

Chapter 1: Introduction and Background

Diagnosis is the cornerstone of patient care, determining the course of treatment and management for a patient's condition. The process of diagnosing involves the synthesis of information gathered from patient interactions, clinical examinations, and diagnostic tests. Accurate diagnosis is vital for guiding appropriate interventions, preventing complications, and ensuring optimal health outcomes.



Yet, this process is complex and vulnerable to errors, which can have profound consequences. When diagnostic errors occur—whether they are delayed, incorrect, or missed—the impact can be devastating, leading to prolonged illness, unnecessary treatment, disability, or even death.

To emphasize the critical need for accurate and timely diagnosis in healthcare, the theme for World Patient Safety Day 2024 is "Get it right, make it safe!" This global campaign, which will be held on 17 September, aims to draw attention to the importance of diagnosis in patient safety and the need for collaborative efforts to minimize diagnostic errors. On this day, stakeholders—including patients, families, healthcare professionals, policymakers, and civil society—will come together to promote strategies and practices that ensure safer diagnostic processes.



Source: WHO 2024

Key Messages for World Patient Safety Day 2024 (WHO, 2024)

- **Correct and Timely Diagnosis: A Foundation for Patient Safety**



A correct and timely diagnosis is the first step towards effective prevention and treatment. However, diagnostic errors—such as missed, incorrect, delayed, or miscommunicated diagnoses—account for 16% of preventable patient harm in healthcare settings.

These errors often result from cognitive biases, insufficient communication, inadequate diagnostic tools, and complex patient presentations. They can worsen patient outcomes, lead to severe or prolonged illness, disability, and death, and increase healthcare costs. Reducing diagnostic errors is essential to improving patient safety and requires a systemic approach that addresses these multifaceted challenges.

- **Understanding the Diagnostic Process: Reducing Errors Through Clarity**

The diagnostic process is multifaceted and includes numerous iterative steps. It begins with the patient's initial presentation, followed by a detailed history-taking and physical examination. This is followed by ordering and interpreting diagnostic tests, communicating results, collaborating among healthcare team members, and developing a treatment plan.

Errors can occur at any point in this process due to factors such as inadequate information gathering, misinterpretation of data, poor communication, or insufficient follow-up. Understanding and clarifying each step in the diagnostic process are crucial for reducing errors and improving patient outcomes.



- **Addressing Diagnostic Errors: A Multi-Pronged Approach**

To address diagnostic errors, a multi-faceted strategy is required that engages all levels of the healthcare system. For policymakers and healthcare leaders, this includes fostering a positive workplace culture that encourages transparency, learning, and the use of quality diagnostic tools and technologies.

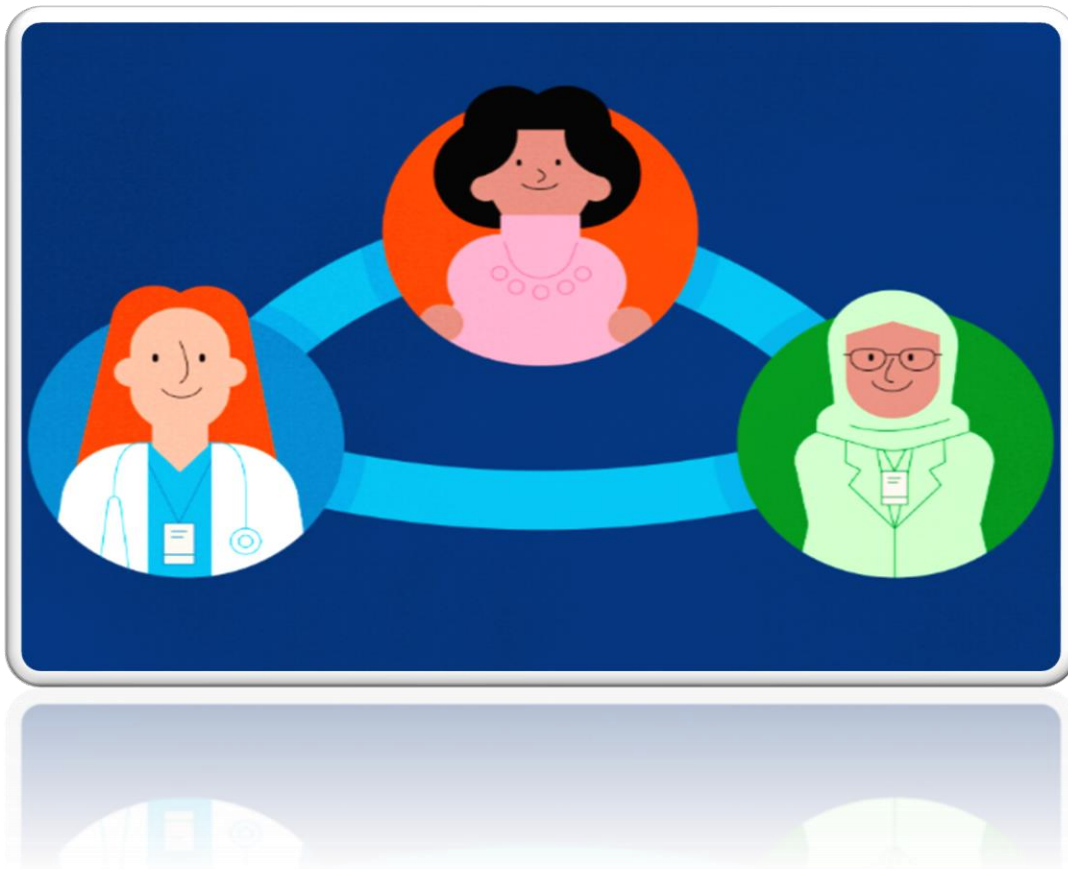
Healthcare workers should be supported in continuously developing their skills, utilizing evidence-based practices, and recognizing and mitigating unconscious biases. Patients and families should also be empowered to actively participate in the diagnostic process, ask questions, share their concerns, and seek second opinions when necessary. Establishing robust feedback and learning systems is essential to understanding errors when they occur and preventing their recurrence.



Source: WHO 2024

- **Diagnosis is a Team Effort: Collaborative Strategies for Safety**

Diagnosis is not the responsibility of a single individual but a team effort that requires the active participation of all stakeholders—patients, families, caregivers, healthcare workers, leaders, and policymakers. Collaborative strategies should be promoted, such as regular team meetings to discuss complex cases, interdisciplinary training sessions, and the use of digital tools for better communication and data sharing. Effective teamwork and communication are critical in minimizing errors and improving diagnostic accuracy.



Source: WHO 2024

Quality Initiatives Setting.

Quality Initiatives were conducted at the Sultan Qaboos Comprehensive Cancer Care & Research Centre SQCCRC (University Medical City). Muscat, Oman. SQCCRC was the vision of His Majesty Sultan Qaboos bin Said, Oman. His directive was to establish a medical center that delivers comprehensive healthcare to cancer patients. The center provides healthcare through a leading multidisciplinary health professional staff with significant potential, expertise, and technical readiness. This includes modern medical equipment, advanced information systems, and a focus on the principle of "Patient First" as its priority.



The center provides the below services offered by the center, categorized into three main sections:

1. **Medical Care:** This section includes various cancer care programs, such as:

- Breast Cancer Program
- Gastrointestinal Cancer Program
- Genitourinary Cancers Program
- Gynecological Cancers Program
- Head, Neck, and Thoracic Cancers Program
- Rare Cancers Program

2. **Scientific Research:** This section covers:

- General scientific research activities
- A request option for scientific research

3. **Academic Training and Development:** This section includes:

- General academic training and development services
- A request option for training

The Centre's services

 Medical Care

Breast Cancer Program

Gastrointestinal Cancerc program

Genitourinary Cancers Program

Gynecological Cancers Program

Head, Neck and Thoracic Cancers Program

Rare Cancers Program

 Scientific Research

 Request for Scientific Research

 Academic Training and Development

Request for Training

Multidisciplinary Team

The multidisciplinary team includes the following specializations across the center's six clinical programs:

- **Oncologists (Cancer Consultants):**
Specialists in medical, clinical, radiation, and surgical.
- **Clinical Nurse Specialists:**
Coordinate various aspects of patient care and offer ongoing support to patients and their families in both inpatient and outpatient settings.
- **Radiologists:** Specialist doctors skilled in interpreting scans and X-rays to diagnose cancer.
- **Geneticists:** Specialists who consult with individuals who have a personal or family history that suggests an inherited cancer risk. They discuss genetic testing options and guide the interpretation of genetic information. Testing results can help guide future medical care.
- **Pathologists/Histologists:** Specialists who examine human cell samples under a microscope to determine if cancer is present.
- **Dietitians:** Provide counseling to patients and their families on dietary needs during and after cancer treatment. They offer evidence-based information on dietary modifications to



minimize the side effects of cancer treatments like chemotherapy. Early screening and nutritional interventions can help improve patient outcomes before, during, and after treatment.

- **Physiotherapists:** Focus on treating disease, injury, or deformity using physical methods such as massage, heat therapy, and exercise.
- **Occupational Therapists:** Enhance a person's ability to perform normal daily roles.
- **The psychosocial team of psychiatrists, psychologists, and social workers** offers essential mental and emotional support to cancer patients and their families. They address the challenges of a cancer diagnosis, aiming to enhance well-being and quality of life.
- **Pharmacists:** Assess, monitor, and collaborate with the multidisciplinary team to ensure medications are prescribed and administered safely and effectively. They educate patients and families about drug use and administration and coordinate with the team on drug therapy decisions to maximize efficacy and minimize side effects.
- **Palliative and pain management team.**

International accreditation certificate from the Joint Commission

International (JCI):

The Sultan Qaboos Comprehensive Cancer Care &

Research Centre obtained the international

accreditation certificate from the Joint

Commission International (JCI) in June 2023.

It is one of the most prestigious international

accreditation institutions working to enhance

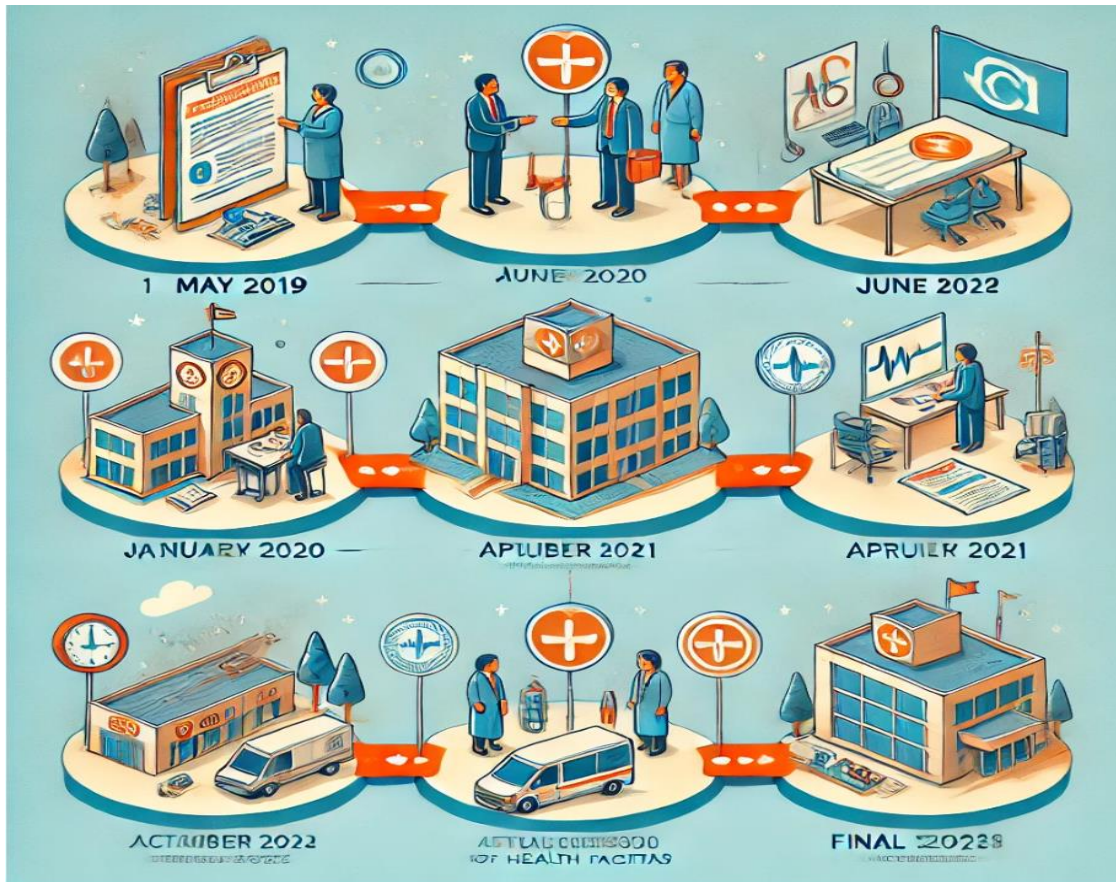
the quality of health care in the world. It is

characterized by accurate, rigorous, and comprehensive

evaluation procedures covering all clinical and administrative aspects, from the patient's

admission into the health facility until the time of their discharge.





The Sultan Qaboos Comprehensive Cancer Care & Research Centre is the first governmental health institution in the Sultanate of Oman to obtain such international accreditation in such a short time frame among all the health institutions in the Sultanate of Oman, despite the strict standards enforced to by the Joint International Commission (JCI) for Accreditation of Health Institutions.



