proper channels of communication in order to maintain quality standards.

ii) RDHS has to organize training required for the MOICs of each DHs at the apex hospital where laboratory consultants are available and continuous supervision and monitoring of laboratory performance at the DH level are essential.

iii) All laboratory test statistics have to be collected regularly and must be presented. Provincial /District laboratory performance reviews for which the Deputy Director of General laboratory services/Director of Laboratory services of the Ministry of Health will be participating at least once a year.

iv) Every step must be taken to ensure the continuous supply of reagent strips to the DHs. Thus, the respective MOICs/RDHSs/PDHSs have to estimate the right quantities required for each DH with the support of responsible MLT in the district and liaise with the RMSD/ Medical Supplies Division of the Ministry of Health for this purpose.

v) Cost to be considered in selecting the appropriate test method for different types of laboratory investigations performed.

References:

1. "A Guide for Establishing a Laboratory Service Network" compiled by the Ministry of Health in collaboration with JICA.
2. “Strengthening Laboratory Services in Primary Healthcare Institutions” Guidelines - 2019 June (Revision 1.0), Ministry of Health
3. Manual on Standard operation procedures, sample collection, and reference ranges for Clinical Chemistry, Ministry of Health and Department of Biochemistry Medical Research Institute Colombo- WHO Biennium 2004-2005

CHAPTER 13
MANAGEMENT OF MEDICAL SUPPLIES

13.1. Introduction

Pharmaceuticals play a crucial role in preventive and curative health care. Drugs are a vital and expensive component in the provision of health services and a fair proportion of the health budget is invested in provision of Pharmaceuticals. To ensure maximum benefit from such investment, it is essential that the drug requirements should be based on realistic forecasts. The rational prescribing is mandatory in order to optimize the usage of available resources and funds. The allocative efficiency of the drugs and consumables should align with the rising trends of the disease pattern such as NCDs, elderly care, rehabilitation and new and emerging diseases while reducing the out-of-pocket expenditures of the Patients and care givers. It is important to provide proper information to and counselling of the patient, along with provision of medicines to patients which in turn obtain maximum benefits to the patients.

13.2. Objectives

i) To make the prescriber cost conscious.
ii) To promote rational prescribing.
iii) To ensure rational supply of safe and effective drugs in adequate quantities to the respective institutions throughout the year, within a realistic forecast.
iv) To practice standard drug transport, receipt, storing, issuing, and inventorying protocols.
v) To ensure proper annual stock management.
vi) To establish periodical, multi-disciplinary activities to prevent pilferage, condemning of drugs, and to optimize stock controlling.

13.3. Care in Prescribing

i) According to Chapter III, Part III, Section 56 (01) of the National Medicines Regulatory Authority Act, No. 5 OF 2015, all drugs with generic names should be prescribed in their generic names.

ii) The prescriptions should contain the tentative diagnosis/indication for use of drugs, correct dosage, frequency with which the drug should be taken and time frame. The prescription should be legibly written and should contain the name and signature of the prescribing officer.

iii) O.P.D. Patients should be prescribed drugs for a period which complies with the standard management protocols.

iv) The prescribing officer should

a) prescribe optimum drugs essential for treating the patient,

b) select the best possible cost-effective treatment regime considering the benefit of the patient

c) the patient clearly understands as to how the drugs prescribed are to be taken.

v) The dispensing officers should:

a) educate the patients on the use of drugs and their possible side effects.

b) dispense the exact amounts of drugs prescribed and

c) advise the patient to take the full course of drugs prescribed.

d) educate the patient regarding the safe and proper storage of the drugs.

All authorized prescribing officers should prescribe with utmost care in prescribing expensive drugs. Whenever possible, prescribing officers should refrain from issuing prescriptions for border line products, supplements etc. even on request, to be purchased outside since it brings disrepute to the institutions and causes hardships to the patient. If a substitute for a drug is available in the institution prescriptions should not be issued to purchase from outside.

vi) If the drugs are to be continued for more than three days in the ward, it is recommended to revise and re prescribe with the name, dosage and the frequency in the BHT. In clinics the full regimen should be reviewed and prescribed at each visit.

vii) The Officer in-charge of the institution should bring the cost of antibiotics as well as the other expensive, frequently used drugs to the notice of all authorized prescribing officers and encourage them to be cost-conscious.

viii) Periodical audits should be conducted to evaluate the efficient use of drugs by the prescribing officers, dispensing officers, and all other stakeholders within the institution.

ix) All expensive antibiotics and drugs prescribed over 5 days from the O.P.D. should be authorized by the Head of the Institution.

x) A method should be formulated to convey the actual prescribing patterns of the officers to the purchasing authority and the Head of the Institution periodically.

13.4. Major Activities

Following major activities are to be carried out in the institutes.

i) Proper estimation of annual requirement of drugs dressings and surgical consumables (the usage pattern and disease trends in the past should be analyzed or adjusted consumption data can be used)

ii) Receipts and maintenance of updated records
iii) Proper Storage of pharmaceuticals under recommended conditions.
iv) Issuing pharmaceuticals to wards, units, sections, clinics and O.P.D.
v) Maintenance of latest and standard stock control practices (electronic drug storage systems)
vi) Management of complaints of substandard drugs and adverse reactions with samples being sent to the relevant authority
vii) Annual verification of medical supplies.
viii) Condemning of unserviceable medical supplies.

13.5. Forecasting of Annual Requirements of Drugs

i) The forecast of the quantity of drugs required for the following year is a vital activity and would be the responsibility of all prescribing officers and the pharmacists in the institutions. The drug and therapeutic committee headed by the institution head should attend to the activities periodically according to the latest circulars.
ii) Annual forecast should be based on the morbidity, past usage patterns and standard treatment regimens etc. If morbidity data is not available, adjusted consumption data can be used as the baseline.
iii) The Head of the Institution should ensure that the forecast are done with the use of available advanced method (i.e., electronic drug requesting process).
iv) Head of the Institution or the pharmacist should prepare the adjusted average monthly consumption of all items as clearly explained in Chapter 4 of the Manual on Management of Drugs in utilizing the available recent manuals, circulars, and guidelines from Ministry of Health.
v) Annual financial allocation should be considered in this process. Estimates should be done according to the justifiable, effective cost analysis and ensuring the optimum usage of allocated finances. It is the responsibility of the Head of the Institution to avoid over estimation as well as under estimation.
vi) The E-estimates to be submitted for the approval by PDHS/RDHS

13.6. Receipts, Issues & Stock Control

i) Pharmacist should prepare a quarterly return of every item indicating SR number, remaining quantity and required quantity for the next quarter. Items would be issued based on justifiable requirement and availability from RMSD.
ii) The officer in-charge of the drug stores should check the quantity of each drug received, their expiry dates, batch numbers and enter the

invoices in the ledgers or in e-database on the same day. Any discrepancies / breakages should be brought to the notice of the Head of the Institution and to the officer of RMSD immediately and should be noted on the Invoices. Full quantity received must be entered in the ledger.

iii) The electronic database should be updated with important entries such as the name of the item, expiry date, batch number, quantity, and date of receipt and issue.

iv) All drugs and surgical registers used in wards and units should be registered in the Register of Drugs by the chief pharmacist.

v) Pharmaceuticals should be ordered from stores by Health 37 register.

vi) Health 287 registers should be used to balance drugs within the unit.

vii) When requests for issues are received from sub-stores or wards, the issuing officer should check the registers to ensure that the entries are correct, the books are balanced accurately, and proper authorization has been given by the relevant officer. The issuing officer should also periodically check the balance stock available at the sub-store, and any discrepancies should be reported to the Head of the Institution.

viii) Only a week's supply should be issued to the units, and efforts should be made to collect empty vials and containers when issuing drugs to maintain better control. The maximum quantity that can be retained in a ward or unit is enough for two weeks of consumption.

ix) Empty vials and containers received should be taken into a register and disposed of periodically with the approval of the officer in-charge either by auctioning or returning to RMSD

x) In addition to the Drug registers Reorder level indicators should be used to avoid shortage of drugs in every unit within the institution.

13.6.1. Surgical Inventory Management

i) Surgical non-consumable items and Bio Medical Equipment, used in health care facilities are considered as permanent assets of the institution.

ii) They require special documentation and procedures to be followed in order to ensure proper management and maximum utilization.

iii) It is mandatory to keep ward/unit copies, office copies, and updated distribution registers for above items.

Following standard formats are used in maintaining surgical inventory

a) Main inventory register – H311
b) Sectional and office copies – H501
c) Distribution Register – No standard printed format
d) Issue order – H500
e) Receiving order – H503

13.7. Storage of Drugs

i) Drugs should be kept dry, cool and away from light according to the accepted standards (preferably air conditioned).Thermo labile items should be stored in refrigerator.

ii) Drugs to be arranged according to the latest standards to ensure the safety, efficacy and quality, preferably based on the pharmacological groups. Each group should be arranged according to VEN and ABC analysis. Vital items should be closely monitored and given the highest priority.

iii) Storage of drugs should be done in a manner that it would facilitate:
   a) The issue of drugs of the closest expiry date first.(FEFO Principle)
   b) The issue of drugs according to dates of manufacture if their expiry dates are not indicated.
   c) Easy monitoring of expiry dates and batch details

iv) Display prominently the list of drugs with expiry dates.

v) Dangerous drugs and narcotic drugs should be kept in a locked cupboard with a double lock and each key should be kept with two separate people in the ward, so that these would not be accessible to any unauthorized persons or any other person who has special interest on their medication. The key should be kept with the Head of the institute or chief pharmacist.

vi) Expensive drugs should always be kept under lock and key. (Items in group A of ABC analysis.)

vii) In the wards, lifesaving drugs should be kept in a glass-fronted cupboard for easy visibility.

13.8. Monitoring of Consumption and Disposal of Drugs

i) Effective tools for monitoring drug consumption include VEN (Vital, Essential, and Non-Essential) and ABC analysis.

ii) The Head of the Institution and Chief Pharmacist should conduct Drugs and Therapeutic Committee (DTC) meetings on a monthly or bi-monthly basis, involving prescribing officers and in-charge nursing officers. During these meetings, they should discuss issues related to receipts, consumption, accounting, and other relevant matters. A copy of the meeting minutes should be submitted to the Regional Director of Health Services (RDHS). Special attention should be given to:
   a) Forecasting quantity
   b) Consumption in the previous month
   c) Consumption during the same month of the previous year

iii) The prescribing pattern of the Outpatient Department (OPD) and clinics should be regularly assessed through periodic test checks, as outlined in the Manual on Management of Drugs.

iv) In addition to the drugs register, the use of bin cards indicating stock re-order levels, re-order quantities, and other relevant information is recommended.

v) Expired drugs, substandard drugs, drugs without proper labels, and withdrawn drugs should be stored separately from others. It is important to initiate the condemning process as soon as possible. It is recommended to remove unnecessary items from the inventory at least once a year, following the established regulations.

vi) The Head of the Institution and pharmacist should make every effort to minimize the quantity of expired drugs. Arrangements should be made to exchange or transfer short expiry drugs to institutions in need. A list of short expiry and nonmoving drugs should be prepared quarterly and forwarded to the RDHS and Divisional Pharmacist.

vii) Periodic test checks, as outlined in the Manual on Management of Drugs, should be conducted regularly to ensure proper adherence to drug management practices.

By implementing these measures, institutions can effectively monitor drug consumption, address prescribing patterns, optimize inventory management, and ensure the timely removal of expired or unnecessary drugs, ultimately enhancing the overall efficiency and effectiveness of the health care system.

13.9. Forecasting of Surgical and Dental Items

This should be updated according to the available standards given by the MSD. This process is similar to the drug forecast.

13.10. Management of Vaccines

To ensure effective cold chain management, the following guidelines should be followed:

i) The requirement for vaccines for the next month should be prepared at the end of the previous month and sent as a return to the Regional Medical Supplies Depot (RMSD).

ii) The RMSD will distribute or deliver the required vaccines based on the return.

iii) The Officer-in-Charge of the RMSD holds the responsibility of maintaining the cold chain throughout transportation.

iv) The Head of the Institution and the pharmacist should verify that the arrangements made by the RMSD to maintain the cold chain are satisfactory.

v) Whenever possible, vaccines should be stored in a separate refrigerator. The door of the vaccine refrigerator should only be opened if absolutely necessary.

vi) The refrigerator should be placed in a spacious, well-lit room, with a minimum distance of 30 cm from the walls.

vii) A thermometer should be placed inside the refrigerator, and the temperature should be monitored twice a day. A cold chain monitoring chart should be maintained and displayed near the refrigerator.

viii) A backup power supply should be provided for the vaccine refrigerator. A backup refrigerator should also be identified and designated for use during emergency breakdowns.

ix) Vaccines should be stored in the middle part of the refrigerator and not in the door. Water bottles (cool packs) should be stored in the door to help maintain the temperature during power failures.

By adhering to these latest standards of cold chain management, the integrity and effectiveness of vaccines can be preserved, ensuring their safety and efficacy when administered to patients

13.11 Management of Medical Gases

i) Maintaining a continuous medical gas supply is a responsibility of the Head of the Institution and the Chief pharmacist.

ii) Enough empty gas cylinders should be stored and inventoried. Empty cylinders should be exchanged with filled cylinders from the RMSD.

iii) It is important to keep an adequate buffer stock by taking the lead time into the consideration. Head of the Institution may utilize the ambulance to get down medical gases and urgently required pharmaceuticals if an alternative transport is not available.

13.12 Monitoring and Reporting of Adverse Drug Reactions

i) All adverse drug reactions should be notified and monitored by the Head of the Institution.

ii) Drug reactions should be notified to the relevant authorities (MSD and NMR) using the available electronic formats

iii) Instructions received on the quality should be conveyed to all the staff members.

13.13 Annual Drugs and Surgical Verification

To facilitate the annual verification of stocks, the RDHS will appoint a Board of Survey. The Head of the Institution, along with the in-charge officers of the stores, pharmacist or dispenser, should coordinate with the Chairman of the Board of Survey

to confirm the verification date. The Board of Survey team will visit the institution according to the agreed schedule to conduct the annual stock verification.

The Head of the Institution is responsible for arranging a suitable place with adequate facilities for the Board of Survey members and providing a Healthcare Assistant to assist them during the process.

Stock handling officers should come prepared with updated registers, ledgers, invoices and duly filled H1196 format. They should organize the items batch-wise, enabling easy access and distinguishing pharmaceuticals that are expired, surplus of low quality, damaged or broken.

Additionally, stock handling officers must ensure compliance with the recommendations from the previous year's annual verification, audit queries, inspection officer's report, and the Drug and Therapeutics Committee (DTC) report.

By following these procedures, the annual stock verification process can be conducted smoothly, promoting accurate record-keeping and ensuring the quality and integrity of pharmaceutical stocks within the institution.

13.14 Disposal of Expired / Spoilt / Quality Failed Pharmaceuticals and Minimizing Wastage (Refer the Manual on Management of Drugs)

To effectively manage the disposal of expired, spoilt, or quality-failed pharmaceuticals while minimizing wastage, please refer to the Manual on Management of Drugs. The Head of the Institution and pharmacist should collaborate to minimize the quantity of expired drugs by facilitating exchanges or transfers of short expiry drugs to institutions in need. A list of short expiries and nonmoving drugs should be prepared quarterly and shared with the Regional Director of Health Services (RDHS) and the Divisional Pharmacist.

By systematically indenting drugs annually and promoting rational use, the occurrence of drug expirations can be completely eliminated. It is crucial to adhere to the latest standards and guidelines for proper drug storage, ensuring their efficacy and safety.

In cases where drugs need to be condemned despite these efforts, the following procedures should be adopted:

i) The drugs to be condemned should be recorded in a separate register, including details such as the drug's name, manufacturer, batch number, date of manufacture, expiry date, and quantity to be condemned.

ii) These condemned drugs should be stored separately from serviceable drugs.

iii) The Officer-in-Charge should complete three copies of the Gen.47 form, which should be sent to the RDHS and the Provincial Director of Health Services (PDHS). Subsequently, a Board comprising three members will be appointed.

iv) The Officer-in-Charge bears the responsibility of overseeing this activity and ensuring periodic condemnation takes place.

v) Condemnation procedures should adhere to the best available methods. Empty bottles, for example, can be auctioned after removing the labels.

By implementing these guidelines, the disposal of expired or unusable pharmaceuticals can be efficiently managed while minimizing wastage. This approach promotes responsible pharmaceutical management and ensures the safety and quality of drugs in health care settings.

CHAPTER 14
DIET SERVICE

14.1 Introduction

Hospital diet service is an essential patient care service that plays a major role in ensuring patient satisfaction and quality of health care delivery. The heads of the institutions have to shoulder greater responsibility to provide continuous nutritionally appropriate and microbiologically safe food warranting that the money spent on food is used economically.

14.2 Definition of a Diet

A "patient's diet" for a day is the entire requirement of food for a patient for a period of 24 hours starting from 12 noon on a particular day to 12 noon on the following day.

14.3 Sources of Diet Supply

The below categories of food are purchased from selected suppliers by the procurement committee of the Ministry of Health (Provincial / Line Ministry) according to the process of procurement.

Serial no.	Item
i	Fresh vegetables
ii	Fresh fruits
iii	Meat and eggs
iv	Dry foods
v	Bakery products
vi	Packed foods, Tins, Bottles

However, Fish and dried fish are supplied by Sri Lanka Fisheries Corporation (In terms of the Cabinet decision No ඇ.මැ.ස 09/0675/311/028 dated 14.05.2009). Food is cooked by the employees of the Department of Health according to the General Circular No. 01-21/2015 dated 28.05.2015 on 'Supply of Diets to Patients and Minor Employees in Medical Institution'. However, DH Hospitals can refer to the respective provincial circulars and carry out the orders as per the directions of the PDHS/RDHS.*

14.4 Types of Diets

Different types of diets can be ordered for both inpatients and for employees in the hospital.

i) For patients
   a) Normal full diet

b) Normal half diet
c) Diabetic patient's diet
d) High protein / high energetic diet

These are the common diets available in various practices. However, in specific situations, it is advised to refer to the relevant circular with the guidance of the RDHS. (General Circular No. 01-21/2015 dated 28.05.2015 on 'Supply of Diets to Patients and Minor Employees in Medical Institutions').

ii) For employees
a) Minor employee's diet

14.4.1 Normal Full Diet

Patients who are in a condition to have a normal diet on medical advice will be given a normal full diet with raw red rice, which is preferred. According to the food included, a normal full diet is further categorized as follows.

Diet	**Abbreviation**
Vegetable	V
Egg	E
Fish	F
Meat/Canned fish	M/CF
Dried fish	DF

It is not essential to provide beef, and alternatives with equivalent nutrients can be considered when necessary. The Medical Officer in Charge (MOIC) of the hospital should seek assistance from the hospital food management committee to prepare a weekly diet program and ensure its supply accordingly.

Serial no.	**Types of diet**	**Number of days that the diet should be given per week**
i	Vegetable	One day (Especially on Sunday)
ii	Egg, fish, meat or canned fish, dried fish	Four days
iii	From the foods which are egg, fish, meat or canned fish, dried fish (should be decided according to the lowest price of the market)	Two days

14.4.2 Minor Employee's Diet

All minor employees attached to the hospital are provided with a half diet to be consumed within the hospital premises. They are entitled to take a lunch or a dinner with morning tea or afternoon tea whichever is applicable to their duty shift. The weekly program of minor employee's diet is as follows

Diet	Abbreviation	No of days per week
Vegetable	V	03
Egg	E	01
Fish	F	01
Meat or Canned fish	M/CF	01
Dried fish	DF	01

An amount of Rs.1000 per month should be recovered from the employees who take diets from the hospital. If an employee has expressed his willingness to receive a diet but does not take the diet after placing the order, the cost of raw provisions and other costs should be calculated and recovered from the salary of the employee concerned. Since the diet is not provided for the days on which minor employees are not in active service orders should not be placed for such days. The head of the institute and overseer should be responsible for this.

14.5 Food Management Committee

Administration of the provision of food is entrusted to the hospital food committee (On authority 219) according to the powers and duties of the hospital committee as per section 12 of the health act, General circular 1169- 17.07.1981 and letter no MH/IP/04/2008 dated 17.07.2011 of the secretary of health (General Circular No. 01-21/2015 dated 28.05.2015 on 'Supply of Diets to Patients and Minor Employees in Medical Institution'). However, hospital committee establishment and related functions can be conducted according to the provincial circulars and guidelines under the direction of the PDHS/RDHS.

14.6 Food Forms

Following forms should be used in respect of ordering, accounting and control of foods.

i.) Health Form 31 - Diet sheet
ii.) Health Form 31a - Analysis of diets
iii.) Health Form 32 - Extras sheet
iv.) Health Form 32a - Summary of extras
v.) Form Health 152 - Hospitals diet card
vi.) Form Health 202 - Milk order
vii.) Form Health 730a - Order for raw provisions
viii.) Form Health 891 - Rice register

ix.) Form Health 893 - Milk register
x.) Form Health 894 - Register of surprise inspections for raw provisions
xi.) Form Health 945 - Shortage register
xii.) Form Health 957 - Ward diets and additional diets
xiii.) 304 -Diet Voucher

14.7 Ordering of Diet

Medical officers conducting morning ward rounds are required to prescribe a suitable diet for every patient unless the patient opts to obtain food from home. The types of diets listed above should serve as a guide, and the prescribed diet should be marked in the "diet" column of the BHT (Health 26). If a patient wishes to receive lunch, dinner, or all meals from home, it should be permitted, and hospital meals should not be provided to such patients. This process must be supervised by the Nursing Sister in charge. Abbreviations should be used to record the diet orders in the BHT. Examples;

V – Vegetable normal diet

V/2 – Vegetable normal half diet

ND – No Diet (Patient is willing to obtain all foods from home)

V/N – Vegetable Dinner (Patient is willing to obtain lunch from home)
V/D – Vegetable lunch (Patient is willing to obtain dinner from home)

V/ND - Patient is willing to obtain both dinner and lunch from home in a day providing a vegetable diet.

Any extras felt as necessary should be marked under the extras column of the BHT close to the entry ND or half diet and in every such instance, MO should personally authenticate the entries pertaining to the extras ordered. When parents of the children who are inpatients require diet from the hospital that should also be provided.

14.8 Receiving Raw Provisions

14.8.1. Procedure for Receiving Raw Provisions

The responsibility for receiving raw provisions should be assigned to a responsible officer, separate from the one placing the orders. In institutions with two public management assistants, one should handle the preparation of food orders, while the other accepts the raw provisions. If only one public management assistant is available, they will prepare the orders, and another officer designated by the MOIC should accept the provisions. The MOIC must create a schedule for the timely acceptance of provisions and assign responsibilities accordingly.

In institutions without a public management assistant, an Assistant/Registered Medical Officer should prepare the orders, while another officer assigned by the MOIC should receive the provisions. The MOIC is responsible for ensuring that the

diet orders are prepared and that arrangements for receiving provisions are in place. If there is a failure to follow the outlined procedure, an alternative system should be implemented, with immediate reporting to the head of the decentralized division or the Director General of Health Services.

The MOIC or a designated officer from the food management committee should conduct surprise inspections, with results recorded in the surprise inspection register (Health 894). Contractors must supply food daily at 8:00 am and 2:00 pm, or as specified by the MOIC, ensuring all items are checked against the duplicate order form for quantity, weight, and quality. Employees are strictly forbidden from bringing private raw provisions into the hospital or removing government-provided food or other hospital articles.

14.8.2 Steps to be Followed in Acceptance of Provisions

i.) The correct number or the weight of the item taken over should be recorded clearly in the columns provided for in the duplicate of the diet order, and two short lines should be drawn before and after the figures.
i.e. Sugar kg =15=

ii.) Coconut should be accepted by number as well as weight so that one coconut will weigh 850 grams. When the average falls short of 850 grams, the supplier should supply more coconuts to make up the correct weight, if requested.

iii.) Ripe plantains should be at least 3” in length and 1 1/2” in diameter.

iv.) Only vegetables that are fresh should be accepted. If any portion of the vegetables or fruits are found to be rotten or eaten by insects should be rejected and the supplier should provide the same item rejected or a substitute named instead of the item so rejected.

v.) Bread should be by loaves not less than 450 grams and should be properly baked. They should be accepted by weight as well as numbers.

vi.) Officers taking over provisions should see that rice is put in water and coconuts are split immediately after taking over.

vii.) Fresh fish should always be received whenever possible and only where it is difficult to supply fresh fish, canned fish should be received. When receiving fish, it should be checked whether the gross weight is accurate.

viii.) Eggs should be washed and cleaned and should not be cracked.

ix.) When supplying Maldives fish, there should be an assurance that the Maldives fish is in good quality

x.) Clean coconut oil should be used at all times possible.

xi.) All items of raw provisions supplied short or rejected should be recorded in the shortage register (Form health 945) without delay. Any items supplied later also should be recorded in the same register.

xii.) Officers taking over provisions supplied by the contractor should sign

and submit the delivery receipts at every delivery and hand over the original to the officer settling the bills.

xiii.) When the taking over officer leaves the kitchen, the cook should take over all the items in his/her charge and be responsible for proper disposal of same. In order to facilitate this, the taking-over officers should make it a point to accept the items in the presence of the cook.

xiv.) Acceptance of substitutes for the provisions ordered from the contractors should not be continued as a habit. However, where the contractor supplies a substitute for a particular item due to unavoidable reasons, price of the substitute accepted should not be higher than the price of the item ordered.

xv.) When substitutes are accepted, it should be ensured that the items are accepted within the quantities given in the diet scales.

14.9 Preparation of Diets

The officer responsible for preparing the diet order should also create a chart that outlines the distribution of diets and any additional items (extras). This chart must be sent to the kitchen before the provisions are received at 2:00 pm. Additionally, separate charts for hospital employees receiving day and night diets should be prepared and sent to the kitchen as well.

Once the provisions are received at 2:00 pm, any extra items should be promptly distributed to the respective wards. The preparation of meals should begin immediately and be completed by 5:00 pm, allowing the day duty staff to distribute the evening meals and feed the patients before their shift ends.

14.10 Distribution of Diets

14.10.1. Distribution of Diets for Patients

Before serving day/night meals, nursing sister or a senior nursing officer nominated by nursing sister should furnish the below details of meals to the member of food management committee or any other officer named by the MOIC of the hospital. Under any circumstances, the cook should not be allowed to distribute meals without being supervised.

Date	Day/Night	Diet	Cook's		Assistant's	
			Name	Signature	Name	Signature

I do certify that the above diets were prepared under my supervision
……..(Signature) Date:
Name of the Nursing Sister/NO Time:
Recommendation of the food management committee member named by the MOIC
…….
… .....(Signature)
Name of the member Date:
Time:

Source: General Circular No. 01-21/2015 dated 28.05.2015 on 'Supply of Diets to Patients and Minor Employees in Medical Institutions'

The patient should be given two rice meals per day. Egg, Fish, Dry fish, Meat, or Canned fish should be served with lunch. The dinner should be only with vegetables. The Director General of Health Service's (DGHS) / RDHS/PDHS approval is necessary for any variations of the above. Patients should be served the meals at below mentioned time.

i.) Evening tea - 2.30 pm
ii.) Dinner - 5.30 pm
iii.) Breakfast including tea - 6.30 am
iv.) Lunch - 11.30 am

14.10.2 Distribution of Diets to Employees

During the distribution of diets from the kitchen, the employee's diet must be served first. It should be ensured that the amount of boiled rice provided to each employee is equivalent to 130 grams of raw rice, which is approximately 390 grams of cooked rice. A notice should be displayed prominently above the counter where employee meals are served, clearly indicating the meal serving times. All employees are required to collect their meals within the specified time period.

14.10.3 Closing of Distribution of a Diet

A diet day ends after lunch is served. The remaining provisions or firewood in the kitchen after the lunch is prepared, should be recorded, and signed by the cook. If the cook is unable to do it alone, the officer assigned to supervise the serving of meals should help the cook. The book should thereafter be sent to the officer preparing the diet order. The officer detailed to prepare diet orders should inspect the "kitchen book" daily and reduce whatever items are recorded as remaining from the next diet

order.

Having done this, the officer should quote the serial number printed in the diet order and initial the "kitchen book". It is the responsibility of the officer who places the diet order to call for the kitchen book, before preparing the diet order. The MOIC should see at the end of each diet day that all the accounts pertaining to diet day are properly entered and place his initials on the relevant documents.

14.11 Donation of Food (by individuals and institutions)

Every effort should be taken by the MOIC to promote donations of food for patients by individuals or institutions. A letter of appreciation should be issued for every donation and a copy of such letter should be given to the officer who supervises the diet preparation. A separate file and a register also should be maintained. Such donations should be marked on the duplicate of the order. Proportionate reduction should be made from the diet orders in respect of donations. No cooked food should be accepted as donations. Donations of raw food need not necessarily be for the total patients in the institution. Packed food received as donations should be accepted on the approval of MOIC. When raw food is received as donations, it should be sent to the relevant wards after being cooked and according to the above-mentioned procedure. On any occasions, donors should not be allowed to provide food directly to the indoor patients. However, donors should be permitted by the MOIC to donate food for specific wards

References:

General Circular No. 01-21/2015 dated 28.05.2015 on 'Supply of Diets to Patients and Minor Employees in Medical Institutions'
http://www.health.gov.lk/CMS/cmsmoh1/viewcircular.php?cno=01-21/2015&med=english

CHAPTER 15
INFECTION PREVENTION AND CONTROL

A Divisional Hospital (DH) is considered an institution that offers various services including outpatient consultations, wound care, emergency treatment, and injection services. It also provides in-ward facilities for general medical, surgical, pediatric, and obstetric needs. This overview should be applied in conjunction with the relevant chapters of the Hospital Infection Prevention and Control Manual by the Sri Lanka College of Microbiologists – 2021.

15.1 Responsibility for Infection Prevention and Control (IPC) Practices

i) The overall responsibility for providing the necessary infrastructure to support IPC measures lies with the Head of the Institution.

ii) All Divisional Hospitals should be equipped with adequate facilities for performing hand hygiene for both staff and patients, including sinks, and a continuous supply of soap and alcohol-based hand rub.

iii) Appropriate disinfectants should be made available in dressing rooms, minor surgical procedure rooms, injection rooms, ETU, wards, labor rooms, etc.

iv) A designated Nursing Officer (NO) for Infection Control should be assigned and trained at the apex hospital under a Consultant Microbiologist. It is also preferable to establish an IPC committee at the DH, involving the Medical Officer in Charge, the designated NO, and additional MOs and NOs.

v) Sterilization facilities, such as an autoclave and a drying oven, should be available to sterilize re-used equipment and dressing materials needed for dressing rooms.

vi) If sterilization facilities are not available, a mechanism must be established with a nearby hospital that has the necessary equipment to ensure all consumables and equipment are sterilized before use or re-use.

vii) Sharp-bins must be provided in all relevant areas, along with appropriate disposal methods for sharps.

viii) A system should be in place to handle infectious waste safely.

ix) The technical expertise of a Consultant Microbiologist should be sought before launching any new service or commissioning new units to ensure that appropriate IPC measures are established.

15.2 Staff Training and Pre-requisites

i) All staff should be vaccinated against Hepatitis B and their response to vaccine should be checked with measuring Hepatitis B surface antibody levels

ii) All staff should be trained in proper hand hygiene technique

iii) Training should be given to all relevant staff on standard precautions to include appropriate use of personal protective equipment, cleaning, disinfection and safe-injection practices. This training should be continued with refresher courses and should not be limited to a one-off training session.

iv) All relevant categories of staff should be trained in body fluid spill management along with refresher training at regular intervals.

15.3 Essential IPC Practices at DH Level

Hand hygiene, standard precautions and body fluid spill management are considered as essential IPC measures at DH level. They are described in the sections below.

15.3.1 Standard Precautions:

Standard precautions are the minimum infection prevention and control practices that apply to all patient care, which should be followed to reduce the transmission of health care associated infections (HAI) in any setting where health care is delivered. These practices are designed to protect both Health Care Worker (HCW) and prevent HCW from spreading infections among patients. They should be used by ALL health care workers at ALL times when attending to ALL patients, regardless of suspected or confirmed infection status of the patient. Standard precautions apply to blood, all body fluids, secretions and excretions (except sweat), non-intact skin and mucous membranes. Body fluids include CSF, pleural fluid, peritoneal fluid and amniotic fluid. Secretions include nasal secretions, sputum, tears and saliva. Excretions include faeces, urine and vomitus.

Standard precautions include:

i) Hand hygiene
ii) Personal protective equipment
iii) Respiratory hygiene / cough etiquette
iv) Sharps safety and safe injection practices
v) Cleaning, disinfection and sterilization of instruments and equipment
vi) Environmental cleaning and disinfection
vii) Linen management
viii) Waste management

15.3.2 Hand Hygiene Technique

Nails must be clean and short. Artificial nails, jewelry and wrist watches should not be worn.

Hand washing with soap and water

i) Wet hands with water and apply the soap necessary to cover all surfaces

ii) Vigorously rub all surfaces of lathered hands systematically covering all surfaces, especially the tips of the fingers, the thumbs and the finger webs

iii) Rinse hands with clean, running water and dry thoroughly with a single-use towel
iv) Duration of the entire procedure is 40-60 seconds
v) Leave adequate single-use hand towels beside the sinks
vi) Keep a foot-operated bin to discard towels which are then collected and sent to the laundry for washing and reuse
vii) Use towel to turn off tap / faucet

Note: Refer to the Annexure 15.1 for a pictorial description of Hand washing technique

Hand Hygiene Using Alcohol-Based Hand Rub

i) Apply 2-3 ml of alcohol-based hand rub
ii) Rub hands until dry, systematically covering all surfaces
iii) Takes only 20–30 seconds to complete

Note:

i) Gloves do not replace the need for hand hygiene
ii) Hand hygiene is required before putting on gloves and immediately after removing gloves
iii) Hand hygiene products should not be applied to gloves

Refer to the Annexure 15.2 for a pictorial description of hand rubbing technique

15.3.3 Management of Body Fluid Spills

i.) Spillages should be dealt with immediately using the spill kit.
ii.) Make the area safe i.e., do not allow people to walk through the spillage and never leave the spillage unattended. A display sign is helpful
iii.) Gather together all the equipment, disinfectants and waste receptacles / waste bags that are required to correctly and safely manage the spill. A spill kit should be available
iv.) All items used to manage a spill must be disposed correctly as per the infection control manual by the College of Microbiologists / National Healthcare Waste Management Guidelines.
v.) Safe working practices and procedures must be used to prevent exposure incidents during the management of spillages
vi.) If an exposure incident occurs when dealing with a spillage, it is important to ensure occupational health and safety of the employees handling the spillage.
vii.) Recording and reporting of spillages should be done to avoid future incidents or exposures to blood and other body fluids and ensure that appropriate measures and equipment are in place to manage such spillages
viii.) Refer to the National Infection Control Manual for further information

Each ward and site where samples are being taken should have a spill kit. Content of the spill kit must be inspected and the responsibility of maintaining the kit and training of the staff in managing spills should be with the nursing officer in charge of each unit.

15.4 Contents in a Spill Kit:

Single-use items in the spills kit should be replaced after each use of the spill kit.

i) Scoop and scraper
ii) Gloves – heavy duty rubber gloves
iii) Plastic apron / disposable polythene apron
iv) Medical / surgical mask
v) Eye protection (face shield / goggles)
vi) Absorbent material (paper towels / wadding)
vii) Clinical waste bags (yellow bags) and ties
viii) Disinfectant (hypochlorite powder or chlorine releasing granules to prepare 1% and 0.1% hypochlorite freshly prepared solution)
ix) Detergents
x) Protocol for spill clean-up procedure (laminated) – Annexure 15.3

15.5 IPC Practices in Outpatient Settings

i) Standard precautions should be followed in all instances

15.5.1 IPC Practices in In-Ward Settings

i) Standard precautions should be followed as appropriate for in-ward settings along with transmission-based precautions.

15.5.2 IPC Practices in Special Units

E.g. Emergency Room, Labour Room and Laboratories

i) Standard precautions and transmission-based precautions should be followed as appropriate
ii) Design, layout, staffing, discipline, sterilization and disinfection, and environmental cleaning and waste disposal of these units should follow established recommendations.

Reference:

Hospital Infection Prevention and Control Manual by the Sri Lanka College of Microbiologists – 2021. Available at https://slmicrobiology.lk/hospital-infection-prevention-and-control-manual-2/

CHAPTER 16
STERILIZATION PROCEDURES

16.1. Introduction

All reusable instruments and equipment should undergo cleaning, disinfection or sterilization to prevent exposure of patients and health care workers to potentially infectious material. Choice of the method will depend on the intended use of the instrument.

Depending on the intended use of an item, medical and surgical equipment may require to undergo one of the following processes:

i.) Cleaning alone
ii.) Cleaning, followed by disinfection
iii.) Cleaning, followed by sterilization

Cleaning: A process of physical removal of foreign material (e.g. dust, soil) and organic material (e.g. blood, secretions, excretions, microorganisms). It is accomplished with manual or mechanical action using water and detergents. Medical devices must be cleaned thoroughly before disinfection or sterilization. (Please refer to the National Hospital Infection Prevention and Control Manual for further information).

Disinfection: A process that kills most pathogenic microorganisms. Disinfection does not destroy all bacterial spores. Medical devices must be cleaned thoroughly for effective disinfection. There are 2 levels of disinfection: high and low.

Sterilization: A process used to make a product free from living microorganisms including bacterial spores and is required for reprocessing critical medical devices.

16.2. Methods of Sterilization

Moist heat (steam) sterilization with autoclaves and dry heat sterilization with hot air ovens are the two major methods used in sterilization of re-usable medical devices along with chemical sterilization. Moist heat sterilization with autoclaves and dry-heat sterilization is described in this chapter. Please refer to the National Hospital Infection Prevention and Control Manual for the details of other methods as needed.

16.3. Moist Heat Sterilization with Autoclaving

Steam sterilization with autoclaving is used for critical devices which are not damaged by heat or moisture. Contact time/exposure time depends on the item sterilized and autoclaves should be properly quality controlled to ensure that sterilization process occurs.

Time and temperature parameters for gravity displacement steam sterilization cycles

Item	Exposure time at 121 °C	Exposure time at 132 °C	Exposure time at 135 °C	Drying time
Wrapped instruments	30minutes	15 minutes		15 -30 minutes
			10 minutes	30 minutes
Textile packs	30minutes	25 minutes		15 minutes
			10 minutes	30 minutes
Wrapped utensils	30minutes	15 minutes		15 - 30 minutes
			10 minutes	30 minutes
Unwrapped porous items (e.g. instruments)		3 minutes	3 minutes	0 -1 minute
Unwrapped non porous items and porous items (e.g. mixed load)		10 minutes	10 minutes	0-1 minute

Time and temperature parameters for dynamic air removal steam sterilization cycle

Item	Exposure time at 132 °C	Exposure time at 135 °C	Drying time
Wrapped instruments	4 minutes		20 -30 minutes
		3 minutes	16 minutes
Textile packs	4 minutes		5-20 minutes
		3 minutes	3 minutes
Wrapped utensils	4 minutes		20 minutes
		3 minutes	16 minutes
Unwrapped porous items (e.g. instruments)	3 minutes	3 minutes	NA

Unwrapped non porous items and porous items (e.g.mixed load)	4 minutes	3 minutes	NA

Note: Above tables are guides for cycle parameters for different items. For a specific autoclave, manufacturer's instructions for cycle parameters should be followed as parameters may vary depending on the instrument.

16.3.1 Important Points in Autoclaving

i) All items should be washed thoroughly with soap and water, dried before preparation of packets or trays for autoclaving.
ii) Maximum weight of one packet should not be more than 5 kgs or as indicated according to the manufacturer.
iii) Wrapping cloth should be double layered.
iv) Don't wrap tightly.
v) Put name tag on each pack.
vi) Sign each packet content slip.
vii) Use chemical indicator inside package for sterility. If sterilizing process is successful, indicator colour will change.
viii) Sterilized packages can be kept for a maximum of 10 days only.
ix) Maximum size of textile packages is 20 x 28 x 30 cms. Otherwise, the steam penetration is not good enough and the packages will remain wet or unsterile after sterilization process.
x) Never put packages very close to autoclave door and walls.
xi) Never load the autoclave tightly.
xii) Never re-use the packing towels (wrappers) without washing properly.
xiii) Proper loading of the autoclave is important to guarantee good penetration of steam and ensure that the supplies sterilized in the autoclave come out dry.
xiv) Clean the autoclave chamber (when it is cold) at least once a week with water, cleaning agent and rinse well with water and dry.
xv) Autoclaves should be handled by well trained staff only.
xvi) Nursing Officers too should have knowledge and skills to handle the autoclave.

16.3.2 Immediate Use of Steam Sterilization (Flash Sterilization)

Immediate use of steam sterilization is used only for the situations where there is an urgent or unplanned need and should never be considered in regular practice. There should be a written procedure and trained staff for flash sterilization. Cycle parameter may vary with the type / design of sterilizer. Parameters for sterilization are established and preset by the sterilizer manufacturer and these guidelines should be followed.

Flash sterilization should not be used to sterilize implants, complete sets or trays of instruments, and compensate for inventory shortage or scheduling difficulties

16.4. Quality Control of Autoclaves

i) The Bowie-Dick test should be conducted for autoclaves before starting the sterilization of the packages for a day. The change of colour shows that the right temperature and steam pressure are reached and good steam penetration has taken place.

ii) Chemical indicator strips should be used for every package autoclaved (Indicator colour will change after proper sterilization) .

iii) Check the autoclaves with biological indicators. (Spore test) frequently.

iv) New autoclaves and autoclaves that are repaired should be tested with biological indicators before they are commissioned / recommissioned for use

16.5. Biological Indicators (Spore Ampoules)

i) Spore ampoules should be obtained from the Medical Research Institute (M.R.I.)

ii) Place the ampoule with the items which have to be sterilized.

iii) Make a separate package for this.

iv) After the sterilization process is over ampoules should be sent to the M.R.I. for culture.

v) If culture shows these spores are destroyed that means the autoclave is in a good working order

16.6. Dry Heat Sterilization with Hot Air Oven

This is the main method of sterilization by dry heat. The oven is usually heated electrically and has a Thermostat that maintains the chamber air constantly at a chosen temperature and a fan to assist circulation of air. This method should be used only for materials that might be damaged by moist heat or that are impenetrable to moist heat (e.g., powders, petroleum products, sharp instruments).

Recommended sterilization times and temperatures

170° C	60 minutes
160°C	120 minutes
150° C	150 minutes

16.7. Boiling

Boiling is not recommended as an effective sterilization method.

16.8. Chemical Disinfection

The choice of disinfectant depends both on the use of the equipment and material compatibility.

Heat-sensitive items should be sterilized with high level disinfectants. Peracetic acid in- use (working) solution 2000 – 3500 ppm (0.2% - 0.35%) & 2% Glutaraldehyde are most effective chemical agents for chemical disinfection. Follow the manufacturer's instructions for disinfection.

16.9. Sterilization Requirements in Special Units

Please refer to relevant chapters in the Hospital Infection Prevention and Control Manual.

Reference:

Hospital Infection Prevention and Control Manual by the Sri Lanka College of Microbiologists – 2021. Available at https://slmicrobiology.lk/hospital-infection-prevention-and-control-manual-2/

CHAPTER 17
SANITATION

17.1 Importance

Sanitation is a vital component of patient care services in hospitals. It extends beyond maintaining cleanliness in wards and sanitary facilities, focusing on creating a pollution-free environment that promotes the well-being of patients. Proper sanitation fosters a pleasant atmosphere within the hospital and its surroundings, thereby improving the quality and efficiency of patient care.

17.2 It involves;

i) Sanitation of wards: Sanitation of wards should be maintained by ensuring they are kept clean and tidy at all times. Wards must be swept and mopped with detergent fluid twice daily, preferably before the ward rounds in the mornings and afternoons, ideally before 7:30 a.m. and 1:30 p.m.

   a. Floors of all wards must be wet mopped daily and terminal cleaning/washing must be done whenever necessary. Dirt of any description that may be accidently thrown on the floor or elsewhere must promptly be removed.

   b. Cleaning of walls, doors and windows as well as removal of cobwebs from roofs and eves, and drying up of mattresses in the sun must be done once a week.

   c. Cleaning of lockers, cupboards, tables, dining tables, trolleys, wash basins and sinks must be done daily.

ii) Decoration of wards may include flower vases, pictures hung on the walls (or painted on the walls), and potted plants placed along the corridors. This approach is preferred to create a homely environment for patients.

iii) Sanitary annexes:- The sanitary annexes should be kept spotlessly clean all the time. It should be washed as frequently as possible. The toilets should be cleaned at least 4 times a day and twice in the nights. In the day time it may be around 7.30 a.m., 10.30 a.m., 1.30 p.m. and 4.30 p.m. and in the nights may be around 7.30 p.m.-and 4.30 a.m.

   a. Spraying the floor of toilets with antiseptic lotions or detergent fluid is preferred. Protective wear (caps, masks, industrial gloves, plastic aprons and boots) may be provided to SKS (Junior) while working. They may be provided with tongs and pails to remove and collect dirty towels, rags, pieces of cloth, papers. and sanitary pads thrown into the

toilets by patients before flushing. But the preferred method for disposing sanitary pads is to collect in yellow bags and treat as infectious waste.

iv) Debugging of furniture and beds should be conducted at regular intervals. Nurses are responsible for ensuring this process occurs under the supervision of the Public Health Inspector (PHI) for the area.

v) Drains in the hospitals must be maintained to ensure complete drainage of surface water and wastewater from kitchens and bathrooms. They should be cleaned daily, and any blockages should be removed to allow for the free flow of drain water without stagnation.

vi) The sewerage lines, catch pits, soakage pits, and related systems should be regularly supervised by the overseer and the Infection Control Nursing Officer to ensure they remain clear of blockages. Each institution may be provided with cleaning rods to remove any obstructions when they are noticed.

vii) Surroundings: The main responsibility for maintaining the surroundings lies with the overseer. However, the relevant person in charge of each ward or unit should also take responsibility. Around the wards, along the corridors, and near drains, catch pits, soakage pits, and water sumps, grass should be neatly cut to a width of about 2 feet, and flowering plants should be planted. Tools such as grass cutters, mamoty, crowbar, etc., should be provided for this purpose.

viii) Lawns: All lawns in the hospital premises should be mowed and kept clean. Wherever possible, seats made up of concrete or iron must be provided for the patients to sit and relax. Rest Park for patients and play parks for children may be maintained in lawns wherever possible. A lawn mower may be provided.

ix) Flower Gardens: The flower garden should be maintained in front, along the sides of wards and corridors. Shady trees may be grown in the hospital premises wherever possible. The responsibility lies on the overseer.

x) Back gardens: Back Garden should be regularly weeded and maintained. Best is to allow the employees to grow vegetables if they wish. It could be divided into small plots / areas and allocated to several groups of employees for maintenance.

xi) Kitchen: The kitchens of the hospitals must be kept clean at all times and in good condition. Utmost attention should be paid to the cleanliness of meat safes, chopping blocks, kitchen tables, vessels and utensils, walls, floors,

sinks, and fly-proofing.

a. All kitchen staff shall wear aprons and caps while working in the kitchen. The cook shall be responsible for the condition of the kitchen and all the utensils used therein.

xii) Labour rooms must be kept clean and tidy at all times. They should be mopped at least twice a day, and blood stains should be removed immediately. All waste, including placentas, must be disposed of promptly, and soiled linen should be removed and washed without delay. Maintaining cleanliness in the labour room is the responsibility of the midwife or nursing officer.

xiii) The mortuary should be situated in a suitable location, well away from the wards, and equipped with refrigerator facilities to store deceased bodies until claimed by their relatives. The availability of refrigerators in Divisional Hospitals should depend on the resources available within the provinces. Additionally, a designated cart should be provided for transporting unclaimed bodies to burial grounds, or a separate stretcher should be used exclusively for moving deceased individuals from the wards to the mortuary.

17.3 Who is Responsible for Sanitation

Sanitation is primarily the responsibility of the administration and should be supervised by the Medical Officer in Charge (MOIC) or the designated Medical Officer, Sister/Senior Nurse in charge, Public Health Inspector (PHI)/Range, and the Overseer.

Maintaining cleanliness in wards, sanitary annexes, and nearby drains is the responsibility of the Saukya Karya Sahayaka (SKS) (Junior) assigned to the respective wards, under the supervision of the nursing officers in charge of the ward.

The upkeep of hospital lawns, flower gardens at the front, rear gardens, patient rest areas, and children's play areas is the responsibility of the overseer.

17.4 Disposal of Refuse

Please refer to Chapter 18 - Healthcare Waste Management.

17.5 Pest and Rodent Control

Every effort should be made to control pests and rodents within the hospital premises. Breeding sites for flies and mosquitoes should be identified and promptly addressed. Common breeding areas include refuse dumping pits, cow dung, soakage pits, catch pits, and sewerage lines.

To control flies, Dipthrex or another suitable fly repellent may be used in wards and dumping pits. Rodents should be managed by either trapping and destroying them or using appropriate poison.

17.6 Cattle Nuisance

Cattle should not be allowed under any circumstances to graze or be kept on hospital premises. A suitable perimeter fence, such as barbed wire or a parapet wall, should be installed to prevent cattle trespass. Additionally, cattle traps may be constructed at the gates to deter entry.

17.7 Stray Dogs & Cats

According to the Letter No PA/E&OH/11/2015 dated 21-07-2015 on 'Controlling of Stray Cats and Dogs within the Hospital Premises' (Annexure 17.1) stray dogs and cats are not allowed in hospitals. MOIC shall get them disposed with the assistance of Public Health Veterinary Services, Responsible officer.

17.8 Sanitation Register

The services of the area's Public Health Inspector (Range PHI) are available to the MOIC to oversee the maintenance of sanitary conditions within the institution and its surroundings. The PHI should conduct regular supervision visits to the hospital, at least once a week, and record their observations and suggestions regarding sanitation in a sanitation register. This register should be submitted to the Head of the Institution, who is responsible for taking appropriate actions based on the PHI's recommendations.

17.9 Water Supply

The primary water supply to a hospital typically comes from the town supply. In areas without such a supply, water is obtained from alternative sources, such as springs or wells. Regardless of the source, the water supply must be safe and adequate.

All drinking water should be either boiled and filtered before use or sourced from purified drinking water systems (e.g., Reverse Osmosis filters). Electric kettles or boilers may be provided in the wards to boil water. In facilities without electricity, water can be boiled in the kitchen and placed in receptacles for use in the wards.

If the water supply is not from the town supply, the Range PHI should regularly chlorinate the water following the prescribed formula. Additionally, water samples from wells, sumps, or other sources should be periodically tested for bacteriological

and chemical contamination to ensure safety.

17.10 Removal of Dead Bodies

Dead bodies should be kept separately in the ward until removed to the mortuary. They must be transported using a designated trolley or stretcher specifically allocated for this purpose.

17.11 Disposal of Unserviceable Items

Unserviceable items from the wards, including general store items, linen, hardware, or surgical equipment, should be condemned by a board of survey and disposed of appropriately on a regular basis. Under no circumstances should such unserviceable items, such as mattresses, linen, or hardware, be stored in corridors or wards.

CHAPTER 18
HEALTH CARE WASTE MANAGEMENT

18.1 Introduction

Health care waste includes all waste generated in a health care facility (HCF). Proper management of health care waste is a critical prerequisite for providing quality health care services. It is also essential for maintaining a healthy environment, ensuring occupational health and safety, protecting the well-being of staff handling waste, and supporting infection prevention and control measures. Health care waste management should be integrated into the overall management system of the HCF.

18.2 Responsibility

Every hospital is responsible for the proper management of waste from the point of generation to its final disposal, in compliance with the National Environmental Act No. 47 of 1980 and the National Environmental (Amendment) Act No. 53 of 2000.

The Medical Officer in Charge (MOIC) holds administrative responsibility for ensuring the proper management of health care waste within the hospital. However, all health care staff are responsible for actively engaging in the safe and proper management of health care waste by adhering to the Health Care Waste Management Guidelines issued by the Ministry of Health. Patients, visitors, and surrounding communities also share the responsibility of supporting the hospital's health care waste management program.

18.2.1 Duties and Responsibilities of the Medical Officer in Charge of the Hospital

The MOIC of the Divisional Hospital is responsible for the overall effectiveness of the health care waste management plan within the hospital. They must take all necessary measures to implement a safe plan and assign specific duties and responsibilities to all medical and non-medical staff under their supervision.

The Medical Officer in charge of the Hospital should:

i) Appoint a health care waste management committee for the hospital.
ii) Appoint a focal officer for health care waste management.
iii) Supervise implementation, monitoring and review of the health care waste management plan.
iv) Allocate sufficient financial and human resources for the implementation of the health care waste management plan.
v) Ensure adequate training and refresher courses for the concerned hospital staff members.

vi) Ensure occupational health and safety of employees handling health care waste.

18.2.2 Duties and Responsibilities of the Health Care Waste Management Committee of the Hospital

The health care waste management team shall consist of the following members, including the hospital's focal point for health care waste management:

i) Medical Officer in charge

ii) Sister / Nurse in charge

iii) Infection Control Nursing Officer

iv) Overseer

v) Any other person designated by the Medical Officer in charge

The health care waste management committee is responsible for preparing, implementing, monitoring, and updating (if necessary) the hospital's health care waste management plan. The committee should convene once a month.

18.2.3 Duties and Responsibilities of the Focal Point for Health Care Waste Management

The designated officer shall be responsible for the daily implementation and monitoring of the health care waste management plan and shall:

i.) Ensure an adequate supply of waste bags, containers, protective clothing, and collection trolleys at all times.

ii.) Ensure proper use of the central storage facility while maintaining security against unauthorized access. They must also prevent unsupervised dumping of waste bags and containers on the hospital premises, even temporarily.

iii.) Coordinate and monitor all waste disposal operations by conducting regular meetings with inter-sectoral officers from the Local Authority and the Central Environmental Authority.

iv.) Ensure the use of correct methods for the transportation and disposal of waste.

v.) Ensure emergency procedures are in place and can be activated at any time. Staff should be made aware of the necessary actions to take. They must investigate, document, and review all incidents related to waste management.

vi.) Report health care waste management data to the relevant officers.

vii.) Ensure the hospital obtains the Environmental Protection License (EPL) and the Scheduled Waste Management License (SWML). Both licenses must be renewed annually through the Central Environmental Authority.

18.3 Implementation of the Health Care Waste Management Programme at the Divisional Hospital

18.3.1 Types of Health Care Waste Generated in Divisional Hospitals

Health care waste can be broadly divided into two groups:

i) Non-hazardous (Non risk) health care waste
ii) Hazardous (Risk) health care waste

Approximately 75% to 90% of health care waste generated in hospitals is classified as non-hazardous (non-risk) waste, while 10% to 25% is classified as hazardous (risk) waste. Both types of waste must be managed appropriately. Hazardous health care waste, in particular, requires specific management according to recommended guidelines due to its potential harmful effects on human health and the environment.

18.3.2 Categories of Health Care Waste Generated in Divisional Hospitals

Non-hazardous (non-risk)	**Hazardous (risk)**
Kitchen waste	Infectious waste
Food waste	Sharps waste
Garden waste	Pathological/anatomical waste
Mixed waste	Pharmaceutical waste
Clean plastic/polythene	E waste
Clean cardboard/paper	Waste items with mercury
Clean glass	

18.3.3 Definitions

i) Non-hazardous (non-risk) Health Care Waste categories
General bio-degradable Health Care Waste

- Kitchen waste

Refuse generated in the kitchen due to cooking.

- Food waste

This includes food waste generated in the hospital from patients, health staff or any others means.

- Garden waste

Leaves and branches collected in the garden needing disposal.

- General non-recyclable Health Care Waste

This includes non-recyclable HCW and includes used lunch sheets, biscuit wrappers, yoghurt cups, lunch wrapping paper etc.

- General recyclable Health Care Waste

These include clean polythene/plastic, cardboard/paper and glass which can be recycled.

ii) Hazardous (risk) Health Care Waste categories

- Infectious waste

All wastes that are susceptible to contain pathogens (or their toxins) in sufficient concentration to cause diseases to a potential host are considered as infectious waste. This category includes for example waste contaminated with blood and other body fluids; waste including excreta and other materials that have been in contact with patients infected with infectious diseases.

- Sharps waste

Sharps are items that can cause cuts or puncture wounds (needle stick injuries for instance). Sharps includes used hypodermic/intravenous or other needles; auto-disable syringes; syringes with attached needles; infusion sets; scalpels; pipettes; knives; blades; broken glass.

- Pathological and anatomical waste

Pathological waste consists of organs, tissues, body parts or fluids such as blood.

Anatomical waste consists of recognizable human body parts, whether they may be infected or not.

- Pharmaceutical waste

Pharmaceutical waste includes expired, unused, spilt and contaminated pharmaceutical products, drugs and vaccines and also discarded items used in handling of pharmaceuticals such as bottles, vials, connecting tubes etc.

- E-waste

Waste electrical and electronic equipment such as computers, printers, refrigerators etc in the hospital are categorized as e-waste

- Waste items containing mercury

End of life thermometers, sphygmomanometers, fluorescent tubes, CFL bulbs and amalgam containing mercury

18.4 Principles to be Used for Planning Healthcare Waste Management in the Divisional Hospital

The health care waste management programme of the hospital should be planned based on the following principles.

i) Avoidance of health care waste generation as much as possible.
ii) Minimization of the quantity of health care waste generated by the HCF.
iii) Reuse of suitable materials wherever possible.
iv) Recycling of appropriate waste items.
v) Proper final treatment and disposal of health care waste.
vi) Ensuring occupational health, safety, and well-being of staff handling health care waste.

18.5 Steps to be Practised in Managing Health Care Waste in the Divisional Hospital

i.) Segregation of health care waste.
ii.) Proper packaging of health care waste.
iii.) Safe transportation of health care waste to the onsite waste storage facility.
iv.) Storage of different health care waste streams in the onsite waste storage facility.
v.) Treatment and final disposal of all health care waste streams, including non-hazardous (non-risk) and hazardous (risk) waste.

Step 1: Segregation of health care waste

Segregation of health care waste shall take place at the source of generation, such as the ward, outpatient department (OPD), emergency room, clinics, or any other area within the HCF where health care waste is produced. Bins must be used for this purpose, following the standard national color code system for health care waste management.

The national colour code for segregation of health care waste is as follows:

Table 18.1: National Colour Code for Segregation of Health Care Waste

	Colour	**Type of waste**
	Yellow	Infectious waste
	Yellow with a red stripe	Sharps waste (Sharps bin)
	Green	Bio-degradable waste such as food waste
	Black	Non-biodegradable, non-recyclable, non-hazardous ex: used lunch sheets
	Blue	Clean cardboard/paper
	Orange	Clean plastic/polythene
	Red	Clean glass
	Grey	E-waste
	White	Pharmaceutical waste

- **Waste bins**

Foot-operated, strong, and durable waste bins with well-fitting lids, adhering to the specified colour code, should be used for collecting different streams of health care waste. The bins should be placed according to the types of waste generated in a particular setting.

Waste bins are generally available in three sizes: large (65L), medium (30L), and small (10L). The appropriate size of the waste bin should be selected based on the quantity of waste generated at a specific location, such as a ward, clinic, or OPD.

- **Sharps bin** should be made of leak proof and puncture proof material and should be labeled with the bio-hazard symbol. The bin should feature an opening at the top, designed to allow the disposal of used sharps while minimizing access. It should also have a handle for easy and safe transportation.

- **Waste collecting bags**

The bins should be lined with plastic bags matching the colour of the bin. For infectious waste, **75-micron/300-gauge leak-proof yellow plastic bags** should be used. Plastic bags in **black, green, red, blue, and orange** should be **50-micron/200-gauge**. All waste bags must be labelled to identify the source and to address issues related to waste segregation, ensuring traceability.

Step 2: Waste packaging

When the bin is ¾ full, the plastic bag needs to be removed from the bin and tied tightly to prevent any spills of Health Care Waste.

Table 18.2: Recommended Segregation and Collection Scheme

Waste categories	**Colour of the bin and markings**	**Type of container**	**Collection frequency**
General non-recyclable Health Care Waste	Black.	Plastic bag (50 microns) inside a bin	When three-quarters filled
General bio-degradable Health Care Waste	Green	Plastic bag (50 microns) inside a bin	When three-quarters filled
General recyclable waste Non-contaminated plastic / glass / paper, to be recycled	Orange (Clean plastic) Blue (Clean cardboard/ paper) Red (Clean glass)	Plastic bag (50 microns) inside a bin	When three-quarters filled. .
Infectious waste	Yellow	Leak-proof strong plastic bag (75	When three-quarters filled

			microns/300 gauge) placed in a bin	
Pathological waste/anatomical waste	Yellow		Leak-proof strong plastic bag (75 microns/300 gauge) placed in a bin	When filled to the line or three-quarters filled.
Waste categories	**Colour of the bin and markings**		**Type of container**	**Collection frequency**
Sharps waste	Yellow with a red stripe		Puncture-proof container (safety box)	When three-quarters filled
Pharmaceutical waste	White		Plastic bag or rigid container.	On demand.
E-waste	Grey		Plastic bag or rigid container.	On demand.

Step 3: Safe transportation of health care waste to the onsite waste storage facility

On-site transportation of waste should be carried out during less busy times whenever possible. Pre-determined routes should be used to minimize staff, visitor, and patient exposure and to reduce the movement of loaded carts through patient care and other clean areas.

The transport route must be the most direct path from the collection point to the storage facility. Collected waste should never be left temporarily at any location other than the designated storage facility.

Waste should be transported in carts or trolleys designated exclusively for this purpose. These must be cleaned and disinfected daily. To prevent injuries and the transmission of infections, carts and trolleys should meet the following specifications:

- Easy to load and unload;
- No sharp edges that could damage waste bags or containers during loading and unloading;
- Easy to clean
- Labelled and dedicated to a particular waste type;
- Easy to push and pull

- Carts/trolleys should be appropriately sized according to the volumes of waste generated at a facility.
- Use of gloves/ PPE by the staff who handle the waste

Hazardous and non-hazardous waste should always be transported separately. Waste transportation to the storage should be done as follows.

i) Waste transportation carts/trolleys for general waste should be painted black and only be used for non-hazardous (non-risk) waste types.
ii) Infectious waste should not be transported together with other hazardous waste to prevent the possible spread of infectious agents. Carts/trolleys should be colored in yellow for infectious waste. Infectious waste can be transported together with used sharps waste. Infectious waste and sharps should be transported by trained hospital staff.
iii) Other hazardous waste, such as pharmaceutical wastes and e-waste should be transported separately in boxes to the point of storage facility.

Step 4: Storage of different health care waste streams in the onsite waste storage facility

In all Divisional Hospitals, separate storage facilities must be provided for storing health care waste streams in accordance with the national colour code for health care waste management.

The designated storage facility should be located within the hospital premises but away from food storage or preparation areas.

The central storage facility must be fully enclosed and secured to prevent unauthorized access. It should be inaccessible to animals, insects, and birds. Additionally, the facility must be easy to clean and disinfect, well-ventilated, and designed to maintain hygienic conditions.

General non-recyclable waste should be stored and kept for collection by the local authority (LA). Food waste should also be stored for collection by the LA or farm owners. The storage area must be enclosed.

General recyclable waste, such as clean cardboard/paper, clean plastic, and clean glass, should be stored in separate compartments in the storage facility.

Infectious and sharps waste must be identifiable as an infectious waste area by using the biohazard sign and painting the walls yellow. Floors and walls should be sealed or tiled to allow easy disinfection. The waste collected should be disposed of as early as possible and must not be kept in the storage area for more than 48 hours. Infectious waste should be stored in a manner that maintains the integrity of the containers, prevents leakage or release of waste from the containers, and protects against water, rain, and wind. Sharps waste can be stored for longer periods.

Pathological and anatomical waste is considered biologically active, and gas formation during storage should be expected. To minimize this possibility, storage conditions should be similar to those for infectious and sharps waste. Where possible, this waste should be stored under refrigerated conditions.

Pharmaceutical waste and e-waste should be segregated from other wastes and stored safely.

Mercury-containing end-of-life thermometers and sphygmomanometers, fluorescent tubes, and CFL bulbs should be stored in a safe place. CFL bulbs and fluorescent tubes should be kept in a covered storage area.

Step 5: Treatment and final disposal of all health care waste: Non- hazardous (non-risk) and hazardous (risk)

The following treatment and disposal methods are recommended for different health care waste streams.

Table 3: Recommended treatment and disposal methods of health care waste as per the guidelines.

Waste stream	**Method**
General degradable Health Care Waste	
Garden waste	Composting onsite
Food waste/kitchen waste	Every effort should be made to avoid food wastage in the hospital. Handing over for animal feeds or to local authority for disposal.
General non degradable Health Care Waste	Handing over to Local Authority.
General recyclable Health Care Waste	Clean plastics, clean glass and clean cardboard/paper should be handed over to recyclers registered with the Central Environmental Authority of Sri-Lanka.
Infectious waste and sharps waste	Incineration or treatment using a MetaMizer (Hybrid Autoclave) is recommended for managing infectious and sharps waste. However, installing individual incinerators or MetaMizers at each Divisional Hospital is not advised. The transportation of infectious waste and sharps waste to a nearby incinerator or MetaMizer facility, or outsourcing this process, should be carried out in accordance with the district-level clustering plan approved by the district and provincial health authorities.

Pathological or anatomical waste	Handing over to florists or burial/cremation in the cemetery following financial regulations. For placentas, disposal can be done using placental pits.
Pharmaceutical waste	Handing over to Regional Medical Supplies Division or Medical Supplies Division if under Line Ministry.
E-waste	Handing over to e-waste collectors registered with the Central Environmental Authority
Mercury waste	Divisional hospitals should adhere to the decision taken by the Ministry of Health to phase out the mercury containing thermometers, sphygmomanometers, CFL bulbs and fluorescent tubes to align with the Minamata Convention ratification. Safely store mercury containing waste until a disposal method is notified by the Ministry of Health

However, since certain facilities may not be available in the Divisional Hospital (DH), it is necessary to seek direction and guidance from the RDHS for the proper disposal of the mentioned wastes.

Sewerage treatment

The excreta generated within the hospital must be disposed of in a safe and effective manner. The hospital should have a sewerage plant or properly constructed sewage pits, designed to manage excreta based on the waste generation capacity of each HCF.

18.6 Development of a Plan on Health Care Waste Management for the Divisional Hospital

Implementing adequate procedures to minimize the risks associated with health care waste management should be a priority for every Divisional Hospital. Waste management and treatment options must priorities the protection of health care workers and the population while minimizing indirect environmental exposures to health care waste.

Each Divisional Hospital should develop a comprehensive health care waste management plan, which should include the following:

i) Clearly defined duties and responsibilities for different categories of hospital staff involved in generating or managing health care waste.

ii) Quantities of hazardous and non-hazardous health care waste generated:
   a) Infectious waste (kg/week)
   b) Sharps waste (kg/week)
   c) Anatomical/pathological waste (kg/month)
   d) Food waste (kg/week)
   e) Clean glass, clean cardboard/paper, clean plastic (kg/month)

f) E-waste and Mercury waste (kg/annually) or (Number of items/annually)

iii) Annual requirements, including human resources, equipment, infrastructure, and budget, necessary for the implementation of the health care waste management plan.

iv) Detailed procedures for the management of health care waste within the hospital.
   a) Treatment and disposal method for all health care waste management streams
   b) Timetables detailing the frequency of waste collection from each ward, clinic, or location, along with a map of the HCF showing waste collection points, storage areas, and treatment locations.

v) Monitoring procedures to trace health care waste inside the HCF and to ensure that health care waste management rules are respected.

vi) Training schedule for all categories of HCF staff members on health care waste management

vii) Contingency plans for storage or disposal of hazardous health care waste in the event of breakdown of such facilities

Occupational health and safety of staff handling health care waste

Staff handling health care waste must always wear protective clothing. It is mandatory to wear covered shoes and an overall or apron while handling such waste. Masks and industrial gloves must be worn when necessary. Routine access to washing facilities, including soap and water, should be provided.

Workers handling sharps and infectious waste should receive Hepatitis B vaccinations. They must also be trained in health and safety procedures to understand the potential risks associated with health care waste. Training should include the proper methods for its safe management and the importance of consistently using personal protective equipment (PPE).

Intra and inter sectoral coordination in health care waste management

Hospital authorities should liaise with officials from the District or Provincial Environmental Authority and the Local Authority as needed. Coordination with the Regional and Provincial Directors of Health Services is also recommended for effective health care waste management. Additionally, technical guidance should be sought from the Environmental and Occupational Health Unit of the Ministry of Health regarding health care waste management practices.

Community engagement

Engaging the surrounding community is crucial for effective health care waste management. Involving the catchment population, including patients, visitors, and local communities, is essential for improving waste management practices within the institution. Initiatives such as reducing plastic usage and minimizing food waste are practical examples of community involvement in health care waste management.

CHAPTER 19
LINEN AND LAUNDRY SERVICE

19.1 Introduction

Providing a sufficient quantity of clean linen at regular intervals is essential for proper patient care. Frequent linen changes serve as a preventive measure against cross-infections and help maintain a clean and pleasant environment for patients.

19.2 Types of Linen Used in Particular Places

i) Hospitals Wards
   a) Screen cloth
   b) Hand towels
   c) Window curtains
   d) Dusters
   e) Bed sheets
   f) Draw sheets
   g) Mattress covers
   h) Pillow cases
   i) Towels
   j) Checked cloth
   k) Shirts
   l) Jackets

ii) O.P.D.
   a) Screen cloth
   b) Door curtain
   c) Window curtains
   d) Dusters
   e) Hand towels

iii) Minor surgical procedure room & Labour rooms
   a) Overalls
   b) Nurses' frocks
   c) Pajamas
   d) Pajama shirts
   e) Masks
   f) Caps
   g) Operating Theatre sheets
   h) G.S. Towels
   i) Leggings
   j) Wrapping towels

19.2.1 Periodicity of Changing Linen

i) Ward bed Linen
   Once in 3 days or to receive a new patient or after soiling or after death of a patient
ii) Curtains - Once a week
iii) Hand Towels - Change twice daily
iv) Linen of Minor surgical procedure room - After each surgical procedure

19.2.2 Linen Needed in Preparing an Ordinary Bed in a Ward

Bed sheets large	-	02
Draw sheets	-	01
Pillow cases	-	02
Mackintosh	-	01 Meter

Sufficient sets should be available in a ward to cater to shortfall of laundered linen during rainy season.

19.3 Procurement

i) MOIC shall take suitable measures to maintain an adequate supply of linen to the hospital.
ii) For this purpose, he shall transmit his annual forecast through the RDHS to the PDHS in time.

19.4 Controlling the Loss of Linen

i) To minimize losses, all staff working in the wards needs to take adequate care in protecting linen.
ii) All staff working in wards is responsible for the protection of government property (General circular No. 427)
iii) Prepare sub - inventories to fix responsibility. Inventories are to be checked weekly and shortages should be reported.
iv) Hospital linen should be stamped, “D.H.S." Name of the hospital & ward/section to be marked with indelible ink.

19.5 Control of Infection

i) Infected linen should be kept in a separate container.
ii) Handle with care to prevent spread of infections
iii) Containers used to store soiled linen must be cleaned with detergent and water weekly.
iv) Infected linen should not be put on the floor.

v) Place infected linen into a container with a dilute disinfectant solution, for one hour.
vi) Linen containers must not be allowed to overflow.
vii) Linen must not be sorted out inside the wards or on corridors.
viii) Linen from scabies and lice infected patients should be treated as soiled linen.

19.6 Dhoby (laundry) Service

i) Ideal system would be to have a daily dhoby (laundry) service.
ii) Soiled linen from theatre, labour room and linen soiled with excreta etc. should be washed by an SKS (junior) and dried before giving to the dhoby (laundry)

19.7 Maintenance of Inventories

i) Inventory maintenance responsibility lies on the Management Assistant / a person designated by MOIC as the person in-charge
ii) All items received in ward or unit should be included in the unit inventory and acknowledged. (Inventory Book - Health 501)
iii) Nursing Officer-in-charge should maintain the following books and registers;
- Linen Request Note Book - Health – 500
- Linen Condemning Book - Health - 503
- Laundry Book - Health - 87

iv) Issues of items to subordinate staff will be under sub-inventories.
v) Nurse-in-charge should check all the sub-inventories once a week.
vi) If a shortage is detected, he / she should inform the MOIC in writing without delay.
vii) Any linen torn but sewable shall be sewn with the assistance of a seamstress.
viii) All clean and soiled linen should be stored in their proper places under lock and key.
ix) Keys of the linen cupboard should be safely kept by the nurse-in- charge.
x) Minimum amount of linen required should be issued at any given time
xi) Linen needed for the night shifts should be issued to the Night Nursing officer.
xii) All washable soiled or dirty linen should be handed over to the dhoby (laundry) for washing, (use Laundry Book - Health - 87)
xiii) On receipt of clean linen, the Nursing Officer should prepare Health 87 in triplicate and send the original and duplicate copies to the MOIC's office.

19.8 Condemning of Linen

i) Sort out unusable linen for condemning.
ii) Nursing Officer shall bundle them according to the inventory numbers and label.

iii) Fill-up General 47 Form.
iv) Obtain authority from the MOIC to condemn the linen.
v) The Nursing Officer should produce the linen listed for condemning to the Board of survey.
vi) Once the Board of Survey approves condemning of the linen, obtain written authority from the Board of Survey to write off.

19.9 Some General Remarks

i) Materials should be cotton and washable.
ii) Private linen should not be used except for personal attire.
iii) All patients who are going to minor surgical procedure room should be in hospital linen.
iv) Public donations should be accepted within the expected standard of the hospital linen

CHAPTER 20
MEDICO-LEGAL FUNCTIONS AND FACILITIES

20.1 Introduction

The Medical Officers in-charge (MOIC) of Divisional Hospitals are responsible for Medico-Legal services of the hospital.

> The Medical Officer is required to handle clinical medico-legal examinations, medico-legal post-mortem examinations, exhumations (legal burials), excavations (illegal burials, after consulting the nearest consultant Judicial Medical Officer), visiting scenes of crime, and recording dying declarations, among other related duties.

To carry out such examinations efficiently, the MOIC must ensure they possess the necessary knowledge and are equipped with trained staff, appropriate instruments, and relevant forms.
A trained SKS should be available to assist the MOIC in these tasks. These services are provided by the MOIC under the supervision of the consultant JMO from the nearest hospital.

20.2 When to Seek Help from the Consultant JMO

If any difficulty arises in conducting medico-legal examinations, whether due to the complexity of the case or resource constraints, the Medical Officer must inform the relevant authority in writing, clearly stating the reasons for the difficulty. The authority should also be advised to refer the case to the nearest Consultant Judicial Medical Officer (JMO).

If there is any difficulty in interpreting findings or providing an opinion regarding the cause of death or any other medico-legal issue, the Medical Officer who conducted the examination must immediately consult the nearest Consultant JMO for advice and guidance.

Cases involving homicides, pediatric deaths (including those related to child abuse), maternal deaths, custodial deaths, medical mishaps (negligence), and excavations should be transferred or referred to the nearest JMO or Consultant JMO for further examination and management.

.

20.3. Referral to a Fellow Medical Officer

In situations where the victim, assailant, accused, or their close relations are personally known to the Medical Officer, or when allegations of medical negligence or neglect of duty are made against the staff of the institution, the Medical Officer must advise the Judicial Authority ordering such examinations to refer the case to a Medical Officer from another institution.

In cases of deaths in police custody within the jurisdiction of the medical institution, the MOIC must advise the Judicial Authority to refer the post-mortem examination to a Medical Officer from another institution.

If the Medical Officer responsible for medico-legal services is on leave, unwell, or unable to perform duties for any valid reason, arrangements must be made for the next senior Medical Officer in the institution or the MOIC of a neighboring institution to take over the responsibilities. Such arrangements must have the prior approval of the RDHS.

20.4. Medico-legal Examinations (Clinical)

MOICs must provide information to the officer in charge of the nearest police station using the medico-legal examination form (Police - 20). This applies to cases involving admission or treatment of patients following intentional violence, sexual assaults, accidents, poisoning, or any other situations where there are reasonable grounds to suspect that a crime has been committed.

i.) Medico-Legal clinical examinations are conducted under the following circumstances:

a) At the request of a police officer:

Medico-legal examination forms (Police-20) are issued by the police department to injured persons in cases such as intentional violence, sexual assault, road traffic accidents, industrial accidents, poisoning, drunkenness, drug consumption, insanity, and similar situations.

Following the examination, the Medical Officer must promptly hand over the report in the police copy of the medico-legal examination form to the police department.

b) Under the orders of Judges, Magistrates, and other Judicial Officers:

Reports of these examinations must be submitted using the Medico-Legal Report Form (H1135).

ii.) **Clinical medico legal examination**

a) Informed written consent should be requested for history taking, examination, photography and investigations etc. If a female patient is examined by a male Medical Officer, a female chaperon must be present and the chaperon's name should be documented.

b) History from the patient, as to the circumstances that led to the present condition.

c) Observations – especially alcohol smell, behavior, and clothing etc.

d) Preliminary procedures – such as photography, X-ray, trace evidence collection when indicated.

e) Clothing examination.

f) General and systemic examinations.

g) Conduct a specific examination of injuries, noting the nature, size, shape, disposition, and site of the injury.

h) Carry out relevant investigations.

i) Visit the scene when required.

j) Refer patients to specialists, as required.

k) Review relevant patients. E.g., Emasculation, hearing, vision, etc.

l) Prepare the medico-legal report.

In respect of (h), (j), if the required facilities are not available at the institution, the patient should be referred to the nearest institution where such facilities are available. The referral should include the medico-legal examination form and a referral letter.

20.5. Medico-legal Post-mortem Examinations Steps

i.) Authority: Post-mortem examinations are ordered by a Judge, Magistrate, or Inquirer-into-Sudden Deaths (ISD)/Coroner. These examinations must be conducted promptly.

ii.) History: Obtain a detailed history from relatives, the investigating police officer, and other relevant parties regarding the circumstances leading to the death.

iii.) Visit to the scene: Conduct a visit to the scene if indicated.

iv.) At the mortuary:

- Identification – Before performing the post-mortem examination, the Medical Officer should see that the body is identified by two persons acquainted with the deceased. Unidentified bodies should be kept in the refrigerator with the order of the ISD of the relevant area for 14 days. If refrigerator is not available, the body should be transported to the nearest facility under the supervision of police and coroner. If the body is not identified after 14 days, proceed with the post-mortem examination with the consultation of the nearest Consultant JMO. Inform the area Grama Niladhari and the relevant police officer to attend the identification of the body and the burial should be performed by the area GN with the funds provided by the divisional secretariat.
- Preliminary procedures such as X-ray, trace evidence, photography, etc. must be carried out
- Clothing examination must be completed.
- Dissection - The examination must be thorough and complete,

including the opening of all body cavities and the dissection of all organs contained within them. After the examination, all dissected internal organs must be replaced in the body cavities, and the body must be sewn up before being handed over to the relatives.

- Laboratory investigations – Samples for histopathology, toxicology, and other necessary investigations must be collected. If any organs are removed for further studies, the Medical Officer must document this in the post-mortem examination report. In cases where the cause of death is not determined at the conclusion of the examination, it is mandatory to collect specimens from all vital organs for histology (preserved in 10% formalin solution) and remove specimens for toxicological analysis.
- Family screening for infective disease, congenital anomalies etc. – In cases of deaths due to infectious diseases (e.g., tuberculosis) or genetic conditions (e.g., hypertrophic cardiomyopathy), refer the family for appropriate screening, including infective disease assessments or genetic studies.
- Report preparation - Upon completion of the post-mortem examination, the cause of death and other relevant opinions must be promptly communicated to the judicial authority. The Medical Officer must record all findings in the Post-Mortem Examination Report Form (H 42).

v.) A copy of the BHT or death registration with other medical documents must be forwarded when a dead body is transferred to the nearest Consultant JMO

The Medical Officers in wards/OPD where death occurred must request inquests through the Officer- in-Charge of the nearest police station for the following types of deaths: -

(a) Where the cause of death is not known.
(b) Death is unnatural (homicide/accident suicide).
(c) Death related to medical and surgical procedures or when there are allegations of negligence.
(d) Deaths under suspicious circumstances.
(e) Deaths of prisoners.
(f) Death following Tetanus & Rabies.
(g) Deaths requiring post-mortem examinations as per special circulars issued by the DGHS or Ministry of Justice, such as maternal or dengue-related deaths.

Cause of death may be entered in the Bed Head Ticket for consideration of the judicial authority conducting the inquest.

In respect of pathological post-mortem examinations, the following criteria must be

satisfied.

i.) The cause of death is natural and is known to the Medical Officer requesting the examination and entering in the BHT.
ii.) An inquest has not been ordered into the death.
iii.) The Medical Officer certifying death must fill the declaration of death form.
iv.) The consent of a close relative was obtained in writing on the BHT.
v.) The approval of the head of the institution obtained.
vi.) All autopsy findings entered on the BHT of the deceased.

All Medico-Legal post-mortem examinations should be carried out in mortuaries in sun light/day light hours with the following basic facilities such as,

i.) A post-mortem table (at least one)
ii.) Running water
iii.) Adequate day light. Examinations should not be carried out after the sunset in artificial light. However, if the Medical Officer is of the opinion that the delay in keeping the body overnight will adversely affect the Medico-Legal investigation, then he may carry out such investigation provided there is adequate artificial light.
iv.) 440Four body capacity refrigerators for the storage of dead bodies/parts.

20.6. Mortuary Labourers

The mortuary labourers must be trained in post-mortem examination techniques and mortuary management under the nearest consultant JMO.

20.7. Dead Bodies Brought to the Hospital

When a person is found to be dead upon being brought to the hospital, the Medical Officer certifying the death must record the name, age, and address of the deceased, as well as the name, address, and relationship of the person who brought the deceased to the hospital. An inquest must be conducted for all such deaths.

20.8. Exhumations (Legal Burials)

In case such a request is made, MOIC must coordinate with the consultant JMO of the nearest hospital.

20.9. Excavations (Illegal Burials)

Acting under Section 373 (2) of the Criminal Procedure Code, a judicial authority may order a Government Medical Officer to exhume a body and perform a post-mortem examination. However, an inexperienced Medical Officer may not be adequately equipped to conduct a post-mortem examination on an exhumed body. In such cases, the Medical Officer may proceed with the exhumation and advise the judicial authority to refer the post-mortem examination to a Consultant Judicial Medical Officer.

20.10. Visits to Scenes of Crime

All Medical Officers must visit scenes of crime at the earliest opportunity, if such a request is made by a Police Officer or a judicial authority. Failure or delay in visiting a scene of the crime can result in loss of scientific data which is vital for the investigation process.

20.11. Dying Declarations

In cases of serious injury resulting from intentional violence, where the Medical Officer believes the patient may die before their statement can be recorded by a Police Officer, the MOIC must notify the Magistrate of the area through the officer-in-charge of the nearest police station to record the patient's dying declaration. If death is imminent, the MOIC must personally document the statement made by the seriously injured person, with specific attention to details such as the name of the assailant, the nature of the weapon used, and the place, date, and time the injuries were sustained.

20.12. On Call Duties in Judicial Medicine

In judicial medicine, forensic emergencies include the examination of drunken drivers, individuals intoxicated while on duty, public misbehavior involving drunkenness, cases of drug intoxication, and the collection of samples in sexual abuse cases within 72 hours of the incident.

The in-charge Medical Officer is responsible for performing medico-legal duties from 8:00 am to 4:00 pm. After this period, medico-legal duties in forensic emergencies should be handled by the Medical Officer on duty at the relevant hospital.

20.13. Reports, Records, and Fees

i.) All notes of examinations must be made clearly and legibly, in the prescribed forms.

ii.) All reports sent to courts, or any other judicial authority must be in duplicate. A copy must be kept by the Medical Officer.

iii.) Notes and reports of examinations made by the Medical Officer, is his/her personal property and must be kept under lock and key. These documents should be taken by the MO when he/she is transferred to another institution.

iv.) All notes and reports must be preserved for at least 25 years.

v.) Hospital should preserve the BHTs including relevant investigation reports (X- rays, etc.) belong to clinical finding and post mortem cases under the supervision of the head of the institution. However the immediate

responsible person for preserved BHTs is the MRO (Medical Record Officer), in the relevant hospital.

vi.) Bed Head Tickets, X-rays and other reports pertaining to Medico-Legal cases must be preserved in the institution for a period of at least 25 years.

vii.) When a notice or summons from a judicial authority is received by the MO or from the Attorney General or the police department the Medical Officer should submit the report to the court without delay.

viii.) Private Medical Reports (MLR & PMR) can be issued only with the written request of the affected person or his next of kin when such person is severely disabled or dead. A private Medical Report cannot be issued to a third party.

ix.) Separate Registers must be maintained for,

a) Clinical medico-legal examinations.
b) Post-mortem examinations.

x.) In case of demise, incapacitation, or migration of an MO-ML, the medico-legal duties should be covered in accordance to the Health/Justice ministry guidelines.

xi.) Fees are payable by the respective courts for submitting Medico-Legal Reports to Courts (H-1135) after the examination of a patient and for conducting and submitting a report in H-42 after post-mortem examinations, under section 373 (1) and the Code of Criminal Procedures.

xii.) If the MO-ML issues a report for insurance purposes, the standard fee allocated by insurance companies/cooperation should be claimed.

CHAPTER 21
ENSURING QUALITY AND SAFETY OF HEALTH CARE

21.1 Introduction

Quality of Healthcare is defined as 'the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge' (Lohr & Schroeder, 1990). It is widely acknowledged that all health care institutions must priorities the delivery of high-quality and safe health services to their patients.

Seven elements are identified as essential to ensuring quality in health care:

i) Effectiveness – providing evidence-based health care services to those who need them
ii) Safety – avoiding harm to people for whom the care is intended
iii) People-centeredness – providing care that responds to individual preferences, needs and values
iv) Timeliness – reducing waiting times and sometimes harmful delays
v) Equity – providing care that does not vary in quality on account of gender, ethnicity, geographic location, and socio-economic status
vi) Integration – providing care that makes available the full range of health services throughout the life course
vii) Efficiency – maximizing the benefit of available resources and avoiding waste

(Source: World Health Organization)

The Directorate of Health Care Quality and Safety (DHQS) of the Ministry of Health, established in 2012, serves as the national focal point for health care quality assurance in the country. It provides technical direction and guidance to hospitals at various levels through the Quality Management Unit (QMU) network, which connects the central level with the line ministry and provincial health organizations.

Currently, many hospitals at the Base Hospital level and above have established Quality Management Units, staffed by Quality Medical Officers and Nursing Officers. Some Divisional Hospitals have also established Quality Management Units within their institutions. Provincial hospitals are linked to the central level through QMU units located at the Regional Director of Health Services (RDHS) offices in each district. These units coordinate and oversee the quality and safety of hospitals within their respective districts.

One of the first guideline aimed at ensuring quality in health care institutions at all levels was published in 2010 by the Ministry of Health. The Quality Series – 1 publication addresses health care quality in hospitals at the Divisional Hospital level and above. These Quality Series publications are available on the DHQS website for reference.

The DHQS plays a crucial role in developing and implementing guidelines, formats, plans, tools, and checklists aimed at enhancing health care quality and safety. These resources, which address various aspects of health care delivery, are available on the DHQS website.

In 2013, the DHQS issued a circular titled *"Establishment of Hospital Quality Management Units (QMUs) and District/Health Care Quality and Safety (HQS) Units,"* which outlined the functions and responsibilities of these units, the required files to be maintained, and the necessary resources. This circular was revised in 2023 and can be accessed on the DHQS website.

The activities of the DHQS are guided by the National Policy on Health Care Quality and Safety, which was first introduced in 2015 and updated in 2021. This policy is operationalised through the National Strategic Plan on Health Care Quality and Safety, which formulates strategies and interventions under seven key results areas.

In 2015, the DHQS introduced a checklist for assessing Primary Medical Care Institutions, which include Divisional Hospitals, Primary Medical Care Units, and outpatient departments of higher-level hospitals. Recognising the need for sustainable quality improvement in PMCIs, the DHQS prioritised quality enhancement under the Primary Health Care System Strengthening Project. This initiative focuses on providing comprehensive and high-quality care at the PMCI level, addressing gaps in service quality, and reducing overcrowding at secondary and tertiary care hospitals. As part of this effort, the Revised Quality Supervision Tool for Primary Medical Care Institutions in Sri Lanka was published in 2020 and is available on the DHQS website.

This revised tool facilitates periodic supervision to assess the quality of care at PMCIs and monitor improvements over time. Since maintaining high-quality health care services requires a deliberate and consistent effort, heads of PMCIs are encouraged to evaluate the quality of their institutions and implement corrective and preventive actions as necessary. With this guidance, Provincial and Regional Directors can ensure that PMCIs have the required capabilities to meet the health care needs of their populations.

The revised supervision tool evaluates multiple areas, including general infrastructure facilities and cleanliness, the availability of human resources, customer feedback mechanisms, adequate medical equipment, emergency care services, clinic facilities, the functioning of Healthy Lifestyle Clinics, pharmacy and laboratory facilities, storage facilities, kitchen quality, and patient satisfaction.

Considering the new dimensions of health care quality and safety, the following aspects of health require focused attention:

- Patient care process
- Quality of care giving
- Health screening
- Health promotion

- Medication safety in patient management
- Infection prevention & control
- Clinical audits
- Waste management
- Employee satisfaction
- Continuous monitoring of quality indicators

Staff members from various levels of hospitals are trained by the DHQS as Master Trainers using the *Manual for Health Care Quality and Safety*, which is available on the DHQS website. This manual provides a comprehensive overview of quality and safety concepts, quality improvement techniques, and the implementation of quality improvement programmes. It serves as a practical guide for implementing quality and safety measures in health care institutions.

The revised *National Policy on Health Care Quality and Safety (2022)*, the *National Strategic Plan on Health Care Quality and Safety 2021-2025*, and the *National Action Plan on Medication Safety (2021)* also offer valuable guidance for improving quality and safety in PMCIs. Additionally, the DHQS has developed quality indicators and guidelines tailored for use in Divisional Hospitals. These include the 20 general quality indicators, circulars on hand hygiene compliance, guidelines for proper maintenance of BHTs and associated formats, and incident reporting guidelines. These resources can be referred to as needed to enhance quality and safety within the Divisional Hospital context.

21.2 Implementing Quality and Safety of Health Care at Institutional Level

This section focuses on ensuring the quality and safety of health care delivered by your institution.

Ensuring quality & safety of health care will:

i) Improve the quality of services provided.
ii) Safeguard the well-being of both clients and staff.
iii) Facilitate supervision and reviews of the institution's health care quality and safety practices.

21.2.1 How Can We Implement Quality and Safety of Health Care at Institutional Level?

i) The MOIC should take overall leadership of the quality and safety programme. It is essential to appoint a focal point for health care quality and safety at your institution, which could be an MO, RMO, NO, DA, or MA.

ii) In collaboration with the MO/QMU in the respective RDHS area, identify areas for improvement based on feasibility and available resources. Develop a

Quality Improvement Action Plan by referring to the relevant guidelines mentioned above.

iii) Inform and create awareness among staff regarding the importance of health care quality and safety through capacity-building initiatives.

iv) Ensure that all staff members are familiar with the action plan and understand the standards that need to be followed and maintained.

v) Conduct an initial assessment, preferably using the *Quality Supervision Tool for PMCIs in Sri Lanka* published in 2020, and use this as a baseline assessment. Ensure adherence to the latest version of the tool available.

vi) Implement a few quality and safety-related activities at your institution, as outlined below.

a) 5S concept implementation

b) Improvements in services involving patient contacts (reception area, immediate service points, and frontline services, responsiveness, medical/pharmaceutical supplies & storage, and equipment management)

c) Patient care-related activities (reduce waiting time, inward patient care, adverse event reporting, clinical audits, medication safety, infection prevention & control)

d) Overall quality and safety improvement (waste management, improve sanitation, health education activities, leadership and management, productivity and quality improvement programme)

vii) Periodic assessments should be conducted at regular intervals (quarterly) to measure progress from the baseline.

viii) Quarterly assessment reports should be submitted to the QMU at the RDHS office.

ix) Results should be discussed and shared with staff at the institution.

x) Further quality improvements should be implemented based on the evaluation results.

21.2.2 Initiatives that can be Implemented:

i) Applying Kaizen/ Gemba Kaizen techniques

ii) Carrying out initiatives such as establishing Work Improvement Teams (WIT). Work Improvement Teams may comprise of small numbers of people with a particular talent or interest. For each area/activity selected, follow the steps below. The starting point will depend on the current status of health care quality and safety activities being implemented in the hospital.

a) Assess the current status.
b) Compare the current status with the standards given in the reference documents mentioned above.
c) Identify any gaps, shortcomings or deficiencies.
d) Find out the reasons for identified gaps.
e) Take corrective action.
f) Display the achievements in your ward/unit.
g) Discuss the findings with your staff.

iii) Training of staff on health care quality & safety
iv) Training of staff on respective profession-related subject matters
v) Continuous supervision and reviews
vi) Staff and patient satisfaction surveys
vii) Keep suggestion boxes in appropriate locations
viii) Introduce a no-blame culture for adverse event reporting
ix) Staff / unit appraisal, and facilitation for ensuring quality & safety
x) Participation at the Regional, Provincial and National-level Productivity and Quality Award competitions

21.3 Patient Centred Health Care (PCHC):

Patient-centredness is a key element of quality in health care. It is essential to provide patient-centred services to individuals visiting health care institutions. The patient is the most significant individual in a health care delivery institution. The Institute of Medicine (IOM) defines patient-centred care as "providing care that is respectful of, and responsive to, individual patient preferences, needs, and values, and ensuring that patient values guide all clinical decisions." Patient-centred care involves caring for patients and their families in ways that are meaningful and valuable to the individual. This approach includes listening to, informing, and involving patients in their care.

However, health care systems frequently adopt a problem-oriented, physician-centred approach to service delivery and documentation. In such systems, patients often play a passive role while physicians make management decisions based on the history, clinical examination findings, and investigations. The management plan is typically determined by the physician's expertise, with minimal or no patient involvement in decision-making.

When patients visit a health care institution, they expect comprehensive care, coordination of services, timely care delivery, clear and reliable communication, convenience, respect, empathy, the opportunity to express their needs and be heard effectively, continuity and stability of care, and equitable service provision based on their needs.

Unfortunately, instances of patient dissatisfaction are commonly observed in health care institutions. Such displeasure often arises from poor communication, including inadequate explanations of medical conditions and management plans, a lack of empathy, rude behaviour by staff, long waiting times at OPDs and clinics, delays in multiple queues for laboratory investigations and pharmacies, the unavailability of medications, and the financial burden of out-of-pocket expenses.

Adopting a patient-centred health care approach can significantly enhance patient perceptions and improve the quality of care delivered.

Currently, some initiatives related to patient-centred care are being implemented in health care institutions. These efforts are encouraged, coordinated, and monitored by the Ministry of Health:

i) Patient satisfaction surveys
ii) OPD and clinic patient waiting time surveys
iii) Establishment of suggestion boxes in hospitals
iv) Grievance redress mechanism
v) Networking of health care institution for minimizing delays
vi) Hospital development committees

Further, the Directorate of Health Care Quality and Safety (DHQS) of the Ministry of Health has issued guidelines, supervision tools, formats, and circulars aimed at improving quality and safety in health care institutions, facilitating the implementation of PCHC.

Transitioning the health care system to a PCHC model requires immediate, short-term, and long-term actions. This process should include frequent, well-planned training sessions for staff to emphasize the importance of PCHC and foster a shift in attitude towards patients, enabling the delivery of high-quality and safe services.

Additionally, it is essential to provide the necessary logistics and human resources to create both external and internal patient-contact environments that are aligned with a patient-centered approach.

21.3.1 How to Implement a Patient-centered Health Care System in the Hospital

i) Physical environment:

   a) The external environment of a health institution should be maintained to create a pleasant atmosphere for both patients and employees.

   b) Name boards should be displayed in all three languages.

   c) The hospital sitemap should be prominently displayed.

   d) Direction boards should be placed at each junction for easy navigation.

e) The garden should be kept well-maintained.

f) Garbage bins should be strategically placed at necessary locations.

ii) OPD, ER, Clinic and in-ward settings:

a) A reception area with a trained officer should be available to welcome and assist patients.

b) The OPD, emergency room, clinic premises, and wards should be clearly labelled for easy identification.

c) A spacious waiting area with adequate seating should be provided for patients attending the OPD or clinics.

d) The premises should be clean, well-lit, and well-ventilated to ensure a comfortable environment.

e) Sitting areas and walking paths should be established for inpatients and visitors.

f) Health topics can be displayed on television screens in waiting areas, and health talks can be conducted by staff members.

g) Safe and clean drinking water should be available to patients and visitors at all times.

h) Every effort should be made to minimise waiting times in the OPD.

i) Patient satisfaction surveys and OPD/clinic waiting time surveys can be conducted to gather feedback and identify areas for improvement.

j) A suggestion box equipped with stationery and a pen should be provided for client feedback. The administration should check the box regularly and take necessary measures to address and resolve issues based on suggestions.

k) Inpatients should be provided with a bed and clean linen, with steps taken to ensure privacy during examinations.

l) Wards should be maintained as pleasant environments, with clean and hygienic toilets and bathrooms.

m) Patients and their families should be treated with respect, and all their queries should be addressed. They should also be included in the decision-making process regarding the patient's care.

n) Patients should be treated with dignity, kindness, empathy, and understanding, particularly regarding their concerns about their illness.

o) Attention should be given to the patient's physical needs and emotional well-being.

p) The preferences, values, cultural traditions, and socioeconomic conditions of patients and their families should be respected.

q) Family members should be kept informed of the patient's progress through direct and timely updates.

iii) Supportive services including Laboratory services and Pharmacy:

a) An efficient, accurate, and patient-friendly service should be provided, ensuring minimal delays.

b) Procedures should be clearly explained, with adequate information and instructions given to patients.

c) Patient queries should be promptly addressed.

d) Emergency cases must be attended to without delay.

e) Patients should be treated with empathy and respect at all times.

f) Adequate seating facilities should be provided in waiting areas for patients' comfort.

g) A suggestion box equipped with stationery should be made available for patients to provide feedback and comments.

h) Online appointment systems should be established wherever possible to facilitate routine procedures.

References:

Directorate of Healthcare Quality and Safety: https://www.quality.health.gov.lk/index.php?lang=en

Institute of Medicine. *Crossing the quality chasm: a new health system for the 21st century*. National Academy Press, Washington, DC, USA (2001).

Lohr, K. N., & Schroeder, S. A. (1990). A strategy for quality assurance in Medicare. *New England Journal of Medicine*, 322(10), 707-12. doi: 10.1056/nejm199003083221031.

World Health Organization. Quality of Care. Retrieved from https://www.who.int/health-topics/quality-of-care#tab=tab_1

CHAPTER 22
HOSPITAL HEALTH INFORMATION SYSTEM / MAINTENANCE OF MEDICAL RECORDS

Medical records serve as essential sources of health information. Relevant, reliable, accurate, and timely health information enables health managers at all levels to make informed decisions regarding health services. The health information generated at the Divisional Hospital level is utilised not only at the institutional level but also at the district, provincial, and national levels for various purposes, including health planning, resource allocation, forecasting, and research. Since the quality of data at Divisional Hospitals is directly reflected in the aggregated data at higher levels, it is the primary responsibility of the Medical Officer in Charge to ensure the proper maintenance of medical records.

This chapter outlines the key medical records that must be maintained at Divisional Hospitals in Sri Lanka.

Main Types of Health Records Maintained in Divisional Hospitals

Main types of medical records maintained at Divisional Hospitals include clinical records, registers and returns.

22.1 Clinical Records

i) Bed Head Ticket (BHT)

The Bed Head Ticket (BHT) is a critical medico-legal document containing information about individual patients admitted for inpatient care. A BHT is issued for each patient at the time of admission, bearing a serial number (Admission Number), which is renewed annually. Each BHT must accurately record the following information: patient reference number (Admission Number), patient name, home address, sex, age, marital status, religion, ethnicity, the name and address of a parent/guardian/relation, date and time of admission, ward, date of discharge, and the principal final diagnosis.

The daily status, including symptoms, observations, analyses, progress, prescriptions, physical examination findings, and investigation results, must be recorded legibly in chronological order. Each entry should include the date, time, and initials of the attending medical officer. The final diagnosis or cause of death must be written clearly in block capital letters in the designated section of the BHT. The use of abbreviations and vague symptoms is strictly prohibited (e.g., "S.O.B.," "R.T.A.," or "Fever"). Further guidance on maintaining BHTs can be found in the *Guidelines for Proper Maintenance of the Bed Head Ticket* (Letter No. HQSH/01/2022 dated 27/08/2022 – Annexure 22.1).

When a child is accompanied by the mother (bystander), two BHTs must be issued under the same admission number. The term "guardian" must be written on the top of the mother's BHT, which is used solely for dieting purposes. However, only the patient should be registered in the Hospital Admission Register and the Ward Admission Register. If a newborn infant is treated as an inpatient, a separate BHT must be created for the infant after registering in the Hospital Admission Register. In such cases, prescriptions must be written on the infant's BHT and not on the mother's.

BHTs for all discharged patients must be submitted to the officer-in-charge of inpatient statistics within 24 hours of discharge. No BHTs for discharged patients should remain in the ward for any reason. For deceased patients, the BHT must not be sent to the Registrar for death registration purposes. Instead, a completed death certificate on Form 417112 must be provided. If a BHT is required for an inquest, it must be retrieved from the Medical Records Room. All staff must take utmost care to prevent the loss or misplacement of BHTs.
BHTs for discharged patients must be stored for a minimum of five years. Judicial BHTs required for medico-legal purposes must be retained for 25 years. Further details can be referred to in the *Guidelines for Proper Maintenance of the Bed Head Ticket* (Letter No. HQSH/01/2022 dated 27/08/2022 – Annexure 22.1).

ii) Clinic Records

Each patient attending a clinic must be issued a suitable record that includes basic demographic information and details related to the disease condition and its management. This record should be issued in duplicate, with one copy retained by the patient and the other kept at the clinic. In some selected hospitals, this process has been digitised through health information systems, as discussed in Chapter 23.

22.2 Registers

i) Hospital Admission Register

All patients admitted to the hospital must be registered in the Hospital Admission Register.

ii) Ward Admission Register

Ward Admission Registers must be maintained under the following headings. Monthly serial number, patient record number, name of the patient, address, sex, marital status, religion, date and time of admission, date of discharge, status of discharge, diagnosis and remarks.

iii) Birth Register

All births (live and still) over 28 weeks of gestation must be recorded in the Birth Register. Birth Register must be maintained under the following headings;

Serial number (yearly / monthly), patient record number, disk number, date and time of delivery, sex and weight of child, name of child, Medical Officer on duty, Sister on duty, case taken by, marital status, place of marriage, mother's name and nationality, name of father, occupation of father, presentation, mode of delivery, tear, post partum hemorrhage, blood group and ward.

iv) In-patient Disease Register

The primary source of information on disease patterns is the Inpatient Disease Register, which is maintained by extracting data from patient records. A printed register, along with an index, is provided by the Medical Statistics Unit of the Ministry of Health to all institutions to facilitate accurate and efficient recording.

All Bed Head Tickets (BHTs) of discharged patients, including transfers, must be sent from the ward to the officer responsible for maintaining the Inpatient Disease Register within 24 hours of discharge. Before submitting the BHTs, the nursing staff must ensure that all entries are complete.

v) Hospital Notification Register

Notification is a vital source of epidemiological information, enabling the early detection of disease outbreaks and allowing health authorities to take immediate action to control their spread. It also supports planning for curative and preventive care and evaluating the effectiveness of measures implemented to control and prevent diseases. The surveillance of communicable diseases relies on a system of notification for specific diseases.

The *Quarantine and Prevention of Diseases Ordinance of 1897* and its subsequent amendments provide the legal framework for implementing this system. Under this ordinance, every practitioner treating a patient with a notifiable disease must report the case to the Medical Officer of Health (MOH) in the area where the patient resides.

All cases of notifiable diseases must be reported based on clinical suspicion, without waiting for a confirmed diagnosis. It is essential to complete the Notification Card clearly and accurately, including details such as the MOH area and the patient’s address. Divisional Hospitals must maintain a single hospital notification register for recording all notifications related to in-patient and out-patient cases.

vi) Outdoor Patient Register

An Outpatient Department (OPD) Register must be maintained to record details of each outpatient, including the serial number (OPD number), patient name, sex, age, and details of subsequent visits. The date, along with the number of first visits and follow-up visits for each day, should also be recorded. These figures are determined based on the numbers issued to OPD patients.

vii) Clinic Register

A Clinic Register should be maintained in each type of clinic. Information such as date of clinic, number of first visits and subsequent visits have to be recorded and this information has to be summarized at the end of the month.

viii) Other Registers

It is necessary for a Hospital Administrator to do an assessment of the various services carried out in the hospital. Therefore, registers have to be maintained to record necessary information on subjects such as immunization (Pentavalent, polio, measles, tetanus toxoid, BCG, JE, ARV and other vaccines), dressings, performance of dental surgeons, surgical procedures performed etc.

22.3 Statistical Returns

i) Quarterly Indoor Morbidity and Mortality Return (IMMR)

The IMMR provides a quarterly summary of the Inpatient Disease Register, offering valuable information such as total admissions, patient days for the quarter, and deaths referred for inquest. Reviewing the IMMR before submitting it to the Medical Statistics Unit of the Ministry of Health enables the Hospital Administrator to gather critical insights. This information can be used for purposes such as reallocating beds, planning drug requirements, investigating deaths, and other planning activities.

All Divisional Hospitals providing inpatient care are required to submit the IMMR quarterly to the Medical Statistics Unit through the Regional Director of Health Services (RDHS) and Provincial Director of Health Services (PDHS). The number of discharges and deaths categorised by diseases or disease groups must be compiled using data from the Inpatient Register, which originates from Bed Head Tickets (BHTs).

The IMMR serves as a quarterly summary of the Inpatient Disease Register, providing data on total admissions, patient days, and deaths occurring within 48 hours of admission. This process, once manual, has been digitised and is now submitted through the Health Information System (HIS) as the eIMMR, in accordance with General Circular No: 01-30/2012.

ii) Quarterly Outdoor & Clinic Return

The total number of treatment days, first visits, and subsequent visits recorded in the OPD and clinic registers must be consolidated for each quarter. This

consolidated information should then be accurately entered into the Outdoor and Clinic Return for submission.

iii) Monthly Maternity Return (H 830)

The information required to complete the Monthly Maternity Return must be obtained from the Birth Register and the Ward Admission Register, which are maintained in hospitals with maternity wards.

iv) Annual Bed Strength Return

The information necessary to complete the return must be obtained by doing a physical count of all beds in the hospital as on 31st December, each year. The ward number, type of ward, number of patient beds and other beds must be recorded in the return.

v) Staff Return

Information of medical and paramedical staff in position as of 31st December must be recorded in the staff return. Any personnel serving in the hospital in a visiting capacity should be recorded separately.

vi) Monthly Dental Return (H1201(a))

All Dental Surgeons should record their daily performance in the monthly Dental Return and the daily recording made should be consolidated at the end of the month.

vii) Immunization Return

The immunization Return has to be completed and submitted to the MOH quarterly.

viii) Family Planning Return (H 1200A)

New acceptors of family planning must be recorded on Form 1200. This form serves both as a reporting document and as a register, as it is completed in duplicate.

Note: Above mentioned are the commonly maintained records, registers and returns in the hospitals. However, there are other records, registers and returns issued time to time according to timely needs. Please refer your respective PDHS, RDHS and Ministry of Health web site and resources for further information.

CHAPTER 23
DIGITAL TRANSFORMATION AND MANAGEMENT OF ELECTRONIC MEDICAL RECORDS

Health information is a fundamental pillar of the health system. The use of paper-based health information systems has revealed several challenges, including the unavailability of real-time data, limited accessibility, and poor data quality, all of which hinder timely and informed decision-making.

The Health Information System (HIS) has transformed the way health information is used for decision-making. An HIS encompasses all sources of health data necessary for providing health care and for planning, implementing, monitoring, and evaluating national health strategies and action plans.

Sri Lanka is advancing its health sector through the adoption of eHealth and digital health technologies. Electronic Patient Records (EPRs) play a pivotal role in delivering health care through digital means. Medical Administrators will find it beneficial to study HIS implementation and management to support administrative activities within their institutions.

Digital transformation refers to the adoption of digital technologies by an organisation to digitise non-digital products, services, or operations. It is a multi-step process that involves converting manual processes into automated electronic systems. According to the World Health Organization (WHO), the basic elements required for this transformation are described as the building blocks of digital health. For a digital health intervention to be sustainable, six critical areas—outlined in Figure 23.1—must be developed concurrently.

Figure 23.1: Seven building blocks of Digital Health (Source: WHO-ITU strategy tool kit)

23.1 Digital Health Blueprint Architecture for Sri Lanka

The Digital transformation encompasses governance, clinical care, public health, education, and health administration. The Sri Lanka Digital Health Blueprint (DHB) outlines the Ministry of Health's strategy for advancing digital health. It aims to standardise and organise the country's digital health infrastructure to align with national health care goals, while streamlining the digitalisation of the health sector to optimise resources during financial constraints.

A key component of the DHB is the National Electronic Health Record (NeHR), which will provide a lifelong health record for individuals from birth to death. Interoperability and effective information sharing are recognised as critical to the success of digital health systems and their practical use. The proposed digital health platform will support the delivery of these components and functions.

The DHB also outlines additional digital health deliverables, including point-of-care services, central registries, centralised services, document repositories, authentication services, audit trails, information dashboards, and a national health data exchange. Future investments in digital health must align with the DHB and its implementation roadmap. The blueprint will be updated as needed to incorporate advancements in technology, ensuring it remains relevant and effective

23.2 Digital Transformation of Patient Records

The digitalisation of a patient's health record is a critical component of any health care service delivery process. Several types of digitalised patient records are utilised to support this process, each serving distinct purposes within the health care system.

i) Electronic Medical Record (EMR)

An EMR is a computer-based information system designed to collect, store, and display information related to patient encounters. It serves as a digital version of paper-based medical records, containing personal and clinical information about a patient's interactions with a single practice or health care institution. Examples of EMR systems include HIMS, HHIMS, and Cloud HIMS.

ii) Personal Health Record (PHR)

A PHR is an electronic application that allows patients to maintain and manage their health information, as well as the health information of others for whom they are authorised, within a private, secure, and confidential environment.

iii) Electronic Health Record (EHR)

An EHR is an electronically managed repository of an individual's personal health information, maintained from birth to death. It serves as a longitudinal record of health care, documenting the care provided to a particular recipient by various health care providers and professionals. When managed by a central governance body, this repository is referred to as the National Electronic Health Record (NeHR)**.**

Digital transformation is an ongoing and dynamic process. Its concepts, methods, and models are subject to frequent updates due to the rapid advancements in technology.

The following sections provide a brief overview of some initiatives undertaken by the Ministry of Health (MoH) to advance the digital transformation of medical records using the resources currently available.

23.3 Electronic Medical Record (EMR) Systems

By the end of 2022, four patient care-related information systems were in use in state-sector hospitals in Sri Lanka. These systems collect individual medical information and include the Hospital Health Information Systems (HHIMS), Hospital Information Management Systems (HIMS), Open MRS-based cluster information systems, and the Cloud-based Hospital Information Management System (Cloud HIMS).

The Cloud HIMS is utilised primarily for non-communicable disease screening, while the HIMS and HHIMS are used to manage hospital Outpatient Departments (OPD) and selected clinics. By December 2022, nearly 12 million Personal Health Numbers had been issued through these systems.

An ideal Electronic Medical Record (EMR) system should include key components such as a patient registration module, an admission, discharge, and transfer (ADT) module, clinical modules for OPDs, clinics, and wards, as well as laboratory, radiology information system, and pharmacy modules.

Another significant Health Information System (HIS) is Swastha, which functions as a logistics management information system for medical supplies. This system is managed in coordination with the Medical Supplies Division of the Ministry of Health, ensuring the efficient distribution and tracking of medical resources

23.3.1 Personal Health Number (PHN)

Allocating a unique digital number for each patient is a critical aspect of digital transformation in the health care sector. In Sri Lanka, the Personal Health Number (PHN) is used to link health care recipients to their respective health records. The PHN is a unique identifier assigned to a health care recipient upon their first interaction with the health care system.

The PHN is composed of three components, designed to ensure accuracy and consistency in connecting patients with their health records. This system plays a vital role in streamlining health care delivery and facilitating efficient management of digital health records.

.**Table 23.1:** PHN details explained

Point of Issue ID (POI)	Random alphanumeric String	Check Digit
XXXX (4-digit alpha numeric string)	XXX XXX (6-character alpha numeric string)	C

The Health Information Unit (HIU**)** of the Ministry of Health serves as the issuing authority responsible for assigning identification numbers to points of issue, referred to as the Both state and private health care institutions are Point

of Issue ID (POI ID)**.** required to request and obtain their POI ID from the HIU to ensure proper identification and standardisation within the health information system.

23.4 Implementation of an EMR System at a hospital

Implementing an Electronic Medical Record (EMR) system in a hospital is a multistep process. Once the decision is made to implement the HHIMS at a particular hospital, the Director of Health Information must be officially notified through the appropriate channels to ensure proper coordination and compliance with established procedures.

- Any request to implement the HIM system at a particular hospital must be made through the proper channels to the Director - HI.
- Health Information Focal Points (HIFP) at RDHS and PDHS levels shall be aware of the requests made by the hospitals under their purview and shall coordinate the process.
- HIU will coordinate with the relevant government body for ICT assistance (E.g. ICTA) to assign a provincial technical coordinator, who will provide technical support throughout the process.
- The availability of a health informatician is a key success factor in the implementation. The Institutional Health Informatician is responsible for project coordination.
- For institutions that do not have a Health Informatician, HIU will assist the capacity building of a suitable Medical Officer as the focal point to facilitate the process.
- The project could be funded by the Health Information Unit of the Ministry of Health, Provincial Ministries or through special projects.
- Provincial Ministries are encouraged to utilize funds received under certain projects to purchase necessary infrastructure for implementation.

Once the process is approved, several steps must be completed before the records can be considered fully digitalised. These steps include initiating a Health Information Committee (HIC**)** within the institution, selecting the sections to be digitalised, identifying hardware requirements (including servers and devices), determining networking needs, establishing stable internet connectivity, implementing information security protocols, building staff capacity for the digital transformation, and documenting the entire process.

A summary of a typical digitalisation process is presented in Figure 23.2 below, outlining these key steps for reference and guidance.

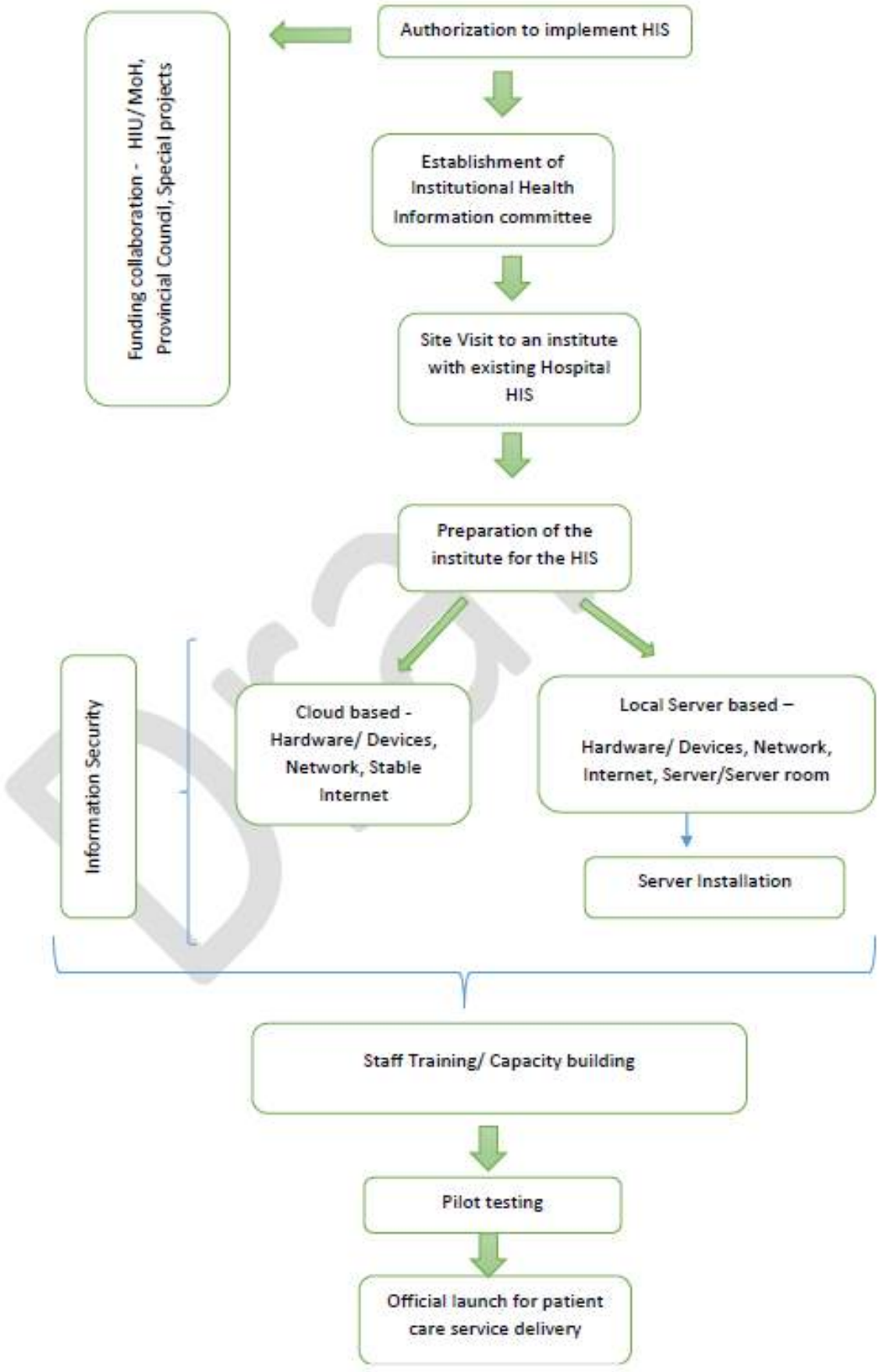


Figure 23.2 Steps of a digitalization process digitalization process

CHAPTER 24
MEDICAL ETHICS AND PATIENT RIGHTS

24.1 Introduction

Medical ethics are the moral principles that govern the practice of medicine. Even though the term was introduced first in 1803 by the English physician Thomas Percival, ethics has been an integral part of medicine from the time of the Greek physician Hippocrates, not forgetting the physicians and surgeons like Charaka and Sushruta who practiced ethical medicine in ancient India. The concept of medicine as a profession is said to have originated in the time of Hippocrates, where physicians were expected to make a public promise, or profess, that they will consider the interests of their patients above their own interests.

In addition to being dedicated to the well-being of others, practitioners of medicine are expected to acquire a specialized body of knowledge, attitudes and skills that its members must teach the next generation of physicians, and also expand by way of research. Members of the profession should have high moral standards and be guided by a code of ethics.

Since the end of the Second World War, medical ethics have been indelibly influenced by the developments in human rights, starting from the milestone document '*The Universal Declaration of Human Rights*' introduced at the United Nations General Assembly in 1948. This and many other international human rights documents provide the basis for introducing the ethical principles of respect for persons, autonomy and justice, into modern versions of physician's oaths and codes of ethics, making them acceptable beyond national and cultural boundaries.

24.2 Professional Ethics

Professionalism is commonly understood as an individual's adherence to a set of standards, code of conduct or collection of qualities that characterize accepted practice within a particular field. Medical professionalism extends to the relationships a medical professional has with the patient, colleagues, other health professionals, other health workers and society. The *International Code of Medical Ethics* (2022), formulated by the World Medical Association (WMA) (Source 1), is a set of guidelines that describes the duties of a physician towards his patients and his colleagues. Similarly, in the nursing profession, there are codes of ethics describing the duties and ethical obligations of nurses towards their patients and colleagues i.e., the *Code of Ethics for Nurses* developed by the American Nurses Association (ANA) (Source 2).

The Sri Lanka Medical Council is a statutory body established for the purpose of protecting health care seekers by ensuring the maintenance of academic and professional standards, discipline and ethical practice by health professionals who are registered with it. The Sri Lanka Medical Council has published *Guidelines on Ethical Conduct for Medical & Dental Practitioners Registered with the Sri Lanka Medical Council* (Source 4) and *Sri Lanka Medical Council Instructions on Serious Professional Misconduct to Medical Practitioners and Dentists* (Source 5) to support medical and dental practitioners to uphold the highest level of ethical standards in their practice.

While certain categories of staff are trained in ethical practice and guided by formal codes of ethics during their basic training, health care institutions also employ staff who may not have received formal training in medical ethics or professionalism. Nevertheless, it is crucial to ensure that all health care employees uphold ethical principles in the delivery of services.

To achieve this, the Head of the institution must foster and promote the development of an ethical environment that influences the behavior of all categories of health care workers. Establishing Hospital Ethics Committees (HECs) is recommended for all health care institutions.

HECs differ from Ethics Review Committees (ERCs), which are responsible for approving research protocols. Instead, HECs are designed to assist in resolving ethical dilemmas that arise in clinical practice and to address conflicts among health care workers. These committees play a vital role in maintaining ethical standards and promoting professionalism across the institution.

The guidelines or standards published by the American Association of Professional Coders (AAPC) (Source 3) outline the conduct and workplace ethics expected of employees in health care institutions. These guidelines are presented in the following eight provisions. The term *'health care professionals'* encompasses physicians, nurses, and other professional categories, reflecting the broad spectrum of roles involved in health care delivery.

Given below is the concise version of the *American Association of Professional Coders* (AAPC) standards for health care ethics as applicable to Sri Lanka.

i) Dignity, Relationship Building and Understanding

Healthcare professionals must treat patients with respect and uphold human dignity. It is important that patients participate in their own recoveries.

ii) Patient-Centered Care, Professional Boundaries and Teamwork

Care providers should promote wellness among individual patients, groups, and entire populations. They must maintain a professional distance from patients so as not to interfere with the privacy of the patients.

While providing service, health care professionals should never exploit patients

for personal gain. In addition, health care personnel must work together and in collaboration with other multidisciplinary teams to meet the expectations of the patients and the institution.

iii) Confidentiality and Information Security

Healthcare professionals are obligated to guard the physical safety and information privacy of patients. This includes revealing information in a professional manner, and only on a need to know basis, to the appropriate individuals. Incidentally, it is obligatory that health care professionals always inform patients and get their consent when researchers will use their information for studies.

iv) Accountability and Responsibility

Healthcare professionals are responsible for following standards of care when delegating tasks, conducting research, training peers, educating patients and performing administrative duties. They must hold themselves to a standard that rises far above organizational policies.

v) Self-Respect, Growth and Character

Healthcare professionals have an ethical and professional duty to always maintain the integrity of their discipline, and to respect themselves as they do their patients.

vi) Moral and Ethical Leadership

Healthcare professionals have an ethical obligation to participate in the improvement and advancement of their fields. This includes developing, nurturing and upholding work environments that support medical professionals in meeting their moral responsibilities. Healthcare administrators have a responsibility to ensure that health care professionals' views related to safety and working conditions are heard, and should act on appropriate suggestions to improve conditions in the institution.

vii) Healthcare Activism through Advocacy and Leadership

Healthcare professionals are responsible for contributing to the definition of their scope of practice. Ethical health care employees collaborate with professional associations to ensure their field continues to advance and represent the public's best interest.

viii) Community and Professional Partnerships

Medical professionals have a duty to be aware of community needs as well as national and global health issues. Further, they have a responsibility to use that information to protect the public from health threats. While performing these duties, health care professionals and other workers should consider how community, cultural, social and religious influences may affect treatment outcomes.

24.3 Patient Rights

Patient rights are a subset of human rights. While human rights establish the minimum standards for how individuals can expect to be treated, ethics refers to the customary standards for how individuals should treat others. Every patient right is derived from one or more underlying ethical principles. Ensuring that patient rights are protected during care is as important as adhering to the ethical guidelines that govern the conduct and attitudes of health care providers.

All medical professionals must respect patients' rights to be heard, to understand their health conditions, and to be informed about available treatments. Patients have the right to be made aware of their diagnosis and to receive the necessary information to make informed decisions about their care without coercion from health professionals. These rights are rooted in the ethical principles of patient autonomy and informed consent.

The *Sri Lanka Medical Association, Declaration on Health 1995* outlines the rights and responsibilities of patients and the public in Sri Lanka (Source 6).

Sources:

1. WMA, International Code of Medical Ethics, 2022
2. American Nurses Association, ANA, 2015
3. American Association of Professional Coders (AAPC) https://www.aapc.com/aboutus/integrity.aspx
4. Guidelines on Ethical Conduct for Medical & Dental Practitioners registered with the Sri Lanka Medical Council (https://slmc.gov.lk/images/PDF_Main_Site/EthicalConduct2021-12.pdf)
5. Sri Lanka Medical Council Instructions on Serious Professional Misconduct to Medical Practitioners and Dentists (https://slmc.gov.lk/images/PDF_Main_Site/serious%20professional%20misconduct2021-12.pdf)
6. Sri Lanka Medical Association, *DECLARATION ON HEALTH*, 1995, (https://slma.lk/wp-content/uploads/2018/09/SLMA-Dec-on-Health-261103.pdf) *(amended in* 2005)

CHAPTER 25
COMMUNICATION

Communication is an important functional component of human lives to build relationships and share ideas. Communication eases the day-to-day activities of people and having good communication skills is essential for all kinds of professionals and in general.

25.1 Definition

"Communication is about sharing information from one person to another person or a group of people" (1).

Communication is a complex process involving at least one sender, a message, a mode of communication, and one receiver. The sender encodes a message, which is then transmitted to the receiver, who decodes it to form an understanding of the intended idea. However, this process can often result in disparities between the intended message and the message as perceived by the receiver. There are number of factors that could interfere with communication and some of them are illustrated in figure 1.

25.2 Noise in Communication

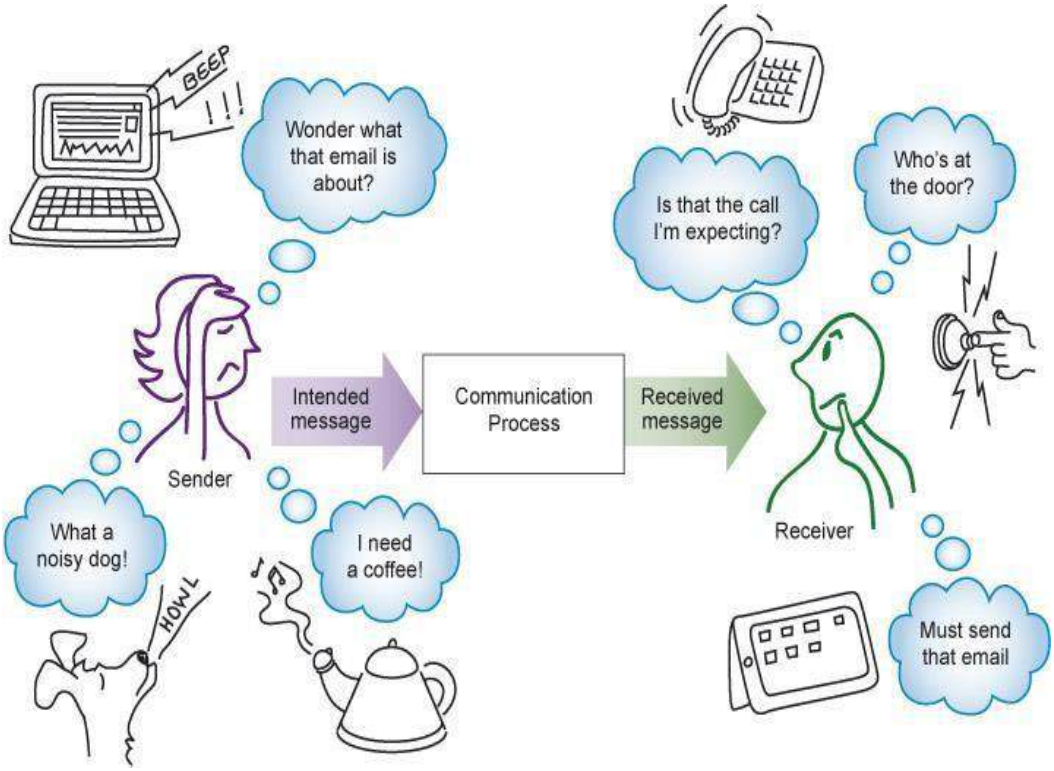


Figure 25.1: Pictorial Representation of "Noise in Real life communication" (2)

Communication is influenced by emotions, cultural settings, the medium used, and the location. These factors can affect how messages are conveyed and understood.

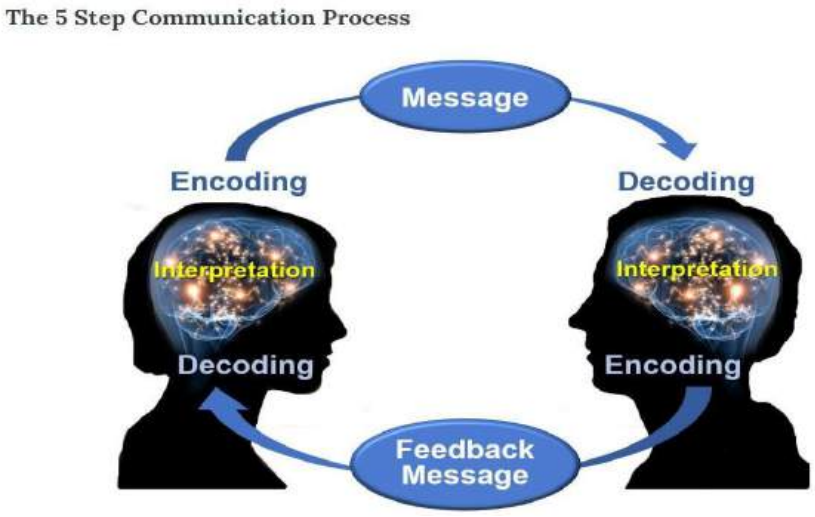


Figure 25.2: The Osgood-Schramm model of communication. Sources: Kisspng, 2018; Web Editor 4, 2017 (3)

25.3 Process of Communication

Step 1: Idea Formation – Sender perceives the idea of communication for a definitive purpose

Step 2: Encoding – Sender encodes the message in to words, symbols, gestures etc to best convey the message.

Step 3: Selecting a medium of transmission – Sender selects one or more mediums of transmission ex: written document, letter or email or in combination several modes of transmission

Step 4: Decoding the message: Receiver (or group of receivers) decodes the message and understand fully or partially the intended message

Step 5: Feedback – Very important part of the communication part where receiver communicates back with the sender to check the comprehensiveness of the intended message

25.4 Methods of Communication

i) Verbal: Spoken words of a specific language are used to convey messages across to people. This method could involve face-to-face communication, meetings, telephone, video calls etc.
ii) Nonverbal: This method involves facial expressions, posture, eye contacts, gestures and overall body movements

iii) Written communication: Uses the words of a specific language in written formats to convey a message

iv) Visual communication: A powerful method of communication that uses drawings, graphic designs, illustrations, colours, typography, signs, and electronic resources to convey messages.

Table 25.1 outlines the various modes of transmission based on the type of communication.

Table 25.1: Message Transmission Mediums for Verbal, Written and Visual Communication Methods

Verbal	Written	Visual
In person speech ex: One to one, group discussions, meetings etc	Letters	Drawings and paintings
Phone conversations	Reports, minutes, articles, essays etc	Photos, Graphic designs
Radio, television and other electronic media like 'YouTube'	Email, whatsapp, viber, text messages etc	Body language
Voice over internet Protocol – Skype, Whatsapp etc	Memos, circulars, guidelines, notices	Graphs
Voicemail message	Blogs	Font types
Podcast	Tweet	Architecture
Intercom	Papers – newspapers, gazette, tabloids and other written formats	Semaphore

25.5 Effective Communication

i) Language Skills**:** Both the sender and receiver should use a language they are comfortable with for effective communication. Language barriers, including those caused by physical or intellectual disabilities, must also be considered.

ii) Formulation of the Message: The sender should craft the message with the recipient's language abilities in mind to ensure the communication achieves its intended purpose.

iii) Method of Communication: Both the sender and receiver should feel comfortable with the chosen method of communication, taking into account any physical or intellectual limitations.

iv) Transmission of the Message: The transmission mode should align with the selected communication method to ensure the message is effectively delivered.

v) Verification of the Message: Both the sender and receiver must confirm that the intended message has been accurately delivered. Feedback and asking questions play a vital role in this verification process.

Following methods might help you improve your communication skills (1)

i.) "Active listening – This means paying attention and truly listening
ii.) Body language – This means being aware of your own body language and how this comes across to other people and also being aware of the other person's body language.
iii.) Ask questions and provide feedback – This ensures engagement from you as the receiver of the message.
iv.) Make eye contact.
v.) Be clear and to the point.
vi.) Take notes.
vii.) Proof read before sending anything in writing.
viii.) Use a strong, confident speaking voice – Particularly important when you are doing a presentation.
ix.) Avoid using filler words – 'Like', 'um' and 'so' are all filler words and should be avoided where possible.
x.) Be intentional about your non-verbal communication – Make an effort to display positive body language. You should use body language to support your verbal communication, for example if you feel confused or unhappy". (Quote: ref 1)

25.6 Communication in Healthcare Settings

Healthcare workers may communicate with following categories

i) Administrative hierarchy
ii) Clients – Patients and their kins; and other service seekers
iii) Staff of the health care institutions
iv) Other health care institutions
v) Stakeholders – Governmental organizations, private sector organizations, NGOs and other stake holders (Suwa Sewa Mithuro and other community organizations)
vi) Media – needs prior approval from relevant authorities

The MOIC and staff should be fully aware of proper communication procedures before initiating any form of communication. All staff members must adhere to established communication guidelines and, when in doubt, seek advice from the relevant authorities.

The sender must exercise caution regarding the content of the message, the mode of transmission, and the communication pathway. Abusive language must be strictly avoided, and communications should not adversely impact any party.

All forms of communication, including implied communications, are considered

formal for health care workers and should be acted upon accordingly. Additionally, factual information learned through professional experience or training should serve as the foundation for all communications.

25.7 Management of Communications

This involves the systematic planning, implementation, monitoring, and revision of all communication channels within the health care institution and between organisations. Communication management includes organising and disseminating new communication directives related to the health care organisation through the available communication networks. Newer communication technologies are increasingly popular and encouraged as measures to reduce reliance on paper-based communication.

The following key aspects should be considered in effectively managing communication strategies within a health care institution:

- Inward communication
- Within the institution communications (with clients and the staff)
- Outward communication

Please see the chapter 2 and annexes for further information.

25.7.1 Inward Communication

All forms of communications received by the institution are considered as inward communications. Verbal communications may be recorded as statements or converted to written format prior to take action.

Healthcare institution can receive communications from numerous originators where majority of communications are relevant to administrative processes of the institution. Course of action with regard to the communication as follows.

i) Registration of communications – Inward register, communication books/files, email register etc.
ii) Dissemination and discussion of the communication with relevant staff members
iii) Discuss with administrative hierarchy where relevant
iv) Dissemination and discussion with other stake holders where relevant
v) Formulation of feedback, reply or answers
vi) Complete the intended purpose of communication

Types of communications available within a health care institution

- Written (Paper based): Letters, registers, circulars, forms and formats etc.
- Written (Electronic or web based): Computer assisted documentary and information management systems (See chapter 22)
- Visual: Signage systems, Bill boards, Notices, Symbols, colours etc.

25.7.2 Communication within the Organizations

Communication within the organization occurs with staff, clients and with other stake holders

i.) Communication with the staff

Communication within the institutional staff can take various forms, such as meetings, notices, electronic media messages, emails, memos, and internal circulars. All verbal communications should be transcribed into written formats, such as meeting minutes, and may be recorded in communication books, complaint books, or other official records for documentation and reference.

ii.) Communication with clients

Communication with clients must be conducted with the utmost care and sensitivity. MOIC may designate a responsible officer to handle client communication, ensuring that interactions are managed effectively. Additionally, communication training sessions should be organised as needed, tailored to the local context.

When communicating with clients, health communication models should be taken into consideration. Health communication, a specialised subset of communication, focuses on how individuals in society strive to maintain health and address health-related concerns. It encompasses the dissemination, access, and interpretation of health-related messages, ensuring that these messages are clear, accurate, and impactful.

iii.) Patient – centered communication

Patient-centered care encourages active collaboration and shared decision-making between patients, families, and providers. The objective is to strengthen patient empowerment and allow patients to gain greater control over decisions and actions relating to their health. To reach this goal, patients should feel heard and understood by their provider, those who do, are more motivated to act and do what is necessary for recovery and therefore have a higher likelihood of a positive health outcome. Empowered patients are more enthusiastic about their care and, or ready to understand and learn what they should do to recover and continue with a healthy lifestyle. Effective communication, empathy, and

soft skills are what help patients feel they are receiving high-quality care with a health care provider they can trust and work together with.

Decision-making is facilitated by information. Therefore, client satisfaction depends on the extent to which expectations for information are met. When clients receive too little information or when communication barriers exist between them and the health professional, they are more likely to either refuse treatment or reduce compliance. Clients should therefore be fully informed about their conditions and the available treatment alternatives.

iv.) Communication with other stakeholders

MOIC may work directly with stake holders like ‘Suwa Seva Mithuro’ (Friends in health service) and other community organizations. Meetings with these organizations are considered as formal and should be supported by minutes. MOIC is responsible for communicating appropriately with the outside organizations under direct guidance of immediate supervisor.

25.7.3 Outward Communications

Outward communication is primarily directed towards the administrative hierarchy to address administrative issues. However, the Medical Officer in Charge (MOIC) may also need to communicate with other organisations to ensure the smooth functioning of the institution. All outward communications should be recorded and kept with the subject officer for future references. Document and file management systems are described in chapter 2. Written formats of communications are used to exchange messages with other governmental and non-governmental organizations. Outward communications are often generated after a wide discussion and evaluation of the topic under consideration. All outward communications should be made with utmost care and in accordance with laid guidelines and instructions.

Some outward communications take place via web-based systems. The MOIC must ensure that all electronic communications are attended to in a timely manner. This includes daily email checks and prompt actions on received messages. The MOIC may designate a responsible person to manage electronic communications, ensuring that messages are properly disseminated to relevant officers or individuals.

To maintain accountability, all outward communications must be recorded, and communication activities should be regularly traced to verify that all responsibilities are fulfilled. The MOIC should distribute communication responsibilities among designated staff members to ensure efficiency and compliance with institutional requirements.

25.8 Message to MOIC

MOIC should regard all forms of communication as essential inputs for enhancing the institution's functions. Proper management of communications is therefore critical for maintaining services and fostering the institution's development.

The MOIC is responsible for ensuring that all communications are appropriately attended to and that all activities comply with administrative requirements and approvals. Since general audits rely heavily on documentary evidence, the MOIC must ensure that all communications are clear and well-documented to justify any actions taken.

References

1. https://cpdonline.co.uk/knowledge-base/business/different-communication-methods/
2. https://www.open.edu/openlearncreate/mod/oucontent/view.php?id=81611&extra=thumbnailfigure_idm437
3. https://pressbooks.senecacollege.ca/buscomm/chapter/1-3-the-communication-process/

CHAPTER 26
PROMOTING A HEALTHY WORKPLACE: HEALTH PROMOTION HOSPITAL SETTING

26.1 Introduction

The *National Health Promotion Policy* of the Ministry of Health (2015) recognises the integration of health promotion and preventive services into curative health care delivery within curative institutions as a cost-effective approach to improving quality of life. Community engagement is identified as a key strategy, and the empanelment of service recipients under the current primary health care reorganisation serves as an effective mechanism for fostering such engagement.

- **Expected Standard:** The management establishes conditions for the development of the hospital as a healthy workplace.
- **Objective:** To support the establishment of a healthy and safe workplace and to support health promotion activities for the staff.

26.2 Guiding Principles for Strengthening of Health Promotion Hospital Settings

i) Empowerment of hospital community on determinants of their health.
ii) Participation of all members of hospital community.
iii) Holistic approach to all components of health.
iv) Intersectoral coordination with all non-health entities.
v) Equitable services to all members of hospital community.
vi) Sustainable measures incorporated to ensure continuity.
vii) Incorporation of multiple strategies and variety of approaches.

26.3 Hospital Health Promotion Setting:

i.) Goal

Improved health and wellbeing of all members of the hospital community.

ii.) General Objective

To empower the hospital community to establish a sustainable health environment in the hospital that addresses needs of their all-health aspects.

iii.) Specific Objectives

a) To establish a setting that provides patient centered care in a healing environment.
b) To establish a safe, supportive and healthy environment that promotes a healthy lifestyle among all members in the hospital community.

c) To engage with all relevant health and non-health partners in establishing a sustainable health promoting setting.

26.3.1 Establishing a Health Promoting Hospital Setting:

Primary process criteria / indicators that define a hospital as a health promoting setting.

i) Availability of a hospital health promotion committee to addresses health promotion.
ii) Availability of a written hospital health promotion policy.
iii) Availability of health education / health promotion unit in the hospital.
iv) Availability of staff trained in health communication / health education / health promotion.
v) Evidence of partnership with stakeholders of health and non-health entities.

The above objectives and criteria are given in *Establishment of hospital health promoting settings: A guideline for health care staff*, 2021, Health Promotion Bureau, Ministry of Health, 2021. Each curative institution is expected to follow and adopt these guidelines to suit the local conditions and the specific environment.

26.3.2 Global Standards for Health Promotion Hospitals

From a global perspective, the *World Health Organization (WHO) Standards for Health Promotion in Hospitals* should also be adhered to. Several of these global standards are already incorporated into Sri Lankan guidelines. The five key global standards for health promotion in hospitals are:

i.) Promoting a healthy workplace
- Standard: Management establishes conditions for the development of the hospital as a healthy workplace.
- Objective: To support the establishment of a healthy and safe workplace and to support health promotion activities for the staff.

ii.) Management policy
- Standard: The organization has a written policy for health promotion. The policy is implemented as a part of the overall organization quality improvement system, aiming at improving health outcomes. This policy should be aimed at patients, relatives and staff.
- Objective: To describe the framework for the organizations activities concerning health promotion as an integral part of the organizations quality management system.

iii.) Patient assessment

- Standard: The organization ensures that health professionals, in partnership with patients. Systematically assess needs for health promotion activities.
- Objective: To support patient treatment, improve prognosis, and to promote the health and wellbeing of patients.

iv.) Patient information and intervention

- Standard: The organization provides patients with information on significant factors concerning their disease or health condition and health promotion interventions are established in all patient management pathways.
- Objective: To ensure that the patient is informed about planned activities, to empower the patient in an active partnership in planned activities and to facilitate integration of health promotion activities in all patient management pathways.

v.) Continuity and cooperation

- Standard: The organization has a planned approach to collaborate with other health service levels and other institutions and sectors on an ongoing basis.
- Objective: To ensure collaboration with relevant providers and to initiate partnerships to optimize the integration of health promotion activities in patient management pathways.

26.4 Monitoring and evaluation of Standard 1:

26.4.1 Promoting a Healthy Workplace: Health Promotion Hospital Setting

An annual self-evaluation can be conducted by the institution as a tool for monitoring progress and providing guidance. Currently, Sri Lanka is focusing on the standard "Promoting a Healthy Workplace: Health Promoting Hospital Setting" as the initial standard. A basic framework for self-evaluation is outlined below to support the *development of a health-promoting hospital setting*.

Each component under the following four indicators can be assessed qualitatively using a three-point scale: Yes, Partly, and No.

1. The organization ensures the establishment and implementation of a comprehensive human resources strategy that includes the development and training of staff in health promotion skills.
    a. A performance appraisal system (on health promotion) is available
    b. A continuing professional development (on health promotion) exists
    c. New staff receives an induction training (on health promotion)
    d. Training plans (on health promotion) are set up
    e. Above training plans are achieved during the year

f. Working practices are developed by multidisciplinary teams
g. Staff knowledge on health promotion is assessed through surveys.

2. The organization ensures the establishment and implementation of a policy for healthy and safe workplace providing occupational health services for staff.
    a. The guideline on establishment of hospital health promotion settings of ministry of health 2021 is followed.
    b. Workplace risks are identified.
    c. Staff comply with health and safety requirements (Vaccinations, Universal precautions etc.).
    d. Smoking free workplace.
    e. Betel chewing free workplace.
    f. Information on diet and physical exercise are offered to all staff categories.
    g. Staff's experience with quality, choice and access to healthy food is assessed through surveys.
    h. Hospital food establishments follows health ministry guidelines on a healthy canteen.

3. The organization ensures the involvement of staff in decisions impacting on the staff's working environment: staff involvement in hospital policy making, audit and reviews.

4. The organization ensures availability of procedures to develop and maintain staff awareness on health issues.
    a. Education sessions are offered to staff
    b. Health policies (smoking, betel chewing, substance abuse, physical activity) are available.
    c. Annual staff surveys are carried out including an assessment of individual behavior, knowledge on supportive services/policies and participation on educational sessions offered by the organization.
    d. Staff are aware of risk management procedures.

26.5 A Few Examples of Quantitative Complementary Monitoring Indicators

i) % short-term absenteeism
ii) % work related injuries
iii) % of staff smoking (habitual, non-work hours)
iv) % of staff chewing betel (habitual, non-work hours)
v) % of staff participating in in-service education activities
vi) % of staff participating in health promotion activities within the hospital
vii) % staff coming to office by bicycle

26.6 Composition of a Hospital Health Promotion Committee in a Divisional Hospital

i) Head of the institution
ii) Nursing officer In-charge
iii) Health education nursing officer

A hospital health promotion policy has to be prepared under the guidance of the respective RDHS. Technical guidance can be obtained from a consultant community physician if required.

CHAPTER 27
LANDSCAPING

27.1 Introduction

Hospital landscaping goes beyond aesthetics; it should provide shade, tranquillity, and opportunities to connect with nature while ensuring the safety of patients, visitors, and hospital staff. Effective landscaping creates a welcoming, clean, and organised environment, fostering a sense of well-being. A beautifully designed hospital setting enhances staff morale and patient satisfaction by offering pleasant and secure surroundings.

27.2 Landscaping Criteria

27.2.1 Safety

i) The parking area must be clean and safe, with clear and visible signage.

ii) Walkways should remain accessible and safe for all users.

iii) Paths must be wide enough to accommodate wheelchairs and pedestrians walking side by side. They should have smooth surfaces to avoid impeding wheelchair wheels or snagging wheeled IV poles.

iv) Overgrown bushes or trees must not obscure important directions.

v) The area should be free from clumps of mowed grass, leaf litter, or other unsightly debris.

vi) There should be no hazardous items that could cause trips, falls, or injuries, such as unprotected wells, open drains, unsafe pits, or unstable walls.

vii) Measures must be taken to eliminate mosquito breeding grounds.

viii) Essential areas, including the main entrance and exit, must be well-lit at night to ensure safety.

27.2.2 Keep it Green

i) Patients and health care workers value green spaces and gardens for the numerous benefits they provide.

ii) Layered landscapes featuring shade trees, lush greenery, herbal plants, flowers, and shrubs of varying heights are essential for creating a healing and restorative atmosphere.

27.2.3 Make it Therapeutic

i) The most effective therapeutic landscaping goes beyond visual appeal; it should offer gardens that engage all the senses, allowing people to

touch, smell, and hear their surroundings.

ii) Ornamental grasses provide numerous benefits and help attract birds and butterflies, enhancing the garden's charm and delighting patients and hospital staff.

iii) A front entrance adorned with colourful flowers and lush plants brings a sense of calm and beauty, helping to relieve stress.

iv) Strongly fragrant flowers or other odours should be avoided, as some patients may be sensitive to certain smells.

27.3 Selection of Staff and Role of Each Staff in Landscaping.

i.) Selected employees for landscaping should be well trained and skilled.

ii.) A committee from the hospital staff should be appointed for monitoring and supervising the landscaping works.

iii.) Supervision rounds should be conducted once a month.

27.4 Training of staff

i.) Proper trainings on landscaping shall be arranged with the support and the guidance of Department of National Botanical Gardens, Sri Lanka

27.5 Motivation

i. A specific area should be allocated to each individual, to create a sense of responsibility and personal interest.

ii. Competitions at different levels (Institutional, District, and National.) should be organized to select the best land, landscaping worker /team and certificates or letters of appreciation for winners should be sent to their personal files. (Following the ‘eAc¿ 230 B’ format)

iii. Special motivational programs should be conducted to make everyone feel a sense of interest in landscaping.

27.6 Supply of Equipment

The following equipment may be required for landscaping:

Wheelbarrows, rakes, hedge shears, pruning saws, large gardening forks, personalised garden forks, lawn mowers, trimmers, edge trimmers, edge blowers, spreaders, sprayers, equipment trailers, buckets, lawn bags, and grass cutter machines.

.

CHAPTER 28
DEVELOPING A FIRE PREPAREDNESS PLAN

The potential occurrence of a fire within a hospital environment poses a significant threat to the safety of both patients and staff. Fire incidents, as a natural hazard, require proactive planning to minimise risks and ensure safety. Risk assessment techniques play a crucial role in identifying the likelihood of such events and evaluating their potential impact on the hospital and the surrounding community.
A thorough understanding of emergency preparedness strategies, as outlined in established guidelines and literature, is essential for mitigating the consequences of a fire.

28.1 Fire in a Hospital

The The occurrence of a fire in a hospital setting poses a significant threat for several reasons. Such incidents can result in devastating consequences, including loss of life, injuries to patients and staff, and extensive damage to property and equipment. Vulnerable groups, such as elderly individuals, pregnant women, children, bedridden patients, and those with disabilities or impaired mobility, may face considerable challenges during evacuation. Fires can also disrupt routine hospital operations, which are critical to patient care and recovery.

Studies have identified cooking as the most common cause of fires in hospitals, although other factors such as electrical malfunctions and heat-producing equipment, including irons, may also contribute to these events. Rebuilding a hospital after a fire is often a complex, costly, and time-consuming process. Therefore, understanding key concepts related to fires is essential for developing effective fire preparedness and response plans.

28.2 Fire Triangle

The The fire triangle is a fundamental concept used to explain how fires ignite, sustain, and can be extinguished. It consists of three essential components: oxygen, fuel, and heat. When these three elements combine, a chemical reaction occurs, resulting in a fire.

Oxygen is a critical element of the fire triangle as it supports the combustion process. Without oxygen, a fire cannot ignite or continue burning. Fuel provides the material necessary to sustain the fire and can exist in solid, liquid, or gaseous forms. The combustibility of fuel varies depending on its type. Heat is the energy required to initiate the chemical reaction that leads to fire. Sources of heat can include open flames, sparks, electrical equipment, or hot surfaces.

To extinguish a fire, at least one component of the fire triangle must be removed. This can be done by cutting off the oxygen supply, eliminating the fuel source, or reducing the temperature below the ignition point. Understanding the fire triangle is essential for taking preventive measures against fires and responding effectively when they occur.

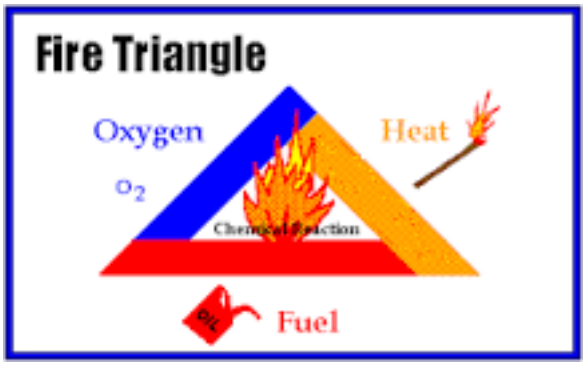


Figure 28.1 Fire Triangle

28.3 Fire Risk Assessment

The risk assessment methodology outlined in the chapter on emergency preparedness can be effectively applied to fire safety by addressing hazard, vulnerability, and capacity aspects. Fire risk assessment is a systematic process that evaluates the potential risks associated with fire in a Divisional Hospital (DH) and its activities. This process helps to determine the likelihood of a fire occurring and the potential harm it could inflict on patients, staff, and visitors.

The assessment also evaluates the adequacy and effectiveness of existing fire safety measures and identifies whether additional control measures are required to minimize overall risks. By examining potential fire hazards, identifying vulnerabilities, and assessing the capacity to manage and respond to fires, appropriate actions can be implemented to prevent fires or mitigate their impact.

A comprehensive fire risk assessment helps to identify potential hazards and to establish measures to manage and reduce risks. This process is crucial for ensuring that DH facilities have robust fire safety measures in place and are adequately prepared to respond effectively in the event of a fire.

Area	Hospital
Hazard (Fire as a phenomenon that can cause damage to people, property, or environment)	What are the fire hazards within the DH premises?
	Can fire hazards in the neighborhood affect the hospital?
	Has the hospital experienced a fire in the recent past?
Vulnerability (Factors that increase the susceptibility to fire)	Are any parts of the hospital more vulnerable to fire risk than others? If so which parts?
	Are any persons in the hospital more vulnerable to fire than others? If so which individuals?
	Were any persons in the hospital more vulnerable to fire than others during past disasters? If so which persons?
Capacity (Attributes that could reduce the occurrence, spread and damage of fire)	What are the fire protection mechanisms available in the hospital?
	Are the contact numbers of the fire brigade available?
	Are fire extinguishers available in the hospital?
	Have any staff from the hospital been trained on firefighting?

To ensure that a Divisional Hospital (DH) facility is adequately prepared to prevent and respond to fires, it is crucial to engage in discussions with hospital staff using the guiding questions provided earlier. These discussions help identify potential fire hazards and vulnerabilities, enabling the implementation of appropriate measures to manage and reduce risks.

It is also advisable to liaise with the local fire brigade to seek their input and assistance in the event of a fire. Establishing a collaborative relationship with the fire brigade ensures both parties are well-prepared to respond effectively to fire emergencies and enhances the overall preparedness of the facility.

A fire risk assessment allows the determination of the hospital's fire risk level. This assessment serves as a foundation for planning activities aimed at preventing fires and preparing for effective responses should a fire occur. The findings from the risk assessment, along with the preventive and response measures adopted, should be documented in a comprehensive fire preparedness and response plan.

By having such a plan in place, DH facilities can enhance the safety of patients, staff, and visitors, while minimizing the potential impact of fires on the facility and its operations.

28.4 Fire Preparedness Activities

Here are 10 practical measures that can be taken to prevent and respond to fires in DH facilities:

i.) Seek the support of an electrician to take simple measures to prevent electrical fire, such as ensuring that electrical outlets and appliances are in good condition and not overloaded.
ii.) Prohibit smoking within the hospital premises, as smoking can be a significant source of fire.
iii.) Clearly mark evacuation routes and ensure that they are free from obstructions.
iv.) Ensure that evacuation routes, doors, and staircases are not blocked with clutter, as this could impede evacuation efforts.
v.) Designate a fire assembly point, where staff and patients can gather safely in the event of a fire.
vi.) Display fire preparedness signs throughout the facility, to ensure that staff and patients are aware of the potential risks and emergency procedures.
vii.) Have fire extinguishers readily available in strategic locations throughout the facility. If expensive fire extinguishers are not available, consider having a bucket of water and sand on hand as an alternative.
viii.) Determine a reliable method of warning the hospital about a fire evacuation, such as an electric bell, public announcement, or ringing a manual bell.
ix.) Assign a fire warden for each section/ward of the hospital, who can be responsible for ensuring that evacuation procedures are followed, and that the area is clear of people during a fire.
x.) Conduct regular fire safety training for all staff, to ensure that they are aware of fire safety protocols and how to respond in the event of a fire emergency.

28.5 Fire response activities

These steps are an effective guide for responding to a fire emergency:

i.) Sound the alarm: activate the fire alarm system to alert everyone in the building.

ii.) Call for assistance: Call the fire department, and the emergency number

(119), and provide them with relevant information such as the location of the fire, any injuries or trapped individuals, and the size of the fire.

iii.) Assist anyone who needs help: help individuals who are injured or need assistance evacuating.

iv.) Evacuate the building: exit the building immediately using the designated evacuation routes and assembly points. Assist physically impaired individuals as needed and do not use elevators.

v.) Use fire extinguishers carefully: use fire extinguishers only if you have been trained and it is safe to do so.

vi.) Assemble at a designated location: meet at a designated remote location to take a headcount and report any missing persons.

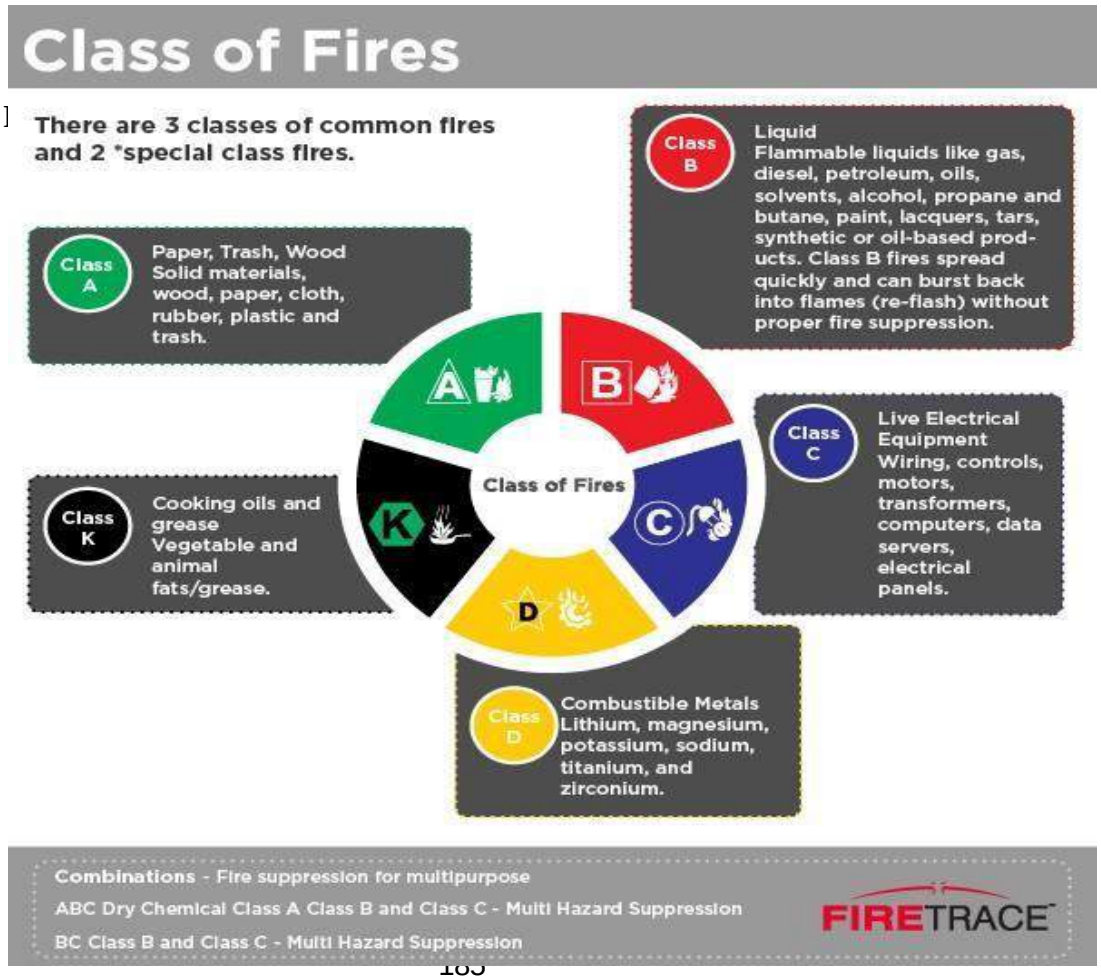
vii.) Report hazardous conditions: report any hazards or dangerous conditions that could start or contribute to a fire.

viii.) Stay low: if confronted with smoke, stay low and check closed doors for heat before opening them.

ix.) Stay away from the building: do not enter the building until it is declared safe to do so by the fire department or other authorized personnel.

28.6 Types of Fire

Fires are classified as A, B, C,D and K



28.7 Fire Extinguishers

Different types of fire extinguishers are specifically designed to address various classes of fires. For instance:

i.) Class A fire extinguishers are suitable for fires caused by wood, paper, textiles, and other materials that leave behind ash.

ii.) Class B fire extinguishers are designed to put out fires caused by flammable liquids, such as gasoline or oil.

iii.) Class C fire extinguishers are specifically made to extinguish fires caused by combustible metals, such as sodium, magnesium, or titanium.

iv.) Class D fire extinguishers are meant to extinguish fires that involve electrical equipment.

v.) Class F fire extinguishers are used for fires that involve cooking oils and fats, which can reignite even after being extinguished.

It is important to choose the extinguisher appropriate for the type of fire.

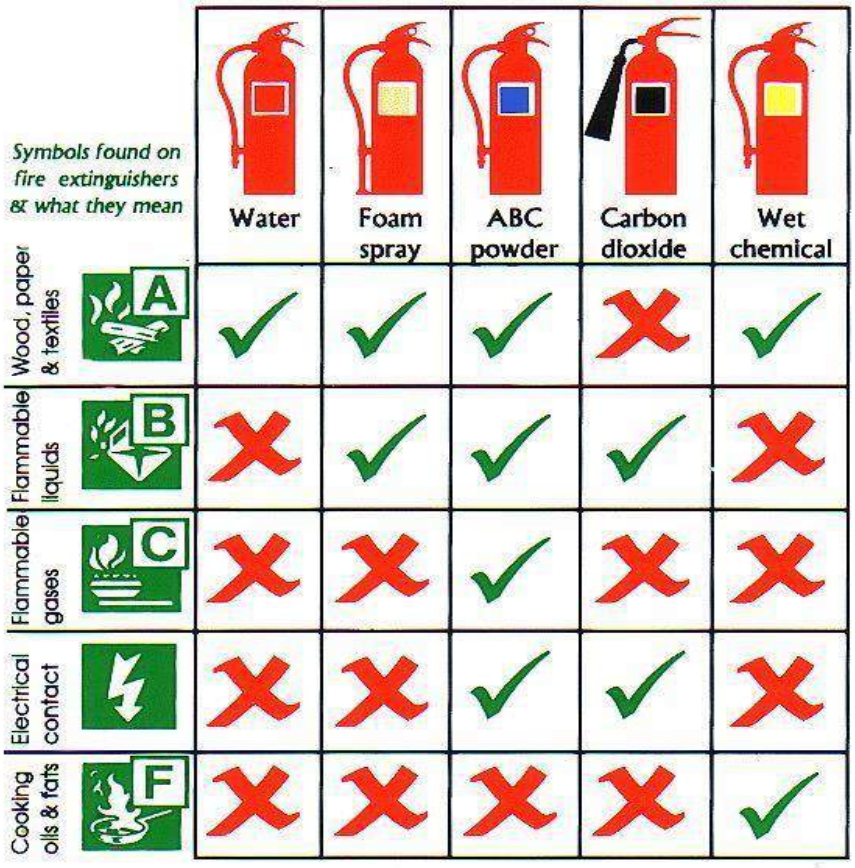


Figure 28. 3 - Type of extinguisher for the type of fire

Fire extinguishers have an expiry date. They need to be examined and refilled annually. Using an expired fire extinguisher can be risky, as it may not function as intended during an emergency.

28.8 Fire and Electricity Safety Concerns in the Minor Surgical Procedure room

28.8.1 Accidental fires in the minor surgical procedure room

Three factors contribute to accidental fires in a minor surgical procedure room.

i.) Closed environment
ii.) Flammable substances (Oxygen, Halothane, Ether and Spirits)
iii.) Sparking electrical equipment (Diathermy, Electric Motors)

These accidents could be avoided if minor surgical procedure room team pays attention to the following rules:

In case of Fire (The evacuation plan should be displayed in the Operation Theatre)

i.) Evacuate all persons and flammables

ii.) Switch off electricity

a. Periodical checking for Oxygen Leaks and proper disposal of empty cylinders.

b. Storage of all flammable liquids in closed containers in a safe place away from diathermy and other hazardous equipment.

c. Smoking in and outside the operation theatre should be strictly prohibited.

d. Keep fire extinguisher Handy.

iii.) Extinguish the fire

a. The minor surgical procedure room team should be aware of early detection of fires and fire extinguishing techniques.

28.8.2 Electrical Accidents in the Minor Surgical Procedure Room

The majority of modern equipment used in minor surgical procedure rooms is powered by electricity, necessitating specialised training and careful handling to prevent accidents. Each piece of electrical equipment must have a proper earth connection, an intact plug, and properly insulated wires. Periodic testing of the circuit breaker (trip switch) is essential to ensure it functions correctly.

Newer ceiling-mounted electrical outlet sockets are superior to traditional wall-mounted sockets, as the latter are prone to electrical leakage caused by repeated exposure to chemicals during carbolisation. Regular servicing by visiting technicians from the Electricity Board is highly recommended to maintain equipment safety and functionality.

All electrical equipment should have a dedicated personal file. This file should include details such as the date of purchase, warranty period, scheduled service dates, and records of completed services.

CHAPTER 29
COMMUNITY PARTICIPATION IN THE MANAGEMENT OF HOSPITALS

29.1 Introduction

Community participation in health sector (mainly in primary health care services) can be explained as the active involvement of the people living in the area individually or as an organization. It encourages the active participation of local residents to develop health institution, and sensitize the people to increase the receptivity and provision of health care. Thus, people are involved in decision making and implementing of health programmes. This enables sharing of social and economic resources for the betterment of health care provision in the institution and it is a cost-effective way of fulfilling the health needs of the community.

There is an allocated population for each health care institution which is called as the empaneled population. Empaneled population is expected to receive their primary health care services through the assigned institution. Hospital staff needs to closely work with people in this area to fulfill their health needs.

Therefore, it is advisable to form a committee to get the community help for the institution. The below mentioned steps can be followed to organize such a committee in 3the health institution.

i) Identification of the local community
ii) Identification of empaneled population and Grama Niladhari divisions
iii) Identification of main stakeholders in the area including,
    a) Government field officers including both health and non-health officers such as Grama Niladari of each Grama Niladari division, Development officer, Samurdhi Development officer, Agrarian officer, PHM and PHI etc.
    b) Political leaders of the area
    c) All the religious places of the area (Buddhist, Catholic,Islam,Hindu etc.) and get the support of the religious leaders.
    d) Government offices such as -Divisional secretary, Agriculture office, Agrarian service office, Government banks, police, and Schools etc.
    e) Other institutions and organizations such as NGOs, private sector organizations, and Community organizations such as business community, trade or industry, NGOs such as Red cross, St Jones, Sarvodaya, World vision, Sanasa, Village development society, Agriculture Society, Funeral aid society, retired government and private sector officers etc.

iv) Then call a meeting with the all above stakeholders and aware them regarding services/facilities available of DH and get support for the establishment of a **Hospital Development committee/ "Suwasewamithuro"**

29.2 Composition of the Committee

The committee should consist of not more than 10 to 15 members and shall consist of

a) The Divisional Secretary/ representative
b) Medical Officer of Health (MOH) / representative.
c) One or two Representatives from each non-Governmental organization,
d) Representatives from the Business Community Trade or Industry.
e) Persons nominated by the RDHS or Head of the Institution.

29.3 Functions of the Committee

(i) Representatives can participate in the Divisional Development committee meetings & identify the government workers and politicians and get help from them.
(ii) Raise awareness and demand for better community health services, and organize the community to use services provided by the health institution optimally and rationally
(iii) Organizing village level community clinics (NCD screening) with the support of volunteers
(iv) Support for the home visits which will be conducted by MOIC or Public Health Nursing Officers for needy patients
(v) Help resolve grievances at local level

29.4 Limitations to the functions of the committee

The members shall have no right to:-

i) Give instructions to the hospital employees on any matter whatsoever, and any complaints should be directed to the Head of the Institution
ii) Collect or accept money for or on behalf of the hospital without the prior approval of the proper authority.
iii) The members of the committee will not interfere in the General Management or Administration of the Hospital.
iv) No member should issue any Press release on matters pertaining to the work of the Institution.
v) Public, Press etc. should not be permitted to committee meetings without the expressed permission of the proper authority.

CHAPTER 30
REFERRAL SERVICES DEVELOPMENT

30.1. Introduction

Sri Lanka maintains high standards in public health care delivery compared to other countries in the region. The country has a well-structured health care system, encompassing primary, secondary, and tertiary care hospitals, along with specialized centers. At the upper levels of the hospital hierarchy, there are National Hospitals, Teaching Hospitals, Provincial General Hospitals, and District General Hospitals.

In addition to dedicated tertiary care hospitals, specialized care hospitals cater to a wide range of diseases, including cardiovascular conditions, psychiatric disorders, oncology, pediatrics, infectious diseases, and respiratory illnesses, serving a large and diverse patient population. Sri Lanka's health service heavily relies on a public health delivery system, which provides both preventive and curative care through dedicated teams for each service. This integrated approach ensures comprehensive health care for the population.

30.2. Levels of Care

The public curative health system in Sri Lanka is organized into three levels of care, based on the size of the institution and the range of services offered. These levels are categorized as primary, secondary, and tertiary care institutions.

Primary Health Care (PHC) institutions include Divisional Hospitals (DHs) and Primary Medical Care Units (PMCUs). DHs provide both inpatient and outpatient care, while PMCUs are limited to outpatient services.

Secondary care institutions, such as Base Hospitals Type A and B, serve as referral centers for DHs and PMCUs. These hospitals provide more advanced services and act as apex institutions for the primary care facilities.

Tertiary care institutions, including District General Hospitals (DGHs), Teaching Hospitals (THs), and a few Provincial General Hospitals (PGHs), offer all the services available at secondary care institutions along with the majority of ultra-specialties. This tier ensures comprehensive care, catering to a wide range of complex medical needs.

30.3. Patient Referral

A proper referral system is essential for improving the quality of patient care management. It can be defined as the process of transferring cases that exceed the technical competence of one health care facility to a higher-level facility with greater technical capabilities and resources to provide the required care.

A referral system is a two-way exchange of information. It includes returning patients to the referring facility for follow-up care, a process known as back referral. Back referral can be defined as the transfer of a patient from a higher-level health care facility back to the original facility, along with necessary instructions for the continuation or follow-up of care. Timely and accurate referrals are critical for saving patients' lives and fostering better communication among health care staff across different facilities.

Conversely, the absence of a well-regulated referral system can lead to overcrowding in secondary and tertiary care institutions, while primary medical care institutions (PMCIs) remain underutilised. A robust referral system ensures balanced utilisation of health care resources and enhances the efficiency and effectiveness of patient care.

30.4. Objectives

A comprehensive, efficient, and effective referral system should be practiced in every health care institution in order to achieve following objectives.

i.) To prevent further complications to the patient.

ii.) To send the patient safely and comfortably to a higher-level health care facility.

iii.) To minimize the time wastage of the client and the health staff.

iv.) To provide specialist care.

v.) To ensure maximum utilization of all types of available resources.

vi.) To minimize overcrowding in institutions and provide efficient prompt care to patients.

vii.) To improve the quality of care provided at secondary and tertiary care hospitals

viii.) To establish a sound link among hospitals in every level with prompt use of technologies such as EHR and HMIS.

30.5. Types of referrals

Referrals can be classified according to the severity of the patient

i. Urgent - Patient is likely to suffer harm if not referred immediately

ii. Elective - Patient is unlikely to suffer harm if not referred immediately but referral will gain long term benefit and reduces potential harm

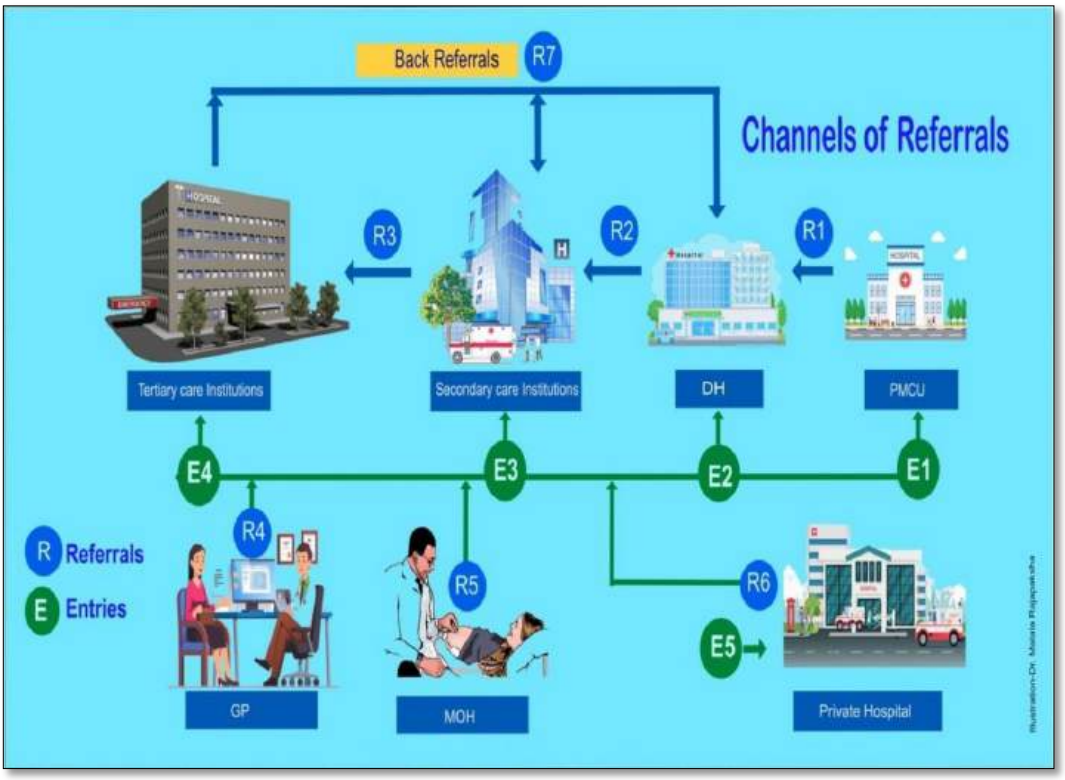


Figure 30.1 : Channels of Referrals

i.) From a general hospital to a specialized Hospital, e.g. From DGH to Nephrology Hospital

ii.) From one specialist to another specialist e.g., from general physician to cardiologist

iii.) From a general practitioner to any specialist or a hospital with inpatient care.

iv.) From a MOH to any specialist or a hospital

30.6. Guidelines

i.) Before transferring, the patient should be stabilized and all possible harms during the transfer should be avoided.

ii.) For acutely ill patients and in emergency situations the transferring authority should contact the receiving hospital and the patient condition should be accurately informed.

iii.) The receiver should take necessary steps to plan for subsequent activities related to the management of the patient, before they receive the patient.

iv.) The receiving hospital should not refuse the patient without any valid reason.

v.) A competent team with relevant equipment should carry the patient to the next institution to avoid any harm to the patient.

vi.) All types of General Practitioners (Western, Ayurwedic and others) should be involved with the referral system. Referrals from private hospitals and General practitioners (GP) should be welcome.

vii.) A referral system is not a one-way flow channel, and it is rather a dual way flow of patients. A back referral service should be considered as important, and practice whenever indicated to a place where the patient would be convenient for the follow up. Through a properly planned back referral the health provider in lower level will have a chance to improve their knowledge and skills.

CHAPTER 31
EMERGENCY PREPAREDNESS AND RESPONSE

The purpose of this chapter is to help identify potential hazards that could affect the DH, develop plans to address them, implement measures to enhance the hospital's preparedness and response capacity, and test these plans to minimize any impact on hospital operations during emergencies and disasters. By doing so, the DH can continue to provide essential services to the community even during times of crisis.

31.1 Risk Assessment

Risk assessment is a crucial first step in preparing a hospital for disasters and emergencies. It helps to identify potential hazards that could affect the hospital and its ability to continue providing essential services. The District Disaster Management Unit in the District Secretariat is a good resource for identifying possible hazards in the area. Engaging the hospital staff in a participatory risk assessment can also help identify hazards specific to the hospital. Once the hazards have been identified, appropriate measures can be taken to mitigate or minimize their impact on the hospital and its operations.

Here are some points that could be discussed with the hospital staff in carrying out a risk assessment:

Area	Hospital	Draining Community
Hazard (Agents that can cause damage to people, property, or environment)	What types of disasters can affect the hospital in future?	What disasters can affect the drainage community of the hospital?
	What types of disasters have affected the hospital in the last ten years?	What disasters have affected the drainage community of the hospital in the last ten years?
Vulnerability (Factors that increase the susceptibility to hazards)	Are any parts of the hospital more vulnerable to disasters than others? If so which parts?	Are any parts of the drainage community of the hospital more vulnerable to disasters than others? If so which parts?
	Were any parts of the hospital more vulnerable to disasters than others during past disasters? If so which parts?	Were any parts of the drainage community of the hospital more vulnerable for disasters than others during past disasters? If so which parts?
	Are any persons in the hospital more vulnerable to disasters	Are any persons in the drainage community of the hospital more

	than others? If so which persons?	vulnerable to disasters than others? If so which persons?
	Were any persons in the hospital more vulnerable for disasters than others during past disasters? If so which persons?	Were any persons in the drainage community of the hospital more vulnerable to disasters than others during past disasters? If so which persons?
Capacity (Attributes that could reduce impacts of the hazard)	What are the strengths of the hospital to face disasters in the future?	What are the strengths of the community of the hospital to face disasters in future?
	What were the strengths that the hospital had in managing disasters and emergencies in the past?	What were the strengths community of the hospital had in managing disasters and emergencies in the past?

The answers provided by the hospital staff to the above questions during the discussions should be recorded, and based on the above responses, the most important hazards that need to be taken into consideration, vulnerabilities, negative attributes that increase the disaster risk, and capacities, positive attribute that decrease the disaster risk, of the hospital as well as the community can be identified. The following format can be used to summarize the finding of the discussion, by listing out the top 3 hazards, vulnerabilities and capacities:

	Hospital	Community
Hazards	1.	1.
	2.	2.
	3.	3.
Capacities	1.	1.
	2.	2.
	3.	3.
Vulnerabilities	1.	1.
	2.	2.
	3.	3.

The best way is to prepare for all possible hazards; however, this is not feasible due to limited resources, and the uncertainty. Therefore, it is essential to identify and prioritise the main hazards that are most likely to impact the hospital and the community. A comprehensive plan should then be developed to address these priority hazards. In the event of a rare or unforeseen hazard, the same plan, with minimal modifications, can be adapted to respond effectively.

31.2 Preparedness Planning

Preparedness planning is a critical aspect of a hospital's emergency management programme. It involves implementing proactive measures to minimise the impact of

potential disasters or emergencies before they occur. To achieve this, hospitals can undertake the following recommended activities:

i.) Establishing a hospital disaster management committee: This committee can be created or incorporated into an existing hospital committee to focus on disaster management. It is crucial to ensure that all categories and levels of staff are well-represented on the committee, highlighting the importance given to disaster management within the hospital.

ii.) Conducting a risk assessment: By evaluating the potential hazards, vulnerabilities, and risks that the hospital might face, the hospital can develop a comprehensive emergency management plan to minimize the effects of potential disasters.

iii.) Developing a mass casualty response plan: Even if the risk assessment does not identify the need for a mass casualty response plan, it is advisable to prepare one. This plan can be used as a foundation to expand the preparedness program into other areas of interest.

iv.) Building a disaster cupboard: This cupboard ensures that the necessary supplies are available to implement the mass casualty plan during a disaster, which is an essential starting point in enhancing hospital preparedness.

v.) Maintaining updated emergency contact numbers: Preparing an updated list of emergency contact numbers for essential services such as police, fire brigade, referral hospitals, and neighboring hospitals is crucial.

vi.) Training the hospital staff: Hospital staff is a vital resource in disaster situations, so providing them with disaster management training on essential competencies required by the mass casualty plan can be a great starting point.

vii.) Training the community: The community can also be an asset in disaster response, so providing relevant training to patients, bystanders, volunteers, or community-based organizations during the preparedness period is essential. These training sessions can build connections and networking, which could be helpful during disaster response.

viii.) Conducting After Action Reviews: If the hospital responds to a disaster during the year, this provides an opportunity to test the hospital plan. A review meeting with all staff and stakeholders involved can identify the strengths, gaps, and areas for improvement in the hospital plan.

ix.) Testing the hospital disaster plan: The hospital disaster plan can be tested using a desktop simulation exercise, discussion based on a scenario or a drill, among other options.

x.) Updating the hospital preparedness plan and continuing the same steps: Disaster preparedness planning is ongoing, and hospitals should carry out the same steps every year to enhance their preparedness for any potential disasters or emergencies.

31.3 A Draft Schedule Hospital Disaster Management Plan

No.	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Responsibility	Outcome
	Establish hospital disaster management committee														
	Conduct a risk assessment														
	Develop a mass casualty response plan														
	Build a disaster cupboard														
	Have the emergency contact numbers ready														
	Train the staff														
	Train the community														
	After Action Review														
	Testing the hospital disaster plan														
	Update the hospital preparedness plan and continue the same steps next year														

31.4 Mass Casualty Incident

A mass casualty incident is defined as an event in which the number of casualties surpasses the capacity of a hospital or health care system to provide immediate and standard care to all patients. The ability to effectively manage such incidents depends heavily on the capacity of the health care facility, the preparedness of its infrastructure, and the ability of its staff to handle a sudden and significant influx of patients. Proper planning, training, and resource allocation are critical to ensuring an organised and effective response to such emergencies.

31.4.1 Mass Casualty Response Plan

Mass Mass casualty incidents can result from a variety of events, including road traffic accidents, natural disasters such as landslides, explosions, or civil unrest. While larger hospitals typically have specialised staff, equipment, and surgical supplies that are better suited to manage such incidents, it is equally important for smaller Divisional Hospitals (DHs) to be prepared. This is because mass casualty incidents can occur anywhere, and DHs are often the first point of contact for injured individuals. To ensure an effective response, DHs must establish appropriate protocols and train their staff to handle these emergencies competently.

A critical aspect of managing a mass casualty incident is the prioritisation of care for patients requiring urgent treatment. This is achieved through triage, a process of rapidly assessing and prioritising patients based on the severity of their injuries or illness and their likelihood of survival with immediate medical intervention. The primary goal of triage is to maximise the number of survivors while minimising fatalities, ensuring that available resources are used efficiently to provide the greatest benefit during such emergencies.

31.5 Triage

Triage is a critical process that helps prioritize casualties during a mass casualty incident based on their clinical condition and the available resources. The triage officer plays a vital role in ensuring that the limited resources are utilized efficiently to provide the best possible care for the maximum number of casualties. The triage officer assesses the casualties based on three clinical decisions, abbreviated as RPM 30:2:Can do which stands for Respiratory Rate more than 30, Perfusion as capillary refilling time more than 2 seconds, and the ability to obey a simple command (Can do).

i.) The first step of the triage process is to check if the person is breathing. If not, the airway should be opened, and the patient rechecked for breathing. If the person is still not breathing, they are categorized as black. If the respiratory rate is more than 30, the patient is categorized as red, and if not, they are categorized as yellow.

ii.) The second step is to check the capillary refilling time of the person. If it is more than 2 seconds, they are categorized as red, and if not, they are categorized as yellow.

iii.) The final step is to assess the patient's ability to obey a simple command, such as raising their hand or leg. If the patient cannot obey the command, they are categorized as red, and if they can, they are categorized as yellow.

iv.) All who pass “RPM 30:2: Can do” test are categorized as green.

Although the clinical decisions used in triage may seem simple, they are critical in ensuring that the limited resources are used efficiently to provide the best possible care for the maximum number of casualties. It is important that the triage officer is trained and experienced in trauma management to make accurate and timely decisions during a mass casualty incident.

After the triage officer categorizes the patients based on their clinical conditions, the patients should be immediately taken to the area designated for their level of care. This is important because the resources, staff, and equipment required for treating critically ill patients are different from those needed for treating patients with less severe injuries. The color-coded ribbon or band helps the medical staff identify and prioritize patients quickly and accurately, so that they can receive the appropriate level of care. It's important for the triage officer to focus on rapid assessment and categorization, rather than providing routine clinical management, to ensure that the most critically ill patients are treated first.

31.5.1 Management of the Triaged Casualties

Identified areas are designated as Red, Yellow, Green and Black areas during response planning.

i.) Red area: This area needs the most attention. Do lifesaving treatments here, stabilize the patient to the best of their ability and transfer the patient to hospital with surgical care. It is a good idea to place the resuscitation equipment in the red area.

ii.) Yellow area: This area needs the next attention. Treat the conditions if possible. Yellow patients can be transferred for further care if needed later.

iii.) Green area: This area needs the last attention. All patients, even in the green area should also be seen and provided treatment if needed.

iv.) Black area: Confirm the death of patients in this area. Discuss with the Judicial Medical Officer of the nearby base hospital about the medicolegal procedures. Postmortem may have to be performed in the DH itself or the dead bodies could be transferred to a base hospital for the above purpose.

Area Management Team (AMT) will perform the desired clinical activities in the respective areas. It is good to have more than one AMT, but in case it is not possible, the available AMT can rotate to the different casualty management areas.

It is understandable that the facilities available for the definitive management of most patients in the red area will not be available at DH level. The responsibility of the DH team is to stabilize the injuries and safely transport the patients to the base hospital with facilities.

To add to that, it's important to note that the designated areas should be clearly marked and communicated to all staff and emergency responders. It's also important to regularly check and adjust the areas as needed, based on the changing needs of the patients. The Area Management Team should work closely with the triage officer to ensure patients are being directed to the appropriate areas and receiving the necessary care. Additionally, the red and yellow areas should be located closest to the entrance to ensure quick access for emergency transport and evacuation if needed.

31.6 Activating the Mass Casualty Plan

Implementing an Incident Command System (ICS) is essential in managing a mass casualty incident at the DH level. Establishing a four-person ICS team is recommended in such situations includes:

i.) Incident Commander (IC): The IC is responsible for overall incident management and serves as the main decision maker. The IC should be a senior person with experience in emergency management.

ii.) Operations Section Chief (OSC): The OSC is responsible for managing the operational activities in the field. The OSC should be someone with experience in managing field operations during emergencies.

iii.) Triage Officer (TO): The TO is responsible for triaging patients as they arrive at the hospital and assigning them to the appropriate area based on their condition. The Should be a medical professional with experience in triaging patients during emergencies.

iv.) Information, Communication, and logistics Coordinator (ICLC): The ICLC plays a critical role in coordinating the flow of information, communication, and logistics during a mass casualty incident. They ensure that relevant information is collected, managed, and shared with relevant authorities, as advised by the incident commander. They also coordinate with external agencies, such as emergency services and local authorities, to arrange non-clinical logistical services that are needed for the response, such as transportation and equipment. Overall, the ICLC ensures that all aspects of the response are well-coordinated and effective.

It is important that each person in the ICS team has a clear understanding of their role and responsibilities. The team should also establish communication protocols to ensure effective communication among team members and with external agencies such as emergency services and the hospital command center. Implementing an ICS system can help to streamline the management of mass casualty incidents, ensure effective communication, and improve the overall outcome for patients.

It's important to have a plan in place for 24/7 response to mass casualty incidents, including on holidays and weekends. This plan should consider potential resource challenges and consider how to maintain mass casualty management services even under difficult circumstances.

The incident command system should also be flexible and adaptable to different situations. The specific roles and responsibilities can be adjusted to suit the needs of the hospital and the incident. Regular training and exercises can help to ensure that the incident command team is prepared and able to respond effectively in the event of a mass casualty incident.

31.7 Keep All Informed

Absolutely, clear, and effective communication is crucial during a mass casualty incident. It is important to establish a communication plan to ensure that all parties involved in the incident response can communicate effectively with each other. This includes communication within the hospital, with other health care facilities, emergency services, and with the families of the casualties.

In addition to keeping the base hospital and Regional Director of Health Services informed, it is also important to provide regular updates to the families of the casualties. This can help to reduce anxiety and provide them with reassurance that their loved ones are receiving appropriate care. Communication should be done in a compassionate and empathetic manner, and efforts should be made to ensure that families receive accurate and timely information.

During a mass casualty incident, it may also be necessary to communicate with the media and the public. This requires a coordinated and consistent approach to ensure that accurate information is provided and that there is no confusion or misinformation. A designated spokesperson or team, should be responsible for communicating with the media and the public, and clear protocols should be established in advance for handling media inquiries and providing updates to the public.

31.8 Managing Media

It's important to remember that patient privacy and confidentiality must be always respected, especially during a mass casualty incident. The hospital staff should prioritize patient care and safety over providing information to the media. The hospital's administration should have a policy in place for dealing with media inquiries during

emergencies, and all staff members should be trained on how to handle these situations. The media should be directed to the appropriate authorities for information, and hospital security should be prepared to manage any potential issues related to media presence.

Media may be eager to learn about the information. Please keep in mind that the administration of DH will not have permission to give information to the media. The information could be provided to the Regional Director of Health Services and refer the media to the RDHS. Or seeking the permission of RDHS before providing information to the media could be done. The staff should be polite to the media. Media should not be allowed to take photos or film videos within the hospital premises during a mass casualty incident.

31.9 Deactivate the Mass Casualty Plan

When all casualties have been managed, the hospital should resume the routine service provision. Deactivation of the mass casualty plan signifies this.

i. Conducting a warm debriefing

A debrief after a mass casualty response is important to identify what worked well and what could be improved upon in future incidents. The debrief should include all members of the response team, including clinical and non-clinical staff. It should be done as soon as possible after the incident, while the events are still fresh in everyone's mind.

During the debrief, it is important to focus on both the technical aspects of the response, such as the effectiveness of the triage process and the clinical care provided, as well as the emotional and psychological impact on the response team. This can help to identify any areas where additional training or support may be needed.

The debrief should be conducted in a respectful and supportive manner, with the goal of improving the hospital's response to future mass casualty incidents. All feedback should be constructive and focused on improvement, rather than placing blame or pointing fingers. It is important to create a safe environment where all team members feel comfortable sharing their thoughts and experiences.

ii. Conducting an After-Action Review (AAR)

An After-Action Review (AAR) is a systematic review process to identify what worked well and what did not work well during an incident response. It is an important step towards improving future responses.

The AAR should be conducted preferably within one week of the incident, and all those involved in the response should be invited, including outside agencies such as the police and ambulance service. The meeting should be brief and focused, with a clear agenda and objectives.

During the AAR, the following topics should be discussed:

a) What were the objectives of the response and were they achieved?
b) What went well during the response and why?
c) What did not go well during the response and why?
d) What improvements can be made for future responses?
e) Were there any challenges in communication and coordination among different agencies?
f) Were there any equipment or resource deficiencies that impacted the response?

All feedback and recommendations should be documented in an AAR report and shared with all relevant stakeholders. It is important to follow up on the recommendations and make necessary improvements for future responses.

CHAPTER 32
REHABILITATION

Rehabilitation is defined as "a set of interventions designed to optimise functioning and reduce disability in individuals with health conditions in interaction with their environment" (WHO, 2023). It involves restoring mental and/or physical abilities that have been lost due to injury or disease, enabling individuals to function in a normal or near-normal manner. The duration of rehabilitation varies based on the severity of the condition or impairment, with patients requiring short-term, medium-term, or long-term care. This chapter outlines the rehabilitative services provided at Divisional Hospitals (DHs) in Sri Lanka.

According to the *Sri Lanka Essential Services Package 2019*, all DHs are required to assess the rehabilitation needs of patients and refer them to specialised rehabilitation departments or apex hospitals as necessary. This includes identifying elderly patients and those with dementia who require home-based or institutional care. Patients with various conditions and impairments, such as stroke, spinal cord injuries, brain injuries, amputations, fractures, and other orthopaedic conditions (including post-surgical cases), can benefit from rehabilitation. Additionally, patients with chronic non-communicable diseases such as cancer, cardiovascular disorders, and chronic respiratory conditions, as well as those with neuromuscular disorders, cerebral palsy, and other paediatric conditions, are among those who may require rehabilitative support.

Rehabilitation services at DHs play a vital role in improving patient outcomes and supporting their reintegration into daily life.

Table 01: Rehabilitative services provided at Divisional Hospitals

Rehabilitative Service	Divisional hospitals providing the service
Assessment of rehabilitative requirements	All DH
Referral to Rehabilitation Department/Hospitals	All DH
Community Based Rehabilitation	Selected
Physiotherapy	Selected

(Source: Sri Lanka Essential Services Package 2019)

Selected Divisional Hospitals (DHs) will provide community-based rehabilitation and physiotherapy services, including rehabilitative care for mental health and home health care for the elderly. Community-based rehabilitation is a strategy integrated within general community development that focuses on rehabilitation, equalisation of opportunities, and social inclusion for individuals with disabilities. It is implemented through the combined efforts of individuals with disabilities, their families, communities, and relevant governmental and non-governmental organisations involved in health, education, vocational, social, and other services.

Medical officers from the primary health care team, Public Health Nursing Officers (PHNOs), and physiotherapists in selected DHs will be part of Community Rehabilitation Teams (CRTs), coordinated by the area Medical Officer of Health (MOH). Physiotherapy services aim to develop, maintain, and restore maximum movement and functional ability across the lifespan, addressing challenges posed by ageing, injury, pain, diseases, disorders, or environmental factors. This process involves interaction among physiotherapists, patients, health professionals, families, caregivers, and communities, with movement potential assessed and goals established collaboratively. Physiotherapy modalities include mechanical (manual therapy), heat and cold energy, electrical energy, sound energy, light energy, electromagnetic energy, and hydrotherapy. Physiotherapists also engage in rehabilitation activities within the community and contribute significantly to community-based rehabilitation.

It is recommended that Elderly Homes, Homes for the Disabled, Rehabilitation Centres, Psychiatric Homes, and Hospices within the empaneled population be regularly monitored by PHNOs and DH staff, ideally on a quarterly basis, subject to resource availability and coordination with the area MOH. A database of these institutions should be maintained, and non-communicable disease (NCD) and psychiatric patients should be registered with medical clinics. Continuous medicine supply should be ensured, and referrals to apex hospitals made when necessary.

Additionally, programmes should be arranged to enhance the mental well-being of elderly and disabled individuals with the support of the MOH. These could include music therapy, meditation, counselling, and other supportive activities. Collaboration with the Elderly Care Officer, Welfare Officer, and Counselling Officer attached to the District Secretary/Divisional Secretary’s office is crucial, and their field assistance should be sought to enhance service delivery and outreach.

CHAPTER 33
PALLIATIVE CARE SERVICES

'Palliative care is an approach that improves the quality of life of patients (adults & children) and their families who are facing the problems associated with life-threatening illness through the prevention and relief of suffering using early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual'(WHO).

The primary goal of providing palliative care services at the Divisional Hospital (DH) level is to enhance the quality of life for patients with life-threatening illnesses while offering holistic support to their families. This is achieved through evidence-based, multidisciplinary, and cost-effective approaches aimed at preventing and relieving suffering.

Palliative care begins at the time of diagnosis of a life-threatening disease (e.g. cancer) and continues throughout the disease process until death and into the family's bereavement period, according to the current concept.

The areas of support would include

- Pain and symptom management
- Psychological & emotional, social and spiritual support
- Support for families and caregivers to cope during the patient's illness and bereavement period

33.1 Strategies and activities at the Divisional Hospital level

(Source: National Strategic Framework for Palliative Care Development in Sri Lanka 2018 – 2022)

i.) Ensure that palliative care is recognized and resourced as an integral component of the health system by making palliative care an essential component of comprehensive health care
   a) Palliative care is prioritized in the delivery of health care
   b) Palliative care is included in the continuum of care linking primary prevention, early detection & treatment programmes
   c) Conduct advocacy programmes to obtain support from all stakeholders

ii.) Facilitate the effective integration of specialist palliative care and palliative care services
   a) Establish a designated palliative care team within the hospital setting.

b) The designated palliative team members are aware of their clearly defined key tasks.
c) Commence 'Palliative care consult services' Palliative care consult services are available with the participation of consultants, medical officers, nursing officers, physiotherapists, occupational therapists, pharmacists, and social workers.
d) Link, clinically supervise & monitor government, non-government & private hospices by the closest palliative care consult services. The hospices are linked with the closest palliative care consult service, and their activities are clinically supervised.
e) Integrate palliative care at the DH level & general practitioner's level. Palliative care is delivered for those who need it in the closest health setting.
f) Conduct programmes on home-based palliative care, including involvement of the DH & general practitioners and scale-up Experience, gained to scale up home- based palliative care.
g) Ensure the role of the Public Health Nursing Officer (PHNO) in palliative care in a home-based setting. PHNO is actively involved in the delivery of palliative care at the family level Identify the role of PHNO as the key in palliative care at Primary health care setting as non-availability of physiotherapists/ occupational therapists.

Referrals in Palliative Care

The Apex hospital and other Tertiary care hospitals will refer Palliative patients to DHs with a management plan (Oncologist's plan for cancers, Rheumatologist/ Nephrologist etc.)
A database will be maintained in the cluster (Google sheet- enter data at the time of discharge from the hospital → categorize the patients (according to the disease condition), MOH area distrib00ution, nearest PHNO, back referral and follow up plan

- Role of MOH and public health staff (PHM, PHI) in palliative care have a close relationship with Public health sector and DH to identify the needy patients from the field, sending messages to the field,
- Get MOH staff support for health promotion and raise public awareness on palliative care (during health talks in MCH clinics, during home visits etc.)
- Arrange transport facility for home visits by MOH when necessary, after approval of RDHS

iii.) Develop and make available skilled multi-disciplinary human resources and infrastructure for delivering palliative care services at institutional and community levels.

a) Develop a human resource deployment plan for palliative care.
b) Develop and conduct in-service training programmes in palliative care for medical officers, nursing officers, pharmacists etc.

iv.) Ensure that patients and their families receive the palliative care services they need when and where required & adhere to protocols & guidelines in palliative care

a) Follow the protocols & guidelines for the delivery of palliative care
b) Facilitate the available protocols & guidelines in palliative care at the service delivery points and give feedback on positives and drawbacks
c) Review the adherence to guidelines in the palliative care setting through clinical audits
d) Include aspects of palliative care in the quality assessment tools and quality improvement projects

v.) Ensure the availability of essential drugs and technologies for the provision of palliative care

a) Attend to the availability and prescription practices of controlled medications, mainly Morphine - pain-relieving drugs should be adequately prescribed.
b) Essential medicines for palliative care are available in the hospital setting.
c) Palliative care drugs are available.
d) Adequate amounts of palliative care drugs are available throughout the year.
e) Necessary medical technologies are available.

vi.) Build partnerships with government and non-governmental organizations for the delivery of palliative care

i) Facilitate networking among palliative care providers & understanding of their roles and areas of work.
ii) Develop networks among organizations coordinating or providing palliative care.
iii) Advocate obtaining the support of community and religion-based organizations in delivering palliative care.

vii.) Empower family members, caregivers, and the general public for the provision of palliative care

a) Create awareness of their responsibility amongst the general public on palliative care and service availability
b) Empower family members and caregivers for the delivery of palliative care
c) Facilitate the establishment of self-help/volunteer support groups for palliative patients
d) Collaboration and building partnership with volunteer/welfare organizations (Eg: Sarvodaya, World Vision, Red Cross)

viii.) Encourage research related to palliative care in assessing the needs and suitable models for implementing palliative care services.
a) Identify research needs on palliative care.
b) Facilitate research (financial and technical grants) related to palliative care.
c) Disseminate & apply findings of research related to palliative care.

33.2 Palliative Care Services at DH Level

(*Source: Sri Lanka Essential Health Services Package 2019)*

Palliative Care Services	**Divisional Hospital Providing Service**
Information and Counselling on the role of families in the provision of palliative care	Yes
Support to self-help groups	Yes
Control of Acute and Chronic pain	Yes
Delivery of Palliate care in emergencies	-
Delivery of Palliative care at intermediate units	Selected, under shared care of consultant at Apex hospital
Delivery of home-based palliative care	Selected

Note: 'Selected' denotes that the service/intervention will be available only at selected delivery sites

ANNEXURES

Annexure 1.1

දුරකථන) 011 2669192, 011 2675011
தொலைபேசி) 011 2698507, 011 2694033
Telephone) 011 2675449, 011 2675280

ෆැක්ස්) 011 2693866
பெக்ஸ்) 011 2693869
Fax) 011 2692913

විද්‍යුත් තැපෑල) postmaster@health.gov.lk
மின்னஞ்சல் (முகவரி))
e-mail)

වෙබ් අඩවිය) www.health.gov.lk
இணையத்தளம்)
website)

සුවසිරිපාය
சுவசிரிபாய
SUWASIRIPAYA

මගේ අංකය)
எனது இல)
My No.) PA&D/03/2018

ඔබේ අංකය)
உமது இல)
Your No.)

දිනය)
திகதி)
Date) 07-05-2018

සෞඛ්‍ය, පෝෂණ හා දේශීය වෛද්‍ය අමාත්‍යාංශය
சுகாதார, போசணை மற்றும் சுதேச வைத்திய அமைச்சு
Ministry of Health, Nutrition & Indigenous Medicine

General Circular No: 01 – 29/2018

To: All Chief Secretaries
All Provincial Health Secretaries
All Provincial Directors of the Health Services
All Regional Directors of the Health Services
All Heads of Institutions including Medical officers of Health

Physical Space norm for Primary Health Care Facilities

Ministry of Health Nutrition and Indigenous Medicine is implementing Primary health care strengthening in Central, Sabaragamuwa, Uva and North Central provinces with the collaboration of Asian Development Bank.

Ministry of Health Nutrition and Indigenous Medicine has finalized the physical space norms for the Primary Health Care facilities which will be established in the future under the Primary health care strengthening project.

Guideline of the physical space norms for the Primary Health Care facilities is annexed herewith (Annexed – I)

As such, all the provincial and regional authorities are advised to take necessary action to adhere to the circulated physical space norms when implementing ADB Project activities in the target provinces or for future improvement of Primary Healthcare facilities.

Janaka Sugathadasa
Secretary
Ministry of Health, Nutrition & Indigenous Medicine
"Suwasiripaya"
385, Rev. Baddegama Wimalawansa Thero Mawatha,
Colombo 10, Sri Lanka.

Janaka Sugathadasa
Secretary
Ministry of Health Nutrition and Indigenous Medicine

CC: 1.DGHS
2. DDG(MS-II)
3. Director / Primary Care Services

385, පූජ්‍ය බද්දේගම විමලවංශ හිමි මාවත, කොළඹ 10. 385, வணக்கத்துக்குரிய பத்தேகம விமலவங்ச தேரோ மாவத்தை, கொழும்பு 10.
385, Rev. Baddegama Wimalawansa Thero Mawatha, Colombo 10, Sri Lanka.

Annex 1.1 - Physical Space Norm for Primary Health Care Facilities (General Circular: 01- 29 / 2018)

N0.	Type of Services	Space Area (Square Feet)					
		Field Health Center	**MOH Office**	**PMCU**	**DHC**	**DHB**	**DHA**
1	Waiting area with reception counter	300	800*	450	500	550	600
2	General office (Room 1)	0	150	150	200	200	250
3	Consultation Room 1	100	100	100	100	100	100
4	Consultation Room 2	0	100	0	100	100	100
5	Consultation Room 3	0	0	0	0	0	100
6	Dispensary / Dispenser Room	0	0	150	150	150	200
7	Drug Store / Supplements Store (with Air conditioner)	0	200	150	200	200	250
8	Laboratory Room (with sink)	0	100	100	150	150	250
9	Medical Officers rest room with Bathroom	0	150	150	150	150	150
10	Restroom with Bathroom for other staffs	150	150	150	150	150	150
11	Minor staff room with Bathroom	0	150	150	150	150	150
12	Overseer or Matron Room 1	0	0	0	0	80	80
13	Overseer or Matron Room 1	0	0	0	0	80	80
14	Patient Toilet (Male and Female, Disability access)	150	100	150	150	150	150
15	Meeting Room with Pantry	100	100	100	150	200	250
16	General Store	100	150	100	150	150	150
17	Instrument Room	100		100	100	100	100
B)	**Services Preventive and Curative**						
18	Clinic Room for Health Promotion / NCD/ Ante-natal/ FP/ WWC/ Nutrition	120	200	200	200	200	200
19	Dental Room	0	0	220	220	220	250
20	ETU Room or Space for Emergency Care Services	0	100	200	200	200	300
21	Dressing Room	0	0	100	100	100	100
22	Vaccination Room / Injection Room	100	100	100	100	100	100
C)	**Office Space**						
23	Office Space for PHMs	150	0	100	100	100	100
24	Office Space for PHIs	150	150	100	100	100	100

	Total Space area for Primary Health Care Facility	**1520**	**2900**	**3020**	**3420**	**3680**	**4260**
D)	**Other Facilities: Staff Quarters**						
25	Quarters for MO (1)	0	1250	1000	1000	1000	1000
26	Quarters for MO (2)	0	1250	1000	1000	1000	1000
27	Quarters for PHMs	750	750	0	0	0	0
28	Quarters for PHIs	0	750	0	0	0	0
29	Quarters for Nursing Officers	0	0	0	750	750	750
	Total area	**750**	**4000**	**2000**	**2750**	**2750**	**2750**

Annexure 4.1 Standard Equipment in each level of A & E Care

	Level 1 A&E (Apex Centre)	Level 2 A&E (DGH)	Level 3 A&E (BH)	Level 4 (ER) (DH)
Theater Tables	X	X	X	N/E
Anesthetic Machine	X	X	X	N/E
Blood Gas Analyzer	X	X	X	N/E
Multipara Monitors 5 channels for resuscitation & 3 channels for observation area	X	X	X	X
Nebulizers	X	X	X	X
Defibrillators with Pacing facilities	X	X	X	X
Ventilator (Transport)	X	X	X	N/E
NIV / CPAP	X	X	X	N/E
Portable X ray machines	X	X	X	N/E
USS machines	X	X	X	N/E
Hand-held Doppler scans	X	X	X	Optional
ECG Machines	X	X	X	X
Wall Oxygen Supply, wall gas and suction	X	X	Optional	N/E
Resuscitation Beds	X	X	X	X
Reclining chairs	X	X	X	N/E
Beds	X	X	X	X
Trolleys	X	X	X	X
CT Scanner	X	Optional	N/E	N/E
IV cannula / Infusion set	X	X	X	X
Suction Device	X	X	X	X
Oral, Nasal Airways / ET tubes	X	X	X	X
Cricothyroidotomy insertion sets	X	X	X	X
Cervical collar	X	X	X	X
Sterile dressings	X	X	X	X
Splinting materials	X	X	X	X
NG tubes	X	X	X	X
IC tubes	X	X	X	X
Pulse oxymeters	X	X	X	X
CVP lines	X	X	X	N/E
Spinal Boards	X	X	X	X
Multi Parameter Monitor	X	X	X	X
Endo: Tracheal Sets	X	X	X	X
CCU doom sets	X	X	N/E	N/E
Laryngoscope	X	X	X	X
Rapid Infusion Sets with blood Warmer	X	X	X	N/E
Thromboelastometry	X	X		
Ambu with Masks – Adult Paediatric	X	X	X	X
Venturi Masks	X	X	X	X
B.P. Apparatus (Non invasive)	X	X	X	X
Venus cut down set	X	X	X	X
Oxygen Cylinder with regulator	X	X	X	X
ET Tubes	X	X	X	X
Non-Rebreathing Masks	X	X	X	X
Peak flow meter	X	X	X	X

Annexure 4.2 Standard Drug List in each level of A & E Care

Drugs	Level 1	Level 2	Level 3	Level 4
Drugs for Pain Management				
1. Morphine IV , Tab	X	X	X	X
2. Pethidine	X	X	X	X
3. Codeine	X	X	X	N/E
4. Tramadol	X	X	X	X
5. Fentanyl IV	X	X	X	N/E
Antiemetics				
1. Prochloperazine	X	X	N/E	N/E
2. Promethazine	X	X	X	X
3. Metachlopramide	X	X	X	X
4. Ondansetron	N/E	N/E	N/E	N/E
Non Opioid agents				
1. Paracetamol	X	X	X	X
2. Ibuprofen	X	X	X	X
3. Indomethacine	X	X	X	X
4. Ketarolac IV	X	X	N/E	N/E
5. Diclofenac Sodium (Tab, Suppository)	X	X	X	X
Drugs for Neuropathic pain				
1. Amytryptalin	X	X	X	N/E
2. Carbemezapine	X	X	X	N/E
3. Gabapentine	X	X	N/E	N/E
Anxiolytics				
1. Midazolam	X	X	X	X
2. Diazepam	X	X	X	X
Anaesthetic Agents				
1. Midazolam	X	X	X	X
2. Propofol	X	X	X	N/E
3. Thiopentone Sodium	X	X	X	N/E
4. Atracurium	X	X	X	N/E
5. Suxamethonium	X	X	X	X
6. Lignocaine	X	X	X	X
7. Bupivacaine	X	X	X	N/E
8. Ketamine	X	X	X	N/E
9. Nitrous Oxoide	X	X	X	N/E
10. Flumazanil	X	X	X	X
11. Naloxone	X	X	X	X

Haemostatic & Anticoagulants & Thrombolytic Agents				
1. Heparine	X	X	X	N/E
2. Enoxheparin	X	X	X	N/E
3. Protamine Sulphate	X	X	X	N/E
4. Streptokinase	X	X	X	N/E
5. Tranexamic Acid	X	X	X	N/E
6. Warfarin	X	X	X	N/E
Hemodynamic Drugs				
1. IV Dobatamine	X	X	X	X
2. IV Dopamine	X	X	X	X
3. IV Nitroglycerine	X	X	X	N/E
4. IV Nitroprusside	X	X	N/E	N/E
5. IV Noradrenalene	X	X	X	N/E
6. IV Adrenalene	X	X	X	X
7. Vasopressin	X	X	X	N/E
8. IV Verapamil	X	X	X	N/E
9. IV Adenosine	X	X	X	N/E
Anti hypertensive				
1. Propanalol	X	X	X	X
2. Atenalol	X	X	X	X
3. Captopril	X	X	X	X
4. Losarten Potassium	X	X	X	N/E
5. Prasocin	X	X	X	N/E
6. Nifidepine SR	X	X	X	X
Hypoglycaemic Agents				
1. Insulin Short acting	X	X	X	X
2. Long acting Insulin	X	X	X	X
3. Metformin	X	X	X	N/E
4. Glibenclamide	X	X	X	N/E
Steroids				
1. Prednisolone	X	X	X	X
2. Dexamethasone	X	X	X	X
3. Hydrocortisone	X	X	X	X
Other IV Preparations				
4. N Acetyl cysteine	X	X	X	N/E
5. Glucagon	X	X	X	N/E
6. Ca glucanate	X	X	X	X
7. Sodium Bicarbonate	X	X	X	N/E
8. Mg So4	X	X	X	X
9. Manitol	X	X	X	N/E
10. Hetastarch	X	X	X	X
11. Dextran	X	X	X	N/E
12. 5%, 25% & 50 % Dextrose	X	X	X	X

13. Normal Saline	X	X	X	X
14. Hartmans Solution	X	X	X	X
Respiratory Drugs				
1. Salbutamol	X	X	X	X
2. Ipravent	X	X	X	X
3. Theophyline(Tab)	X	X	X	X
4. Aminophylline	X	X	N/E	N/E
Antiepileptics				
1. Phenytoin IV oral	X	X	X	X
2. Carbamazepine	X	X	X	X
3. Sodium Valproate	X	X	X	X
4. Phenobarbitone	X	X	N/E	N/E
5. Lorazepam	X	X	N/E	N/E

Annexure 8.1

General Circular Letter No. 1757

My No.MY.4/81
Office of the Director of
Health Services,
Colombo, 23 September, 1981

To: All Heads of Decentralised Units
& Specialised Campaigns

Attendants attached to Dental Clinics

It has been reported that there are no Attendants permanently attached to Dental Clinics and that the Dental Surgeons have to train the Attendant in dental work, each time a new Attendant is sent to work in the Clinic.

02. It has now been decided that there should be an Attendant attached to the Dental Clinic for at least a period of 02 years and that in his absence there should be another Attendant trained in Dental Clinic work, to take his place.

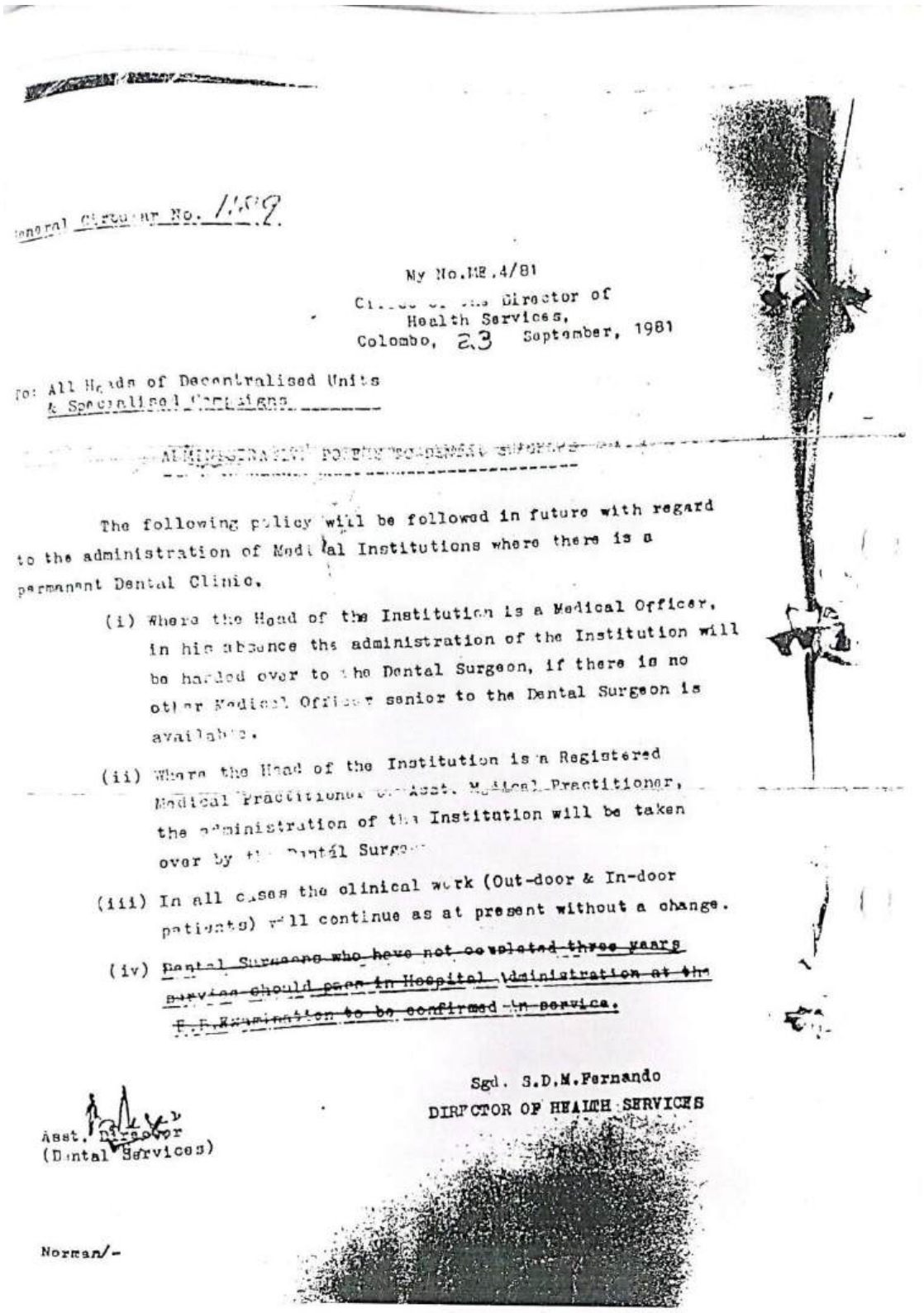
Sgd. S.D.W.Fernando
DIRECTOR OF HEALTH SERVICES

Asst. Director
(Dental Services)

Norman/-

pl. bring to the notice of D.S

Annexure 8.2



General Circular No. 1/89

My No.ME.4/81

Office of the Director of
Health Services,
Colombo, 23 September, 1981

To: All Heads of Decentralised Units
& Specialised Campaigns

ADMINISTRATION OF DENTAL SERVICES

The following policy will be followed in future with regard to the administration of Medical Institutions where there is a permanent Dental Clinic.

(i) Where the Head of the Institution is a Medical Officer, in his absence the administration of the Institution will be handed over to the Dental Surgeon, if there is no other Medical Officer senior to the Dental Surgeon is available.

(ii) Where the Head of the Institution is a Registered Medical Practitioner or Asst. Medical Practitioner, the administration of the Institution will be taken over by the Dental Surgeon.

(iii) In all cases the clinical work (Out-door & In-door patients) will continue as at present without a change.

(iv) ~~Dental Surgeons who have not completed three years service should pass in Hospital Administration at the F.F.Examination to be confirmed in service.~~

Sgd. S.D.M.Fernando
DIRECTOR OF HEALTH SERVICES

Asst. Director
(Dental Services)

Norman/-

Annexure 8.3

Recommended list of instruments and equipment (for a new oral health care clinic)

- Dental chair, High speed Dental Hand piece, Suction Apparatus
- Sterilizer Electric / Non-electric
- Aseptic table
- Instrument Cabinet
- Instrument tray with lid (Aluminium/ Stainless Steel)
- Micro-motor Hand piece (Straight & Contra-angle)
- Cheatle Forceps
- Tooth Extracting Forceps
- Root Elevators (W. James, Coupland, Winters – Right & Left)
- Extracting Tweezers (locking & un-locking)
- Amalgam Carver & Amalgam Carver Wards
- Scaler Unit
- Mortar & Pestle
- Light cure unit
- Mercury Holder
- Mixing Slab - Glass
- Matrix bands & Matrix strips
- Burs Stand
- Silver Alloy
- Zinc Phosphate Cement Powder & Liquid
- Finishing strips
- Waxed Nylon Floss
- Eugenol 30ml
- Composite filling material (full pack)
- Cellulose Strips
- Stain Remover
- Prophylaxis Paste Jars
- Tooth Polishing Brushes

- Bristle brushes
- Mercury 30G
- Mouth wash Bottles
- GIC – Anterior & Posterior
- Sodium Hyphochlorite 3% - 6% Solution
- Gutta Percha (GP) – 15-40, 45-80, Auxillary, Auxillary medium, F-medium
- GP Solvent
- Paper Points
- Root Canal Sealers (CA(OH)2 base)
- Root Canal Files
- Surgical Spirit
- Surgical Blades (as required)
- Suture Materials (as required)
- Syringes (as required)
- Necessary Diamond & TC Burs
- Saline
- Scalpel Handle
- Dental model & Brush
- Bonding Agents
- Acid Etchant
- EDTA gel
- Vaseline
- Cavity Liner
- Matrix band Holders
- Calcium Hydroxide

Annexure 12.1

General Circular Letter No. - 02-73/2005

My No.D/LS/09/05
Office of the Director General Health Services
"Suwasiripaya"
No. 385, Baddegama Wimalawansa Thero Mw.
Colombo 10
19th May 2005

All
Provincial Secretaries of Health,
Provincial / Deputy Provincial Directors of Health Services,
Directors of Teaching Hospitals,
Heads of Decentralized Units / Specialized Campaigns,
M.SS/D.M.OO of Provincial and Base Hospitals.

GUIDELINES FOR USE AND MAINTENANCE OF LABORATORY EQUIPMENTS

It has been observed that in spite of the fact that expensive equipments have been provided to laboratories, they are neither well maintained nor are functional in many hospitals due to various reasons.

As the capital vote is a cumulative fund, assets acquired under this vote should be carefully maintained, to ensure that the maximum benefit would be achieved until the value of the equipment is written off from the capital assets register, after being certified to be no longer functioning. Following guidelines should be strictly adhered and practiced in all institutions with regard to usage and maintenance of laboratory equipments, of which the **value exceeds Sri Lankan rupees 100,000/-** irrespective of whether they are procured or being donated .

Since late there had been many audit queries on high-tech, costly equipment being repaired on state expenses without a justification.

As such the following precautionary steps are being recommended to ensure the safety of laboratory staff and to prevent any audit queries being raised at a latter usage.

1. The equipment must be handed over to an officer in the laboratory (e.g.:- senior MLT) and signature should be obtained.
2. Those that are trained in the use of the machine are held responsible for the smooth functioning of the machine /equipment.
3. The names of responsible officers must be typed and list displayed near the machine.
4. This trained team must be responsible for routine maintenance of equipment.
5. The responsible person must communicate with the maintenance biomedical engineer/ Local Agent, though head of laboratory/ Head of Institute and ensure the routine checks and calibration done by the engineer/ agent.
6. Each item of equipment must have a log book. The maintenance checks repairs, service records and comments must be logged onto the book. All entries should be initialed by the responsible officer and endorsed by the head of laboratory. All consumables received should be entered itemizing the quantity, expiry date & cost, respectively.
7. The automated analyzer needs to be housed away from the main laboratory with separate access from outside. This room must be locked and a key kept in the Director's /Medical Superintendent'/ Head of the Institution's room, when the machine is not in use.
8. If there is a functional problem, the engineer/ local agent should be informed in writing though head of laboratory. A copy of the letter and any communication must be noted in the above log book and copies of letters attached.
9. If there is a breakdown due to **negligence** on the part of the technical staff or **sabotage** or the machine made non usable by a willful act of a staff member, then the responsible officer should report this to the Head of Division / Head of the Hospital where Punitive action will be taken as per provisions in the establishment code, and other relevant circulars. Acton should also be taken to get the offender to bear the cost of repairs.
10. An operator log book must be maintained and entries should be made whenever the equipment is over for usage and is being handing back to another officer clearly indicating.
    - Name of the officers handing over and taking over
    - Date and time of taking over
    - Any comments at the time of handing over

Please ensure that all laboratory staff would be informed on this circular.

Please bring the contents of this circular to the notice of all officers concerned in your province/ region/ institution.

Dr. H.A.P.Kahandaliyanage

Director General of Health Services

Annexure 12.2

My No: D/LS/NLP/Let/2010
Ministry of Health
"Suwasiripaya"
385,Baddegama Wimalawansa Mawatha,
Colombo 10,
23.07.2010

To all

Provincial directors and regional directors of health services

Directors of Teaching Hospitals and Provincial General Hospitals
MSS of District general and Base Hospitals

Rational use of laboratory investigations in government hospitals

It has been brought to my notice by the committee appointed to R**eorganize and Strengthen Laboratory services in the country,** that the existing laboratory services in government hospitals are not being properly used by the specialists, and other medical officers including house officers, mainly due to inadequate communication of information between the Ward /OPD staff and the laboratory staff. To overcome this situation the committee proposes to have

1. Monthly Committee meeting of the laboratory Medicine department of the hospital

The head of the institution must make sure that the meeting is held regularly on monthly basis with the participation of the consultants in charge of units and any errors detected pertaining to lab investigations are brought to the notice of the consultant in-charge and/or the chief MLT of the laboratory at this forum. A copy of the minutes of the meeting should be directed to the DDG/LS for reference.

Arrangements should be made to enroll all newly appointed medical officers including interns to be briefed on this topic by the laboratory consultants or the chief MLT at the orientation program.

2. Avoidance of Duplication of investigations

Duplication of investigations occur when the same investigation is being requested from the hospital lab as well as from the private lab,

Incurring additional expenditure to the poor patient. The hospital has to bear an additional cost in providing reagents, bottles and test tubes to collect samples for private labs, in addition to the time spent on these procedures by the hospital staff in collecting samples.

A list of currently performed laboratory investigations by the hospital should be circulated among all the medical officers regularly so that sending samples to private labs for investigations could be prevented.

3. Increased vigilance by consultants in requesting for laboratory investigations.

The consultants in charge of units must exert vigilance on the following matters with regard to ordering of investigations, and recording of reports in the BHT and diagnosis card.

a) The signature of the consultant is obtained in case of an **expensive investigation** for in-ward patients.

b) The Medical officers carry out proper filling of investigation forms for routine and "URGENT" investigations. Urgent request forms are signed by them indicating the Ward number, date & time of ordering.

c) The Medical officers enter all investigation reports in the diagnosis card at the time of discharge of patient.

All heads of institutions are requested to circulate copies of this letter among the consultants of the hospital. Your cooperation in this regard is very much appreciated.

Singed

Dr. H.R. U. Indrasiri ***Dr. U. A. Mendis***

Act. DDG (LS) ***DGHS***

It would be mandatory for the directors/MSS of hospitals to conduct monthly meetings in their respective laboratories with the participation of all consultants. This would provide the opportunity for consultants to have a closer relationship with the laboratory staff and to clarifying their doubts.

Annexure 12.3

දුරකථන
தொலைபேசி
Telephone
0112669192 , 0112675011
0112698507 , 0112694033
0112675449 , 0112675280

ෆැක්ස්
பெக்ஸ்
Fax
0112693866
0112693869
0112692913

විද්‍යුත් තැපෑල
மின்னஞ்சல் முகவரி
e-mail
postmaster@health.gov.lk

වෙබ් අඩවිය
இணையத்தளம்
website
www.health.gov.lk

සුවසිරිපාය
சுவசிரிபாய
SUWASIRIPAYA
සෞඛ්‍ය අමාත්‍යාංශය
சுகாதார அமைச்சு
Ministry of Health

මගේ අංකය
எனது இல
My No. DDG/LS/ED/EQ-DB/304/2022

ඔබේ අංකය
உமது இல
Your No.

දිනය
திகதி
Date 2022-09-

Deputy Director General (NHSL/NHK)
All PDHS / RDHS
All Directors of TH/PG/DGH
All Medical Superintendents of BH
All Heads of Institutions

Preparation of National Laboratory Equipment Database

Secretary of Health has instructed to conduct an audit of available laboratory equipment in each institute according to the decision taken at the meeting held on 24/08/2022 at the MOH. This has also been emphasized under "Reorganization Strengthening Laboratory Services of Government Hospitals" in the National Health Strategic Master Plan 2016-2025. Hence, it has been decided to develop a National Laboratory Equipment Database using virtual platform (Software).

It is observed that different laboratories have different departments eg: Microbiology / Chemical Pathology / Haematology / Histopathology / Virology etc depending on the level of care. Hence, in order to communicate with the Institute / Laboratory, you are kindly requested to nominate a focal point to each department who is handling the inventory to provide us updated details of equipment as per the given format. (Attached)

Please send the details of the focal points to Deputy Director General (Laboratory Service) unit via, Fax : 0112-670097 or e-Mail : ddgls.mohlk@gmail.com

For any further clarification, please contact Dr Muditha Hapudeniya (Consultant in Health Informatics) via 0718-074895.

Your prompt response in this matter is highly appreciated.

Dr. Asela Gunawardena
Director General of Health Services

Dr. ASELA GUNAWARDENA
Director General of Health Services

385, Rev. Baddegama Wimalawansa Thero Mawatha,
Colombo 10.

Cc 1. Secretary Health
2. Deputy Director General (Laboratory Services)
3. Deputy Director General (BME)
4. Deputy Director General (MSD)
5. Director (Laboratory Services)

385. පූජ්‍ය බදිගේදරම විමලවංශතිමි මාවත, කොළඹ 10. 385.வணக்கத்துக்குரிய பத்தேகம விமலவங்ச தேரோ மாவத்தை, கொழும்பு 10.
385, Rev. Baddegama Wimalawansa Thero Mawatha, Colombo 10, Sri Lanka.

Annexure 12.4

General Circular No: 01-14/2005

My No. LA/D-LS/05/004
Ministry of Healthcare, Nutrition &
Uva Wellassa Development,
"Suwasiripaya"
Colombo 10
28th June, 2005

All
Provincial Secretaries of Health,
Provincial / Deputy Provincial Directors of Health Services,
Directors of Teaching Hospitals,
Heads of Decentralized Units / Specialized Campaigns,
M.SS/D.M.OO of Provincial and Base Hospitals.

INSPECTION OF LABORATORIES

It has been observed that many laboratories have not been inspected routinely by health authorities. It is of paramount importance that the hospital laboratories should be regularly inspected in order to ensure proper performance of tests leading to good quality reports and achieving of proper laboratory standards. It is also observed that Consultants in many hospitals do not have much confidence in their respective laboratories and tend to refer many patients to private sector laboratories.

As such, it would be essential to closely supervise and monitor the functioning of the respective laboratories within your purview, so that whatever the existing shortcomings could be rectified early.

All Medical Administrators including M.O. i/CC are advised to conduct routine laboratory inspections, using the attached check list and to discuss the shortcomings at the monthly laboratory meetings with the stakeholders for rectification.

It would be advisable to have a file of inspection reports maintained in your Office, have them copied to the Director/Laboratory Services for purpose of monitoring.

Your immediate attention in this regard would be greatly appreciated.

Dr. Athula Kahandaliyanage

Director General of Health Services

Check list for Inspection of Laboratories

Institution -

Date -

Inspected By -

Staff - **No. in position** **Present on the day**

Specialists

MOO

MLTT

Orderlies

Laborers

Space -

	Approximate floor area	Adequacy
Chemical Pathology		
Histopathology		
Microbiology		
Haematology		
OPD		
Night lab		
Special lab		

Design - Purpose built / improvised

Ventilation - Satisfactory / unsatisfactory

Suggested improvements

Lighting - Satisfactory / unsatisfactory

Suggested improvements

Water supply - Adequate / Inadequate

Continuous / Interrupted

In good Quality/ Not in good Quality

Telephone facility - Direct/intercom – No direct line

Specific infrastructure requirements -

Air Conditioning/ Voltage Stabilizing/generator backup etc..

Required/not required

Met/ unmet

Literature for reference - available/ not available

Furniture

	Adequate	**Not adequate**
Benches		
Stools		
Wall racks		
Storage cupboards		
Tables		
Chairs		

Staff welfare availability of separate space for changing/eating etc and toilets

Doctors	
Technical Staff	
Minor Staff	

Reception of Specimens- Counter available/not available

Time of Reception Fixed / Open

Collected by Lab or delivery by ward

Issue of reports - Delivered by Lab or collected by wards

Computer facility available or not available

Scope of the lab - Tests performance whether compatible with approved list or not

Equipments - Deficiencies or excess compared to approved list

Safety procedures - Universal precautions

- Safety apparels
- Personal Protective equipments

Waste Disposal System - Unserviceable articles accumulated removed

Storage space -

Quality Assurance Scheme - System for internal quality assurance:

- Availability of SOPs,
- Regular calibration
- Mechanism for supervision

Whether participating in external quality assurance

Supply system - Uninterrupted / interrupted
Quality of supplies satisfactory /not satisfactory

Media Preparation Room - Satisfactory/ not satisfactory
(please specify)

Washing Room -

Procedure Room (bleeding, Bone marrow etc.)

Patients' waiting area including toilets

Observations :-

Annexure 12.5

List of Chemicals for Divisional Hospital

A. Anticoagulant
- EDTA di potassium salt
- Sodium fluoride
- Potassium oxalate
- Sodium citrate

B. For staining
- Leishman's stain
- Methyl alcohol

C. For Urine analysis
- Sodium nitroprusside
- Ammonium sulphate
- Ammonium hydroxide concentrated (25% w/v Ammonia solution
- Iron (III) chloride
- Barium chloride
- Trichloroacetic acid
- Para dimethyl amino benzaldehyde
- Hydrochloric acid concentrated
- Sodium acetate
- 5- Sulphosalicylic acid
- Sodium carbonate
- Cupper sulphate

Chemicals for estimation of plasma glucose level and Creatinine by Manual method

D. Plasma glucose level- Glucose oxidase method

1. Benzoic acid
2. 4 – amino phenazone / 4- amino antipyrine-AR
3. Glucose oxidase
4. Peroxidase lyophilized powder
5. Phenol crystals-AR
6. Tween 20
7. D-Glucose anhydrous –AR
8. Disodium hydrogen phosphate dehydrate-AR ($Na_2HPO_42H_2O$)
9. Potassium dihydrogen phosphate-AR (KH_2PO_4)
10. Sodium azide AR

E. Creatinine - Jaffe method

1. Sodium hydroxide pellets
2. Picric acid
3. Creatinine anhydrous-AR
4. Hydrochoric acid concentrated (37 % w/v)
5. Sulphuric acid – AR

6. Sodium tungstate dehydrate
7. Polyvinyl alcohol

Glassware and others

- Staining rack
- Funnels
- Rubber Teats/Bulbs
- Filter papers
- Microscope cover slips (20 x 20 mm)
- Measuring cylinders
- Test tubes
- Centrifuge tubes
- Microscope slides plain
- Westergren sedimentation tube
- Volumetric flasks (100 ml, 500 ml, 1000 ml volumes)
- Petri dish, watch glass
- Beakers (100 ml, 500 ml)
- Measuring cylinder
- Conical centrifuge tubes 15 ml

Reference:

1. Manual on Standard operation procedures, sample collection and reference ranges for Clinical Chemistry, Ministry of Health and Department of Biochemistry Medical Research Institute Colombo- WHO Biennium 2004-2005

Annexure 15.1

Hand Washing Technique Poster (WHO)

How to Handwash?

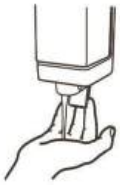
WASH HANDS WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB

Duration of the entire procedure: **40-60 seconds**

0

Wet hands with water;

1

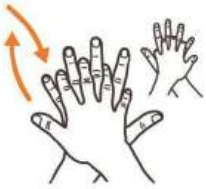


Apply enough soap to cover all hand surfaces;

2

Rub hands palm to palm;

3



Right palm over left dorsum with interlaced fingers and vice versa;

4

Palm to palm with fingers interlaced;

5

Backs of fingers to opposing palms with fingers interlocked;

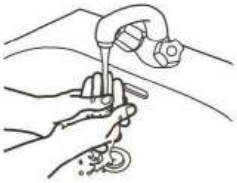
6

Rotational rubbing of left thumb clasped in right palm and vice versa;

7

Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;

8

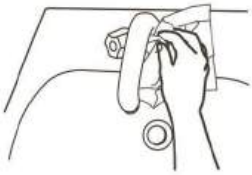


Rinse hands with water;

9

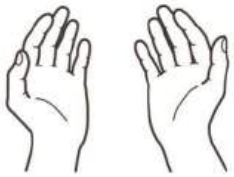
Dry hands thoroughly with a single use towel;

10



Use towel to turn off faucet;

11



Your hands are now safe.

Annexure 15.2

Hand Rubbing Technique Poster (WHO)

Annexure 15.3

Management of Spills

- Spillages should be dealt with immediately
- Make the area safe i.e. do not allow people to walk through the spillage and never leave the spillage unattended. A display sign is helpful
- PPE must be worn
- Gather together all the equipment, disinfectants and waste receptacles/waste bags that are required to correctly and safely manage the spill. A spill kit should be available
- All items used to manage a spill must be disposed of correctly as per local waste policy
- Safe working practices and procedures must be used to prevent exposure incidents during the management of spillages
- If an exposure incident occurs when dealing with a spillage, the local occupational exposure policy should be followed
- Recording and reporting of spillages should be done to avoid future incidents or exposures to blood and other body fluids and ensure that appropriate measures and equipment are in place to manage such spillages

Contents in a spill kit:

Single-use items in the spills kit should be replaced after each use of the spill kit

1. Scoop and scraper
2. Gloves – heavy duty rubber gloves
3. Plastic apron/ disposable polythene apron
4. Medical/surgical mask
5. Eye protection (face shield/goggles)
6. Absorbent material (paper towels/wadding)
7. Clinical waste bags (yellow bags) and ties
8. Disinfectant (hypochlorite powder or chlorine releasing granules to prepare 1% and 0.1% hypochlorite freshly prepared solution)

9. Detergents
10. Protocol for spill clean-up procedure (laminated)

Management of blood and body fluid spill

- Keep a "caution" board and isolate the area
- Wear appropriate PPE in the spill kit
- Cover the area of the spill with absorbent material (disposable paper towels/wadding) and allow to absorb
- Pour freshly prepared 1% hypochlorite solution (10000 ppm available chlorine) on the absorbent material
- Allow at least 10 minutes of contact time
- Remove broken glass pieces using a forceps and discard them into a sharps bin
- Remove absorbent material and dispose of in a yellow bag
- Wipe the area with a detergent solution and allow it to dry
- Remove PPE and place disposable PPE immediately in the yellow bag
- Tie the mouth of the yellow bag
- Wash hands wearing heavy-duty gloves with running water. Remove heavy-duty gloves and disinfect them in 1% hypochlorite
- Wash hands with soap and running water
- Arrange cleaning and disinfection of reusable supplies (e.g. mops, buckets etc.) immediately after the spill is managed

Management of other spillages (vomitus, feces, and urine)

Spillages of body fluids containing solid/semi-solid matter e.g.faeces and pus, need to be cleaned up and disposed into a yellow bag first as the presence of organic matter can markedly reduce the activity of any disinfectant applied.

- Wear appropriate PPE in the spill kit
- Cover and contain the spillage with an absorbent material
- Once absorbed, carefully clean the area removing the absorbent material with all organic matter (vomitus, feces) and absorbed liquid (e.g. urine). Discard all into a yellow bag
- Mop the area with warm water and a GPD

- Wipe over the area with 0.1% hypochlorite solution (1000 parts per million available chlorine) and let it dry
- If the feces, urine, or vomitus was blood-stained, 1% hypochlorite solution (10000 ppm available chlorine) should be used
- Remove disposable PPE and place it immediately into the yellow bag
- Tie the mouth of the yellow bag
- Wash hands wearing heavy-duty gloves with running water. Remove heavy-duty gloves and disinfect them in 1% hypochlorite
- Wash hands with soap and running water
- Arrange cleaning and disinfection of reusable supplies (e.g. mops, buckets etc.) immediately after the spill is managed

Annexure 17.1

දුරකථන
தொலைபேசி
Telephone
) 011 2669192 , 011 2675011
) 011 2698507 , 011 2694033
) 011 2675449 , 011 2675280

ෆැක්ස්
பெக்ஸ்
Fax
) 011 2693866
) 011 2693869
) 011 2692913

විද්‍යුත් තැපෑල
மின்னஞ்சல் முகவரி
e-mail
) postmaster@health.gov.lk

වෙබ් අඩවිය
இணையத்தளம்
website
) www.health.gov.lk

සුවසිරිපාය
சுவசிரிபாய
SUWASIRIPAYA

අපේ අංකය
எனது இல
My No.
ඔබේ අංකය
உமது இல
Your No.
) PA/E &OH/11/2015

දිනය
திகதி
Date
) 21 / 07/2015

සෞඛ්‍ය හා දේශීය වෛද්‍ය අමාත්‍යාංශය
சுகாதாரம் மற்றும் சுதேச வைத்திய அமைச்சு
Ministry of Health & Indigenous Medicine

.....

.....

.....

Controlling of Stray Cats and Dogs within Hospital Premises

There are many complaints on stray cats & dogs causing health hazards within the hospitals and other healthcare institutions. Though there is an immunization and sterilization programme, this has not been very effective in most of the places, as new stray dogs & cats are appearing in these premises very often.

Therefore, please ensure that the food waste is securely collected and stored until proper disposal. This will distract all kinds of animals, birds and pests including crows, cattle, rats etc.

In the mean time it was brought to the notice that feeding and providing shelter to these dogs by the healthcare staff is contributing immensely to breeding of stray dogs and cats within hospital premises. Therefore please advise the health staff to refrain from such activities as it is important to maintain the hospital premises free of nuisances of this nature.

Central Environmental Authority too has refused to issue Environmental Protection License to certain hospitals as stray dogs are found in canteens etc.

Visitors, patients and health staff often get bitten by these dogs and the government has to spend on medication unnecessarily.

Therefore, make the staff aware of this issue and take appropriate action to ensure hospital premises are safe in this respect.

Thank you

Dr. P. G. Mahipala
Director General of Health Services
Ministry of Health & Indigenous Medicine
385, "Suwasiripaya"
Rev Baddegama Wimalawansa Thero Mawatha,
Colombo 10.

Dr. P G Mahipala
Director General of Health Services.

385, පූජ්‍ය බද්දේගම විමලවංස හිමි මාවත, කොළඹ 10. 385, வணக்கத்துக்குரிய பத்தேகம விமலவங்ச தேரோ மாவத்தை, கொழும்பு 10.
385. Rev. Baddegama Wimalawansa Thero Mawatha, Colombo 10. Sri Lanka.

Annexure 22.1

දුරකථන
தொலைபேசி
Telephone
2698475
2698490
2698507

ෆැක්ස්
பெக்ஸ்
Fax
2692913
2694860

විද්‍යුත් තැපෑල
மின்னஞ்சல் முகவரி
E-mail
postmaster@health.gov.lk

වෙබ් අඩවිය
இணையத்தளம்
Website
www.health.gov.lk

සුවසිරිපාය
சுவசிரிபாய
SUWASIRIPAYA

මගේ අංකය
எனது இல
My Number
HQSH/01/2022

ඔබේ අංකය
உமது இல
Your Number

දිනය
திகதி
Date
27 / 08/2022

සෞඛ්‍ය අමාත්‍යාංශය
சுகாதார அமைச்சு
Ministry of Health

Deputy Director General NHSL-Colombo, Deputy Director General NH-Kandy,
All Directors of Specialized Hospitals, Teaching Hospitals, Provincial & District General Hospitals,
All Provincial Directors and Regional Directors of Health Services,
All Medical Superintendents of Base Hospitals,
All Medical Officers in Charge of Divisional Hospitals,

Guidelines for proper maintenance of the Bed Head Ticket

In the Sri Lankan context, the Bed Head Ticket (BHT) is the main medical record used in inward care and management of patients. It carries important information about the patient including the admission data, history, clinical findings, investigations, diagnosis and treatment, etc. It is also a legal document which can be challenged in a court of law.

Therefore, it is of utmost value to maintain the BHT properly to ensure prompt and quality patient care while minimizing medical errors. Proper maintenance of BHT will also safeguard the healthcare providers if they have to face any litigation issues.

However, it has been observed that during certain instances, the BHT is not properly maintained. This has led to lapses in providing optimal care and achieving favorable outcomes.

As an initiative of improving the current status of maintaining the BHT, guidelines have been developed for its proper maintenance (attached as annex 1), in consultation with relevant stakeholders including medical administrators, representatives from Professional Colleges and the Institute of Forensic Medicine & Toxicology.

All heads of the institutions are hereby requested to instruct all relevant officers to adhere to the aforementioned guidelines and to ensure their compliance with the guidelines.

Dr. Asela Gunawardena
Director General of Health Services

Dr. ASELA GUNAWARDENA
Director General of Health Services
Ministry of Health
"Suwasiripaya"
385, Rev. Baddegama Wimalawansa Thero Mawatha,
Colombo 10.

Copies:
Additional Secretary (Medical Services)
Additional Secretary (Public Health Services)
All Deputy Directors General
All Directors of Special Campaigns and Units

385" පූජ්‍ය බද්දේගම විමලවංශ හිමි මාවත, කොළඹ 10. 385, வணக்கத்துக்குரிய பத்தேகம விமலவங்ச தேரோ மாவத்தை, கொழும்பு 10.
385, Rev. Baddegama Wimalawansa Thero Mawatha, Colombo 10, Sri Lanka.

Annex 1

Guidelines for proper maintenance of the Bed Head Ticket

Maintaining the Front page (Admission sheet):

The admission sheet of the BHT has been updated recently to include important information regarding the admission of the patient. Please note the following:

- Fill all the relevant cages legibly and accurately.
- Document the allergy status of the patient (if any) in red.
- Mention the blood group in red.
- Always clearly write the principal diagnosis (if available) of the patient.

Maintaining the Continuation sheets:

- Number all pages in the chronological order, at the top right-hand corner of the page.
- All pages have to be intact.
- If there are subfolders (e.g. for investigation forms), number them also in the chronological order.
- Mention the name of the patient (surname with initials), ward number (setting) and BHT number at the top of each page.
- Maintain separate subsections in the BHT for entries of different categories of staff who are authorized to make entries and are involved in care of the patients regularly (e.g. records of nursing officers).

Documentation of individual entries:

- Make an entry each time the patient is seen by a healthcare professional who is authorized to make entries in the BHT.
- Make all entries without undue delay.
- Make the entries in the chronological order in which they occurred.
- The person making the entry needs to always clearly write his/ her name and the designation and place the signature at the end of the entry.
- Always clearly mention the date (in day/month/year format - dd/mm/yyyy) and the time (in 24-hour clock format or in 12-hour clock format with am/pm) of making the entry, at the beginning of the entry.

- Every entry has to identify (by name and designation), the most senior healthcare professional present (who is responsible for decision making) at the time the entry is made (i.e. during a ward round with the consultant, it has to be the consultant's name).
- Record all communications regarding the patient, including communications via the telephone, in the BHT.
- If the person making the entry in the BHT is different from the person giving the instruction/ making the decision (e.g. instructions given over the phone, a junior doctor recording the observations/ instructions of a consultant), it is important that he/she repeat back the instruction written in the BHT to the person giving the instruction and confirm it as correct.
- Do not leave undue space in between entries, and do not leave any blank pages in between. If there is any unused blank space in between entries, cut it off with a single line.
- All entries must be accurate to the knowledge of the person making the entry.
- Clarity and legibility of the entries have to be ensured.
- Use blue or black ink for making entries except for special entries (e.g. allergies, blood group, IV drugs, etc. in red).
- Make sure all diagrams are clear and labelled properly.
- Avoid abbreviations (except for standard abbreviations).
- Always document action taken for an identified problem.
- Document the care plan as comprehensively as possible.
- Clearly document consent taken for treatment/ procedures.
- It is important that the following aspects are documented as comprehensively as possible:
    - relevant history and examination findings (both normal and abnormal).
    - in medico-legal cases, it is useful that the injuries and the alcohol status are documented.
    - differential diagnosis whenever possible
    - decisions made and actions agreed upon
    - if relevant, information given to patients, including the different treatment options and risks explained during taking the consent for procedures/ treatment
    - if relevant, the patient's concerns, preferences and expressed wishes (this is important if the patient subsequently loses the capacity to make decisions)
    - investigations and referrals made
    - drugs and other treatment prescribed, and advice given
    - procedures and other management done

- Prescribe medications using their generic name at every possible instance.

- In case of a transfer of care within the hospital, record the name of the new responsible consultant and the date and time of the transfer.
- If there is a need to make any change to an already documented record (deletion or amendment), it has to be done by striking the error through with one line so that the original entry is still legible. The corrected entry has to be written alongside with the date, time, name and signature of the person making the necessary change. The original entry must not be permanently erased by using white correction fluid, scribbling out or writing over the original, nor must the particular BHT sheets be removed.
- If there is a request from a patient/ guardian to change the name of the patient already mentioned in the BHT due to some reason, it should be carried out after obtaining a letter from the patient/ guardian requesting the name change, along with proof of identity. The change should also be done in all the relevant documents e.g. admission register.

The responsibility of entries in the Bed Head Ticket:

- All staff placing entries in the BHT are responsible for the content, accuracy and the clarity of their entries.
- All staff who supervise authorized staff in training (i.e. House Officers) are overall responsible for the entries written by the staff under their supervision.

Provision of supports for improvement in maintenance of Bed Head Ticket:

- It is necessary to identify and support the training needs of all relevant staff, regarding the proper maintenance of the BHT.
- Random checks of the BHT for completeness and accuracy by the clinician (medical team leader) will help to maintain the proper documentation in the BHTs of the relevant ward.
- Conducting regular audits will help in identifying the causes and contributory factors for poor maintenance of BHT and for making necessary improvements.