



**SINDH INFECTIOUS DISEASES
HOSPITAL & RESEARCH CENTRE
(SIDH)**

DOW UNIVERSITY OF HEALTH SCIENCES

STRATEGIC PLAN
(2024 – 2027)

Pioneering Excellence | Inspiring Innovation



To Heal | To Educate | To Discover

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MEDICAL SUPERINTENDENT'S MESSAGE



Sindh Infectious Diseases Hospital & Research Centre is a living example of commitment and dedication. Back in 2020 when the world was hit by the COVID-19 pandemic, the government of Sindh assigned Dow University of Health Sciences to establish Pakistan's first dedicated infectious diseases facility. The journey leading up to the establishment of this hospital has been remarkably challenging. The challenges we faced were numerous and multifaceted, from the urgent need to provide specialized care for COVID patients to the logistical complexities of setting up a dedicated infectious diseases facility. However, through the collective efforts of our incredible team under the dynamic leadership of Prof. Mohammed Saeed Quraishy, Vice Chancellor, Dow University of Health & Sciences- Karachi, we overcame each obstacle, turning adversity into opportunity.

As front liners, we recognized the urgency of the situation and swiftly mobilized resources to secure the necessary infrastructure, medical equipment, and supplies. This allowed us to create a dedicated space for COVID patients in record time. While the establishment of the hospital was underway, our healthcare professionals underwent intensive training to handle the unique challenges associated with infectious diseases, particularly COVID-19. Their dedication to continuous learning and preparedness has been instrumental in providing quality care to our patients.

The challenges of the pandemic extended beyond physical health, affecting the mental well-being of both patients and their families. SIDH prioritizes mental health support services through one-on-one counseling sessions by consultants in a designated 2-hour time slot to ensure holistic care, not only for patients but also for their families. It is through the collective efforts of our team that we were able to manage more than 5000 COVID cases and have now extended our services to other infectious diseases, pediatrics, pulmonology, critical care, and nephrology cases.

As we stand on the cusp of a new era in healthcare delivery, SIDH symbolizes not only a response to a crisis but also a testament to our collective resilience and ability to overcome challenges. I extend my heartfelt gratitude to the members of the SIDH team for their unwavering support, hard work, and sacrifices that made this milestone possible.

Together, let us continue to be the beacons of hope and continue to serve our community with dedication and compassion, knowing that our efforts contribute to the greater well-being of society and Pakistan.

EXECUTIVE SUMMARY:

Sindh Infectious Diseases Hospital & Research Centre (SIDH&RC) has developed this strategic plan for 2024-2027 through diligent analysis and collaboration with stakeholders ensuring comprehensive coverage of all aspects relevant to our objectives. It outlines key initiatives to optimize patient outcomes, enhance operational efficiencies, foster collaboration, and promote growth. In-depth analysis of the institutional strengths, weaknesses, opportunities, and threats was done to outline distinct goals and formulate objectives to achieve them.

SIDH&RC is committed to providing comprehensive and innovative care for patients with infectious diseases while advancing research and education in the field. In line with our mission and vision, we have developed the following primary goals for 2024-2027.

- 1) Achieve Accreditation and Enhance Operational Excellence Q4-2026.
- 2) Develop Training, Research, and Community Engagement Programs by Q4-2025
- 3) Optimize Human Resources and Employee Well-being by Q4-2025
- 4) Expand and Enhance Multidisciplinary Clinical Care and Diagnostic Services by Q1 2027
- 5) Integrate Advanced Technology to Enhance Hospital Operations by Q1 2026.

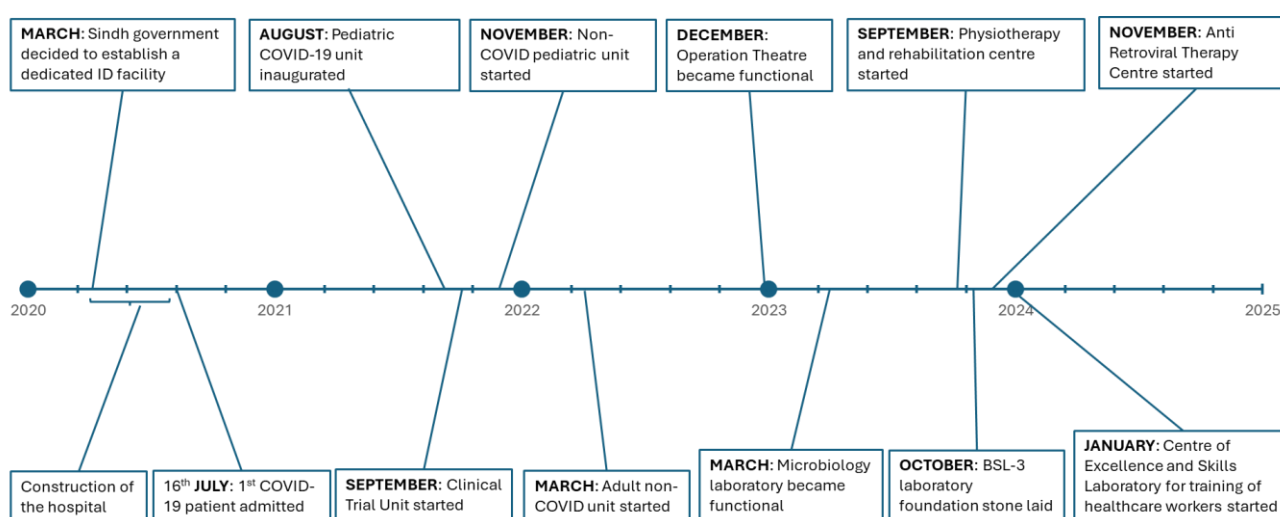
SIDH&RC aims to fulfill these goals through planned timelines, compliance with which shall be monitored through regular meetings and scheduled audits.

ABOUT THE INSTITUTE:

Sindh Infectious Diseases Hospital & Research Centre (SIDH&RC) is the only dedicated infectious diseases hospital of Pakistan and is affiliated with the Dow University of Health Sciences, Karachi.

SIDH&RC provides holistic services with experienced and dedicated consultants, nurses, medical officers, laboratory technologists, radiographers, pharmacists, administrative staff, etc. They work tirelessly to provide comprehensive care for patients with infectious diseases, promote infection prevention and control practices, conduct cutting-edge research and educate healthcare professionals and the community about infectious diseases management and prevention.

INSTITUTIONAL HISTORY:



INTRODUCTION & OVERVIEW

Sindh Infectious Diseases Hospital & Research Centre (SIDH & RC) is the first dedicated infectious diseases hospital of Pakistan. Located in the heart of Karachi, SIDH&RC was founded amidst the COVID pandemic in July 2020 by the Government of Sindh in collaboration with the Dow University of Health Sciences.

FACILITIES AND SERVICES:

SIDH&RC is a 175-bedded hospital with adult and pediatric units. Since its inception, over a short period, SIDH & RC has provided high quality patient care to more than 40,000 patients, free of cost, by qualified health care professionals as per the latest research and treatment protocols. To date, SIDH has managed more than 16,000 cases as inpatients and more than 27,000 cases as outpatients. During the COVID-19 pandemic, it was the only hospital of Karachi, which had 48 fully equipped ICUs and 110 HDU beds to cater to critical and severe COVID cases. Despite COVID restrictions, SIDH was the only hospital where consultants were available for counselling of attendants in a designated 2-hour counselling session to address the concerns and fears of attendants and patients' families.

Under the dynamic leadership of Prof. Mohammed Saeed Quraishy, Vice Chancellor Dow University of Health & Sciences- Karachi, SIDH team is committed and determined to make a difference in the health care sector and to take the quality of patient care to newer heights in public sector.

CLINICAL AREAS:

Triage:

24-hour triage facility is available for adult patients to filter and admit cases eligible for in-patient care.

Intensive Care Units (ICU):

SIDH&RC has three fully equipped 16-bedded adult ICUs with negative pressure to ensure appropriate and timely treatment for critical patients with adequate infection control.

High Dependency Units:

There are two 33-bedded HDUs and one 8-bedded HDU available for adult patients with oxygen supply, ventilatory and suction ports and monitoring systems on each bed. Privacy is upheld by maintaining partitions between patients with walls.

Pediatric Unit:

The pediatric unit has an eight-bedded fully equipped ICU and a 33-bedded HDU with the same facilities as in adult HDUs. An area in the HDU is dedicated to 24-hour pediatric triage for critical patients.

Isolation Rooms:

To ensure transmission-based precautions for the prevention of spread of contagious diseases, SIDH has twelve isolation rooms (four in each HDU) with negative pressure to maintain airborne precautions.

CLINICAL SERVICES:

Infectious diseases:

Infectious diseases include bacterial, viral, parasitic, and fungal infections including challenging cases of HIV/AIDS, Diphtheria, Tuberculosis and Crimean Congo Hemorrhagic Fever (CCHF).

Pediatric infectious diseases:

Pediatric Unit for Infectious Diseases is one of a kind in the entire city, which is flourishing day by day with the ever-increasing influx of challenging pediatric cases. Daily triage and pediatric clinic help in identifying critical cases and in timely treatment.

Pulmonology:

Pulmonology caters to cases with obstructive and restrictive airway diseases, connective tissue diseases, empyema, pneumothorax, and occupational pulmonary diseases. Tube thoracotomy and therapeutic thoracentesis are being performed by our skillful pulmonology consultants.

Nephrology:

To address nephrology-related issues of patients, qualified professionals are present.

Infection Control Department:

The hospital has an efficient infection control department with a manager and three infection control nurses.

Anesthesia and Critical Care:

To ensure quality of care, in-house ICU consultants are present round the clock to address all the issues of critical patients and to perform emergency procedures like intubation and CVP/DL /A-lines insertion.

Anti-Retroviral Therapy (ART) Center

To provide quality care to HIV/AIDS patients, HIV Treatment Centre has recently started, where HIV testing and treatment are available free-of-cost through a national program.

SUPPORT & ANCILLARY SERVICES:

Radiology:

The hospital has a modern radiology unit with radiography, ultrasonography, echocardiography, and CT scan services.

Laboratory:

The hospital has a well-rounded laboratory with hematology, chemistry, and microbiology departments. The hematology and chemistry unit receives and reports more than hundred tests daily. It is very well equipped with the latest machines to report basic hematology and chemistry parameters along with some advanced tests. The microbiology department receives more than 30 tests daily and has up-to-date facilities including quality control organisms, an automated blood culture system, etc.

Pharmacy:

The pharmacy is well-stocked, equipped with a wide array of medications and pharmaceutical supplies, and ensures timely access to essential drugs for patients. With knowledgeable staff and streamlined processes, it provides efficient and reliable pharmaceutical services to meet patient needs effectively.

The pharmacy services include dilutional, compounding, narcotic, supplementary, and total parenteral nutrition facilities.

Nutrition and Food:

Qualified nutritionists perform rounds that are conducted daily to cater to nutritional requirements for debilitated and critical patients.

Physiotherapy and rehabilitation:

A physiotherapy and rehabilitation center is present to cater to patients who have post-COVID pulmonary fibrosis and other diseases requiring rehabilitation. Qualified physiotherapists are present for in-patient care and recovery.

Clinical Trial Unit:

SIDH is also contributing to research projects and international multi-center clinical trials not only to find novel solutions to local health care problems but also to help in the advancement of health care approaches. SIDH & RC has a Clinical Trial Unit with designated research staff, which is approved by DRAP for phase I-IV clinical trials. SIDH has completed multicenter international trials, and many are in the pipeline.

CERTIFICATIONS:

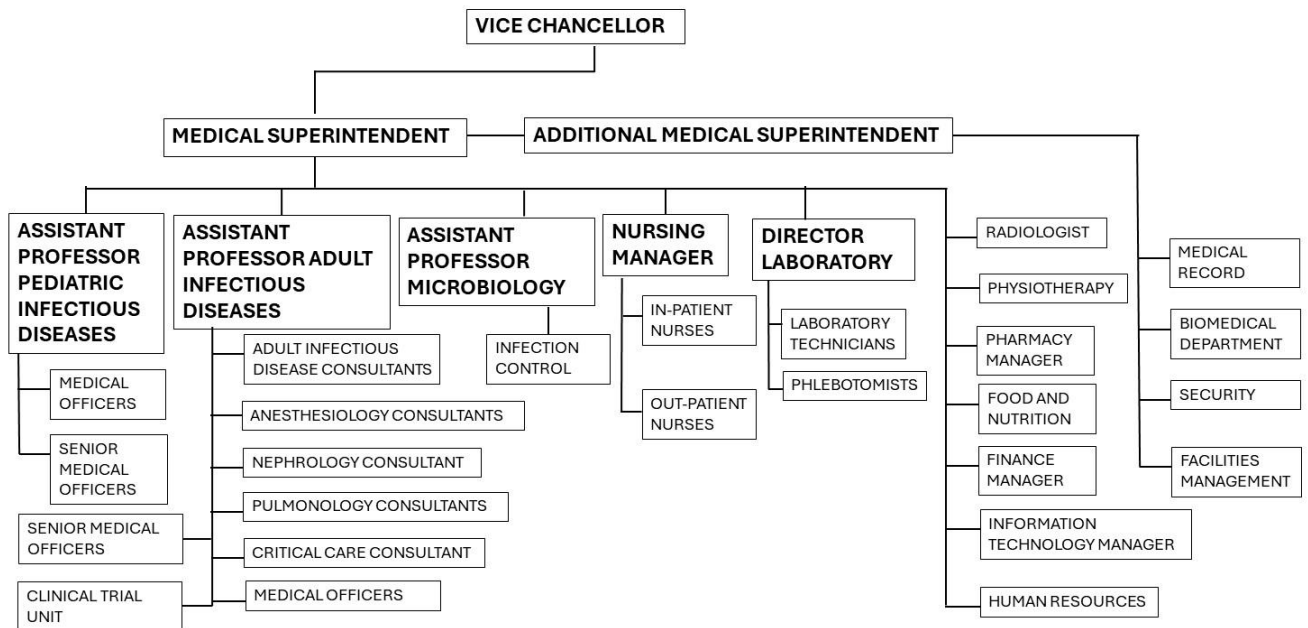
- Drug Regulatory Authority of Pakistan (DRAP) for Pharmacy & Clinical Trial Unit

- Pakistan Nuclear Regulatory Authority (PNRA) for Radiology
- Registration Certificate from Sindh Health Care Commission (SHCC)

QUALITY POLICY

- At Sindh Infectious Diseases Hospital and Research Centre, we are committed to providing free of cost, holistic, and compassionate evidence-based patient-centered care with equality and dignity.
- To provide good quality care with strong adherence to infection control practices and safety measures, not only for patients but also for employees and visitors.
- To continuously evaluate and enhance our processes to optimize patient outcomes and experiences through ongoing education, training, and quality assurance programs.
- To provide coordinated patient care by fostering a culture of collaboration and open communication between multidisciplinary teams, maintaining ethical standards and transparent practices

INSTITUTIONAL ORGANOGRAM:



CURRENT STAFF:

Designation	No of Staff
Medical Superintendent	01
Additional Medical Superintendent	01
Director Laboratory	01
Assistant Professor Infectious Diseases- Adult	01
Assistant Professor Infectious Diseases- Pediatrics	01
Assistant Professor -Microbiology	01
Consultants Adult Infectious Diseases	03
Senior Registrar- Infectious Diseases	01
Pulmonology Consultants	05
Anesthesia Consultants	05
Critical Care Consultant	01
Nephrology Consultant	01
Anesthesiologists	02
Radiologist	01
Senior Medical Officers	12
Medical Officers	36
Manager Finance	01
Manager Infection Prevention and Control	01
Nursing Manager	01
Manager Pharmacy	01
Manager IT	01

Pharmacist	08
Clinical Research Associate	01
Medical Technologist/ Jr Medical Technologist	02
Bio Medical Engineer	02
HR Officer	01
Assistant Admin Officer	02
IT Support	01
Registered Nurses	135
Physiotherapist	05
Dietician	02
Respiratory / Critical Care Technologist	15
Lab Technologist	06
Lab Technician	04
ISO Coordinator	01
Lab Assistant	01
Phlebotomist	12
Pharmacy Technician	07
Aid Nurse	16
CT Technician	01
ICU Technician	23
X-Ray Technician	02
MRI Technician	01
Dialysis Technician	03
Anesthesia Technician	02

Pediatric Technician	01
Bio Medical Technician	01
CCTV Operator	01
Receptionist	04
Key Punch Operator	03
Data Entry Operator /Computer Operator	03
Unit Receptionist	01
Storekeeper	02
Security Supervisor	01
Ward Boy/ Porter	48
Aya	26
Driver	01
Peon	02
Chowkidar	04
Total	429

SECTION I: OVERVIEW OF THE STRATEGIC PLANNING PROCESS

The 2024-2027 strategic plan for Sindh Infectious Diseases Hospital & Research Centre (SIDH&RC) was developed through stakeholder collaboration and institutional analysis. The process involved consultations with healthcare professionals, administrative teams, and research personnel to assess needs and challenges.

A comprehensive SWOT analysis was conducted to define priorities and align objectives with the hospital's statement of purpose.

Five strategic goals were established with clear timelines, focusing on accreditation, research, human resources, clinical expansion, and technological integration. Implementation was structured through planned resource allocation, operational improvements, and compliance monitoring.

Regular audits and review meetings were integrated to ensure progress and adaptability. Emphasis was placed on enhancing patient care, optimizing hospital functions, and expanding research and training programs for long-term sustainability.

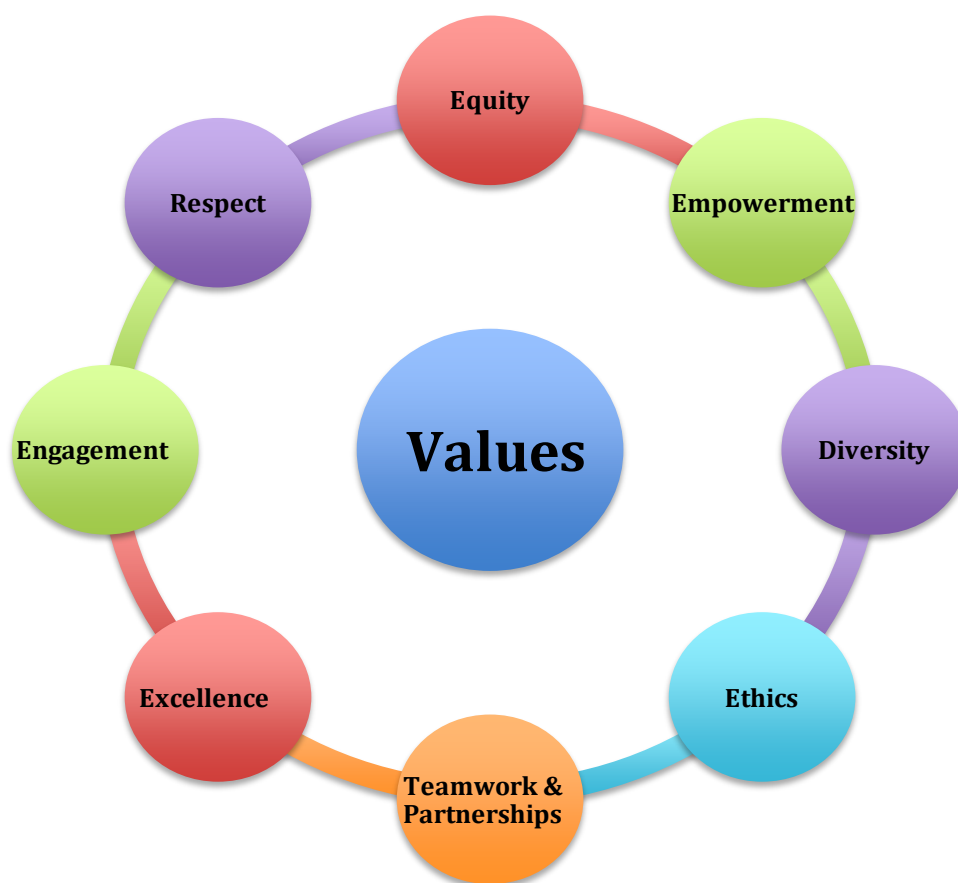
SECTION II: VISION, MISSION & VALUES

Vision:

To be a pre-eminent academic institution committed to changing and saving lives.

Mission:

Providing outstanding patient-centered education, training, and clinical care informed by cutting-edge research and innovation, while generating and disseminating new knowledge.



VALUES

Customer Service

- Put students first

● Empathy & Compassion

- Understand before you judge
- Be concerned for the sufferings and misfortunes of others

- Excellence
 - Be the best and commit to exceptional quality and service
- Innovation
 - Encourage curiosity, imagine, create, and share
- Teamwork
 - Engage and collaborate
- Integrity & Leadership
 - Be a role model and influence others to achieve their best
 - Have the courage to do the right thing
 - Hold yourself and others accountable
- Respect & Collegiality
 - Be kind
 - Listen to understand
 - Value different opinions

STATEMENT OF PURPOSE

Pioneering Excellence in Infectious Disease Treatment

We aim to be a pioneering force in infectious disease treatment, setting new standards for patient care, research, and community outreach. At SIDH&RC, we envision a future where infectious diseases are met with unwavering expertise, compassion, and innovation based on the current treatment guidelines and protocols.

SECTION III: ASPIRATIONAL INSTITUTIONS

1. Pakistan Kidney and Liver Institute and Research Center (PKLI&RC):

PKLI&RC was inaugurated on December 25, 2017. Situated in Lahore, the mega-hospital, aiming to be a center of excellence in healthcare, has opened its doors with a wide range of services, including OPD consulting clinics, inpatient facilities, pathology, blood bank, pharmacy, operating rooms, intensive care services, radiology, and nuclear medicine with a complete range of modern equipment.

PKLI&RC has a sophisticated infection control team which performs audits, surveillance and maintains impeccable infection control throughout the hospital.

Services offered by PKLI&RC:

- Urology & Nephrology
- Gastroenterology and Hepatology
- Pediatric Gastroenterology, Hepatology & Nephrology
- Kidney, Bone Marrow & Liver Transplant
- Oncology
- Internal medicine
- Infectious diseases
- Critical care & Anesthesiology
- Pulmonology & Cardiology
- Neurology
- Interventional Radiology
- Laboratory (Histopathology, Microbiology, Virology, Hematology, Immunology)
- Gynecology
- Psychiatry & Rehabilitation

Rationale to select:

PKLI&RC is a large center that caters to all subspecialties with rigorous infection control practices. With a strong focus on infection control, they have managed to carry out several transplants and hence prevented infection transmission in susceptible patients.

2. National Centre for Infectious Diseases (NCID), Singapore:

The National Centre for Infectious Diseases (NCID) is a 330-bed purpose-built facility designed to strengthen Singapore's capabilities in infectious disease management and prevention.

NCID houses clinical services, public health, research, training and education, and community engagement under one overarching structure. In addition to the functions of the Communicable Disease Centre (clinical treatment of infectious diseases and outbreak management), the functional units of NCID include the

Infectious Disease Research and Training Office, the National Public Health and Epidemiology Unit, the National Public Health Laboratory, the National HIV Program, the National TB Program, the Antimicrobial Resistance Coordinating Office, and the Infection Prevention, Control and Outreach Office of NCID.

Services offered by NCID:

- Infectious Disease Research and Training Office
- National Public Health and Epidemiology Unit
- National Public Health Laboratory
- National HIV Program
- National Tuberculosis Program
- Antimicrobial Resistance Coordinating Office
- Infection Prevention, Control and Outreach Office of NCID

Rationale to select:

The NCID is providing all infectious disease services under one roof, addressing not only patient care but also playing a pivotal role in prevention and management of infectious diseases in the community. By having dedicated departments for public health, epidemiology, research and training, antimicrobial resistance coordination and outreach services, it has proven to be an aspirational institute for newly established and ambitious teams like ours.

3. Hospital for Tropical Diseases (HTD), United Kingdom:

The specialist team at the HTD provides the UK with diagnoses and treatment of all tropical diseases including malaria, leprosy, Chagas, parasites and diseases of the skin, eye, and gut.

HTD also provides clinical infectious disease services for UCLH. It houses the National Travel Health Network and Centre and the Find and Treat service.

The Hospital accepts direct referrals from GPs or referrals and transfers from other hospitals and has an emergency self-referral service. HTD runs a Travel Clinic to help keep people safe when travelling. HTD outpatients also offers clinics for a range of tropical, rare, and imported infections and conditions.

Services offered by HTD:

- Emergency walk-in clinics
- Travel clinic
- HTD outpatient services

- Infection inpatients
- Rapid Access Infectious Diseases (RAID)
- Outpatient Parenteral Antimicrobial Therapy (OPAT)
- UK Chagas Hub
- Tuberculosis Service
- RESPOND Integrated Refugee Health Service
- Infection Control
- COVID Medicines Delivery Unit (CMDU)
- Parasitology

Rationale to select:

The services provided by HTD include several outpatient facilities such as the Rapid Access Infectious Diseases (RAID) and Outpatient Parenteral Antimicrobial Therapy (OPAT).

The RAID clinic is for patients with suspected or confirmed acute infections, who do not need admission but warrant prompt ID assessment and management. Some patients assessed in this clinic may be transferred to the OPAT service for treatment with intravenous antibiotics.

OPAT is the provision of intravenous antibiotics used to treat infection in an outpatient or community setting as a comparable and safe alternative to inpatient care in medically stable patients. They accept direct GP referrals, as well as patients referred from UCLH wards and outpatient clinics, A&E, or the RAID clinic. These patients can either be seen daily by the OPAT team or at home by community nurses.

SECTION IV: STRATEGIC GOALS

Goal 1: Achieve Accreditation and Enhance Operational Excellence

Objective 1: Establish Key Operational Departments.

Goal 2: Develop Training, Research, and Community Engagement Programs

Objective 1: Establish Training and Development Programs.

Goal 3: Optimize Human Resources and Employee Well-being

Objective 1: Enhance Human Resources Policies and Practices.

Goal 4: Expand and Enhance Multidisciplinary Clinical Care and Diagnostic Services

Objective 1: Expand and Upgrade Clinical and Diagnostic Services

Goal 5: Integrate Advanced Technology to Enhance Hospital Operations

Objective 1: Implement and Upgrade Technology Systems

OBJECTIVES OKRs, & KPIs

Strategic Goal 1: Achieve Accreditation and Enhance Operational Excellence							
Goal Statement: Attain national and international accreditation by establishing key operational departments and ensuring compliance with global standards for quality management, patient safety, and hospital services.							
OKR (Objective and Key Results)							
Objective 1: Establish Key Operational Departments							
Objective	Key Results	KPI	Measurement Method	Target	Person Responsible	Resource Requirement	Timeline
O 1.1: Establish essential operational departments to meet accreditation standards and enhance the hospital's ability to deliver high-quality, patient-centered care.	KR 1.1.1: Establish the Quality Management and Patient Safety (QMPS) Department by Q4-2025.	The number of departments established on schedule.	Monitor the progress of department establishment.	100% establishment of QMPS, SSD, CSSD, Laundry and Linen Services, and NFSD by Q4-2026.	MS	Area Staff Equipment	Q4-2025
	KR 1.1.2: Establish the Safety and Security Department (SSD) by Q3-2025.	Compliance with accreditation standards.	Conduct internal audits to ensure compliance with accreditation standards.		MS	Area Staff Equipment	Q3-2025
	KR 1.1.3: Establish the Central Sterile Services Department (CSSD) by Q3-2026.	Number of quality and safety audits conducted.			MS	Area Staff Equipment	Q3-2026
	KR 1.1.4: Establish a functional Laundry and Linen Services Department by Q4-2025.				MS	Area Staff Equipment	Q4-2025
	KR 1.1.5: Establish the Nutrition and Food Services Department (NFSD) by Q3-2025.				MS	Area Staff Equipment	Q3-2025
O 1.2: Develop and implement the necessary policies and procedures to meet and maintain accreditation standards.	KR 12.1: Develop and document all required policies and procedures by Q4-2025.	Number of policies developed and implemented.	Track the creation and implementation of policies.	100% policy development by Q4-2025.	MS, QC	QC officer	Q4-2025
	KR 12.2: Train 100% of relevant staff on accreditation policies by Q4-2025.	Percentage of staff trained.	Monitor staff training completion rates.	100% staff training in Q4-2025.	MS, QC		Q4-2025
	KR 12.3: Conduct bi-annual	Number of successful audits.	Review audit results and	Two successful	MS, QC		Q4-2026

	internal audits to ensure compliance with established policies.		compliance records.	audits per year.			
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Strategic Goal 2: Develop Training, Research, and Community Engagement Programs							
Goal Statement: Enhance community health and workforce capabilities through training, development, and research initiatives that foster collaboration with national and international partners.							
OKR (Objective and Key Results)							
Objective 1: Establish Training and Development Programs							
Objective	Key Results	KPI	Measurement Method	Target	Person Responsible	Resource Requirement	Timeline
O 2.1: Launch comprehensive training and development initiatives to enhance the skills of healthcare workers and support community health.	KR 2.1.1: Launch the Community Awareness Program (CAP) by Q2-2025.	Number of community outreach activities conducted.	Track the implementation and participation in CAP and PDP.	CAP launched Q2-2025.	MS, CAP Committee	Broadcasting equipment, Marketing team, venue	Q2-2025
	KR 2.1.2: Develop the Professional Development Program (PDP) for healthcare workers by Q4-2025.	Participation rate in PDP among healthcare workers.	Monitor the development and success of the research consortium.	80% of staff participated in PDP by Q4-2026.	MS, PDP Committee	HR, grants, policies	Q4-2025
	KR 2.1.3: Enhance the Clinical Trial Unit by developing a research consortium with national and international partners by Q4-2025.	Satisfaction rate among participants.	Conduct participant feedback surveys.		MS, Research Committee	EMR system	Q4-2025
O 2.2: Strengthen research capabilities and establish collaborations with national and international partners to advance healthcare knowledge.	KR 2.2.1: Develop a research consortium with at least three national and international partners by Q4-2025.	Number of research partnerships established.	Track partnership agreements and collaborative projects.	Three research partnerships by Q4-2025.	MS, Research Committee	Networking platforms	Q4-2025
	KR 2.2.2: Increase research output by 25% within the next two years.	Increase in research publications and projects.	Monitor research output and publications.	25% increase in research output by Q4-2025.	MS, Research Committee	Research associates, Biostatistician	Q4-2025

	KR 2.2.3: Secure funding for five major research projects by Q1-2027.	Amount of research funding secured.	Review research grant and funding applications.	Five research projects funded by Q1-2027.	MS, Research Committee	Networking platforms	Q1-2027
O 2.3: Implement programs to engage the community and promote public health through education and outreach.	KR 2.3.1: Conduct at least 05 community health workshops annually starting Q1-2025.	Number of community workshops conducted.	Monitor the number and attendance of workshops.	05 workshops annually starting Q1-2025.	MS, CAP Committee	Venue, Fund, Marketing department	Q4-2025
	KR 2.3.2: Launch a public health awareness campaign by Q3-2025.	Reach and impact of public health campaigns.	Track campaign metrics (reach, engagement).	Public health campaign launched by Q3-2025.	MS, CAP Committee	Fund, security, marketing team	Q3-2025
	KR 2.3.3: Partner with local organizations to increase participation in public health initiatives by 20% within the next two years.	Participation rate in public health initiatives.	Review partnership outcomes and participant numbers.	20% increase in participation by Q4-2026.	MS, CAP Committee	Collaborations	Q4-2026

Strategic Goal 3: Optimize Human Resources and Employee Well-being							
Goal Statement: Implement effective human resource policies that focus on employee induction, retention, satisfaction, and well-being, creating a supportive and sustainable work environment.							
OKR (Objective and Key Results)							
Objective 1: Enhance Human Resources Policies and Practices							
Objective	Key Results	KPI	Measurement Method	Target	Person Responsible	Resource Requirement	Timeline
O 3.1: Implement comprehensive HR policies to improve employee retention, satisfaction, and performance.	KR 3.1.1: Develop and implement a promotions and incentives program by Q4-2025.	Employee retention and satisfaction rates.	Conduct employee satisfaction surveys.	Promotions and incentives program operational by Q4-2025.	MS/AMS	HR Policies	Q4-2025
	KR 3.1.2: Expand the administration department by hiring dedicated HR personnel by Q3-2025.	Number of promotions and incentives awarded.	Monitor HR records for promotions and retention data.	HR personnel hired by Q3-2025.	MS, AMS, HR	HR policies	Q3-2025
O 3.2: Create a supportive environment that prioritizes	KR 3.2.1: Establish an Employee Wellness Centre by Q4-	Usage rate of the Employee Wellness Centre.	Track wellness center utilization and survey responses.	Wellness Center established by Q4-2025.	MS/AMS	Venue, fund, Equipment, HR	Q4-2025

employee well-being through wellness programs and comprehensive support services.	2025 to provide physical, mental, and emotional support.						
	KR 3.2.2: Conduct bi-annual employee satisfaction surveys and achieve a 75% satisfaction rate by Q4-2025.	Employee satisfaction rate.	Monitor program participation and outcomes.	75% employee satisfaction rate by Q4-2026.	MS/AMS	Survey forms	Q4-2025
	KR 3.2.3: Implement wellness programs that target at least 50% of employees by Q4-2025.	Participation rate in wellness programs.		50% staff participation in wellness programs by Q4-2025.	MS/AMS	QC officer	Q4-2025

Strategic Goal 4: Expand and Enhance Multidisciplinary Clinical Care and Diagnostic Services							
Goal Statement: Improve patient care by expanding multidisciplinary clinical services, upgrading diagnostic capabilities, and establishing specialized units to address the evolving needs of the community.							
OKR (Objective and Key Results)							
Objective 1: Expand and Upgrade Clinical and Diagnostic Services							
Objective	Key Results	KPI	Measurement Method	Target	Person Responsible	Resource Requirement	Timeline
O 4.1: Enhance the scope and quality of clinical services by expanding key departments and integrating new specialties.	KR 4.1.1: Expand pharmacy services by Q4-2025.	Number of new services and departments established.	Monitor the timeline and completion of each service expansion.	Complete all service expansions by Q4-2025.	MS/ Pharmacy Management	Space, funds, equipment, IT, HMIS	Q4-2025
	KR 4.1.2: Establish a surgical department by Q2-2026.	Patient volume and satisfaction in expanded services.	Track patient feedback and service utilization rates.	Increase patient satisfaction by 30% within one year of service implementation.	MS, HR	Equipment, HR	Q2-2026
	KR 4.1.3: Expand pulmonology services Q1-2027.	Utilization rates of newly established services.			MS, pulmonology department, HR	Equipment, space, HR, Policies	Q1-2027
	KR 4.1.4: Expand pediatric services by starting subspecialty services and establishing a neonatal intensive care	Utilization rates of newly established services.		Functional NICU by Q4-2026	MS/Paeds ID, HR	Space, HR, Equipment, Policies	Q4-2026

	unit by Q4-2026.						
O 4.2: Strengthen diagnostic services by upgrading equipment, expanding the test menu, and improving accessibility.	KR 4.2.1: Upgrade the radiology department with increased radiology services by Q4-2025.	Number of diagnostic tests offered	Track the number and range of diagnostic tests available.	Radiology and laboratory upgrades completed by Q4-2025.	MS, Radiologist, HR	Equipment, space, HR	Q4-2025
	KR 4.2.2: Expand laboratory services by improving the test menu and equipment by Q4-2025.	Utilization rate of diagnostic services.	Monitor the usage rates of diagnostic services.	Laboratory unit and vaccination center operational by Q4-2026.	Director Laboratory/ MS	Equipment	Q4-2026
	KR 4.2.3: Establish a neurology unit by Q1-2025 and a vaccination center by Q2-2026.	Patient satisfaction with diagnostic services.	Conduct patient satisfaction surveys.	Complete working by Q2-2026	MS, Neurologist, HR	Space, HR	Q2-2026
O 4.3: Develop programs that provide additional support to underprivileged patients and ensure equitable access to healthcare.	KR 4.3.1: Develop a Welfare Program by Q4-2025 to support underprivileged patients.	Number of patients served by welfare programs.	Monitor the enrollment and impact of welfare programs.	Welfare Program operational by Q4-2026.	MS, Welfare, Committee	Funds, Policies	Q4-2025
	KR 4.3.2: Expand infectious diseases services by Q2-2026, including a focus on preventive care.	Access to preventive care services.	Review preventive care outreach and utilization data.	Expanded infectious diseases services by Q2-2026.	MS, ID, HR	Logistics, Space, HR	Q2-2026

Strategic Goal 5: Integrate Advanced Technology to Enhance Hospital Operations							
Goal Statement: Leverage advanced technology to streamline hospital operations, improve patient care, and ensure efficient resource management.							
OKR (Objective and Key Results)							
Objective 1: Implement and Upgrade Technology Systems							
Objective	Key Results	KPI	Measurement Method	Target	Person Responsible	Resource Requirement	Timeline
O 5.1: Enhance hospital operations and patient care by implementing advanced technology systems, including IT infrastructure upgrades, electronic medical records, and improved environmental controls.	KR 5.1.1: Expand IT services by upgrading hardware and software by Q1-2026.	IT system uptime and reliability.	Monitor IT system performance and EMR usage statistics.	100% IT system upgraded by Q1-2026.	MS, IT Committee	EMR	Q1-2026
	KR 5.1.2: Implement an electronic medical record (EMR) system by Q1-2026.	Adoption rate of the EMR system.	Track environmental conditions and HVAC system performance.	Full EMR system implementation by Q1-2026.	IT	Funds, IT	Q1-2026
	KR 5.1.3: Improve HVAC services for better environmental control by Q2-2025.	Efficiency of HVAC systems post-upgrade.		25% improvement in HVAC system efficiency by Q2-2025.	MS, Maintenance department	Logistics	Q2-2025
O 5.2: Improve internal communication and information management by adopting digital platforms that streamline processes and enhance transparency.	KR 5.2.1: Implement a centralized communication platform (e.g., intranet) by Q1-2026.	Adoption and usage rate of the communication platform.	Track platform adoption and usage metrics.	Communication platform fully operational by Q1-2026.	MS, IT	IT, EMR	Q1-2026
	KR 5.2.2: Train 100% of staff on the new communication platform by Q1-2026.	Staff training completion rate.	Monitor training participation and feedback.	100% staff trained in Q1-2026.	MS, IT	HR	Q1-2026
	KR 5.2.3: Achieve a 75% satisfaction rate with internal communication effectiveness by Q1-2026.	Stakeholder satisfaction with communication processes.	conduct surveys to assess satisfaction with communication.	75% satisfaction rate by Q1-2026.	MS, IT	Surveys	Q1-2026

SECTION V: RESOURCE PLANNING FOR ACHIEVING STRATEGIC GOALS

STRATEGIC GOALS	RESOURCES		
	Human Resources	Equipment	Space
Goal 1: Achieve Accreditation and Enhance Operational Excellence by Q4-2026.	• Full-time Quality Officer • QMPS team • Safety and Security Officer • Trained and armed security guards • CSSD team • LLSD team • Cooks	• Wall-through gate • Arms for security guards • CSSD related equipment • LLSD related equipment • NFSD related equipment	• QMPS office • CSSD • LLSD • NFSD kitchen • Staff cafeteria
Goal 2: Develop Training, Research, and Community Engagement Programs by Q4-2025	• Research associates • Biostatisticians	• EMR system • Computer systems	• Auditorium
Goal 3: Optimize Human Resources and Employee Well-being by Q4-2025	• Administrative officer • Assistant administrative officers • Mental health professional	• Shelves, books, journals, and computers • Equipment for the gym	• Employee Wellness Centre • Library • Gym
Goal 4: Expand and Enhance Multidisciplinary Clinical Care and Diagnostic Services by Q1-2027	• Pharmacists for dilutional pharmacy • Pharmacists for a drug poison center • Pharmacists for TPN • Pharmacists for compounding pharmacy • Pulmonology SMOS • Respiratory technicians • Interventional radiologist	• Pharmacy equipment • Pharmacy software • Bronchoscopy equipment • Spirometry equipment • Pleuroscopy equipment • Sleep laboratory equipment • Portable ultrasound machine	• Dilution pharmacy • Drug poison center • Area for TPN • Compounding pharmacy • Warehouse • Bronchoscopy suite • Pulmonary function test laboratory • Pleuroscopy suite

	• Consultant nephrologist • OT technician • General surgeon • Thoracic surgeon • Pediatric surgeon • Laboratory technologists • ER staff • Neonatologist • Pediatric neurologist • Pediatric cardiologist • Pediatric ID consultant • Pediatric nursing staff • Pediatric medical officers • Vaccinators • Rabies clinic staff • Neurologist • Neurophysiology technicians	• Portable CXR • MRI • RO plant • Renal biopsy gun • CRRT • Anesthesia machine • GeneXpert machine • BSL-3 equipment • Automated phlebotomy tube labelling system • NICU equipment • Recreational equipment for play area • Vaccination center equipment • UVGI machines	• Sleep laboratory • Dialysis unit • Area for BSL-3 • Area for Syphilis Testing • Area for GeneXpert testing and AFB smear • NICU • Play area • Pediatric HIV clinics • Pediatric vaccination center • Adult vaccination center • Rabies clinic • Area for EEG and EMG
Goal 5: Integrate Advanced Technology to Enhance Hospital Operations by Q1-2026	• IT staff	• Computer systems • Printers • Network switch • Servers • CCTV equipment • PABX equipment • Software related to EMR, social media, antivirus, cloud storage, website domain • Pressure monitors • HVAC related equipment	• Ready for servers and other IT equipment • Area for isolation cubicles in the ICU

SECTION VI: IMPLEMENTATION AND MONITORING OF THE STRATEGIC PLAN

Goal 1: Achieve Accreditation and Enhance Operational Excellence by Q4-2026.	
Key results	● Seeking approval for QC officer ○ Identify leaders in each department and assign policies ○ Start regular audits by Q1 2025 ○ Plan for SHCC accreditation ○ Plan for ISO accreditation ● Seeking approval for Safety and Security Officer ○ Make a safety and security plan ○ Make a fire safety policy ○ Make a construction safety policy ● Seeking approval for CSSD staff ○ Make CSSD committee ○ Making CSSD policies ○ Acquiring CSSD equipment ● Hire LLSD team ○ Make LLSD policies ○ Acquire LLSD equipment ● Designate space for NFSD ○ Seeking approval to hire NFSD staff ○ Acquire NFSD equipment
Review Frequency	Quarterly
Responsibility	MS, QC officer

Goal 2: Develop Training, Research, and Community Engagement Programs by Q4-2025	
Key results	● Make CAP committee ○ Make a program for awareness sessions ● Make PDP committee ○ Develop faculty training program ○ Make liaison with international institutes for training programs ○ Enroll faculty in CPSP supervisory skills workshop ● Making the research committee ○ Hire research associates and biostatisticians ○ Conduct at least two CMEs in one year

	○ Conduct at least three workshops in one year ○ Establish partnership with at least two other research institutes ○ Increase the number of clinical trials by 20% ○ Increase the number of publications by 20%
Review Frequency	Quarterly
Responsibility	MS, QC officer

Goal 3: Optimize Human Resources and Employee Well-being by Q4-2025

Key results	● Make a program for incentives and promotion ● Seeking approval for administrative officer and assistant administrative officer ● Seeking approval for a mental health professional ● Allocate area for library ○ Acquire resources. ● Allocate area for gym ○ Acquiring equipment.
Review Frequency	Quarterly
Responsibility	MS, QC officer

GOAL 4: Expand and Enhance Multidisciplinary Clinical Care and Diagnostic Services by Q1-2027

Key results	● Expansion of pharmacy services ○ Establish a dilutionary pharmacy. ○ Establish drug poison center. ○ Establish TPN program. ○ Initiate AMS rounds. ○ Initiate clinical pharmacist. ○ Expand compounding pharmacy. ○ Upgrade warehouse. ○ Acquiring equipment. ○ Develop pharmacy software. ● Development of welfare platform
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	○ Establish hospital welfare committee. ○ Develop criteria for use of zakat/donations. ● Expansion of pulmonology services ○ Allocate area for bronchoscopy. ○ Acquiring bronchoscopy equipment. ○ Hire staff for bronchoscopy. ○ Allocate area for spirometry. ○ Acquire spirometry equipment. ○ Hire staff for spirometry. ○ Allocate area for Pleuroscopy. ○ Acquire pleuroscopy equipment. ○ Hire staff for Pleuroscopy. ○ Allocate area for sleep laboratory. ○ Acquire sleep laboratory equipment. ○ Hire staff for sleep laboratory. ● Upgradation of radiology department ○ Get approval for backup ultrasound machine. ○ Get approval for radiographer and departmental X-ray. ○ Seeking approval for interventional radiologist. ○ Acquire MRI machine. ● Expansion of the nephrology department ○ Seek approval for nephrologist and nephrology SMO. ○ Allocate area for dialysis. ○ Acquire renal biopsy gun. ○ Seek approval for CRRT. ● Establishment of surgical department ○ Get approval for anesthesia machine. ○ Get approval for OT technicians. ○ Get approval for general surgeon. ○ Get approval for thoracic surgeon. ○ Get approval for pediatric surgeon. ○ Seek approval for surgical equipment. ● Expansion of laboratory services ○ Seek approval for AFB smear and GeneXpert. ○ Seek approval for syphilis testing. ○ Complete construction of BSL-3 facility. ○ Seek approval for automated phlebotomy tube labelling system. ● Expansion of pediatric services ○ Allocate area for NICU.
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	○ Seek approval for neonatologist. ○ Seek approval for pediatric neurologist. ○ Seek approval for pediatric cardiologist. ○ Seek approval for pediatric ID consultant. ○ Seek approval for SMOs. ○ Allocate space for play area. ○ Allocate area for pediatric HIV clinic. ● Establishment of Vaccination Centre ○ Sign an MOU with the health ministry for EPI. ○ Allocate areas for adult and pediatric vaccination centers. ○ Hire vaccinators. ○ Acquire equipment and vaccines. ● Expansion of ID services ○ Issue notification for establishment of rabies clinic. ○ Allocate area for antiretroviral therapy center. ○ Acquire rabies vaccines and immunoglobulins. ○ Seek approval for human resources. ● Establishment of neurology unit ○ Seek approval for neurologists and technicians. ○ Seek approval for EEG and EMG machines. ● Improvement of infection control program ○ Seek approval for UVGI. ○ Design training program for healthcare workers.
Review Frequency	Quarterly
Responsibility	MS, QC officer

Goal 5: Integrate Advanced Technology to Enhance Hospital Operations by Q1-2026

Key results	● Expansion of IT services ○ Seek approval for IT-related human resources. ○ Launch EMR program, aiming for 100% adaptation by Q4 2025 ○ Seek approval for acquisition of hardware. ○ Seek approval for acquisition of software. ○ Seek approval for intranet and internet packages. ○ Seek approval for social media presence. ○ Seek approval for website development. ● Improvement of HVAC services ○ Install pressure monitors. ○ Seek approval for required equipment. ○ Identify locations for isolation cubicles. ○ Seek approval for acquisition of related equipment.
Review Frequency	Quarterly
Responsibility	MS, QC officer

SIDH&RC/DUHS-GOALS & OBJECTIVES 2024 to 2027													Not completed or initiated.			
													Initiated			
													Completed			
GOAL & OBJECTIVES	LEAD	SUPPORTING ENTITIES	TIMELINE	BUSINESS YEARS												
				2024				2025				2026				2027
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Achieve Accreditation and Enhance Operational Excellence	MS	QMPS, SSD, CSSD, LLSD, NFSD	Q4 2026													
Establishment of Quality Management and Patient Safety (QMPS) Department	MS	QMPS	Q4 2025													
Establishment of Safety and Security Department (SSD)	MS	SSD	Q3 2025													
Establishment of Central Sterile Services Department (CSSD)	MS	CSSD	Q3 2026													
Establishment of functional Laundry and Linen Services Department	MS	LLSD	Q4 2025													
Establishment of Nutrition and Food Services Department (NFSD)	MS	NFSD	Q3 2025													
Develop Training, Research, and Community Engagement Programs	MS	CAP committee, PDP committee, CTU, Research committee	Q4 2025													

Establishment of a Community Awareness Program (CAP)	MS	CAP committee	Q2 2025													
Establishment of a Professional Development Program (PDP)	MS	PDP committee	Q4 2025													
Enhancement of the working of the clinical trial unit by developing a research consortium	MS	Research committee	Q4 2025													
Optimize Human Resources and Employee Well-being	MS	HR	Q4 2025													
Development of program for promotions and incentives	MS	HR	Q4 2025													
Enhancement of the administration department by hiring an HR	MS	HR	Q4 2025													
Establishment of Employee Wellness Centre	MS	HR	Q4 2025													
Expand and Enhance Multidisciplinary Clinical Care and Diagnostic Services	MS	Clinical team	Q1 2027													
Expansion of pharmacy services	MS	Pharmacy team	Q4 2025													
Development of Welfare Program	MS	Administration	Q4 2025													

Expansion of pulmonology services	MS	Pulmonology team	Q1 2027													
Upgrade the radiology department by increasing radiology services	MS	Radiology team	Q4 2025													
Expansion of nephrology department by upgradation of dialysis unit and nephrology diagnostics	MS	Nephrology team	Q4 2026													
Establish surgical department	MS	HR, anesthesia team	Q2 2026													
Expansion of laboratory services by improving the test menu and equipment	MS	Director laboratory	Q4 2025													
Expand pediatric services by starting subspecialty services and establishing a neonatal intensive care unit.	MS	Pediatric team	Q4 2026													
Establish vaccination center	MS	ID team	Q4 2026													
Expansion of ID services	MS	ID team	Q2 2026													
Establish neurology unit	MS	HR/administration	Q2 2025													

Improvement of infection control program	MS	ICC	Q2 2025													
Integrate Advanced Technology to Enhance Hospital Operations	MS	IT/Administration	Q1 2026													
Expansion of IT services by upgradation of hardware & software	MS	IT	Q1 2026													
Improvement of HVAC services	MS	Administration	Q2 2025													

SECTION VII:

LIST OF APPENDICES

No.	DESCRIPTION
A	LIST OF EXISTING RESEARCH PROJECTS
B	PUBLICATIONS
C	SWOT ANALYSIS
D	TOWS MATRIX

APPENDIX A: LIST OF EXISTING RESEARCH PROJECTS

Project Name	International / Local	Sponsor	Focus Area
A Multi-center, Randomized, Blinded, Placebo-controlled, Phase 3 Clinical Study to Evaluate the Efficacy, Safety, and Immunogenicity of SARS-CoV-2 Bivalent mRNA Vaccine (LVRNA021) as Booster in Participants Aged 18 Years and Older who Completed Primary/1 Booster Dose(s) of SARS-CoV-2 Vaccination	International	AIM Vaccine Co. Ltd.	COVID-19
"A Clinically Oriented Antimicrobial Resistance Surveillance Network for Healthcare-associated Infections (ACORN-HAI)	International	National University of Singapore / Wellcome Trust	Hospital Acquired Infection
ACTIV-2d/A5407) A Phase 3, multicenter, randomized, double-blind, 24-week study of the clinical and antiviral effect of S-217622 compared with placebo in non-hospitalized participants with COVID-19	International	Shionogi & Co. Ltd	COVID-19 oral antiviral trial (non-hospitalized)

APPENDIX B: PUBLICATIONS

1. Hyper immune Anti-COVID-19 IVIG (C-IVIG) treatment in severe and critical COVID-19 patients: a phase I/II randomized control trial. *Eclinical medicine*, volume 36, 2021,100926,issn 2589-5370,<https://doi.org/10.1016/j.eclinm.2021.100926>
2. Efficacy of heterologous boosting against SAR-COV-2 using a recombinant interferon-armed fusion protein vaccine (V-01): a randomized, double blind and placebo-controlled phase III trial. *Emerging microbes & infections*, volume 11,2022 11:1, 1910-1919, doi: [10.1080/22221751.2022.2088406](https://doi.org/10.1080/22221751.2022.2088406)
3. Knowledge, attitude and practice among COVID-19 health care workers a quantitative study on the COVID 19 health care workers of Sindh Infectious Disease Hospital Karachi Pakistan. *PJMHS* vol. 16, no. 09, September 2022. DOI: <https://doi.org/10.53350/pjmhs22169371>
4. Phase II/III trial of hyper immune Anti-COVID-19 intravenous immunoglobulin (C-IVIG) therapy in severe covid-19 patients: study protocol for a randomized controlled trial. *Trials* 23, 932 (2022). <https://doi.org/10.1186/s13063-022-06860-2>.
5. Frequency of raised cardiac biomarkers in patients with COVID-19 infection and its association with mortality (idj.org.pk). <http://ojs.idj.org.pk/index.php/files/article/view/103/145>
6. Efficacy of heterologous boosting against SARS-COV-2 using a recombinant interferon-armed fusion protein vaccine (V-01): a randomized, double-blind and placebo-controlled phase III trial. *Emerg microbes infect*. 2022 dec;11(1):1910-1919. <https://pubmed.ncbi.nlm.nih.gov/35686572/>
7. Clinical and biochemical characteristics of covid-19 patients during the delta-omicron wave with risk assessment of adverse outcomes. *J coll physicians surg pak*. 2023 mar;33(3):297-302.
8. Comparison of clinical disease severity and outcome of vaccinated COVID-19 patients with unvaccinated patients in a specialized COVID-19 facility: a retrospective cohort study from Karachi, Pakistan. *Vaccines* 2023, 11,1178. <https://doi.org/10.3390/vaccines11071178>
9. Evaluation of neutrophil percentage to albumin ratio as predictor of mortality in patients with COVID-19. *P J M H S* vol. 17, no. 02, february, 2023. DOI: <https://doi.org/10.53350/pjmhs2023172327>
10. Risk factors and outcome of acute kidney injury in critical COVID-19 patients in Karachi, Pakistan: a single center, retrospective study. June 23, 2023https://doi.org/10.53778/pjkd72221
11. Safety and efficacy of selective RIPK1 inhibitor SIR1-365 in hospitalized

patients with severe COVID-19. A multicenter, randomized, double-blind, phase 1b trial. [Journal of Intensive Medicine](#). Sept 2024. <https://doi.org/10.1016/j.jointm.2024.07.003>

APPENDIX C: SWOT ANALYSIS

STRENGTHS	WEAKNESSES
1. Free of cost patient management with quality of care through assigned budget by the government. 2. Centrally located government hospital with easy accessibility. 3. Purpose built facility with isolation rooms and negative pressure, well-equipped ICU and HDU, availability of invasive and non-invasive respiratory equipment (Ventilator, HFNC, BiPAP, CPAP). 4. DRAP approved site for phase I, II, III, and IV Clinical trials with dedicated Clinical Trial Unit. 5. Centre of Excellence with Skill Lab with ongoing training programmes for Notifiable ID Case Management and Critical Care. 6. Antiretroviral Therapy Centre.	1. Lack of specialized diagnostic & therapeutic equipment like Bronchoscopy/ Pleuroscopy/Pulmonary Function test/Renal biopsy/Lymph node biopsy/EEG/ MRI facility/ CRRT/departmental CXR for outpatients (especially for ART centre/pulmonology clinic)/backup U/S machine for ICU bedside procedures and assessments; in-hospital TB workup (genexpert /AFB smear for TB, which delays reporting and sample tracking) and limited advance molecular testing. 2. Lack of dedicated infrastructure for sub-specialties (hemodialysis unit/ pulmonology unit); Absence of CSSD, Absence of LLSD, Library; Employee health unit (for physical and psychological support) and staff cafeteria. 3. Inadequate HR (General nursing staff, lack of consultant backup in microbiology, nephrology and pediatric ID; hospital administrator and lab manager; Inadequate lab staff to perform specialized testing such as ELISA, syphilis and others). Lack of Surgical and Subspecialty backups (general surgery, thoracic surgery, pediatric surgery, pediatric cardiology, pediatric and adult neurology, interventional radiology). 4. 6 monthly Contractual Jobs /No promotions and incentives. No paid leave in cases when prolonged rehabilitation is required. 5. No EPI/vaccination center for

	pediatric & adults immunocompromised patients. 6. Absence of mechanism to estimate the cost spent per patient 7. Inadequate IT support: Limited in-hospital Wi-Fi access and inadequate number of computer systems and printers. Inefficient HMIS system (esp. radiographs/ retrieval of documents) / unavailability at point of care. Lack of electronic medical record system. 8. No Quality Assurance department. No defined policy for advanced directives/ DNI/end of life care /withdrawal of care, and no ethical committee. Absence of hospital policies. 9. Safety & Risk Management: Radiological exposures during clinical rounds, inadequate construction safety practices. 10. There is No structured program for HCWs training and no undergraduate and postgraduate training programs. 11. Issues with HVAC regulation.
OPPORTUNITIES	THREATS
1. We can make a clinical trial consortium. 2. We can collaborate with academia, donor agencies, research organizations, for training, CME activities, and public awareness sessions. 3. Faculty and HCWs can be trained. 4. We can formulate evidence-based local guidelines and protocols. 5. More research can be done. 6. Hospital services and infrastructure can be expanded.	1. Security issues/lapses inside and outside hospital (No walk-through gates, no armed security guards). 2. Retention of staff due to increase in national/international opportunities. 3. Referrals of burnout and terminally ill patients increasing ICU mortality. 4. Inflation. 5. Sustainability of biosafety measures. 6. High dependency on government grants. 7. Accreditation.

APPENDIX D: TOWS MATRIX

	OPPORTUNITIES	THREATS
	1. We can make a clinical trial consortium. 2. We can collaborate with academia, donor agencies, research organizations, for training, CME activities, and public awareness sessions. 3. Faculty and HCWs can be trained. 4. We can formulate evidence-based local guidelines and protocols. 5. More research can be done. 6. Hospital services and infrastructure can be expanded.	1. Security issues/lapses inside and outside hospital (No walk-through gates, no armed security guards). 2. Retention of staff due to increase in national/international opportunities. 3. Referrals of burnouts and terminally ill patients increasing ICU mortality. 4. Inflation. 5. Sustainability of biosafety measures. 6. High dependency on government grants. 7. Accreditation.
STRENGTHS	SO	ST
1. Free of cost patient management with quality of care through assigned budget by the government. 2. Centrally located government hospital with easy accessibility. 3. Purpose built facility with isolation rooms and negative pressure, well-equipped ICU and HDU, availability of invasive and non-invasive respiratory equipment (Ventilator, HFNC, BiPAP, CPAP).	1. Leverage the hospital's position as the first dedicated infectious diseases hospital with a purpose-built facility and advanced equipment to establish a clinical trial consortium. This can attract collaborations with academia, donor agencies, and research organizations, enhancing training, continuing medical education (CME) activities, and public awareness sessions.	1. Enhance the hospital's conducive working environment and interdepartmental communication to build a culture of vigilance and security awareness, thereby mitigating security issues inside and outside the hospital. By leveraging the hospital's infection control and biomedical capabilities, we should implement

4. DRAP approved site for phase I, II, III, and IV Clinical trials with dedicated Clinical Trial Unit. 5. Centre of Excellence with Skill Lab with ongoing training programmes for Notifiable ID Case Management and Critical Care. 6. Antiretroviral Therapy Centre.	2. Utilize the well-equipped ICU, HDU, and skilled faculty to expand hospital services and infrastructure in collaboration with donor agencies and research bodies. This can also be linked with the hospital's DRAP-approved clinical trial site, further enhancing research capabilities. 3. Capitalize on the hospital's infection control program, biomedical and IT departments, and DRAP-approved status to formulate evidence-based local guidelines and protocols. These guidelines can be shared with other institutions, elevating the hospital's role as a leader in infectious diseases management.	biosafety and security training programs to ensure the sustainability of safety measures. 2. Utilize the round-the-clock availability of qualified consultants and the specialized nature of the hospital to effectively manage referrals of terminally ill patients. Establish protocols for managing high-risk patients to reduce ICU mortality and prevent staff burnout.
WEAKNESSES	WO	WT
1. Lack of specialized diagnostic & therapeutic equipment like Bronchoscopy/Pleuroscopy/Pulmonary Function test/Renal biopsy/Lymph node biopsy/EEG/ MRI facility/ CRRT/departmental CXR for outpatients (especially for ART centre/pulmonology clinic)/backup U/S machine for ICU bedside procedures and assessments; in-hospital TB workup	1. Address the lack of specialized diagnostic and therapeutic equipment by collaborating with academic institutions, donor agencies, and research organizations. This collaboration can also support the expansion of hospital services and infrastructure, filling gaps in diagnostic capabilities like bronchoscopy, MRI, and advanced molecular testing.	1. Develop a comprehensive security and risk management plan to address security threats, infrastructure gaps, and safety risks (e.g., radiological exposures during clinical rounds). This strategy will also help retain staff by ensuring a safe and supportive working environment. 2. Implement an affective quality assurance

(genexpert /AFB smear for TB, which delays reporting and sample tracking) and limited advance molecular testing. 2. Lack of dedicated infrastructure for sub-specialties (hemodialysis unit/pulmonology unit); Absence of CSSD, Absence of LLSD, Library; Employee health unit (for physical and psychological support) and staff cafeteria. 3. Inadequate HR (General nursing staff, lack of consultant backup in microbiology, nephrology and pediatric ID; hospital administrator and lab manager; Inadequate lab staff to perform specialized testing such as ELISA, syphilis and others). Lack of Surgical and Subspecialty backups (general surgery, thoracic surgery, pediatric surgery, pediatric cardiology, pediatric and adult neurology, interventional radiology). 4. 6 monthly Contractual Jobs /No promotions and incentives. No paid leave in cases when prolonged	2. Improve the hospital's IT infrastructure by introducing an electronic medical record system and upgrading the HMIS system. This will enhance the hospital's capacity to conduct research and clinical trials and contribute to the development of local evidence-based guidelines. 3. Implement structured training programs for faculty and healthcare workers to overcome HR deficiencies and improve overall hospital performance. Collaborations with academic institutions can also provide opportunities for undergraduate and postgraduate training programs, addressing the hospital's current gaps in educational offerings.	department and establish hospital policies, including a mechanism to estimate patient care costs, which will help mitigate the threat of inflation and ensure efficient resource utilization. This strategy can also address the lack of ethical committees and policies on end-of-life care. 3. Introduce a structured employee health unit and staff cafeteria to improve staff morale and retention, countering the threat of losing staff to other national/international opportunities. Additionally, offering promotions, incentives, and permanent employment structures will further mitigate this risk.
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rehabilitation is required. 5. No EPI/vaccination center for pediatric & adults immunocompromised patients. 6. Absence of mechanism to estimate the cost spent per patient. 7. Inadequate IT support: Limited in-hospital Wi-Fi access and inadequate number of computer systems and printers. Inefficient HMIS system (esp. radiographs/ retrieval of documents) / unavailability at point of care. Lack of electronic medical record system. 8. No Quality Assurance department. No defined policy for advanced directives/ DNI/end of life care /withdrawal of care, and no ethical committee. Absence of hospital policies. 9. Safety & Risk Management: Radiological exposures during clinical rounds, inadequate construction safety practices. 10. There is no structured program for HCWs training and no undergraduate and postgraduate training programs. 11. Issues with HVAC regulation.		
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